Panasonic

Network Interface Unit
Operating Instructions

Model No. **WJ-NT204**
WV-CU20

WJ-NT204
(Transmitter)

LAN / WAN

WJ-NT204
(Receiver)

WV-CU20
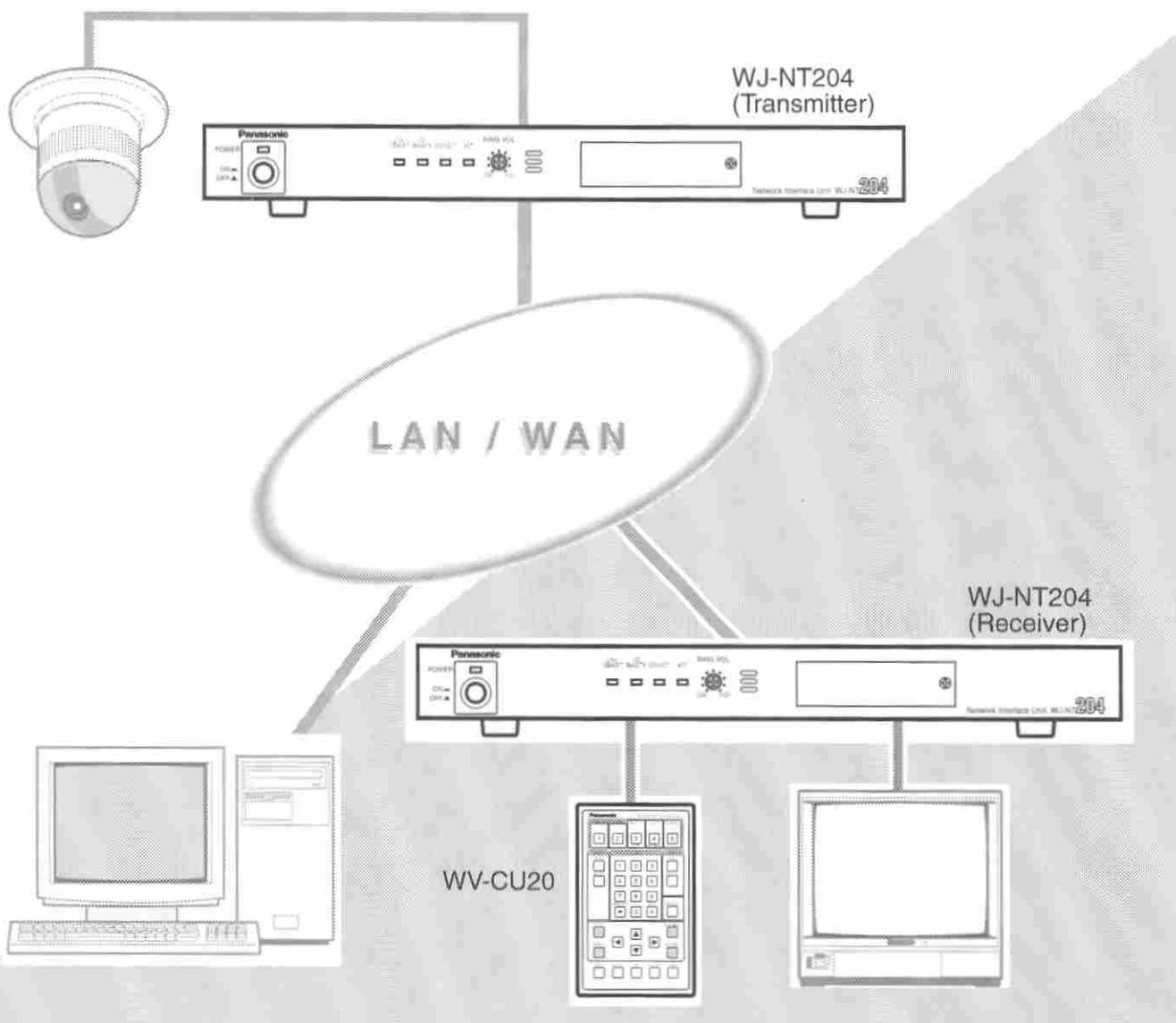
Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

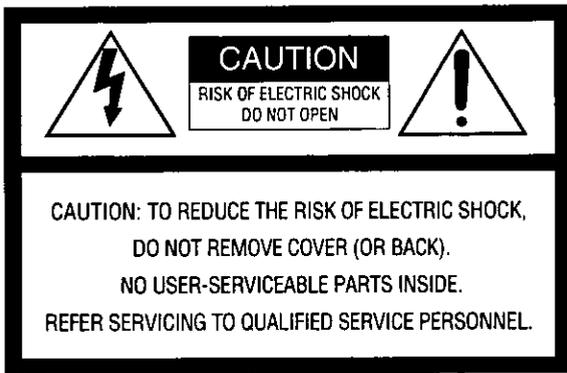# IMPORTANT SAFETY INSTRUCTIONS

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding–type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

S3125A

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

2

Caution:

Before attempting to connect or operate this product, please read the label on the bottom.

The serial number of this product may be found on the bottom of the unit.
You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. ─────────────────────────────────────

CONTENTS

PREFACE

The Network Interface Unit WJ-NT204 is the key devices for a remote surveillance system. The unit works as an HTTP server and transmits high quality video on the H.261 or JPEG* standard basis, along with audio**. You can monitor remote places through a 10/100BASE-T Ethernet LAN.

Various systems can be built up ranging from a 1-1 site system up to multiple site system.

A Remote site can install a maximum of 4 cameras with the unit alone, or up to a number of cameras in combination with peripheral devices such as Data Multiplex Units, etc. The unit has serial and parallel interfaces to communicate with those peripherals.

A Control site can be formed with a WJ-NT204 or a general purpose PC. It receives video and audio to check them on a video monitor or computer display while sending control commands to the Remote site devices for pan/tilt control, camera selection and so forth.

Setup menus are pre-installed in the unit that make you customize the settings most suitable to the system requirement. That is, for example, IP directory registration, dialing sequences, camera switching sequences, etc. A Control site PC can download the main page from the WJ-NT204.

Remote Controller WV-CU20 is an exclusive unit to operate with the WJ-NT204 for dialing, camera selection, etc., in the normal mode. It is also used for IP address registration, sequential mode setup, alarm mode setup, etc., in the setup mode.

*JPEG is applicable only when the Control site uses a browser on the PC.
**Audio transmission is available only when H.261 mode is applied.

FEATURES

Audio/Video Transmission

- Up to 4 cameras can be connected when no peripherals installed at the Remote site.
- A Remote site supplies camera picture and audio** to the Control site.
- Picture selection is made accordingly when the connected sensor operates or the Control site demands the camera.
- Picture quality can be selected in accordance with network traffic and your requirement.
- Audio mute available (when H.261 mode is applied.)

Access to the Site

- TCP/IP is employed to permit use of existing Ethernet LANs.
- Sensor (Alarm) activation triggers the Auto-dial function to access to the Control site.
- One-touch dial and Quick dial are available with preset addresses.

Peripheral Interfaces

- Combination cameras
- PS·Data or other NORMAL devices such as PC
- Data communication/ RS-485 (PS·Data)/RS-232C
- 8 sensor inputs and 8 trigger outputs
- 8 parallel inputs and 8 parallel outputs

Setup menus

- View point setup
- Memories: Dialing number table/Alarm log/Communication log
- Maintenance
- Up/Download function enables the Control site to edit the Remote site's setup remotely.
- The built-in ringer beeps when receiving a call.
- Password protects your system from unauthorized operation.
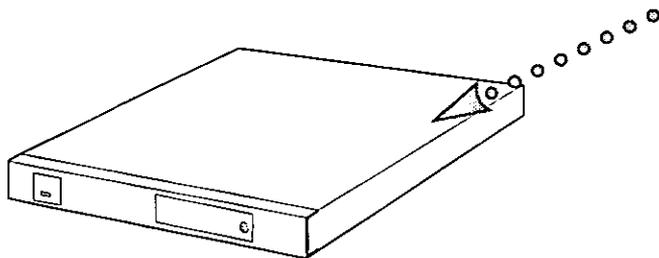
WJ-NT204
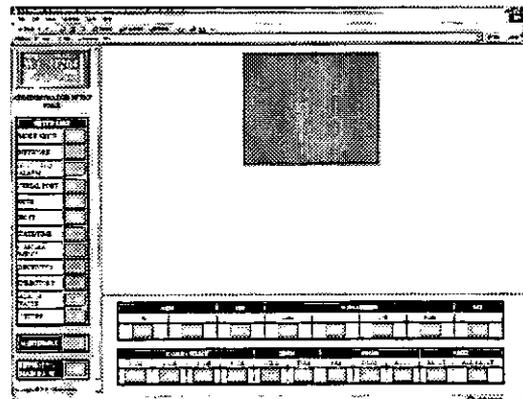
Homepage

- **Refer all work related to the installation of this product to qualified service personnel or system installers.**

- **Do not attempt to disassemble the appliance.**
  To prevent electric shock, do not remove screws or covers.
  There are no user-serviceable parts inside. Contact qualified service personnel for maintenance.

- **Handle the appliance with care.**
  Do not strike or shake, as this may damage the appliance.

- **Do not expose the appliance to water or moisture, nor try to operate it in wet areas.**
  Do take immediate action if the appliance becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture may damage the appliance and also cause electric shock.

- **Do not use strong or abrasive detergents when cleaning the appliance body.**
  Use a dry cloth to clean the appliance when it is dirty. When the dirt is hard to remove, use a mild detergent and wipe gently.

- **Do not operate the appliance beyond its specified temperature, humidity or power source ratings.**
  Do not use the appliance in an extreme environment where high temperature or high humidity exists.
  Use the appliance at temperatures within −10°C - +50°C (14°F - 122°F) and a humidity below 90 %.
  The input power source for this appliance is 120 V AC 60 Hz.

SYSTEM CONFIGURATION

There are some system forms depending on the number of the sites, and the network routings.

■ Basic Connection with WJ-NT204 Receiver

In the basic connection, the Control site can connect to the Remote site all the time as necessary.

Remote Site

Combination Cameras (4)

WJ-NT204
Network Interface Unit
(Transmitter)

Ethernet LAN

Control Site

Video Monitor

WJ-NT204
Network Interface Unit
(Receiver)

WV-CU20
Exclusive Remote Controller

7
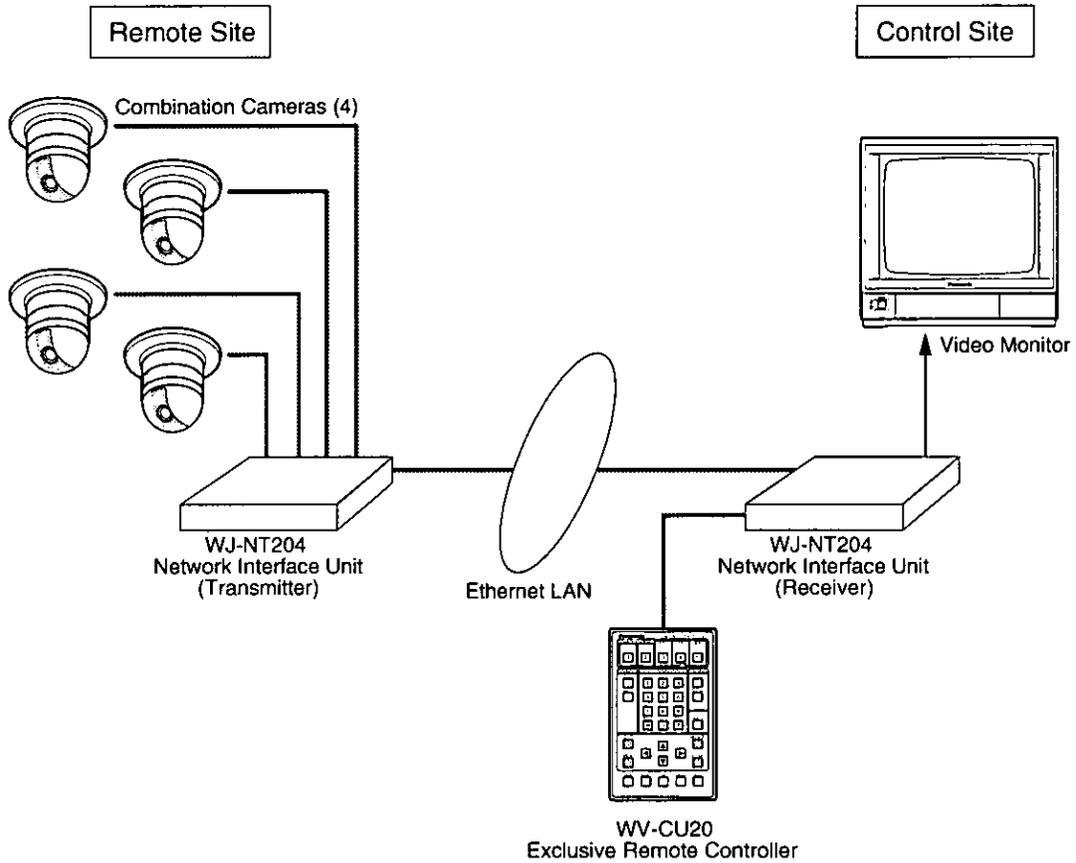
■ Basic Connection with PC Browser

Remote Site

Control Site

Combination Cameras (4)

LAN

WJ-NT204
Network Interface Unit
(Transmitter)

Ethernet LAN

PC (Browser)
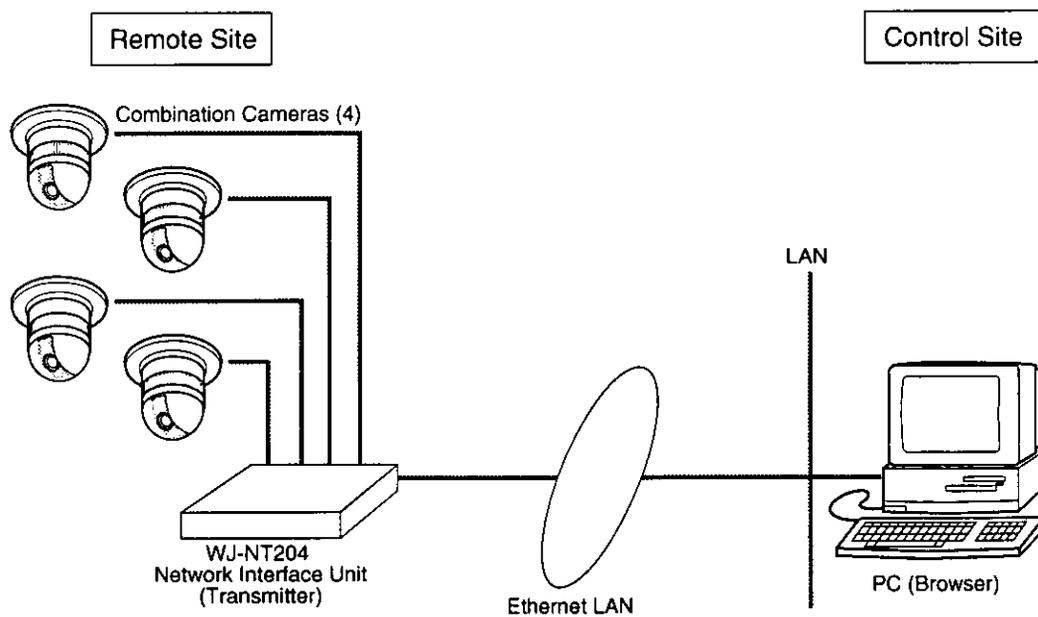
■ Multi-site Connection

The Multi-site connection enables you to monitor the same image at a maximum of 4 Control sites. A Remote site can transmit images up to 4 Control sites.

Camera selection and camera control is made by only one Control site at a time. This results in a sudden change of monitoring image in the site that did not operate the camera.

Another Remote site may call the Control site that is in communication with the currently connected Remote site. You can select operations from options such as ACCEPT or REJECT at the Control site. See page 37 for detailed operations. Access from the Control site is available as far as the Remote site is connected with less than 4 Control sites. Refer to Appendix for the right of the control.

9
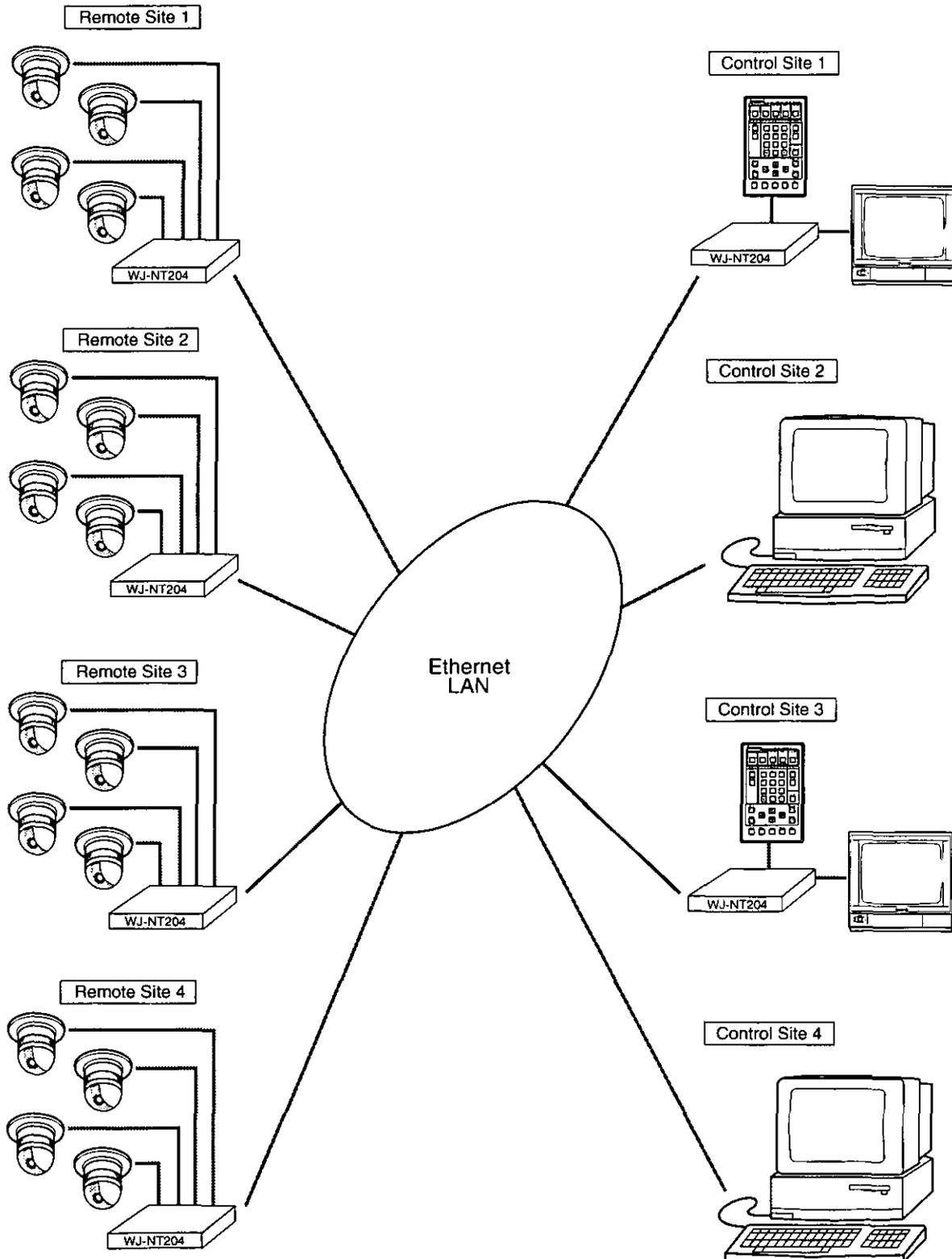
■ Access from an Internet

The PC accesses to the Remote site via Internet.
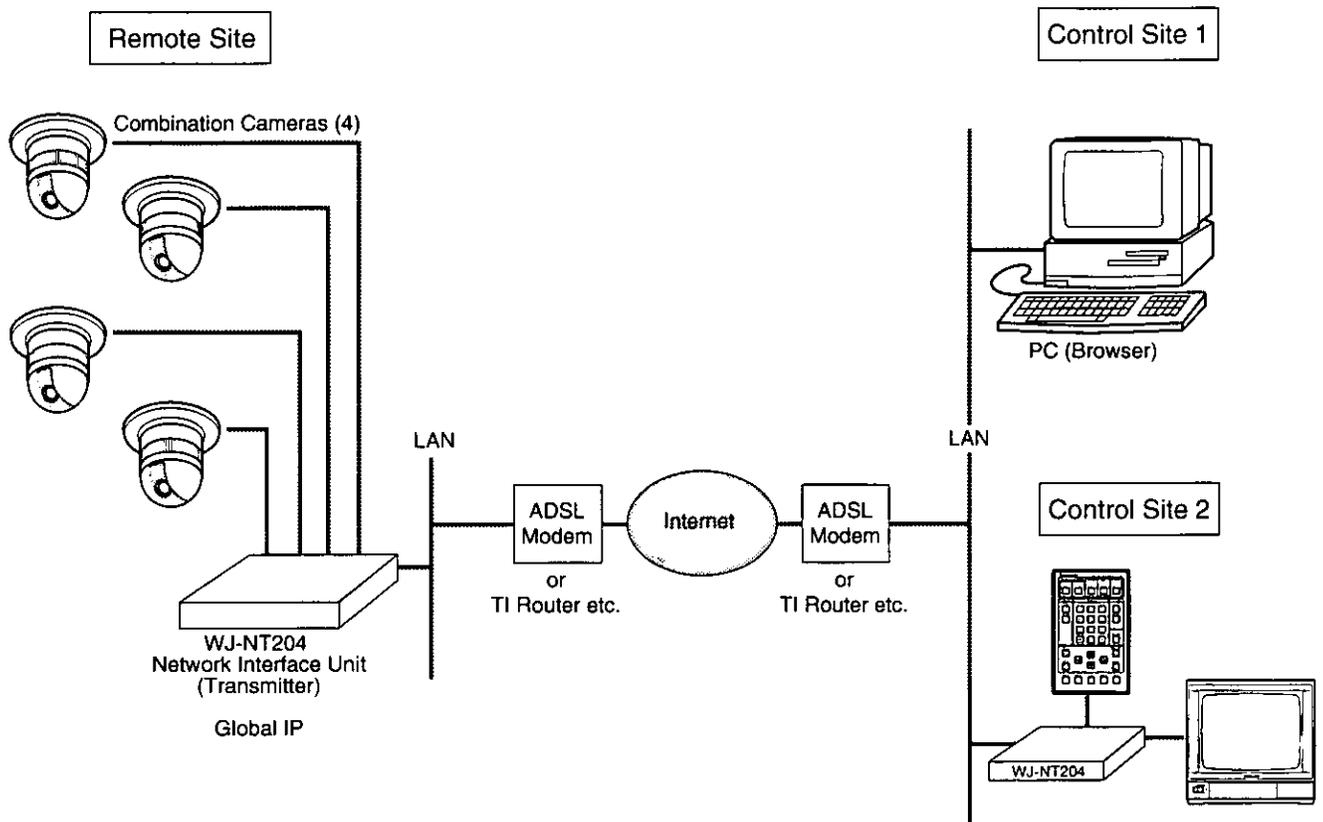
■ Front View
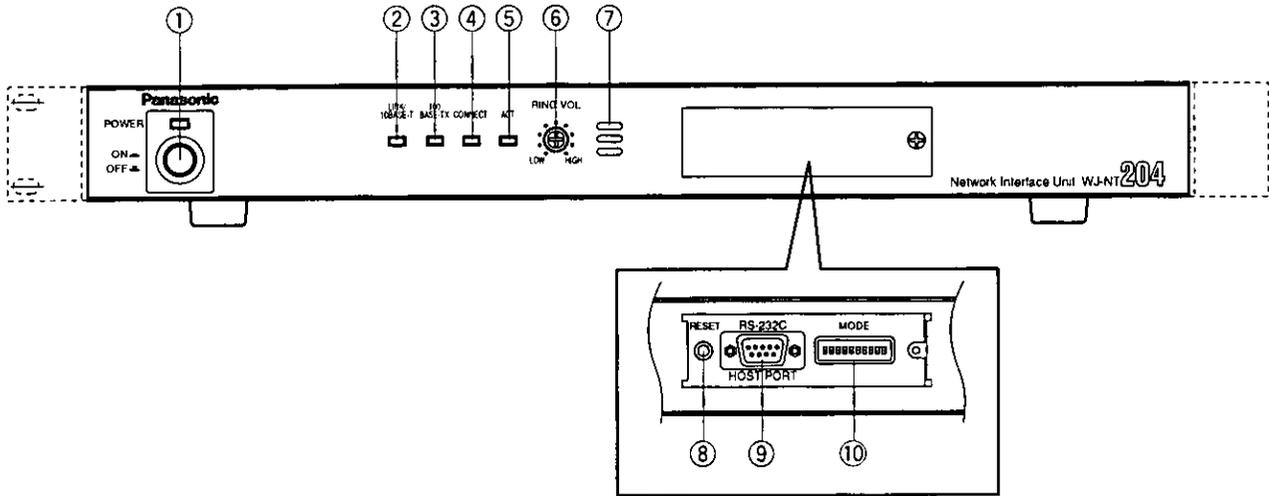
① Power Switch & Power Indicator [POWER]
Press this switch to turn on or off the power of the unit. The indicator lights while the power is turned on.

② [LINK/10BASE-T] indicator
Lights when communication is established through lines (LINK) or a 10BASE-T LAN.

③ [100BASE-TX] indicator
Lights when communication is established through a 100BASE-T LAN, along with the LINK/10BASE-T indicator.

④ [CONNECT] indicator
Lights when signaling the data only in H.261 mode.

⑤ [ACT] indicator
Blinks when receiving and sending IP packets.

⑥ Ringer Volume Control [RING. VOL]
Turn this control to adjust the sound level that beeps when receiving a call.

⑦ Ringer Buzzer
Beeps when receiving a call only in H.261 mode.

⑧ Reset Button [RESET]
Pressing this button shuts down the current operation and restarts the system.

⑨ RS-232C Host Port [RS-232C HOST PORT]
The unit communicates with the host computer through this D-Sub 9-pin connector. Setting the MODE DIP switch #9 specifies the mode and usable port from among RS-485 (Rear Panel) and RS-232C (Front Panel). Available controls are as follows.
• Communication control such as calling and disconnection
• Up/Download for software
• Download for communication log and alarm log
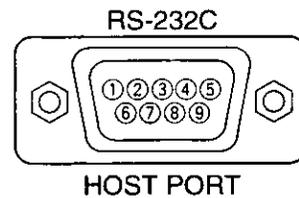
RS-232C

HOST PORT

RS-232C Host Port

No.	Signal name	Function	Direction as seen from WJ-NT204
1	C D	Receiver carrier detection	Input
2	R D	Receiving data	Input
3	S D	Sensing data	Output
4	E R	Data connection ready	Output
5	S G	Signal Ground	–
6	D R	Data set ready	Input
7	R S	Request send	Output
8	C S	Send enabled	Input
9	N. C.	(Not used)	

11

⑩ Mode DIP Switch [MODE]

The default setting is marked with *.

After changing the DIP switch, make sure to turn OFF the power switch once and then turn it ON, or press the RESET button to take in the new settings to the unit.

```
ON  ┌─┬─┬─┬─┬─┬─┬─┬─┬─┐
OFF └─┴─┴─┴─┴─┴─┴─┴─┴─┘
     1 2 3 4 5 6 7 8 9 10
```
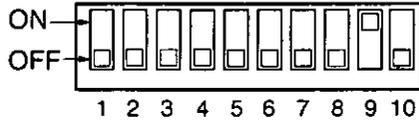
Bit #	OFF	ON	Function/Note
1	Normal Operation *	Initialize(1)	Maintenance
2	Normal Operation *	Initialize(2)	HTML file
3	*		Not Used
4	See below *		Applicable Line
5	See below *		Applicable Line
6	Normal Operation*	Initialize(3)	Network Configuration
7	*		Not Used
8	Setup Menu Enabled *	Menu Disabled	Setup Menus
9	RS-485 Rear	RS-232C Front*	Host Port Selection
10	*		Not Used

Initialize(1) will reset all settings including IP address back to the factory default.

Initialize(2) will reset the HTML contents files back to the factory default settings.

Initialize(3) will reset the IP address, subnet mask and default gateway back to the factory default settings.

Applicable Line

		Bit #4	
		OFF	ON
Bit #5	OFF	AUTO *	10BASE-T
	ON	100BASE-TX	AUTO

■ Rear View
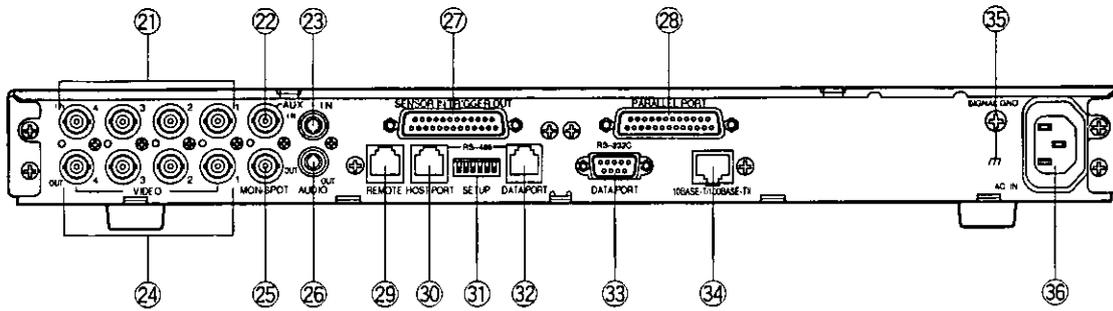
㉑ **Video Input [VIDEO IN 1, 2, 3, 4]**
Connect a maximum of four Panasonic's Combination Cameras in the Remote site where the unit is set to Transmitter mode. These BNC receive composite video signals from the cameras while the control commands (e.g., pan/tilt, focus, etc.) pass through these terminals. This will be used only for the Remote site.

㉒ **Auxiliary Video Input [AUX IN]**
Connect an ordinary camera rather than a Combination Camera. or an image reproduction device such as Digital Disk Recorder, VCR and so forth with this BNC. This BNC is used at the Remote site where the unit is set to Transmitter mode. This will be used only for the Remote site. The image supplied to the AUX IN will not be output to the MONI/SPOT terminal on the Remote site, however it is transmitted to the Control site.

㉓ **Audio Input [AUDIO IN]**
Accepts audio signal from the outboard device. Audio is transmitted to the other site. Audio transmission can be interrupted if you press the MUTE button on the Remote Controller. Press it again to resume the transmission.

㉔ **Video Output [VIDEO OUT 1, 2, 3, 4]**
Video In signal 1-4 are looped through to these BNC in the Remote site. If connected, make certain to terminate at the connected device with a 75 Ω resister because the automatic termination will be released in the unit. This will be used only for the Remote site.

㉕ **Monitor/Spot Output [MON/SPOT]**
This BNC little changes in function depending on the unit setup to a Receiver or a Transmitter.

Setup	Available Video	On-Screen Setup
Transmitter	The designated camera picture by the Receiver	Available
Receiver	Transmitted video supplied by the Transmitter	Available

㉖ **Audio Output [AUDIO OUT]**
Outputs audio signal supplied from the other site. Audio transmission is enabled or disabled depending on the setting conditions at the other site.

㉗ **Sensor Input/Trigger Output [SENSOR IN/TRIGGER OUT]**
A D-Sub 25-pin connector has 8 inputs and 8 outputs for sensor-related wiring. This is used only for the Remote site.
A SENSOR IN terminal receives the signal from the connected sensor that is installed in conjunction with the camera position or its aiming position. A TRIGGER OUT terminal relays the sensor input information to the connected device such as Hard Disk Recorder, Video Multiplexer, etc. These devices will enter alarm recording mode accordingly. The Network Interface unit, following the setup, will enter Alarm Dialing or Camera Switching when the sensor input comes in. The TRIGGER OUT terminal also supplies the VIDEO SWITCH selection information. See page 24-26 for connection and specifications.

㉘ **Parallel Port [PARALLEL PORT]**
A D-Sub 25-pin connector has parallel inputs and outputs for auxiliary control purposes with optionally installed switches and other devices. The following 3 functions perform on the unit basis while the others perform between the Control and Remote site.
The internal clock is adjusted to the hour (xx:00:00) when an externally connected switch is turned on, as far as the clock deviates within 3 minutes before or after the hour.
Current communication will be forcibly disconnected when an externally connected switch is turned on.
The In-Communication Status Out will be active while the unit on the site is in communication, not the unit on the other site.
Parallel inputs and outputs are used between the Control site and Remote site.
Parallel input information is reflected to parallel output terminals on the other site, from a Control site to Remote site or vice versa. For example, an electric lamp can be turned on to illuminate the aiming zone of the camera on the Remote site when the switch connected to a parallel input is pressed on the Control site. See page 27 and 28 for connection and specifications.

㉙ **Controller Port [REMOTE]**
Connect with a Remote Controller WV-CU20 that only operates the unit. Connection cable is a 6-conductor modular type included in the Controller. (RJ-11)

㉚ **RS-485 Host Port [RS-485 HOST PORT]**
Use this when connecting with another WJ-NT204 unit to operate them from a single controller such as a PC through the RS-485 daisy chain. Make certain to set the DIP switch #9 on the front panel to OFF when using this port. (RJ-11)

RS-485
Host port


```
6 5 4   3 2 1
| | |   | | |
GNDA B   A BGND
    └─┘   └─┘
   Transmit  Receive
```

For PC


```
   ┌─RA─┐
 3─┤ RB ├─> Receive
 2─┘    
   ┌─TA─┐
 5─┤ TB ├<─ Transmit
 4─┘    
   WJ-NT204
```

Straight
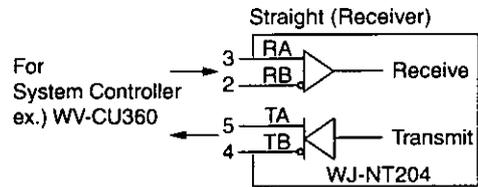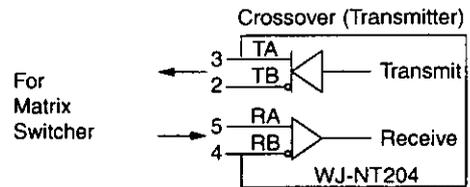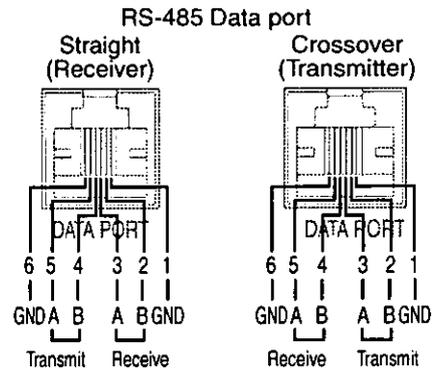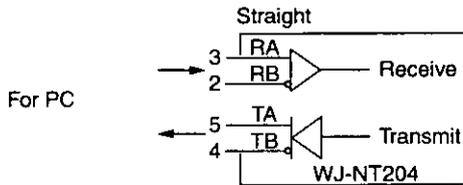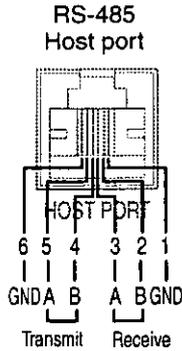
㉛ **Setup DIP Switch [SETUP]**
A 6-bit DIP switch is provided with the following function. The default position is marked with *. See INSTALLATIONS on how to set these switches.

Bit #	OFF	ON	Function/Note
#1	Open*	Terminate	Termination on Transparent Receiving side
#2	Open*	Terminate	Termination on Transparent Transmission side
#3	Receiver* (Straight)	Transmitter (Cross)	RS-485 DATA PORT wiring exchange
#4	RS-485*	RS-232C	DATA PORT selection
#5	Open*	Terminate	Termination on Host Receiving side
#6	Open*	Terminate	Termination on Host Transmission side

㉜ **RS-485 Data Port [RS-485 DATA PORT]**
Use this when connecting with other PS·Data (Panasonic Security) devices such as WJ-MP204 Data Multiplex Unit, WJ-FS409 Video Multiplexer and so forth to operate them from a Remote Controller through the RS-485 chain.
The DIP switch **#4** on the rear panel must be set to OFF when using as an RS-485, or to ON as an RS-232C. The DIP switch **#3** on the rear panel changes terminal wiring either Straight or Crossover as shown below. (RJ-11)
This switch is set to OFF for a Receiver, and ON for a Transmitter when CCTV devices are connected.

RS-485 Data port

Straight (Receiver)   Crossover (Transmitter)


```
6 5 4  3 2 1      6 5 4  3 2 1
| | |  | | |      | | |  | | |
GNDA B  A BGND    GNDA B  A BGND
    └─┘  └─┘          └─┘  └─┘
  Transmit Receive  Receive  Transmit
```

Crossover (Transmitter)


```
For            ┌─TA─┐
Matrix     3 <─┤ TB ├─ Transmit
Switcher   2   └────┘
           5 ──┤ RA ├─> Receive
           4   └─RB─┘
               WJ-NT204
```

Straight (Receiver)


```
For             ┌─RA─┐
System      3 ──┤ RB ├─> Receive
Controller  2   └────┘
ex.) WV-CU360   ┌─TA─┐
            5 <─┤ TB ├─ Transmit
            4   └────┘
                WJ-NT204
```

㉝ **RS-232C Data Port [RS-232C DATA PORT]**
Use this when communicating with other RS-232 devices through D-Sub 9-pin connector. The pin function is basically the same as the RS-232C HOST port on the front panel.

RS-232C


```
(1)(2)(3)(4)(5)
 (6)(7)(8)(9)
```
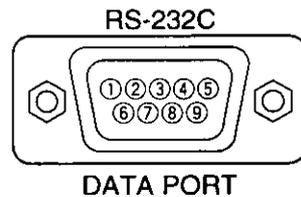
DATA PORT

RS-232C Data Port

No.	Signal name	Function	Direction as seen from WJ-NT204
1	C D	Receiver carrier detection	Input
2	R D	Receiving data	Input
3	S D	Sensing data	Output
4	E R	Data connection ready	Output
5	S G	Signal Ground	–
6	D R	Data set ready	Input
7	R S	Request send	Output
8	C S	Send enabled	Input
9	N. C.	(Not used)	

㉞ **Ethernet Port [10BASE-T/100BASE-TX]**
Connect the 10/100BASE-T terminal to an Ethernet with a 10BASE-T or 100BASE-TX cable.

㉟ **Signal Ground [SIGNAL GND]**

㊱ **AC Inlet [AC IN]**

14

■ WV-CU20 Remote Controller (Option)
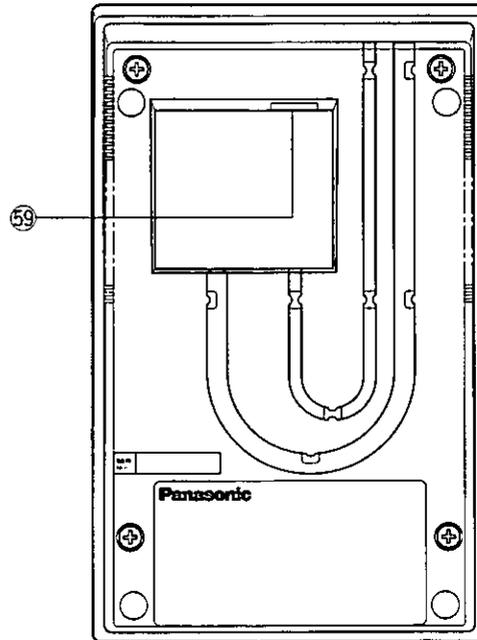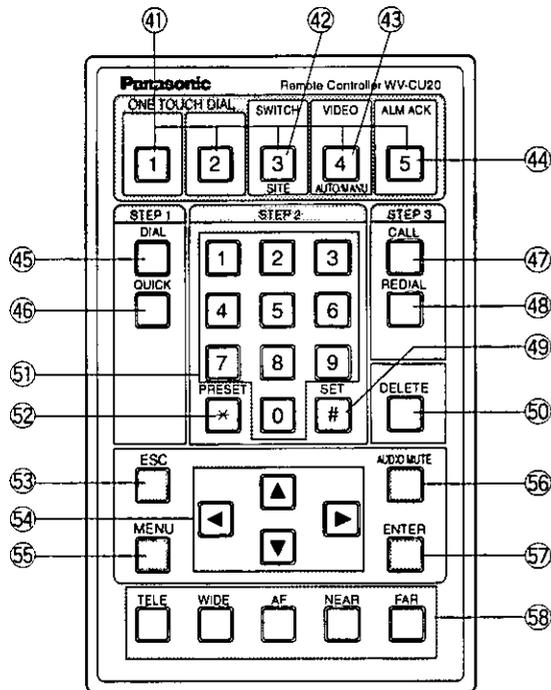
④ One-touch Dial Buttons [ONE TOUCH DIAL, 1 - 5]
These buttons are used to call the destinations preset to the buttons. Press the DIAL, then any of them.

④ Switch Site Button[SWITCH SITE, 3]
This button is used to switch the site from the currently communicating to another one when communicating with more than one site. Highlight a site on the receiver monitor with the direction button, then press this button.

④ Video Scanning Mode Button
[VIDEO AUTO/MANU, 4]
This button is used on the receiver to toggle the scanning mode automatically and manually.

④ Alarm Acknowledge Button [ALM ACK, 5]
This button is used on the receiver to acknowledge activated alarms.

④ Dial Button [DIAL]
This button is used to open the DIRECT DIAL window where you can enter an IP address prior to start dialing. After pressing this button, specify an IP address from the registered directory or on the DIRECT DIAL window. To terminate the call, hold down this button for 2 seconds.

④ Quick Dial Button [QUICK]
This button is used to select Quick (Short) Dial numbers stored in the menu.

④ Call Button [CALL]
This button is used to call the IP address that may be picked up from the registered directory or may be entered in the DIRECT DIAL window. After specifying the IP address, then press this button.

④ Redial Button [REDIAL]
This button is used to redial the last called destination if the power of the unit has been tuned on after the call. The last called number is reset when the power of the WJ-NT204 is turned off.

④ # SET Button [#, SET]
For camera selection, enter a camera number 1 through 5, then press this button.
For preset position selection, press [* , **PRESET**], [number], and this button.
This is also used to confirm the selected parameter in the setup menus, or to reset all parameters in the camera setup.

⑤ Delete Button [DELETE]
This button is used to correct any numeric or alphabetic input in the menu.
Pressing this button will delete the character followed immediately by the cursor.

⑤ Numeric Buttons [0 - 9]
These buttons are used to enter numeric characters for phone numbers, passwords, and camera selection.

⑤ * PRESET Button [* , PRESET]
This button is used to specify a camera preset position. Press this button, [number], and then [#, SET] button to recall the camera preset position.
In the camera setup menu, pressing this button will reset all parameters, or change the menu to SPECIAL.

㊿ Escape Button [ESC]

This button is used to escape and execute the currently highlighted setting on the setup menu. The monitor screen will then return to the previous setup menu.

㊿ Direction Buttons [◀ ▲ ▶ ▼]

These buttons are used to control the pan/tilt head in the normal operations when the Combination Cameras are connected to the transmitter.

㊿ Menu Button [MENU]

This button is used to open or close the setup menu on the monitor screen.

㊿ Audio Mute Button [AUDIO MUTE]

This button is used to mute the outgoing sound from the local site.
Pressing it again will restore the sound.

㊿ Enter Button [ENTER]

This button is used to confirm the selection in the setup menu or to open the submenu where more details are set.

㊿ Camera Control Buttons

These buttons are used to operate the zoom/focus lenses capable of remote control if they are mounted on the cameras.
TELE/WIDE: Zooms in or out the image.
NEAR/FAR: Adjusts the focus.
AF: Focusing is automated and adjusted to the best position thanks to the built-in circuitry.

㊿ Connection Port

This port is used to connect with the REMOTE port on the rear of the WJ-NT204 Network Interface Unit.
To connect to the unit, use a 6-conductor modular cable supplied as an accessory with the controller.

- **The following installations should be made by qualified service personnel or system installers and should conform to all local codes.**

- **For permanetly connected unit, a readily accessible disconnection device shall be incorporated in the fixed wiring:**
  An ALL-POLE MAINS SWITCH with a contact separation of at least 3 mm in each pole in the electrical installation of the building
  An easily accessible wall-outlet to unplug the power cord of the unit
  An easily accessible AC inlet to unplug the power cord of the unit

[To working personnel]

Prior to starting work, turn off the power supply and pull out the power plug out of the wall outlet.

Inform the user of the fact that more than 48 hours of charging is required for initial usage after the completion of connections.
Operation of the clock used in this unit is sustained by backup operation of the built-in battery. When this unit is initially used, continuous charging is needed for more than 48 hours so that the backup battery can be charged up. In the following cases, the clock may become out of order:
- Lack of charging time
- A service interruption continued for a long time
- The POWER switch has been set at OFF for a long time, or the power plug has been left disconnected from the wall outlet.

If the clock becomes out of order, set the clock again.
The contents of the abbreviated directory and various setting data are stored in nonvolatile memory, and they cannot be lost even if there is a service interruption.

■ Mounting in the Rack

1. Loosen the four screws to remove the four rubber feet from the bottom of the Network Interface Unit.
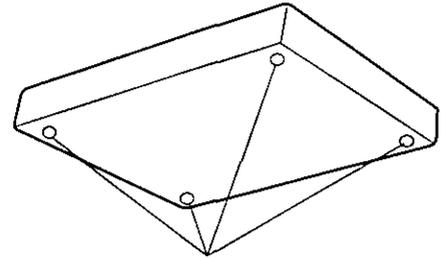
Remove the rubber feet.

M3 (supplied)

2. Place the rack mounting brackets on both sides of the Network Interface Unit and tighten them with the six supplied screws.

M3 (supplied)
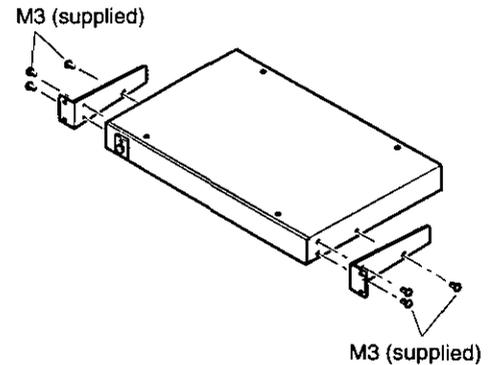
3. Install the Network Interface Unit with the rack mounting brackets in the rack using four screws (not included).
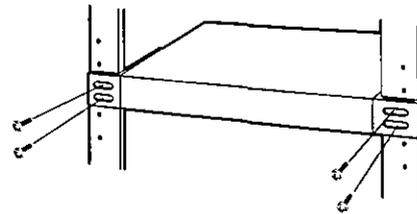
┌─ **Accessory Switch Protector** ──────────────────────────────────┐
If this switch protector is used, then it is possible to avoid the Network Interface Unit being turned off by careless pressing of the unit POWER switch.
In case of gang power ON/OFF operation incorporated in the rack, the unit POWER switch must always be moved to the ON position and the accessory switch protector should be mounted.

└──┘
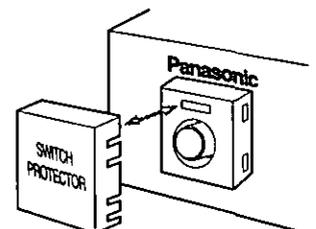
■ On the Remote Site (Transmitter)

Procure cables and connectors locally, when they are not supplied as standard accessories. For details on connections, refer to the manual provided with the device.

● Audio/Video Connection on the Remote Site

1. Camera Connections

Connect the VIDEO IN terminals 1 through 4 to a maximum of 4 Combination cameras or ordinary cameras with coaxial cables and BNC connectors. When an audio input is available, connect it to the AUDIO IN/OUT terminal using an audio cable with the RCA plug.

Combination Camera
or Ordinary Camera

Microphone

Amplifier

To CCTV devices
See page 19 - 23, 29.

See page 27, 28.

See page 29.

See page 24 - 26.

VIDEO IN | 4 | 3 | 2 | 1 | AUDIO IN   Network Interface Unit

(Transmitter)

See page 29.

Speaker

Amplifier

See page 29.
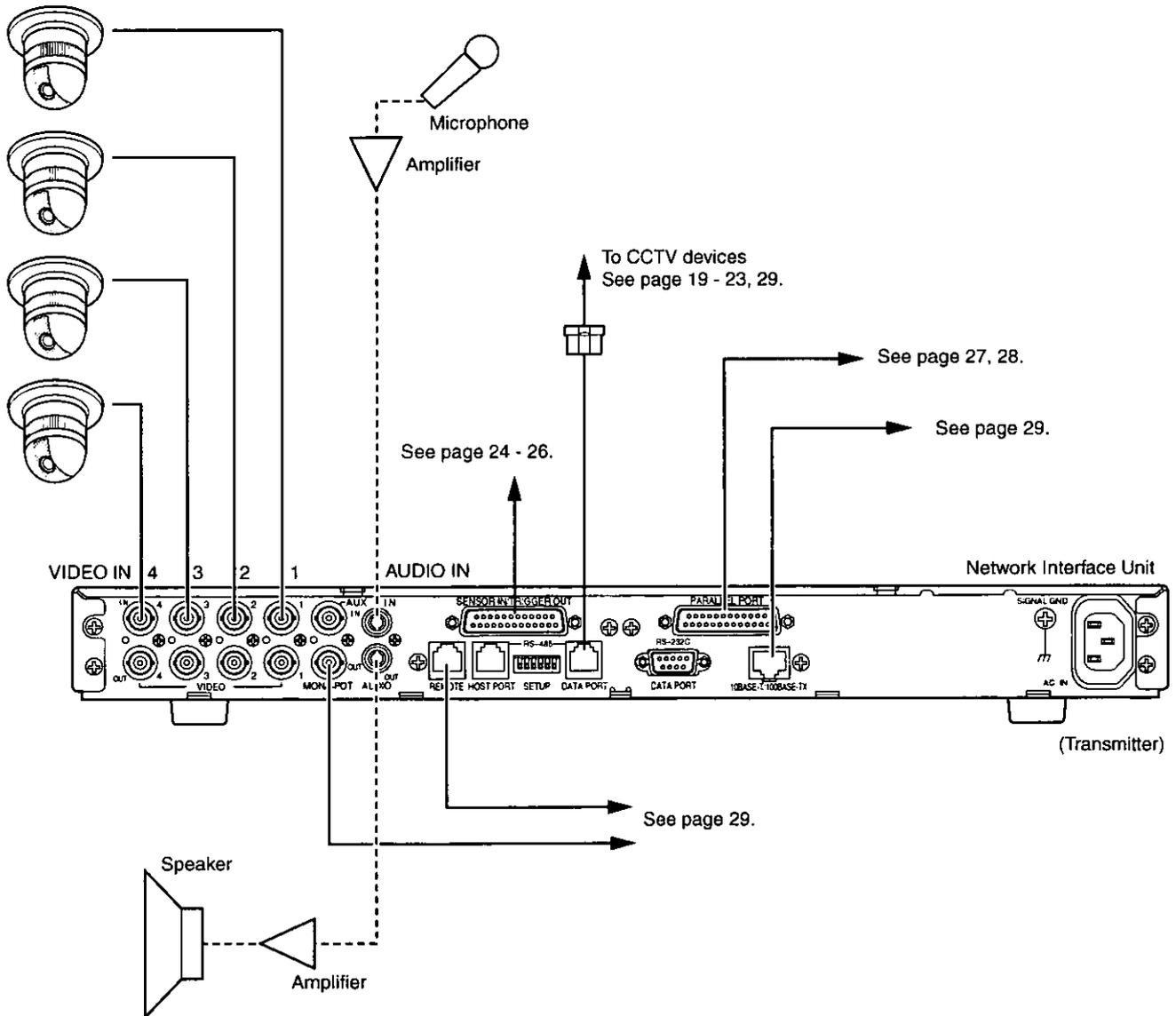
2. Data Multiplex Unit Connections

When the site contains Data Multiplex Units, connect these units with cameras as shown. Connect among the units, from SPOT IN to SPOT OUT, from VS/VD OUT to VS/VD IN, from SPOT SW IN to SPOT SW OUT. Also connections from SPOT OUT to VIDEO IN on the Network Interface Unit, and RS-485.connections are needed.

Combination Cameras

SPOT IN
SPOT SW IN

SPOT OUT
SPOT SW OUT

Data Mutiplex Unit

Data Mutiplex Unit

SPOT OUT   VS/VD OUT

VS/VD IN

RS-485 Cable

VIDEO IN

Network Interface Unit

Set #3 to ON

(Transmitter)
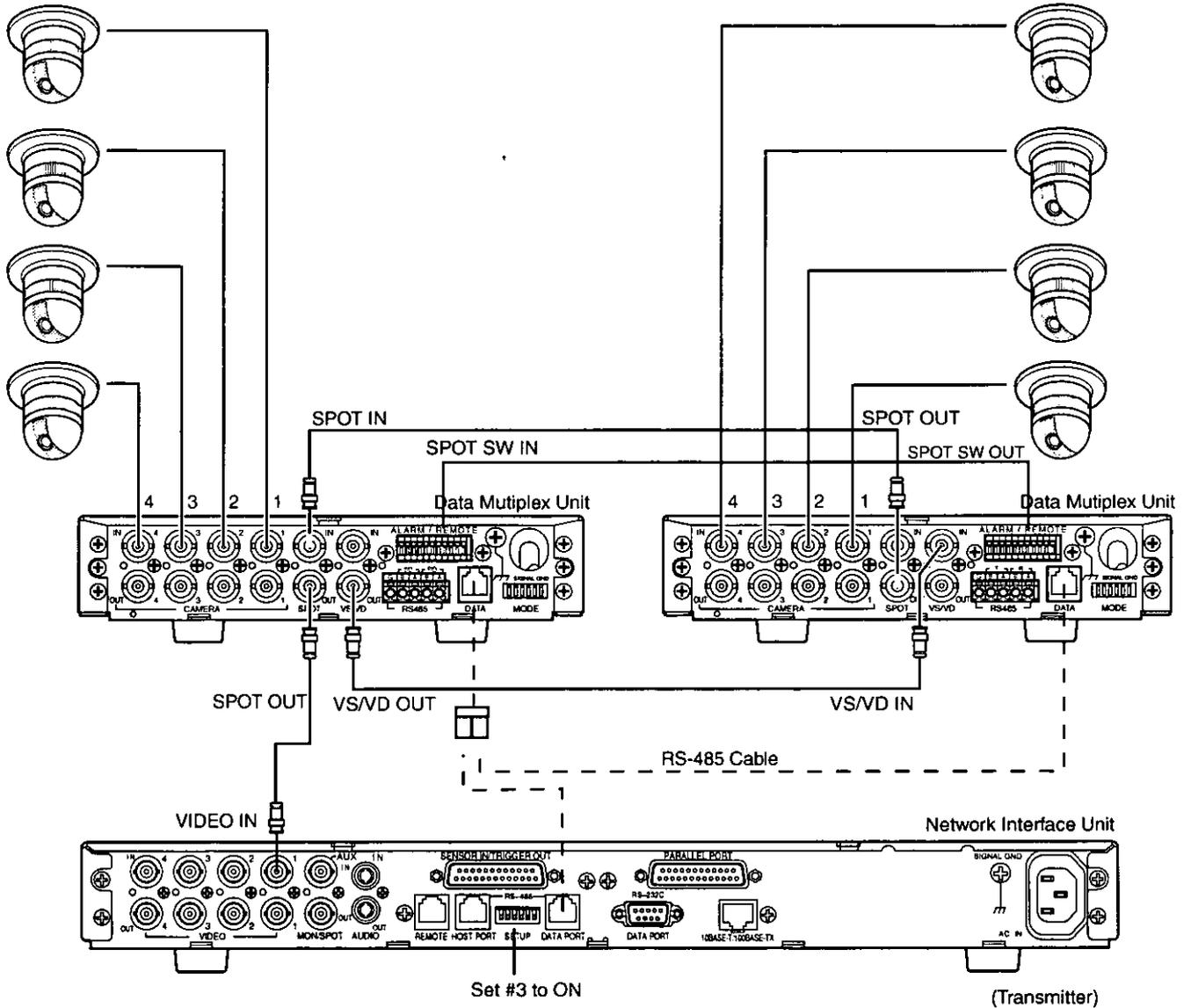
3. Video Multiplexer Connections

When the site contains the Video Multiplexer, connect it with cameras as shown. More connections are needed from MULTI SCREEN OUT to VIDEO IN 1, and RS-485 connections.

Cameras

VIDEO OUTPUT

Video Multiplexer WJ-FS416 or similar model

MULTI SCREEN OUT

VIDEO IN 2   1

Network Interface Unit

(Transmitter)

Set #3 to ON

RS-485 Cable
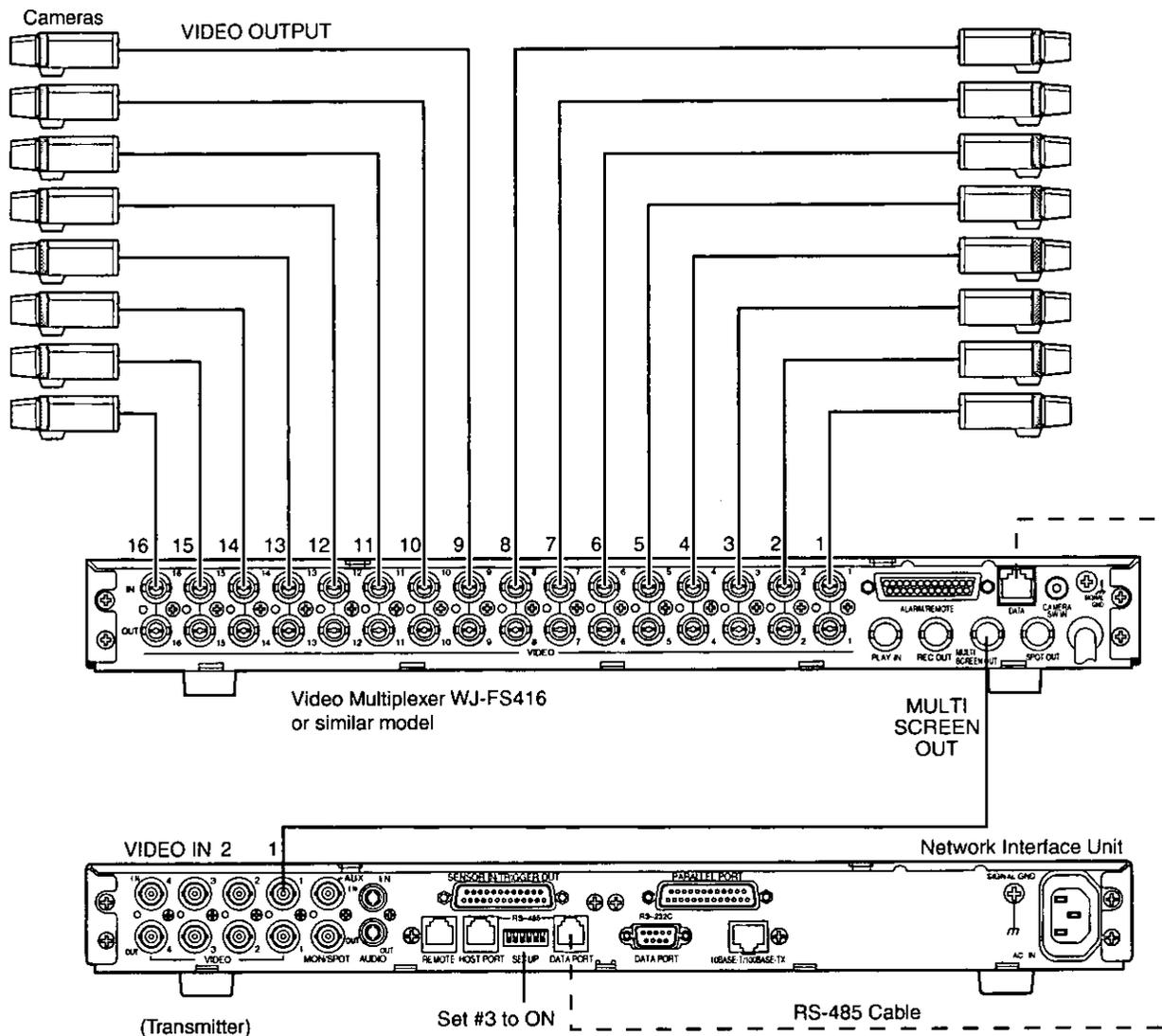
4. Matrix Switcher Connections

When the site contains a System 550 Matrix Switcher, connect it with cameras as shown. Connect the VIDEO OUT on the MATRIX SWITCHER WJ-SX550 A/B with the VIDEO IN 1-4 on the WJ-NT204. Refer to the manual included in the WJ-SX550 A/B.

