Operating Instructions

Panasonic ®

Before attempting to connect or operate this product,
please read these instructions completely.

CONTENTS

PREFACE

The WV-RM70 Camera Controller, when combined with the optional WV-CP610 and WV-BP510 series CCTV Camera, enables remote control of camera settings.
Also it is available to receive the alarm (motion detector) signal multiplexed with the video signal from the WV-CP610 and WV-BP510 series camera.

FEATURES

The WV-RM70 Camera Controller enables remote control of the following functions:
- Remote control of camera settings for the WV-CP610 and WV-BP510 series camera, including Electronic Sensitivity Up, Electronic Shutter, and more.
- Remote control of camera and auxiliary equipment, by using optional receiver and accessories, including:
    1. Remote control of Pan/Tilt Head and Camera Housing.
    2. Remote control of Motorized Zoom Lens : Focus, Zoom and Iris.

Also it is available to receive the alarm (motion detector) signal multiplexed with the video signal from the WV-CP610 and WV-BP510 series camera.

PRECAUTIONS

- Do not attempt to disassemble the unit.
  In order to prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside.
  Do refer to all servicing to qualified service personnel.

- Handle the unit with care.
  Do not abuse the unit. Avoid striking, shaking, etc. It could be damaged by improper handling or storage.

- Do not expose the unit to rain or moisture, or try to operate it in wet areas.
  Do take immediate action if the unit becomes wet. Turn the power off and refer servicing to qualified service personal. Moisture can damage the unit and also create the danger of electric shock.

- Do not use strong or abrasive detergents when cleaning the unit body.
  Do use a dry cloth to clean the unit when dirty. In case the dirt is hard to remove, use a mild detergent and wipe gently.

- Do not operate the unit beyond its temperature, humidity or power source ratings.
  Do not use the unit in an extreme environment where high temperature or high humidity exist. Use the unit under conditions where temperatures are within 14°F-140°F (−10°C - +60°C) and humidity is below 90%.
  The input power source is 12V DC (10.8 - 16.0V DC).

Caution: To prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for DC12V Input Terminal.

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS
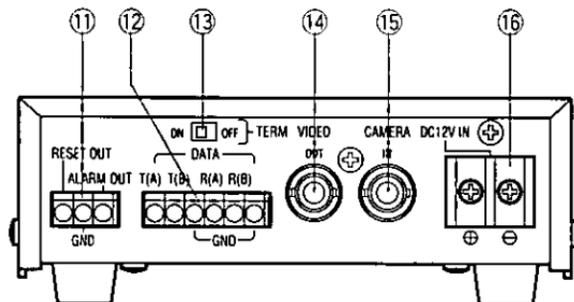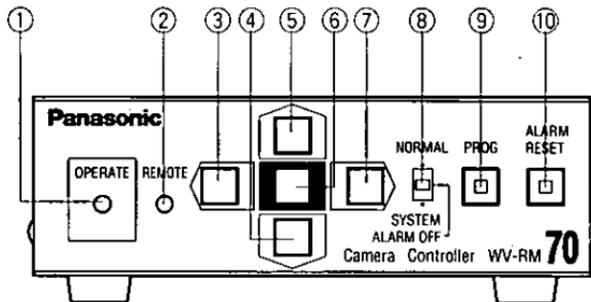
1. **Power Indicator (OPERATE)**
   This indicator lights up when DC power is supplied to the DC 12V Input Terminal.

2. **Remote Indicator (REMOTE)**
   This indicator lights up when this controller is controlled remotely by Personal Computer.

3. **Left Switch (◄)**
   This switch is used to move the cursor (in the Setup Menu) in the left direction or move the Pan/Tilt Head toward the left direction.

4. **Down Switch (▼)**
   This switch is used to move the cursor (in the Setup Menu) in the down direction or move the Pan/Tilt Head toward the down direction.

5. **Up Switch (▲)**
   This switch is used to move the cursor (in the Setup Menu) in the up direction or move the Pan/Tilt Head toward the up direction.

6. **Set Switch**
   The mode selected in the setup menu is enabled by pressing this switch.

7. **Right Switch (►)**
   This switch is used to move the cursor (in the Setup Menu) in the right direction or move the Pan/Tilt Head toward the right direction.

8. **Mode Selection Switch (NORMAL/ALARM OFF/SYSTEM)**
   This switch is used to select the activated mode. Refer to the Mode Selection on page 13 for more details.

9. **Program Switch (PROG)**
   This switch is used to display the Program Menu on the monitor screen by pressing this switch for more than 2 seconds,

10. **Alarm Reset Switch (ALARM RESET)**
    When the unit is in the alarm mode, this indicator starts blinking. Press this switch to cancel alarm and the indicator light turns off.

11. **Alarm Terminal**
    RESET OUT: When the controller resets the activated alarm by pressing the Alarm Reset Switch, the alarm reset output signal is provided at this terminal for the Time Lapse VCR.

ALARM OUT: The alarm output signal is provided at this terminal for the Time Lapse VCR.

12. Data Terminal

These terminals are used to transmit / receive control data to / from a Personal Computer. Use data grade cable, suitable for RS-485 (2 shielded, twisted pairs), cable length may be extended up to 4,000 ft. (1,200m).

Designation	Direction
T (A)	Personal Computer ← Controller
T (B)	Personal Computer ← Controller
GND	
R (A)	Personal Computer → Controller
R (B)	Personal Computer → Controller
GND	

13. Termination Switch (TERM ON/OFF)

This switch is used to enable termination of this controller's data terminal.

14. Video Output Connector (VIDEO OUT)

A 1.0 Vp-p / 75Ω composite video signal is provided at this connector.

15. Camera Input Connector (CAMERA IN)

This connector accepts either a color or B/W composite video signal from the camera. Also, VD2, to synchronize camera in vertical timing, and data, to control camera site devices, are multiplexed through this connector.

16. DC 12V Input Terminal (DC 12V IN)

This terminal accepts 12V DC (10.8 - 16.0V DC) power source.

Cautions :
1. Connect to a 12V DC class 2 power supply only.
2. To prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for DC 12V Input Terminal.

CONNECTIONS

1. Dip Switch Setting

Before connecting this controller, confirm the Dip Switch Setting if the system setting change is required.
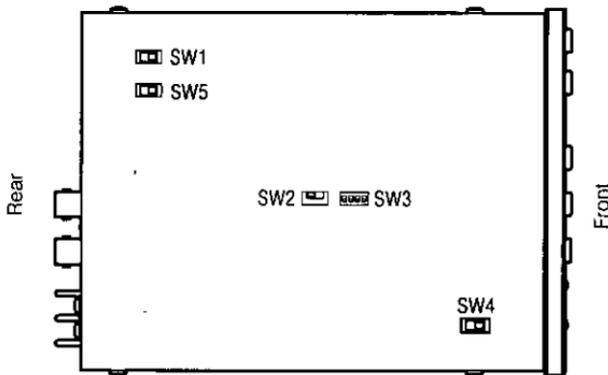
1. Set switch (SW1) on the board to choose the alarm reset output signal as either Open Collector (OPC) or Pulse (VTR).
   Open Collector (OPC) :
       16V DC 100mA max.
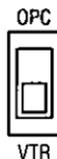
Pulse (VTR): +5V DC approx. 500msec.
Initially, VTR position is selected at the factory.

