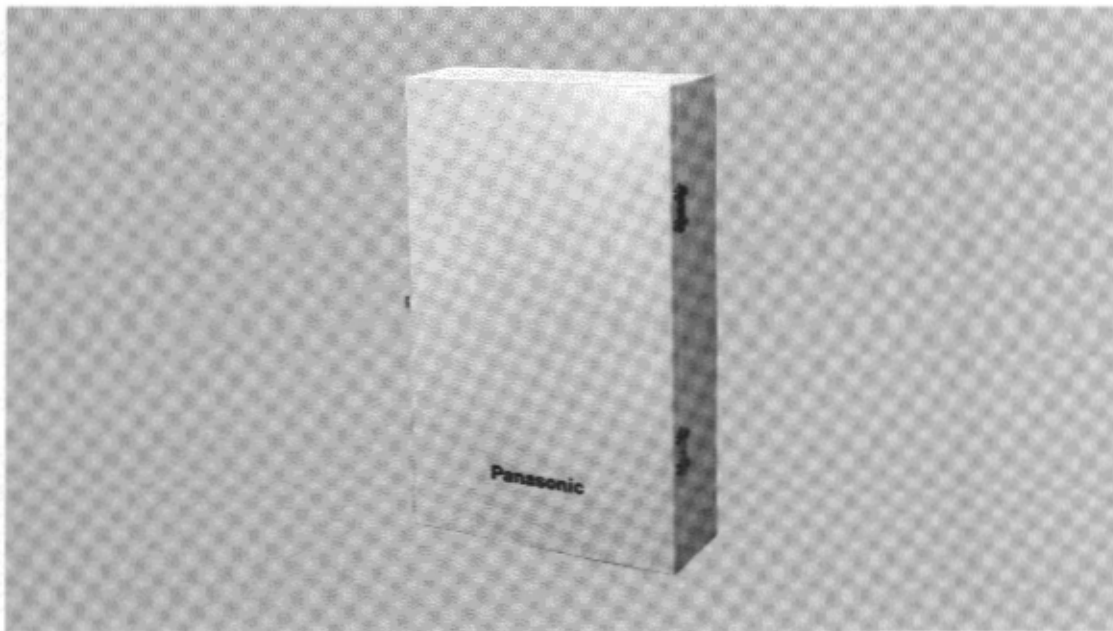


# Operating Instructions & Installation Manual

Indoor Receiver  
WV-RC100





**Panasonic®**

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

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	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p><b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



SA 1965

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



SA 1966

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For U.S.A.

**Warning:**

This equipment generates and uses radio frequency energy and if not installed and used properly, i.e., in strict accordance with the instruction manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

For CANADA

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

The serial number of this product may be found on the side 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. WV-RC100