Combination Cameras

Matrix Switcher
WJ-SX550A/B

MONITOR OUT   Data Port

RS-485 Cable

VIDEO IN

| 4 | 3 | 2 | 1 |

Network Interface Unit

Set #3 to ON

(Transmitter)
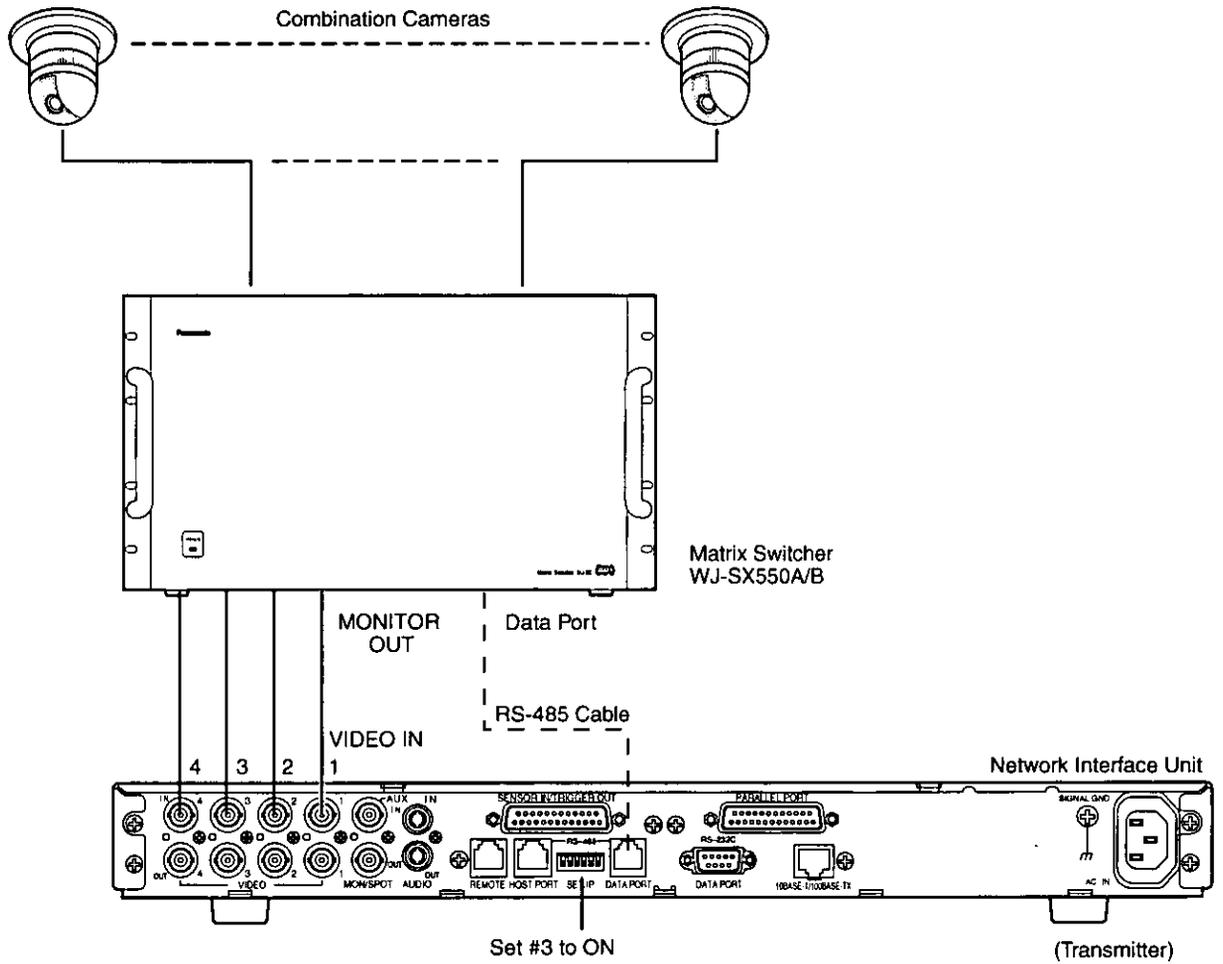
5. Monitor Connections

Monitor terminals are used mainly for maintenance purposes on the Remote site. Connect the MON/SPOT terminal to VIDEO IN on the monitor with a BNC cable, also between the AUDIO OUT and the AUDIO IN terminal with an audio cable.

The VIDEO OUT terminals can be used when you monitor each camera image at a time.
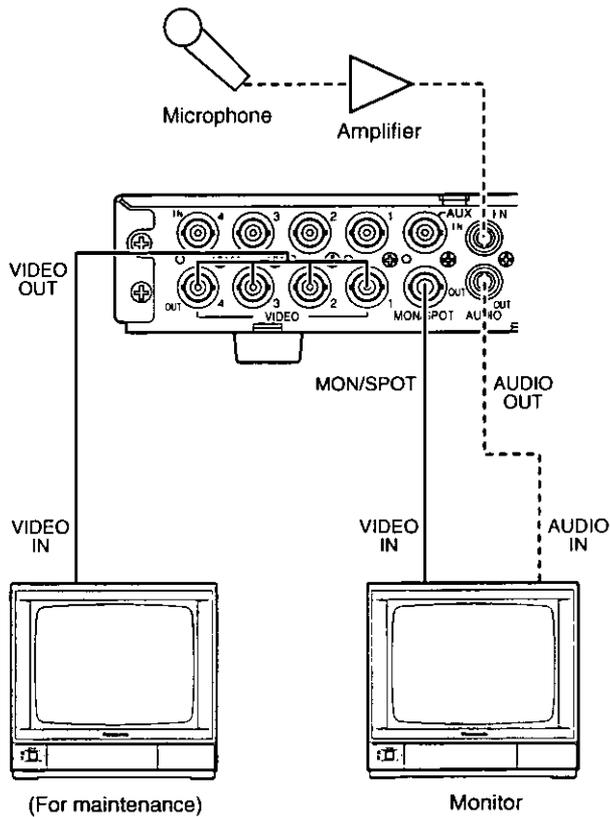
6. Digital Disk Recorder Connections

Connect between the Network Interface Unit and the Digital Disk Recorder as follows.

23
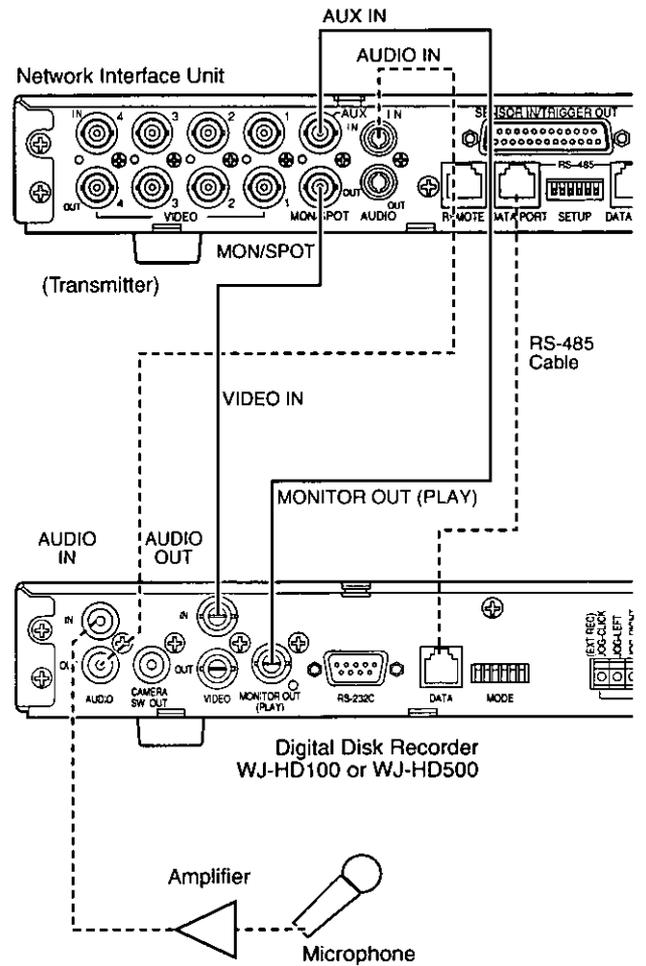
● Control Device Connection on the Remote Site

1. SENSOR IN/TRIGGER OUT Connections

Two connection examples are shown in this page, but there may be more applications. Consult the manuals included in the equipment for the system configuration you need.

<First example>

In the first example, a sensor input lets the Network Interface Unit supply the sensor-related camera picture to the MON/SPOT terminal. Sensor input signals are relayed to the trigger out terminals. A TRIGGER OUT lets the Digital Disk Recorder enter the Alarm recording in that the sensor-related images are recorded.

See page 26 for electrical specifications.

<Second example>
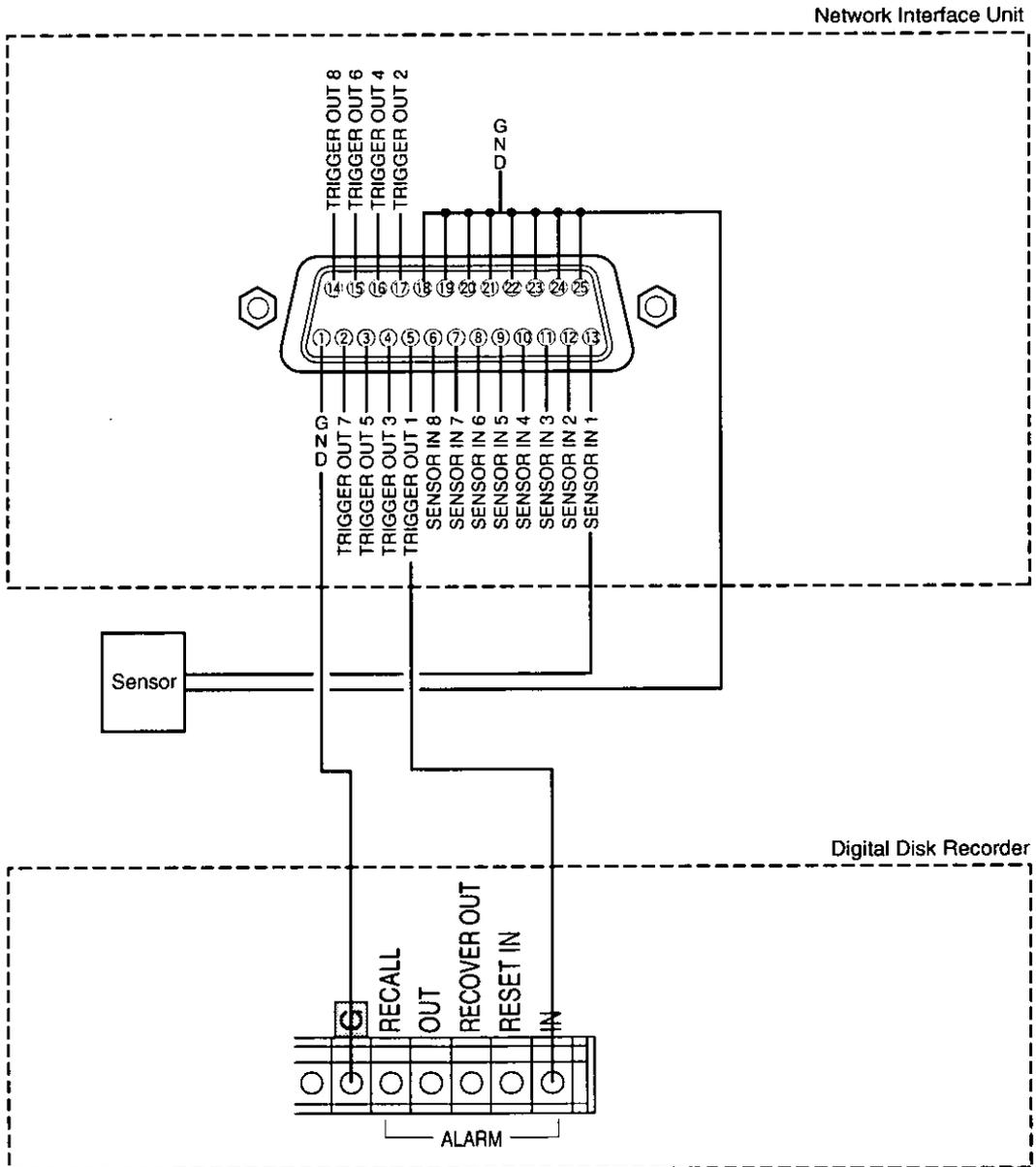
In the second example there are 8 sensors relayed to a Video Multiplexer. The Video Multiplexer will enter the Alarm mode when an alarm is input. For more details, read the manual included in the Multiplexer.
See page 26 for electrical specifications.

Network Interface Unit
SENSOR IN/TRIG OUT

Video Multiplexer WJ-FS416
ALARM/REMOTE Connector

TRIGGER OUT 8
TRIGGER OUT 6
TRIGGER OUT 4
TRIGGER OUT 2

GND

GND
TRIGGER OUT 7
TRIGGER OUT 5
TRIGGER OUT 3
TRIGGER OUT 1
SENSOR IN 8
SENSOR IN 7
SENSOR IN 6
SENSOR IN 5
SENSOR IN 4
SENSOR IN 3
SENSOR IN 2
SENSOR IN 1

Sensor 8
Sensor 7
Sensor 6
Sensor 5
Sensor 4
Sensor 3
Sensor 2
Sensor 1

Open
Alarm In 4
Alarm In 3
Alarm In 2
Alarm In 1

GND
Alarm In 5
Alarm In 6
Alarm In 7
Alarm In 8

25

Sensor In Trigger Out Specifications

Pin#	Name	Specification/Note
1	GND	
2	TRIGGER OUT 7	Open Collector Output, Low Active, Hold Time≈300 ms, Controllable Capacity 25 V DC 50 mA maximum
3	TRIGGER OUT 5	Same as TRIGGER OUT 7
4	TRIGGER OUT 3	Same as TRIGGER OUT 7
5	TRIGGER OUT 1	Same as TRIGGER OUT 7
6	SENSOR IN 8	Connect an Open Collector or non-voltage make-contact, Low Active (≤0.2 V), Hold Time≥100 ms, Controllable Capacity 5 V DC maximum
7	SENSOR IN 7	Same as SENSOR IN 8
8	SENSOR IN 6	Same as SENSOR IN 8
9	SENSOR IN 5	Same as SENSOR IN 8
10	SENSOR IN 4	Same as SENSOR IN 8
11	SENSOR IN 3	Same as SENSOR IN 8
12	SENSOR IN 2	Same as SENSOR IN 8
13	SENSOR IN 1	Same as SENSOR IN 8
14	TRIGGER OUT 8	Same as TRIGGER OUT 7
15	TRIGGER OUT 6	Same as TRIGGER OUT 7
16	TRIGGER OUT 4	Same as TRIGGER OUT 7
17	TRIGGER OUT 2	Same as TRIGGER OUT 7
18-25	GND	

26

2. PARALLEL IN-OUT Connection

The signal inputs entering the parallel inputs 1-8 on the control site are output to the parallel outputs 1-8 on the remote site. (Similarly, the signals entering the remote site are output to the control site.) If any one of the parallel inputs is closed, then the corresponding parallel output is generated.

The switches connected to the control site can be used for the shut/release of the electronic lock connected to the parallel port of the remote site via relays, etc., or for ON/OFF switching of lighting.
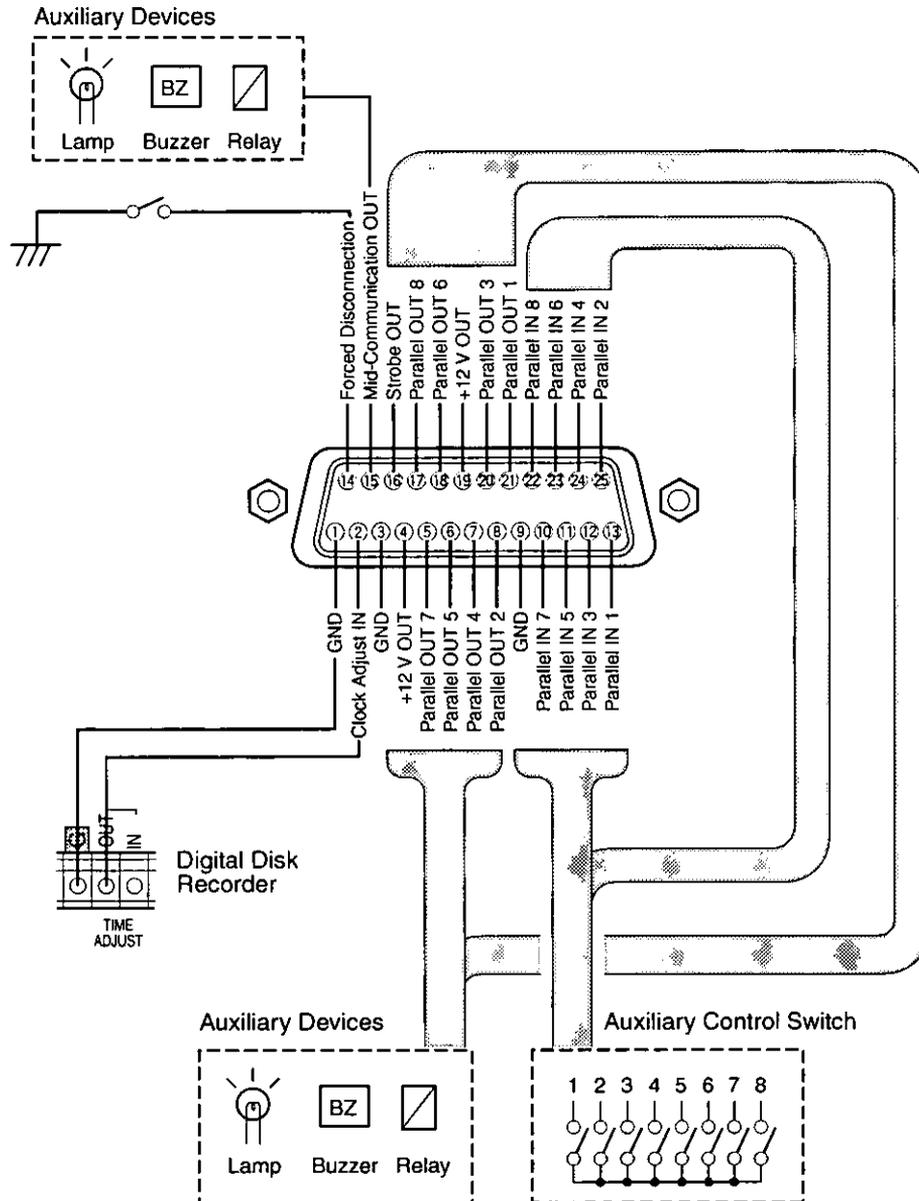
● Forced disconnection input terminal

Communication is forcibly finished if the making condition continues for more than 100 ms between the forced disconnection input terminal and the nearest GND terminal.

● Mid-communication output terminal

When the line is connected and communication is started with the destination, this connector is closed. There is no perfect coincidence between video or audio and output timing. This is an open-collector output.

● Strobe output terminal

When data at the parallel output connector is updated, the strobe pulse output is generated from this connector.

● Clock adjust input terminal

When this input terminal is closed, the clock incorporated in the WJ-NT204 can be corrected. The electrical conditions are the same as those for parallel input. Closure should be maintained for more than 100 ms.

Parallel In/Out Specifications

Pin#	Name	Specification/Note
1	GND	
2	Clock Adjust In	Connect an Open Collector or non-voltage make-contact, Low Active ($\leq$0.2 V), Hold Time$\geq$100 ms, Controllable Capacity 5 V DC maximum
3	GND	Open Collector Output, Low Active, Hold Time$\approx$300 ms, Controllable Capacity 25 V DC 50 mA maximum
4	+12 V Out	DC source for relay driving, Current pin#4+#19$\leq$50 mA
5	Parallel Out 7	Open Collector Output, Low Active, Hold Time$\approx$300 ms, Controllable Capacity 25 V DC 50 mA maximum
6	Parallel Out 5	Same as Parallel Out 7
7	Parallel Out 4	Same as Parallel Out 7
8	Parallel Out 2	Same as Parallel Out 7
9	GND	
10	Parallel In 7	Connect an Open Collector or non-voltage make-contact, Low Active ($\leq$0.2 V), Hold Time$\geq$100 ms, Controllable Capacity 5 V DC maximum
11	Parallel In 5	Same as Parallel In 7
12	Parallel In 3	Same as Parallel In 7
13	Parallel In 1	Same as Parallel In 7
14	Forced Disconnection In	Communication Break /Specifications are same as other In terminals.
15	Mid-Communication Out	Active (low) while the unit is in communication/Specifications are same as other Out terminals.
16	Strobe Out	A 300 ms negative pulse generated by any change of the parallel input to update 8 of parallel outputs / Specifications are same as other Out terminals.
17	Parallel Out 8	Same as Parallel Out 7
18	Parallel Out 6	Same as Parallel Out 7
19	+12v Out	DC source for relay driving, Current pin#4+#19$\leq$50 mA
20	Parallel Out 3	Same as Parallel Out 7
21	Parallel Out 1	Same as Parallel Out 7
22	Parallel In 8	Same as Parallel In 7
23	Parallel In 6	Same as Parallel In 7
24	Parallel In 4	Same as Parallel In 7
25	Parallel In 2	Same as Parallel In 7

3. Data Communication Connection

Connect the 10/100BASE-T terminal to an Ethernet with a 10BASE-T or 100BASE-TX cable.
Connect the RS-485 DATA PORT to other PS·Data equipment with RS-485 cable.
Use the REMOTE terminal to connect WV-CU20 Remote Controller with the supplied cable (6-conductor, straight wiring included in the WV-CU20) for maintenance.
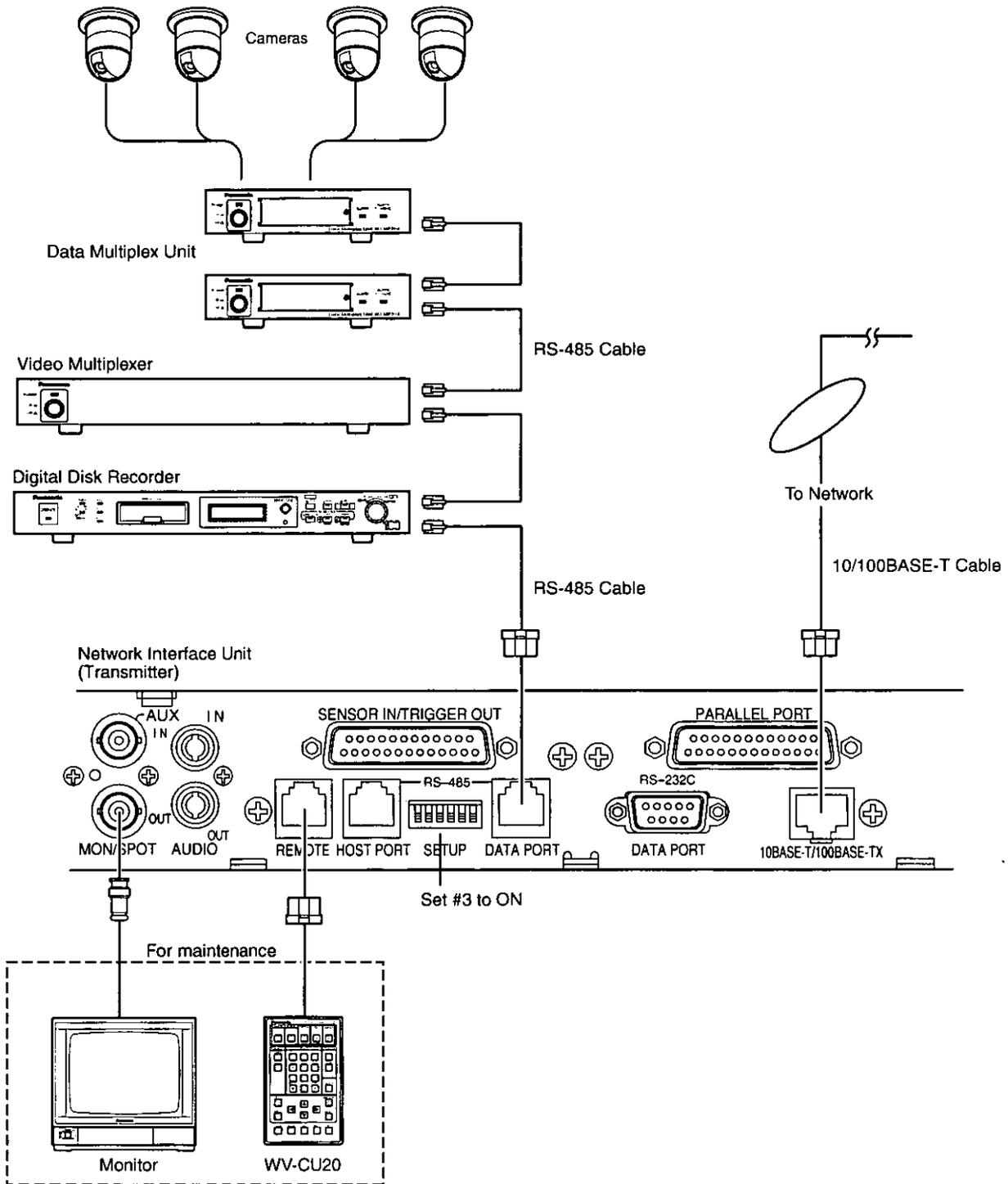
Remote Site Connection

29

● DIP Switch Setting on the Remote Site

See the manual included in the peripheral equipment for more information on DIP switch settings.

1. WJ-NT204

The setting shown in the figure is applied when connecting with PS·Data devices such as Digital Disk Recorder, Data Multiplex Unit and Video Multiplexer on the Remote site. The termination must be set to ON when the unit is at the end position in the RS-485 chain, otherwise keep it in the OFF position.

```
ON   [ ][ ][■][ ][ ][ ]    WJ-NT204 (Transmitter)
OFF  [■][■][ ][■][■][■]    SETUP DIP Switch
      1  2  3  4  5  6
                  └──┴── Keep in the OFF position.
               └── DATA PORT Selection
                       OFF: RS-485, ON: RS-232C
            └── RS-485 Wiring Selection
                    OFF: Straight, ON: Cross
                    (Change the ON position)
         └── Termination for Remote Site
                 OFF: Open, ON: Terminate
      └── Keep in the OFF position.
```
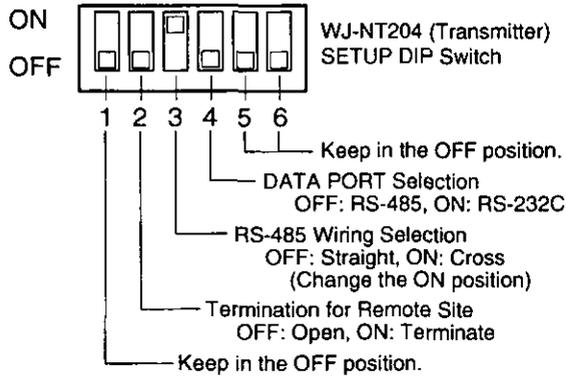
2. Digital Disk Recorder, WJ-HD100

Set the DIP Switch on the rear of the Digital Disk Recorder as follows. Remember the RS-485 line termination rule that is the same as described above.

```
ON   [■][ ][ ][ ][ ][ ]   Digital Disk Recorder
OFF  [ ][■][■][■][■][■]   WJ-HD100
      1  2  3  4  5  6
      └──────┘   └── RS-485 Termination
                        OFF:Open, ON:Terminate
      └── Unit Address
```

Unit Address	Bit #1	#2	#3	#4
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
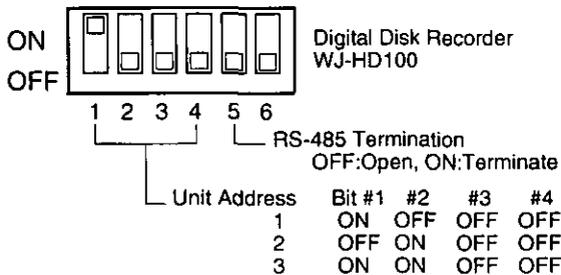
3. Digital Disk Recorder, WJ-HD500

Set the DIP Switch on the rear of the Digital Disk Recorder as follows.

```
OFF  [ ][ ][ ][■]   Digital Disk Recorder
ON   [■][■][■][ ]   WJ-HD500
```

4. Data Multiplex Unit, WJ-MP204

Set the DIP Switch on the rear of the Data Multiplex Unit as follows.

```
OFF  [ ][ ][ ][ ][ ][ ]   Data Multiplex Unit
ON
      1  2  3  4  5  6
                     └── Data Line Selection
                            OFF: 4-Line, ON: 2-Line
                  └── Termination
                         OFF: Open, ON: Terminate
            └── Data Communication Mode
      └── Sync Out (VS/VD) Selection
             OFF: Looped Through, ON: Internal VD
```

Data Communication Mode	Bit #3	#4
PS-Data	OFF	OFF
Camera Mode	ON	OFF
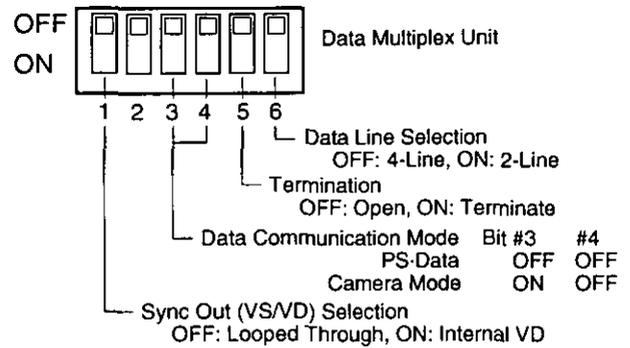
■ On the Control Site (Receiver)

Connections on the Control site is outlined below in the figure.

1. MONITOR Connection
   Connect the MON/SPOT terminal to the monitor.
   Connect the AUDIO OUT terminal to the monitor.

2. PARALLEL IN-OUT Connections
   Connect the PARALLEL OUT terminals with Auxiliary devices (e.g., an electric lamp and a relay). These devices will be activated when optional switches connected to the PARALLEL IN terminals are closed on the Remote site.
   Connect the PARALLEL IN terminals with optional switches to control the Auxiliary devices on the Remote site.

3. Connect the REMOTE terminal to the WV-CU20 Remote Controller with the supplied cable (6-conductor, straight wiring, included in the WV-CU20).

4. Connect the RS-485 DATA PORT to a WV-CU360 System Controller with RS-485 cable. The WV-CU360 will control PS·Data equipment on the Remote site through the network, and will also control the Control site equipment.

5. Connect the 10/100BASE-T terminal to an Ethernet with a 10BASE-T or 100BASE-TX cable.
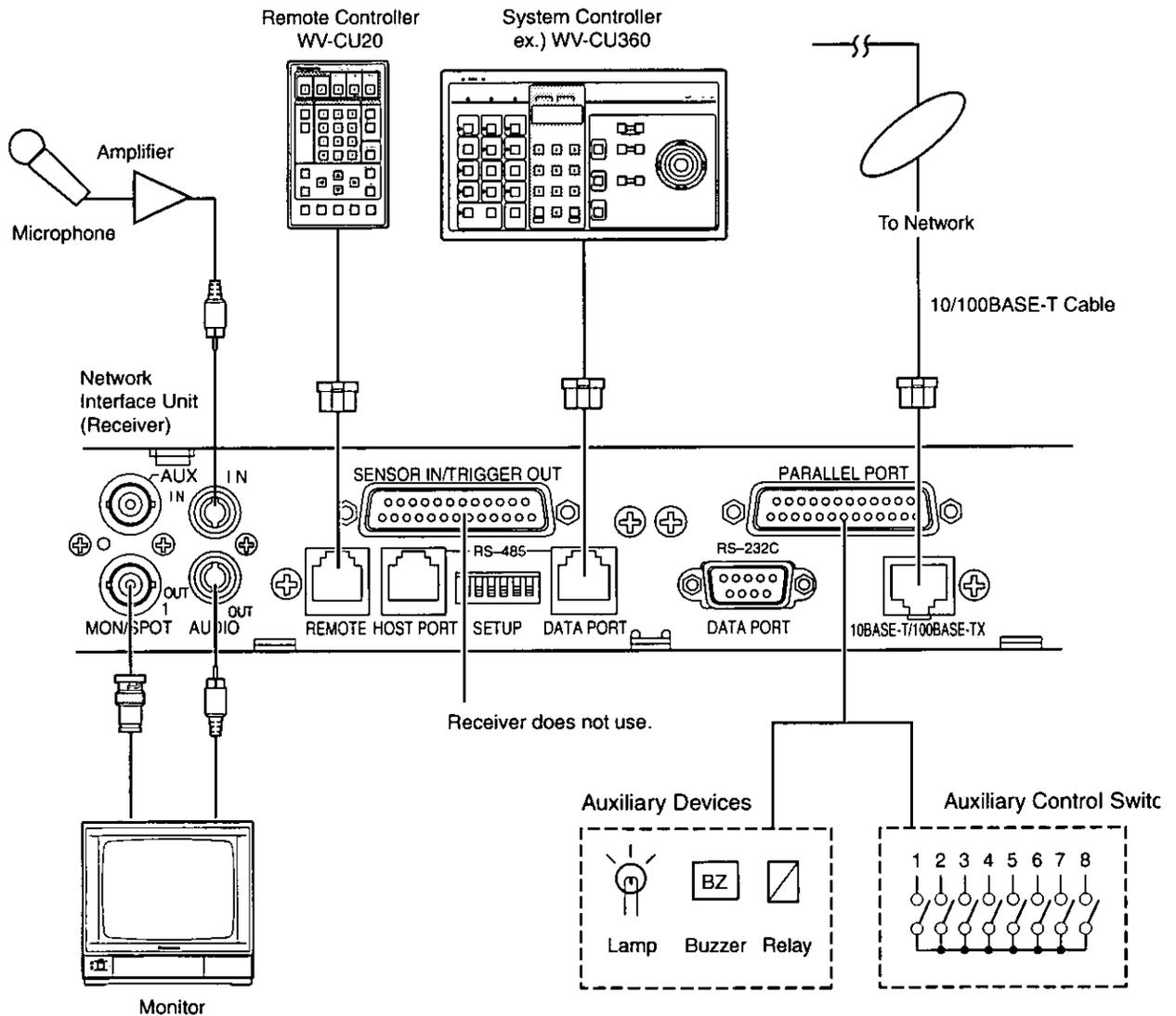
Control Site Connection

● DIP Switch Setting on the Control Site

1. Set the WJ-NT204 Rear DIP Switch as follows. This setting applies when connecting with PS·Data devices such as System Controller on the Control site.

Bit # 1: ON/OFF   Termination, set to ON at the chain end of the RS-485 DATA line, otherwise OFF.

Bit # 2: ON/OFF   Termination, set to ON at the chain end of the RS-485 DATA line, otherwise OFF.

Bit # 3: OFF   Straight wiring for RS-485 DATA PORT

Bit # 4: OFF   RS-485 DATA port is selected.

Bit # 5: ON/OFF   Termination, set to ON at the chain end of the RS-485 HOST line, otherwise OFF.

Bit # 6: ON/OFF   Termination, set to ON at the chain end of the RS-485 HOST line, otherwise OFF.
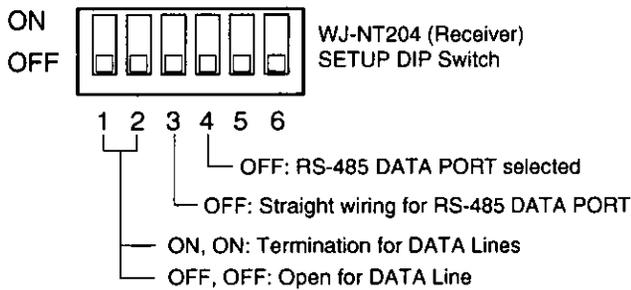
2. Set the DIP Switch and Unit Number Switch on the rear of the System Controller WV-CU360 as follows. For details refer to the manual included in the System Controller.

DIP Bit #5: ON/OFF   Termination for RS-485 (PS·DATA), set to ON at the RS-485 chain end, otherwise set to OFF.

Unit Number: Set to 1.

OFF
ON

System Controller WV-CU360

1 2 3 4 5 6 7 8

Set the unit number

ON: Termination for RS-485 (PS·Data) Lines

OFF: Open for Lines

ON
OFF

WJ-NT204 (Receiver)
SETUP DIP Switch

1 2 3 4 5 6

OFF: RS-485 DATA PORT selected

OFF: Straight wiring for RS-485 DATA PORT

ON, ON: Termination for DATA Lines

OFF, OFF: Open for DATA Line
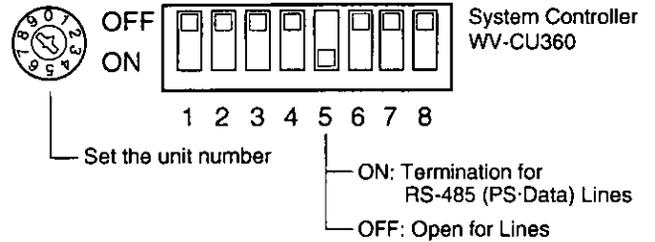
■ PC Connection

Connect the Remote site unit to the PC via a hub with Ethernet straight cables as shown below.
For more details, refer to LAN TYPE CONNECTION on page 66.

Connection to a Client PC via Hub

Combination Cameras (4)

Ethernet straight cable

Ethernet straight cable

WJ-NT204 Network Interface Unit for remote site

Hub

PC (browser)
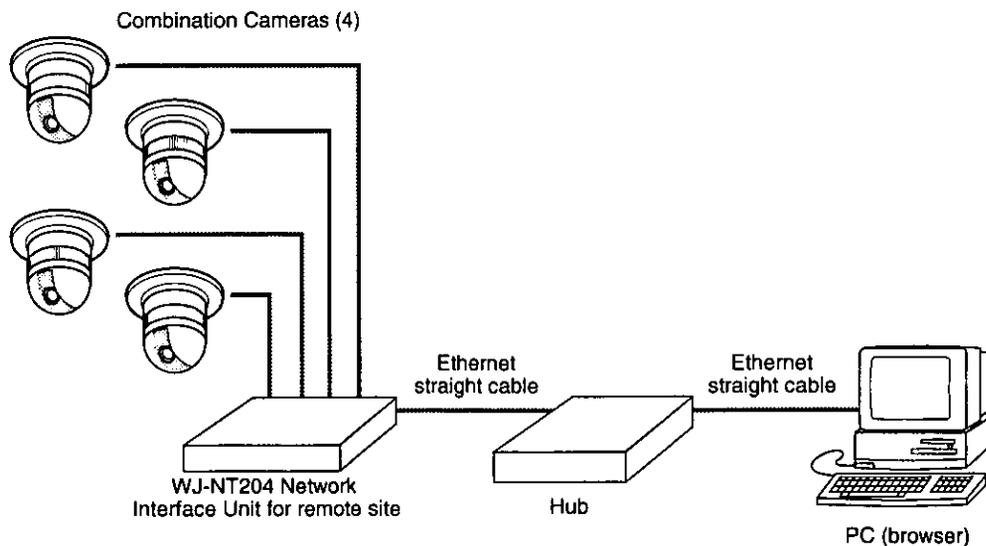
■ Prior to Setup

● Turning On the Power

1. Confirm that the cameras and peripherals are connected correctly and securely.
2. Turn on the power switches of all system components.
3. Connect the Remote Controller to the Network Interface Unit.

Remote Controller
WV-CU20

REMOTE
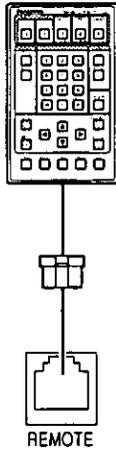
4. Turn on the power switch of the Network Interface Unit. The power indicator illuminates. On the monitor, the initial screen is displayed when "PLEASE WAIT" message disappears.

5. Switch Protector
   We recommend that you install the protector on the POWER switch after the setup. The protector is supplied as one of the standard accessories.
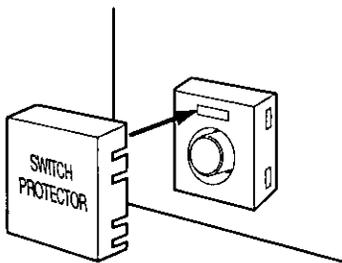
● Turning Off the Power

1. Wait until the communication ends.
2. Turn off the power switch.
   The power indicator goes out and the monitor screen changes to no picture.

● To Open/Close the Setup menu

1. Press the MENU button on the Remote Controller to open the 000 TOP menu. You can approach to the menu you wish to set up through this window.
   Move the cursor to the menu then press the ENTER button, or enter the menu number with the numeric buttons to open the desired menu.

```
000 TOP

100 CONFIGURATION↓ (TRANSMITTER)
200 RECEIVING REGI.↓
300 DIRECTORY/DIALING REGI.↓
400 SETUP↓
500 CONTROL↓
600 MAINTENANCE↓
700 REMOTE SETUP EDIT↓




↑↓:MOVE  ENT:SELECT  ESC:CLEAR
```

2. Press the MENU button to close the menu, or the ESC button to return the menu to the previous one.

   A setup menu has its menu number on the left top followed by the menu name.
   In the center of the menu, various items, parameters and messages will appear depending on the menu selection. A default parameter is underlined for the first time or right after the initializing until its item is selected. The cursor blinks, and can be navigated with the direction buttons to move it to the desired position.
   On the bottom, major control buttons are explained such as the DIRECTIONS, ENTER, ESCAPE, DELETE, etc.
   A dashed line may appear in the menu when the function is not applicable to the transmitter unit or receiver unit depending on the setup. In this manual, setup menus are depicted without dashed lines unless the menu is exclusively used for a transmitter or receiver.

■ Buttons Used for the Setup
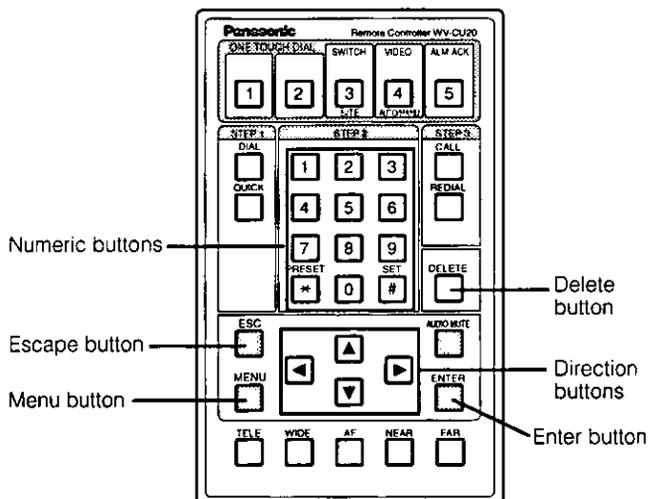
Escape button [ESC]: Returns menu to the previous.

Menu button [MENU]: Opens or closes the setup menu.

Numeric buttons [0 - 9]: Enters numeric characters, e.g., for IP addresses, etc.

Direction buttons [◄, ►, ▼, ▲]: Moves the cursor.

Delete button [DELETE]: Deletes the entered number preceding the cursor.

Enter button [ENTER]: Confirms the selected parameter, and opens a sub menu.

Caution:
- Settings are stored into the internal memories in the following cases:

  When you close the menu with the MENU button, or

  When you change the menu from the current one to the other with the ESC button.

- The settings in the currently displayed menu will not be stored in the following cases:

  When the power of the unit is turned off

  When a power failure takes place

  When the unit receives a call and enters communication

  When the unit disconnects the line.

34

■ Setup Menus

As shown below, tens of menus are provided to make setups as minute and convenient as possible.

35

■ 100 CONFIGURATION

This menu lets you set the operating mode and IP address in the network.

1. Press the MENU button on the Remote Controller to open the 000 TOP menu.

```
000 TOP

  100 CONFIGURATION↓ (TRANSMITTER)
  200 RECEIVING REGI.↓
  300 DIRECTORY/DIALING REGI.↓
  400 SETUP↓
  500 CONTROL↓
  600 MAINTENANCE↓
  700 REMOTE SETUP EDIT↓




  ↑↓:MOVE ENT:SELECT ESC:CLEAR
```

2. Select the 100 CONFIGURATION with the ▲ or ▼ button, then press the ENTER button.

```
100 CONFIGURATION

  MODE      : TRANSMITTER   RECEIVER
  VIDEO     : H261 JPEG
  IP ADDRESS      : 192.168.  0. 10
  SUBNET MASK     : 255 255.255.0
  DEFAULT GATEWAY :   0.  0.  0.  0
  DATE/CLOCK
    JAN.01.01  MON 00:00
        . .            :  SET
    MM.DD.YY       HH:MM
  DAYLIGHT SAVINGS: ON   OFF
  TRANS. CONTROL  : ON   OFF

  ↑↓←→:MOVE ←→:SELECT DEL:CLR ESC:PRV
```

3. Move the cursor to MODE and select either TRANSMITTER or RECEIVER. The default setting is TRANSMITTER.

   TRANSMITTER: Select this when the unit is installed in the Remote site along with cameras.
   RECEIVER: Select this when the unit is installed in the Control site.

4. Move the cursor to VIDEO and select H261 or JPEG with the ◄ or ► button. A standard for video compression is selected only for the **TRANSMITTER**.

   H261: The unit uses the H.261, ITU-T recommendation.
   JPEG: The unit uses the Joint Photographic Experts Group standard. This standard is applicable only when the PC site receives video transmission.

5. Move the cursor to IP ADDRESS and enter the number with the numeric buttons.

6. Move the cursor to SUBNET MASK and enter the number with the numeric buttons.

7. Move the cursor to DEFAULT GATEWAY and enter the number with the numeric buttons.
   Make certain that the default gateway is set to 0 when the system is used in the environment not having a gateway.

8. Move the cursor to the date and time field.
   Enter the month, date, year with the numeric buttons, then hour and minute. Press the ENTER.

9. Move the cursor to DAYLIGHT SAVINGS and select ON or OFF with the ◄ or ► button. The default setting is OFF.

   ON: The internal clock advances by one hour than the normal time.
   OFF: The normal time is applied to the clock.

10. Move the cursor to TRANS. CONTROL and select ON or OFF with the ◄ or ► button. The default setting is ON.

    This setting specifies whether the **RECEIVER** unit operates or not the following functions such as camera control, serial port control and parallel port control.

    ON: The unit is enabled to operate these control functions.
    OFF: The unit is disabled.

    Note: The priority is given to the presently operating unit when ON is set to more than one unit, and a collision arises.

11. The confirmation dialog prompts you to select YES or NO when pressing the ESC button after changing the setting.

```
  ■ CHANGE CONFIGURATION?

  YES  NO






  ←→:SELECT ENT:EXEC ESC:PRV
```

   YES: Select this when you wish to store the new (changed) settings.
   NO: Select this when you wish to retain the previous settings.

12. Press the ENTER to return the screen back to the standby mode, or press the ESC button to go back to the 000 TOP menu. In the standby mode, the monitor displays camera pictures, not setup menus.

■ 200 RECEIVING REGI.

In this menu you can set up parameters related to the call reception mode.

```
200 RECEIVING REGI.

210 RECEIVING REGI.↓
220 CALLING IP ADDRESS CHECK↓




↑↓:MOVE  ENT:SELECT  ESC:PRV
```
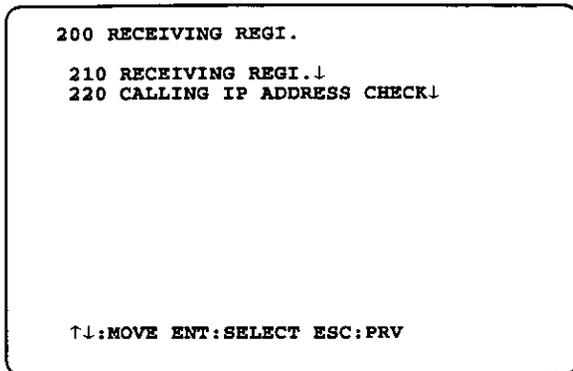
1. The 200 RECEIVING REGI. menu appears when you press the ENTER button after selecting it in the 000 TOP menu.

2. Select a menu you wish to set up from the 210 or 220, then press the ENTER. The selected menu appears.

210 RECEIVING REGI.

The call receiving mode is set in this menu.
The COM STATE setting appears only when the unit is set to a receiver.

```
210 RECEIVING REGI.

RECEIVING MODE
   READY STATE:   AUTO MANUAL

RINGER        :  ON   OFF






↑↓:MOVE  ←→:SELECT  ESC:PRV
```
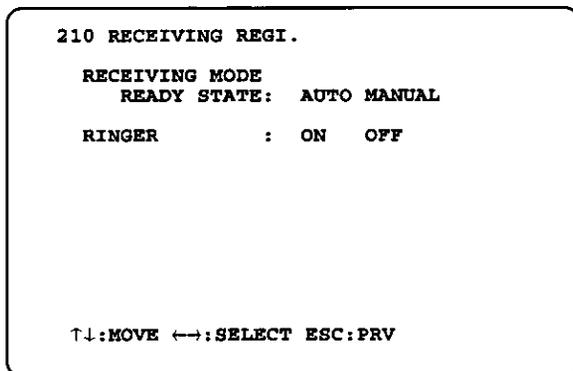
1. Open the 210 RECEIVING REGI. menu.

2. Move the cursor to READY STATE and select either AUTO or MANUAL. This setup specifies the reception mode when the unit is not in communication. The default setting is AUTO.

   AUTO: The unit accepts incoming call without manual operation.
   MANUAL: Call reception is made only when the DIAL button is pressed on the Remote Controller.

3. Move the cursor to COM.STATE and select either AUTO or MANUAL.. This setup specifies the reception mode when the **RECEIVER** unit is in communication.

   AUTO: The unit accepts incoming call without manual operation. The previous call will be suspended.
   MANUAL: Call reception is made only when the DIAL button is pressed.

4. Move the cursor to RINGER and select either ON or OFF. Sound level is adjusted with the RINGER VOLUME CONTROL on the front panel. The default setting is ON.

   ON: The ringer sounds when the unit receives a call.
   OFF: The ringer does not sound.

220 CALLING IP ADDRESS CHECK

When receiving a call, the caller's address can be examined whether to accept or reject it.

```
220 CALLING IP ADDRESS CHECK

CALLING IP ADDRESS CHECK: ON OFF

REJECT IP/SUBNET MASK REGI.
  192.168.  0. 10/255.255.255.128
  192.168.  1. 11/255.255.255.128
    .   .   . /  .   .   .

ACCEPT IP/SUBNET MASK REGI.
    .   .   . /  .   .   .
    .   .   . /  .   .   .
    .   .   . /  .   .   .

↑↓←→:MOVE  DEL:CLEAR  ESC:PRV
```
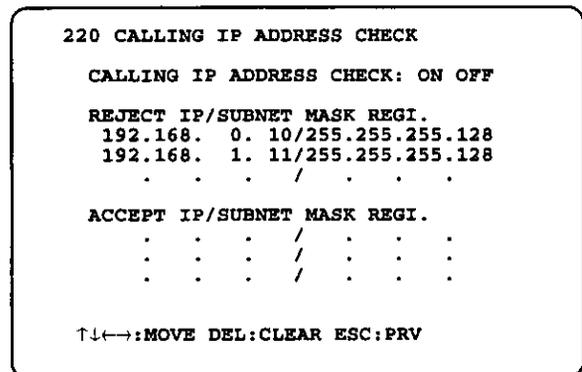
1. Open the 220 CALLING IP ADDRESS CHECK menu.

2. Move the cursor to CALLING IP ADDRESS CHECK and select either ON or OFF.

   ON: The caller address check is enabled.
   OFF: The check is disabled.

3. Move the cursor to REJECT IP/SUBNETMASK REGI. (Registration) field. You can enter up to 3 terminal addresses with the numeric buttons.
   The unit will ignore calls from these masked range IPs, while it will accept calls from the site other than the registered.

4. Move the cursor to ACCEPT IP/SUBNET MASK REGI. (Registration) field. You can enter up to 3 terminal addresses with the numeric buttons.
   The unit will accept calls from these masked range IPs, while it will ignore calls from the site other than the registered.

Note: A calling site will be rejected if the setting meets the following conditions.
   • IP ADDRESS CHECK is set to ON in the called site.
   • The calling site is not included in REJECT, ACCEPT or Quick Dialing Directory in the called site.
   • Check will be done only for the masked range with the IP address and subnet mask.

■ 300 DIRECTORY DIALING REGI.

IP addresses and titles are registered in the directory for Quick, One-touch and Sequence dialing.
The 330 SEQ DIALING REGI. appears only when the unit is set to a receiver.

```
300 DIRECTORY/DIALING REGI.

310 DIRECTORY REGI.↓
320 ONE TOUCH DIALING REGI.↓
330 SEQ.DIALING REGI.↓




↑↓:MOVE  ENT:SELECT  ESC:PRV
```

1. The 300 DIRECTORY DIALING REGI. menu appears when you press the ENTER button after selecting it in the 000 TOP menu.

2. Select a menu you wish to set up from the 310 or 320 and 330, then press the ENTER. The selected menu appears.

310 DIRECTORY REGI.

Up to 200 Quick dialing addresses are registered in the directory.

```
310 DIRECTORY REGI.
QCK# TITLE          SEQ.DIAL
001 Trans.01        OFF
002
003
004
005
006
007
008
009
010

NO.   ↑↓:MOVE  ENT:SELECT  ESC:PRV
```

1. Open the 310 DIRECTORY REGI. menu. On the left end column, the quick numbers (QCK#) from 001 to 010 are displayed.

2. Enter a number from 001 to 200 with the numeric buttons, or select a QCK# with the ▲ or ▼ button, then press the ENTER. The submenu for individual number appears.
   Note: The ▲ and ▼ buttons may not move when the cursor is placed in the No. field on the bottom line, and the selected QCK# has not registered contents yet or only "0" is registered for it. When this happens, enter a number 001 through 200, then use the ▲ or ▼ button

3. Enter the IP address with the numeric buttons.

```
NO.002

IP ADDRESS
 192.168.  0.  12

(TITLE↓)


SEQ.DIAL:  ON  OFF



↑↓←→:MOVE  DEL:CLEAR  ESC:PRV
```

4. Move the cursor to (TITLE↓) and press the ENTER. The TITLE submenu appears.

```
TITLE: Trans.02

ABCDEFGHIJ
KLMNOPQRST
UVWXYZ
abcdefghij
klmnopqrst
uvwxyz
0123456789
←→=?'"#&()
*+,-./:;·

(TITLE COPY↓)

ENT:SELECT  ESC:PRV  DEL:BS
```

5. Select a character with the direction button, then press the ENTER. The selected character appears on the top line. A maximum of 10 characters can be selected.

6. Repeat step 5 above until all characters are entered, then press the ESC button. The window returns to the submenu for individual number displaying the entered title.

7. You can copy a pre-existing title to a new one for convenience as follows.
   7-1 In the step 5, move the cursor to (TITLE COPY↓), then press the ENTER. The QUICK # TITLE list appears.
   7-2 Move the cursor to the title in the list you wish to copy, then press the ENTER. The individual submenu (similar to step 3) appears with the copied title.
   7-3 Go back to step 4 when you edit the copied title.

8. Move the cursor to SEQ.DIAL for the **RECEIVER** and select either ON or OFF with the ◄ or ► button. The default setting is OFF.

   ON: The terminal is included in as one step of the sequential dialing.
   OFF: The sequential dialing excludes the terminal.

9. Repeat step 2 through step 8 above to enter for other quick numbers (QCK#).

320 ONE TOUCH DIALING REGI.

The five ONE TOUCH DIAL buttons on the Remote Controller can be assigned the start point of sequential dial (SEQ. DIAL) or one-touch dial numbers as follows.

. Open the 320 ONE TOUCH DIALING REGI. menu.
The one-touch numbers (NO.) from 1 to 5 are displayed on the left end column followed by the corresponding quick numbers (QCK#) and the registered titles.

```
320 ONE TOUCH DIALING REGI.

NO.  QCK#   TITLE
 1    001    Trans.01
 2    002
 3    003
 4    004
 5    005




↑↓:MOVE  ENT:SELECT  ESC:PRV
000:SEQ.DIAL  DEL:CLEAR
```

Start point assignment for SEQ. DIAL

1. Move the cursor to QCK# column on the line of the desired one-touch number.

2. Press the DEL button to clear the registered QCK# to the one-touch button.

3. Enter "000" with the numeric button.

One-touch dial assignment

1. Move the cursor to the desired one-touch number, then press the ENTER. The QCK# LIST appears.

```
QCK# LIST
 QCK#  TITLE          SEQ.DIAL
 001   Trans.01        OFF
 002   Trans.02        ON
 003   Trans.03        ON
 004   Trans.04        ON
 005   Trans.05        OFF
 006
 007
 008
 009
 010

NO.   ↑↓:MOVE  ENT:SELECT  ESC:PRV
```

2 Enter the desired quick number with the numeric buttons, then press the ENTER. The selected number appears in the NO. field on the bottom line of the QCK# LIST.