2. Set switch (SW2) on the board to choose the character display mode on the monitor.
   NOR : White with Black border
   REV : Black with White border
   Initially, normal (NOR) position is selected at the factory.
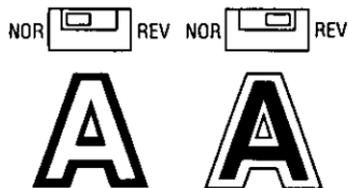
3. Confirm switches (SW3) on the board are set to the position as shown. These switches are used only for factory test.
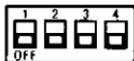
4. Confirm switch (SW4) on the board is set to the "VS" position. This switch is used only for factory test.

5. Set switch (SW5) on the board to choose the data line selection mode for data terminal.

4 LINE : normal connections are made.

2 LINE : simplified connections are made.

Initially, 4 LINE is selected at the factory.
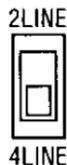
The above switching should be made by qualified service personal or system installers.

2. Connection of Alarm Output Terminal

• Make sure the polarity of the buzzer to meet with this terminal.

The positive (+) terminal of the buzzer should be connected with the Alarm Output Terminal.

• The Alarm Output Terminal is composed of the Open Collector Output and the capacity is 16V DC, 100mA or less.

(1) In case the buzzer is operable within the capacity of Alarm Output Terminal, connect buzzer as shown right.

(2) In case the buzzer is not operable within the capacity of Alarm Output Terminal, the external relay unit should be used as shown below.
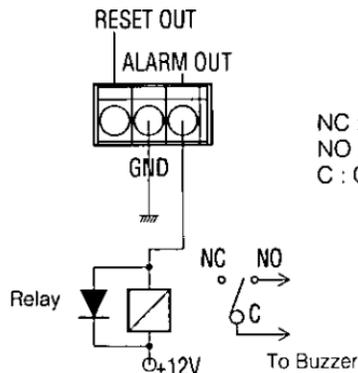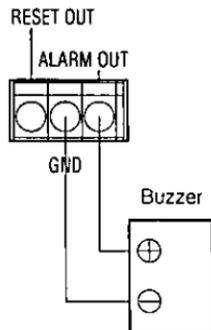
NC : Normally Closed
NO : Normally Open
C : Common

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3. System Connections

■ Basic Connection

Camera WV-CP610

Camera WV-CS304

Pan/Tilt

Receiver

Camera Controller WV-RM70

RS-485

Time Lapse VCR

Converter
(RS-485/
RS-232C)

Personal Computer

Motion Detect
Output

Monitor

■ System 100

■ System 300

WV-CS304
WV-BS204

WV-CP610

WJ-SW208

RS-485   ALARM OUT

WV-RM70

Converter
(RS-485/
RS-232C)

WV-CU101

PC   Monitor   Time Lapse VCR

WV-CP610

WV-RM70

WJ-MP404

WJ-SQ508

Converter
(RS-485/
RS-232C)

WV-CU300

Time Lapse
VCR

Monitor
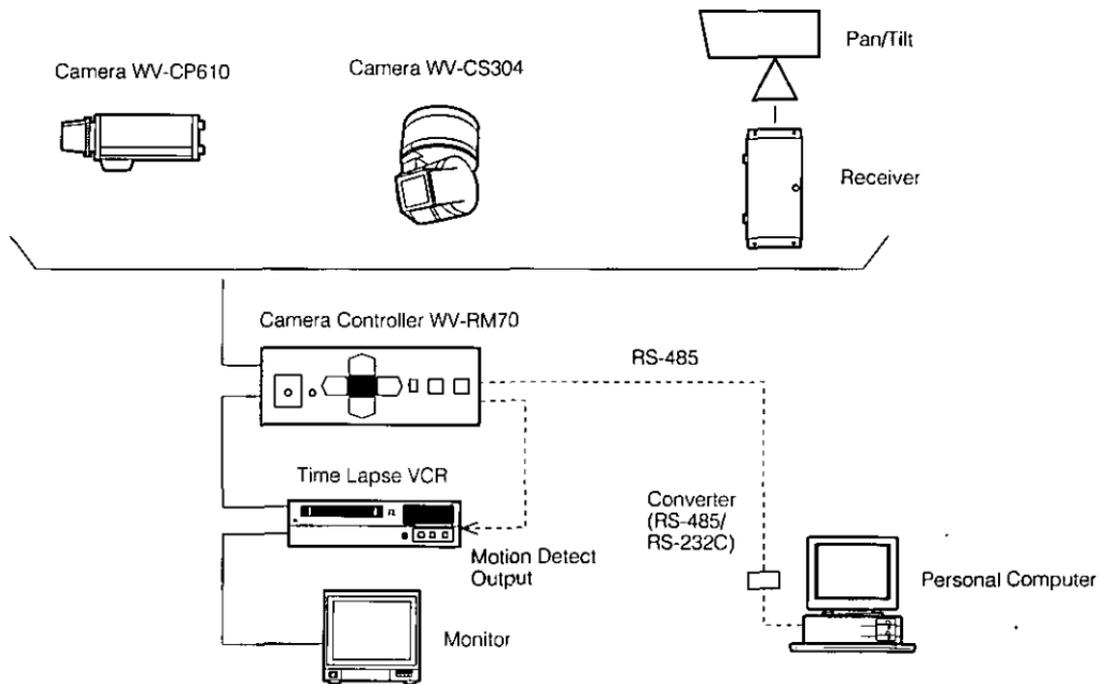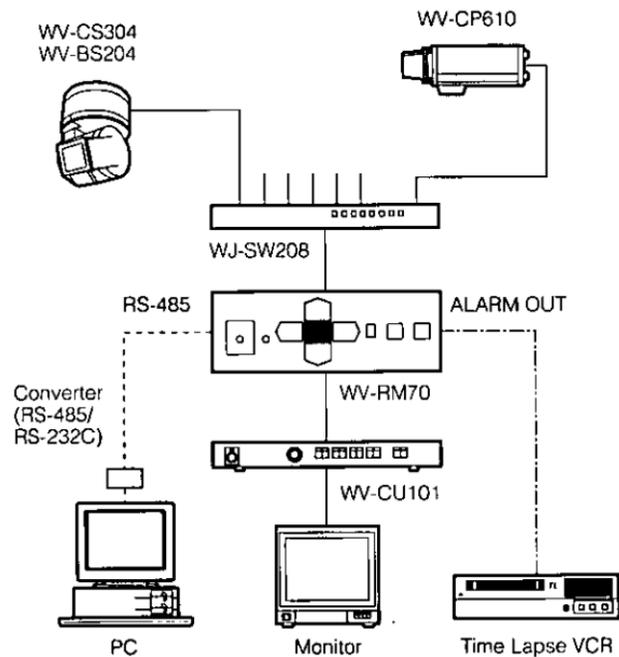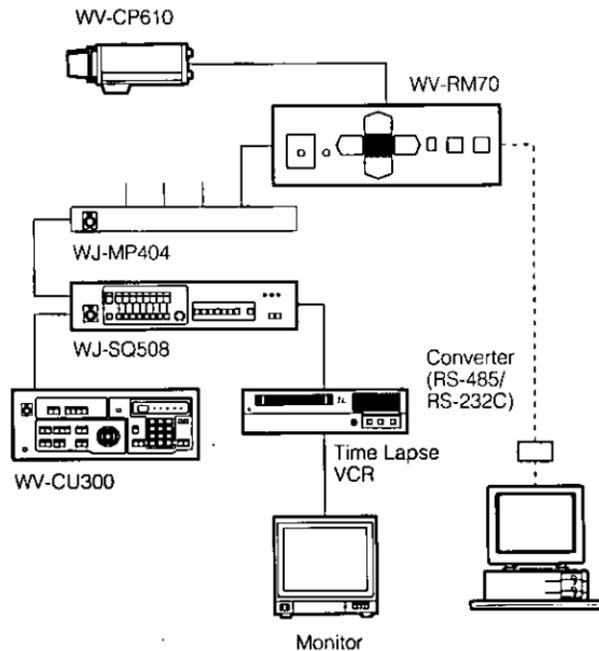
■ Cable-loss Compensation Setting

The maximum cable length in the system is approximately 3,000 ft.
See the diagram below and set up the cable-loss compensation switch for each unit accordingly.
For examples:
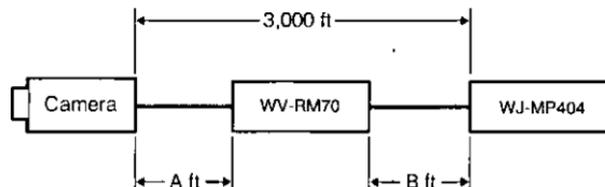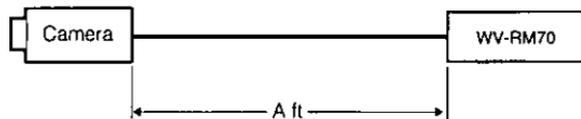
		Position of the switch of WV-RM70
$0 \leq A < 1300$	$\rightarrow$	S
$1300 \leq A < 2300$	$\rightarrow$	M
$2300 \leq A < 3000$	$\rightarrow$	L

Position of the switch of WV-RM70			Position of the switch of WJ-MP404
S:	$0 \leq A + B < 1300$	$\rightarrow$	S
S:	$1300 \leq A + B < 2300$	$\rightarrow$	M
S:	$2300 \leq A + B < 3000$	$\rightarrow$	L
M:	$1300 \leq A + B < 2300$	$\rightarrow$	S
M:	$2300 \leq A + B < 3000$	$\rightarrow$	M
L:		$\rightarrow$	S

4. Connection with the Personal Computer

■ 4 Data Line (Dip Switch SW5 : 4 LINE)

Personal Computer		Camera Controller
T(A)	——	R(A)
T(B)	——	R(B)
R(A)	——	T(A)
R(B)	——	T(B)
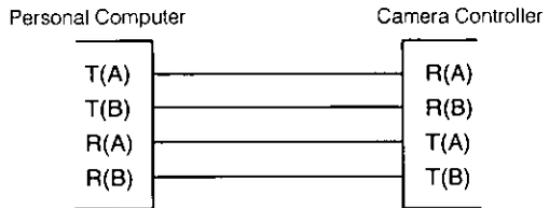
■ 2 Data Line (Dip Switch SW5 : 2 LINE)

Personal Computer		Camera Controller
T(A)		R(A)
T(B)		R(B)
R(A)		T(A)
R(B)		T(B)

Personal Computer		Camera Controller
T(A)		R(A)
T(B)		R(B)
R(A)		T(A)
R(B)		T(B)
		R(A)
		R(B)
		T(A)
		T(B)

Data Terminal

Camera Controller

T(A)	
T(B)	Transmit Data
R(A)	
R(B)	Receive Data

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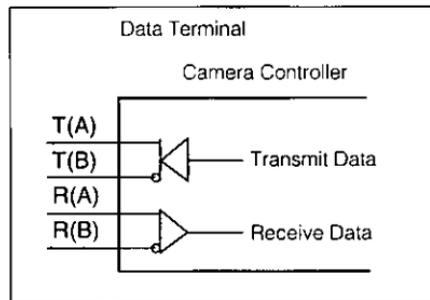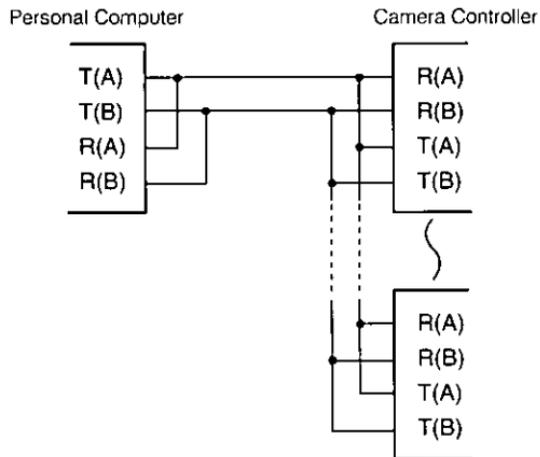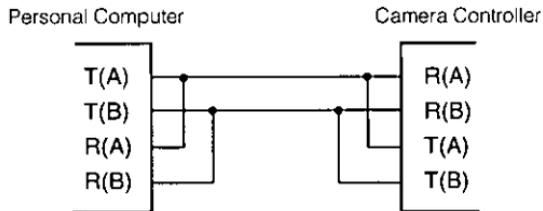
OPERATING PROCEDURE

Before starting the following procedures, all system components should be turned on.

1. Mode Selection

This controller can select the activated mode by selecting Mode Selection Switch located on the front panel.