3. Press the ENTER if the displayed number is to be assigned to the one-touch button, or press the ESC button to go back to step 3 above if the displayed number is wrong.

4. The menu returns to the 320 ONE TOUCH DIALING REGI. menu displaying the newly assigned QCK# and its title.

```
320 ONE TOUCH DIALING REGI.

NO.  QCK#   TITLE
 1    001    Trans.01
 2    002
 3    003
 4    004
 5    005




↑↓:MOVE  ENT:SELECT  ESC:PRV
000:SEQ.DIAL  DEL:CLEAR
```

5. Repeat steps 2 through 5 above to assign the terminal to the remaining one-touch buttons.

330 SEQ. DIAL REGI. (Receiver only)

In this menu, parameters for the sequential dialing are set up such as the start point, dwell time and repetition for the **RECEIVER**. Individual terminal is selected or deselected for the sequential dialing in the 310 DIRECTORY REGI. menu.

```
330 SEQ.DIAL

START UP SEQ.DIAL: 001
COM TIME:
 10S  20S  30S  1M  5M MANUAL
REPEAT   : YES  NO

SEQ.DIAL IS AVAILABLE FOR SEQ.ON
REGI. IN DIRECTORY.




↑↓:MOVE  ←→:SELECT  ESC:PRV
```

1. Open the 330 SEQ. DIAL menu.

2. Move the cursor to the START UP SEQ. DIAL and enter a QCK# (quick terminal number registered in the directory) with the numeric buttons. The entered terminal will be called first when the unit starts the sequence. The default setting is 001.

3. Move the cursor to COM. TIME and select a duration with the ◄ or ► button. The sequence advances to the next step when the selected time elapses, or the DIAL button is held down for 2 seconds on the Remote Controller. The default setting is 20S.

   10S: 10 seconds
   20S: 20 seconds
   30S: 30 seconds
   1M: 1 minute
   5M: 5 minutes
   MANUAL: Hold down the DIAL button for at least 2 seconds to advance the sequence.

4. Move the cursor to REPEAT and select either YES or NO.

   YES: The sequence continues until the DIAL button is pressed.
   NO: The sequence ends after one round.

39

■ 400 SETUP

Eight of fundamentals are set up for the system.
The menus 430, 460 and 470 will be replaced with dashed lines when the unit is set to a receiver.

```
┌─────────────────────────────────────┐
│                                     │
│   400 SETUP                         │
│                                     │
│   410 RE-CONNECTION↓                │
│   420 SERIAL/HOST PORT↓             │
│   430 VIDEO SWITCH SETUP↓           │
│   440 AUDIO↓                        │
│   450 VIDEO↓                        │
│   460 ALARM↓                        │
│   470 SEQ.SCAN SETUP↓               │
│   480 LOCK/MENU PASSWORD↓           │
│                                     │
│                                     │
│   ↑↓:MOVE ENT:SELECT ESC:PRV        │
│                                     │
└─────────────────────────────────────┘
```

1. The 400 SETUP menu appears when you press the ENTER button after selecting it in the 000 TOP menu.

2. Select a menu you wish to set up from the 410, 420, 430, 440, 450, 460, 470, and 480, then press the ENTER. The selected menu appears.

410 RE-CONNECTION

Re-connection is started by the site that is set to ON for this setting when a call is interrupted during communication. This setting is applicable only to the system comprising two WJ-NT204 units, one for TRANSMITTER and the other for RECEIVER, and when the call has been made with the Remote Controller WV-CU20. This does not perform in the multi-site connection.

```
┌─────────────────────────────────────┐
│                                     │
│   410 RE-CONNECTION                 │
│                                     │
│   RE-CONNECTION : ON   OFF          │
│                                     │
│                                     │
│   IN COM.STATE,NT204 WILL CONNECT   │
│   AGAIN IN CASE OF NETWORK          │
│   INTERRUPTION.                     │
│                                     │
│                                     │
│                                     │
│                                     │
│   ←→:SELECT ESC:PRV                 │
│                                     │
└─────────────────────────────────────┘
```

1. Open the 410 RE-CONNECTION menu.

2. Select either ON or OFF with the direction button. The default setting is ON.

   ON: Re-connection is enabled.
   OFF: Disabled.

420 SERIAL/HOST PORT

Serial and Host ports are set up in this menu.

```
┌─────────────────────────────────────┐
│                                     │
│   420 SERIAL/HOST PORT              │
│                                     │
│   421 SERIAL DATA PORT↓             │
│   422 HOST PORT↓                    │
│                                     │
│                                     │
│                                     │
│                                     │
│   ↑↓:MOVE ENT:SELECT ESC:PRV        │
│                                     │
└─────────────────────────────────────┘
```

1. Open the 420 SERIAL/HOST PORT menu.

2. Select a menu you wish to set up from the 421 and 422, then press the ENTER. The selected menu appears.

   421 SERIAL DATA PORT: Select this when the system comprises a Matrix Switcher (WJ-SX550A/B), Digital Disk Recorder or other PS·Data devices.
   422 HOST PORT: Select this when the system connects with a personal computer.

421 SERIAL DATA PORT

The DIP switch #4 on the rear of the unit specifies the usable serial port from RS-232C or RS-485 (PS·Data). The settings below must be the same among the devices connected in the chain, except the unit #.

```
┌─────────────────────────────────────┐
│                                     │
│   421 SERIAL DATA PORT              │
│                                     │
│   RATE     :  4800  9600  19200     │
│   DATA BITS:  8     7               │
│   STOP BITS:  1     2               │
│   PARITY   :  NONE  ODD   EVEN      │
│                                     │
│   MODE : PSD  NORMAL                │
│   RS485  UNIT #:002  (002-999)      │
│                                     │
│                                     │
│   ↑↓:MOVE ←→:SELECT ESC:PRV         │
│                                     │
└─────────────────────────────────────┘
```

1. Open the 421 SERIAL DATA PORT menu.

2. Move the cursor to RATE, then select a Baud rate with the ◄ or ► button.
   The default setting is 9600.

   4800: 4800 bps (bit per second)
   9600: 9600 bps
   19200: 19200 bps

3. Move the cursor to DATA BITS, then select a bit length with the ◄ or ► button.
The default setting is 8.

   8: 8 bits
   7: 7 bits

4. Move the cursor to STOP BITS, then select a bit length with the ◄ or ► button.
The default setting is 1.

   1: 1 bit
   2: 2 bits

5. Move the cursor to PARITY, then select a check mode with the ◄ or ► button.
The default setting is NONE.

   NONE: No check is made.
   ODD: Checked with odd parity.
   EVEN: Checked with even parity.

6. Move the cursor to MODE, then select a data communication protocol with the ◄ or ► button. When PSD is selected, set the DIP switch #4 to OFF on the rear of the WJ-NT204 transmitter.
The default setting is PSD.

   PSD: PS·Data protocol
   NORMAL: Other than PSD

7. Move the cursor to RS485 UNIT #, then enter a number with the numeric buttons. The number can range from 002 to 999. The default setting is 002.
This item appears only when PSD is selected in the MODE above.
This number needs not to be the same among the transmitter and receiver because that this is referred only for the re-sending address when a collision arises.

422 HOST PORT

The DIP switch #9 on the front of the unit specifies the usable serial port from RS-232C (front) or RS-485 (rear) (PS·Data). The settings below must be the same among the devices connected in the chain, except the unit #.

```
422 HOST PORT

RATE        :   4800   9600   19200

DATA BITS:  8bits(FIXED)
STOP BITS:  1bit (FIXED)
PARITY   :  NONE (FIXED)

RS485 UNIT #:  001




↑↓:MOVE  ←→:SELECT  ESC:PRV
```

1. Open the 422 HOST PORT menu.

2. Move the cursor to RATE, then select a Baud rate with the ◄ or ► button.
The default setting is 9600.

4800: 4800 bps (bit per second)
9600: 9600 bps
19200: 19200 bps

DATA BITS, STOP BITS and PARITY are not changeable.

3. Move the cursor to RS-485 UNIT #, then enter a number with the numeric buttons. The number can range from 001 to 999. The default setting is 001.

430 VIDEO SWITCH SETUP (Transmitter only)

Up to 8 video switches can be set in this menu for the **TRANSMITTER** unit in the Remote site. A video switch represents a set of information including the camera number, its preset position, alarm reception and associated trigger output.
While the unit is in communication, the Control site can select the registered video switches with the numeric buttons. The unit sends the designated image to the Control site while it supplies the trigger outputs to the connected device.
A video switch can be linked with the alarm input.

```
430 VIDEO SWITCH SETUP
  NO. CAM  PRST  TRG   ALARM
● 1.   1    1              ON OFF
● 2.   2    1              ON OFF
● 3.   3    1              ON OFF
● 4.   4    1              ON OFF
● 5.   *                   ON OFF
● 6.   1    2              ON OFF
● 7.   1          1        ON OFF
● 8.   1          2        ON OFF

DEFAULT NO. : 1
● IS AVAILABLE(ENT:●/-) ↑↓←→:MOVE
1-4(VIDEO) *(AUX) 1-8(PRST) 1-8(TRG)
ENT(ALARM ON/OFF):SELECT ESC:PRV
```

1. Open the 430 VIDEO SWITCH SETUP menu. There are 8 video switch numbers (No.)

2. Move the cursor to the left end of the No.1 line.

3. Press the ENTER button to toggle the video switch entry.

   ●: Video switch entry
   −: No entry

4. Move the cursor to CAM area, then enter a camera number with the numeric buttons.

5. Move the cursor to PRST (preset position) area, then enter a position number with the numeric buttons.
Preset position control is available only for the Combination Cameras. Position setting is required for the camera in advance. Press the DEL button when you do not have to set.

6. Move the cursor to TRG (trigger output) area, then enter an output number with the numeric buttons.
When the unit designated the video switch, trigger output terminal will be active on the rear panel to control connected device such as a Video Multiplexer.

41

7. Move the cursor to ALARM area, and select either ON or OFF with the ◄ or ► button, then press the ENTER. The SENSOR IN terminals #1 through #8 on the rear panel correspond to the video switch numbers on the menu.The default setting is ON.

ON: The camera aims at the preset position when the corresponding sensor (alarm) input is supplied.
OFF: The alarm input does not link to the video switch.

8. Repeat above steps for the remaining video switches.

9. Move the cursor below to the DEFAULT NO. field. Enter a video switch number from among 0-8.

The default view appears in the following cases.
when the unit is turned on
when the unit enters the standby mode after terminating communication
when the unit starts sequential scan
When "0" is set, AUTO mode assigned to the combination camera will continue. When other than "0" is set, the camera stops AUTO mode and moves to the designated default position (1-8).

440 AUDIO

You can set the audio transmission mode in this menu. Set for both Remote and Control sites. This setting is available only when the unit is not in communication.

1. Open the 440 AUDIO menu.

```
440 AUDIO

   AUDIO SEND:
    G711-mu   G711-A   OFF




   ←→:SELECT ESC:PRV
```

2. Select the mode with the ◄ or ► button. The default setting is G711-mu.

G711-mu: Select this when the unit is used in the USA or Japan.
G711-A: Select this when the unit is used in the Europe.
OFF: Transmission disabled.

450 VIDEO

You can set the video transmission mode in this menu. Set for both Remote and Control sites. This setting is available only when the unit is not in communication.

```
450 VIDEO

   451 VIDEO BIT RATE/MOTION↓
   452 ON-SCREEN DISPLAY↓
   453 CABLE COMPENSATION↓




   ↑↓:MOVE ENT:SELECT ESC:PRV
```

1. Open the 450 VIDEO menu.

2. Select a menu you wish to set up from the 451,452, and 453, then press the ENTER. The selected menu appears.

451 VIDEO BIT RATE/MOTION (Transmitter only)

This setting is available at the **TRANSMITTER**. From the Control site MOTION setting is also available through the 520 window during communication.

```
451 VIDEO BIT RATE/MOTION

   VIDEO BIT RATE(kbps):
   0 16 32 64 128 256 384 512 768 1024
   MOTION :   SLOW   NORMAL   FAST




   ↑↓:MOVE ←→:SELECT ESC:PRV
```

1. Open the 451 VIDEO BIT RATE/MOTION menu.

2. Move the cursor to VIDEO BIT RATE and select a rate with the ◄ or ►, then press the ENTER.The default setting is 1024.

0: No video transmitted.
16: 16 kbps (kilo-bit per second)
32: 32 kbps
64: 64 kbps
128: 128 kbps
256: 256 kbps
384: 384 kbps
512: 512 kbps
768: 768 kbps
1024: 1024 kbps

3. Move the cursor to MOTION and select a parameter with the ◄ or ► button, then press the ENTER. The default setting is NORMAL.
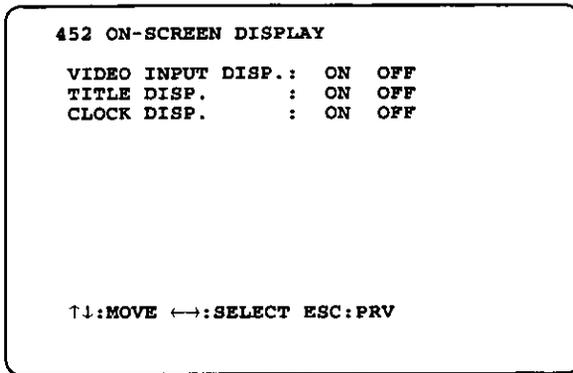
SLOW: Video quality oriented, but motion is slow.
NORMAL: For normal use.
FAST: Motion speed oriented, but video quality is low.

452 ON_SCREEN DISPLAY

You can set the display contents in this menu.

```
452 ON-SCREEN DISPLAY

VIDEO INPUT DISP.:  ON   OFF
TITLE DISP.       :  ON   OFF
CLOCK DISP.       :  ON   OFF




↑↓:MOVE  ←→:SELECT ESC:PRV
```

1. Open the 452 ON_SCREEN DISPLAY menu.

2. Move the cursor to VIDEO INPUT DISP. and select ON or OFF with the ◄ or ► button. The default setting is ON.

   ON: Enables the display of the currently designated video input.
   OFF: Disables the display.

3. Move the cursor to TITLE DISP. and select ON or OFF with the ◄ or ► button. The default setting is ON.

   ON: Enables the title display.
   OFF: Disables the display.

4. Move the cursor to CLOCK DISP. and select ON or OFF with the ◄ or ► button. The default setting is ON.

   ON: Enables the time and date display.
   OFF: Disables the display.

453 CABLE COMPENSATION (Transmitter only)

Picture quality is lowered as long as the cable is extended between the transmitter and the camera. Compensation is applied to the transmitter in three degrees with assumption that RG-59/U, BELDEN 9259 or equivalent cable is used. The default setting is S.

```
453 CABLE COMPENSATION

CAMERA1:  S   M   L
CAMERA2:  S   M   L
CAMERA3:  S   M   L
CAMERA4:  S   M   L




↑↓:MOVE  ←→:SELECT ESC:PRV
```
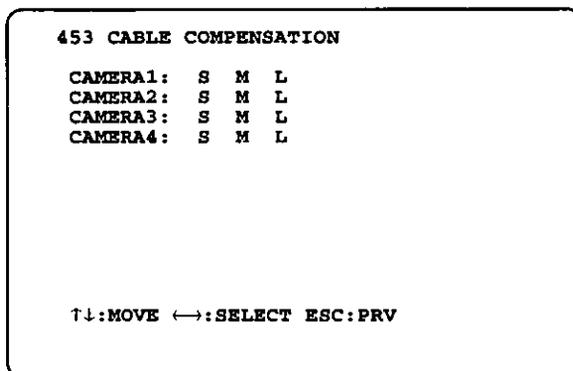
1. Open the 453 CABLE COMPENSATION menu.

2. Move the cursor to CAMERA 1 and select S, M or L with the ◄ or ► button.

S (Short): Up to 400 m (1 300 ft)
M (Middle): From 400 m (1 300 ft) to 700 m (2 300 ft)
L (Long): From 700 m (2 300 ft) to 900 m (3 000 ft)

3. Repeat above step for the remaining cameras.

460 ALARM (Transmitter only)

Alarm sensors are connected with a transmitter unit, and are located at where the camera aims or associated places. If a connected sensor operates, the transmitter unit will notify the Control site of the alarm activation during standby mode. Then the unit starts communication to transmit image and audio. The 460 ALARM menu lets you select and set up the 461 ALARM SETUP, 462 to 464 ALARM DIALING TABLES and 465 ALARM PORT SETUP. For more information, see SENSOR OPERATION in APPENDIX.

1. Open the 460 ALARM menu.

```
460 ALARM

461 ALARM SETUP↓
462 ALARM DIALING TABLE1↓
463 ALARM DIALING TABLE2↓
464 ALARM DIALING TABLE3↓
465 ALARM PORT SETUP↓




↑↓:MOVE ENT:SELECT ESC:PRV
```
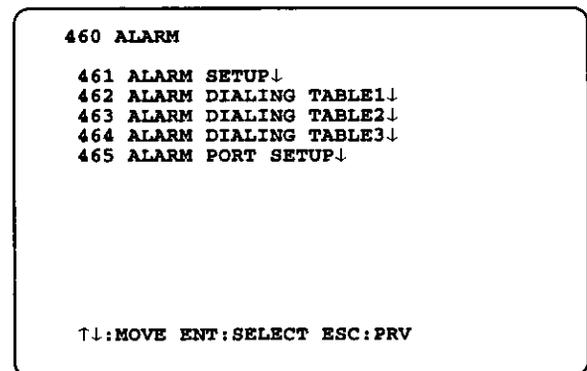
2. Select 461, 462, 463, 464 or 465 with the ▲ or ▼ button, then press the ENTER.
   The selected menu appears.

461 ALARM SETUP (Transmitter only)

This setup is applied only to the transmitter.

1. Open the 461 ALARM SETUP menu.

```
461 ALARM SETUP

ALARM TYPE:  LEVEL  EDGE(OPEN CLOSE)
ALARM AUTO DISC       :  ON  OFF
ALARM AUTO DISC TIMER :  060S
ALARM DIALING TIME TABLE:
 TABLE   DAY          TIME
   1    MON-SUN    00:00-00:00
   2    MON-FRI    08:30-17:00
   3    FRI-MON    17:00-08:00


ENT:DAY INC. DEL:CLR
↑↓←→:MOVE ESC:PRV
```
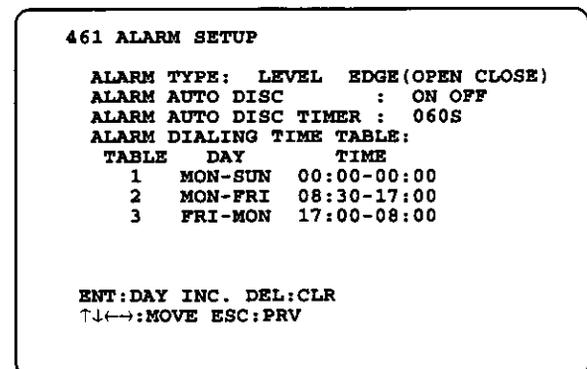
2. Move the cursor to ALARM TYPE and select either LEVEL or EDGE (OPEN CLOSE) with the ◄ or ► button. The default setting is EDGE (CLOSE).

This selection defines the sensor signal reception to the unit, and applies for all 8 sensor inputs. Consult the sensor on the output signal type.

LEVEL: The unit enters and retains the alarm mode while the sensor signal continues active status.
EDGE (OPEN): The unit enters the alarm mode when the sensor input changes from the close to open status.
EDGE (CLOSE): The unit enters the alarm mode when the sensor input changes from the open to close status.

Note: The alarm log may record redundant event when this setting is changed from one to another.

3. Move the cursor to ALARM AUTO DISC (disconnection) and select either ON or OFF with the ◄ or ► button. The default setting is ON.

ON: The alarm mode ends when the time elapses in the ALARM DISC TIMER below.
OFF: Automatic disconnection is disabled.

4. Move the cursor to ALARM AUTO DISC TIMER and enter a 3-digit number with the numeric buttons.
The unit escapes from the ALARM mode after elapsing the specified time in this setting. Time range depends on the ALARM TYPE selection. The time entry is allowed every 10 second in the range such as 010, 020 and so forth common to LEVEL and EDGE selection. The default setting is 60S.

0-600S (second): applies to LEVEL selection.
10-600S (second): applies to EDGE selection.

5. Select the applicable day and time for ALARM DIALING TIME TABLE. The dial numbers are specified in the menus 462, 463, and 464. You can utilize these time tables when there are differences in time zone or calling addresses depending on days. For example, TABLE 1 is used for weekdays while TABLE 2 is used for holidays with different calling addresses.
  5-1 Move the cursor to the "starting day" position on TABLE 1 line. Press the ENTER repeatedly until the desired day of the week appears.
  5-2 Move the cursor to the "ending day" position on TABLE 1 line. Press the ENTER repeatedly until the desired day of the week appears.
  5-3 Move the cursor to the "starting time" position on TABLE 1 line. Enter the time with the numeric buttons.
  5-4 Move the cursor to the "ending time" position on TABLE 1 line. Enter the time with the numeric buttons.
  5-5 Repeat above steps for TABLE 2 and 3.

Notes:
  • The times can be entered in the 24-hour system.
  • Enter "MON-SUN 00:00-00:00" when you let the unit work all the time around.
  • When you do not apply any of alarm dialing table, cancel all dial numbers in the corresponding menu 462, 463 or 463 ALARM DIALING TABLE.

462, 463, 464
ALARM DIALING TABLE (Transmitter only)

These tables link between each sensor input and the quick dial numbers specified in the 300 DIALING REGI. One sensor input lists three quick numbers. When a sensor operates, the unit dials the first number. If the first destination could not connect, the unit re-dials the second, and if not the third. The unit tries dialing up to 3 rounds when ALARM TYPE is set to EDGE, or does more rounds until the sensor input is reset when the TYPE is set to LEVEL. This setup is applied only to the transmitter.

```
462 ALARM DIALING TABLE1

MON-SUN 00:00-00:00

ALARM    #1      #2      #3
  1      001     002     003
  2      011     012     013
  3      ...     ...     ...
  4      ...     ...     ...
  5      ...     ...     ...
  6      ...     ...     ...
  7      ...     ...     ...
  8      ...     ...     ...

↑↓←→:MOVE ENT:SELECT ESC:PRV
```

1. Open the 462 ALARM DIALING TABLE1 menu.

2. Move the cursor to the dial #1 on the ALARM input 1 line and enter a quick number with the numeric buttons, then press the ENTER.

3. Move the cursor to the dial #2 and enter the second quick number.

4. Move the cursor to the dial #3 and enter the third quick number.

5. Repeat steps 2 through 4 for other ALARM inputs if necessary.

465 ALARM PORT SETUP (Transmitter only)

The sensor inputs connected to the rear of the unit can be enabled or disabled with this setup. EXT can be set only for the port #8. This setup is applied only to the transmitter. Similar setup is available at the receiver through the 540 menu during communication.

```
465 ALARM PORT SETUP

PORT NO.
  1      ENABLE    DISABLE
  2      ENABLE    DISABLE
  3      ENABLE    DISABLE
  4      ENABLE    DISABLE
  5      ENABLE    DISABLE
  6      ENABLE    DISABLE
  7      ENABLE    DISABLE
  8      ENABLE    DISABLE    EXT


↑↓←→:MOVE ←→:SELECT ESC:PRV
```

1. Open the 465 ALARM PORT SETUP menu.

2. Move the cursor to an input number and select ENABLE or DISABLE with the ◄ or ► button. The default setting is ENABLE.

   ENABLE: The unit accepts the sensor input.
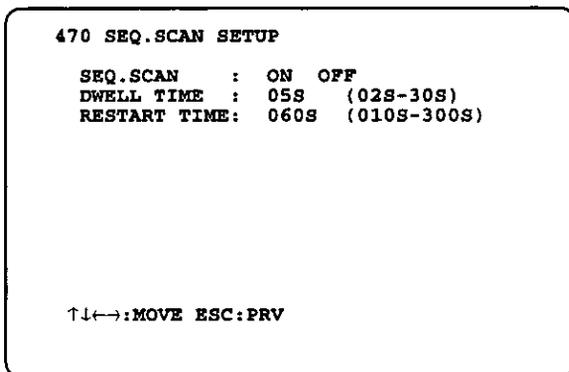   **DISABLE:** The unit ignores the sensor input.
   EXT: The highest priority is given to #8 port that the unit ignores inputs to other ports when #8 port is activated.

3. Repeat step 2 above until relevant ports are set.

470 SEQ. SCAN SETUP (Transmitter only)

The menu 430 presets a maximum of 8 video switches. The sequential scan is a function that traces these video switches in order, and only the Remote site unit (transmitter) is controllable. The Control site can monitor these scanning images in communication status. The Remote site can monitor these images while it is in communication. This setup is applied only to the transmitter.

1. Open the 470 SEQ. SCAN SETUP menu.

```
╭─────────────────────────────────╮
│   470 SEQ.SCAN SETUP            │
│                                 │
│   SEQ.SCAN    :  ON   OFF       │
│   DWELL TIME  :  05S   (02S-30S)│
│   RESTART TIME:  060S  (010S-300S)│
│                                 │
│                                 │
│                                 │
│   ↑↓↔:MOVE ESC:PRV              │
╰─────────────────────────────────╯
```

2. Move the cursor to the SEQ.SCAN and select either ON or OFF with the ◄ or ► button. The default setting is OFF.

   ON: Sequential scan enabled.
   OFF: Disabled.

3. Move the cursor to DWELL TIME and enter a time duration with the numeric buttons. The time is in second to monitor per point. The default setting is 5S.
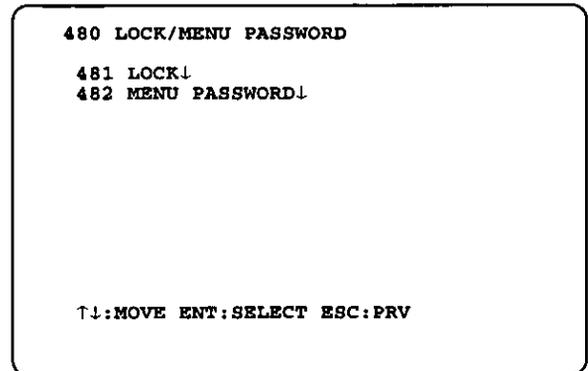
   02-30S: Set an appropriate time in second.

4. Move the cursor to RESTART TIME and select a time duration with the numeric buttons. The time is in second to restart the sequential scan after an interruption made by a manual operation. The default setting is 60S.

   010-300S: Set an appropriate time in second.

480 LOCK/MENU PASSWORD

This menu provides the unit with protection from accidental use, or from use by unauthorized operator.

```
╭─────────────────────────────────╮
│   480 LOCK/MENU PASSWORD        │
│                                 │
│   481 LOCK↓                     │
│   482 MENU PASSWORD↓            │
│                                 │
│                                 │
│                                 │
│                                 │
│   ↑↓:MOVE ENT:SELECT ESC:PRV    │
╰─────────────────────────────────╯
```

1. Open the 480 LOCK/MENU PASSWORD menu.

2. Move the cursor to 481 or 482 with the ◄ or ► button, then press the ENTER.
   The selected menu appears.

481 LOCK

MENU LOCK enables or disables the password protection when opening the menu windows. Preset password is entered in the 482 MENU PASSWORD.
NUM LOCK enables or disables the numeric buttons on the Remote Controller.
FUNCTION LOCK enables or disables the SWITCH SITE, VIDEO AUTO/MANUAL and ALM ACK buttons on the Remote Controller. This setting is available only when the unit is set to a receiver.

```
╭─────────────────────────────────╮
│   481 LOCK                      │
│                                 │
│   MENU LOCK    :  ON   OFF      │
│   NUM LOCK     :  ON   OFF      │
│   FUNCTION LOCK:  ON   OFF      │
│                                 │
│                                 │
│                                 │
│   ↑↓:MOVE ↔:SELECT ESC:PRV      │
╰─────────────────────────────────╯
```
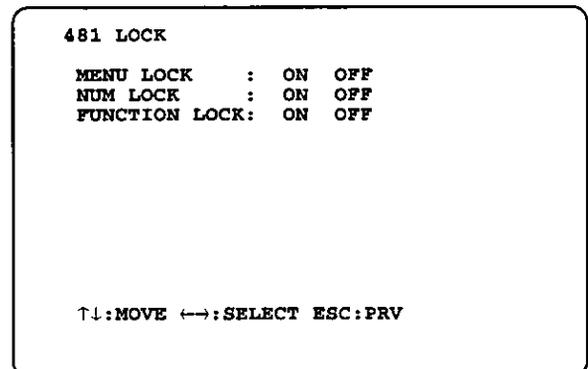
1. Open the 481 LOCK menu.

2. Move the cursor to MENU LOCK and select either ON or OFF with the ◄ or ► button. The default setting is OFF.

   ON: Password protection are enabled.
   OFF: No password protection.

3. Move the cursor to NUM LOCK and select either ON or OFF with the ◄ or ► button. The default setting is OFF.

   ON: Numeric buttons are disabled.
   OFF: Numeric buttons are operable.

4. Move the cursor to FUNCTION LOCK and select either ON or OFF with the ◄ or ► button. This setup is applied only to the receiver. The default setting is OFF.

ON: SWITCH SITE, VIDEO AUTO/MANUAL and ALM ACK buttons are disabled.
OFF: These buttons are operable.

482 MENU PASSWORD

The password is registered with a 4-digit number in this menu.

1. Open the 482 MENU PASSWORD menu.
   1-1 A message "ENTER CURRENT PASSWORD" appears if you have already registered the password. This message will not appear when the unit is very first to use or right after the initializing, then the message skips to "ENTER NEW PASSWORD".

```
482 MENU PASSWORD

  ENTER CURRENT PASSWORD   ****




  ENT:EXEC DEL:BS ESC:PRV
```
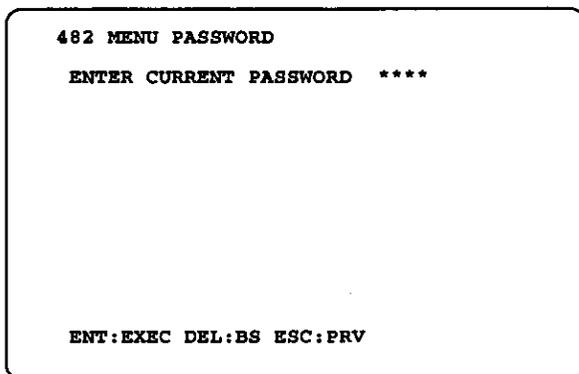
1-2. Enter the currently registered password with the numeric buttons, then press the ENTER.
When the entered password is correct, the message changes to "RE-ENTER NEW PASSWORD".
When the entered password is wrong, press the ESC button to quit the menu. Ask your dealer or system administrator what the registered password was.

2. When a message "ENTER NEW PASSWORD" appears on the menu, enter a new password, then press the ENTER. The new password is now registered.

```
482 MENU PASSWORD

  ENTER NEW PASSWORD        ****




  ENT:EXEC DEL:BS ESC:PRV
```
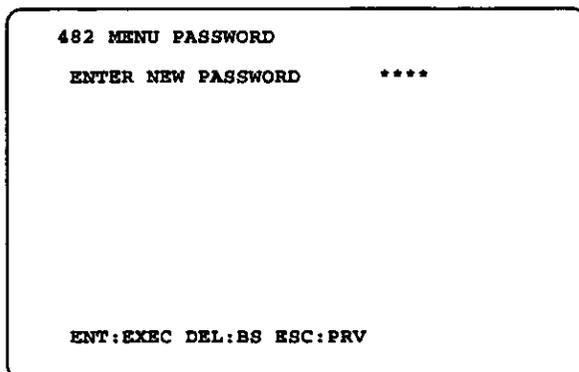
A password consists of 4-digit numeric entered with buttons from 0 to 9, # and *.
We recommend that you take notes the password and retain it for future reference.

3. When a message "RE-ENTER NEW PASSWORD" appears, it prompts you to enter the new password for verification. Press the ENTER to return the menu to the 480 LOCK/MENU PASSWORD.

```
482 MENU PASSWORD

  RE-ENTER NEW PASSWORD    ****




  ENT:EXEC DEL:BS ESC:PRV
```
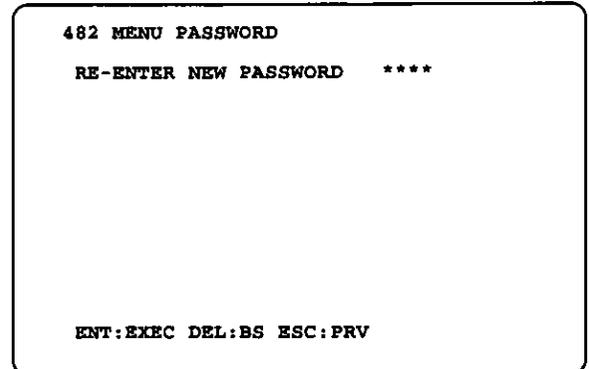
■ 500 CONTROL (Transmitter only)

Camera selection, preset position selection, trigger output assignment and camera menu setup can be made through this window from the Control site (Transmitter) unit.

Operations for this window is exactly the same as that of the 510 CAMERA • PRESET • TRIGGER OUT described in the next page.

```
500  CONTROL

  CAMERA  :  1 2 3 4 AUX
  PRESET  :  1 2 3 4 5 6 7 8
  TRIGGER :  1 2 3 4 5 6 7 8
  CAMERA MENU↓



  ↑↓←→:MOVE ENT:EXEC ESC:PRV
```
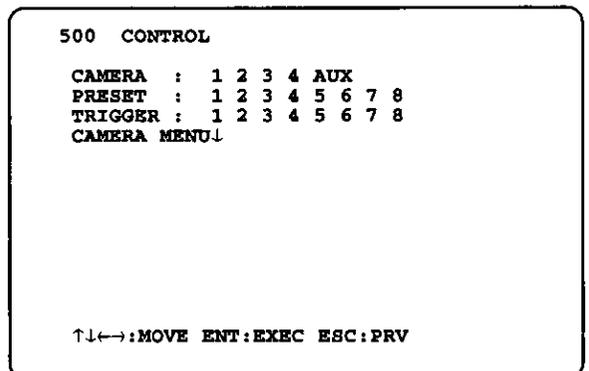
■ 500 REMOTE CONTROL/SETUP (Receiver only)

Some of the Remote site setups can be changed from the Control site during communication in order for displaying the wanted image on the monitor.

```
500 REMOTE. CONTROL/SETUP

510 CAMERA·PRESET·TRIGGER OUT↓
520 VIDEO MOTION↓
530 VIDEO SWITCH SETUP↓
540 ALARM PORT SETUP↓




↑↓:MOVE ENT:SELECT ESC:PRV
```

1. Open the 500 REMOTE CONTROL SETUP menu.

2. Move the cursor to 510, 520 or 530 with the ▲ or ▼ button, then press the ENTER. The selected menu appears.

510 CAMERA • PRESET • TRIGGER OUT (Receiver only)

Before operating this menu, make certain to stop the sequential scan mode with the AUTO/MANUAL button on the Remote Controller.

1. Open the 510 CAMERA • PRESET • TRIGGER OUT menu.

```
510 CAMERA·PRESET·TRIGGER OUT

CAMERA  :  1 2 3 4 AUX
PRESET  :  1 2 3 4 5 6 7 8
TRIGGER :  1 2 3 4 5 6 7 8
CAMERA MENU↓




↑↓←→:MOVE ENT:EXEC ESC:PRV
```

2. Move the cursor to the desired input number on the CAMERA line, then press the ENTER. The camera selection in the Remote site is changed, and the selected image appears on the monitor in the Control site.

1-4: Selection is made from among the VIDEO IN 1-4.
AUX: Input image to the AUX IN terminal is selected. The selected image appears on the Control site monitor only when the unit is in communication, not in standby mode.

The transmitter site monitor will not display the AUX image even when AUX is selected in the 500 CONTROL menu for the transmitter during communication. On the other hand the receiver monitor displays the selected image with the input display of VIDEO 5.

3. Move the cursor to the desired position number on the PRESET line, then press the ENTER. The camera aims at the preset position in the Remote site, and the selected image appears on the monitor in the Control site.

1-8: Selection is made from the preset positions designated to the camera in advance.

4. Move the cursor to the desired number on the TRIGGER line, then press the ENTER.
The TRIGGER OUT terminal on the Remote site unit will supply an output pulse to the connected device.

1-8: Numbers represent the TRIGGER OUT terminals on the Remote site unit.

5. Move the cursor to the CAMERA MENU, then press the ENTER.
The camera setup menu appears (except when AUX is selected) on the monitor only when the Combination Camera is used. Refer to the manual supplied with the Combination Camera. Press the MENU button on the Remote Controller to quit the camera menu.

520 VIDEO MOTION (Receiver only)

This menu corresponds to 451 VIDEO BIT RATE MOTION on the Remote site setup. The Control site can change these selections remotely.

1. Open the 520 VIDEO MOTION menu.

2. Move the cursor to VIDEO MOTION and select a parameter with the ◄ or ► button, then press the ENTER.

SLOW: Video quality oriented, but motion is slow.
NORMAL: For normal use.
FAST: Motion oriented, but video quality is low.

530 VIDEO SWITCH SETUP (Receiver only)

This menu corresponds to 430 VIDEO SWITCH SETUP on the Remote site setup. The Control site can change these selections remotely during communication.

1. Open the 530 VIDEO SWITCH SETUP menu.

2. Set parameters as same as the 430 VIDEO SWITCH SETUP.

540 ALARM PORT SETUP (Receiver only)

This menu corresponds to 465 ALARM PORT SETUP on the Remote site setup. The Control site can change these selections remotely during communication.

1. Open the 540 ALARM PORT SETUP menu.

2. Set parameters as same as the 465 ALARM PORT SETUP.

■ 600 MAINTENANCE

A variety of maintenance menus can be used in both the Control and Remote sites. Menu window changes depending on the site set (to a Transmitter or Receiver) and also on the communication status.

Maintenance menu in standby mode is shown below.

```
600 MAINTENANCE

610 ALARM LOG↓
--- -----
630 COM RATE/INFO.↓
640 CALLING LOG↓
650 SERIAL DATA PORT↓
660 LOCAL LOOPBACK↓
670 VERSION↓
--- -----
690 INITIALIZE↓


↑↓:MOVE ENT:SELECT ESC:PRV
```

During communication, the receiver displays the menu as shown below.

```
600 MAINTENANCE

610 ALARM LOG↓
620 REMOTE CLOCK SET↓
630 COM RATE/INFO.↓
640 CALLING LOG↓
650 SERIAL DATA PORT↓
--- -----
670 VERSION↓
680 MODE DISP.↓
--- -----


↑↓:MOVE ENT:SELECT ESC:PRV
```

610 ALARM LOG

The Remote site calls the Control site to inform the alarm activation. The ALARM LOG in the Remote site (transmitter) records the calling history while the reception history is stored in the Control site (receiver). The Remote site log can be seen from the Control site if necessary. The older records are overwritten when more than 100 events take place. The 612 ALARM LOG (RECEIVER) will be replaced with a dashed line when the unit is set to a transmitter.

```
610 ALARM LOG

611 ALARM LOG(TRANSMITTER)↓
612 ALARM LOG(RECEIVER)↓




↑↓:MOVE ENT:SELECT ESC:PRV
```

1. Open the 610 ALARM LOG menu.
2. Move the cursor to the 611 or 612, then press the ENTER. The selected menu appears.

611 ALARM LOG

The latest information is sent from the transmitter when this menu is opened on the receiver.

1. Open the 611 ALARM LOG (TRANSMITTER) menu.
   A page displays 10 events including the event number, date, time and sensor number (ALM#). Time and date are based on the transmitter's internal clock.

```
611 ALARM LOG(TRANSMITTER)    1/10

NO.  DATE       TIME       ALM#
96   JAN.03.01  12:32:23    1
95   JAN.03.01  09:56:26    1
94   JAN.03.01  05:55:55    4
93   JAN.03.01  03:46:40    5
92   JAN.02.01  23:13:05    1
91   JAN.02.01  21:58:47    3
90   JAN.02.01  17:15:23    1
89   JAN.01.01  06:30:34    2
88   JAN.01.01  03:15:00    1
87   JAN.01.01  00:01:30    1

↑:NEXT ALARM ↓:PRV ALARM ESC:PRV
```

Use the ▲ or ▼ button to scroll up or down the page.
2. Press the ESC button to return the menu back to the previous.

612 ALARM LOG (Receiver only)

This menu is only used in the Control site.
1. Open the 612 ALARM LOG (RECEIVER) menu.
   A page displays 5 events including the event number, date, time, sensor number (ALM#) and the name or address of the caller site. Time and date displayed on the monitor are based on the receiver's internal clock.

```
612 ALARM LOG(RECEIVER)       1/1

NO.  DATE       TIME       ALM#
2    JAN.03.01  15:49:34    2
     192.168.   0 12
1    JAN.01.01  15:45:21    5
     Trans.01




↑:NEXT ALM ↓:PRV ALM DEL:CLR ESC:PRV
```

Use the ▲ or ▼ button to scroll up or down the page.
2. Press the ESC button to return the menu to the previous.
3. Press the DELETE button to quit the 612 menu.
   A message asks you YES or NO. Select either one with the ◄ or ► button, then press the ENTER.

   YES: Stops displaying the ALARM LOG.
   NO: Continues the 612 menu.

620 REMOTE CLOCK SETUP (Receiver during Communication)

This menu enables the Control site to adjust the transmitter's clock during communication.

1. Open the 620 REMOTE CLOCK SETUP menu.

```
620 REMOTE CLOCK SET

REMOTE CLOCK SET:EXEC


PRESS ENT KEY,TO SET REMOTE CLOCK
TO LOCAL CLOCK.




ENT:EXEC ESC:PRV
```

2. Press the ENTER button when the local time is the hour. The clock on the transmitter is adjusted to the hour with a delay of 2 or 3 seconds due to transmission. The adjustment is accepted only when the deviation is within plus or minus 3 minutes from the hour.

630 COM RATE/INFO.

This menu helps you to analyze failures in communication such as disconnection.

1. Open the 630 COM RATE/INFO. menu.

```
630 COM RATE/INFO.

COM STATE/DISC VALUE:



COM INFO.:




ESC:PRV
```

2. Observe the COM STATE display.

   ●: In-communication
   –: Standby

3. Observe the cause display.

COM INFO. is not used.

640 CALLING LOG

The suspended call and calling log can be displayed for reference.

```
640 CALLING LOG

641 CALLED LOG IN COM↓
642 CALLING LOG↓







↑↓:MOVE ENT:SELECT ESC:PRV
```

1. Open the 640 CALLING LOG menu.

2. Move the cursor to the 641 or 642 with the ▲ or ▼ button, then press the ENTER.
   The selected menu appears.

641 CALLED LOG IN COM

You can later check the caller number that is the latest suspended in-communication status.

1. Open the 641 CALLED LOG IN COM menu.

```
641 CALLED LOG IN COM


192.168.  0. 11


DATE:JAN.01 03:15



ESC:PRV
```

You can check the registered name and address, and received date and time on the monitor. This log will be lost when the unit is turned off the power.

2. Press the ESC button to return the menu to the previous.

642 CALLING LOG

This log lists up to 100 of calling events with the event number, date and time, event type, and name and address of the site concerned. The older records are overwritten when more than 100 events take place.

1. Open the 642 CALLING LOG menu.

```
┌─────────────────────────────────────┐
│  642  CALLING LOG           1/16     │
│                                      │
│   78  JAN.03 16:00  L_DISC           │
│          192.168. 0. 14              │
│   77  JAN.02 21:00  CALLING          │
│          192.168. 0. 14              │
│   76  JAN.02 18:00  R_DISC           │
│          Receiver04                  │
│   75  JAN.01 06:00  CALLED           │
│          Receiver04                  │
│   74  JAN.01 00:00  L_DISC           │
│          192.168. 0. 11              │
│                                      │
│                                      │
│   ↑:NEXT COM ↓:PRV COM ESC:PRV       │
└─────────────────────────────────────┘
```

You can check every 5 events in chronological order on the monitor at a time. The event type is denoted as follows.

CALLING: Calling made in the site
CALLED: Reception made in the site
L-DISC: Disconnection took place in the site
R-DISC: Disconnection took place in the other site
CLD: Calling site received during communication

2. Press the ▲ or ▼ button to scroll up or down the page.

3. Press the ESC button to return the menu to the previous.

650 SERIAL DATA PORT

This menu lets you check the serial port setup whether to be the same as that of the other site concerned.

1. Open the 650 SERIAL DATA PORT menu.

```
┌─────────────────────────────────────┐
│  650  SERIAL DATA PORT               │
│                                      │
│                   LOCAL    REMOTE    │
│   RATE      :     9600     9600      │
│   DATA BITS:      8        8         │
│   STOP BITS:      1        1         │
│   PARITY    :     NONE     NONE      │
│                                      │
│                                      │
│   ESC:PRV                            │
└─────────────────────────────────────┘
```

2. Observe each parameter comparing with that of the other site. If you find any difference, remedy to match both settings as the same.

3. Press the ESC button to return the menu back to the previous.

660 LOCAL LOOPBACK (In Standby Only)

This test simulates how much quality of the video and audio are received without routing signals to the other site. Thanks to the built-in circuit to the unit, the simulated video appears on the monitor, and the audio comes out via the speaker in its-own site.

1. Open the 660 LOCAL LOOPBACK menu.

```
┌─────────────────────────────────────┐
│  660  LOCAL LOOPBACK                 │
│                                      │
│    MODE:   VIDEO   AUDIO             │
│                                      │
│                                      │
│                                      │
│                                      │
│                                      │
│   ←→:MOVE ENT:EXEC ESC:PRV           │
└─────────────────────────────────────┘
```

2. Move the cursor to VIDEO or AUDIO, then press the ENTER.
   VIDEO: Simulated video appears on the monitor.
   AUDIO: Simulated audio is supplied through the speaker.

   Observe the simulated video or audio carefully. The monitor screen changes blue when no video is supplied to the unit.

3. Press the ESC button to return the window to the previous one.
   Note: Video switch changing can not be implemented during the local loopback test.

670 VERSION

Software versions are displayed on the monitor.

1. Open the 670 VERSION menu.

```
┌─────────────────────────────────────┐
│  670  VERSION                        │
│                 LOCAL      REMOTE    │
│        SYSTEM:  ██████-██  ██████-██ │
│        HOST  :  ██████-██  ██████-██ │
│        DSP   :  ██████-██  ██████-██ │
│        SUB   :  ██████-██  ██████-██ │
│        H/W   :  ██████-██  ██████-██ │
│                                      │
│                                      │
│   ESC:PRV                            │
└─────────────────────────────────────┘
```

All versions for the REMOTE site are displayed as 000000-00 in the standby status, but in communication they will be displayed.

2. Press the ESC button to return the window to the previous one.

680 MODE DISP (display) [In Communication Only]

Transmission and reception mode for audio and video can be displayed in the communication status. Confirm that the relevant modes are set appropriately.

1. Open the 680 MODE DISP menu.

```
680 MODE DISP.

   SENDING MODE:
      VIDEO : H261     0    kbps
      AUDIO : G711-mu

   RECEIVING MODE:
      VIDEO : H261     128 kbps
      AUDIO : G711-mu




   ESC:PRV
```

2. Press the ESC button to return the window to the previous one.

690 INITIALIZE (In Standby Only)

INITIALIZE is to clear stored DIRECTORY or to return the setup parameters to the default settings.
Warning:
The following are irrevocable procedures. We strongly recommend that you take notes necessary data before implementing the INITIALIZE.

1. Open the 690 INITIALIZE menu.

```
690 INITIALIZE

   SYSTEM    : EXEC
   DIRECTORY : EXEC






   ↑↓:MOVE ENT:EXEC ESC:PRV
```

2. Move the cursor to SYSTEM or DIRECTORY, then press the ENTER. The selected menu appears.

SYSTEM: All setups are reset to the default settings, except the directory for quick dial.
DIRECTORY: Only the directory for dialing is reset.

3. When SYSTEM is selected, a message "(Do you want to) INITIALIZE SYSTEM CONFIG?" appears.

```
■INITIALIZE SYSTEM CONFIG?

   PLEASE WRITE DOWN THE FOLLOWING
   ADDRESSES BEFORE SELECTING YES
   AND PRESSING ENT.

   IP ADDRESS      : 192.168.  0. 10
   SUBNET MASK     : 255.255.255.  0
   DEFAULT GATEWAY :   0.  0.  0.  0

   YES  NO

   ←→:SELECT ENT:EXEC ESC:PRV
```

3-1 Take notes the IP address, subnetmask and default gateway following the message on the screen.
3-2 Select YES or NO with the ◄ or ► button, then press the ENTER.

YES: Returns the system setups to the default settings. INITIALIZE is implemented!!
NO: No initializing, the menu goes back to 690 INITIAL-IZE.

4. When DIRECTORY is selected, a message "(Do you want to) CLEAR DIRECTORY REGI.?" appears.

```
■CLEAR DIRECTORY REGI.?

   IF SELECTING YES AND PRESSING ENT.
   DIRECTORY WILL BE CLEAR.

   YES  NO




   ←→:SELECT ENT:EXEC ESC:PRV
```

4-1 Read the message on the screen.
4-2 Select YES or NO with the ◄ or ► button, then press the ENTER.

YES: Returns the dialing directory to the default settings. INITIALIZE is implemented!!
NO: No initializing, the menu goes back to 690 INITIAL-IZE.

■ 700 REMOTE SETUP EDIT (Receiver in Communication)

This menu lets the Control site (receiver) pull out the Remote site's (transmitter) setups to change them. The Control site transmits the modified setups to upload them back to the Control site. The monitor screen changes to blue during upload or download. To monitor the image, disconnect once, then connect again.

Notes:
• Up/Download can be made only by the site using a WV-CU20 Remote Controller.
• All the Remote site devices connected to the transmitter will be disconnected once when the upload ends. The transmitter will enter system reset mode to reflect the renewed settings. You need make connection after operating upload because that re-connection is not applied to this case.

1. Select the 700 in the 000 TOP menu, then press the ENTER.

```
000 TOP

100 CONFIGURATION↓ (TRANSMITTER)
200 RECEIVING REGI.↓
300 DIRECTORY/DIALING REGI.↓
400 SETUP↓
500 CONTROL↓
600 MAINTENANCE↓
700 REMOTE SETUP EDIT↓




↑↓:MOVE ENT:SELECT ESC:CLEAR
```

2. A message "DOWNLOAD? (REMOTE TO LOCAL)" appears. Select YES or NO with the ◄ or ► button, then press the ENTER.

```
■DOWNLOAD? (REMOTE TO LOCAL)

YES  NO





←→:SELECT ENT:EXEC ESC:CLEAR
```

3. A message "NOW DOWNLOADING, PLEASE WAIT" appears. Wait until the menu changes.

```
■NOW DOWNLOADING

PLEASE WAIT
   →  →
   .




ESC:QUIT
```

When the ESC button is pressed during the download, a dialog appears asking whether to quit. Select YES or NO, then press the ENTER.

YES: Escapes from the download.
NO: Continues the download.

4. The 700 REMOTE SETUP EDIT appears when data transmission ends successfully.

```
700 REMOTE SETUP EDIT

100 CONFIGURATION↓(TRANSMITTER)
200 RECEIVING REGI.↓
300 DIRECTORY/DIALING REGI.↓
400 SETUP↓




UPDATED ON JAN.01.01 00:00

↑↓:MOVE ENT:SELECT ESC:PRV
```

5. Move the cursor to the item you wish to edit with the ▲ or ▼ button, then press the ENTER. The selected menu appears. Each menu is the same as described before.

100 CONFIGURATION:
200 RECEIVING REGI.:
300 DIRECTORY/DIALING REGI.:
400 SETUP:

Remember that you are manipulating the Remote site's menu from the Control site.

6. Edit the necessary settings by opening the menus shown in the step 5 above.

7. Press the ESC button. The 700 REMOTE SETUP EDIT menu is recalled.

8. Press the ESC again. The upload dialog appears.

```
┌─────────────────────────────────────┐
│                                     │
│  ■UPLOAD?  (LOCAL  TO  REMOTE)      │
│     YES   NO                        │
│                                     │
│                                     │
│                                     │
│                                     │
│  ←→:SELECT  ENT:EXEC  ESC:CLEAR     │
│                                     │
│                                     │
└─────────────────────────────────────┘
```

9. Move the cursor to YES or NO with the ◄ or ► button, then press the ENTER.

   YES: Sends the changed settings back to the Remote site.
   NO: Returns the menu back to 700 REMOTE SETUP EDIT.

10. When YES is selected, a message "NOW UPLOADING, PLEASE WAIT" appears. Wait until the data transmission ends.

```
┌─────────────────────────────────────┐
│                                     │
│  ■NOW  UPLOADING                    │
│     PLEASE  WAIT                    │
│            → →                      │
│                                     │
│                                     │
│                                     │
│  ESC:QUIT                           │
│                                     │
│                                     │
└─────────────────────────────────────┘
```

11. Press the ESC button to end the 700 REMOTE SETUP EDIT.

Notes:
- When the data transmission fails, an error message [UPLOAD FAILED] appears. Press the ESC button to go back to the 000 TOP menu, then repeat above steps.
- Disconnect once, then connect again when you have escaped from this menu upon the completion or in the course of download.

This section details about operations made in the control site where a WJ-NT204 Network Interface Unit is installed as a receiver. For control site operations with WWW browser, refer to MAIN PAGE AND CONTROLS on page 70.

■ Before Operating the Unit

Confirm the following.
1. The relevant peripherals are connected to the unit in the site, and they are turned on the power.

2. A Remote Controller is connected to the unit. It operates major functions in the system.

3. System setups and call directory registrations are completed to the Network Interface Unit.

4. Turn on the power switch of the unit. The power indicator illuminates, and the monitor displays the initial screen shown on the right column.

5. The supplied Power Switch Protector is put on the power switch.
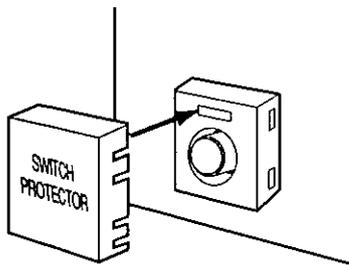
● About Power ON/OFF

Please use caution to the power operation.

Caution:
The power switch does not have a sufficient insulation capability from the AC mains even when it is turned off. We recommend that you unplug either end of the power cord from the unit or the AC outlet when you do not use the unit for a long time. Turning off the AC circuit breaker will be another cut-off measure if the unit is connected to it.

Note:
• Do not turn off the power switch while the unit is in communication.
• After the unit has been turned off or unplugged for a long time, supply AC power to the unit and turn it on to charge up the backup battery.

● Screen Display

There are 2 basic screens for operation: Normal and Dialog.

• Normal Screen

Beside the camera picture or playback image, some additional information are displayed as follows.

```
VIDEO1         JAN.01.01 00:00:00☎
Trans.01                           ●
```
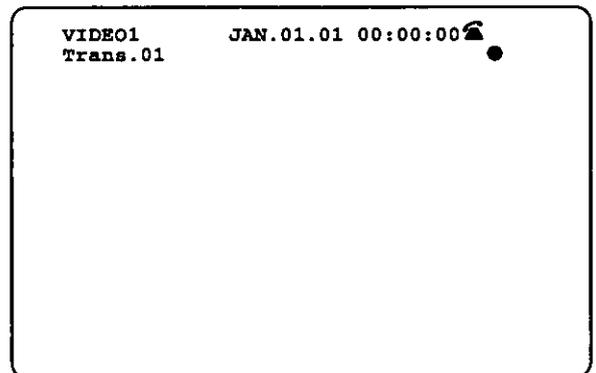
• VIDEO INPUT Number Display
The camera numbers are registered in the setup menu. See the 430 VIDEO SWITCH SETUP for details.

VIDEO 1: VIDEO INPUT number
Trans.01: A registered title

The transmitter's monitor displays the video input number and its registered title. Video input 5 is displayed when AUX IN is selected.
The receiver's monitor displays them only in the communication status.

• Date & Time Display
An asterisk * will follow the date display when the clock is on the daylight savings advancing by one hour than the normal time.

APR.01.01* 00:00:00

• Telephone Symbol
☎ : Standby
☎ : In-communication

• Connecting Display
●: Stands for calling, disappears after 10 seconds past the start of communication.
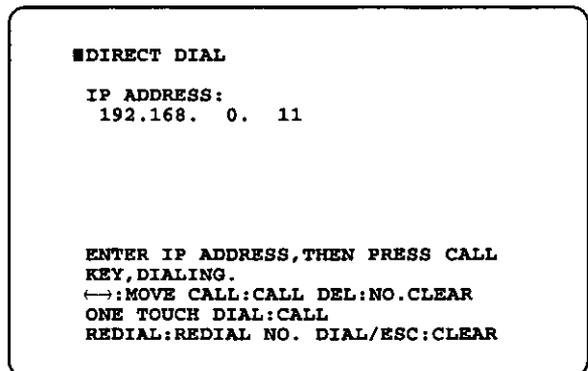
• Dialog Screen

There are several dialogs that appear during normal operations: YES/NO inquiry, etc. The major operations are explained on the bottom half of the screen. For further details, see MAJOR CONTROLS AND THEIR FUNCTIONS.

```
█DIRECT DIAL

   IP ADDRESS:
             .    .    .




   ENTER IP ADDRESS,THEN PRESS CALL
   KEY,DIALING.
   ←→:MOVE CALL:CALL DEL:NO.CLEAR
   ONE TOUCH DIAL:CALL
   REDIAL:REDIAL NO. DIAL/ESC:CLEAR
```

■ To Call a Site

There are some dialing methods to call a site.

1. Direct entry of the destination IP address with the numeric buttons

2. Using the registered Quick dialing directory

3. Using the registered One-touch dialing directory

4. Sequential dialing in the preset order

● Direct Dialing

This is the most basic way to call a site.

1. Press the DIAL button.
   The DIRECT DIAL dialog appears.

```
█DIRECT DIAL

   IP ADDRESS:
             .    .    .




   ENTER IP ADDRESS,THEN PRESS CALL
   KEY,DIALING.
   ←→:MOVE CALL:CALL DEL:NO.CLEAR
   ONE TOUCH DIAL:CALL
   REDIAL:REDIAL NO. DIAL/ESC:CLEAR
```

2. Enter the IP address of the site you wish to call, with the numeric buttons.

```
█DIRECT DIAL

   IP ADDRESS:
    192.168.  0.  11




   ENTER IP ADDRESS,THEN PRESS CALL
   KEY,DIALING.
   ←→:MOVE CALL:CALL DEL:NO.CLEAR
   ONE TOUCH DIAL:CALL
   REDIAL:REDIAL NO. DIAL/ESC:CLEAR
```

3 When you entered a wrong number, press the DELETE button. The number followed by the cursor will be erased.

4. Press the CALL button. The dialog screen changes to "CONNECTING" and the unit starts dialing.
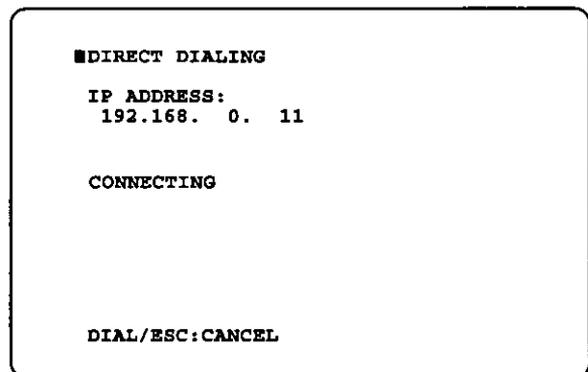
```
█DIRECT DIALING

   IP ADDRESS:
    192.168.  0.  11


   CONNECTING




   DIAL/ESC:CANCEL
```

During communication, the CONNECT indicator will illuminate.