Switch Position	Activated Mode	Functions
NORMAL	Normal Mode	Function 1 : Controller setup Function 2 : Camera Setup (for WV-CP610 series) Function 3 : Camera Control Function 4 : Receiver Control Function 5 : Alarm Control Function 6 : Remote Control by Personal Computer
ALARM OFF	Alarm Off Mode	Function 1 : Controller setup Function 2 : Camera Setup (for WV-CP610 series) Function 3 : Camera Control Function 4 : Receiver Control Function 6 : Remote Control by Personal Computer
SYSTEM	System Mode	Function 1 : Controller setup Function 5 : Alarm Control Function 6 : Remote Control by Personal Computer (Except Camera Site Control)

2. Entering Program Menu

By pressing the Program (PROG) Switch for more than 2 seconds, when Mode Selection Switch is selected at Normal (NORMAL) position or Alarm Off (ALARM OFF) position, the following displays appear on the monitor screen.

```
** Program Menu **

Camera Control   *

Receiver Control  *

Camera Set Up   *

Controller Set Up  *
```
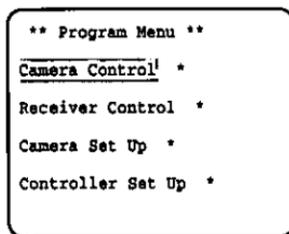
Fig. 1

As shown in Fig. 2, the Program Menu has four main sub menus: Camera Control, Receiver Control, Camera Setup and Controller Setup. These sub menus are further divided in to additional submenus.

Program Menu

```
— Camera Control ——— Iris Control
                     — Sens Up Control
                     — Shutter
                     — BLC
                     — AGC
                     — White Balance

— Receiver Control ——— Pan/Tilt Control (Manual)
                       — Zoom/Focus Control
                       — AUX 1, 2 Control
                       — Wiper/Defroster
                       — Pan Action
                         (Auto/Random Panning)

— Camera Set Up

— Controller Set Up ——— System
                        — Communication
```
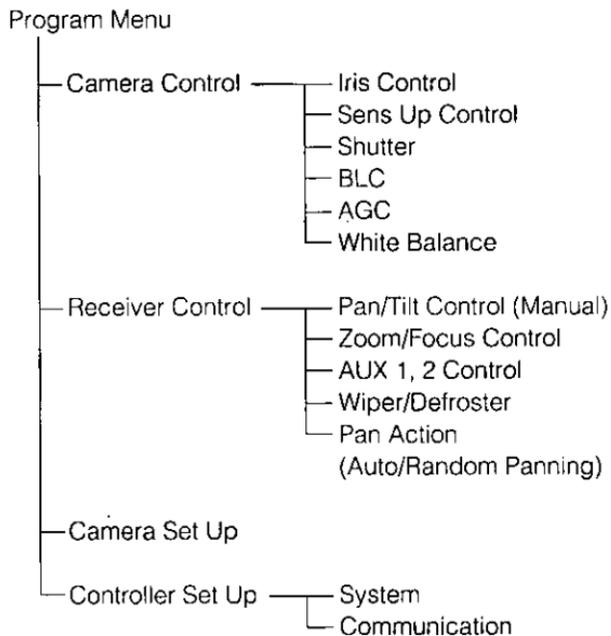
Fig. 2

Move the cursor to the desired program by pressing the Up (▲) Switch or the Down (▼) Switch on the controller, then press the Set Switch to select program where the cursor is positioned.

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3. Camera Control

Move the cursor to the "Camera Control" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the following display on the monitor screen.

```
** Program Menu **
Camera Control¹ *
Receiver Control  *
Camera Set Up    *
Controller Set Up *
```
➡
```
←close Iris open→
```

Fig. 3

Press the Set Switch repeatedly to select the desired functions. The function is selected as shown in the following sequence.

$$\to \text{Iris} \to \text{Sens Up} \to \text{Shutter} \to \text{BLC} \to$$
$$\longleftarrow \text{ATW, AWC} \leftarrow \text{AGC} \longleftarrow$$
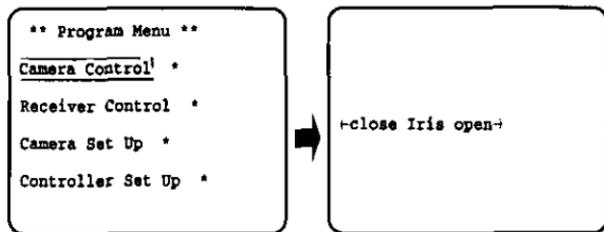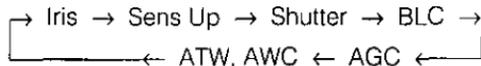
3-1. Lens Iris Control

The following function is available only when specified lens is mounted on the specified camera.

1. Display the Iris Menu as shown in Fig. 4 by repeating the previous procedures.

```
←close Iris open→
```
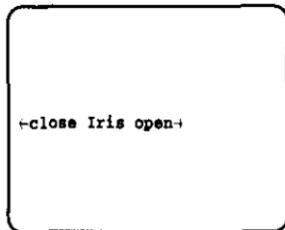
Fig. 4

2. Press the Right (►) Switch to open the lens iris or press the Left (◄) Switch to close the lens iris. Adjust the lens iris by pressing the switches to obtain the proper picture exposure.
   While pressing the switches, the character is inversely displayed on the monitor screen.

3. By pressing both of these switches at the same time for one second, the lens iris is set to the factory preset condition.

3-2. Electronic Sensitivity Up

The following function is available only when specified camera with the electronic sensitivity feature is used.

1. Display the Sens Up Menu as show in Fig. 5 by repeating the previous procedures.

Fig. 5

2. Press the Up (▲) Switch or the Down (▼) Switch to select the desired mode, "Off", "Auto" or "Manu".

3. When selected "Auto" or "Manu" mode, press the Right (►) Switch to select a higher sensitivity up setting, or press the Left Switch to select a lower sensitivity up setting.

3-3. Electronic Shutter

The following function is available only when specified camera with the electronic shutter feature is used.

1. Display the Shutter Menu as shown in Fig. 6 by repeating the previous procedures.

Fig. 6

2. Press the Up (▲) Switch or the Down (▼) Switch to select the desired mode, "On" or "Off".

3. When selected "On" mode, press the Right (►) Switch to select faster shutter speeds or press the Left (◄) Switch to select slower shutter speeds.

3-4. Back Light Compensation (BLC)

The following function is available only when specified camera with the Auto/Preset BLC Function is used.

1. Display the BLC Menu as shown in Fig. 7 by repeating the previous procedures.

```
┌─────────────────────┐
│                     │
│                     │
│                     │
│  ↑BLC↓:Auto         │
│                     │
│                     │
│                     │
└─────────────────────┘
```

Fig. 7

2. Press the Up (▲) Switch or the Down (▼) Switch to select the desired mode, "Off", "Auto" or "Preset".

3-5. Gain Control

The following function is available only when specified camera with the AGC feature is used.

1. Display the AGC Menu as shown in Fig. 8 by repeating the previous procedures.

```
┌─────────────────────┐
│                     │
│                     │
│  ↑AGC↓:On           │
│                     │
│                     │
│                     │
│                     │
└─────────────────────┘
```
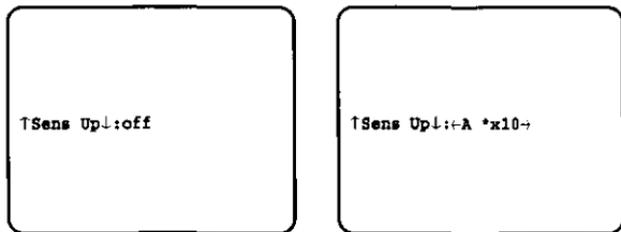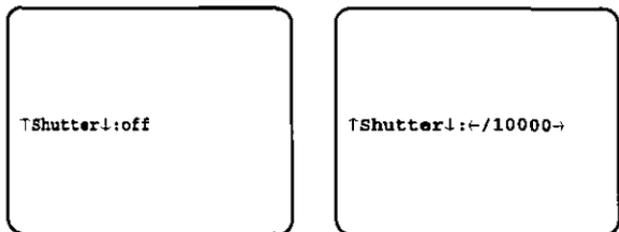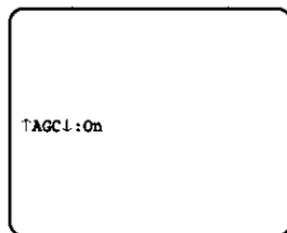
Fig. 8

2. Press the Up (▲) Switch or the Down (▼) Switch to select the desired mode, "On" or "Off".

3-6. White Balance

The following function is available only when the specified camera with the ATW/AWC White Balance Function is used.

1. Display the ATW, AWC Menu as shown in Fig. 9 by repeating the previous procedures.
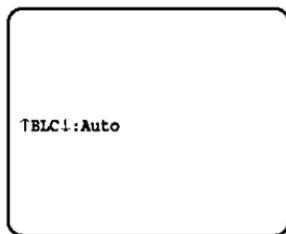
```
┌─────────────────────┐
│                     │
│                     │
│  ←ATW,AWC→:ATW      │
│                     │
│                     │
│                     │
│                     │
└─────────────────────┘
```

Fig. 9

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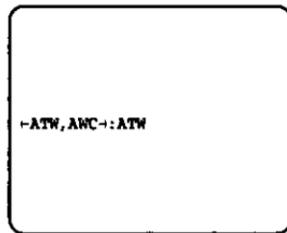
2. Press the Right (►) Switch or the Left (◄) Switch to select desired mode, "ATW" or "AWC".

After completing the above settings, press the Program (PROG) Switch to return the previous Program Menu as shown in Fig. 1.
To return to the normal camera picture, press the Program (PROG) Switch again.

4. Receiver Control

Press the Program (PROG) Switch for more than 2 seconds to display the Program Menu.
Move the cursor to the "Receiver Control" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the following display on the monitor screen.

```
** Program Menu **
Camera Control    *
Receiver Control¹  *        ➡    ↑Tilt↓ / ←Pan→
Camera Set Up     *
Controller Set Up  *
```

Fig. 10

Press the Set Switch repeatedly to select the desired functions. The function is selected as shown in the following sequence.

```
┌→ Tilt/Pan → Zoom/Focus → Aux ─┐
│                                │
└── Pan Action ← Wiper/Defroster ←┘
```
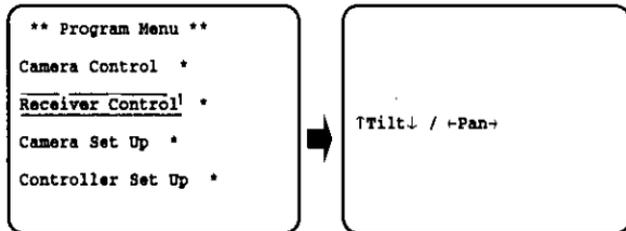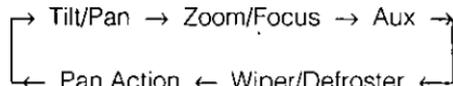
Note : Normally, a WV-RC100 or WV-RC150 Receiver is required to perform the following functions.

4-1. Pan/Tilt Control (Manual Operation)
1. Display the Tilt/Pan Menu as shown in Fig. 11 by repeating the previous procedures.

↑Tilt↓ / ←Pan→
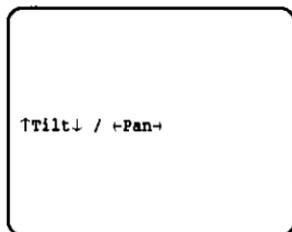
Fig. 11

2. Press the Up (▲) Switch or the Down (▼) Switch to move the Pan/Tilt Head toward up or down. Press the Right (▶) Switch or the Left (◀) Switch to move the Pan/Tilt Head toward right or left. While pressing these switches, the character is inversely displayed on the monitor screen.

3. If the Up (▲) Switch and the Right (▶) Switch are pressed at the same time, the Pan/ Tilt Head moves diagonally towards Up and Right.

4-2. Zoom/Focus Control
1. Display the Zoom/Focus Menu as shown in Fig. 12 by repeating the previous procedures.

Tt Z w↓ / ⊢n F f⊣
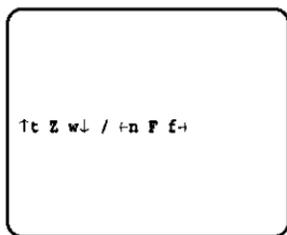
Fig. 12

2. Press the Up (▲) Switch or the Down (▼) Switch to adjust the lens zoom to achieve the desired picture while observing the monitor screen.
Press the Up (▲) Switch to optically bring an object closer, pressing the Down (▼) Switch has the reverse effect.

3. Press the Right (▶) Switch or the Left (◀) Switch to adjust the lens focus to achieve a sharply picture while observing the monitor screen.

4-3. Auxiliary Control
1. Display the Aux Menu as shown in Fig. 13 by repeating the previous procedures.

⊢1:On Aux ⊣2:Off
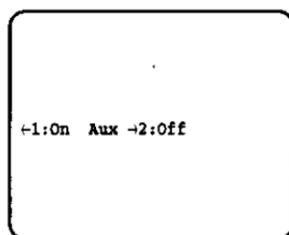
Fig. 13

2. Press the Left (◀) Switch repeatedly to turn on or off the user's auxiliary switch 1 in the Receiver (WV-RC100 or WV-RC150).

3. Press the Right (▶) Switch repeatedly to turn on or off the user's auxiliary switch 2 in the Receiver (WV-RC100 or WV-RC150).