5. To terminate the call, hold down the DIAL button for 2 seconds. The dialog changes to "LINE TERMINATED".

```
■LINE TERMINATED




ESC:CLEAR
```
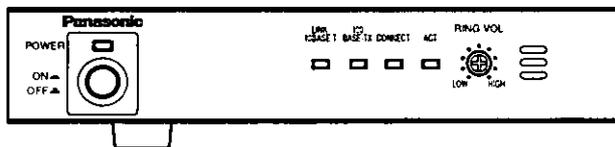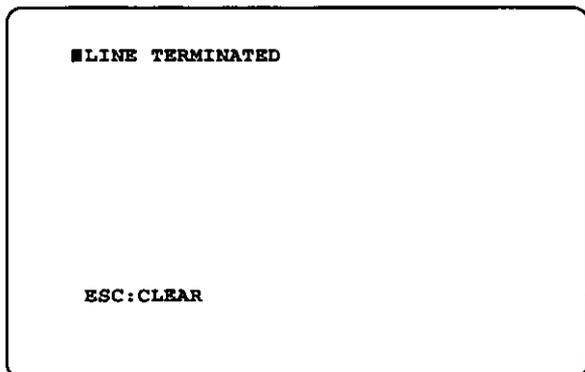
● Quick Dialing

You can use the quick dialing directory registered in
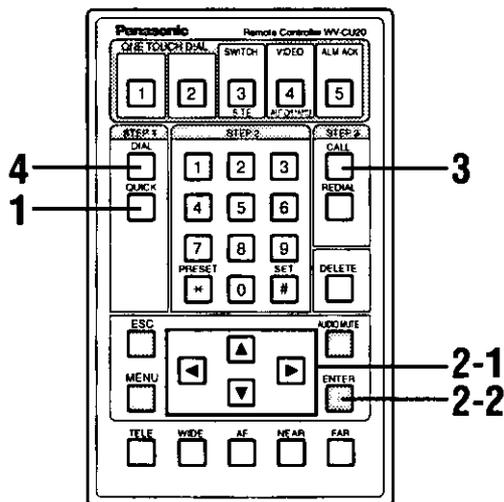
advance to call a site.

1. Press the QUICK button.
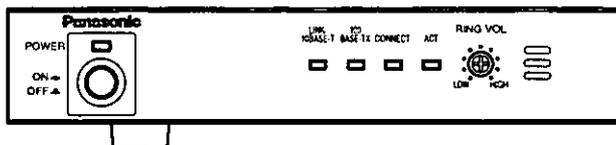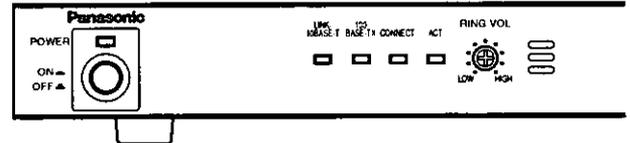   The QUICK dialog appears accompanied with the directory.

```
■QUICK DIAL
 QUICK#:
  NO.
 IP ADDRESS:
  .   .   .
 DIRECTORY:
  001 Trans.01
  002 Trans.02
  003 Trans.03
  004 Trans.04
  005 Trans.05

 ↑↓←→:MOVE CALL:CALL DEL:BS
 ENT:SELECT DIAL/ESC:CLEAR
```
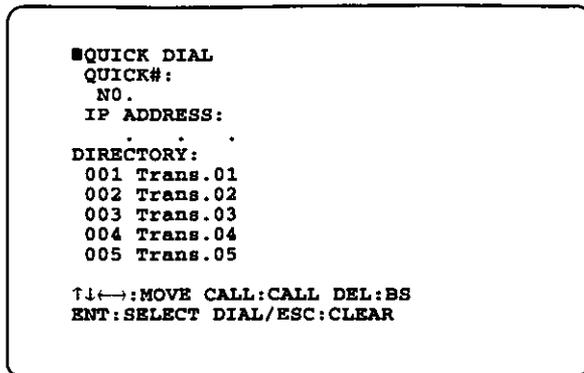
2. Select a quick number with the ▲ or ▼ button, then press the ENTER, or enter the quick number with the numeric buttons. The selected quick number, name and address are displayed in the upper half lines.
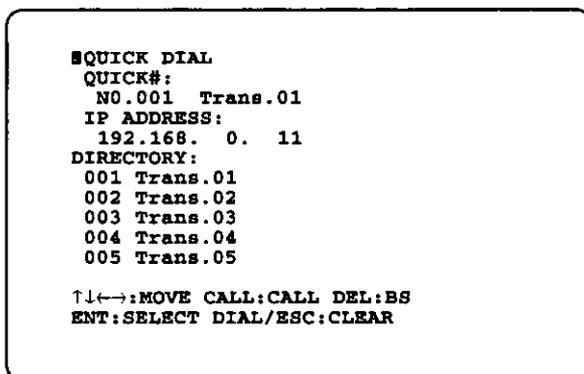
```
■QUICK DIAL
 QUICK#:
  NO.001  Trans.01
 IP ADDRESS:
  192.168.  0.  11
 DIRECTORY:
  001 Trans.01
  002 Trans.02
  003 Trans.03
  004 Trans.04
  005 Trans.05

 ↑↓←→:MOVE CALL:CALL DEL:BS
 ENT:SELECT DIAL/ESC:CLEAR
```

3. Press the CALL button. The dialog screen changes to "CONNECTING" and the unit starts dialing.

```
■QUICK DIALING

  NO.001  Trans.01


  CONNECTING




  DIAL/ESC:CANCEL
```

During communication, the CONNECT indicator will illuminate.

4. To terminate the call, hold down the DIAL button for 2 seconds. The dialog changes to "LINE TERMINATED".

```
■LINE TERMINATED




ESC:CLEAR
```

● One-touch Dialing

You can use the one-touch dialing directory registered in advance to call a site.

1. Press the DIAL button.

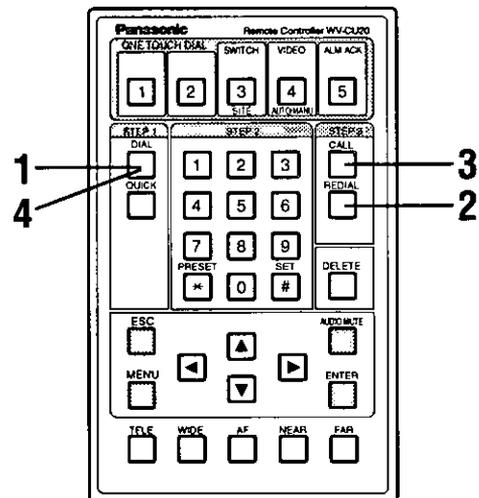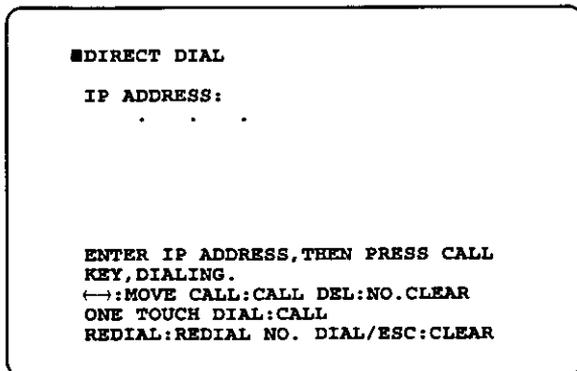The DIRECT DIAL dialog appears.

```
■DIRECT DIAL

IP ADDRESS:
          .   .   .




ENTER IP ADDRESS,THEN PRESS CALL
KEY,DIALING.
←→:MOVE CALL:CALL DEL:NO.CLEAR
ONE TOUCH DIAL:CALL
REDIAL:REDIAL NO. DIAL/ESC:CLEAR
```
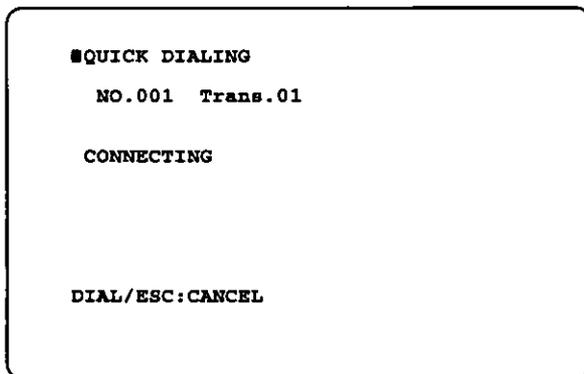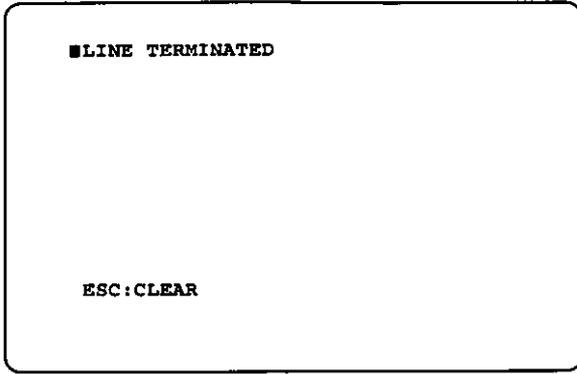
2. Press a one-touch dial button. The dialog screen changes to "CONNECTING" and the unit starts dialing.

```
■QUICK DIALING

   NO.001  Trans.01

   CONNECTING



   DIAL/ESC:CANCEL
```
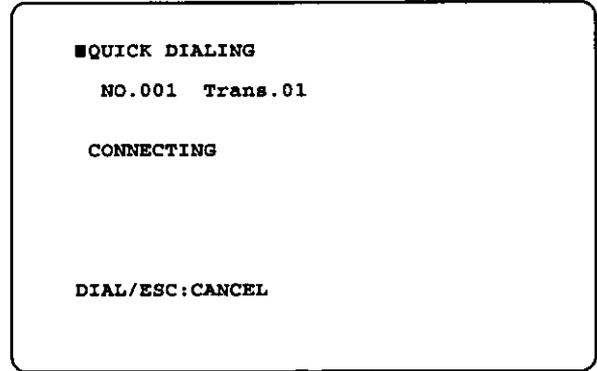
"DIALING FAILED" may appear when no assignment is made for the pressed one-touch button.

During communication, the CONNECT indicator will illuminate.

3. To terminate the call, hold down the DIAL button for 2 seconds. The dialog changes to "LINE TERMINATED".

● Redialing

The site can be called again if it has been the latest dialing, as follows.

1. Press the DIAL button.
   The DIRECT DIAL dialog appears.

```
■DIRECT DIAL

  IP ADDRESS:
      .    .    .




  ENTER IP ADDRESS,THEN PRESS CALL
  KEY,DIALING.
  ←→:MOVE CALL:CALL DEL:NO.CLEAR
  ONE TOUCH DIAL:CALL
  REDIAL:REDIAL NO. DIAL/ESC:CLEAR
```
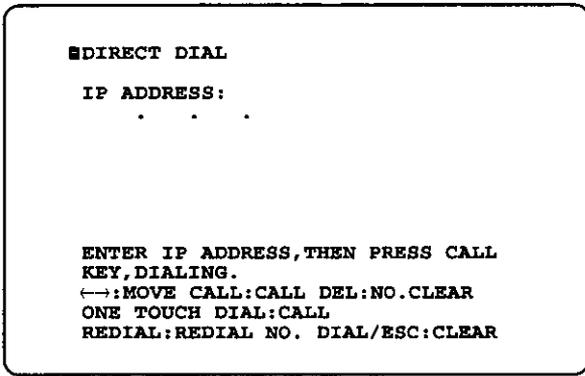
2. Press the REDIAL button. The dialog screen displays
   the IP address that has been the latest dialing.
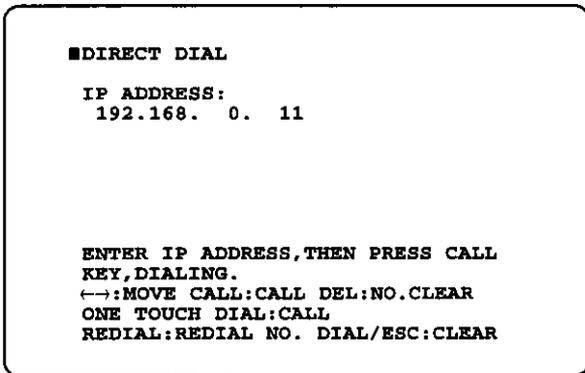
```
■DIRECT DIAL

  IP ADDRESS:
   192.168.  0.  11




  ENTER IP ADDRESS,THEN PRESS CALL
  KEY,DIALING.
  ←→:MOVE CALL:CALL DEL:NO.CLEAR
  ONE TOUCH DIAL:CALL
  REDIAL:REDIAL NO. DIAL/ESC:CLEAR
```
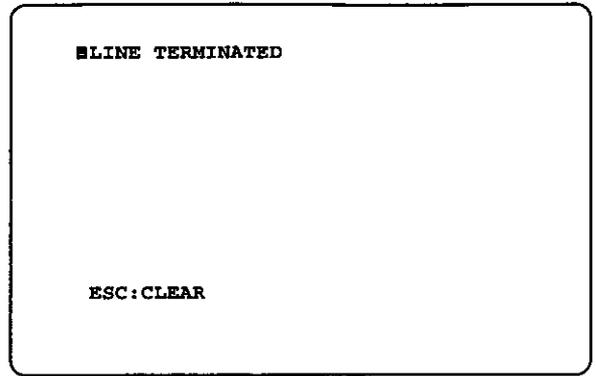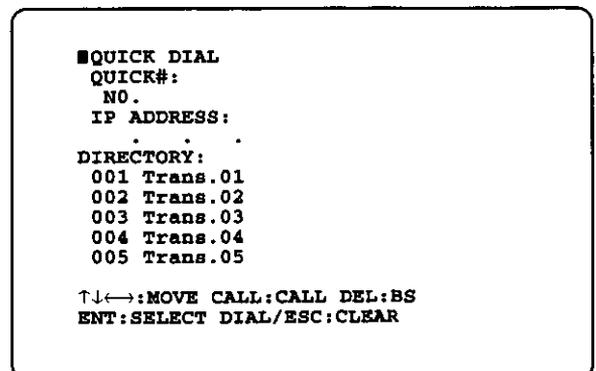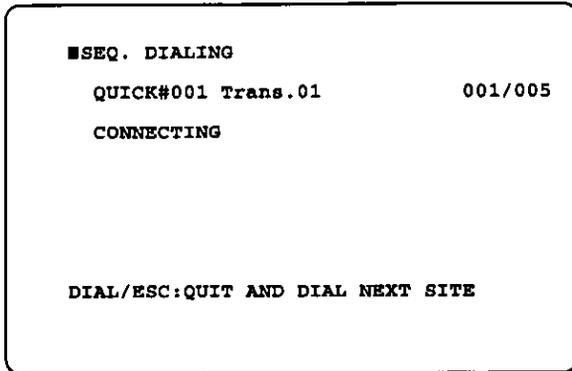
3. Press the CALL button. The dialog screen changes to
   "CONNECTING" and the unit starts dialing.

```
■DIRECT DIALING

  IP ADDRESS:
   192.168.  0.  11


  CONNECTING




  DIAL/ESC:CANCEL
```

During communication, the CONNECT indicator will illuminate.

4. To terminate the call, hold down the DIAL button for 2
   seconds. The dialog changes to "LINE TERMINATED".

```
■LINE TERMINATED




  ESC:CLEAR
```
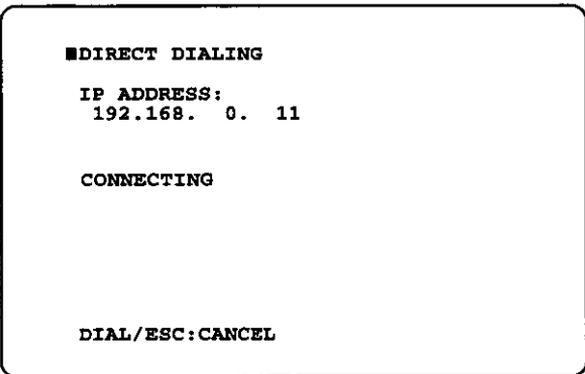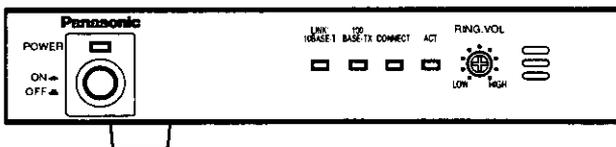
■ Sequential Dialing (Receiver)

The sequential dialing can be operated only at the Control
site to call the Remote sites one after another. The dialing
sequence traces the sites that are designated to SEQ. ON
in the 320 QCK# LIST. The sequence also follows the
assignments specified in the 330 SEQ.DIAL setup. It starts
with the start site, retains communication for the duration,
advances to the next site, and repeats the round if applied.
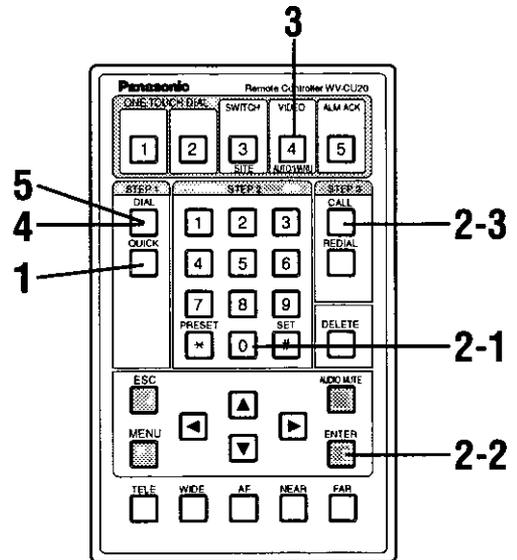
1. Press the QUICK button.
   The QUICK dialog appears accompanied with the
   directory.

```
■QUICK DIAL
  QUICK#:
   NO.
  IP ADDRESS:
      .    .    .
  DIRECTORY:
   001 Trans.01
   002 Trans.02
   003 Trans.03
   004 Trans.04
   005 Trans.05

  ↑↓←→:MOVE CALL:CALL DEL:BS
  ENT:SELECT DIAL/ESC:CLEAR
```

2. Enter "000" with the numeric button, and press the ENTER, then press the CALL. The dialog appears. Another way to start the sequence is to press the one-touch button that is assigned to "000" the start of the sequence.

```
■SEQ. DIALING

   QUICK#001 Trans.01           001/005

   CONNECTING




   DIAL/ESC:QUIT AND DIAL NEXT SITE
```

The sequential dialing starts to let the Control site view the images sequentially. The sequence will skip to the next when the called site is busy or does not respond for more than 150 seconds.

3. Press the VIDEO AUTO/MANUAL, (ONE-TOUCH DIAL 4) button when you want to keep viewing the current site. Press it again to go back to the sequence.

4. Hold down the DIAL button for 2 seconds to terminate the sequence dialing.
   When the inquiry dialog appears, select YES or NO with the ◄ or ► button, then press the ENTER.

   YES: Ends the sequence dialing.
   NO: Continues the sequence dialing.

```
■CANCEL SEQ. DIAL?

  YES  NO




  ←→:SELECT ENT:EXEC
  DIAL:CANCEL ESC:CLEAR
```
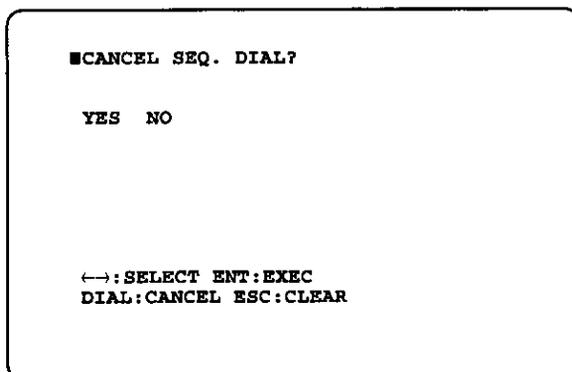
■ To Receive a Call

Receiving operation is made manually or automatically following the setup in the 200 RECEIVING REGI. menu.

● Manual Reception
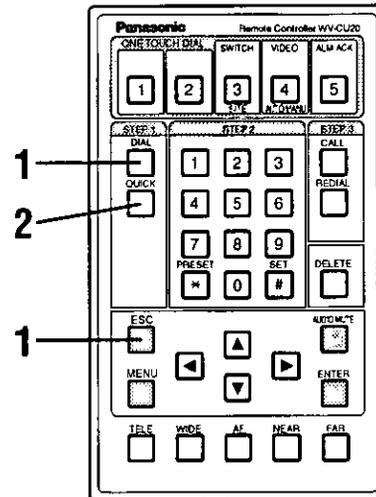
The "RECEIVE A CALL?" dialog appears when there is a call to the unit. The dialog shows a caller number in either way: a quick dial number and site name if it is registered, or simply an IP address if not registered.
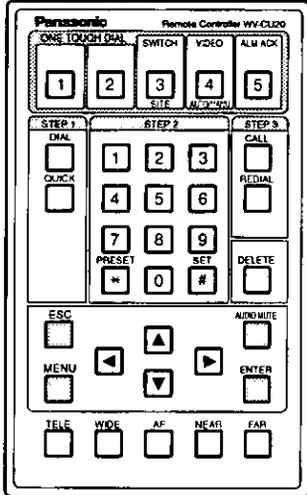
```
■RECEIVE A CALL?

  NO.001  Trans.01


  YES  NO




  ←→:SELECT ENT:EXEC DIAL:YES ESC:NO
```
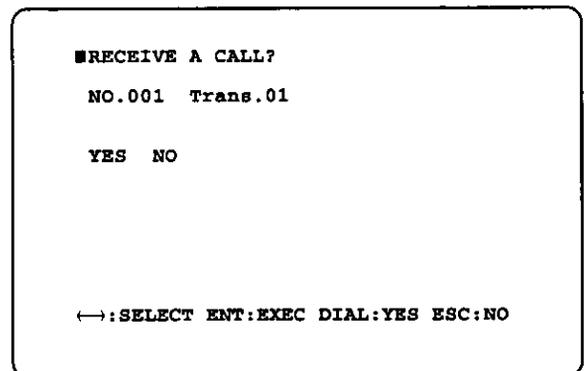
1. Press the DIAL button to accept, or the ESC button to cancel it.
   There is another way of operation. Move the cursor to YES or NO, then press the ENTER button.
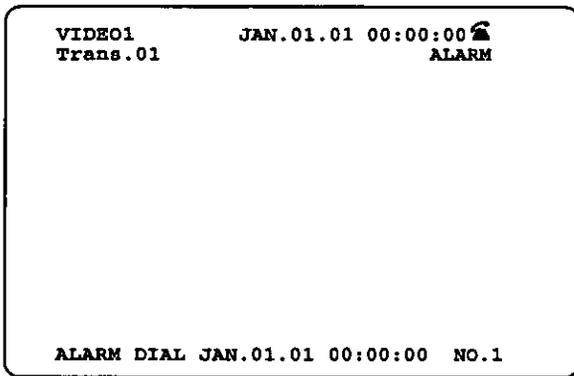
   When YES is selected, communication starts, then audio and video is received.

2. Hold down the DIAL to terminate the call.

● Alarm call reception

The ALARM DIAL dialog appears when the unit accepts an alarm call.

```
VIDEO1          JAN.01.01 00:00:00 ☎
Trans.01                      ALARM




ALARM DIAL JAN.01.01 00:00:00  NO.1
```

1. Press the ALM ACK button to display images sent from the alarm activated site. The alarm call disconnects when the preset time in the transmitter elapses before pressing the ALM ACK button.

2. Press the ALM ACK button again to clear the ALARM DIAL dialog.

● Automated Reception

1. The unit receives a call automatically.

2. Hold down the DIAL button for 2 seconds to terminate the call.

■ Operations During Communication

Other than calling and receiving, the following operations are available in the Control site during communication.

● Changing View Points during SEQ SCAN (sequential scan)

The sequential scan traces the preset view points one after another with the dwell time preset in the 470 SEQUENTIAL SCAN menu for the transmitter. View points are set up in the 430 VIDEO SWITCH SETUP, including the camera number, preset position, trigger output assignment and alarm ON/OFF.
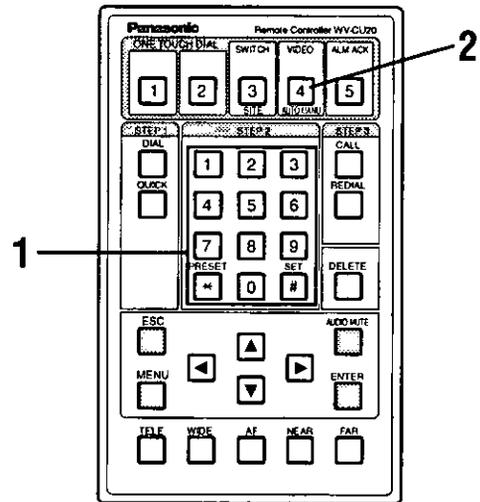
The sequential scan begins with the start view point and goes to the next view point every time the preset dwell time elapses on the Remote site.

On the Control site, the view point image is displayed on the monitor sequentially during communication.

1. See the next page for changing the video input, preset position, pan/tilt control, zoom and focus control. The sequence may also be interrupted with an alarm call.
   The interrupted sequence will resume when the restart time set in the 470 menu elapses.

2. To halt the sequence step, press the AUTO/MANUAL (#4 of the one-touch) button. The current view point will be displayed until the AUTO/MANUAL button is pressed again.

60

● Mute

Muting is available when audio is unnecessary.

1. Press the MUTE button. The Control site stops sending audio while the monitor displays the status indication "MUTE" on the Control site.

```
VIDEO1          JAN.01.01 00:00:00🔒
Trans.01
                           MUTE
```
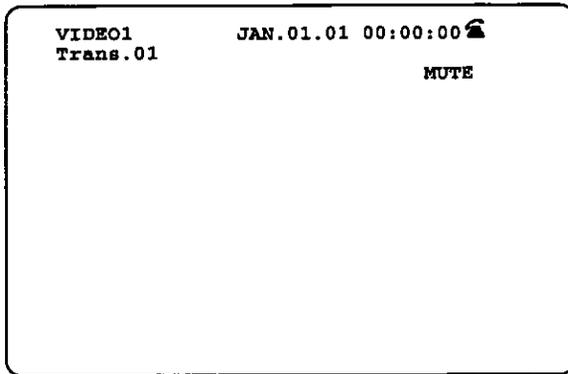
2. Press it again to resume audio data transmission.

● Operating Combination Cameras

Combination cameras directly connected to the transmitter unit can be controlled from the Control site while these sites are in communication.

1. To change the video input
   Enter an input number with the numeric button from 1 to 5, then press the [#] SET button. The image of the selected input appears on the Control site monitor.
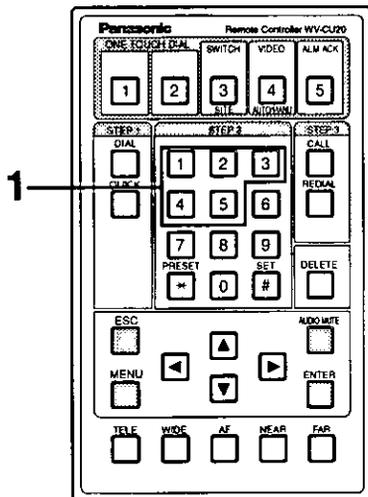
2. To select a preset position.
   2-1 Press the [*] PRESET button.
   2-2 Enter a preset position with the numeric button(s) from 1 to 64.
   2-3 Press the [#] SET button.

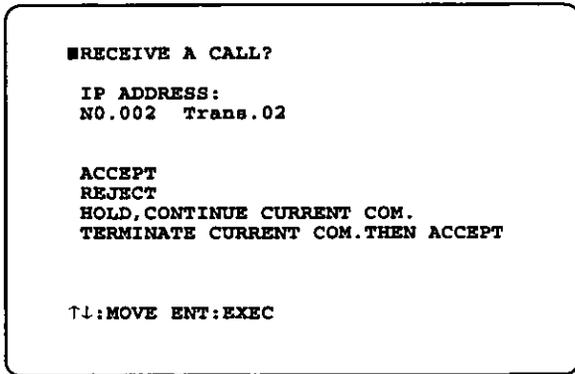The image of the selected position appears on the Control site monitor.
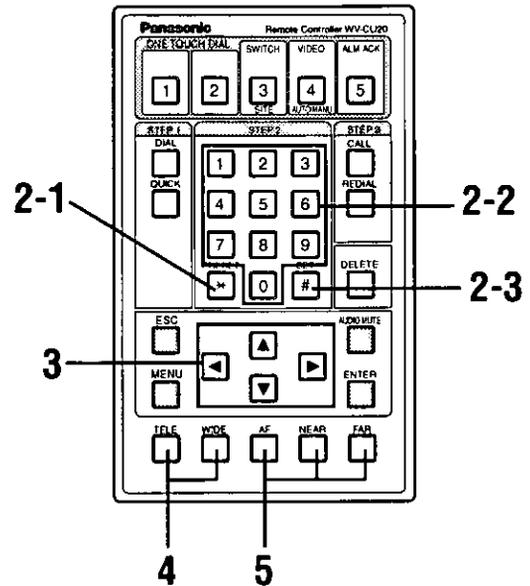
3. Pan/tilt control
   Press any of the direction buttons to direct the Combination camera head toward the desired point.

4. Zoom control
   Press the TELE or WIDE button to zoom out or in the image.

5. Focus control
   Press the NEAR or FAR button to adjust the focus manually. Press the AF (automated focus) button to let the camera adjust the focus by itself.

● Multi-Site Operation

When the system is made up of multiple sites, the following may take place on the Remote and Control sites.
A Remote site will reject new access from the Control site, when it establishes connection with four Control sites. Wait for a while and retry when you are the 5th caller to the Remote site.

A dialog saying "RECEIVE A CALL?" may appear on the Control site monitor while the site is in communication with a Remote site. This indicates that a new access is made by another Remote site. The unit processes according to the selection below.

```
■RECEIVE A CALL?

IP ADDRESS:
NO.002  Trans.02


ACCEPT
REJECT
HOLD,CONTINUE CURRENT COM.
TERMINATE CURRENT COM.THEN ACCEPT


↑↓:MOVE ENT:EXEC
```

1. Move the cursor to one of the four options below with the ▲ or ▼ button, then press the ENTER.

   ACCEPT: The unit accepts the new access and holds the current communication.
   REJECT: The unit rejects the new access.
   HOLD, CONTINUE CURRENT COM.: The unit holds the new access until the current communication is terminated.
   TERMINATE CURRENT COM. THEN ACCEPT: The unit terminates the current communication and accepts the new access.

2. On-hold process

   2-1 Press the SWITCH SITE (#3 of the one-touch dial) button to display the on-hold list. The list shows suspended callers (transmitter) with registered site name or IP address respectively.

   2-2 Move the cursor to a number you wish to communicate with, then press the ENTER. Communication will start.

```
■SWITCH SITES?

NO.001  Trans.01

NO.002  Trans.02

192.168.0.20


↑↓:MOVE ENT:EXEC ESC:CLEAR
```
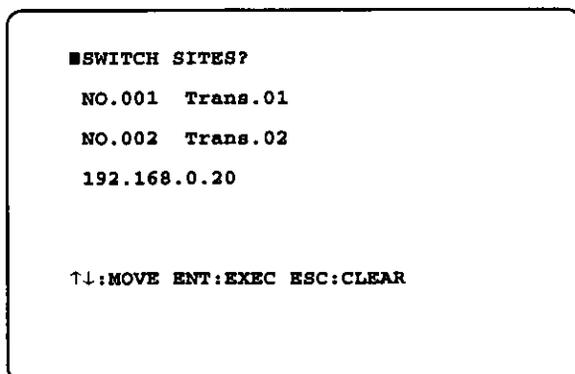
3. Hold down the DIAL button for 2 seconds to terminate calls. The listed calls will be canceled and a message "LINE TERMINATED" appears.

   Note: When the call is terminated by the Remote site's operation, "TERMINAL LEFT" appears on the Control site monitor.

■ Alarm Operation

When a connected (alarm) sensor is activated on the Remote site, the transmitter calls the Control sites to let them check the alarm images. Alarm setups are made on the Remote site in the menus 460 through 465.

When the Control site receives an alarm call, the ALARM DIAL window appears.

```
VIDEO1        JAN.01.01 00:00:00🔔
Trans.01                   ALARM




ALARM DIAL JAN.01.01 00:00:00  NO.1
```
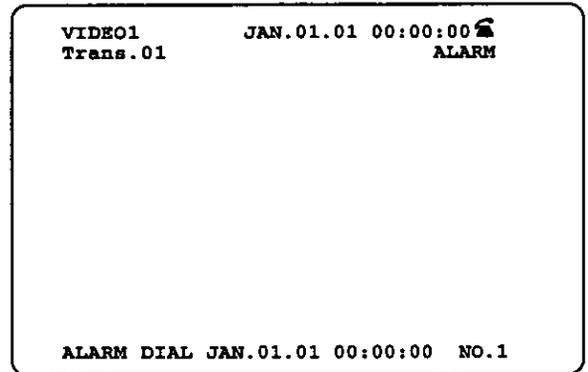
1. Press the ALM ACK button. The camera images associated with the sensor is displayed on the Control site monitor.
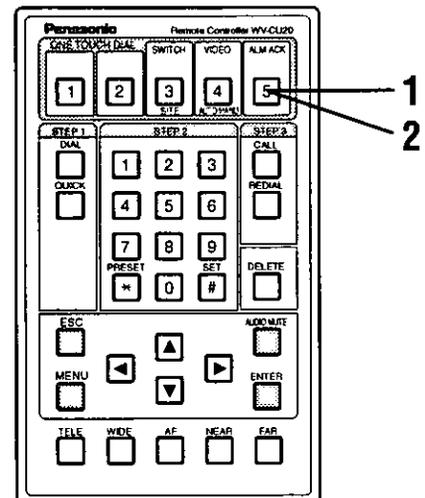
2. To escape from the alarm display follow any one below as the case may be.
   • When AUTO DISC (automatic disconnection) is set to OFF in the 461 ALARM SETUP menu, press the ALM ACK button.
   • When AUTO DISC is set to ON, the alarm display ends as the preset timer elapses. You can press the ALM ACK button before the preset timer elapses.

■ Remote Site Setup Operations

Besides in the setup menus displayed on the Remote site, the following parameters can be operated from the Control site during communication.

```
500 REMOTE. CONTROL/SETUP

510 CAMERA·PRESET·TRIGGER OUT↓
520 VIDEO MOTION↓
530 VIDEO SWITCH SETUP↓
540 ALARM PORT SETUP↓




↑↓:MOVE ENT:SELECT ESC:PRV
```

CAMERA selection, PRESET position selection, TRIGGER OUT assignment and CAMERA MENU can be operated.

```
510 CAMERA·PRESET·TRIGGER OUT

CAMERA  : 1 2 3 4 AUX
PRESET  : 1 2 3 4 5 6 7 8
TRIGGER : 1 2 3 4 5 6 7 8
CAMERA MENU↓




↑↓←→:MOVE ENT:EXEC ESC:PRV
```

VIDEO MOTION can be selected from SLOW, NORMAL and FAST.

```
520 VIDEO MOTION








VIDEO MOTION:  SLOW NORMAL FAST
←→:SELECT ENT:EXEC ESC:PRV
```

VIDEO SWITCH SETUP can be operated.

```
530 VIDEO SWITCH SETUP
   NO. CAM  PRST  TRG   ALARM
● 1.   1     1          ON OFF
● 2.   2                ON OFF
● 3.   3                ON OFF
● 4.   4                ON OFF
● 5.   *                ON OFF
● 6.   1     6          ON OFF
● 7.   1     7     1    ON OFF
● 8.   1     8     2    ON OFF

   DEFAULT NO. : 1
● IS AVAILABLE(ENT:●/-) ↑↓←→:MOVE
1-4(VIDEO) *(AUX) 1-8(PRST) 1-8(TRG)
ENT(ALARM ON/OFF):SELECT ESC:PRV
```

ALARM PORT SETUP can be operated.

```
540 ALARM PORT SETUP

   PORT NO.
      1      ENABLE   DISABLE
      2      ENABLE   DISABLE
      3      ENABLE   DISABLE
      4      ENABLE   DISABLE
      5      ENABLE   DISABLE
      6      ENABLE   DISABLE
      7      ENABLE   DISABLE
      8      ENABLE   DISABLE   EXT


↑↓←→:MOVE ←→:SELECT ESC:PRV
```

# PC SETUP & OPERATION

■ Computer Requirements

• OS: Windows98, 98SE/ Windows NT4.0/ Windows2000 or Windows ME
   Note: Windows**95** are not applicable to this system.
• WWW browser:
   Internet Explorer Ver. 5.0 or higher
   Netscape Navigator Ver. 4.7 or higher except Ver. 6.0 series
• Display resolution: 800 x 600 pixels or more
• CPU clock: 500 MHz or more
• Memories: 128 MB or more
• Network Interface Card: 10/100 Base-T
• Video Card
• Audio Card is required when using H.323 mode

■ LAN Type Connection

The figure below shows how the WJ-NT204 can be connected directly to a PC for testing before it is connected directly to a network. The connection can also be made via a hub.

● Direct Connection to a PC without Hub

Connect the 10Base-T/100Base-TX port on the PC to the Ethernet port on the WJ-NT204 with a crossover cable.

Combination Cameras (4)

Ethernet crossover cable

WJ-NT204 Network
Interface Unit for remote site

PC (Browser)
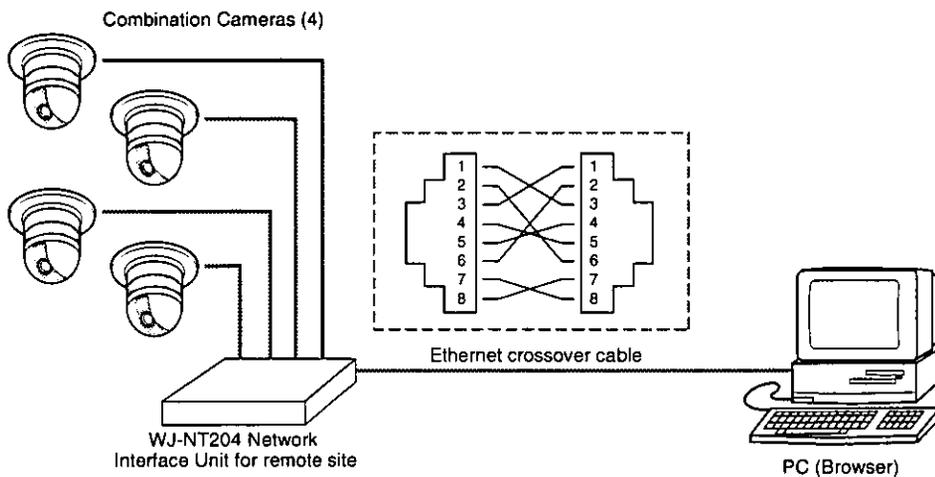
● Connection to a Client PC via Hub

Connect the 10Base-T/100Base-TX port on the PC to the Ethernet port on the WJ-NT204 with straight cables via a hub.

Combination Cameras (4)

Ethernet
straight cable

Ethernet
straight cable

WJ-NT204 Network
Interface Unit for remote site

Hub

PC (browser)
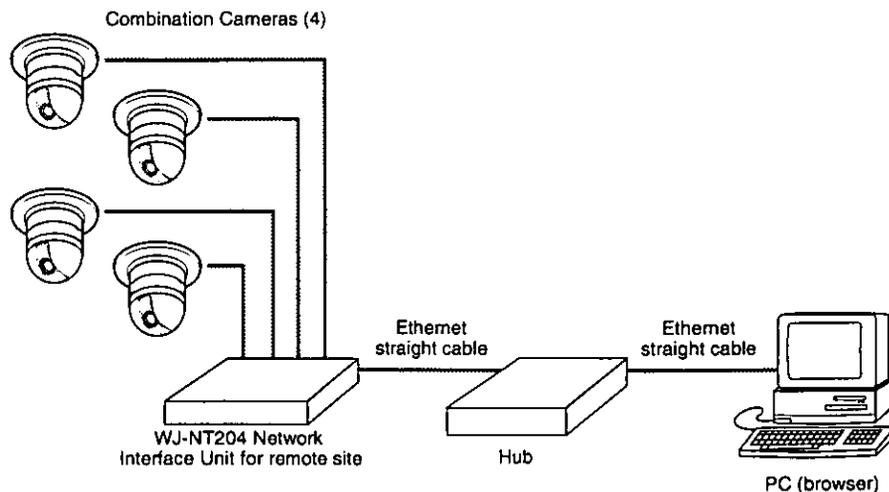
● PC Setup

Graphics on the right column are from WindowsMe.

The factory default settings of the WJ-NT204 are as follows;

| IP address	192.168.0.10
Netmask	255.255.255.0
Default gateway	0. 0. 0. 0.

For a client PC to access WJ-NT204 factory default settings, set the IP address of the PC to 192.168.0.XX (XX means any number from 2 to 254 except 10).

1. Connect the WJ-NT204 to the PC.

2. Change the PC's TCP/IP to match the factory default settings of the WJ-NT204.

   If your PC runs on WindowsMe, proceed as follows:

   (1) Click the **Start** button, point to **settings**, and then click **Control Panel**.

   (2) Double-click **Network**.

   (3) In the **Network** dialog box, click the **Configuration** tab.

   (4) Choose **TCP/IP**, and then click the **[Properties]** button to display the **TCP/IP Properties** dialog box.

   (5) Specify an IP address as follows:
   IP Address: 192.168.0.9
   Subnet Mask: 255.255.255.0
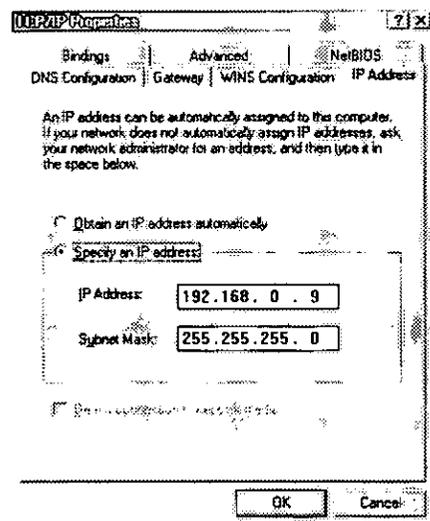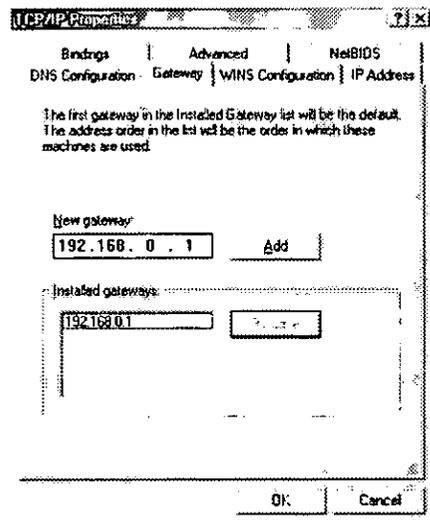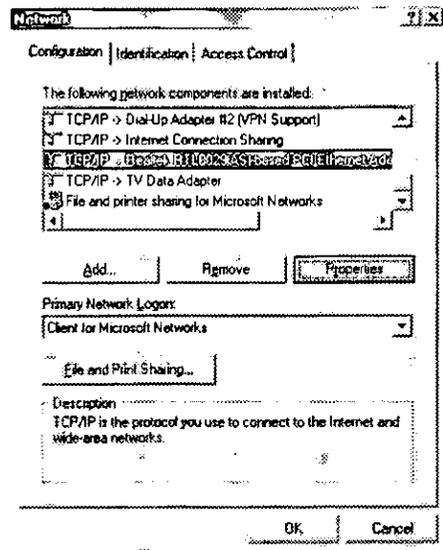
3. Restart the PC.

If your browser is Internet Explorer, proceed as follows.

(1) Start Internet Explorer.

(2) Click the **Tool** menu, then **Internet Options**.

(3) In the **Connections** menu, click **LAN Setting**.

(4) If you have already checked on **Use proxy server**, click **Advanced** button and specify 192.168.0.10 in the space **[Do not use proxy server for addresses beginning with:]**.
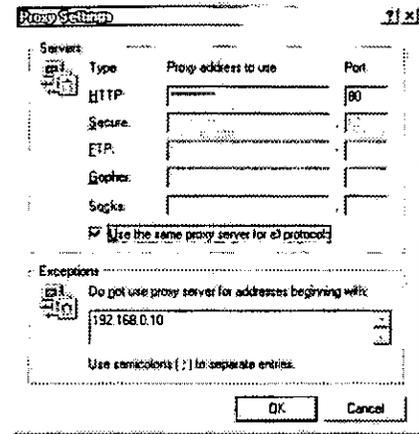
Else if your browser is Netscape Navigator, proceed as follows:

(1) Click the **Edit** menu, and then click **Preferences**.

(2) In the **Preferences** dialog box, click **Advanced**, and then click **Proxies**.
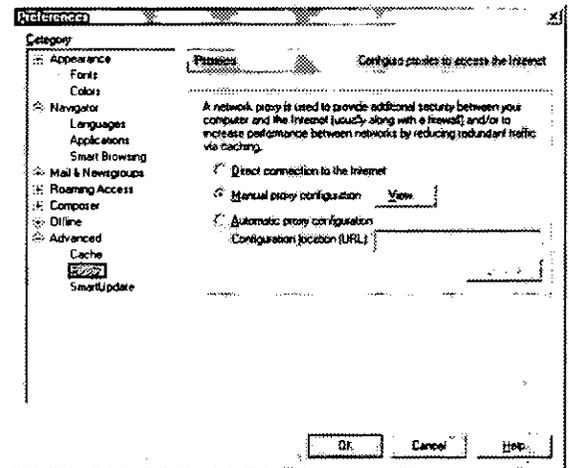
(3) Select the **Manual proxy configuration** option, and then click the **[View]** button to display the **Manual Proxy Configuration** dialog box.

(4) In the space **[Do not use proxy servers for domains beginning with:]**, specify 192.168.0.10 .
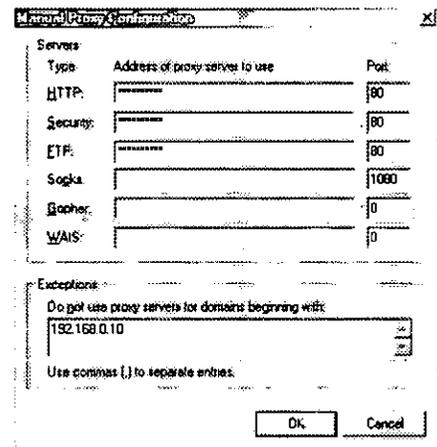
4. In the Location bar on the WWW browser, specify http://192.168.0.10/hwsetup.html.

5. The browser displays the ADMINISTRATOR SETUP PAGE of the WJ-NT204. When necessary, follow the WJ-NT204 S]setup procedures starting in the next page.

68

■ WJ-NT204 Setup

First, it is necessary to set an IP address for the WJ-NT204 according to the operating environment. Consult your network administrator for the address to set.

● IP Address Setting via LAN Connection

1. On the Location bar, enter http://192.168.0.10/hwset-up.html to display the **ADMINISTRATOR SETUP PAGE**.
   To open the **ADMINISTRATOR SETUP PAGE**, you need to enter your user ID and password.
   The default ID and password are [admin] and [any character], respectively.
   Click the **[NETWORK]** button to display the **NETWORK SETUP** dialog box.

2. Set **IP-ADDRESS, NETMASK, DEFAULT GATEWAY**.
   Consult your network administrator for the correct settings.

3. Specify the TCP/IP settings for the PC.
   If the PC is already operating on a network, specify its original IP address in the **TCP/IP Properties** dialog box (before changing it to 192.168.0.9).

If the PC is running WindowsMe, select **Control Panel → Network → Configuration**, click the **[Properties]** button to open the **TCP/IP Properties** dialog box, and enter the IP address.
Refer to the settings on page 67.

4. Restart the PC.

5. Start the PC's browser.
   Specify http://(IP address set in the WJ-NT204)/ in the **Location** bar. The connection is established when the image from the WJ-NT204 is displayed on the PC screen.

Note: Refer page 68 for further details.
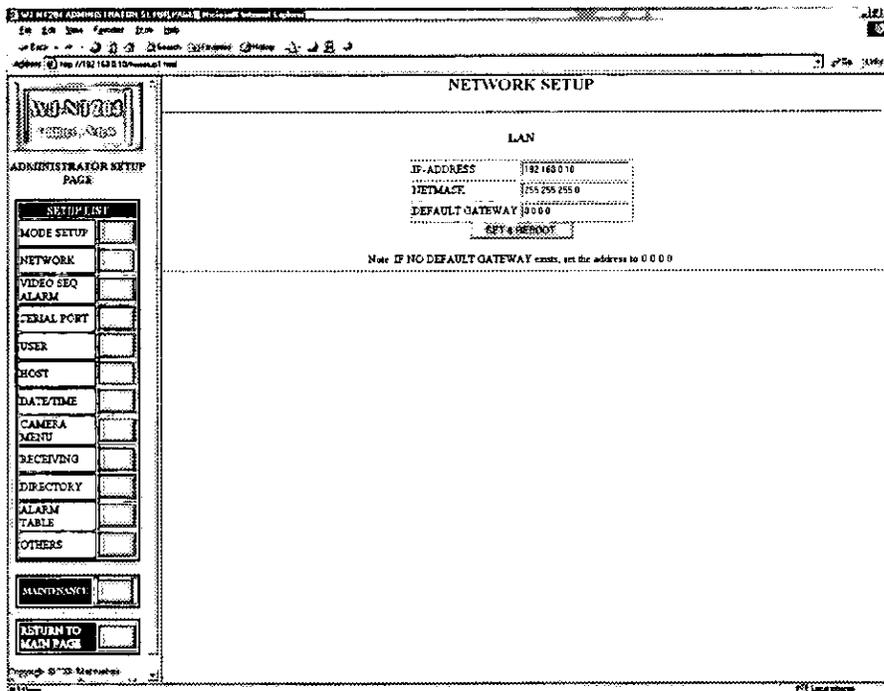
● IP Address Setting via RS-232C Connection

1. Connect the serial port (D-Sub 9 pin) on your PC to RS-232C front port (D-Sub 9 pin) on the WJ-NT204 with a crossover type cable.
   The default settings for communication parameters are: speed=9600 bps, data length=8 bits, parity=1 bit and stop bit=none.

2. Start up a terminal software such as HyperTerminal or the like.

3. Hold down CTRL and D keys simultaneously to enter the terminal mode.

4. Press ENTER when the password inquiry appears.

5. Type "dispon" from the keyboard following the prompt (>) on the display, then press ENTER.

6. Hold down CTRL and R keys simultaneously to enter the menu operation mode.

7. Operate the keyboard following the guidance shown by the terminal software.

8. To escape from the terminal mode, hold down CTRL and R, then CTRL and D, otherwise the Remote Controller WV-CU20 will not function.

69

There are two image transmission/reception methods to monitor remote places on the WWW browser: the H.261 and JPEG. One mode must be selected at the Remote site unit (transmitter), and the selected mode must be used for all transmitters in the system.

You need to install a plug-in software into your PC before monitoring images based on the H.323/H.261 standard with use of a browser software. When using JPEG, you need not install it.

## ■ Main Page and Control Windows

On the Location bar of the PC, type http://192.168.0.10 (or IP address set for WJ-NT204) to display the MAIN PAGE default window.

The MAIN PAGE window appears following the default page registered in the "MODE SETUP" window.

> **Note:** Image quality and motion on the browser may be lowered slightly than that of 1 to 1 connection when multiple sites are connected.

The mode 1 to 4 windows may differ slightly depending on the operation mode.

For the Main Page setup see MODE SETUP on page 81.
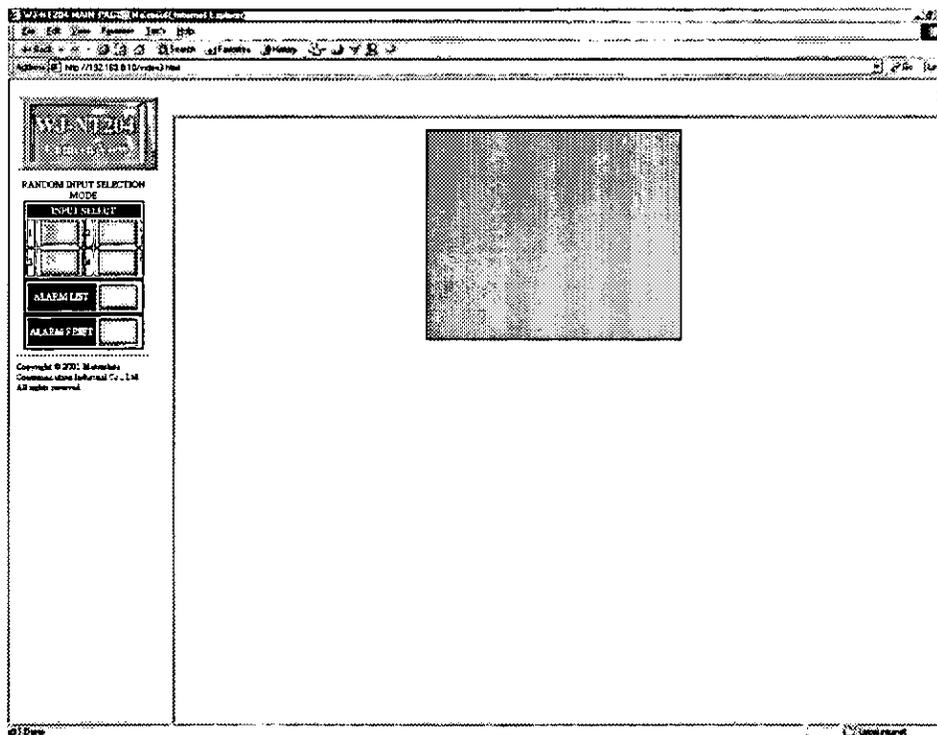
■ Installing an H.323 Plug-in to PC

You need to install a plug-in software into your PC before monitoring images based on the H.323/H.261 standard with use of a browser software. Follow the steps 1 and 2 below when using Internet Explorer, or steps 1, 2 and 3 when using Netscape.

1. Put in the floppy disk.
2. Execute the setup.exe.
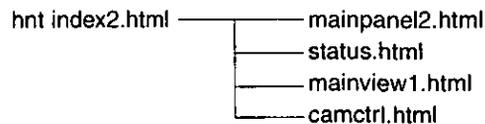3. Execute the Setup-Netscape.exe when using Netscape.

Notes:
- A message "Unable to init audio" appears right after starting the browser if no sound board is installed in the PC.
- Only reception is available for video and audio.

■ About Operation Windows

An operation window is made up of four major frames with the html description as follows.
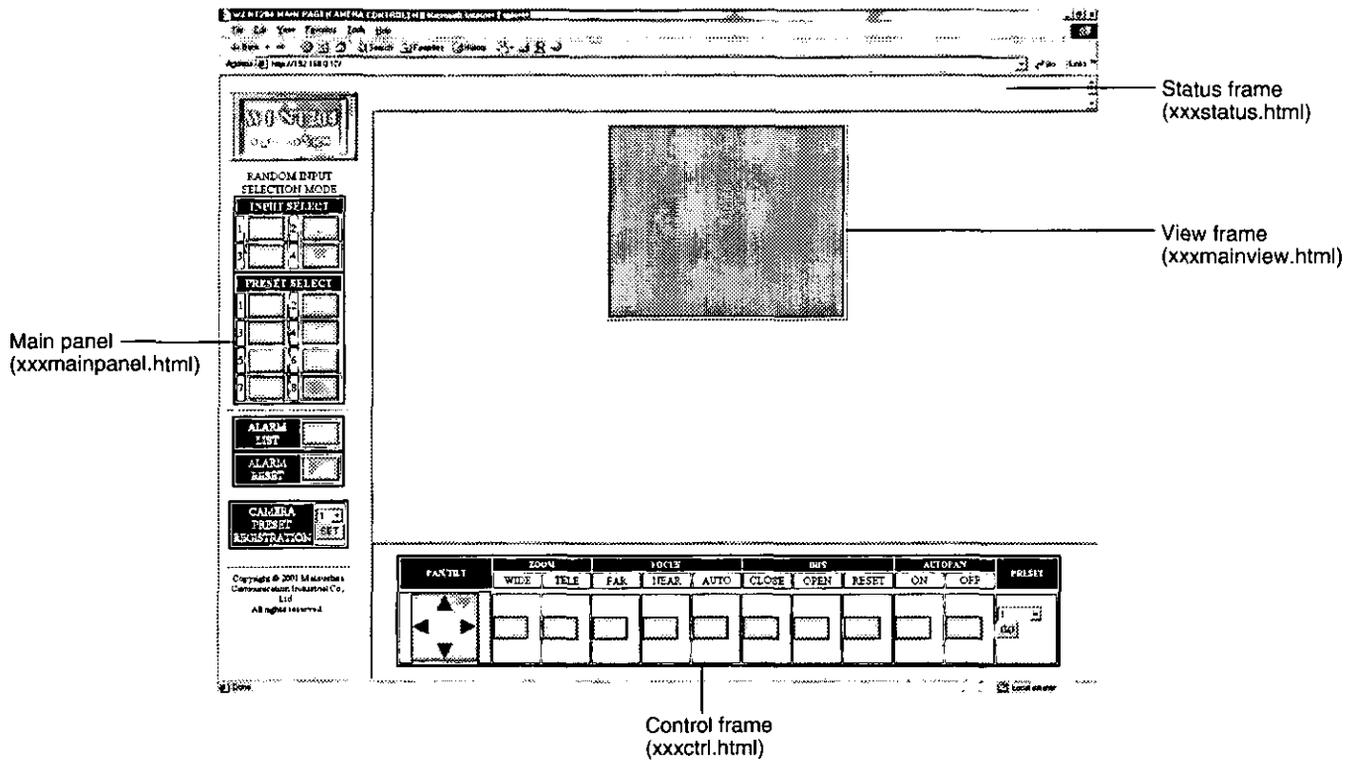
The designated window appears after you specify the corresponding URL in the location bar on the browser. A URL represents these four frame parts, as shown below for the index2.html example.

```
hnt index2.html ──────┬────── mainpanel2.html
                      ├────── status.html
                      ├────── mainview1.html
                      └────── camctrl.html
```

■ Operation Mode

Image transmission is carried out as follows between the transmitter WJ-NT204 and the PC on the Control sites.