4-4. Wiper / Defroster Control

1. Display the Wip / Def Menu as shown in Fig. 14 by repeating the previous procedures.

┌─────────────────────────┐
│   │
│   │
│ ←Wip:Off,→Def:On   │
│   │
│   │
└─────────────────────────┘
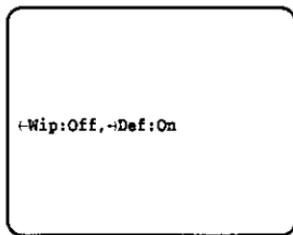
Fig. 14

2. Press the Left (◀) Switch repeatedly to turn on or off the housing wiper.

3. Press the Right (▶) Switch repeatedly to turn on or off the housing defroster.

4-5. Pan Action (Auto/Random Panning)

1. Display the Pan Menu as shown in Fig. 15 by repeating the previous procedures.

┌─────────────────────────┐
│   │
│   │
│ ←Å Pan:Off R→   │
│   │
│   │
└─────────────────────────┘
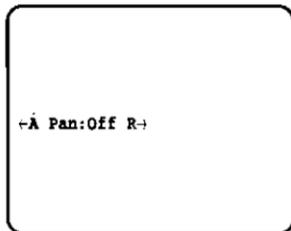
Fig. 15

2. Press the Right (▶) Switch or the Left (◀) Switch repeatedly to select the desired Panning mode off, Auto or Random.

After completing the above settings, press the Program (PROG) Switch to return the previous Program Menu as shown in Fig. 1.
To return to the normal camera picture, press the Program (PROG) Switch again.

5. Camera Set Up

The following functions are only available with the camera that has set up functions such as the Panasonic WV-CP610 or WV-BP510 series camera.

1. Press the Program (PROG) Switch for more than 2 seconds to display the Program Menu.

2. Move the cursor to the "Camera Set Up" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the following display on the monitor screen.



```
** Program Menu **

Camera Control  *

Receiver Control  *

Camera Set Up  *

Controller Set Up  *
```

```
        ** SET UP **
CAMERA ID    [OFF] *
ALC/ELC       ALC  *
SHUTTER       OFF
AGC           ON
SENS UP       OFF
SYNC          INT
WHITE BAL     ATW  *
WIDE D-RANGE  OFF
MOTION DET    OFF
DNR           OFF
  END    SET UP ENABLE
```

Fig. 16

3. Select the desired item by pressing the Up (▲) Switch or the Down (▼) Switch and then select the desired mode by pressing the Right (▶) Switch or the Left (◀) Switch.

Press the Set Switch to execute the selection or entering the sub menu.

Notes:
- Refer to the Operating Instructions of the camera for more details.
- While pressing both the Left (◀) Switch and the Right (▶) Switch, press the Set Switch for a few seconds on the SET UP Menu as shown in Fig.16. At this time all adjustments and selections are being changed to the factory default settings.

6. Controller Set Up

6-1. Entering Controller Setup Menu

1. Press the Program (PROG) Switch for more than 2 seconds to display the Program Menu.

2. Move the cursor to the "Controller Set Up" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the following display on the monitor screen.
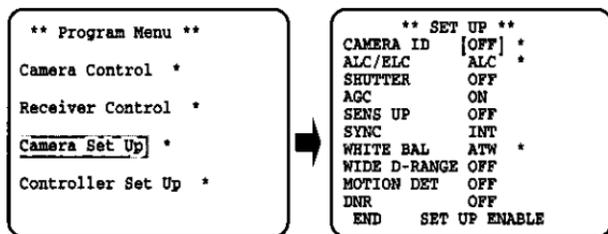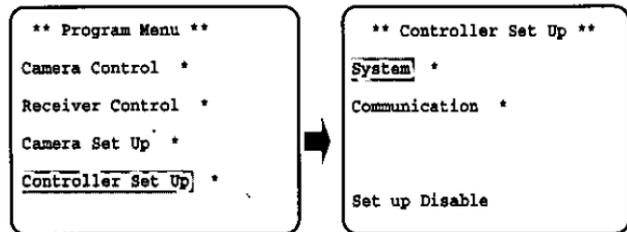

Fig. 17

Note: When Mode Selection Switch is selected at System (SYSTEM) position, Controller Set Up Menu appears by pressing the Program (PROG) Switch for more than 2 seconds.

3. Move the cursor to the "Disable" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch and "Enable" is displayed.

Fig. 18

4. Select the desired item by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to select item where the cursor is positioned.

Press the Program (PROG) Switch to return to the previous Program Menu as shown in Fig. 1.
To return to the normal camera picture, press the Program (PROG) Switch again.

6-2. System Setup

1. Display the Controller Set Up Menu by repeating the previous procedures.


```
** Controller Set Up **

System *

Communication *    .



Set up Enable
```

```
** System **

Title          Off  *
Cable Comp     S
Alarm Time     60 S
Alarm Display  Off



Return
```

Fig. 19

2. Move the cursor to the "System" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the System Menu as shown in Fig. 19.

3. Move the cursor to the desired item by pressing the Up (▲) Switch or the Down (▼) Switch and then select the desired mode by pressing the Right (►) Switch or the Left (◄) Switch.

4. After completing the above settings, move the cursor to the "Return" Position then press the Set Switch to return to the previous Controller Set Up Menu.

5. Press the Program (PROG) Switch to return to the previous Program Menu.
   To return to the normal camera picture, press the Program (PROG) Switch again.

(1) Title Setting

1. Display the System Menu as shown in Fig. 20 by repeating the previous procedures.

```
** System **

Title          Off  *
Cable Comp     S
Alarm Time     60 S
Alarm Display  Off


Return
```
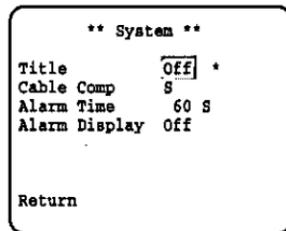
Fig. 20

2. Move the cursor to the "Title" position by pressing the Up (▲) Switch or the Down (▼) Switch, then select either "On" or "Off" mode by pressing the Right (►) Switch or the Left (◄) Switch.

3. When the title needs editing, perform the following steps by using the sub menu of Title.

-23-

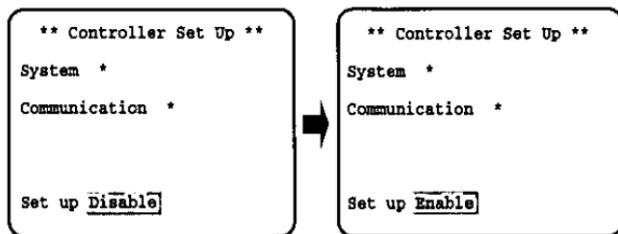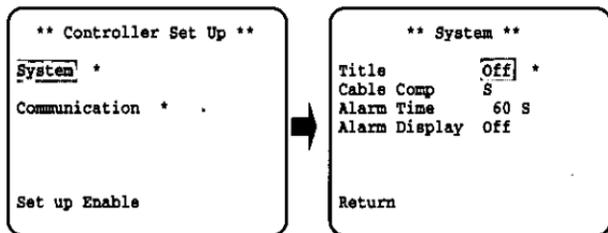4. Move the cursor to the "Title" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the Title Editing Menu as shown in Fig. 21.

Character Cursor — ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789
().,'":;&#!?=
+-*/%$
← → Space
Posi Return Clear
Editing Cursor — [ ] ....

— Character Areas
— Command
— Editing Area

Fig. 21

5. Move the character cursor to the desired letter by pressing the Up (▲) Switch, Down (▼) Switch, Right (►) Switch and Left (◄) Switch, then press the Set Switch.

The selected letter is written to the editing cursor and the editing cursor moves to right automatically.

6. Repeat the above procedure until all character editing is completed.

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789
().,'":;&#!?=
+-*/%$
← → Space
Posi Return Clear
DOOR ....

Fig. 22

7. When the position of the editing cursor is to be shifted in the editing area, move the character cursor to the "←" or "→" by pressing the switches, then press the Set Switch.

This function is used to move the editing position or to correct an individual character.

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789
().,'":;&#!?=
+-*/%$
← → Space
Posi Return Clear
DOOR [ ] ....

Fig. 23

8. When blank space is needed, move the character cursor to the "Space" position by pressing the switches, then press the Set Switch.
The blank space is inserted into the cursor position in the editing area.


```
ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789
().,'":;&#!?=
+-*/%$

← →  Space ←
Posi Return Clear

DOOR ::·········
```

Fig. 24

9. When all characters in the editing area are to be erased, move the character cursor to the "Clear" position by pressing the switches, then press the Set Switch.


```
ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789
().,'":;&#!?=
+-*/%$

← →  Space
Posi Return Clear ←

DOOR ··········
```

Fig. 25

10. After completing the editing title, the title display position on the monitor screen can be set as follow. Move the character cursor to the "Posi" position by pressing the switches, then press the Set Switch to display the title as shown in Fig. 26.
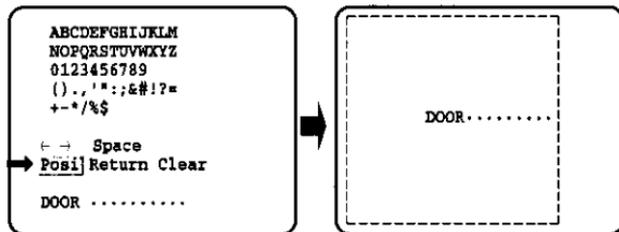


```
ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789
().,'":;&#!?=
+-*/%$

← →  Space
Posi Return Clear

DOOR ··········
```

```
                    DOOR········
```

Fig. 26

-25-

The title display position can be placed anywhere on the screen by pressing the Up (▲) Switch, Down (▼) Switch, Left (◄) Switch and Right (►) Switch.

Notes :

1. The positioning of the title stops at the edges of the monitor screen except the right side of the monitor screen.

2. The title moves faster when the Up (▲) Switch, Down (▼) Switch, Right (►) Switch or Left (◄) Switch is kept pressed.

11. After completing the positioning, press the Set Switch to return to the Title Editing Menu as shown in Fig. 21.

12. Move the Character cursor to the "Return" position by pressing the switches, then press the Set Switch to return to the System Menu.

(2) Cable Compensation Setting

1. Display the System Menu as shown in Fig. 27 by repeating the previous procedures.

```
      ** System **

Title          Off  *
Cable Comp     S]
Alarm Time      60 S
Alarm Display  Off



Return
```
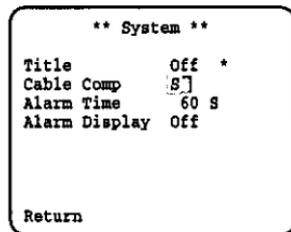
Fig. 27

2. Move the cursor to the "Cable Comp" position by pressing the Up (▲) Switch or the Down (▼) Switch, then select the most suitable cable length as shown below by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

S : Up to 1,300ft (400m)

M : 1,300ft (400m) to 2,300ft (700m)

L : 2,300ft (700m) to 3,000ft (900m)

(When using RG-59U, BELDEN 9259 or equivalent cable)

(3) Alarm Time Setting

1. Display the System Menu as shown in Fig. 27 by repeating the previous procedures.

2. Move the cursor to the "Alarm Time" position by pressing the Up (▲) Switch or the Down (▼) Switch, then select the desired alarm time, 0.5s - 120s, by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

(4) Alarm Display Setting

1. Display the System Menu as shown in Fig. 27 by repeating the previous procedures.

2. Move the cursor to the "Alarm Display" position by pressing the Up (▲) Switch or the Down (▼) Switch, then select either "On" or "Off" mode by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

To return to the Controller Set Up Menu, move the cursor to the "Return" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch.

```
         ** System **

Title          Off   *
Cable Comp     8
Alarm Time     60 S
Alarm Display  Off



Return
```
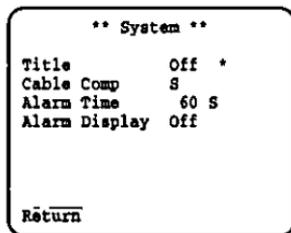
Fig. 28

6-3. Communication Setup

1. Display the Controller Set Up Menu by repeating the previous procedures.

2. Move the cursor to the "Communication" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to display the following display on the monitor screen.

```
** Controller Set Up **

System          *

Communication   *




Set up Enable
```

```
   ** Communication **

Unit Number    [1]
Baud Rate      9600
Data Bit       8
Parity Check   None
Stop Bit       1
Xon/Xoff       Not Use
Wait Time      Off
Delay Time     Off
Alarm Data     Off
Return
```

Fig. 29

3. Move the cursor to the desired item by pressing the Up (▲) Switch or the Down (▼) Switch and then select the desired mode by pressing the Right (►) Switch or the Left (◄) Switch.

4. After completing the above settings, move the cursor to the "Return" position by pressing the Up (▲) Switch or the Down (▼) Switch, then press the Set Switch to return to the previous Controller Set Up Menu.
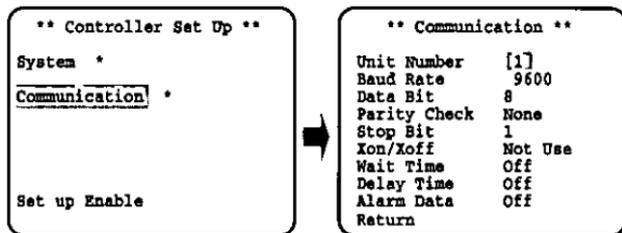
5. Press the Program (PROG) Switch to return to the previous Program Menu.
   To return to the normal camera picture, press the Program (PROG) Switch again.

(1) Unit Number Setting
   1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

```
** Communication **

Unit Number    [1]
Baud Rate      9600
Data Bit       8
Parity Check   None
Stop Bit       1
Xon/Xoff       Not Use
Wait Time      Off
Delay Time     Off
Alarm Data     Off
Return
```
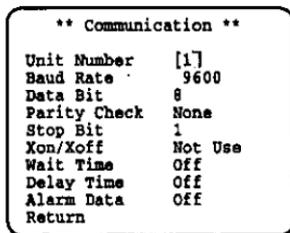
Fig. 30

2. Move the cursor to the "Unit Number" position by pressing the Up (▲) Switch or the Down (▼) Switch, then select the desired unit number, 1-16, by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

(2) Baud Rate Setting
   1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

   2. Move the cursor to the "Baud Rate" position by pressing the Up (▲) Switch or the Down (▼) Switch.
      Select the desired baud rate, 1200 - 19200, by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

(3) Data Bit Setting
   1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

   2. Move the cursor to the "Data Bit" position by pressing the Up (▲) Switch or the Down (▼) Switch.
      Select the desired data bit, 7 or 8, by pressing the Right (►) Switch or the Left (◄) Switch.