● Random Input Selection Mode

The WJ-NT204 transmits continuous image of a single camera to the multiple PC when connected. The image will change if a PC sends a command to switch the camera channel from one to another. This may cause a sudden change of monitoring image on the sites other than that it operated.

Up to four (4) PC sites are accessible to one transmitter when the mode is set to H.323/H.261, or six (6) are accessible when set to JPEG.
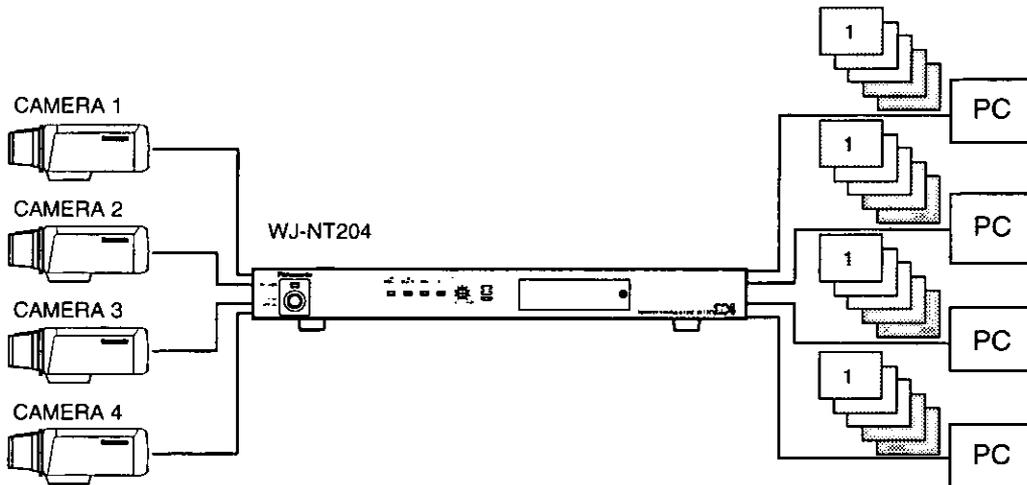
■ Push Mode

The unit continues to transmit the latest image data per a preset interval in reply to the PC's command.
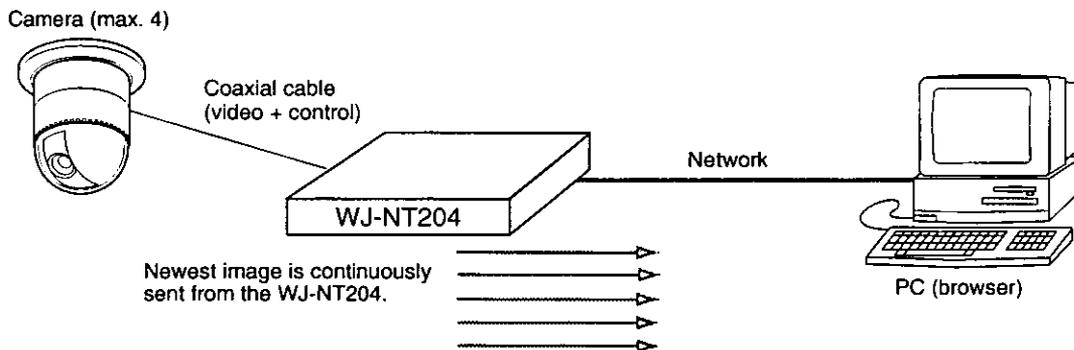
■ Image Quality Setup

● Image Resolution

The following 3 image resolutions (number of picture elements) are available. The higher the resolution is set, the larger the image data will be and the slower the display speed will result in.

1. 640 x 480 pixels → JPEG
2. 352 x 288 pixels → JPEG
3. Image size can be set to 640x480 or 352x288 when H.261 is selected.

Note:
The display size of images received in any of the above resolutions can be changed from the WWW browser.

● Image Quality

The following four image qualities (compression ratios) are available. The lower the compression ratio is set, the better the image quality will be and the slower the display speed will result in.

The WJ-NT204 has two modes of video output.
(1) H.261
- **VIDEO BIT RATE: 16/32/64/128/256/384/512/768/1024kbps**
- **MOTION: SLOW / NORMAL / FAST**
(2) JPEG
1 **Super Fine (compressed to about 1/6)**
2 **Fine (compressed to about 1/10)**
3 **Normal (compressed to about 1/16)**
4 **Rough (compressed to about 1/25).**

■ Main Page (without Camera Control)

This page appears when a LEVEL 3 user made access, and the MODE SETUP is set as follows.
MODE SETUP
CAM CONTROL: OTHERS
AUX SYSTEM: NT204

● Random Input Selection Mode
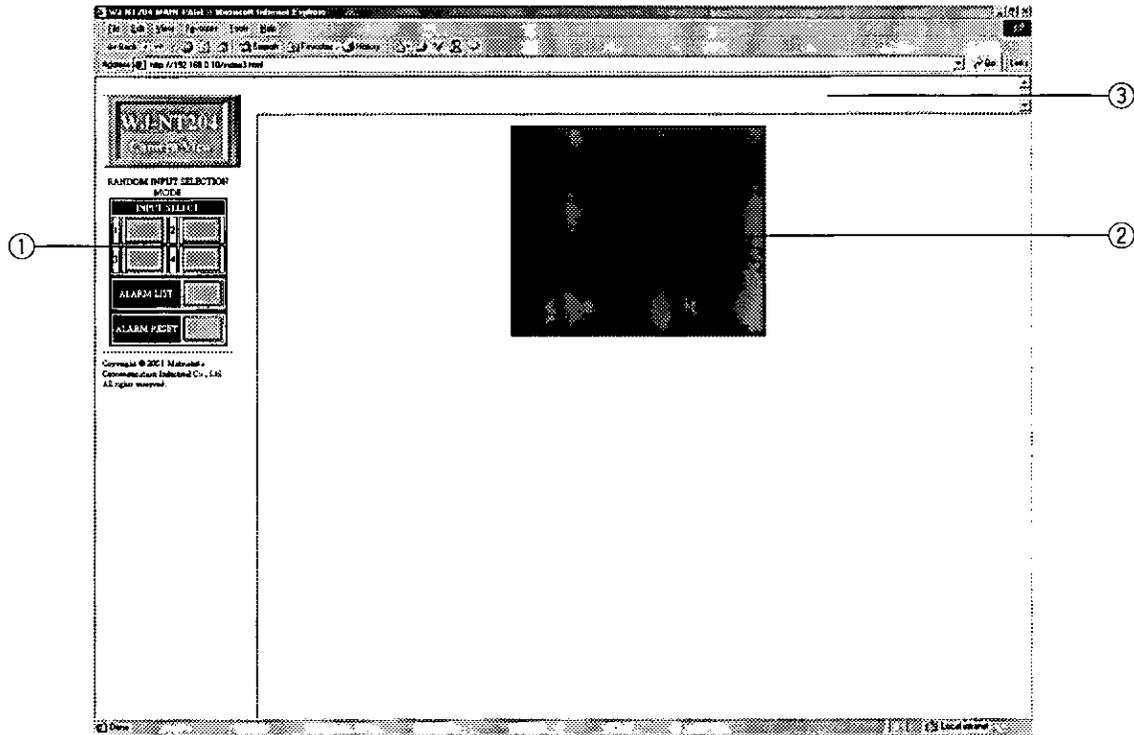
① **INPUT SELECT**
These buttons are used to switch the images of up to four cameras.
A change of channel by one user causes the channels of the other users connected to the WJ-NT204 to be switched to that same channel.

② **Live image display**
Images of the selected camera are displayed on the default page as animated (H.261) /semi-animated (JPEG) pictures.

③ **Status Display**
Alarm information is displayed as "NT204 ALARM 1ch" with input channel number when the transmitter receives a sensor activation. The latest event will be displayed when more than one event take place. The status information disappears when the ALARM RESET button is clicked.

■ Main Page (with Camera Control)

This page appears when a user authorized level 2 or higher made access, and the MODE SETUP is set as follows.
MODE SETUP
CAM CONTROL: OTHERS
AUX SYSTEM: NT204

● Random Input Selection Mode
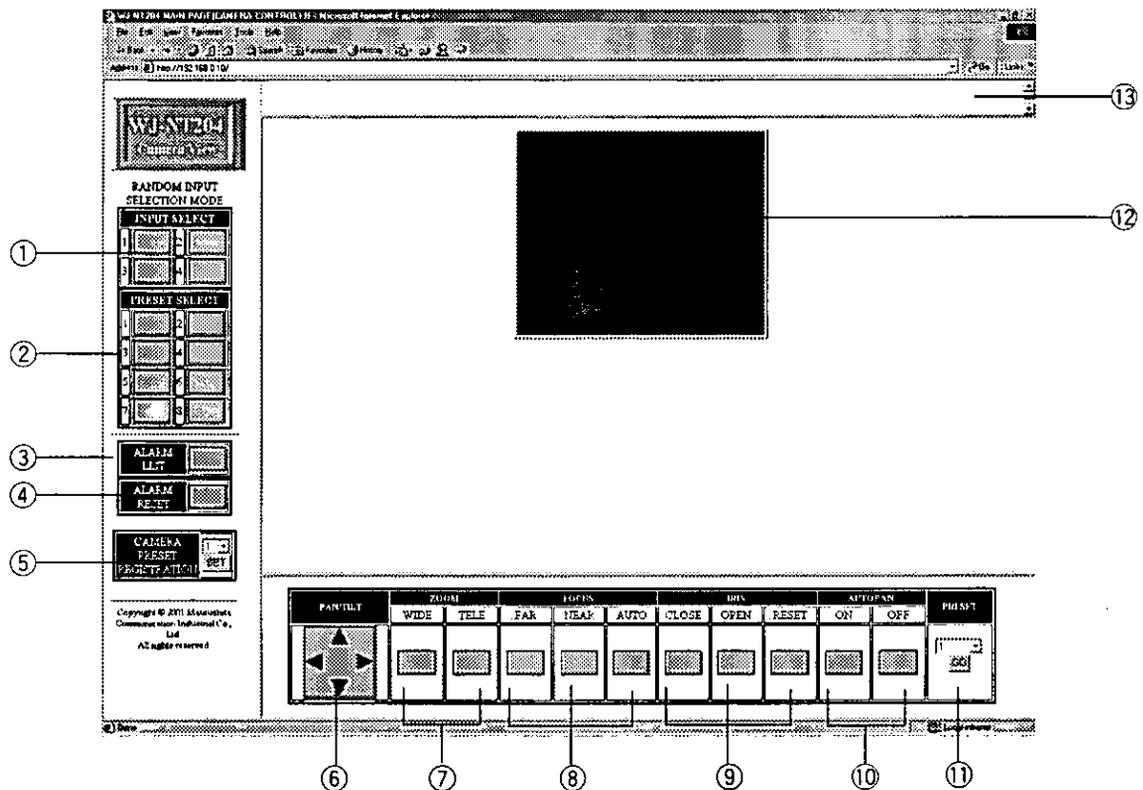
① **INPUT SELECT**
These buttons are used to switch images of up to four cameras.

② **PRESET SELECT**
To move the combination camera (option) connected to the WJ-NT204 to any of 8 preset positions.
To register preset positions refer to the CAMERA SETUP MENU on page 91.

③ **ALARM LIST**
Camera video input before and after alarm input can be temporarily stored in the internal memory of the WJ-NT204.
For alarm display see ALARM LIST on page 78.

④ **ALARM RESET**
Click this to reset the activated alarm mode. The alarm information will disappear in the STATUS window.

⑤ **CAMERA PRESET REGISTRATION**
Preset registration can be made for the Combination camera connected to the WJ-NT204 as follows.
While displaying the desired image position, select the position number, then press the SET button.

⑥ **PAN/TILT**
Click on any of the pan/tilt buttons: Up, Down, Right or Left to move the pan/tilt head of the Combination camera to the desired direction. Click the button repeatedly as necessary not holding down it.

⑦ **ZOOM**
Click the button to zoom in or out. Instead holding down the button, click on it repeatedly as necessary.
TELE: Zooms in the image.
WIDE: Zooms out the image.

⑧ **FOCUS**
Click NEAR or FAR to adjust the focus of the image manually. Instead holding down the button, click on it repeatedly as necessary.
NEAR: Manual focusing
FAR: Manual focusing
AUTO: The built-in focus mechanism performs in the Combination camera.

⑨ **IRIS**

These buttons control the iris of the lens mounted on the combination camera. Click a button as you may need. When you open or close the iris continuously, click on the button repeatedly, instead holding down it.
CLOSE: Closes the iris.
OPEN: Opens the iris.
RESET: Resets the iris back to the default setting.

⑩ **AUTOPAN**

The AUTOPAN lets the camera head turn around in a preset view angle. This performance depends on the REMOTE or LOCAL selection in the setup menu for the combination camera.
ON: Enables the AUTOPAN.
OFF: Disables the AUTOPAN within 1 minute if the right of control has been set to REMOTE in the camera setup.
Note: AUTOPAN will continue regardless of AUTOPAN ON/OFF selection if the right of control has been set to LOCAL in the camera setup.

⑪ **PRESET**

To move the connected combination camera (option) to any of 64 preset positions and the HOME position. Select a preset position number, then press the **[SET]** button to move the camera to the position.

⑫ **Live image display**

Images from the cameras connected to the WJ-NT204 are displayed on the default page as animated pictures when H.261 is set or as semi-animated when JPEG is set.

⑬ **STATUS WINDOW**

Displays alarm information.

■ ALARM LIST Window

The ALARM LIST appears when the ALARM LIST button is clicked in the MAIN PAGE. The list stores and displays up to 100 alarm events in descendant order with the event number, date & time, and input channel. The oldest record will be overwritten when more than 100 events take place.

On the Location bar, type http://192.168.0.10 (or IP address set for WJ-NT204)/almindex.html, or click the ALARM LIST button on the MAIN PAGE.

Note:
> The ALARM LIST does not display the new alarm activation that comes in while displaying the window. Click the Reload button on the browser to renew the list.
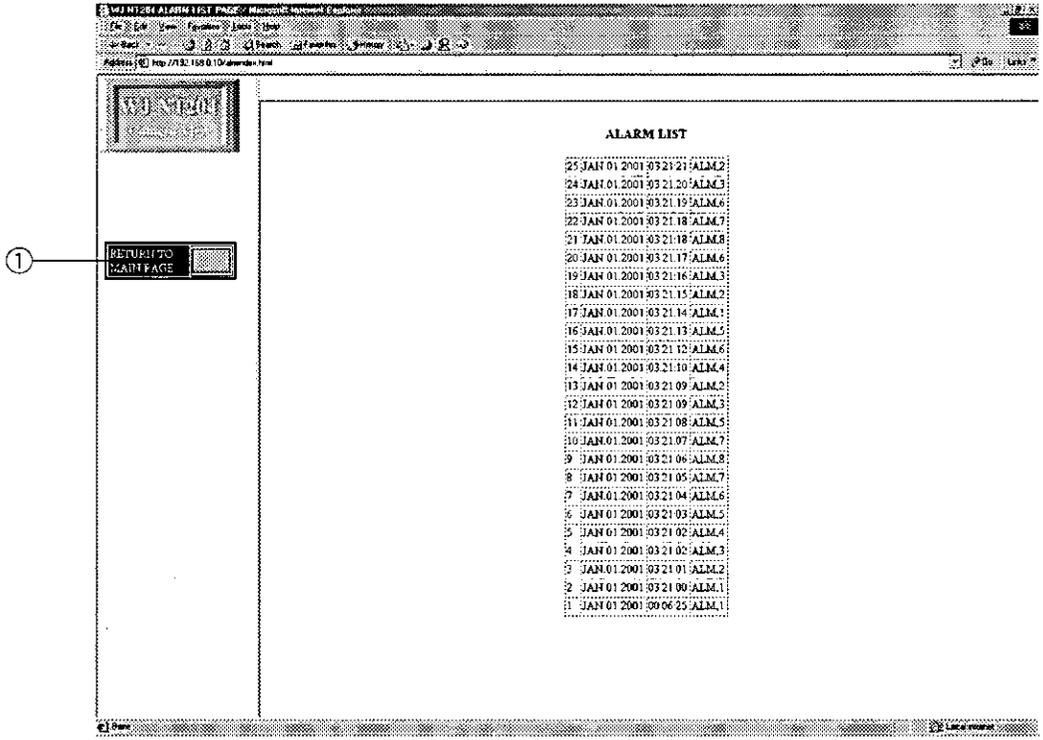
① **RETURN TO MAIN PAGE**
Click this button to return the window to the MAIN PAGE.

■ How to Read ADMINISTRATOR SETUP PAGE

On the Location bar, type http://192.168.0.10/hwsetup.html to display the **ADMINISTRATOR SETUP PAGE**. To open the **ADMINISTRATOR SETUP PAGE**, you need to enter your user ID and password. The default ID and password are [admin] and [any character], respectively.

Notes:
- Settings for a transmitter can be operated through a WWW browser window when a PC works as a Receiver, and through the 700 REMOTE SETUP EDIT window when a WJ-NT204 works as a Receiver. The latest change will take effect when more than one Control site operate the settings at a time as far as they have the same access priority.
- Settings for a WJ-NT204 receiver are not operable through a WWW browser window.
- Click the Reload button on the browser when changing the window from H.323/H261 operation to the ADMINISTRATOR SETUP PAGE. Reloading will ensure the new window display, although this change results in a disconnection, thus the new display takes time.
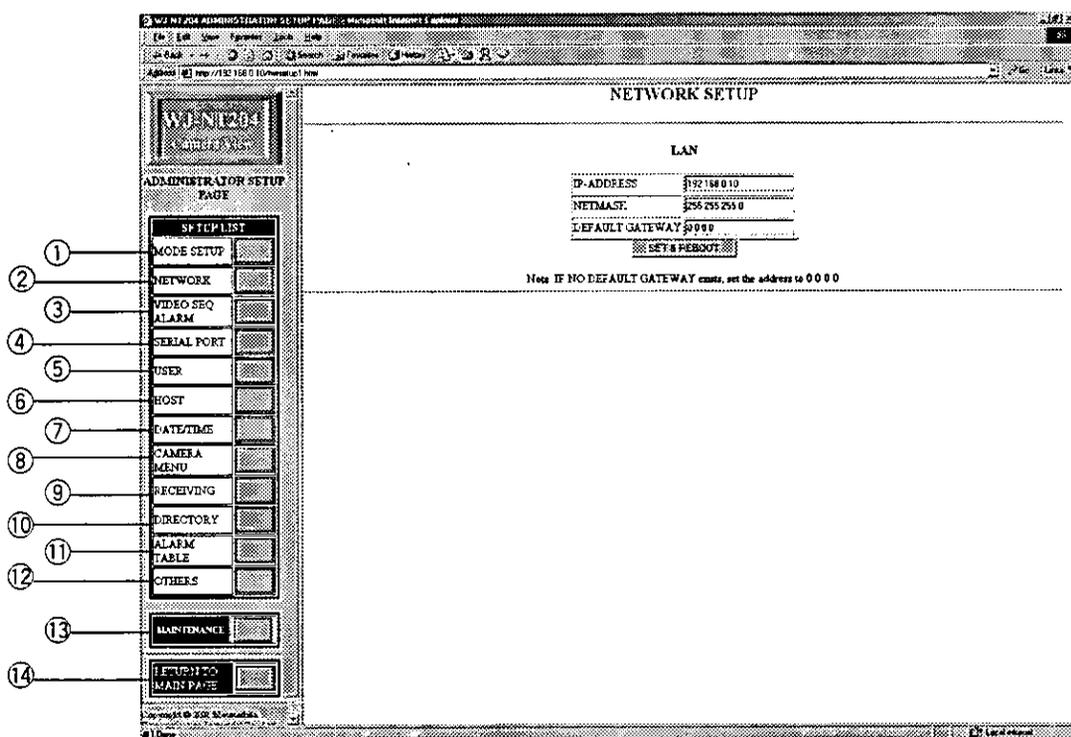
[SET][SUBMIT] button

Clicking this button stores the settings made on the **ADMINISTRATOR SETUP PAGE** in the WJ-NT204.

The setting range of this button is indicated by the ruled line that separates one item from another. The area showing the data within the range returns to the original display when the button is clicked.

The system is not restarted when this button is clicked.

[SET & REBOOT] button

Clicking this button stores the settings made on this page in the WJ-NT204.

① MODE SETUP

To set the default page when a file name is specified. Also set operation mode, image quality, and camera control selection on this page.

② NETWORK

To set the IP address, netmask and default gateway.

③ VIDEO SEQ/ALARM

Click this button to open the VIDEO SEQ SCAN/, ALARM SETUP where you can specify the video sequence ON/OFF, alarm reception ON/OFF and so forth.

④ SERIAL PORT

Click this button to open the SERIAL PORT SETUP where you can specify parameters for serial communications in the RS-232C or RS-485 protocol.

⑤ USER

Click this button to open the USER SETUP window where you can set up USER AUTHORIZATION, USER REGISTRATION and USER DELETION.

⑥ **HOST**
   To set the address of the host that can be accessed
   without user authorization.

⑦ **DATE/TIME**
   To set the internal clock of the device.

⑧ **CAMERA MENU**
   To set connected cameras (option) by remote control.

⑨ **RECEIVING**
   Parameters are set such as AUTO/MANUAL reception,
   REJECT/ACCEPT reception, etc.

⑩ **DIRECTORY**
   Click this button to open the DIRECTORY SETUP where
   you can assign IP addresses, site names to the short
   form dialing numbers.

⑪ **ALARM TABLE SETUP**
   Click this button to open the ALARM TABLE SETUP
   where you can assign a maximum of 3 short form dial-
   ing numbers to each alarm input. The transmitter will
   dial these registered numbers sequentially when
   receiving an alarm activation.

⑫ **OTHERS**
   The following settings can be made on the window
   remotely to the transmitter WJ-NT204.

   ONE TOUCH DIALING
   RE-CONNECTION
   HOST PORT
   ON SCREEN DISPLAY
   LOCK/PASSWORD

⑬ **MAINTENANCE**
   Opens MAINTENANCE menus where you can set up
   settings for auxiliary devices and also cameras con-
   nected to the device.

⑭ **RETURN TO MAIN PAGE**
   To return to the MAIN PAGE.

■ MODE SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **MODE SETUP** button to display the **MODE SETUP** window.
Select set Operation mode, image quality and camera control.
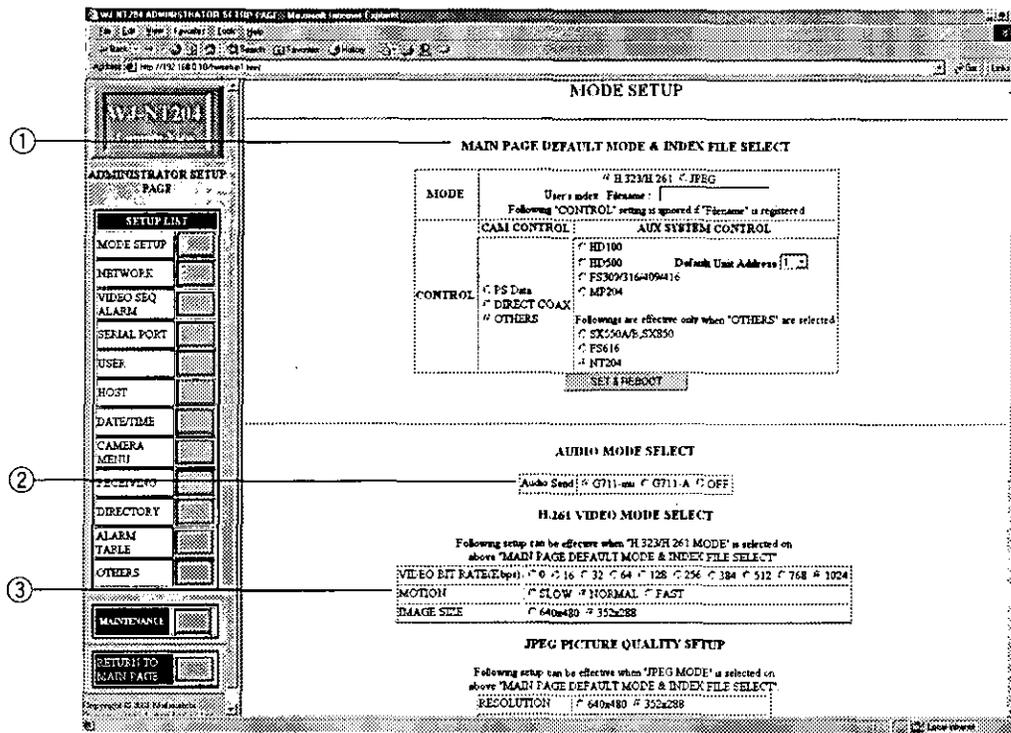
① **MAIN PAGE DEFAULT MODE & INDEX FILE SELECT**

The following setting specifies the opening window you access typing an IP address alone in the browser's URL column.

MODE

Select a compression mode or enter the user's index filename.

H.323/H.261: H.323/H.261 ITU-T is applied.

JPEG: Joint Photographic Experts Group is applied.

User's index filename: Enter a filename.

CAM CONTROL

The rout for camera control is specified here depending on the system composition. The following selection for CONTROL is ignored if you entered the index filename in the MODE procedure right above.

PS·Data: Controls the cameras connected to an auxiliary device (except WJ-NT204) capable of PS·Data (Panasonic Security Data) protocol.

DIRECT COAXIAL: Controls the cameras directly connected to the WJ-NT204 transmitter unit.

OTHERS: Select this for the case other than PS·Data or DIRECT COAXIAL. This is applicable to the WJ-SX550A/B or WJ-FS616 if connected.

AUX SYSTEM CONTROL

You can specify auxiliary device(s) connected to the WJ-NT204 transmitter. When there are more than one device in the system, register them in the PS·Data UNIT REGISTRATION window that is opened from the SERIAL PORT window.

HD100: Digital Disk Recorder, WJ-HD100

HD500: Digital Disk Recorder, WJ-HD500

FS309/316/409/416: Video Multiplexer, WJ-FS309/ 316/ 409/416

MP204: Data Multiplex Unit, WJ-MP204

SX550A/B: Matrix Switcher, WJ-SX550A/B

FS616: Video Multiplexer, WJ-FS616

NT204: Specify this when no auxiliary device connected

Note: The Authorization window will appear when you click on the SET & REBOOT for a new MODE setting after once you set H.323/H.261.

Default Unit Address: The default unit address is set to the selected device within 1-16.

SET & REBOOT: Settings are renewed to that you have just made in the above procedures. Clicking this button may interrupt communication among a transmitter and a receiver or other PC.

② **AUDIO MODE SELECT**

This selection is available only when the H.261 is set in the above selection. The transmitter sends audio data complying with this selection. The default setting is G.711-mu.

G.711-mu: Select this when the system is used in North America or Japan.

G.711-A: Select this when the system is used in Europe.

OFF: No sound is transmitted.

③ **H.261 VIDEO MODE SELECT**

Bit rate and motion speed are set for the transmitter.

BIT RATE: 0 - 1024

When 0 is selected, no picture is transmitted. The greater the bit rate (kbps) is, the more data is transmitted. The default setting is 1024.

MOTION: The default setting is NORMAL.

IMAGE SIZE: Image size can be set to 640x480 or 352x288 when H.261 is selected. The default setting is 352x288.
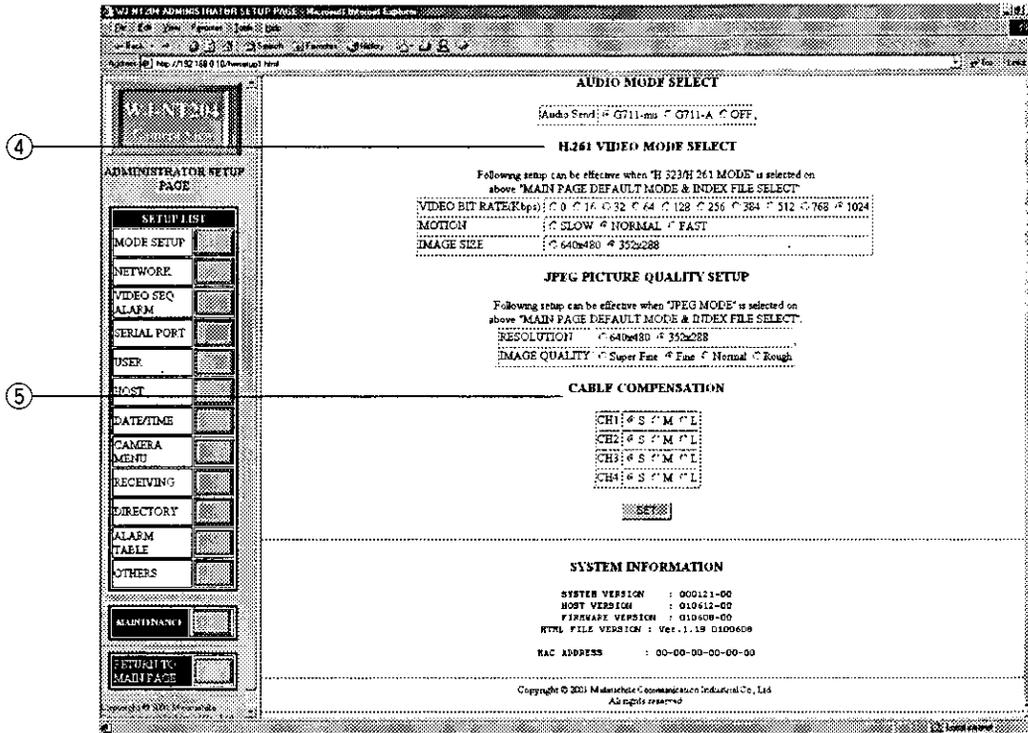
④ **JPEG PICTURE QUALITY SETUP**

Resolution and image quality are set.
RESOLUTION: The default setting is 352 (H) x 288 (V)
  pixels.
IMAGE QUALITY: The default setting is FINE.

⑤ **CABLE COMPENSATION**

Picture quality is lowered as long as the cable is
extended between the transmitter and the camera.
Compensation is applied in three degrees with
assumption that RG-59/U, BELDEN 9259 or equivalent
cable is used. The default setting is S.
S (Short): Up to 400 m (1 300 ft)
M (Middle): 400 m (1 300 ft) to 700 m (2 300 ft)
L (Long): 700 m (2 300 ft) to 900 m (3 000 ft)

■ NETWORK SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **NETWORK** button to display the **NETWORK SETUP** window.
Select set IP address, netmask, and default gateway.
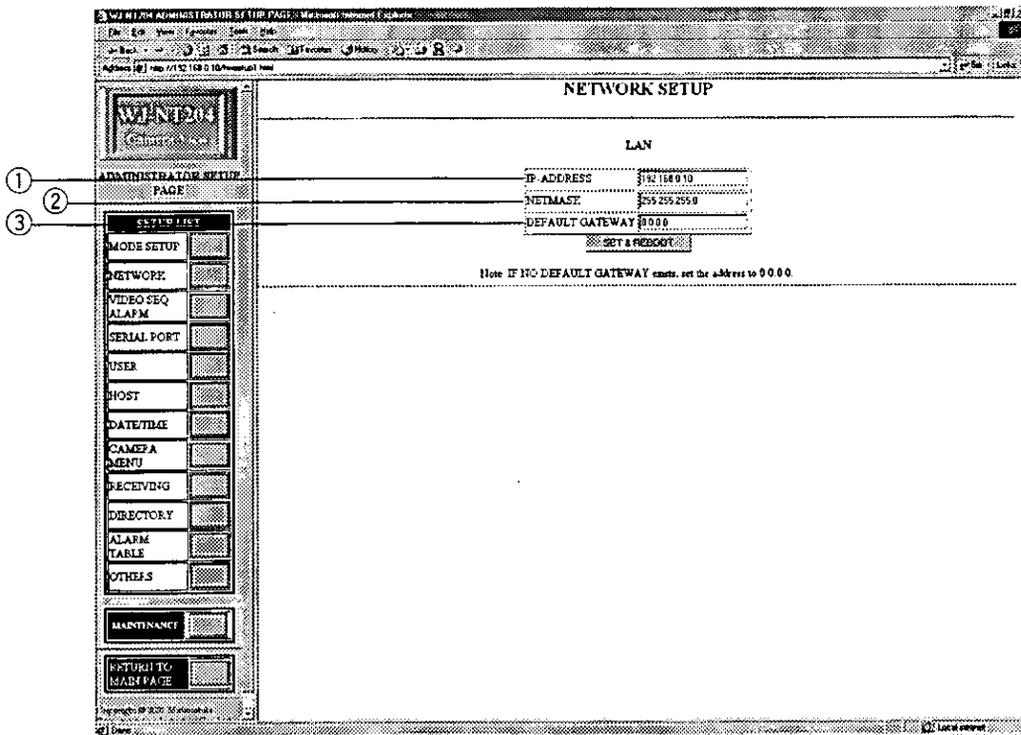
① **IP ADDRESS (LAN)**
Enter the IP address to be used with LAN.
The factory default setting is **192.168.0.10**.

② **NETMASK (LAN)**
Enter the netmask to be used with LAN.
The factory default setting is **255.255.255.0**.

③ **DEFAULT GATEWAY (LAN)**
Enter the default gateway to be used with LAN.
The factory default setting is **0. 0. 0. 0**   .

Note: Make certain that the default gateway is set to 0
when the system is used in the environment not
having a gateway.

■ VIDEO SEQ/ALARM SETUP

The transmitter has 8 view points to trace them in order in the sequential video scan and transmit images to the Control site. Beside scanning the view points, it transmits images of the camera when the associated sensor (alarm) operates. The trigger output terminal supplies an active pulse when the camera is selected in the video sequence or the sensor input to the camera operates. This window lets you set up the following.

① **VIDEO SEQ. entry for the view points**

The transmitter scans the entered points to send images to the Control site in ascending order of the point numbers when the video sequence works. The default setting is ON for each point.

ON: The point will be scanned.

OFF: The point is exempted from the video sequence.

② **CAMERA CH**

Assign a camera number to the point from among 1, 2, 3, 4 and AUX. The default setting is as follows.

Point #	VIDEO SEQ	CAM #	PRESET #	TRIGGER OUT	ALARM
1	ON	1	1	1	ON
2	ON	2	1	2	ON
3	ON	3	1	3	ON
4	ON	4	1	4	ON
5	ON	AUX	NONE	5	ON
6	ON	1	2	6	ON
7	ON	1	3	7	ON
8	ON	1	4	8	ON

③ **CAMERA PRESET**

Assign a camera preset position from among 1 through 8 and NONE of the selected camera to the point number. NONE will be given automatically when AUX is assigned to CAM #. The default setting is shown above.

④ **TRIGGER OUT**

Assign a trigger output number from among 1 through 8 and NONE to the point number. The default setting is shown above.

⑤ **ALARM FUNCTION**

Select ON or OFF for the point number. The default setting is ON for each point.

⑥ **VIDEO SEQ SCAN**

This selection enables or disables the preset video sequence. The default setting is OFF.

ON: The video sequence is enabled.

OFF: Disabled.

⑦ **DWELL TIME**

A duration is set for a view point. The time is selected from 2 seconds up to 30 seconds. The default setting is 5 seconds.

2-30 S: The sequence stays for the specific time per view point.

⑧ **RESTART TIME**

The time is in second to restart the sequential scan after an interruption made by a manual operation. The default setting is 60 seconds.

010-300 S: Set an appropriate time.

84

⑨ **ALARM TYPE**

This setting specifies the sensor (alarm) input reception whether to accept or ignore depending on the signal forms, and applies to all 8 inputs on the rear of the transmitter. The default setting is EDGE (CLOSE).

LEVEL: The transmitter enters the alarm mode when the input retains active (when low) for more than 1 second.

EDGE (OPEN): The transmitter enters the alarm mode when the input changes from close to open.

EDGE (CLOSE): The transmitter enters the alarm mode when the input changes from open to close.

Note: The alarm log may record redundant event when this setting is changed from one to another.

⑩ **ALARM PORT Enable/Disable SETUP page**

Clicking this line opens the setup page.

The sensor inputs connected to the rear of the transmitter unit can be enabled or disabled with this setup. EXT can be set only for the port #8. This setup is applied only to the transmitter unit. The default setting is ENABLE for all ports.

ENABLE: The unit accepts the sensor input.

DISABLE: The unit ignores the sensor input.

EXT: The highest priority is given to #8 port that the unit ignores inputs to other ports when #8 port is activated.
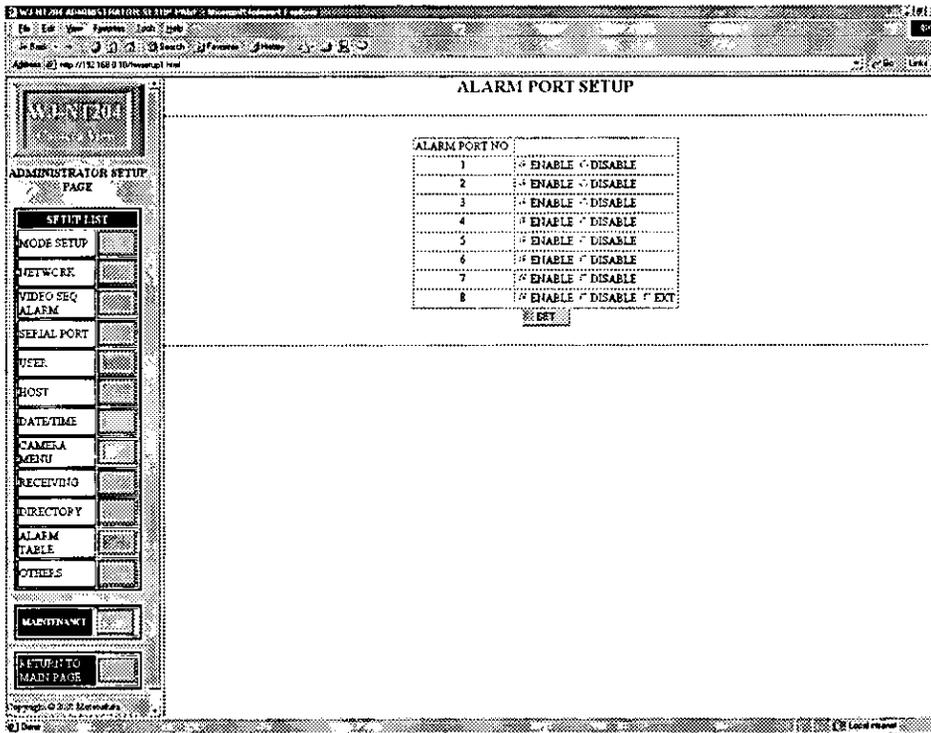
⑪ **ALARM LOG CLEAR**

Click this button to clear the alarm log.

■ SERIAL PORT SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **SERIAL PORT** button to display the **SERIAL PORT SETUP** window
Specify whether to use the RS-232C or RS-485 interface, and set the communication parameters
Make certain that the DIP switch #4 on the rear of the transmitter is set to OFF when the RS-485 port is used, or to ON when the RS-232C port is used
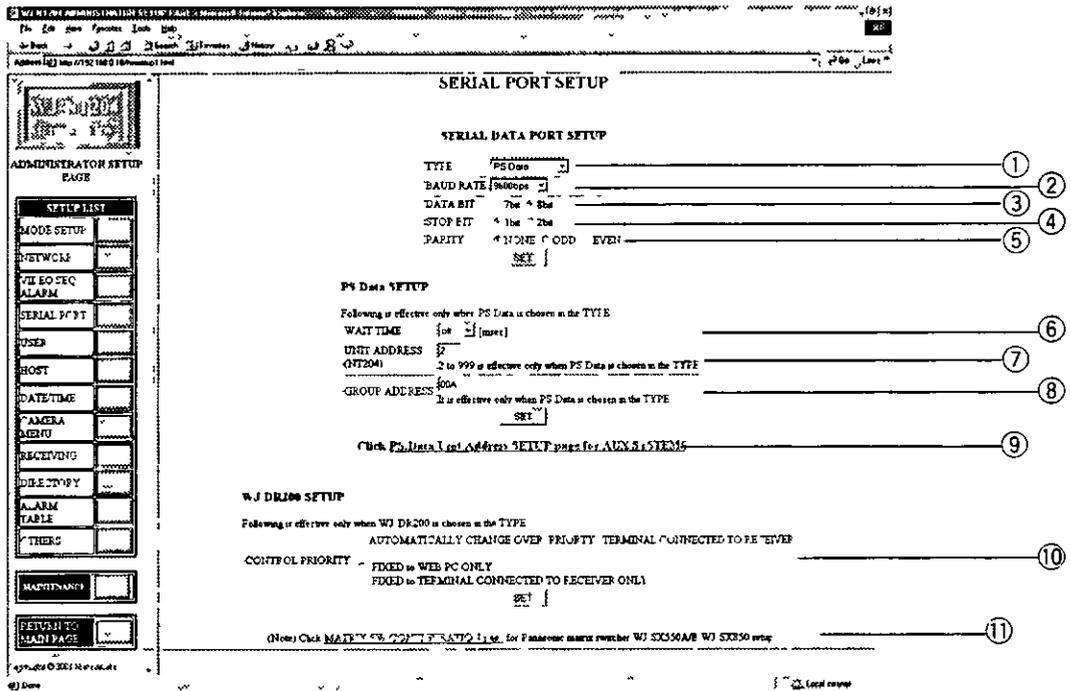
① TYPE

Specify a peripheral device that communicates with the transmitter through the serial port Click the ▼ button repeatedly to scroll down the options shown below The default setting is PS·Data

The following options are available when DIP switch #4 is set to OFF (RS-485) on the rear of the WJ-NT204

WJ-SX550A/B Matrix Switcher System
WJ-FS616 Video Multiplexer
PS Data Products capable of Panasonic Security Data protocol
Serial Through Data is transmitted through the DATA port using comthr html

The following options are available when DIP switch #4 is set to ON (RS-232C) on the rear of the WJ-NT204

WJ-SX550A/B: Matrix Switcher System
WJ-SX850 System 850 Matrix Switcher
WJ-DR200 Digital Disc Recorder
Serial Through Data is transmitted through the DATA port using comthr html

② BAUD RATE

Set the rate to 4 800, 9 600 or 19 200 bps The default setting is 9 600 bps

③ DATA BIT

Set the data bit to 7 or 8 bits The default is 8 bits

④ STOP BIT

Set the stop bit to 1 or 2 bits The default is 1 bit

⑤ PARITY

Set the parity check to NONE, ODD or EVEN The default setting is NONE

⑥ WAIT TIME

Set the wait time with the ▼ button The default setting

is OFF

⑦ UNIT ADDRESS

Set an address number within 002 through 999 when TYPE is set to PS·Data The default setting is 002

Notes Special caution should be used for setting unit address when the System Controller WV-CU360 is installed in the system

● The transmitter WJ-NT204 will be set to address "1" automatically, when no receiver WJ-NT204 is connected to the transmitter except the PC The WV-CU360 connected to the transmitter should be set to other than "1"

● The transmitter WJ-NT204 will be set to the address by this operation, when a receiver WJ-NT204 is connected The Control site WV-CU360 connected to the receiver should be set to "1" while the Remote site WV-CU360 be set to other than "1" and " transmitter's address"

⑧ GROUP ADDRESS

Set an address within 00A through 00Z The default setting is 00A

⑨ PS·Data Unit Address SETUP

Is linked to the PS Data Unit Address SETUP page

⑩ WJ-DR200 SETUP

Set the CONTROL PRIORITY from among three options The default setting is AUTOMATICALLY CHANGE OVER

⑪ WJ-SX550A/B and WJ-SX850 MATRIX SWITCHER SETUP

Clicking on this line will open the WJ-SX550A/B and WJ-SX850 MATRIX SWITCHER setup window

Clicking on the line indicated ⑨ in the previous page displays the PS·Data Unit Address SETUP page.
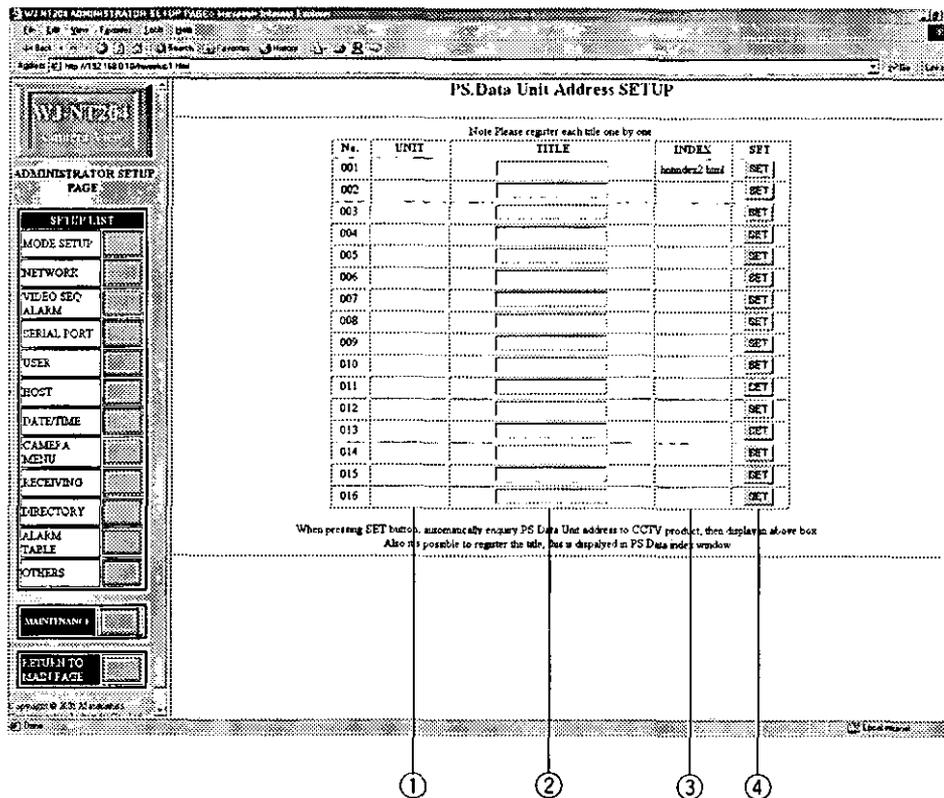
① **UNIT column**
This column displays the PS·Data device model numbers that the inquired site has sent back.
WJ-HD100: Digital Disk Recorder, WJ-HD100
WJ-HD500: Digital Disk Recorder, WJ-HD500
WJ-FS309/316/409/416: Video Multiplexer
WJ-MP204: Data Multiplex Unit
No model number or "No Response" appears on the column when the transmitter responds irregularly or does not respond.

② **TITLE column**
Enter a maximum of 10 characters in the column. Usable characters are the same as that are used for the USER AUTHORIZATION. The entered title will be displayed later in the EXTENSION FUNCTION windows.

③ **INDEX column**
An index filename is displayed, or blank when no file exists. The filename is specified with the UNIT name and setup for MODE or CONTROL in the MODE SETUP window.

④ **SET button**
Pressing this button performs three jobs as follows.
The Control site sends an inquiry command to the transmitter to let it inform the unit name connected with it.
The entered titles are registered.
The filename is searched and displayed.

87

■ USER SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **USER** button to display the **USER SETUP** window. Use this window to register or delete users.

① USER AUTHORIZATION
Set **USER AUTHORIZATION** to **OFF** or **ON**.

Even if USER AUTHORIZATION is set to OFF, host authorization is necessary to access the pages exclusive to your network administrator, or to use the FTP function (to call the WJ-NT204 transmitter).

The factory default setting is **OFF**.

② USER REGISTRATION
Set **USER NAME**, **PASSWORD** and **ACCESS LEVEL**.

USER NAME and **PASSWORD** can be entered with up to 16 upper or lower case alphanumeric characters and symbols. Select an **ACCESS LEVEL** from 1 to 3. To change an already registered password and access level, set them in the same way as to register a new password and access level, and then click the **[SUBMIT]** button.

For user authorization, refer to the ACCESS AUTHORIZATION on page 105.

③ DELETE USER
Select a registered user and click the **[DELETE]** button to delete.

The list of currently registered users can be viewed by clicking this pulldown list. The number in brackets is the access level.

■ HOST SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **HOST** button to display the **HOST SETUP** window. Use this window to register or delete the HOST IP and SUBNET MASK that can be accessed without user authorization.

① **HOST AUTHORIZATION**
Set **HOST AUTHORIZATION** to **ON** or **OFF**. The authorization is carried out only for the masked range specified by the **HOST IP ADDRESS** and **SUBNET MASK**. The default setting is OFF.

② **HOST REGISTRATION**
Set a **HOST IP ADDRESS**, **SUBNET MASK** and **ACCESS LEVEL** from 1 to 3.
Select an **ACCESS LEVEL** (1 to 3). To change an already registered password and access level, set them in the same way as to register a new password and access level, and then click the **[SUBMIT]** button.
For host authorization, refer to ACCESS AUTHORIZATION on page 105.

Note: Only for the masked range with the host IP address and subnetmask will be authorized.

③ **DELETE HOST**
Select a registered **HOST** and press the **[DELETE]** button to delete.
The list of currently registered hosts can be viewed by clicking this pulldown list. The number in brackets indicates the access level.

89

■ CLOCK SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **DATE/TIME** button to display the **CLOCK SETUP** window. Use this window to adjust the internal clock of the device.
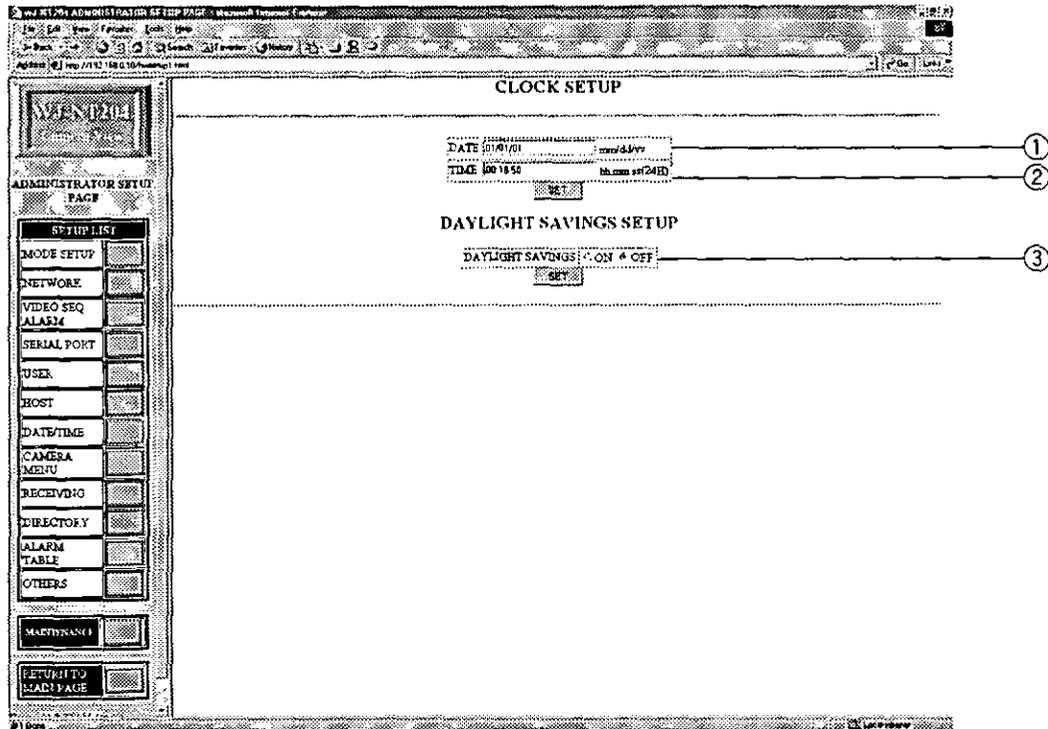
① DATE

Set a date in the order of mm/dd/yy (for example, 04/23/01 for April 23, 2001). The date is shown when this window is called on the screen.

② TIME

Set a time in the order of hh:mm:ss (for example, 12:03:45 for 3 minutes 45 seconds past 12 o'clock).
Use the 24-hour system for time setting. The date is shown when this window is called on the screen.

③ DAYLIGHT SAVINGS

Set this to ON, then click the SET button to advance the internal clock by one hour for applying the daylight savings. Click OFF, then click SET to return the clock to the normal time.

■ CAMERA SETUP MENU

On the **ADMINISTRATOR SETUP PAGE**, click the **CAMERA MENU** button to display the **CAMERA SETUP MENU** window.
The cameras (option) can be set by remote control from this page.
For the individual functions of the camera menu, refer to the operating instructions for the camera.
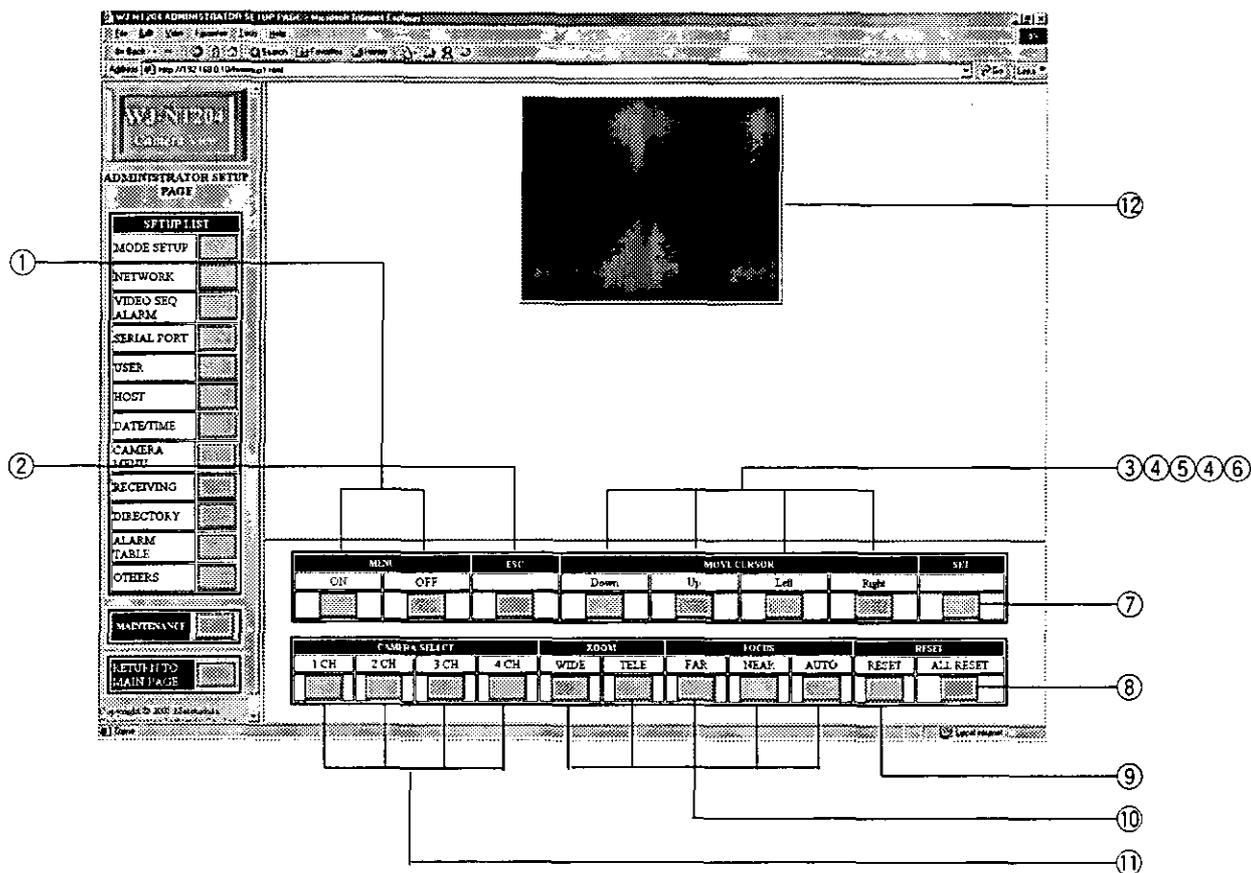
① **MENU ON/OFF**
Select **ON** or **OFF** for **CAMERA MENU**.

② **ESC**
Escape from the currently selection and return to the previous page of the **CAMERA MENU**.

③ **MOVE CURSOR - Left**
To move the cursor to the left. Use to change settings or adjust levels.

④ **MOVE CURSOR - Up**
To move the cursor up.

⑤ **MOVE CURSOR - Down**
To move the cursor down.

⑥ **MOVE CURSOR - Right**
To move the cursor to the right. Use to change settings or adjust levels.

⑦ **SET**
To execute the currently selected settings or to enter a submenu of the **CAMERA MENU**.

⑧ **ALL RESET**
To reset all camera settings to the factory defaults, click this button when the cursor is positioned on the CAMERA RESET in the SPECIAL MENU.

⑨ **RESET**
To reset individual parameters to the factory defaults. Clicking this button will enter the SPECIAL MENU when the cursor is positioned on the SPECIAL in the menu.

⑩ **ZOOM/FOCUS**
These buttons are used to zoom in/out the image, and to adjust the focus. Instead holding down the button, click on it repeatedly as necessary.

TELE: Zooms in the image.
WIDE: Zooms out the image.

NEAR: Manual focusing
FAR: Manual focusing
AUTO: The built-in focus mechanism performs in the Combination camera.

⑪ **CAMERA SELECT**
To select any of the cameras connected.

⑫ **Live Image & Camera Setup Menu Display**
The camera setup menu is overlaid on the live image when the MENU ON button is clicked.