(4) Parity Check Setting

1. Display the communication Menu as shown in Fig. 30 by repeating the previous procedures.

2. Move the cursor to the "Parity Check" position by pressing the Up (▲) Switch or the Down (▼) Switch. Select the desired parity check, None, Odd or Even, by pressing the Right (►) Switch or the Left (◄) Switch.

(5) Stop Bit Setting

1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

2. Move the cursor to the "Stop Bit" position by pressing the Up (▲) Switch or the Down (▼) Switch.
Select the desired stop bit, 1 or 2, by pressing the Right (►) Switch or the Left (◄) Switch.

(6) Xon / Xoff

1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

2. Move the cursor to the "Xon / Xoff" position by pressing the Up (▲) Switch or the Down (▼) Switch.

Select desired mode, Not Use or Use, by pressing the Right (►) Switch or the Left (◄) Switch.

(7) Wait Time Setting

1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

2. Move the cursor to the "Wait Time" position by pressing the Up (▲) Switch or the Down (▼) Switch.
Select the desired wait time, Off or 100mS - 1000mS by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

(8) Delay Time Setting

1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

2. Move the cursor to the "Delay Time" position by pressing the Up (▲) Switch or the Down (▼) Switch. Select the desired delay time, Off or 10mS - 100mS, by pressing the Right (►) Switch or the Left (◄) Switch repeatedly.

(9) Alarm Data Setting

This mode is used to select transmitting an alarm data to a personal computer through RS-485, when the controller is activated in alarm mode.

On: (transmitted automatically)
Off: (none transmit)

1. Display the Communication Menu as shown in Fig. 30 by repeating the previous procedures.

2. Move the cursor to the "Alarm Data" position by pressing the Up (▲) Switch or the Down (▼) Switch. Select the desired mode, "On" or "Off", by pressing the Right (►) Switch or the Left (◄) Switch.

To return to the Controller Set Up Menu, move the cursor to the "Return" position by pressing the Up (▲) Switch or the Down (▼) Switch then press the Set Switch.

7. Alarm Control

(1) Alarm Operation

When this unit receives an alarm from the camera, such as Panasonic WV-CP610 is activated at motion detect mode, or camera site receiver WV-RC100 or WV-RC150, the Alarm Indicator blinks. The indicator keeps blinking and "Alarm" is displayed on the monitor screen.

ALARM
RESET
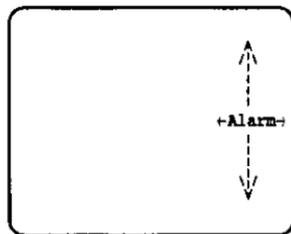
Note :

- "Alarm" display position can be placed at upper or lower right side of the monitor screen. Refer to the Title Setting on page 23 for setup method.
- It is available to choose the "Alarm" display mode on the monitor screen. Refer to the Alarm Display Setting on page 27 for setup method.

(2) To Cancel Alarm

Press the Alarm Reset (ALARM RESET) Switch for alarm reset. The indicator light turns off and "Alarm" display on the monitor screen disappears.

8. All Reset

It is possible to undo all the changes the end user made to return to the factory settings without having to go through each individual menu.

This feature is called the ALL RESET operation and is accomplished as follows :

1. Ensure that the Program Menu is not displayed. (a normal camera picture is displayed).

2. While pressing both the Left (◄) Switch and the Right (►) Switch, press the Set Switch for more than 2 seconds. The "All Reset" display appears momentarily on the monitor screen. At this time all adjustments and selections are being changed to the factory default settings.
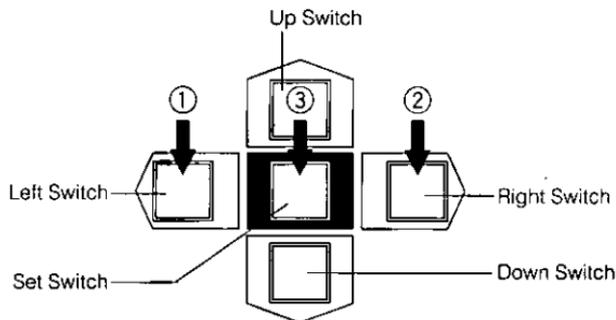
Note: When the ALL RESET mode is being performed, the picture may be disturbed momentarily.

This is normal and is not indicative of a problem.

SPECIFICATIONS

Power Source :	DC12V (DC 10.8V - 16.0V), 230mA
Camera Input :	Composite Video Signal: 1.0Vp-p / 75Ω
	VD2 Output Signal: 2.5Vp-p / 75Ω
	Data Signal: 0.5Vp-p / 75Ω
Video Output :	Composite Video Signal: 1.0Vp-p / 75Ω
	VD2 Input Signal: more than 1.5Vp-p / 75Ω
	(Mode Selection Switch is set at SYSTEM)
	Data Signal: 0.5Vp-p / 75Ω
	(Mode Selection Switch is set at SYSTEM)
Alarm Output :	Open collector output : 16V DC, 100mA max.
Alarm Reset Output :	Pulse (VTR) : +5V DC 500msec. or
	Open collector output : 16V DC, 100mA max.
Data Input / Output :	RS-485
Remote Control Functions	
Camera Set Up :	For Panasonic WV-CP610 or WV-BP510 series camera
Camera Functions :	Electronic Sensitivity Up Mode Select : Auto / Manual / Off
	Electronic Shutter : On / Off, Shutter Speed Select
	Back Light Compensation : Auto / Preset/Off
	Automatic Gain Control : On / Off
	White Balance : ATW / AWC
Lens Functions :	Iris : Open / Close / Preset
	Focus : Near / Far
	Zoom : Tele / Wide
Housing :	Wiper : On / Off, Defroster : On / Off
Pan / Tilt :	Manual Pan : Right / Left, Manual Tilt : Up / Down
	Auto Pan : On / Off, Random Pan : On / Off
Auxiliary Switch :	Aux 1-2 : On / Off

Ambient Operating Temperature : 14°F - 140°F (−10°C - +60°C)
Ambient Operating Humidity : Less than 90%
Dimensions : 5-7/16" (W) x 7-5/16" (D) x 2"(H)
138 (W) x 185 (D) x 51 (H) mm
Weight : 1.8 lbs. (0.8 kg)

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

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Division of Matsushita Electric Corporation of America

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