91

■ RECEIVING SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **RECEIVING** button to display the **RECEIVING SETUP** window.
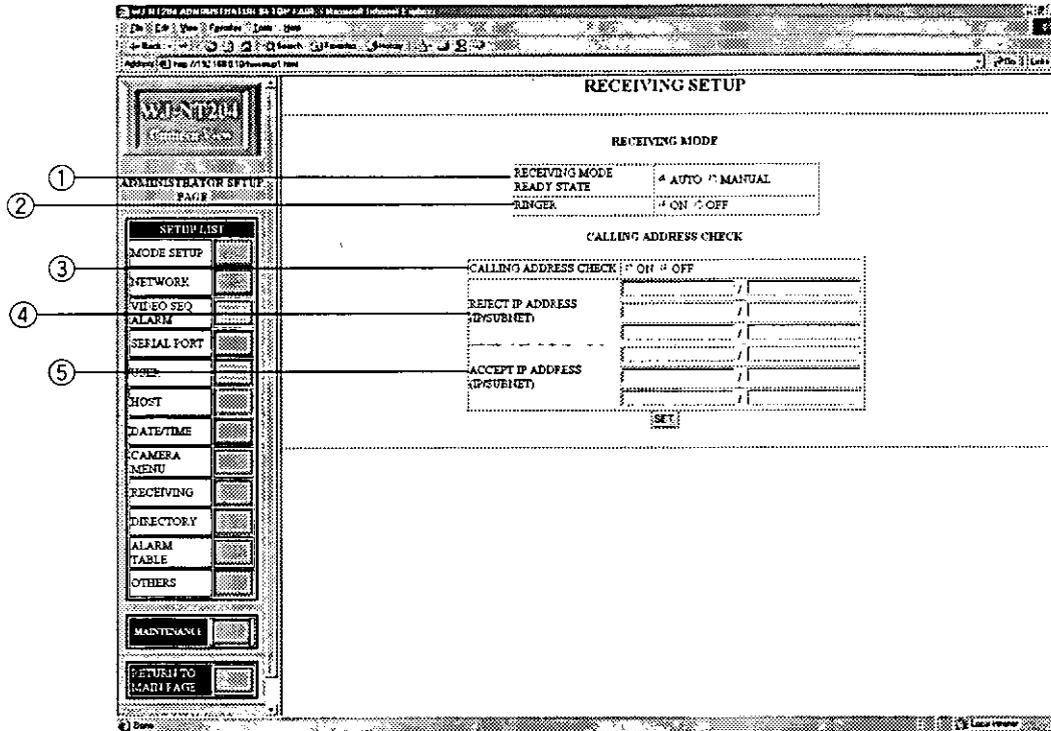
① **RECEIVING MODE READY STATE**

The default setting is AUTO.

AUTO: Calls are received automatically.

MANUAL: Calls can be received by pressing the DIAL button.

② **RINGER**

This setting takes effect only when H.261 is applied. The default setting is ON.

ON: Enables alert tone when a call is received.

OFF: Disables alert tone when a call is received.

③ **CALLING IP ADDRESS CHECK**

The default setting is OFF.

ON: If call reject/allow addresses are set, the IP addresses of incoming calls are checked.

The check sequence advances as follows.

1 The caller address is checked whether it is in the range of REJECT IP address.

If it is Yes, the caller will be rejected.

If it is No, check goes to the next step 2 below.

2 The caller address is checked whether it is in the range of ACCEPT IP address.

If it is Yes, the caller will be connected.

If it is No, check goes to the next step 3 below.

3 The caller address is checked whether it is included in the Quick Dialing directory.

If it is Yes, the caller will be connected.

If it is No, the caller will be rejected.

OFF: Even if call reject/allow addresses are set, the IP addresses of incoming calls are not checked. Therefore, the call reject/allow function remains inactive.

④ **REJECT IP/SUBNET MASK REGI.**

Set IP addresses and subnet masks to be rejected. Up to 3 can be set. All IP addresses other than the set ones will be allowed.

⑤ **ACCEPT IP/SUBNET MASK REGI.**

Set IP addresses and subnet masks to be allowed. Up to 3 can be set. All IP addresses other than the set ones will be rejected.

■ DIRECTORY SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **DIRECTORY** button to display the **DIRECTORY SETUP** window.

Register IP addresses and names in the quick dial address book.

① **IP ADDRESS**
Input the IP address.

② **TITLE**
Enter a title name for the IP address with up to 10 of alphanumeric characters and symbols. Usable characters are shown below. Some of the symbols will be displayed differently when the title appears on the monitor as enclosed with brackets.
< [←] > [→] = ? ' " # & ( ) * + , - . / ; : @ [•]
Space 0-9 a-z A-Z

Note: Make sure to press the SET button every time the IP ADDRESS and TITLE for a No is entered

■ ALARM DIALING TABLE SETUP

On the **ADMINISTRATOR SETUP PAGE**, click the **ALARM TABLE** button to display the **ALARM TABLE SETUP** window.
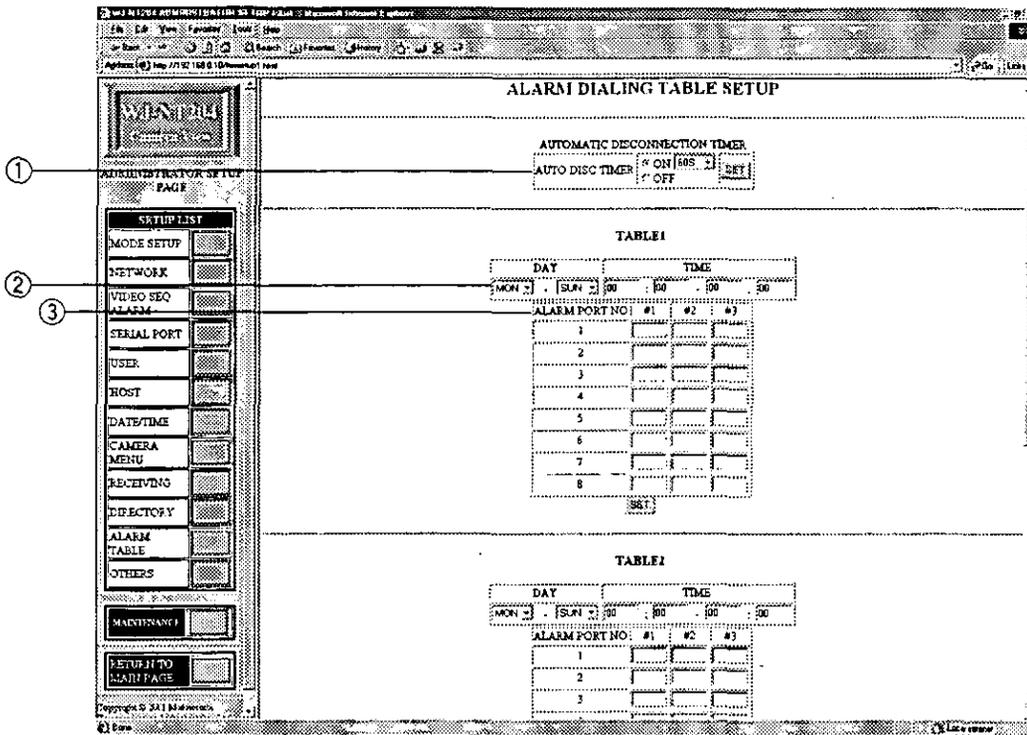
① **AUTOMATIC DISCONNECTION TIMER**
The timer is enabled or disabled.
ON: Set an appropriate time.
    Every 10 seconds from 0 to 600 seconds can be set when [ALARM TYPE] is set to [LEVEL], or every 10 seconds from 10 to 600 seconds can be set when [ALARM TYPE] is set to "EDGE".
OFF: The timer does not function.
There are three tables: TABLE1, TABLE2 and TABLE3: that may be convenient, for example, when you have more than one surveillance center depending on the time zone and day of the week.

② **DAY/TIME**
• Set the scope of days of the week.
    Move the cursor to the Starting Day of the week. Then press the ENTER button to toggle the day display. Select the desired day with the ENTER button. Move the cursor to the Ending Day of the week. Then select it the same as above with the ENTER button.

• Set the starting and ending times.
    Move the cursor to the Starting time. Then enter the desired time by pressing the NUMERIC buttons.
    Move the cursor to the Ending time. Then enter the desired time by pressing the NUMERIC buttons.
    Enter the hours with a 24-hour clock (military time).
    To set alarm dialing valid for 24 hours, enter 00:00 for both the starting and ending times.

③ **Alarm Call Address, ALARM PORT NO.**
Up to 3 quick dial numbers (including other choices) can be specified per alarm input number.

Example of Alarm Table Setting
An example is shown below when there are three time zones with deferernt destinations.
Setting A: From 9:00 to 18:00 on Monday through Friday, destination is set to Surveillance Center A
Setting B: From 18:00 to 9:00 (next day) on Monday through Friday, destination is set to Surveillance Center B
Setting C: 9:00 Saturday through 9:00 Monday, destination is set to Surveillance Center C

Alarm Table Setting

Set the tables as follows.
Table 1: MON-FRI 09:00-18:00 (Surveillance Center A)
Table 2: MON-FRI 18:00-9:00 (Surveillance Center B)
Table 3: SAT-SUN 09:00-9:00 (Surveillance Center C)

94

■ OTHERS SETUP

On the ADMINISTRATOR SETUP PAGE, click the OTHERS button to display the OTHER SETUP window.

① ONE-TOUCH DIALING REGISTRATION

The five ONE TOUCH DIAL buttons on the Remote Controller can be assigned the start point of sequential dial (SEQ. DIAL) or one-touch dial numbers. Pressing the one-touch button will call the start point of SEQ. DIAL if it is registered as "000". Pressing other one-touch dial buttons than "000" will call the assigned IP address to the button.

② RE-CONNECTION

Re-connection is started by the site that is set to ON for this setting when a call is interrupted during communication. This setting is applicable only to the system comprising two WJ-NT204 units, one for TRANSMITTER and the other for RECEIVER, and when the call has been made with the Remote Controller WV-CU20. This does not perform in the multi-site connection.

③ HOST PORT

The DIP switch #9 on the front of the WJ-NT204 unit specifies the usable serial port from RS-232C (front) or RS-485 (rear) (PS·Data). The settings must be the same among the devices connected in the chain, except the unit #.

④ ON SCREEN DISPLAY

Elements displayed on the monitor connected to the WJ-NT204 transmitter are selected to ON or OFF.

⑤ LOCK/PASSWORD

MENU LOCK enables (ON) or disables (OFF) the password protection when opening the menu windows.
NUM LOCK enables (ON) or disables (OFF) the numeric buttons to operate on the Remote Controller.
A PASSWORD comprises 4-digit of numeric characters (0-9), asterisk (*) and sharp (#).

■ MAINTENANCE INDEX FILE SELECT
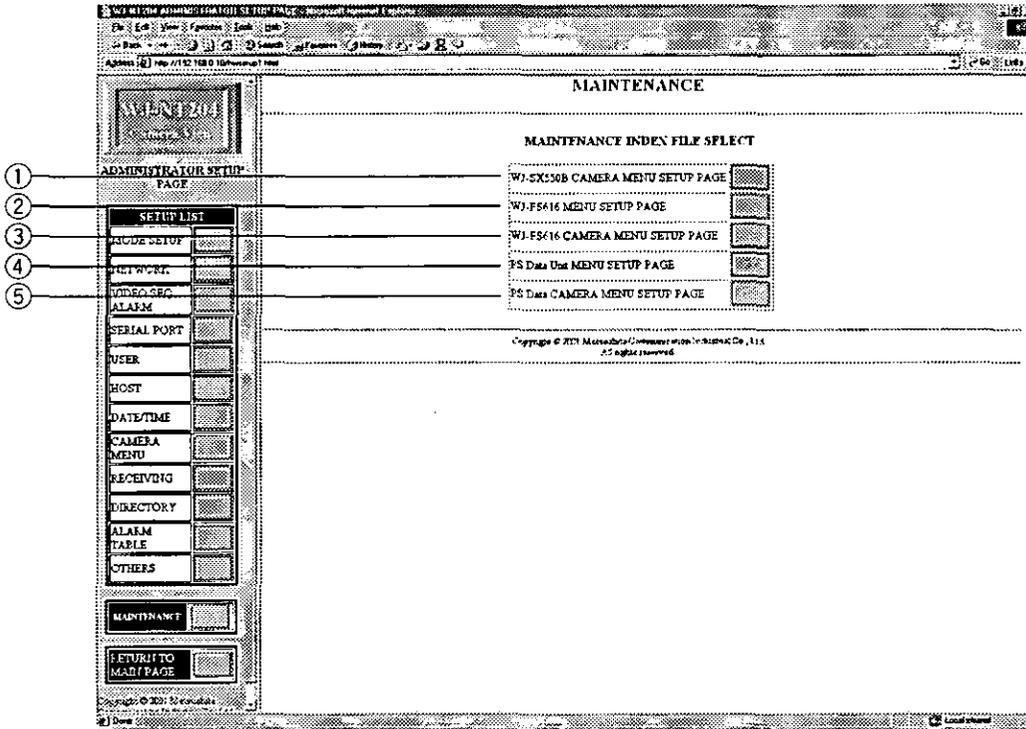
① **WJ-SX550B CAMERA MENU SETUP PAGE**
Setup is available for the cameras connected with the WJ-NT204 transmitter via the WJ-SX550A/B.

② **WJ-FS616 MENU SETUP PAGE**
Setup is available on the window for the WJ-FS616 connected with the WJ-NT204 transmitter.

③ **WJ-FS616 CAMERA MENU SETUP PAGE**
Setup is available for the cameras connected with the WJ-NT204 transmitter via WJ-FS616.

④ **PSD MENU SETUP PAGE**
Setup is available on the window for the PSD device connected with the WJ-NT204 transmitter.

⑤ **PSD CAMERA MENU SETUP PAGE**
Setup is available for the cameras connected with the WJ-NT204 transmitter via the PSD device.

97

■ WJ-SX550A/B CAMERA MENU SETUP PAGE
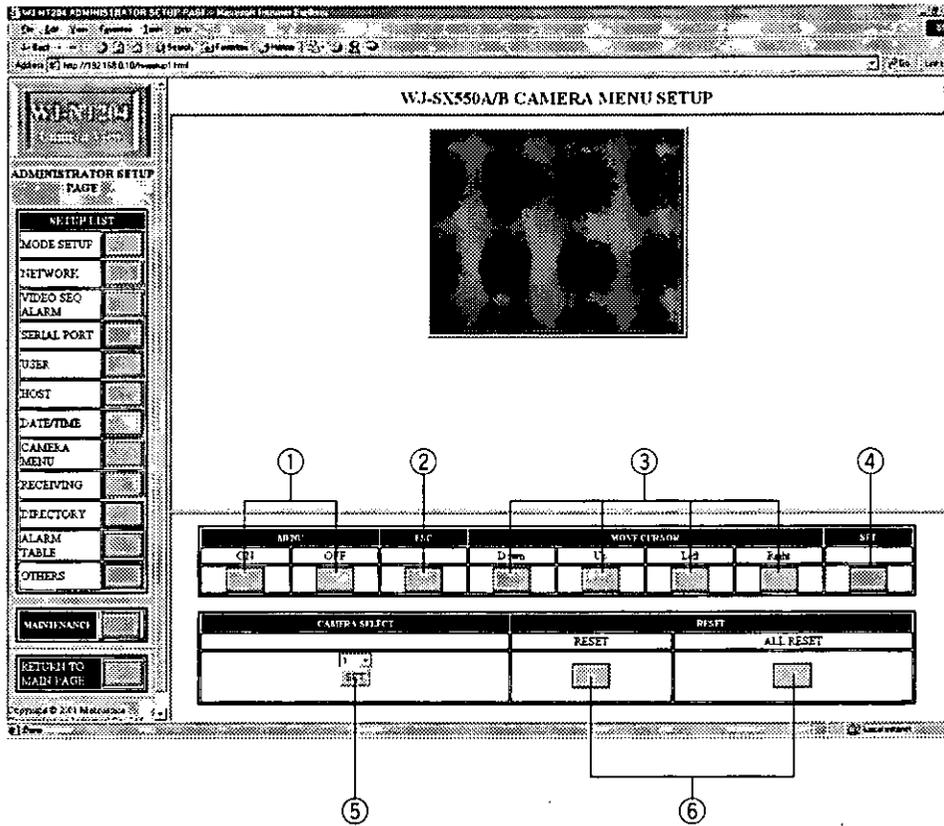
① **MENU buttons**
Open or close the CAMERA menus.

② **ESC button**
Returns the window to the previous page.

③ **MOVE CURSOR buttons**
Move the cursor to the right, left, up and down.

④ **SET button**
Confirms the selected parameter, or opens a submenu window.

⑤ **CAMERA SELECT**
Selects a camera connected to the WJ-SX550A/B from among 1 through 128.

⑥ **RESET buttons**
RESET: Resets the settings of the WJ-SX550A/B back to the default values. Clicking on this button displays the SPECIAL menu when the cursor is on the SPECIAL line.
ALL RESET: Pressing this button displays the SPE-CIAL menu when the cursor is on the CAMERA PRESET line.

■ WJ-FS616 MENU SETUP PAGE
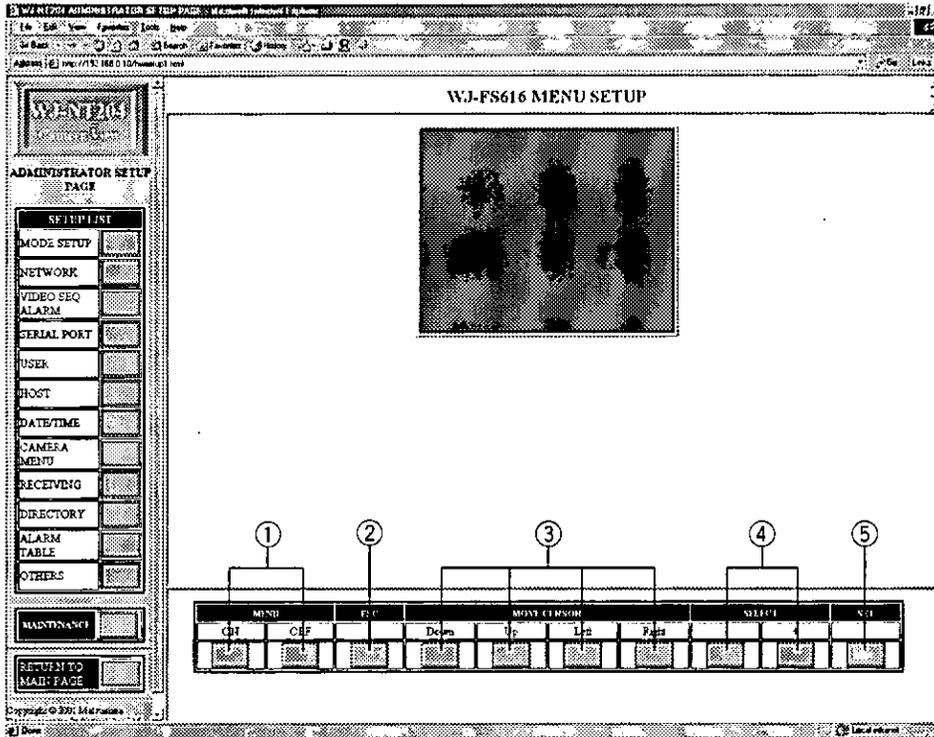
① **MENU buttons**

These buttons open or close the WJ-FS616 menus.

② **ESC button**

Returns the window to the previous page.

③ **MOVE CURSOR buttons**

Moves the cursor to the right, left, up and down.

Note: The following buttons should be operated after displaying the WJ-FS616 MENU, otherwise the AUTO mode preset to the camera may start when you click SELECT + button. To stop unwanted AUTO mode, click SELECT - button.

④ **SELECT buttons**

These buttons increase or decrease the highlighted parameter in the setup menu.

⑤ **SET button**

Confirms the selected parameter, or opens a submenu window.

■ WJ-FS616 CAMERA MENU SETUP PAGE
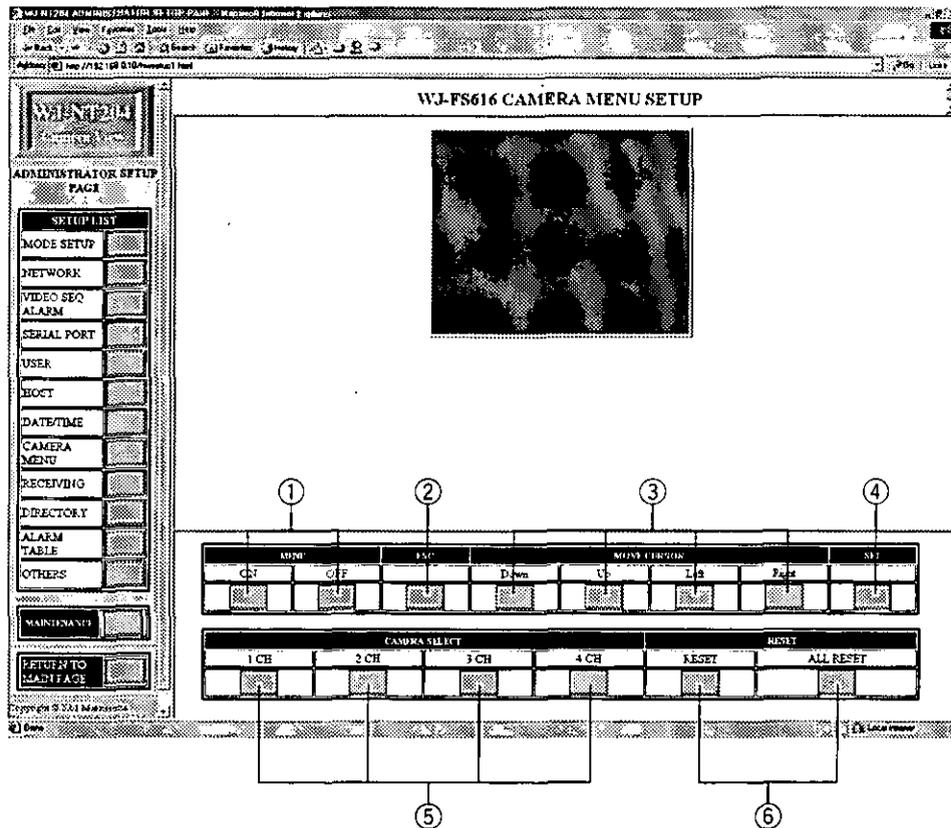
WJ-FS616 CAMERA MENU SETUP

① **MENU buttons**
Open or close the WJ-FS616 menus.

② **ESC button**
Returns the window to the previous page.

③ **MOVE CURSOR buttons**
Move the cursor to the right, left, up and down.

④ **SET button**
Confirms the selected parameter, or opens a submenu window.

⑤ **CAMERA SELECT buttons**
Select a camera from 1 to 4 connected to the WJ-FS616.

Note: The following buttons should be operated after displaying the MENU for WJ-FS616.
Clicking RESET before displaying the menu will start SEQ preset to WJ-FS616. Click RESET again to stop it.
Clicking ALL RESET will toggle the VCR/CAM output of WJ-FS616. Click ALL RESET again to restore the output.

⑥**RESET buttons**
RESET: Resets the settings of the WJ-FS616 back to the default values. Clicking on this button displays the SPECIAL menu when the cursor is on the SPECIAL line.
ALL RESET: Resets the settings for cameras back to the default values when the cursor is on the CAMERA PRESET line.

100

■ PS·Data MENU SETUP PAGE
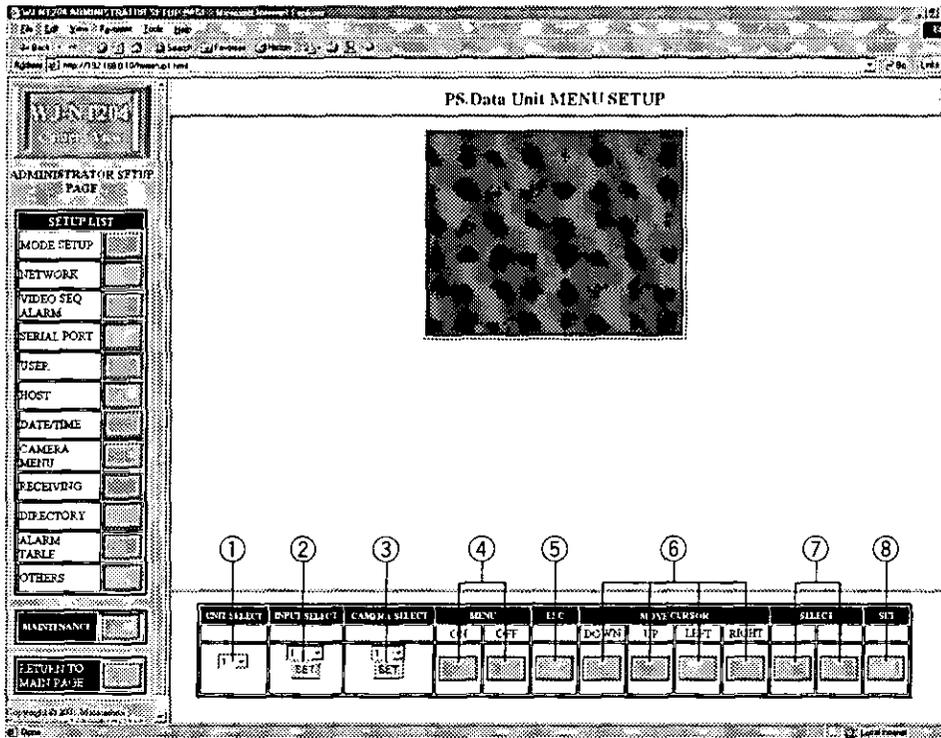
① **UNIT SELECT**

Specifies the PS.Data device, you are going to operate, with the unit address or title.

② **INPUT SELECT**

Specifies the input number to the PS.Data device.

③ **CAMERA SELECT**

Specifies the camera number connected to the PS.Data device.

④ **MENU buttons**

These buttons open or close the menus for the PS.Data device.

⑤ **ESC button**

Returns the window to the previous page.

⑥ **MOVE CURSOR buttons**

Move the cursor to the right, left, up and down.

⑦ **SELECT**

These buttons increase or decrease the highlighted parameter in the setup menu.

⑧ **SET button**

Confirms the selected parameter, or opens a submenu window.

■ PS·Data CAMERA MENU SETUP PAGE
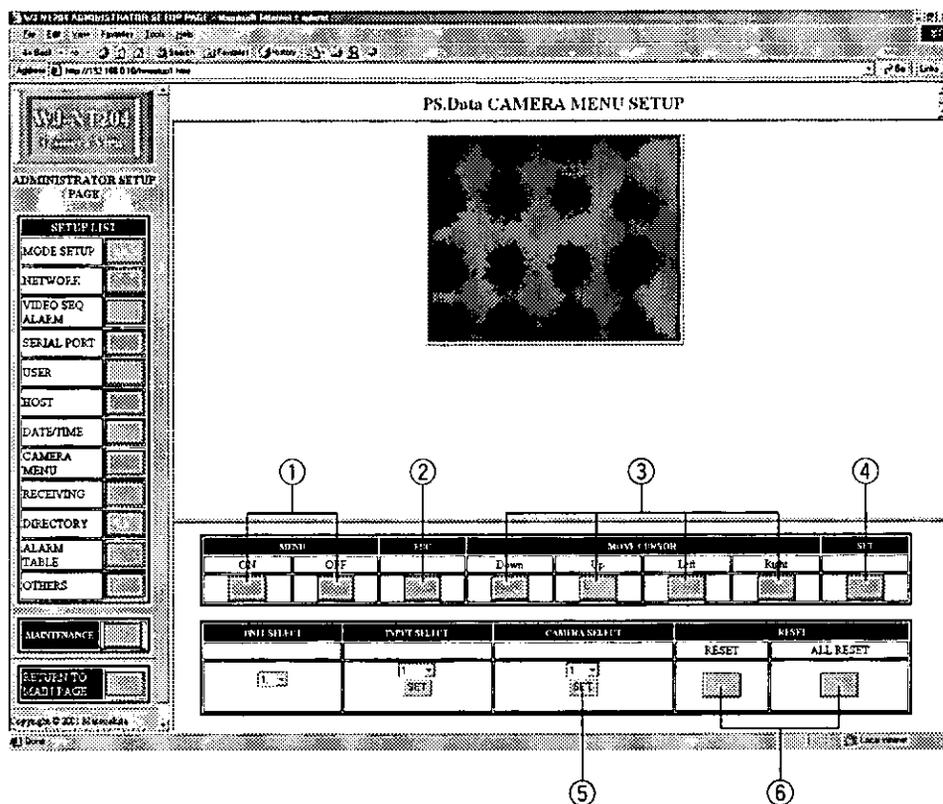
① MENU buttons
Open or close the menus for the cameras connected with the PS.Data device.

② ESC button
Returns the window to the previous page.

③ MOVE CURSOR buttons
These buttons move the cursor to the right, left, up and down.

④ SET button
Confirms the selected parameter, or opens a submenu window.

⑤ UNIT SELECT
Specifies the PS.Data device, you are going to operate, with the unit address or title.

⑥ INPUT SELECT
Specifies the input number to the PS.Data device.

⑦ CAMERA SELECT
Selects a camera from 1 to 128 connected to the PS.Data device.

⑧ RESET buttons
RESET: Resets the settings of the PSD device back to the default values. Clicking on this button displays the SPECIAL menu when the cursor is on the SPECIAL line.

ALL RESET: Resets the settings for cameras back to the default values when the cursor is on the CAMERA PRESET line in the SPECIAL menu.

● Confirmation of the set values

Turn OFF all Mode Setup switches inside the WJ-NT204 front panel, and then press the RESET button to restart the unit. Restarting makes the addresses entered take effect.
Perform a communication check by means of ping commands as follows.

10BASE-T
100BASE-TX
crossover cable

WJ-NT204

PC
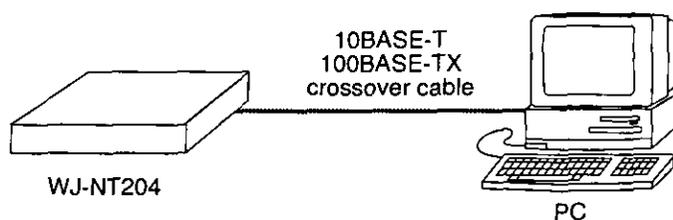
① Connect the WJ-NT204 to the PC (see page 66).

② Click the **[START]** button on the PC, and then point to **[Programs]**. In the program menu, choose **[MS-DOS Prompt]**, and enter the following commands.

```
C:\Windows>ping 192.168.0.10        (if the WJ-NT204 address is 192.168.0.10)
```

* The address has been set properly if the WJ-NT204 responds as follows:

```
Pinging 192.168.0.10 with 32 bytes of data :
Reply from 192.168.0.10 : bytes = 32 time < 10 ms TTL = 32
Reply from 192.168.0.10 : bytes = 32 time < 10 ms TTL = 32
Reply from 192.168.0.10 : bytes = 32 time < 10 ms TTL = 32
Reply from 192.168.0.10 : bytes = 32 time < 10 ms TTL = 32
```

* If the request times out without a response from the WJ-NT204, the address may not have been set properly. Attempt to set it again.

```
Pinging 192.168.0.10 with 32 bytes of data :
Request timed out.
Request timed out.
Request timed out
Request timed out.
```

* If the WJ-NT204 responds as below, the network setup of the PC may be wrong. Correct the setup (e.g., change the IP address to 192.168.0.2 and the sub netmask to 255.255.255.0), and enter the ping command again.

```
Pinging 192.168.0.10 with 32 bytes of data :
Destination host unreachable.
Destination host unreachable.
Destination host unreachable.
Destination host unreachable.
```

103

■ Control of Access Authorization

User access authorization is controlled as follows.

● Unlimited access

If neither user nor host authorization is used (set to OFF) in a network, all users may perform the following operations at access level 2.

- Controlling cameras and other equipment connected to the WJ-NT204
- Monitoring live images
- Monitoring alarm images and querying the log files
- Accessing the data stored in the WJ-NT204

* Accessing the ADMINISTRATOR SETUP PAGE of the WJ-NT204 requires an administrator account.

● Limited access

- Access is limited according to the host access levels specified in the HOST SETUP window. The HOST SETUP window is queried using the IP address of the host requesting access to the WJ-NT204. When accessing via a proxy server, the access level therefore is determined by the IP address of the proxy server.

- When access is made from a PC not registered in the HOST SETUP window, the dialog box shown below prompts the user to enter User Name and Password. The access level is determined when both the user name and password are entered.

■ Access Level

Three access levels can be assigned to the users.

More than one user can be assigned the same access level. While device control commands are given top priority in the execution chain, there is no priority attached to the access level. It is possible to designate more than one network administrator and to change designated administrators.

● Administrator (Level 1)

- Access to and setup of ADMINISTRATOR SETUP PAGE
- Rewriting data stored in the WJ-NT204 using FTP (File Transfer protocol)
- Controlling cameras and other equipment connected to the WJ-NT204
- Monitoring live images
- Querying the log files

● Input Select and operation (Level 2)

- Controlling cameras and other equipment connected to the WJ-NT204
- Monitoring live images
- Querying the log files

● Monitoring only (Level 3)

- Monitoring live image.
- Querying the log files

■ Registration

Administrator level (Level 1) users only can be registered in the HOST SETUP and USER SETUP windows.
Each window is provided with fields for making the necessary entries.
The factory default setting is USER NAME: admin, PASSWORD: any character, ACCESS LEVEL: 1. An "admin" user can change passwords, but is not authorized to delete users or change access levels.

● Host Setup Window

A maximum of 8 terminal addresses can be registered in the HOST SETUP window. Initially there are no addresses registered.
Enter the host IP address as a dotted (.) notation,for example. 192.168.0.10. The host name cannot be specified. The host IP address "0.0.0.0" is invalid.
Select (mark) any of access levels 1 to 3.

● User Setup Window

A maximum of 16 users can be registered in the USER SETUP window.
Enter a user name and password consisting of up to 16 alphanumeric characters (case sensitive). Select (mark) any of access levels 1 to 3.

● WJ-NT204 Authorized Functions

105
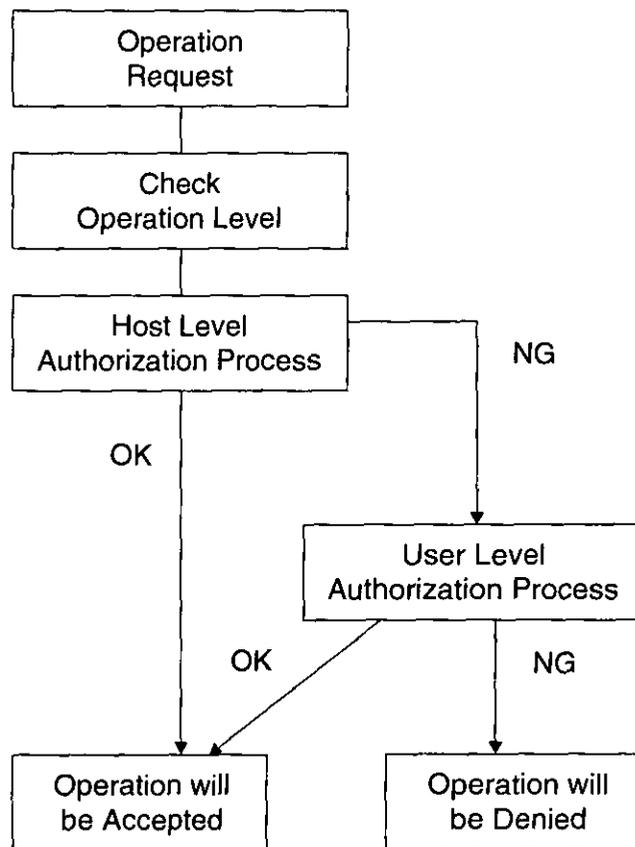
You may see dark stripes in the edges of image display. These are added by the devices connected to the transmitter for the administration purposes

■ WJ-MP204 Data Multiplexer Control

● Connection
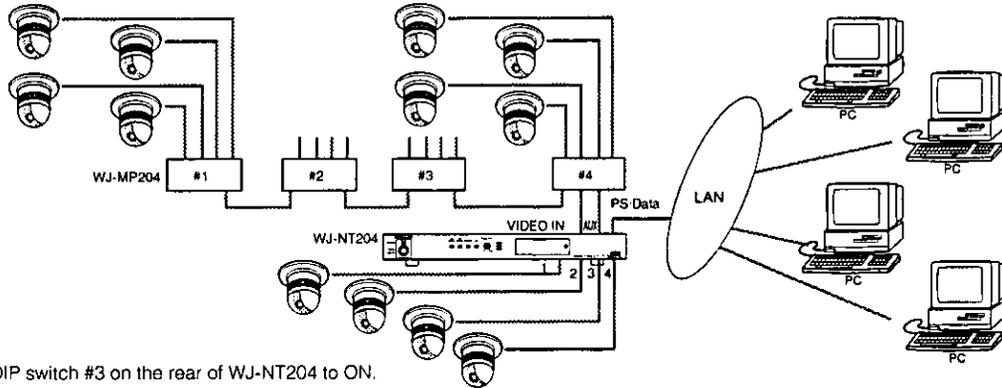
Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.

(1) Connect SPOT OUT on the rear of the WJ-MP204 to VIDEO IN AUX on the rear of the WJ-NT204.
(2) Connect the RS-485 ports of both units with an RS-485 cable.

● Setup

(1) On the ADMINISTRATOR SETUP PAGE, click the **[SERIAL PORT]** button to open the SERIAL PORT SETUP window. For **TYPE**, select PS·Data. Set the same communication parameters as for the WJ-MP204.
(2) On the ADMINISTRATOR SETUP PAGE, click the **[MODE SETUP]** button to open the MODE SETUP window.
Make the CONTROL SETUP as follows.
CAMERA CONTROL: COAX
AUX SYSTEM: MP204

● Control Operation

On the Location bar, type http://192.168.0.10 to open the **WJ-MP204 OPERATION VIEW** window.
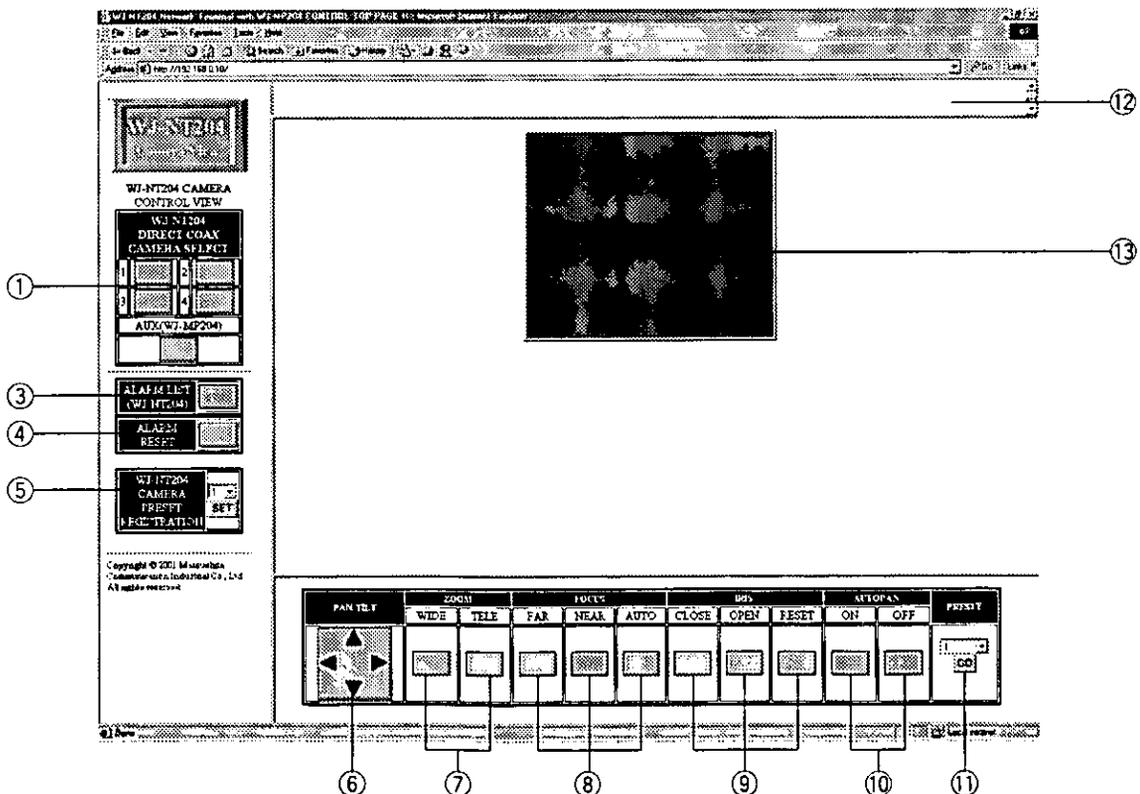
① **WJ-NT204 DIRECT COAXIAL CAMERA SELECT**
Select the input number to the WJ-NT204 from 1 to 4 and AUX.

② **WJ-MP204 CAMERA SELECT**
When AUX is selected, a 16-button panel appears where you can select a camera connected to the WJ-MP204 Data Multiplex Units #1 through #4 while AUX button disappears. The numbers of buttons will vary from 16 to 12, 8 or 4 depending on the numbers of the connected WJ-MP204 units and when the html file is changed accordingly. To return the panel back to 5-button, click on any of the input button from 1 to 4 in the WJ-NT204 DIRECT COAXIAL CAMERA SELECT.
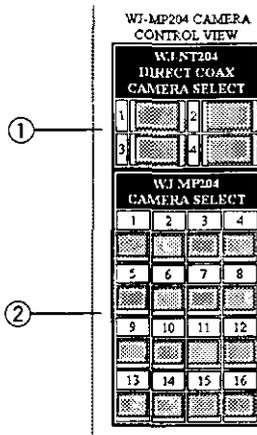
③ **ALARM LIST (WJ-NT204)**
Displays the alarm list activated on the WJ-NT204 transmitter.

④ **ALARM RESET**
Resets the alarm mode activated on the WJ-MP204 or WJ-NT204 transmitter.

⑤ **CAMERA PRESET REGISTRATION**
Select the number and click the SET to register the preset position that is presently displayed of the camera connected to the WJ-NT204 or WJ-MP204. Position entry is available up to 64.

⑥ **PAN/TILT**
Click on any of the pan/tilt buttons: Up, Down, Right or Left to move the pan/tilt head of the Combination camera to the desired direction. Click the button repeatedly as necessary not holding down it.

⑦ **ZOOM**
Click the button to zoom in or out. Instead holding down the button, click on it repeatedly as necessary.
TELE: Zooms in the image.
WIDE: Zooms out the image.

⑧ **FOCUS**
Click NEAR or FAR to adjust the focus of the image manually. Instead holding down the button, click on it repeatedly as necessary.
NEAR: Manual focusing
FAR: Manual focusing
AUTO: The built-in focus mechanism performs in the Combination camera.

⑨ **IRIS**
The connected combination camera (option) can be controlled to close or open the iris by clicking the **[CLOSE]** or **[OPEN]** button under IRIS.
Clicking the **[OPEN]** or **[CLOSE]** button will open or close the camera iris for a specified time, after which the operation is released automatically.
Clicking the **[RESET]** button on the screen will reset the iris of the displayed camera to the factory default setting. Iris control cannot be retained by keeping the **[OPEN]** or **[CLOSE]** button depressed. You need to click the **[OPEN]** or **[CLOSE]** button again.

⑩ **AUTO PAN**
The auto pan status of the connected combination camera (option) can be changed by clicking the **[ON]** or **[OFF]** button under AUTOPAN.
Note: When LOCAL is selected in the camera setup menu, auto pan is released automatically within 1 minute.

⑪ **PRESET**
To move the connected combination camera (option) to any of 64 preset positions and the HOME position. Select a preset position number, then press the **[SET]** button to move the camera to the position.

⑫ **Status Display**
Displays alarm information when an alarm connected to the WJ-MP204 or WJ-MP204 is activated.

⑬ **Image Display**
The image supplied from the selected camera is displayed.

■ WJ-FS616 Video Multiplexer Control

● Connection

(1) Connect MULTISCREEN OUT on the rear of the WJ-FS616 to VIDEO IN 1 on the rear of the WJ-NT204.
(2) Connect the RS-485 ports of both units with a RS-485 cable.
Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.

● Setup

(1) On the ADMINISTRATOR SETUP PAGE, click the **[SERIAL PORT]** button to open the SERIAL PORT SETUP window. For **TYPE**, select WJ-FS616. Set the same communication parameters as for the WJ-FS616.
(2) On the ADMINISTRATOR SETUP PAGE, click the **[MODE SETUP]** button to open the MODE SETUP window.
  Make the CONTROL SETUP as follows.
    CAMERA CONTROL: OTHERS
    AUX SYSTEM: WJ-FS616

● Control Operation

On the Location bar, type http://192.168.0.10 to open the **WJ-FS616 OPERATION VIEW** window.
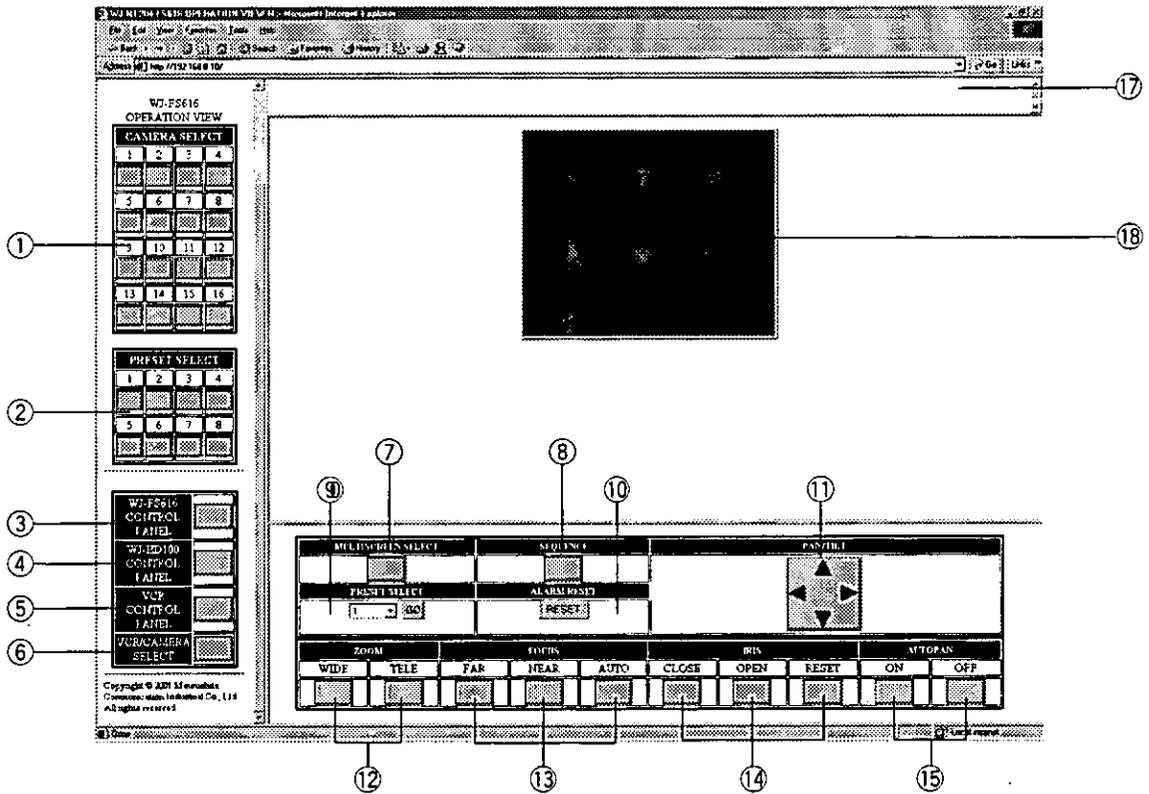
① **CAMERA SELECT**
  To select a camera (camera 1 to 16) connected to the WJ-FS616 Video Multiplexer. The image of the selected camera is displayed in spot mode.

② **PRESET SELECT**
  To move the combination camera (option) connected to the WJ-FS616 to any of 8 preset positions.

③ **WJ-FS616 CONTROL PANEL**
· Opens the WJ-FS616 control panel on the bottom center of the window.
  Scroll down the left window panel to display the follow-

ing buttons 4-6.

④ **WJ-HD100 CONTROL PANEL**
  Opens the WJ-HD100 control panel on the bottom center of the window.

⑤ VCR CONTROL PANEL

Opens the VCR control panel on the bottom center of the window.

⑥ VCR/CAMERA SELECT

Alters the FS616's output between the VCR playback and live camera image.

⑦ MULTISCREEN SELECT

Clicking this button repeatedly will switch the screen segments as follows:
4 → 7 → 9 → 10 → 13 → 16 → 4 screen segments

⑧ SEQUENCE

The sequential images preset to the WJ-FS616 are displayed.

⑨ PRESET SELECT (Bottom window panel)

To move the combination camera (option) connected to the WJ-FS616 to any of 64 preset positions. Select a preset position number, and then click the **[SET]** button to move the camera to the position.

⑩ ALARM ALL RESET

To reset all alarms activated in the Video Multiplexer, and return it to normal condition.

⑪ PAN/TILT

Click on any of the pan/tilt buttons: Up, Down, Right or Left to move the pan/tilt head of the Combination camera to the desired direction. Click the button repeatedly as necessary not holding down it.

⑫ ZOOM

Click the button to zoom in or out. Instead holding down the button, click on it repeatedly as necessary.
TELE: Zooms in the image.
WIDE: Zooms out the image.

⑬ FOCUS

Click NEAR or FAR to adjust the focus of the image manually. Instead holding down the button, click on it repeatedly as necessary.
NEAR: Manual focusing
FAR: Manual focusing
AUTO: The built-in focus mechanism performs in the Combination camera.

⑭ IRIS

The connected combination camera (option) can be controlled to close or open the iris by clicking the **[CLOSE]** or **[OPEN]** button under IRIS.
Clicking the **[OPEN]** or **[CLOSE]** button will open or close the camera iris for a specified time, after which the operation is released automatically.
Clicking the **[RESET]** button on the screen will reset the iris of the displayed camera to the factory default setting. Iris control cannot be retained by keeping the **[OPEN]** or **[CLOSE]** button depressed. You need to click the **[OPEN]** or **[CLOSE]** button again.

⑮ AUTO PAN

The auto pan status of the connected combination camera (option) can be changed by clicking the **[ON]** or **[OFF]** button under AUTOPAN.
Note: Note: When LOCAL is selected in the camera setup menu, auto pan is released automatically within 1 minute. When REMOTE is selected, auto pan will not be released automatically.

⑯ Status Window

Displays information when an alarm is activated on the WJ-FS616.

⑰ Image Display

Displays the image output supplied from the MULTI-SCREEN OUT connector on the video multiplexer to the WJ-NT204.

● WJ-HD100 Control Buttons

REW(TOP FRAME)	VARIABLE SLOW	PAUSE	VARIABLE FAST	PLAY	FF(LAST FRAME)	STOP	REC

㉑   ㉒   ㉓   ㉔   ㉕   ㉖   ㉗   ㉘

㉑ **REW**
Rewinds the recorded image back to the start position.

㉒ **VARIABLE SLOW**
Slows down the speed when playing back the image normally, or speeds up when playing reversely.

㉓ **PAUSE**
Pauses the playback image.

㉔ **VARIABLE FAST**
Increases the speed when playing back the image normally, or slows down when playing reversely.

㉕ **PLAY**
Plays back the recorded image.

㉖ **FF**
Fast-forwards the recorded image to the end position.

㉗ **STOP**
Stops playbacks including REV, REW and FF playback.

㉘ **REC**
Starts recording.

● VCR Control Buttons

REW	REV-PLAY	PAUSE	PLAY	FF	STOP	REC	T/L MODE UP	T/L MODE DOWN

㉛   ㉜   ㉝   ㉞   ㉟   ㊱   ㊲   ㊳   ㊴

㉛ **REW**
Winds the tape backward to the top.

㉜ **REV-PLAY**
Plays back the image reversely.

㉝ **PAUSE**
Pauses the tape move to display still image.

㉞ **PLAY**
Plays back the recorded images.

㉟ **FF**
Winds the tape forward to the end.

㊱ **STOP**
Stops the tape move.

㊲ **REC**
Starts recording.

㊳ **T/L MODE UP**
Increases the interval for time-lapse recording (Images are more sparsely recorded and tape runs out slower).

㊴ **T/L MODE DOWN**
Decreased the interval.

110

■ WJ-SX550B Matrix Switcher Control

● Connections

(1) Connect the MONITOR OUT connectors on the rear of the WJ-SX550B to the VIDEO IN connectors 1 to 4 on the rear of the WJ-NT204.

(2) Connect the RS-232C ports (of WJ-SX550B and WJ-NT204) with a RS-232C cable. You can also connect the CONTROL DATA port on the rear of the WJ-SX550B to the RS-485 connectors on the rear of the WJ-NT204.

- **Random Input Selection Mode**
  - Unless a user changes channels, the last selected channel is used to continue transmission.

Data Port (WJ-SX550B)		RS-232C		RS-485	
Pin No.	Designation	DB25	DB9	R(B)	T(B)
1	Ground	8 1		R(A) .... T(A)	
2	R(B)	3 2		T(B) .... R(B)	
3	R(A)	2 3		T(A) .... R(A)	
4	T(B)	20 4			
5	T(A)	7 5			
6	Ground	6 6			
		4 7			
		5 8			
		22 9			
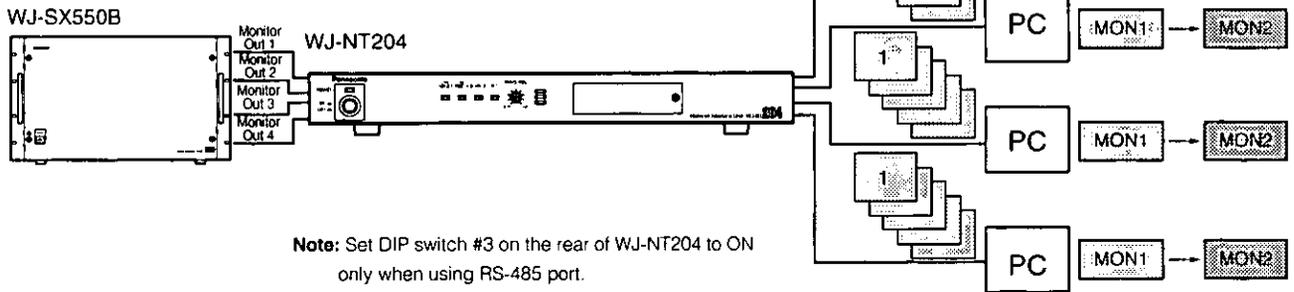
Note: Set DIP switch #3 on the rear of WJ-NT204 to ON only when using RS-485 port.

● Setup

Make the CONTROL SETUP as follows.

        CAM CONTROL: OTHERS
        AUX SYSTEM: SX550A/B

In the **SERIAL PORT SETUP** window, set TYPE under RS-232C SETUP or RS-485 SETUP to WJ-SX550B. Set the same communication parameters as for the Matrix Switcher. (For further details refer to the operation manual of the WJ-SX550B Matrix Switcher.) Click the link to [MATRIX SW CONFIGURATION page] at the bottom of the **SERIAL PORT SETUP** window to open the MATRIX SWITCHER CONFIGURATION window.

111

① **MATRIX SWITCHER CONFIGURATIONS**
Select and enter the same parameters for the following as set for the WJ-SX550 A/B, except the NT204 UNIT ADDRESS.
OPERATOR NUMBER
PASSWORD
WAIT TIME
CONTROL PROCEDURES
CONTROL PRIORITY(RS232C)
NT204 UNIT ADDRESS
When NONE ENQ is selected for CONTROL PROCEDURES, set the address to "1".

When ENQ/ACK is selected, set an appropriate address .

② **VIDEO-INPUT NUMBER AND MONITOR-OUT CHANNEL SETUP**
Set a channel number for the monitor output of the WJ-SX550B Matrix Switcher to be connected to the video input connector on the WJ-NT204 network interface unit. The status when selecting VIDEO-INPUT (at WJ-NT204) in the previous page table is the same as when a monitor compatible with the WJ-SX550B is selected.

● Control Operation

On the Location bar, type the URL http://192.168.0.10/ to access the WJ-SX550B OPERATION VIEW window for the Matrix Switcher.
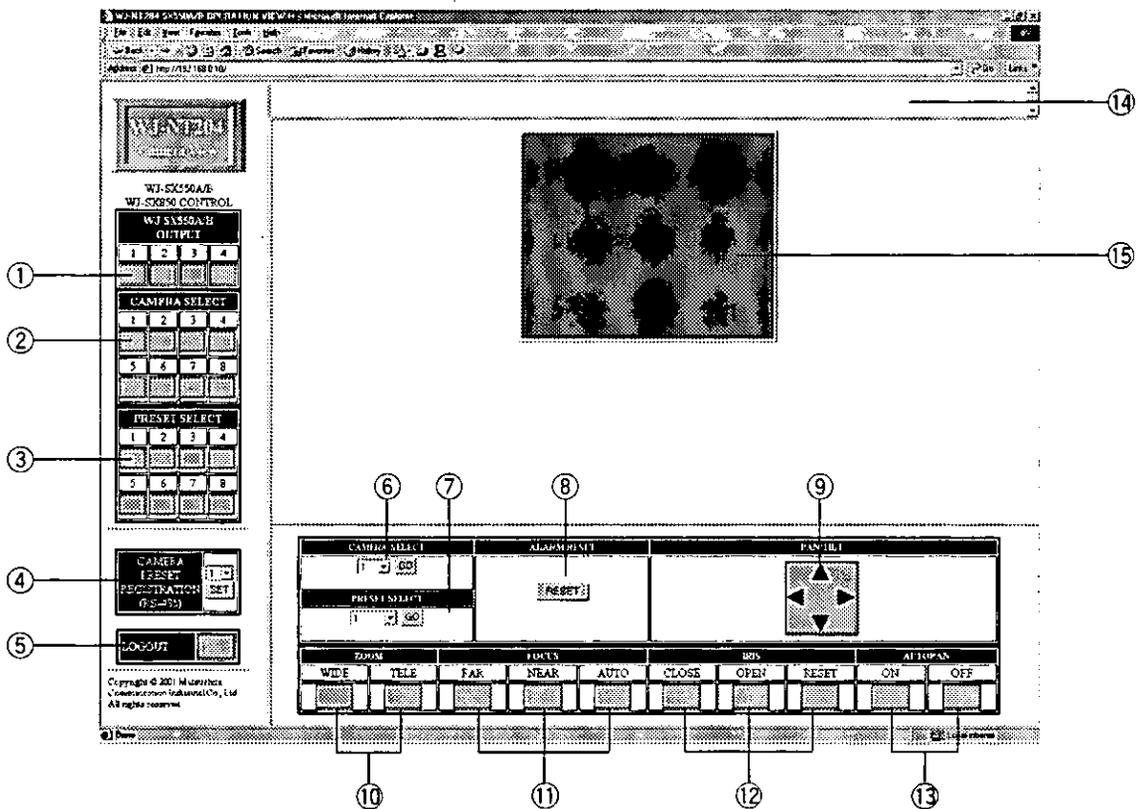
① **WJ-SX550 A/B OUTPUT**
Selects any of the four video inputs of the Interface Unit for display on the monitor. Set the monitor outputs of the Matrix Switcher to match the video inputs of the Interface Unit.
The video channels will be switched in accordance with the operating mode selected.

② **CAMERA SELECT (Left window panel)**
To select a camera (camera 01 to 08) connected to the WJ-SX550B Matrix Switcher. The image of the selected camera is displayed on the monitor in the previously selected input mode.

③ **PRESET SELECT (Left window panel)**
To move the combination camera (option) connected to the WJ-SX550B to any of 8 preset positions.

④ **CAMERA PRESET REGISTRATION**
Register up to 64 camera preset positions of that the cameras connected to the WJ-SX550 A/B.

112

⑤ **LOGOUT**

Logs out of the WJ-SX550 control operation.

⑥ **CAMERA SELECT (Bottom window panel)**

To select a camera (CAMERA 1 to 128) connected to the WJ-SX550B. Select a camera number, and then click **[SET]** to apply it. The image of the selected camera is displayed on the monitor in the previously selected input mode.

⑦ **PRESET SELECT (Bottom window panel)**

To move the combination camera (option) connected to the WJ-SX550B to any of 64 preset positions. Select a preset position number, and then click the **[SET]** button to move the camera to the position.

⑧ **ALARM ALL RESET**

To reset all alarms activated in the Matrix Switcher, and return it to normal condition.

Note: Follow the resetting procedures for each alarm mode setup in the WJ-SX550A/B.

- When MODE 1 is set, select the MONITOR 1, then reset the alarm.
- When MODE 2 is set, select any of the MONITOR 1 through 4, then reset the alarm.
- When MODE 3 is set, select the same MONITOR that is set in the WJ-SX550A/B, then reset the alarm.

⑨ **PAN/TILT**

Click on any of the pan/tilt buttons: Up, Down, Right or Left to move the pan/tilt head of the Combination camera to the desired direction. Click the button repeatedly as necessary not holding down it.

⑩ **ZOOM**

Click the button to zoom in or out. Instead holding down the button, click on it repeatedly as necessary.
TELE: Zooms in the image.
WIDE: Zooms out the image.

⑪ **FOCUS**

Click NEAR or FAR to adjust the focus of the image manually. Instead holding down the button, click on it repeatedly as necessary.
NEAR: Manual focusing
FAR: Manual focusing
AUTO: The built-in focus mechanism performs in the Combination camera.

⑫ **IRIS**

The connected combination camera (option) can be controlled to close or open iris by clicking the **[CLOSE]** or **[OPEN]** button under IRIS.

Clicking the **[OPEN]** or **[CLOSE]** button will open or close the camera iris for a specified time, after which the operation is released automatically.

Clicking the **[RESET]** button on the screen will reset the iris of the displayed camera to the factory default setting. Iris control cannot be retained by keeping the **[OPEN]** or **[CLOSE]** button depressed. You need to click the **[OPEN]** or **[CLOSE]** button again.

⑬ **AUTO PAN**

The auto pan status of the connected combination camera (option) can be changed by clicking the **[ON]**or **[OFF]** button under AUTOPAN.

Note: When LOCAL is selected in the camera setup menu, auto pan is released automatically within 1 minute. When REMOTE is selected, auto pan will not be released automatically.
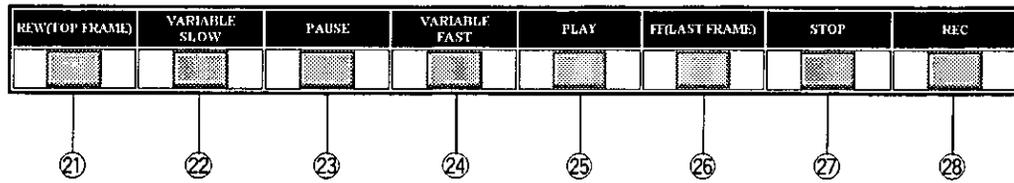
⑭ **Status Display**

Displays information when an alarm is activated on the Matrix Switcher.
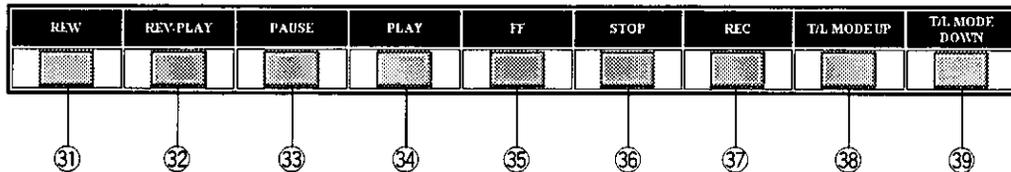
⑮ **Image Display**

Displays the image output supplied from the Matrix Switcher connected to the WJ-NT204. Set the monitor outputs of the Matrix Switcher to match the video inputs of the WJ-NT204.

■ WJ-DR200 AV Disc Recorder Control

● Connections

- **Random Input Selection Mode**
  (1) Connect CAMERA 1 and 2 to the VIDEO IN 1 and 2 connectors on the rear of the WJ-NT204.
  (2) Connect the VIDEO OUT 1 and 2 connectors on the rear of the WJ-NT204 to the VIDEO IN A and B connectors of the WJ-DR200.
  (3) Connect the VIDEO OUT connector of the WJ-DR200 to the VIDEO IN 3 connector of the WJ-NT204.
  (4) Connect the RS-232C ports (of WJ-DR200 and WJ-NT204) with a RS-232C cable.
  - For VIDEO INPUT SELECTION MODE under OPERATION MODE SELECT, mark RANDOM INPUT SELECTION MODE.
  - Enables control of cameras connected to the VIDEO IN connector of the WJ-NT204 (requires customizing the WJ-DR200 OPERATION VIEW window).
  - Unless a user changes channels, the last selected channel is used to continue transmission.
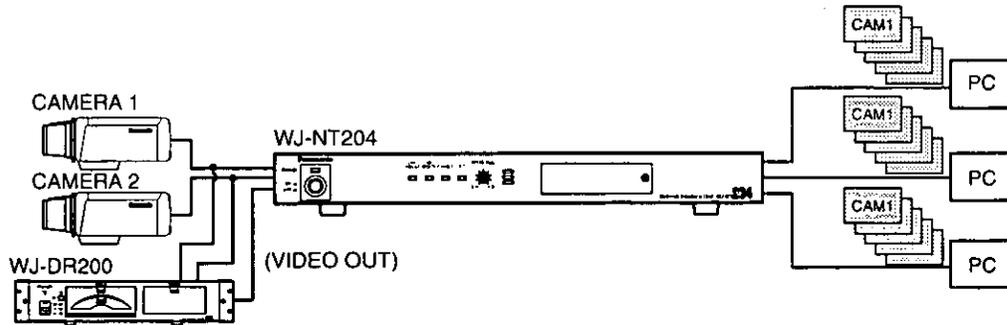
● Setup

Files to be used are as follows. Consult your dealer for these files, because the files are not included
    For H.323/H261: [drindex.html]
    For JPEG: [jdrindex.html]
In the SERIAL PORT SETUP window, set TYPE under RS-232C to WJ-DR200. Set the same communication parameters as for the WJ-DR200 AV Disc Recorder. (For further details refer to the operation manual of the WJ-DR200 AV Disc Recorder.)

● Control Operation

On the Location bar, type the URL http://192.168.0.10/drindex.html to access the WJ-DR200 OPERATION VIEW window for the AV Disc Recorder.

114
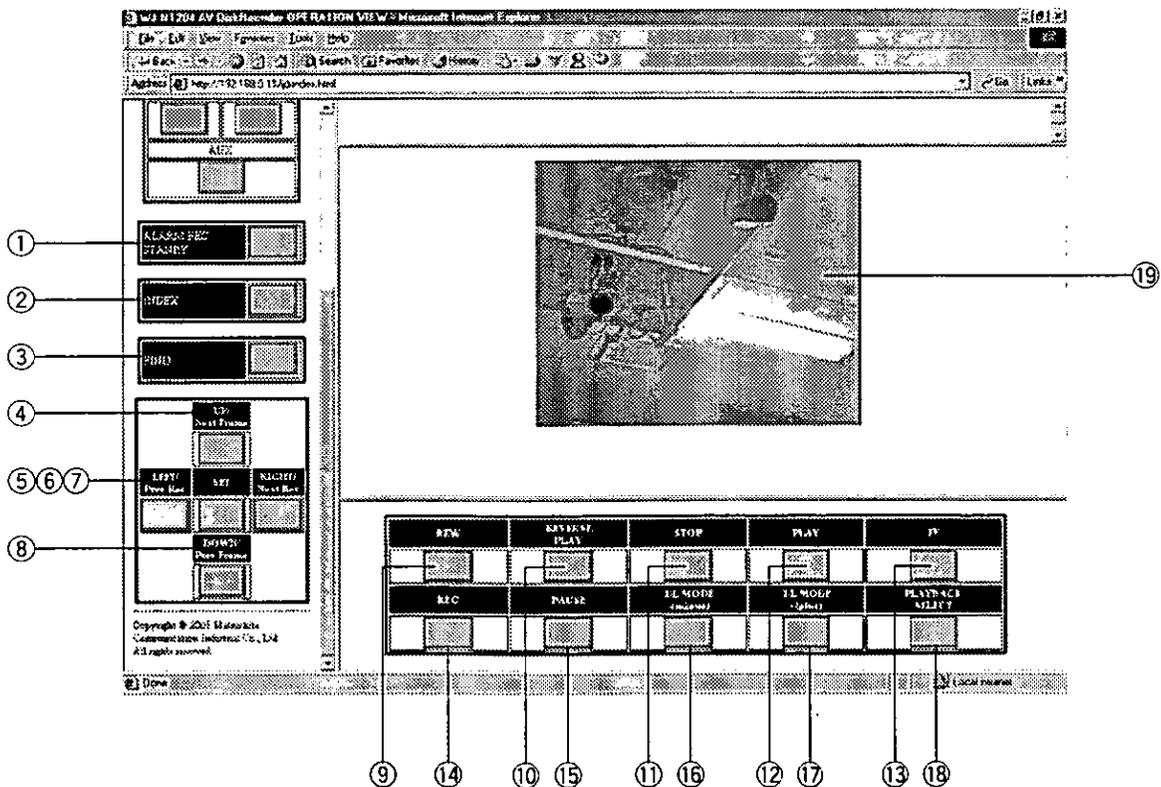
① **ALARM REC STANDBY**

To toggle between enabling and disabling alarm recording on the WJ-DR200 AV Disc Recorder.

② **INDEX**

To search the disk for recorded frames. Clicking the **[INDEX]** button opens the WJ-DR200 RECORD LIST window. Click the **[REFRESH]** button in the window to refresh the recording list displayed in the image window.

Then click the recording number to play back the selected frames. To exit from search mode, click the **[STOP]** button.

This button also toggles between displaying recordings as a list and as a group of thumbnails.

You can also use this window to search the disk by the same operation as from the WJ-DR200.

Refer to the operation manual of the WJ-DR200 for details.

③ **FIND**

To directly specify and play back a recorded frame.

④ **UP/Next Frame**

Click in paused playback to advance the playback operation one step to the next frame.

Also moves the cursor up one line in the recording list or thumbnails.

⑤ **LEFT/Prev Rec**

To move the playback operation back one step to the previous record.

Also moves the cursor to the left in the recording list or thumbnails.

⑥ **SET**

Click to start playback of frames selected in the recording list or group of thumbnails.

In frame search, click this button to apply the entered value.

⑦ **RIGHT/Next Rec**

To move the playback operation one step to the next record.

Also moves the cursor to the right in the recording list or thumbnails.

⑧ **DOWN/Prev Frame**

Click in paused playback to move the playback operation back one step to the previous frame.

Also moves the cursor down one line in the recording list or thumbnails.

⑨ **REW**

To play back a recording in backward search.

⑩ **REVERSE PLAY**

To play back frames in reverse order.

⑪ **STOP**

Clicking this button will terminate all modes of operation,such as recording, playback, and setting.

⑫ **PLAY**

To play back frames in forward order.

⑬ **FF**

To play back a recording in forward search.

⑭ **REC**

To start recording in the previously defined mode.

⑮ **PAUSE**

Click to temporarily pause playback.

⑯ **TL MODE - (minus)**

Clicking this button in playback will increase the playback speed.

Clicking it in paused playback will decrement the playback channel (or camera ID). To play back the selected channel, click the **[PLAYBACK SELECT]** button.

⑰ **TL MODE + (plus)**

Clicking this button in playback will decrease the playback speed.

Clicking it in paused playback will increment the playback channel (or camera ID). To play back the selected channel, click the **[PLAYBACK SELECT]** button.

⑱ **PLAYBACK SELECT**

Clicking this button after selecting the input channel with the (+) or (-) button will start playback of the respective channel.

⑲ **Image Display**

To display the images previously selected as input.

Note: The buttons in the window have the same functions as those of the WJ-DR200. Refer to the operation manual of the WJ-DR200 for details.

115

■ WJ-FS309/FS316/FS409/FS416 Video Multiplexer Control

The following description is based on the assumption that a WJ-FS416 is installed in the system.

● Connections

1. Connect ordinary cameras to the video multiplexer while the combination cameras are connected to the WJ-NT204. The video signals of the combination cameras are supplied to the video multiplexer via the VIDEO OUT 1-4 terminal. Connect the MULTI SCREEN OUT terminal on the multiplexer to the AUX IN on the WJ-NT204.
2. Connect DATA on the rear of the WJ-FS416 to DATA on the rear of the WJ-NT204 with an RJ-11 type 4-conductor modular cable.
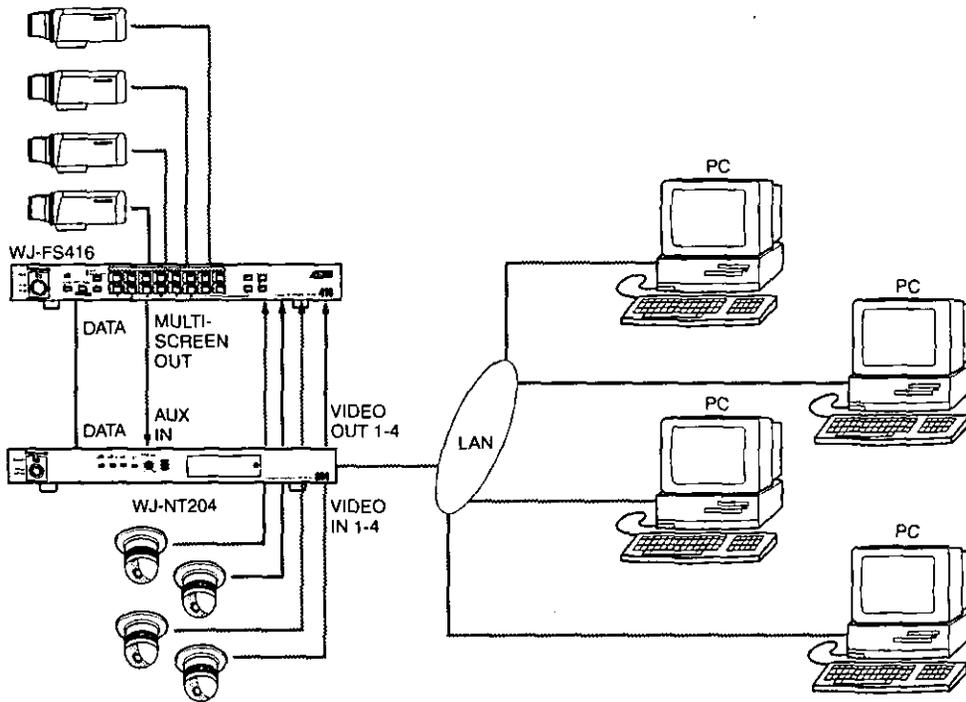
Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.

● Setup

1. On the ADMINISTRATOR SETUP PAGE, click the SERIAL PORT button to open the SERIAL PORT SETUP window. For TYPE, select PS·Data. Set the same communication parameters as for the Video Multiplexer.
2. On the ADMINISTRATOR SETUP PAGE, click the MODE SETUP button to open the MODE SETUP window.
3. Select either H.261 and JPEG in the MAIN PAGE DEFAULT MODE & INDEX FILE SELECT.
   Then, select DIRECT COAX for CAM CONTROL and FS309/316/409/416 for AUX SYSTEM CONTROL.
   Click the SET & REBOOT. The transmitter WJ-NT204 will restart.

● Control Operation

Type in the location bar http://192.168.0.10/ when you selected JPEG. The 192.168.0.10 in the URL may vary depending on the WJ-NT204 settings. Type the identical address to that the WJ-NT204 is set to. The VIDEO MULTIPLEXER OPERATION VIEW window is displayed.
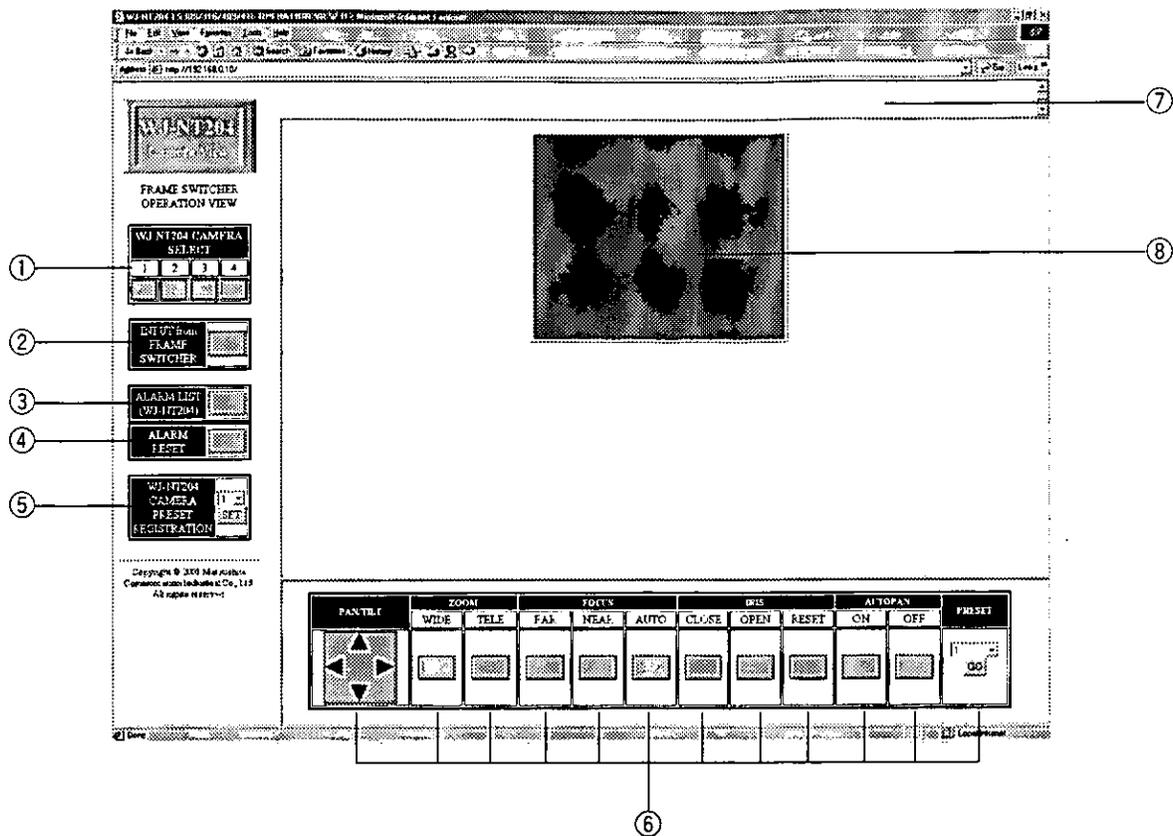
① **WJ-NT204 CAMERA SELECT**
These buttons select the input to VIDEO IN 1-4 on the WJ-NT204 to display it in the Image Display area.

② **INPUT from FRAME SWITCHER**
Displays the image supplied from the video multiplexer, and opens the 16-button panel where you can select the input to the video multiplexer.

③ **ALARM LIST (WJ-NT204)**
Opens the alarm list activated on the WJ-NT204 transmitter.

④ **ALARM RESET**
Resets the alarm mode.

⑤ **WJ-NT204 CAMERA PRESET REGISTRATION**
Registers the presently displayed image position of the camera connected to the WJ-NT204. Manipulate the camera to the desired position, then select the preset number with the pull-down button. Click the SET button to register the position.

⑥ **CAMERA CONTROL Buttons**
Controls the Combination camera designated with WJ-NT204 CAMERA SELECT button for pan/tilt, zoom, focus and auto-pan.

⑦ **Status Window**
Displays alarm information when an alarm is activated.

⑧ **Image Display**
Displays the camera image or multiscreen.

117

This window appears when "INPUT from FRAME SWITCHER" button is clicked.
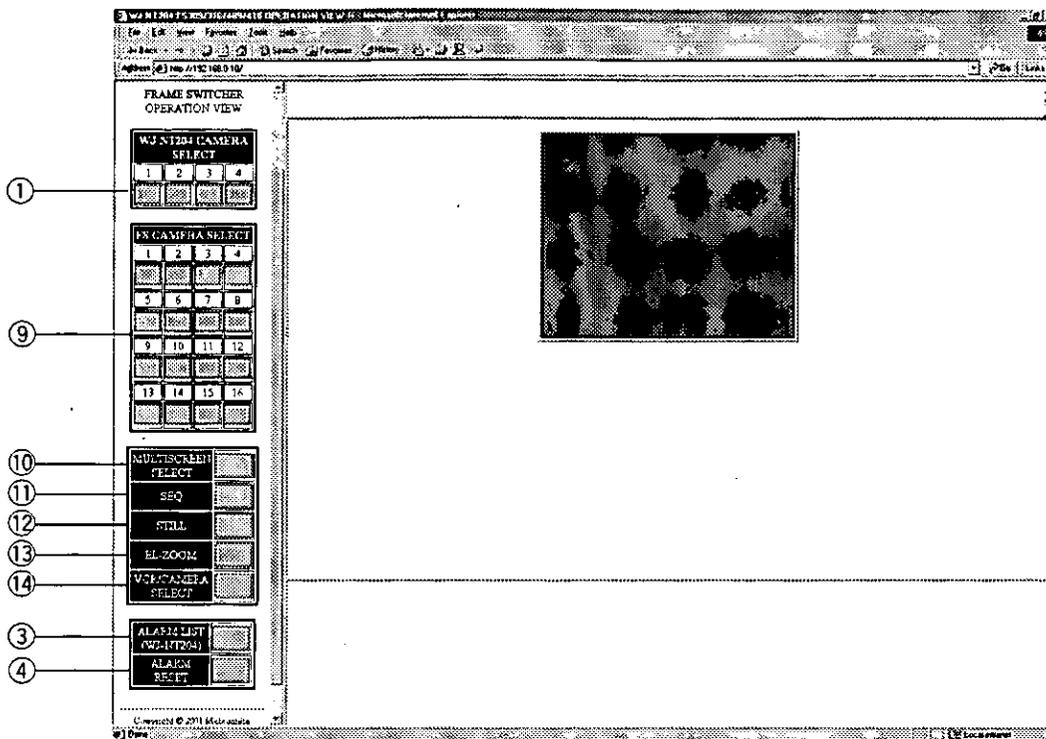
⑨ **FS CAMERA SELECT**
These buttons select the input to the video multiplexer to display it in the Image Display area.

⑩ **MULTISCREEN SELECT**
Selects a multiscreen pattern each time this button is pressed as follows.
4 → 9 → 16 → 4 screen segments (WJ-FS316/416)
4 → 9 → 4 screen segments (WJ-FS309/409)

⑪ **SEQ**
Implements the sequential scan preset in the video multiplexer. A series of camera pictures is displayed in succession for the specific duration.

⑫ **STILL**
Displays the image in still picture. Clicking this button again will restore the moving picture.

⑬ **EL ZOOM**
Opens the EL ZOOM panel on the bottom center of the window while + sign is displayed in the Image Display representing the center of the area to be enlarged.

⑭ **VCR/CAMERA SELECT**
Switches the output of the video multiplexer between VCR playback and camera image.
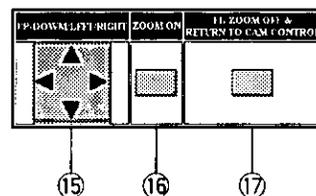
⑮ **UP DOWN LEFT RIGHT Buttons**
These buttons move the + sign' to the area you wish to enlarge in the Image Display.

⑯ **EL ZOOM ON**
Clicking this will enlarge the image designated with the + sign.

⑰ **EL ZOOM OFF & RETURN TO CAMERA CONTROL**
Resets EL ZOOM function to the normal display.

■ WJ-HD100 Digital Disk Recorder Control

● Connections

1. Connect MONITOR OUT on the rear of the WJ-HD100 to AUX IN on the WJ-NT204 with a BNC attached coaxial cable.
2. Connect VIDEO IN on the rear of the WJ-HD100 to SPOT OUT on the WJ-NT204 with a BNC attached coaxial cable.
3. Connect DATA on the rear of the WJ-NT100 to DATA on the rear of the WJ-NT204.
4. Up to four (4) Combination cameras can be connected to the WJ-NT204.
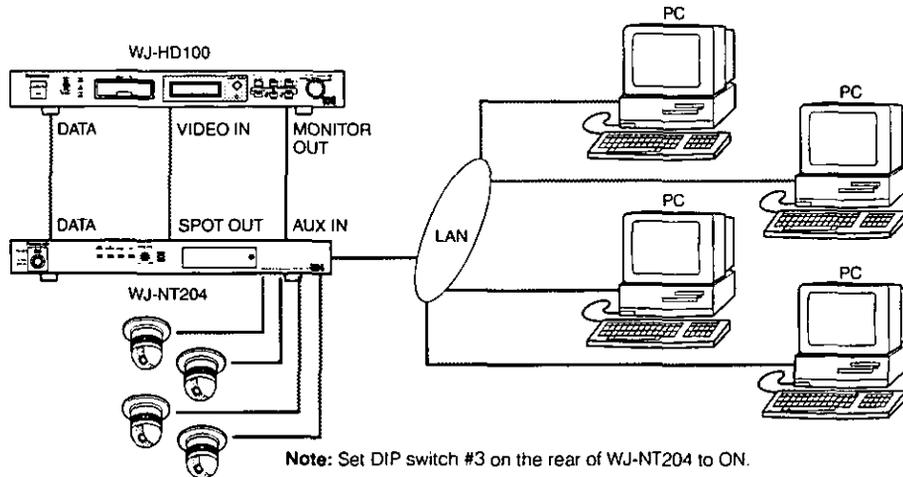
Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.

● Setup

1. On the ADMINISTRATOR SETUP PAGE, click the SERIAL PORT button to open the SERIAL PORT SETUP window. For TYPE, select PS.Data. Select the same communication parameters as for the WJ-HD100.
2. On the ADMINISTRATOR SETUP PAGE, click the MODE SETUP button to open the MODE SETUP window.
3. Select either H.261 and JPEG in the MAIN PAGE DEFAULT MODE & INDEX FILE SELECT.
   Then, select DIRECT COAX for CAM CONTROL.
   Click the SET & REBOOT. The transmitter WJ-NT204 will restart.

● Control Operation

Type in the location bar http://192.168.0.10/. The 192.168.0.10 in the URL may vary depending on the WJ-NT204 settings. Type the identical address to that the WJ-NT204 is set to.
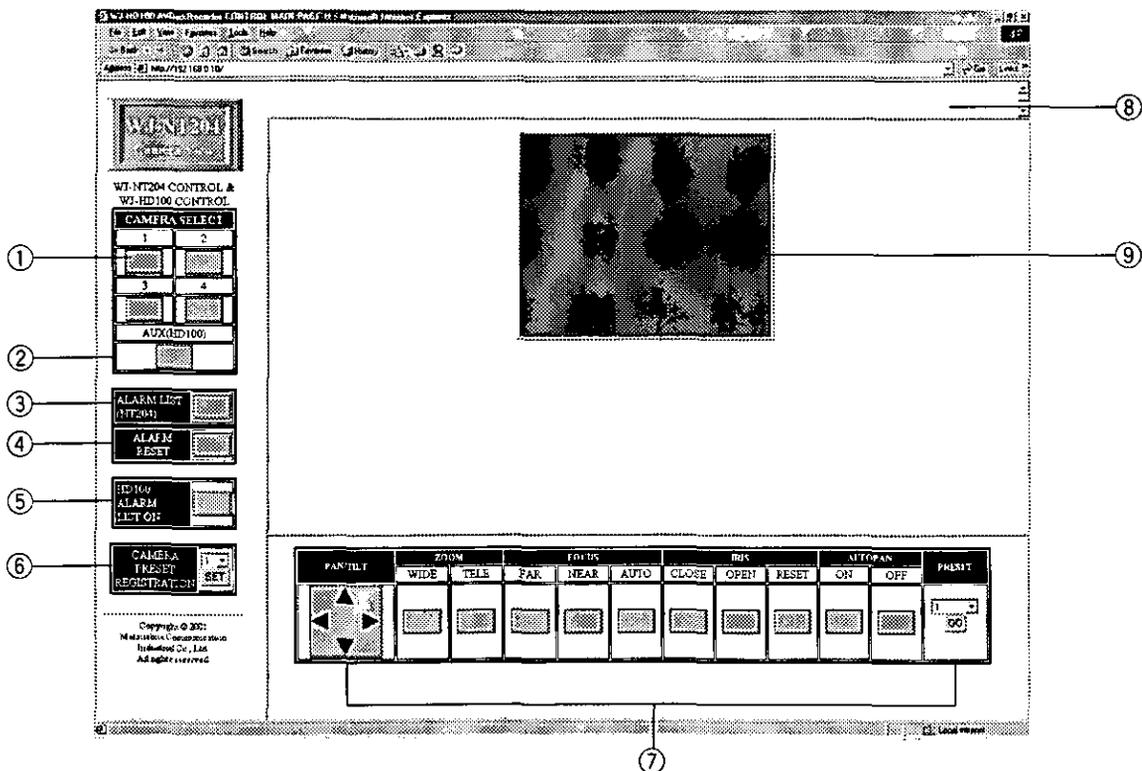
① **CAMERA SELECT**

These buttons select the input image supplied to VIDEO 1-4 on the WJ-NT204 transmitter. The selected image appears in the Image Display area of the window.

② **AUX**

Selects the AUX IN image supplied by WJ-HD100 while opening the HD100 control panel on the bottom center of the window.

③ **ALARM LIST (WJ-NT204)**

Displays the alarm list activated on the WJ-NT204 transmitter.

④ **ALARM RESET**

Resets the alarm mode activated on the WJ-HD100.

⑤ **HD100 ALARM LIST ON**

Displays the alarm list activated on the WJ-HD100 while opening the alarm control panel.

⑥ **CAMERA PRESET REGISTRATION**

Preset registration can be made as follows.
While displaying the desired image position, select the position number, then press the SET button.
This panel disappears when the AUX button is clicked, and resumes when any of CAMERA SELECT 1-4 is clicked.

⑦ **Camera Control Buttons**

Controls the combination cameras selected with CAMERA SELECT button.

⑧ **Status Window**

Displays information when an alarm is activated on the WJ-HD100.

⑨ **Image Display**

Displays the playback image or the WJ-HD100.
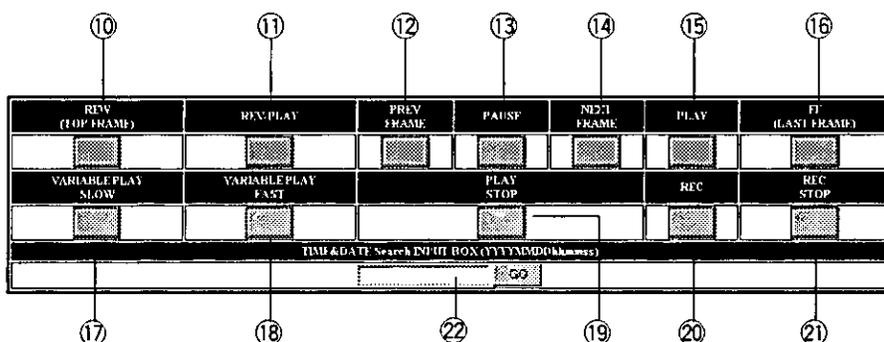
⑩ **REW**

Rewinds the recorded image on the WJ-HD100 to the start position.

⑪ **REV-PLAY**

Plays back the recorded image reversely.

⑫ **PREV FRAME**

Returns the frame one step to the previous while pausing.

⑬ **PAUSE**

Pauses the playback image.

⑭ **NEXT FRAME**

Forwards the frame one step to the next while pausing.

⑮ **PLAY**

Plays back the recorded image.

⑯ **FF**

Fast-forwards the recorded image on the WJ-HD100 to the end position.

⑰ **VARIABLE PLAY SLOW**

Slows down the speed when playing back the image normally, or speeds up when playing reversely.

⑱ **VARIABLE PLAY FAST**

Increases the speed when playing back the image normally, or slows down when playing reversely.

⑲ **PLAY STOP**

Stops playbacks including REV, REW and FF playback.

⑳ **REC**

Starts recording.

㉑ **REC STOP**

Stops recording.

㉒ **TIME & DATE Search**

Retrieves the recorded image data designated by the entered time and date. Type in a 14-digit number comprising YYYYMMDDhhmmss, then click GO button to access to the data.
Playback starts from the designated point when the data was found, or starts from the closest point ascending from the designation when not found.
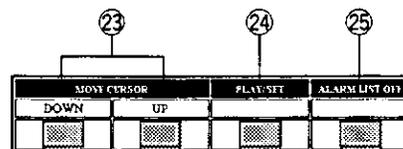
㉓ **MOVE CURSOR**

Moves the cursor up or down while displaying the WJ-HD100 ALARM LIST to select a recorded event in the list.

㉔ **PLAY/SET**

Starts playing back of the image designated with the cursor when the alarm list is displayed.
Resets alarm data when DATA CLEAR is highlighted.

㉕ **ALARM LIST OFF**

■ WJ-HD500 Digital Disk Recorder Control (Coax)

This is a system example that the WJ-NT204 transmitter has 4 of directly connected combination cameras while it has 12 of combination cameras connected indirectly via the WJ-MP204 and WJ-HD500.

● Connections

1. Connect 4 combination cameras to VIDEO IN 1-4 on the WJ-NT204 with coaxial cables.
2. Connect VIDEO OUT 1-4 on the WJ-NT204 to VIDEO IN 1-4 on the WJ-HD500.
3. Connect MULTISCREEN OUT on the rear of the WJ-HD500 to VIDEO AUX IN on the WJ-NT204 with a BNC attached coaxial cable.
4. Connect 12 combination cameras to CAMERA IN 1-4 on WJ-MP204 unit #1 through #3 with coaxial cables.
5. Connect CAMERA OUT 1-4 on WJ-MP204 unit #1 through #3 to VIDEO IN 5-16 on the WJ-HD500.
6. Connect DATA terminals among WJ-MP204, WJ-HD500 and WJ-NT204 with RS-485 cables and branch connectors.

Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.
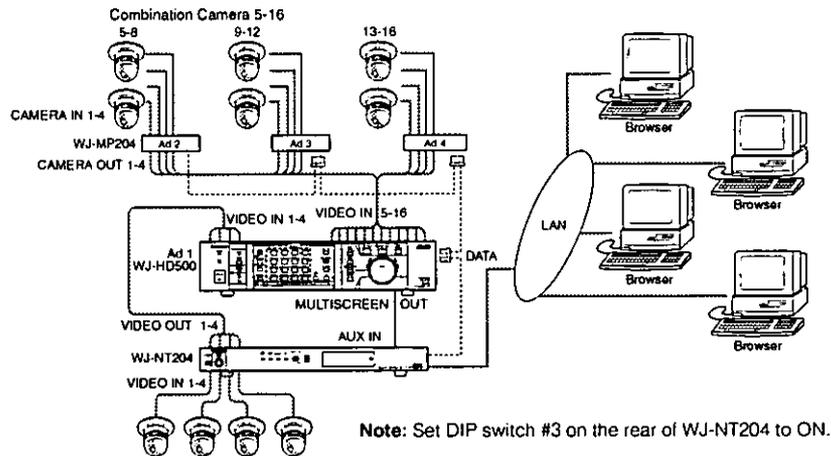
● Setup for Peripheral Devices

1. Address Setup

Unit addresses must be set as follow.

Unit Name	Unit Address
WJ-HD500	1 (set in its own setup menu)
WJ-MP204 #1	2 (set with UNIT switch on its front panel)
WJ-MP204 #2	3 (set with UNIT switch)
WJ-MP204 #3	4 (set with UNIT switch)

2. Communication Parameter Setup

Every unit must be set to the same parameter in their own setup menus.
(For example, BAUD RATE: 9600 bps, DATA BIT: 8 bits, STOP BIT: 1 bit, PARITY: NONE)

3. Input Assignment

For WJ-MP204 units, open CAMERA CONFIG menu on each unit, and set CAM NO. (camera numbers) as follows.

Unit Name	CAM NO.
WJ-MP204 #1	5CH through 8CH
WJ-MP204 #2	9CH through 12CH
WJ-MP204 #3	13CH through 16CH

For more information, refer to the manual included in each unit.

● Setup for WJ-NT204 Transmitter

1. On the ADMINISTRATOR SETUP PAGE, click the MODE SETUP button to open the MODE SETUP window.
2. Select either H.323/H.261 or JPEG in the MAIN PAGE DEFAULT MODE & INDEX FILE SELECT area.
   Make the CONTROL SETUP as follows.
   CAM CONTROL: COAX
   AUX SYSTEM CONTROL: HD500
   Default Unit Address: 1
   Click SET & REBOOT. The WJ-NT204 transmitter will restart. Confirm the transmitter has restarted.
3. On the ADMINISTRATOR SETUP PAGE, click the SERIAL PORT button to open the SERIAL PORT SETUP window.
   In the window, select COAX for TYPE, and set communication parameters the same as that other devices are set to.

● Control Operation

Type in the location bar http://192.168.010/ . The 192.168.010 in the URL may vary depending on the WJ-NT204 settings. Type the identical address to that the WJ-NT204 is set to. The WJ-HD500 OPERATION VIEW window appears.
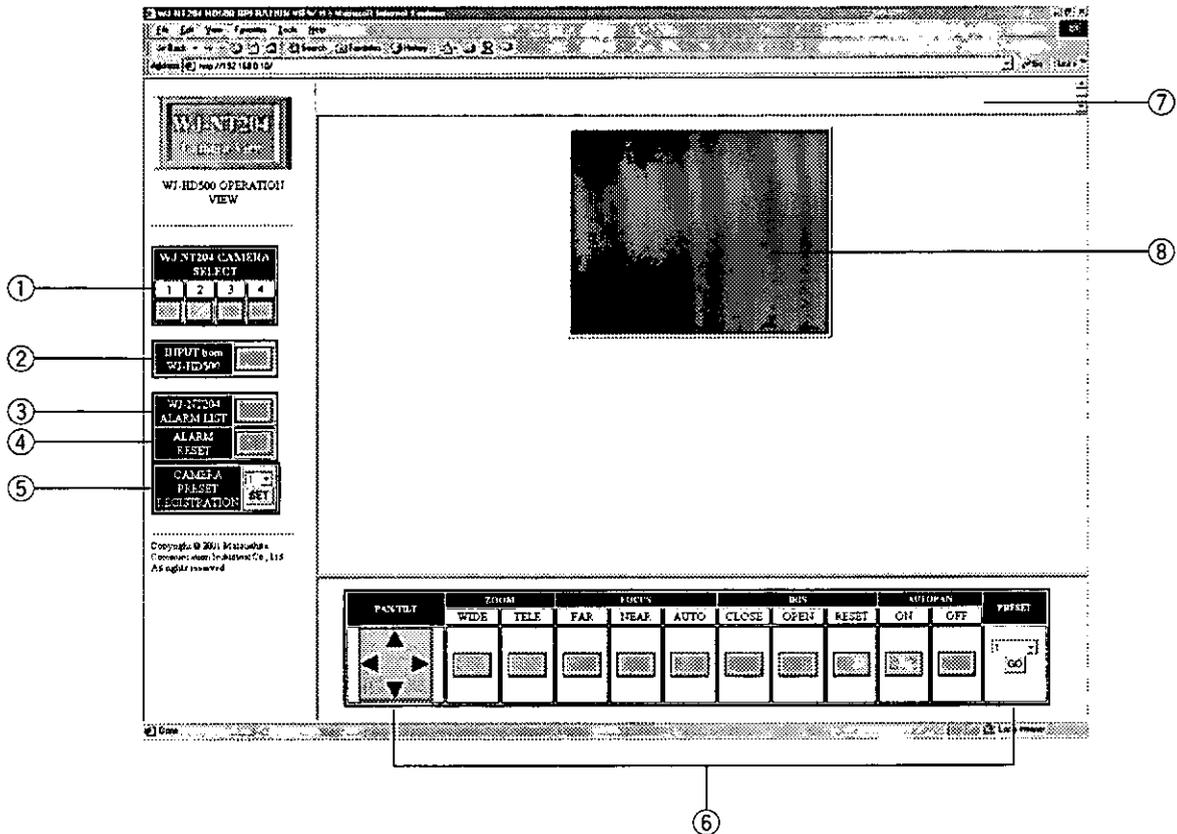
① **WJ-NT204 CAMERA SELECT**

These buttons select the input to VIDEO IN 1-4 on the WJ-NT204 to display it in the Image Display area.

② **INPUT from WJ-HD500**

Switches the window from that of WJ-NT204 control to that of WJ-HD500 control.

Clicking this opens the 16-button panel on the left window enabling the input selection to the video WJ-HD500, and the control panel for operating the WJ-HD500 on the bottom center.

③ **WJ-NT204 ALARM LIST**

Displays the alarm list activated on the WJ-NT204.

④ **ALARM RESET**

Resets the alarm mode activated on the WJ-NT204.

⑤ **CAMERA PRESET REGISTRATION**

Registers the presently displayed image position of the camera directly connected to the WJ-NT204. Manipulate the camera to the desired position, then select the preset number with the pull-down button. Click the SET button to register the position.

⑥ **Camera Control Buttons**

These buttons control the combination camera designated with WJ-NT204 CAMERA SELECT button for pan/tilt, zoom, focus and auto-pan.

⑦ **Status Window**

Displays information when an alarm is activated on the WJ-HD500.

⑧ **Image Display**

Displays the live camera image or playback image on the WJ-HD500.
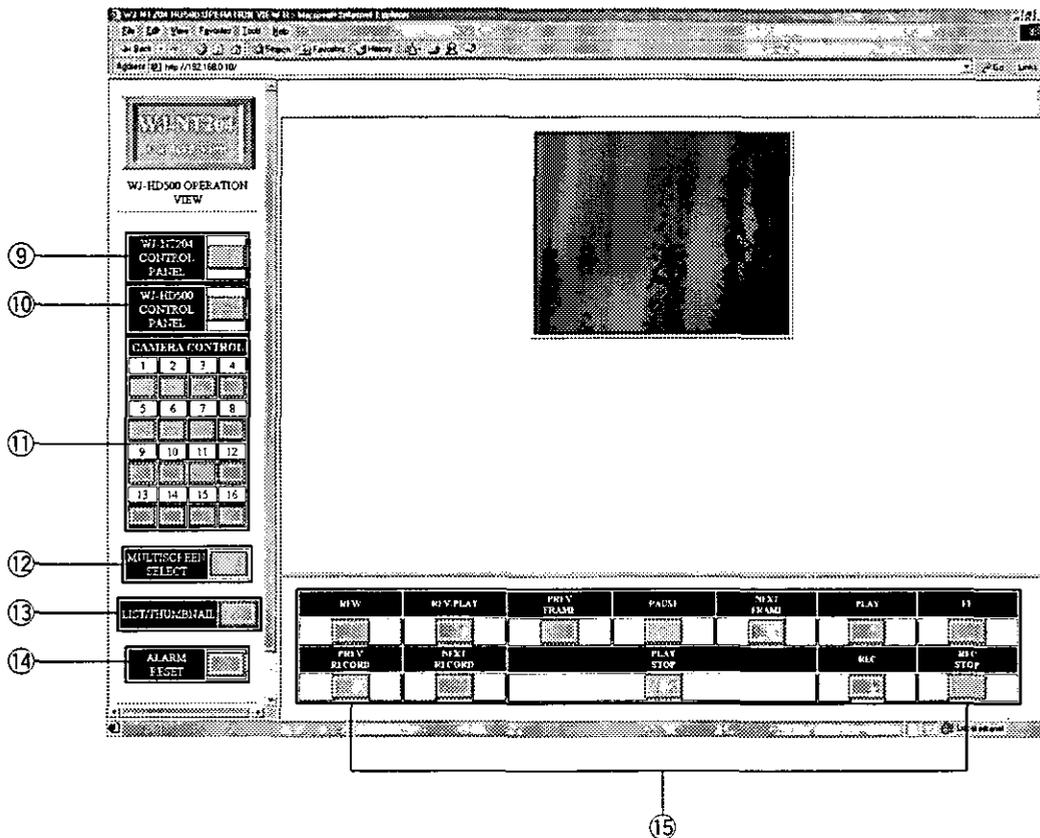
⑨ **WJ-NT204 CONTROL PANEL**
Switches the whole of the window back to that of WJ-NT204 control from that of WJ-HD500 control.

⑩ **WJ-HD500 CONTROL PANEL**
Switches the control panel on the bottom center of the window from the camera control to the WJ-HD500 control. The WJ-HD500 control panel is replaced with the camera control panel when any of the 16-button (CAMERA CONTROL) is clicked.

⑪ **CAMERA CONTROL**
Selects the camera input to the WJ-HD500 to display the image in the window. On the bottom center, the control panel changes from the WJ-HD500 control to the camera control.

⑫ **MULTISCREEN SELECT**
Selects a multiscreen pattern for live or playback image each time this button is clicked as follows.
4 → 7 → 9 → 10 → 13 → 16 → 4 screen segments

⑬ **LIST THUMBNAIL**
Displays the index of the recorded image in a list or thumbnail format. Clicking this button toggles the format between list and thumbnail. The control panel for list and thumbnail appears on the bottom center of the window. Refer to page 126.
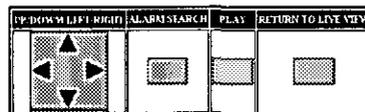
⑭ **ALARM RESET**
Resets the alarm mode activated on the WJ-HD500, and stops the alarm recording.

⑮ **WJ-HD500 Control Buttons**
These buttons control the WJ-HD500 Hard Disk Recorder. Refer to page 125-126.

123

■ WJ-HD500 Digital Disk Recorder Control (PS.Data)

This is a system example that the WJ-NT204 transmitter has none of directly connected combination cameras while it has combination cameras connected indirectly via WJ-MP204 and WJ-HD500.

● Connections

1. Connect MULTISCREEN OUT on the rear of the WJ-HD500 to VIDEO IN on the WJ-NT204 with a BNC attached coaxial cable.
2. Connect 16 Combination cameras to CAMERA IN 1-4 on WJ-MP204 unit #1 through #4 with coaxial cables.
3. Connect CAMERA OUT 1-4 on WJ-MP204 unit #1 through #4 to VIDEO IN 1-16 on the WJ-HD500.
4. Connect DATA terminals among WJ-MP204, WJ-HD500 and WJ-NT204 with RS-485 cables and branch connectors.

Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.
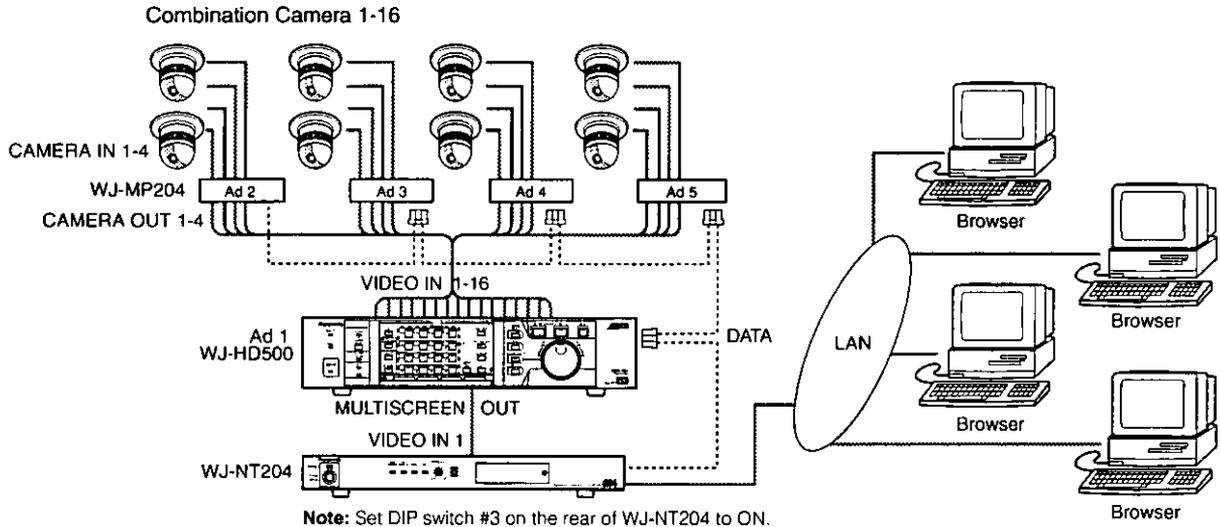
● Setup for Peripheral Devices

1. Address Setup

Unit addresses must be set as follow.

Unit Name	Unit Address
WJ-HD500	1 (set in its own setup menu)
WJ-MP204 #1	2 (set with UNIT switch on its front panel)
WJ-MP204 #2	3 (set with UNIT switch)
WJ-MP204 #3	4 (set with UNIT switch)
WJ-MP204 #4	5 (set with UNIT switch)

2. PS.Data Communication Parameter Setup

Every unit must be set to the same parameter in their own setup menus.
(For example, BAUD RATE: 9600 bps, DATA BIT: 8 bits, STOP BIT: 1 bit, PARITY: NONE)

3. Input Assignment

For WJ-MP204 units, open CAMERA CONFIG menu on each unit, and set CAM NO. (camera numbers) as follows.

| Unit Name	CAM NO.
WJ-MP204 #1	1CH through 4CH
WJ-MP204 #2	5CH through 8CH
WJ-MP204 #3	9CH through 12CH
WJ-MP204 #4	13CH through 16CH

For more information, refer to the manual included in each unit.

● Setup for WJ-NT204 Transmitter

1. On the ADMINISTRATOR SETUP PAGE, click the MODE SETUP button to open the MODE SETUP window.
2. Select either H.323/H.261 or JPEG in the MAIN PAGE DEFAULT MODE & INDEX FILE SELECT area.
   Make the CONTROL SETUP as follows.
   CAM CONTROL: PS·Data
   AUX SYSTEM CONTROL: HD500
   Default Unit Address: 1
   Click SET & REBOOT. The WJ-NT204 transmitter will restart. Confirm the transmitter has restarted.
3. On the ADMINISTRATOR SETUP PAGE, click the SERIAL PORT button to open the SERIAL PORT SETUP window.
   In the window, select PS.Data for TYPE, and set communication parameters the same as that other devices are set to.

4. In the SERIAL PORT SETUP window, click the Unit Address SETUP page for AUX SYSTEMS to open the PS.Data Unit Address SETUP window.

In the window, type in the device names for convenient when needed, then click the SET buttons for No. 001 through 005 to register the PS.Data devices connected to the WJ-NT204 transmitter.

Note: When a message "No Response" appears after clicking the SET button, confirm the connections and setups described above.

● Control Operation for WJ-HD500

Type in the location bar http://192.168.0.10/ . The 192.168.0.10 in the URL may vary depending on the WJ-NT204 settings. Type the identical address to that the WJ-NT204 is set to. The WJ-HD500 OPERATION VIEW window appears.
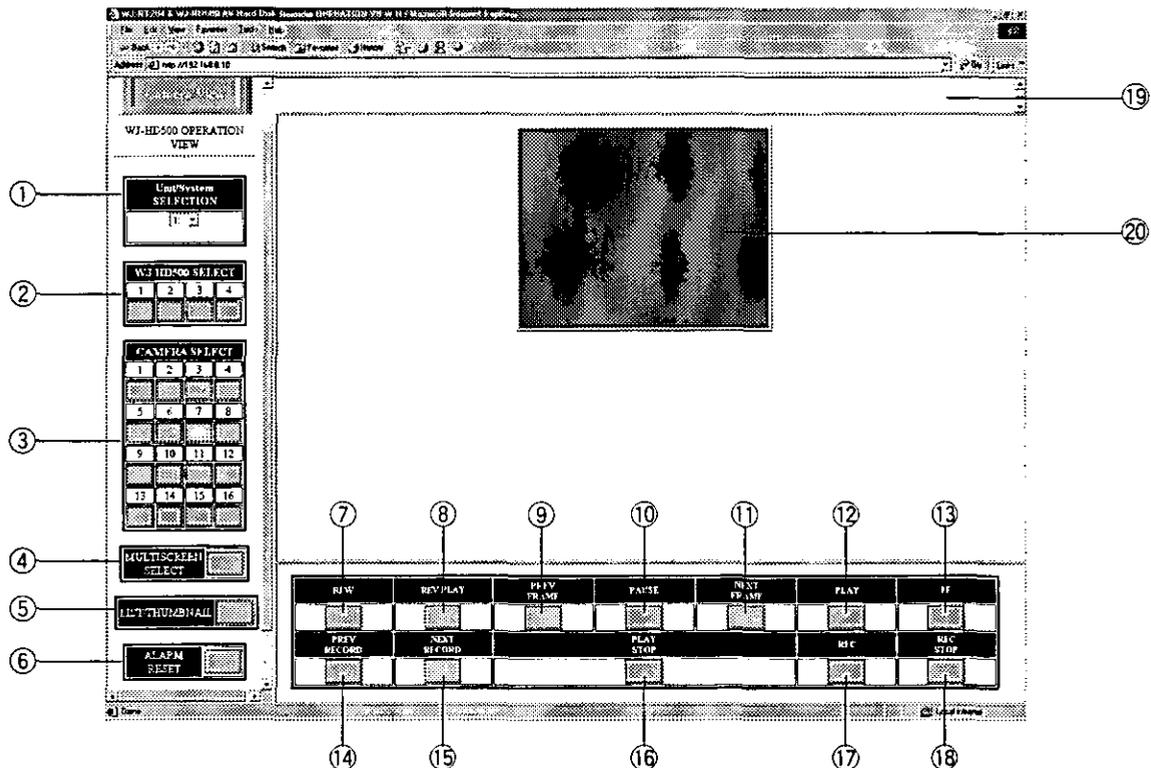
① **Unit/System SELECTION**

This selection changes the Control Operation window to that of the selected unit while communicating with the unit.

Pull down the button to display the registered title and PSD unit #. Select the respective unit number you wish. The window changes to the selected unit's where you can control it.

Notes:

• When you control combination cameras connected to the WJ-HD500 via the WJ-MP204, select WJ-MP204 with this pull-down. Refer to WJ-MP204 Data Multiplexer Control.

• Specify Unit/System SELECTION first, then go to WJ-HD500 and CAMERA SELECT.

② **WJ-HD500 SELECT**

These buttons select a WJ-HD500 when there are more than one unit. No image will appear when clicking buttons 2, 3, and 4 in this connection example.

③ **CAMERA SELECT**

These buttons select the input image of the camera connected to the WJ-HD500. The selected image appears in the Image Display area of the window.

④ **MULTISCREEN SELECT**

Selects a multiscreen pattern for live or playback image each time this button is clicked as follows.

4 → 7 → 9 → 10 → 13 → 16 → 4 screen segments

⑤ **LIST/THUMBNAIL**

Displays the index of the recorded image in a list or thumbnail format. Clicking this button toggles the format between list and thumbnail. The control panel for list and thumbnail appears on the bottom center of the window.

⑥ **ALARM RESET**

Resets the alarm mode activated on the WJ-HD500, and stops the alarm recording.

125

⑦ **REW**

The WJ-HD500 enters the fast reverse playback five times speed than the normal when this button is clicked in the normal playback.

⑧ **REV-PLAY**

Plays back the recorded image reversely.

⑨ **PREV FRAME**

Returns the frame one step back to the previous while pausing.

⑩ **PAUSE**

Pauses the playback image.

⑪ **NEXT FRAME**

Advances the frame one step while pausing.

⑫ **PLAY**

Plays back the recorded image.

⑬ **FF**

The WJ-HD500 enters the fast playback five times speed than the normal when this button is clicked in the normal playback.

⑭ **PREV RECORD**

Returns the image one record back while pausing.

⑮ **NEXT RECORD**

Advances the image one record while playing.

⑯ **PLAY STOP**

Stops playbacks including REV, REW and FF playback.

⑰ **REC**

Starts recording.

⑱ **REC STOP**

Stops recording.

⑲ **Status Window**

Displays information when an alarm is activated on the WJ-HD500.

⑳ **Image Display**

Displays the live image or the image played back on the WJ-HD500.

㉑ **UP DOWN LEFT RIGHT Buttons**

These buttons move the cursor to designate the record in the list or thumbnail index or the alarm event in the alarm list.

㉒ **ALARM SEARCH**

Switches the record list display to the alarm list.

㉓ **PLAY**

Plays back the designated record in the list/thumbnail index or the alarm list.

㉔ **RETURN TO LIVE VIEW**

Returns the window back to the normal. The control panel changes from the list/thumbnail control to WJ-HD500's.

126
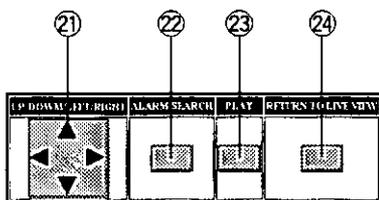
■ PS·Data System Control (WJ-FS416, WJ-MP204s and WJ-HD100)

This is a system example employing a WJ-FS416 (or FS409/FS316/FS309 instead), four WJ-MP204 and a WJ-HD100.

● Connections

1. Connect MULTISCREEN OUT on the rear of the WJ-FS416 to VIDEO IN on the WJ-NT204 with a BNC attached coaxial cable.
2. Connect PLAY IN on the rear of the WJ-FS416 to SPOT OUT on the WJ-HD100 with a BNC attached coaxial cable.
3. Connect REC OUT on the rear of the WJ-FS416 to VIDEO IN on the WJ-HD100 with a BNC attached coaxial cable.
4. Connect 16 Combination cameras to CAMERA IN 1-4 on WJ-MP204 unit #1 through #4 with coaxial cables.
5. Connect CAMERA OUT 1-4 on WJ-MP204 unit #1 through #4 to VIDEO IN 1-16 on the WJ-FS416.
6. Connect DATA terminals among WJ-FS416, WJ-MP204 and WJ-HD100 with RS-485 cables and branch connectors.
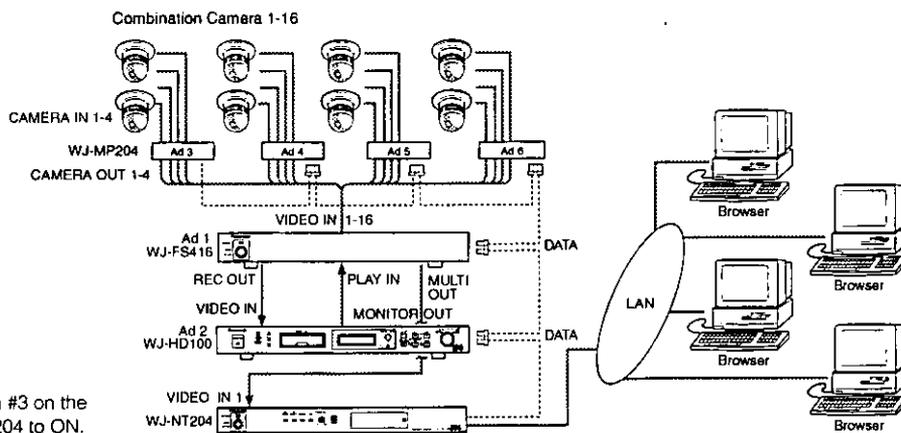
Note: Set DIP switch #3 on the rear of WJ-NT204 to ON.

● Setup for Peripheral Devices

1. Address Setup

Unit addresses must be set as follow.

Unit Name	Unit Address
WJ-FS416	1 (set in its own setup menu)
WJ-HD100	2 (set in its own setup menu)
WJ-MP204 #1	3 (set with UNIT switch on its front panel)
WJ-MP204 #2	4 (set with UNIT switch)
WJ-MP204 #3	5 (set with UNIT switch)
WJ-MP204 #4	6 (set with UNIT switch)

2. PS.Data Communication Parameter Setup

Every unit must be set to the same parameter in their own setup menus.
(For example, BAUD RATE: 9600 bps, DATA BIT: 8 bits, STOP BIT: 1 bit, PARITY: NONE)

3. Input Assignment

For WJ-FS-416, open COMMUNICATION SETUP menu, and set CAMERA NUMBER to 001 through 016.
For WJ-MP204 units, open CAMERA CONFIG menu on each unit, and set CAM NO. (camera numbers) as follows.

Unit Name	CAM NO.
WJ-MP204 #1	1CH through 4CH
WJ-MP204 #2	5CH through 8CH
WJ-MP204 #3	9CH through 12CH
WJ-MP204 #4	13CH through 16CH

For more information, refer to the manual included in each unit.

● Setup for WJ-NT204 Transmitter

1. On the ADMINISTRATOR SETUP PAGE, click the MODE SETUP button to open the MODE SETUP window.
2. Select either H.323/H.261 or JPEG in the MAIN PAGE DEFAULT MODE & INDEX FILE SELECT area.
   Make the CONTROL SETUP as follows.
   CAM CONTROL: PS·Data
   AUX SYSTEM CONTROL: FS309/316/409/416
   Default Unit Address: 1
   Click SET & REBOOT. The WJ-NT204 transmitter will restart. Confirm the transmitter has restarted.
3. On the ADMINISTRATOR SETUP PAGE, click the SERIAL PORT button to open the SERIAL PORT SETUP window.
   In the window, select PS.Data for TYPE, and set communication parameters the same as that other devices are set to.

4. In the SERIAL PORT SETUP window, click the Unit Address SETUP page for AUX SYSTEMS to open the PS.Data Unit Address SETUP window.

In the window, type in the device names for convenient when needed, then click the SET buttons for No. 001 through 006 to register the PS.Data devices connected to the WJ-NT204 transmitter.

Note: When a message "No Response" appears after clicking the SET button, confirm the connections and setups described above.

● Control Operation for Video Multiplexer (WJ-FS416/409/316/309)

Type in the location bar http://192.168.0.10/ . The 192.168.0.10 in the URL may vary depending on the WJ-NT204 settings. Type the identical address to that the WJ-NT204 is set to. FRAME SWITCHER OPERATION VIEW window appears.
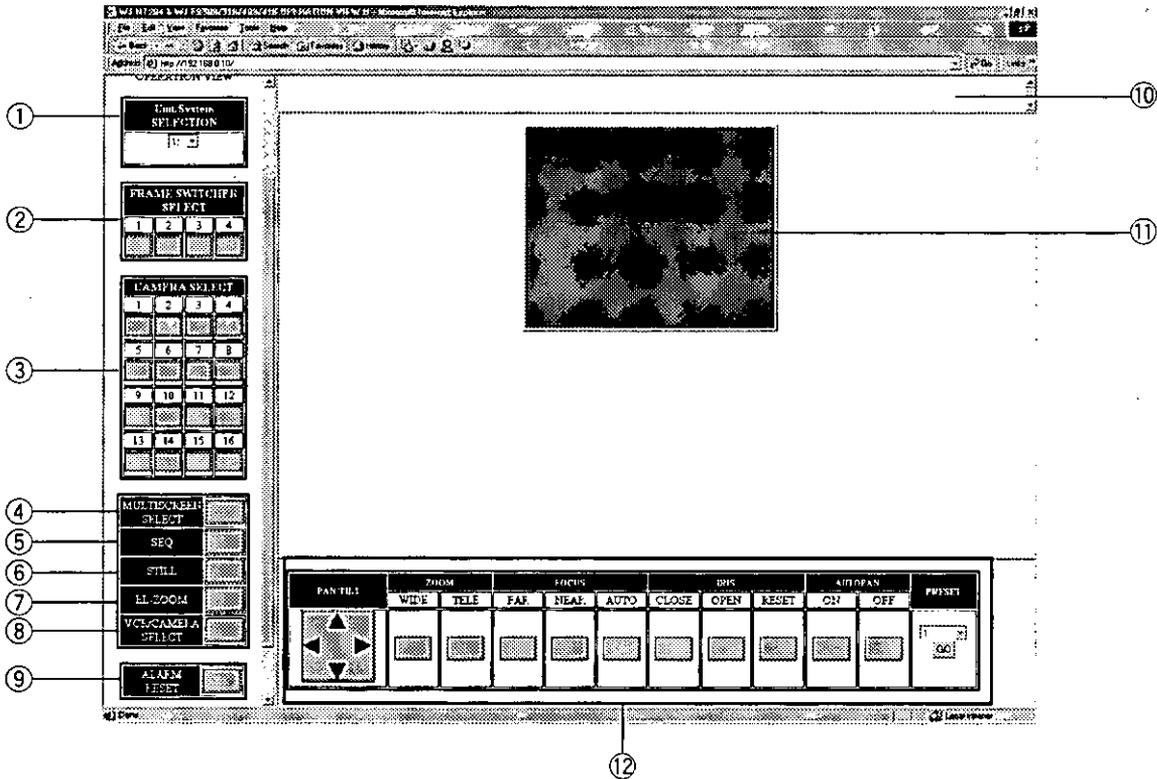
① **Unit/System SELECTION**

This selection changes the Control Operation window to that of the selected unit while communicating with the unit.

Pull down the button to display the registered title and PSD unit #. Select the respective unit number you wish. The window changes to the selected unit's where you can control it. For example, you should select number 1 for WJ-FS416, or number 2 for WJ-HD100.

② **FRAME SWITCHER SELECT**

These buttons are used to select the input image to VIDEO IN 1-4 supplied from Video Multiplexers when a maximum of four units are connected. In this connection example, only the button 1 performs because a single Video Multiplexer is connected to VIDEO IN 1.

Note: When connecting more than one Video Multiplexer unit, you need to make selection in the Unit/System SELECTION first, and then in the FRAME SWITCHER SELECT.

③ **CAMERA SELECT**

These buttons select the input image of the camera connected to the WJ-FS416. The selected image appears in the Image Display area of the window.

④ **MULTISCREEN SELECT**

Selects a multiscreen pattern each time this button is pressed as follows.

4 → 9 → 16 → 4 screen segments (WJ-FS316/416)

4 → 9 → 4 screen segments (WJ-FS309/409)

⑤ **SEQ**

Implements the sequential scan preset in the video multiplexer. A series of camera pictures is displayed in succession for the specific duration.

⑥ **STILL**

Displays the image in still picture. Clicking this button again will restore the moving picture.

⑦ **EL ZOOM**

Opens the EL ZOOM panel on the bottom center of the window while + sign is displayed in the Image Display representing the center of the area to be enlarged.

⑧ **VCR/CAM SELECT**

Switches the output of the video multiplexer between VCR playback and camera image.

⑨ **ALARM RESET**

Resets the alarm mode activated on the WJ-FS416.

⑩ **Status Window**

Displays information when an alarm is activated on the WJ-FS416.

⑪ **Image Display**

Displays the output image supplied from the WJ-FS416.

⑫ **Camera Control Buttons**

These buttons control the combination cameras selected with CAMERA SELECT button.when the cameras are connected to WJ-FS416 via WJ-MP204.
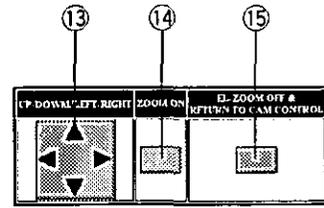
⑬ **UP/DOWN/LEFT/RIGHT Buttons**

These buttons move the + sign to the area you wish to enlarge in the Image Display. After zooming, the buttons scroll the enlarged image up, down, right or left.

⑭ **EL ZOOM ON**

Clicking this will enlarge the image designated with the + sign.

⑮ **EL ZOOM OFF & RETURN TO CAMERA CONTROL**

Resets EL ZOOM function to the normal display.

● **Control Operation for Digital Hard Disk Recorder (WJ-HD100)**

To change the window to WJ-HD100 CONTROL, follow the steps below.

1. In the FS-416 Control window, click VCR/CAM SELECT button to display the image supplied by the WJ-HD100.
2. In the FS-416 Control window, select UNIT #2 with the pull down button of the Unit/System SELECT area. The WJ-HD100 CONTROL window is displayed.
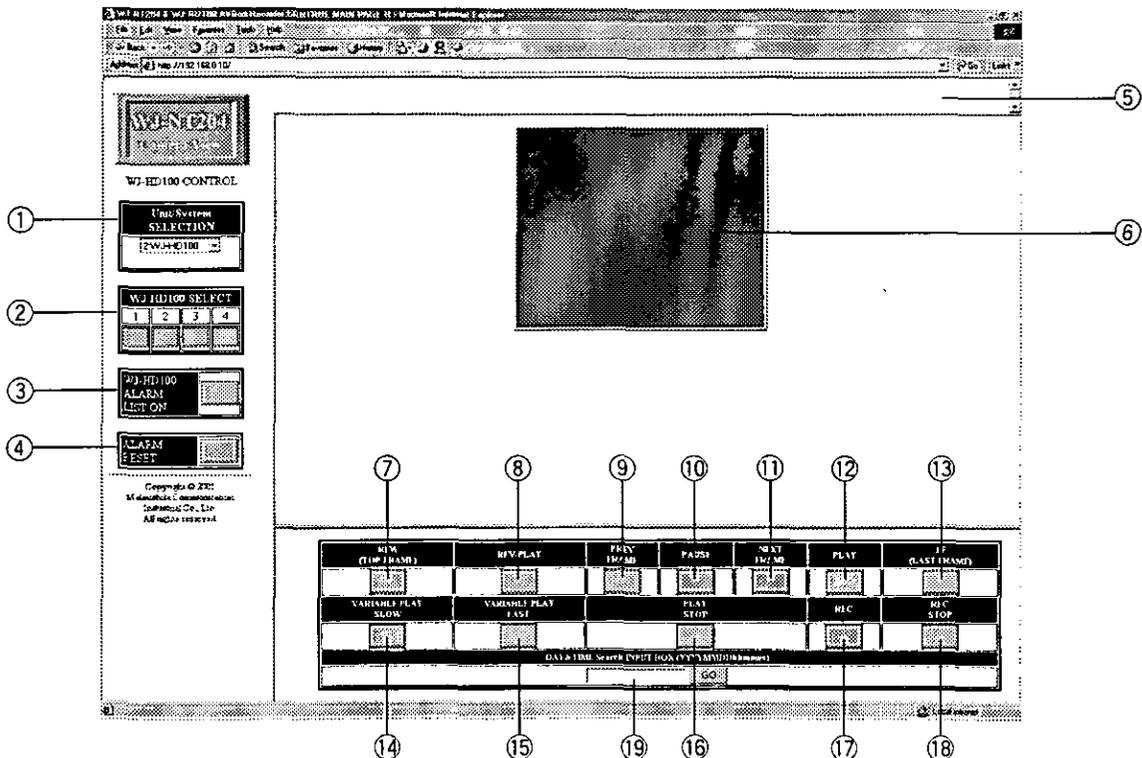
① Unit/System SELECTION

This selection changes the Control Operation window to that of the selected unit while communicating with the unit.

Pull down the button to display the registered title and PSD unit #. Select the respective unit number you wish. The window changes to the selected unit's where you can control it. For example, you should select number 1 for WJ-FS416, or number 2 for WJ-HD100.

② WJ-HD100 SELECT

These buttons are used to select the input image to VIDEO IN 1-4 on the WJ-NT204 supplied from Hard Disk Recorders when a maximum of four Recorders are connected. In this connection example, only the button 1 performs because a single Recorder is connected (not directly, but via FS416) to VIDEO IN 1.

③ WJ-HD100 ALARM LIST ON

Displays the alarm list activated on the WJ-HD100 while opening the alarm control panel.

④ ALARM RESET

Resets the alarm mode activated on the WJ-HD100 and other devices in the PS·Data chain.

⑤ Status Window

Displays information when an alarm is activated on the WJ-HD100.

⑥ Image Display

Displays the playback image on the WJ-HD100.

⑦ REW (TOP FRAME)

Rewinds the recorded image on the WJ-HD100 to the start position.

⑧ REV-PLAY

Plays back the recorded image reversely.

⑨ PREV FRAME

Returns the frame one step to the previous while pausing.

⑩ PAUSE

Pauses the playback image.

⑪ NEXT FRAME

Forwards the frame one step to the next while pausing.

⑫ PLAY

Plays back the recorded image.

⑬ FF

Fast-forwards the recorded image on the WJ-HD100 to the end position.

⑭ VARIABLE PLAY SLOW

Slows down the speed when playing back the image normally, or speeds up when playing reversely.

⑮ VARIABLE PLAY FAST

Increases the speed when playing back the image normally, or slows down when playing reversely.

⑯ PLAY STOP

Stops playbacks including REV, REW and FF playback.

⑰ REC

Starts recording.

⑱ REC STOP

Stops recording.

⑲ TIME & DATE Search

Retrieves the recorded image data designated by the entered time and date. Type in a 14-digit number comprising YYYYMMDDhhmmss, then click GO button to access to the data.

For an example, "20010121181535" indicates as follows.

YYYY: stands for year, year of 2001
MM: stands for month, 01 (Jan.)
DD: stands for day, 21(twenty-first)
hh: stands for hour, 18 (6 o'clock pm), in the 24-hour system
mm: stands for minute, 15 (fifteen minutes)
ss: stands for second, 35 (thirty five seconds)

Playback starts from the designated point when the data was found, or starts from the closest point ascending from the designation when not found.

The alarm control panel appears when WJ-HD100 ALARM LIST button is clicked.
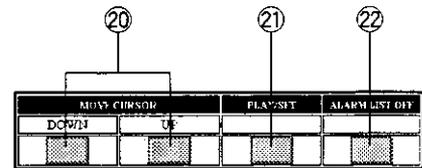
⑳ MOVE CURSOR

Moves the cursor up or down while displaying the WJ-HD100 ALARM LIST to select a recorded event in the list.

㉑ PLAY/SET

Starts playing back of the image designated with the cursor when the alarm list is displayed.
Resets alarm data when DATA CLEAR is highlighted.

㉒ ALARM LIST OFF

Contents upload to the WJ-NT204 transmitter can be made using a File Transfer Protocol (FTP). A single PC is allowed to upload at a time. Uploading may take time when the transmitter is in communication with a receiver or PC. It is recommended that you disconnect communication for monitoring image prior to login. The login procedures are described below.

■ Uploading a File

Upload contents produced by using a PC by the following procedures.

① Click the **[Start]** button, point to **Programs**, and then click **MS-DOS Prompt** to open the MS-DOS window.

② Enter an FTP command in the MS-DOS window and start the FTP. Then enter the IP address of the WJ-NT204.
C:\CONTENTS>FTP 192.168.0.10

③ In response to the input request for a user account, log in the user at the administrator level (Level 1).
User (192.168.0.10 : (none)) : admin

④ Enter a password.
Password:
This column will not appear until you enter a new password.

⑤ After finishing the log-in operation, enter "**bin**" to select a binary transmission mode.
ftp>**bin**

⑥ Enter a put command to upload the file.
ftp>**put upload.html**

⑦ After finishing the transmission, enter "**quit**" to exit from the FTP.
ftp>**quit**

Notes
To transmit more than one file at a time, enter "prompt" to release the interactive mode, and follow "mput" of the input command with a wild card symbol (for example, "*").
　　ftp>prompt
　　Interactive mode off
　　ftp>mput * .html

■ Content Storage Memory

• Content files such as HTML that have been uploaded by means of the FTP are stored in the flash ROM of the WJ-NT204. Hence, they are protected from erasure when the power switch is turned off. However, they are returned to an initial state during version-up operation or if reset after turning on the Mode Setup Switch "2" of the WJ-NT204. Make sure to back up the files before attempting to conduct such operations.

• No directories can be prepared in the content memory interior.

• Reading of the contents file name is case-sensitive.

Storing capacity: Approx. 200 kBytes in total
Number of storable files : Max. 100
　* The above figures are subject to change, depending on file sizes and memory usage.

CONTROL BY HTML DESCRIPTION

Image display, camera operation, and alarm image display can be effected on the WWW browser by means of commands described in the HTML (Hyper Text Mark-up Language) file. The WJ-NT204 employs CGI (Common Gateway Interface) to carry out these functions. When using a function, the following syntax is used.
Syntax: http:// <IP address >/<CGI function>?<Parameter>=<value> [&<Parameter> = <value>...]

■ Image Display

● HTML Sample File [jmainview1.html]

```
<HTML>
<TITLE></TITLE>
<HEAD>
<style TYPE="text/css">
#cVbh323 { LEFT: 50%; POSITION: absolute; TOP: 50% }
</style>
</HEAD>
<BODY BGCOLOR="#FFFFCC">
<CENTER>

<APPLET
code = "JPEGDLLClient.class"
archive = "JPEGDLLClient.jar"
width = "%w"                                                    ─── 1
height = "%h">
</APPLET>

</CENTER>
</BODY>
</HTML>


Window size (%w, %h) is available (640, 480) or (352, 288).
Note: ("%p"): The transmitter unit sets its own address, and the browser issues the address automatically.
```

1 This is a function to call new images by means of JavaScript.

132

■ Camera Operation

● CGI functions related to camera operation

The WV-CS854 (optional) can be operated by using the following commands.
The following commands can be selected at a time. (Example: PAN and TILT can be operated in a combined manner.)

CGI item	URL	Parameter name	Parameter	Parameter
Camera control	/cgi-bin/camctrl	CHSEL	1-5	Selecting a video channel Random Camera mode: Enabled Multi Camera/Fixed Camera mode: Disabled
		PRESET	0-64	0: Calling a home position 1 to 64: Calling a preset position
		PAN	−10-10	PAN & STOP Negative: Left, Positive: Right The moving distance is in proportion to their absolute values.
		TILT	−10-10	TILT & STOP Negative: Down, Positive: Up The moving distance is in proportion to their absolute values.
		ZOOM	−10-10	ZOOM Negative: Wide, Positive: Tele Zooming ratio is in proportion to their absolute values.
		ATPAN	on, off	Turning ON/OFF of auto pan
		AF	on	Auto Focus
		FOCUS	−10-10	Focus Negative: Near, Positive: Far Focusing ratio is in proportion to their absolute values.
		IRIS	−10-10	Iris Negative: Close, Positive: Open, 0: Reset The iris-opening ratio is in proportion to their absolute values.
		SEQ	on, off	Implementation of SEQ SCAN
		CAM	Optional Code	32 byte max.

133

● HTML Sample File [mainpanel1.html]

```
<HTML>
<HEAD>
        <TITLE></TITLE>
</HEAD>
<BODY BGCOLOR="#FFFFCC">
<CENTER>
<!-- TITELE LOGO IMAGE -->
<IMG SRC=nt204_logo.jpeg VSPACE=8>

<!-- CH SELECT FUNCTION -->
RANDOM INPUT SELECTION MODE
<TABLE BORDER=2 BORDERCOLOR=black WIDTH=90% BGCOLOR=#DCfeff>
        <TR ALIGN=CENTER>
                <TH BORDER=2 COLSPAN=4 BGCOLOR=black>
                        <FONT SIZE=3 COLOR=#DCfeff>INPUT SELECT</FONT>
                </TH>
        </TR>
        <FONT SIZE=4>
                <TR ALIGN=CENTER>
                        <TD>1</TD><TD><A HREF="/cgi-bin/camctrl?CHSEL=1"><IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                        <TD>2</TD><TD><A HREF="/cgi-bin/camctrl?CHSEL=2"><IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                </TR>
                <TR ALIGN=CENTER>
                        <TD>3</TD><TD><A HREF="/cgi-bin/camctrl?CHSEL=3"><IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                        <TD>4</TD><TD><A HREF="/cgi-bin/camctrl?CHSEL=4"><IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                </TR>
        </FONT>
</TABLE>

<!-- ALARM LOG -->
<!-- COMMON ALL MODE -->
<TABLE BORDER=3 BORDERCOLOR=black WIDTH="90%" BGCOLOR=#DCFEFF>
        <TR ALIGN=CENTER>
                <TD BGCOLOR=black WIDTH=66% >
                        <FONT SIZE=3 COLOR=#DCFEFF>ALARM LIST</FONT>
                </TD>
                <TD><A HREF="/almindex.html" TARGET="_top"><IMG SRC="/button.jpeg"
BORDER=0></A></TD>
        </TR>
</TABLE>

<!-- ALARM RESET -->
<SCRIPT LANGUAGE="JavaScript">
        function OpenConfirmWindow() {
                var mes_str = "Are you sure you want to reset alarm ?";
                answer = confirm(mes_str);
                return answer;
        }
</SCRIPT>

<!-- COMMON ALL MODE -->
<TABLE BORDER=3 BORDERCOLOR=black WIDTH="90%" BGCOLOR=#DCFEFF>
        <TR ALIGN=CENTER>
                <TD BGCOLOR=black WIDTH=66% >
                        <FONT SIZE=3 COLOR=#DCFEFF>ALARM RESET</FONT>
                </TD>
                <TD><A HREF="/cgi-bin/almreset?RESET=0" ><IMG SRC="/button.jpeg" BORDER=0
OnClick="OpenConfirmWindow()"></A></TD>
        </TR>
</TABLE>

</CENTER>
<HR>
<FONT SIZE=2 COLOR=BLUE>
Copyright &#169 2001
Matsushita Communication Industrial Co., Ltd.<BR>
All rights reserved.
</FONT>
</BODY>
</HTML>
```

● HTML Sample File 2 [camctrl.html]

```
<HTML>
<HEAD>
        <TITLE></TITLE>
</HEAD>
<BODY BGCOLOR="#FFFFCC">
<CENTER>
<TABLE BORDER=3 width=95% BORDERCOLOR=black BGCOLOR="#DCFEFF">
        <TR>
                <TH ROWSPAN=2 COLSPAN=1 BGCOLOR=black><FONT SIZE=2 COLOR="#DCFEFF">
                        PAN/TILT   </FONT></TH>
                <TH COLSPAN=2 BGCOLOR=black><FONT SIZE=2 COLOR="#DCFEFF">
                        ZOOM   </FONT></TH>
                <TH COLSPAN=3 BGCOLOR=black><FONT SIZE=2 COLOR="#DCFEFF">
                        FOCUS  </FONT></TH>
                <TH COLSPAN=3 BGCOLOR=black><FONT SIZE=2 COLOR="#DCFEFF">
                        IRIS   </FONT></TH>
                <TH COLSPAN=2 BGCOLOR=black><FONT SIZE=2 COLOR="#DCFEFF">
                        AUTOPAN</FONT></TH>
                <TH ROWSPAN=2 COLSPAN=1 BGCOLOR=black><FONT SIZE=2 COLOR="#DCFEFF">
                        PRESET </FONT></TH>
        </TR>
        <TR ALIGN="center" >
                <TD>WIDE</TD> <TD>TELE </TD> <TD>FAR  </TD> <TD>NEAR</TD> <TD>AUTO</TD>
                <TD>CLOSE</TD><TD>OPEN </TD> <TD>RESET</TD> <TD>ON  </TD> <TD>OFF </TD>
        </TR>
        <TR ALIGN="center">

<SCRIPT LANGUAGE="JavaScript">
        document.writeln("<TR ALIGN=center >")
        document.writeln("<TD ROWSPAN=3><IMG SRC=/fspantilt.jpeg BORDER=0 WIDTH=100 HEIGHT=100
USEMAP=#PANTILT></td>")

        document.write("<MAP NAME=PANTILT>")

        for(x=0;x<5;x++)
        {
                for(y=0;y<5;y++)
                {
                        if(x<2) {xx = -(x-2)*(x-2);} else {xx = (x-2)*(x-2);}
                        if(y<2) {yy = -(y-2)*(y-2);} else {yy = (y-2)*(y-2);}
                        document.write("<AREA SHAPE=\"rect\" COORDS="+(x*20)+","+(y*20)+","+((x+1)*20-
1)+","+((y+1)*20-1)+" HREF=/cgi-bin/camctrl?PAN="+xx+"&TILT="+yy+" TARGET=mainpanel>")
                }
        }
        document.write("</MAP>");

        document.writeln("</TR>")
</SCRIPT>


                <TD><A HREF="/cgi-bin/camctrl?ZOOM=-5">             <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?ZOOM=5">              <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?FOCUS=5">             <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?FOCUS=-5">        <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?AF=on">           <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?IRIS=-5">         <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?IRIS=5">          <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?IRIS=0">          <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?ATPAN=on">        <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD><A HREF="/cgi-bin/camctrl?ATPAN=off">       <IMG SRC="/button.jpeg"
BORDER=0></A></TD>
                <TD>
```

135

```
<FORM ACTION="/cgi-bin/camctrl" METHOD=POST>
    <INPUT TYPE="hidden" NAME="CH" VALUE="%c">
    <SELECT NAME="PRESET">
        <SCRIPT LANGUAGE="JavaScript">
            for(i=1 ;i<=64; i++)
            {
                document.writeln("<OPTION>"+i)
            }
            document.writeln("<OPTION VALUE=0>HOME")
        </SCRIPT>
    </SELECT><BR>
    <FONT SIZE=3><INPUT TYPE=SUBMIT VALUE="SET"></FONT>
</FORM>
        </TD>
    </TR>
</TABLE>
</CENTER>
</BODY>
</HTML>
```

● **HTML Sample File 3 [mainview1.html]**

```
<HTML>
<HEAD>
        <TITLE></TITLE>
<style TYPE="text/css">
#cVbh323 <!-- { LEFT: 50%; POSITION: absolute; TOP: 50% } -->
</style>
</HEAD>
<BODY BGCOLOR="#FFFFCC">
<CENTER>

<script LANGUAGE="Javascript">

var plugInVbh323;
function Hide()
{
    document.vbh323.Mode = "remote";
}
function Show()
{
    document.vbh323.Mode = "full";
}


function init()
{
        document.vbh323.CallTo( "%p" );
}

window.onload = Show;
window.onload = Hide;
window.onload = init;
</script>

<div id="cVbh323">
        <OBJECT id="vbh323"
                classid="clsid:1F966E25-5284-11D4-98B0-00104BC1A0D1"
                height="288" width="352">
                <PARAM NAME="Mode" VALUE="Remote">
                <embed type="application/x-vbh323-plugin"
                        name="vbh323" height=288 width=352
                        param_Mode = "Remote">
        </OBJECT>
</div>
</CENTER>
</BODY>
</HTML>
```

■ Substitute Character Strings in HTTP Server

Parameters can be described in HTML files by means of substitute characters as described below.

● Ordinary HTML file get

When an HTML file containing the following substitute characters is transmitted to a client through the HTML protocol, it is transmitted with the substitute characters unconditionally converted into internal parameters.
Any characters that begin with % but are not substitute ones are displayed as they are (for example, %k is displayed as %k).
If a user wants to transmit a character string that is the same as a substitute, one of the following methods can be chosen.
(Example : %m / %m)

Item	Substitute character	Description
Camera channel	%c	In the Multi Input Selection mode, %m is substituted with 2. Channel (1 to 4) selected in the Random Input Selection mode. Camera channel is not fixed in other modes.
Live image data size & display size	%w %h	%w and %h indicate respectively the width and height of current live image.
Version	%v	SYSTEM VERSION, HOST VERSION, FIRMWARE VERSION
Ether address	%e	Ether address (MAC address) 00-00-00-00-00-00 type (hexadecimal, 2 x 6-bit)

● /cgi-bin/chconv

The designated file is opened by the substitution of % character with this description.
cgi-bin/chconv?FILE=(file name)

[Troubleshooting in the system using WJ-NT204 Transmitter/Receiver]

Symptoms	Check items
No power is supplied	1. Check that the POWER switch is turned on, and the power cord is connected firmly into the unit and the AC outlet.
The Network Interface Unit does not start after power-on.	2. Check the DIP switch setup referring to page 12 &14.
No image is displayed.	3. Check the camera connection to the VIDEO IN terminal, and the power to the camera is supplied on the Remote site.
	4. Is the monitor connected correctly on the Control site? Check the monitor connection on the Control site.
	5. Is the Remote site unit set to a Receiver wrongly? Set the unit to a Transmitter using 100 CONFIGURATION menu.
No connection is made.	6. Are network setups and connections made correctly? **<When the unit is a Transmitter>** Check the response from the other site using 'ping' command as follows. • On the Remote Controller of your own site, press the DIAL, then enter the IP address of the other site. • When 'Ping time-out' appears, confirm network setups and connections for both the transmitter and receiver. • When 'Ping OK' appears, follow the items below **<When the unit is a Receiver>** Confirm the following on MS-DOS window. C: \Windows>ping ***.***.***.***[ENTER] • When "100% loss" appears, settings may be insufficient. • When other than "0% loss" appears, connection may be disturbed by noise or the like.
	7. Are you trying to connect the Control site with more than four Remote sites? A Remote site is only allowed to connect with a maximum of four Remote sites. "Ping" command is valid in this case.
	8. Is the 10/100BASE status indicator lit on the front panel? If not, is the 10/100BASE connection (RJ-45, 8-pin) made correctly on the rear panel? Connect securely the 10/100BASE cable.
	9. Is the 10/100BASE status indicator lit on the front panel? If not, is the 10/100BASE cable selected correctly in style from X-over and straight? Use an X-over cable to connect between 2 hubs. A straight cable is used for cascade port connection or to connect between a hub and a terminal. A circuit tester will be helpful to check cable wiring.
	10. Is the 10/100BASE status indicator lit on the front panel? If not, is there any shorting circuit or wrong wiring in the connector? Check the connector and wiring.
	11. Is the 10/100BASE status indicator lit on the front panel? If not, are you using a too long cable? Category 5 cables (length: 100 m) are allowed to be used.
	12. Is the 10/100BASE status indicator lit on the front panel? If not, are you using too many hubs in one segment? A maximum of 4 hubs for 10BASE-T, 2 hubs for 100BASE-T is allowed.
	13. Are network addresses set correctly? Is the IP address set correctly? When using the private line, set the IP address to [10.0.0-10.255.255.255], [172.16.0.0-172.31.255.255] or [192.168.0.0-192.168.255.255]. When using the public line, get an available IP address from the network administrator.
	14. Are network addresses set correctly? Is the IP address repeated with another equipment? Check the IP address on the opposite site.
	15. Are you trying to connect with the transmitter that is set to JPEG? If Yes, the WJ-NT204 receiver cannot connect with the transmitter set to JPEG. Only PC sites can access.
	16. Is the mode setup made correctly? Is the same "Subnet" set for relevant Network Interface Units on both the Remote and Control site? Set the same "Subnet Mask" for all units, e.g., 255.255.255.0, when they are connected within one network. Ask the network administrator when there is more than one "Subnet".
	17. Are network addresses set correctly? Is the "Default Gateway" set correctly on the Control site? You need this setup when connecting the Control site with another network. Set the "Gateway" correctly to rout the communications between deferent networks.
	18. Is the unit set up correctly? Is the 220 CALLER IP CHECK menu set to ON? If Yes, calling may be rejected. Register mutual IP addresses in the directory each other.

Symptoms	Check items
Bad communication caused by noise	19. Is there any possibility that the unit is disturbed by insufficient grounding or lack of cable shielding? We recommend that you connect a grounding wire to the SIGNAL GND terminal on the rear, and use shielded cables.
	20. Is there any noise source such as fluorescent light, transformer, welding machine or the like adjacent to the unit? Separate the noise source from the unit or vice versa.
	21. Is there any cable running along the power line or near the noise sources? Separate the noise source from the cable or vice versa.
Taking a long time to connect	22. Are there too many packet data or frequent traffic that can exceed over the LAN capacity? Consult a LAN expert or administrator for study on the LAN capacity.
Frozen image displayed during communication	23. Is there any cable disconnection? Check the cable connection. Communication will resume automatically if the cable gets back in a short time. When communication is disconnected once and the 410 RE-CONNECTION is set to ON, the unit will reconnect to the network after a while.
Sound interruption	24. Same as 23 above.
Communication interruption	25. Same as 23 above.
Poor image quality during communication	26. Is the VIDEO QUALITY set properly? Set the 450 VIDEO menu to a higher rate as far as the network capability and traffic permit.
"CANNOT CONTROL REMOTE" displayed	27. Are both units set to Receiver? Set one unit to a Transmitter.
	28. Is the opposite site busy in communication? Wait for a while, then retry to connect.
Received images do not appear on the Control site monitor.	29. Is the monitor connection made properly? Connect the monitor to the MONI/SPOT terminal.
	30. Is communication carried out properly between the Control and Remote site? Check
	31. Is camera selection made properly? Make camera selection from the points where cameras are connected. To make selection, open the 510 CAMERA•PRESET•TRIGGER OUT menu.
Howling	32. Is the microphone placed close to the speaker? Move the microphone away from the speaker, or level down the speaker output.
No audio supplied	33. Is the mode set to JPEG? Audio transmission is not available when JPEG is selected.
	34. Is the speaker connection made properly? Connect the AUDIO OUT terminal to the speaker via the amplifier.
	35. Are the volume controls adjusted properly on both the Remote and Control sites? This unit accepts and supplies line level audio signals. Thus a pre-amp is necessary on the Remote site, and an output amplifier is needed on the Control site. Adjust the sound level properly with the volume controls.
	36. Is the AUDIO menu set properly on both the Remote and Control sites? Open the 440 AUDIO menu, and set an appropriate parameter to your place. Settings must be identical for both the Remote and Control sites.
	37. Is the AUDIO menu set to OFF? If Yes, audio transmission will not be carried out. Select other than OFF in the 440 AUDIO menu when you need audio.
	38. Is the MUTE function activated on the other site? Stop muting.
Alarm dialing malfunction	39. Is the sensor connection made properly? Refer to Connection on page 24 and 25.
	40. Is the alarm dialing registration made properly? Check the 462 through 464 ALARM DIALING TABLE.
	41. Is the sensor signal reception set properly? Check the ALARM TYPE selection in the 461 ALARM SETUP menu. When LEVEL is selected, the sensor signal must continue until the call ends. When EDGE is selected, the signal must be active for at least 100 ms without chattering.
Unwanted Connection	42. Is any sensor malfunctioning? Check sensors with a circuit tester whether activated although the conditions do not meet. Repair connections, or re-arrange the conditions such as sensor's directions, positions and surroundings if applicable.
View Point/Alarm View Point malfunction	43. Is the VIEW POINT SETUP made properly? Check the 430/530 VIDEO SWITCH SETUP menu. When you let the view point settings interlock with the sensor inputs, set the ALARM to ON in the VIDEO SWITCH SETUP menu.
Site operation at the Remote site	44. Is an exclusive controller connected to the unit properly? Refer to Connection on page 31.
Combination Camera Control failure	45. Is the line connected properly? If not, try to reconnect. The Control site can manipulate cameras on the Remote site only when the communication is established between the sites.
	46. Is the camera Panasonic made? Only Panasonic's Combination camera is controllable with this unit for pan/tilt, zoom, focus and so forth.

139

Symptoms	Check items
Combination Camera Control failure	47. Is the camera connected to the AUX IN terminal? If Yes, change the connection to VIDEO IN 1 to 4, because the AUX IN terminal does not pass control data to the camera.
	48. Is the camera already assigned PRESET Positions? If No, open the 510 CAMERA•PRESET•TRIGGER OUT menu to assign the preset positions.
Parallel I/O failure	49. Is there any error in connection or interface condition? Refer to Connection on page 27.
	50. Did the site lose a negotiation with other site? If Yes, try to reconnect.
Serial I/O failure	51. Are both units and peripherals set to the same parameters for communication? Open the 650 SERIAL DATA PORT and check parameters.
	52. Did the site lose a negotiation with other site? If Yes, try to reconnect.
	53. Are DIP switches #4 on both the transmitter and receiver set to the same position? If No, set these switches to the same position.
No alarm log or no communication log	54. Initializing may have been carried out in the 690 INITIALIZE menu. The unit will start to log events after initializing.
Frozen Image	55. Did the site lose a negotiation with other site? If Yes, try to reconnect.
PS•Data device not controllable	56. Is the exclusive controller used? If Yes, the WV-CU20 does not control the PS•Data devices, but only the Network Interface Unit. Use a WV-CU360 for PS•Data devices.
	57. Is the PS•Data setup made properly for the unit? • Check the following on the 421 SERIAL DATA PORT menu: • RATE, DATA BITS, STOP BITS, PARITY must be set to the same among the devices. • MODE must be set to PSD. • A UNIT # must be given to each unit with this menu. • Check the DIP switches #4 on both the transmitter and receiver set to OFF position. Check the line termination refereeing to page 30. Check the DIP switch #3 on the rear for wiring selection: Straight or X-over. See page 32.
	58. Is the PS•Data setup made properly for other devices? Refer to page 7-9, System Configuration.
CCTV device not controllable	59. Is the exclusive controller used? If Yes, the WV-CU20 does not control the CCTV devices, but only the Network Interface Unit. Use a WV-CU360 for CCTV devices.
	60. Is the NORMAL (RS-485) setup made properly for the unit? Check the following on the 421 SERIAL DATA PORT menu: • RATE, DATA BITS, STOP BITS, PARITY must be set to the same among the devices. • MODE must be set to NORMAL. • A UNIT # must be given to each unit with this menu. Check the line termination refereeing to page 30. Check the DIP switch #3 on the rear for wiring selection: Straight or X-over. See page 32.
	61. Is the CCTV setup made properly for other devices? Refer to page 19 through 22, System Configuration.
	62. Another site may have taken the right of control when multiple site access to one transmitter and re-connection is carried out among them automatically.
A message "ONLY MONITOR REMOTE SITE" appears.	63. This site cannot control the Remote site in the multi-site connection because that there is another site having the control priority to the Remote site. Only monitoring is available.

Prior to having the unit repaired, check the following items.

[Troubleshooting in the system using a WWW browser]

Symptoms	Check items
No access from the browser.	• Is a 10Base-T/100Base-Tx cable connected to the Ethernet connector on the rear panel?
	• Is the link indicator of the front panel on? If it is not on, the unit is not correctly connected to the LAN or the network is not correctly connected. Check for any poor contact or cable disconnection.
	• Is the WJ-NT204 IP address correctly set?
	• Is the wrong IP address accessed? If making access from Windows98, 98SE, ME, 2000 or UNIX, check the connection in the following manner. >ping **[IP address set in the WJ-NT204]** If the WJ-NT204 responds to the above command, the connection is correct. If it does not respond, perform the following procedures: (1) Initialize referring to MODE SETTING to reset the IP address to 192.168.0.10. (2) Set the IP address again referring to GLOBAL NETWORK CONNECTION.
	• Has the set IP address already been assigned to another device? • Does the set IP address match the conventions of the network/subnet to which the WJ-NT204 is connected? WJ-NT204 and client PC connected to the same subnet: • Are the IP addresses of the WJ-NT204 and the client PC set for the same subnet? • Is the browser set to **[Use proxy server]**? When accessing an NT204 on the same subnet, it is recommended to select **[Do not use proxy server]** for the IP address. WJ-NT204 and client PC connected to different subnets: • Is the correct value set for the WJ-NT204 default gateway?
No image is displayed.	• Are power switches of cameras and other connected devices turned on? Did you install the Plug-in when the MODE is set to H.323/H.261? If Yes, check the OS. Windows95 is not applicable to this system.
Images are not updated.	• With some WWW browsers or browser versions images may not be updated, camera control may not function normally, etc. It is recommended to use Netscape Navigator Ver. 4.7 or higher, or Internet Explorer Ver. 5.0 or higher. • Under conditions such as network congestion or simultaneous access to the WJ-NT204 by too many users, the display of images may be suspended. In this case, click the [Refresh] button.
The certification window that opens when displaying a default page cannot be closed.	• Enter correct user name and password. If the correct user name and password are unknown, repeatedly press the [ESC] button on the screen. If a series of more than one input is accepted, the certification window is not displayed again.
HTML file is not displayed.	• Check the contents of the HTML file. An HTML file is not displayed, if it is incorrectly described or broken. HTML files may be broken, if they have not been fully initialized. Initialize the files again by turning on the Mode Setup Switch No. 2 of the WJ-NT204.
Image get is abnormally slow, or PC does not react at all.	• According to an announcement by Microsoft, Windows95 may develop trouble if operated uninterruptedly for more than 50 consecutive days. It is recommended to reset your PC once a week.
Live images cannot be updated.	• Image requests may not be made to the WJ-NT204, because data are called from the cache of the PC. Should this phenomenon occur frequently, it is recommended to set the browser in the following manner: **For Netscape Navigator** In the **[SETTING]** menu, set the memory cache and disk cache under **[DETAIL-CACHE]** to 0 Kbyte. **For Internet Explorer** In the View drop-down menu of the browser, click Internet Options, and then click Settings for Temporary Internet Files. Under **[Check for newer version of stored pages]**, mark **[Every visit to the page]**.
A message "Call failed. Reason is 11." appears.	• The accessed transmitter is in communication with four receivers. The fifth is not allowed to connect. Wait for a while and try connection again.
Dark stripes appear in the edges of a picture.	These are added by the devices on the transmitter site for the administration purposes in the following cases. • A WJ-HD100 or WJ-FS416 is connected with the transmitter • H.323 is selected with 640x480 pixels for the transmitter

SPECIFICATIONS

General

Power supply: 120 V AC, 60 Hz
Power consumption: 13 W max.
Weight: 4 kg (8.8 lbs.)
Dimensions: 420 mm (W) x 44 mm (H) x 350 mm (D) (no rubber feet and bosses included)
                                    16-9/16" (W) x 1-3/4" (H) x 13-3/4" (D)
Working temperature range: Specified temperature: +5 °C ~ +40 °C (41 °F ~104 °F)
                                    Operating temperature: -10 °C ~ +60 °C (14 °F ~140 °F)
Working humidity range: 95 % maximum
Applicable line: 10BASE-T/100BASE-TX, RJ45
Communication protocols: TCP, IP, UDP, ICMP, FTP, HTTP, H.323
Video input: Video input 1 - 4 and AUX, NTSC composite / 1 V[p-p]/75Ω, BNC
Video output   Video output 1 - 4, NTSC composite / 1 V[p-p]/75Ω, BNC
                                    Monitor/Spot output, NTSC composite / 1 V[p-p]/75Ω, BNC
Image compression system: H.261, maximum communication rate 1 Mbps
                                    (0/16/32/64/128/256/384/512/768/1024 kbps manually)
                                    elements CIF: 352 x 288 / 640x480 (Image Size) max. 30 fps
                                    JPEG, maximum 15 fps, CIF: 352 x 288, VGA: 640 x 480
Audio input   Audio input x1, -10 dB 47 kΩ, RCA pin jack
Audio output: Audio output x1, –10 dB 300 Ω, RCA pin jack:
Audio compression system: G.711-μ/G711-A, audio band 3.4kHz, or no sound

Control System

Data port: RS-232C (D-sub 9 pin male)/ 4-wire RS-485 (RJ-11 connector),
                                    baud rate = 4 800 bps/ 9 600/19200 bps,
                                    data length = 7-bit/8-bit,
                                    stop = 1-bit/2-bit, parity = NONE/ODD/EVEN
                                    Note) The rear DIP switch specifies RS-232C or RS-485.
Parallel port: D-Sub 25-pin female, Input x8 (make-contact),
                                    Output x8 (open collector output)
                                    Forced (line) disconnection input x1 (make-contact)
                                    Clock adjust signal input x1 (make-contact)
                                    Mid-communication output x1 (open collector output)
                                    Parallel data strobe output x1 (open collector output), +12 V output (50 mA max.)
Sensor input/Trigger output: D-Sub 25-pin female, sensor input x8 (make-contact)
                                    Trigger output x8 (open collector output)
Host port: RS-232C (D-Sub 9-pin male) or 4-wire RS-485 (RJ-11 connector),
                                    rate = 4 800/9 600/19 200 bps, data length = 8-bit (fixed),
                                    stop = 1-bit (fixed), parity = NONE
                                    Note) The front DIP switch specifies RS-232C or RS-485.

Operation System

Remote control connector: Rear: RJ-11 modular port
Host port, data port RS-485 terminating SW: ON/OFF (Set with dip switches on the rear)
Data port RS485 line changeover SW: Straight/crossover (The rear DIP switch specifies the wiring.)

Weight and dimensions indicated are approximate.
Specifications are subject to change without notice.

STANDARD ACCESSORIES

Utility Software (contained in the FD) 1
Switch protector 1
Rack mount bracket 2
Mounting bracket screw (M3) 6
Power cord (2.5 m) 1
6-conductor modular cable (for host RS-485 data port) (3 m) 1

OPTIONAL ACCESSORIES

Remote Controller WV-CU20 1

For details on the other peripheral products, consult your sales agent.

■ Default Settings

The default settings in the menus and DIP switch positions are shown below. The settings in the menus will return to the default values after you implement the initializing operation.

● Default Settings in the menus

Menu # & Title	Item	Initial Value	Note
100 CONFIGURATION	MODE IP ADDRESS SUBNET MASK DEFAULT GATEWAY DATE/CLOCK DAYLIGHT SAVINGS TRANS. CONTROL	TRANSMITTER 192.168.0.10 255.255.255.0 0.0.0.0 01.01.01 00:00 OFF ON	
210 RECEIVING REGI.	READY STATE COM.STATE RINGER	AUTO AUTO ON	
220 CALLING IP ADDRESS CHECK	CALLING IP ADDRESS CHECK REJECT IP/SUBNET MASK Specify the addresses ACCEPT IP/SUBNET MASK Specify the addresses	OFF	
320 ONE-TOUCH DIAL REGI.	From No. 1 to No. 5 No. 1(001), No. 2(002), No. 3(003), No. 4(004), No. 5(005)		
330 SEQ. DIAL	START UP SEQ. DIAL COM TIME REPEAT	001 20S per site NO	
410 RE-CONNECTION	RE-CONNECTION	ON	
421 SERIAL DATA PORT	RATE DATA BIT STOP BIT PARITY MODE RS485 UNIT #	9600 8 1 NONE PSD 002	
422 HOST PORT	RATE RS485 UNIT #	9600 001	
430 VIDEO SWITCH SETUP	VIDEO SWITCH No. 1 thru 8	Point # VIDEO SEQ CAM # PRESET # TRIGGER OUT ALARM 1 ON 1 1 1 ON 2 ON 2 1 2 ON 3 ON 3 1 3 ON 4 ON 4 1 4 ON 5 ON AUX NONE 5 ON 6 ON 1 2 6 ON 7 ON 1 3 7 ON 8 ON 1 4 8 ON	
440 AUDIO	AUDIO SEND	G711-mu	
451 VIDEO BIT RATE MOTION	VIDEO BIT RATE(kbps) MOTION	1024 NORMAL	
452 ON SCREEN DISPLAY	VIDEO INPUT DISP TITLE DISP CLOCK DISP	ON ON ON	
453 CABLE COMPENSATION	CAMERA 1-4	S(Short)	
461 ALARM SETUP	ALARM TYPE ALARM AUTO DISC ALARM AUTO DISC TIMER ALARM DIALING TIME TABLE1-3	EDGE(CLOSE) ON 60S DAY(MON-SUN), TIME(00:00-00:00)	
462 ALARM DIALING TABLE 1	ALARM 1-8	ALARM 1-8: #1-#3 (SELECT)	
463 ALARM DIALING TABLE 2	ALARM 1-8	ALARM 1-8: #1-#3 (SELECT)	
464 ALARM DIALING TABLE 3	ALARM 1-8	ALARM 1-8: #1-#3 (SELECT)	
465 ALARM PORT SETUP	PORT 1-8	Enabled	
470 SEQ. SCAN SETUP	SEQ. SCAN DWELL TIME RESTART TIME	OFF 05S 060S	
481 LOCK	MENU LOCK NUM (Numeric buttons) LOCK FUNCTION (Function buttons) LOCK	OFF OFF OFF	
482 MENU	ENTER NEW PASSWORD	SELECT	

● Rear DIP Switch Default Setting

The default positions are marked with *.

Bit #	OFF	ON	Function/Note
1	Open*	Terminate	Termination on Transparent Receiving side
2	Open*	Terminate	Termination on Transparent Transmission side
3	Straight*	X-over	RS-485 DATA PORT wiring exchange
4	RS-485*	RS-232C	DATA PORT selection
5	Open*	Terminate	Termination on Host Receiving side
6	Open*	Terminate	Termination on Host Transmission side

● Front DIP Switch Default Setting

The default positions are marked with *.

Bit #	OFF	ON	Function/Note
1	Normal Operation *	Initialize	Maintenance
2	Normal Operation *	Initialize	HTML file
3	*		Not Used
4	See below *		Applicable Line
5	See below *		Applicable Line
6	Normal Operation *	Initialize	Network Configuration
7	. *		Not Used
8	Setup Menu Enabled *	Menu Disabled	Setup Menus
9	RS-485 Rear	RS-232C Front*	Host Port Selection
10	*		Not Used

Applicable Line

		Bit #4	
		OFF	ON
Bit #5	OFF	AUTO *	10BASE-T
	ON	100BASE-TX	AUTO

■ Sensor Operation

The transmitter unit has 8 sensor inputs. The unit lets the camera direct to the preset position as an input is supplied while it informs the Control site about sensor (alarm) activation. In the setup menus, the time zone tables and alarm dialing tables specify whether to make the call and where to call at.

The operator can check the transmitted image at the Control site. Image display retains until the preset time elapses when AUTO DISC (disconnection) TIME is set, or it is ended manually when the preset time is extended with the ALM ACK button.

The following charts show how the unit processes multiple inputs.
Among inputs of a unit the smaller the input number is, the higher the priority will be.
The priority order depends on the setups as described below. The viewpoint setup has the highest priority.
　　　A sensor activation that ALARM is set to ON in the 430 VIDEO SWITCH SETUP.
　　　A sensor activation that AUTO DISC TIME is set to ON with a preset time in the 461 ALARM SETUP.
　　　A sensor activation that AUTO DISC TIME is set to OFF (manually disconnected).
The edge type is convenient to detect pulsive inputs while the level type is good to ignore pulsive inputs in contrast. Besides the detection sensitivity, the disconnection timer starts differently: when the first detection takes place in the edge type, or when the first detection ends in the level type.
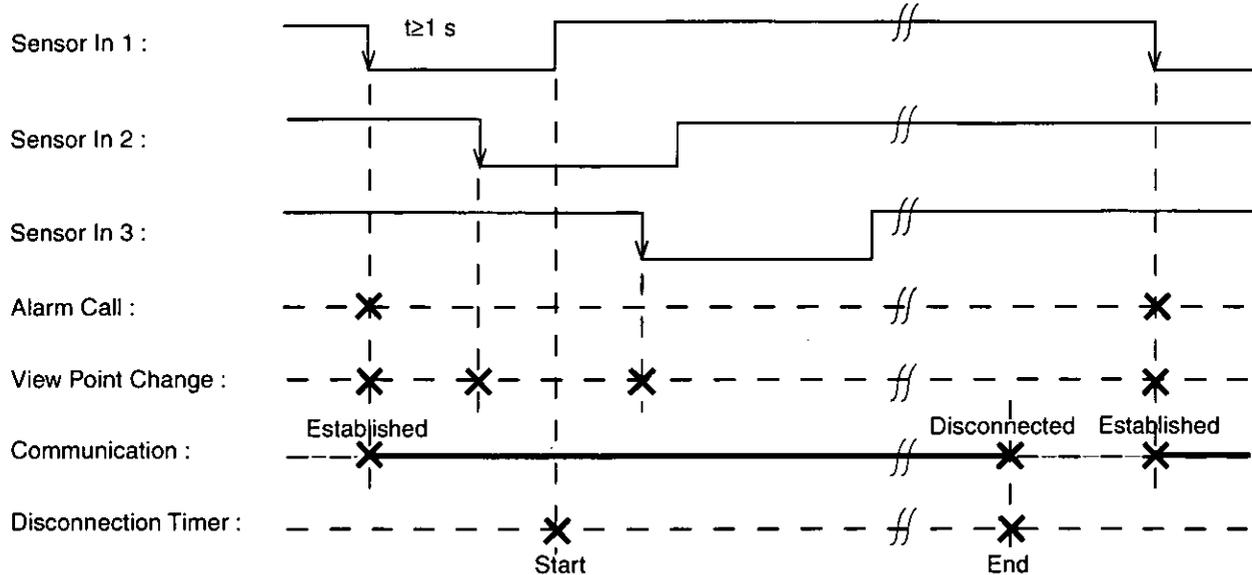
EDGE CLOSE Type Input

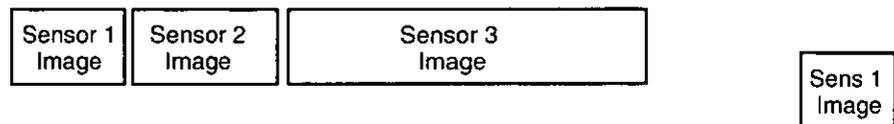### Remote Site

Control Site
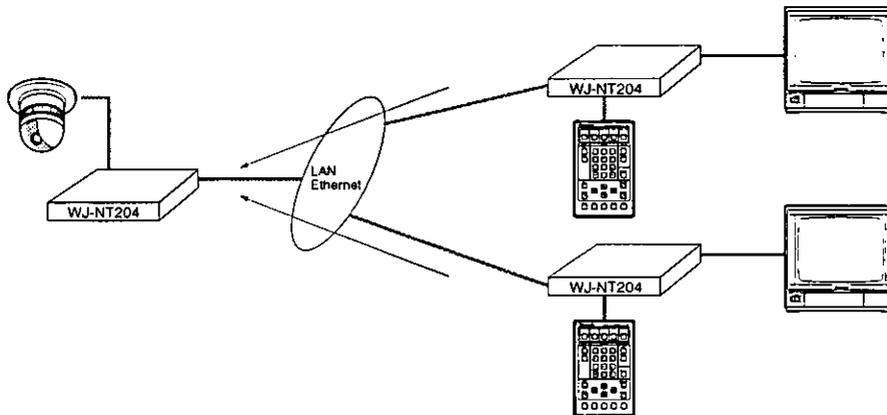

146
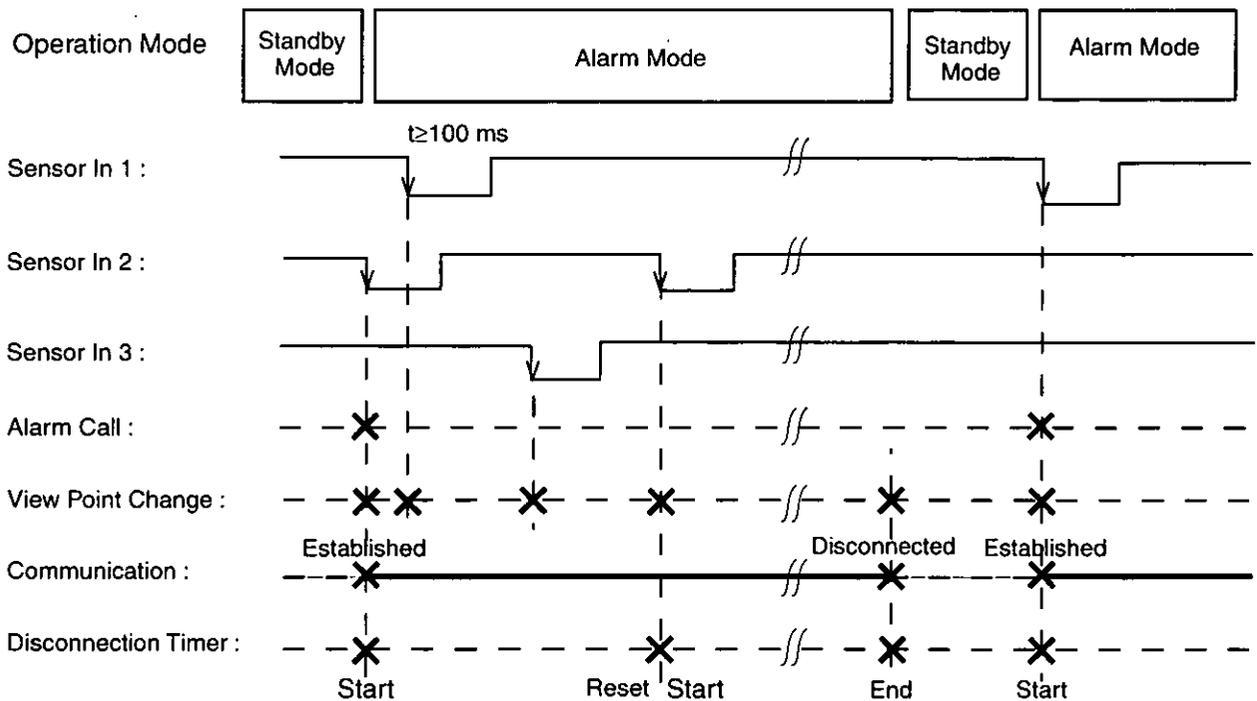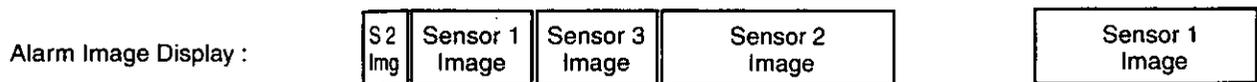
LEVEL Type Input

Remote Site

Control Site

Alarm Image Display :

Sensor 1 Image	Sensor 2 Image	Sensor 3 Image

Sens 1 Image

■ About the Right of Control

There are some limitations on the right of control when more than one WJ-NT204 receiver (Control site) access to one transmitter (Remote site).
The earliest Control site who has connected with the transmitter first can have the following right of control, while the other sites are limited.

    Camera control for the Remote site
    Serial port control for the Remote site
    Parallel port control for the Remote site
    Audio transmission to the Remote site (bi-directional audio communication)

The other sites can operate the following functions.

    Receiving the transmitted audio and image

Set TRANS CONTROL to OFF for the site you do not want to give the right of control in the 100 CONFIGURATION menu. The site may establish only bi-directional audio communication except camera control, serial or parallel control even though it is set to OFF for TRANS CONTROL.

The right of control is not limited when the Control site employs a PC, not a WJ-NT204 receiver.

N0601-0   V8QA5722AN   Printed in Japan
                                 Ⓝ 19