Serial No. \_\_\_\_\_

**WARNING:**

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

## **PREFACE**

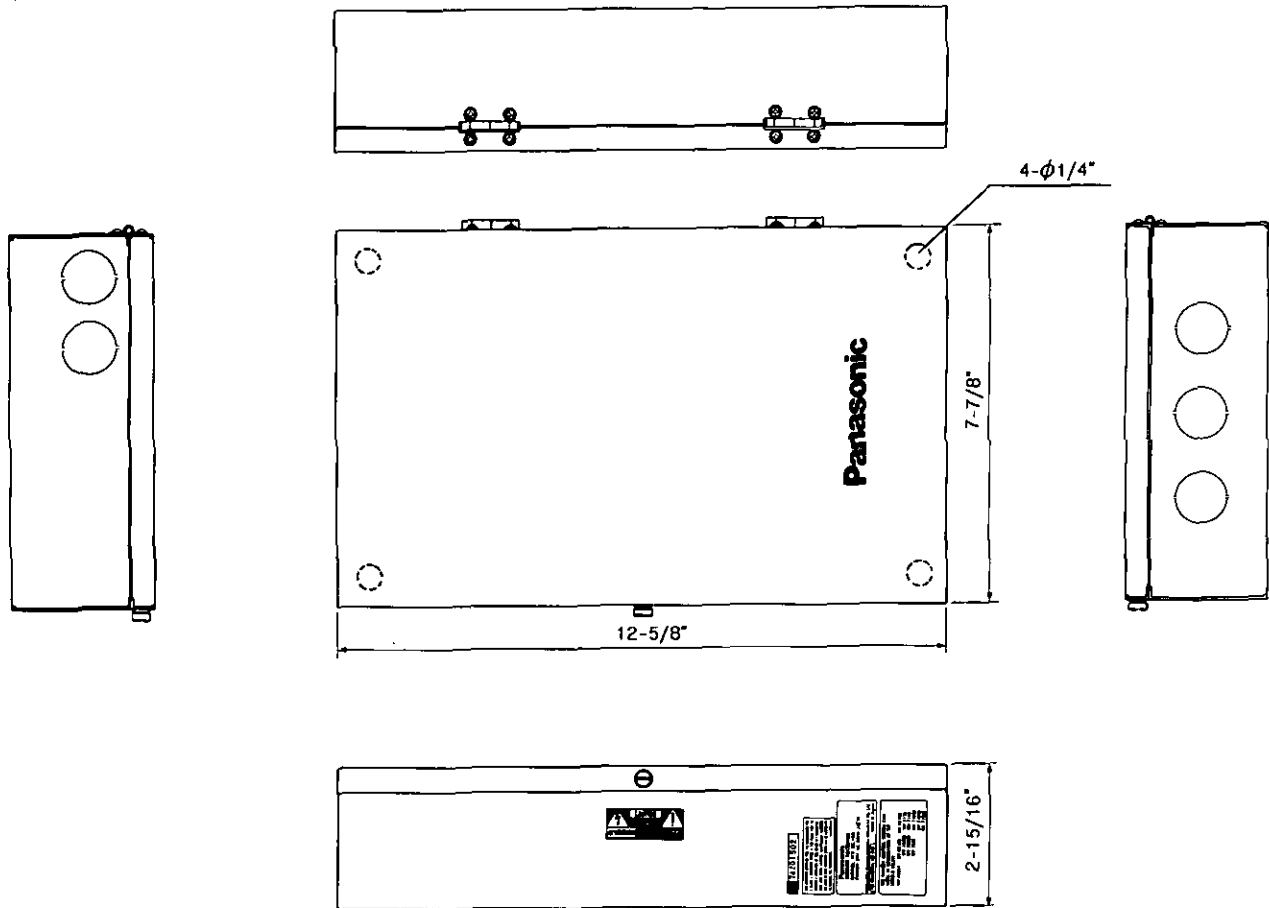
The Indoor Receiver, WV-RC100, is designed for a relay unit to be stationed in between the operator room and the camera site. WV-RC100 controls the powers or functions of the camera site, such as Pan-Tilt Head, Camera Housing and Cameras, and is remotely operated by the System Controller WV-CU254. The control data from WV-CU254 is multiplexed on the video signal so that the complicated wiring will not be necessary.

The optional Audio Board enable to make a bi-directional audio signal transmission to expand the system capability.

## **FEATURES**

1. Since the control data is multiplexed on the video signal, only single coaxial cable can be connected between the Receiver and the System Controller.
2. The movement of the random panning is controlled by this Receiver with a specified Pan/Tilt Head.
3. Lens control voltage can be adjusted for a variety of lenses.
4. Built-in two Aux terminals for external equipment.
5. The bi-directional audio signal transmission will be available using an optional Audio Board.

# APPEARANCE



## SPECIFICATIONS

Power Source :	24V AC $\pm 10\%$ 60Hz
Input Signal	
Camera Input :	1Vp-p/75 $\Omega$ (Multiplexed video signal) (BNC)
Mic Input :	600 $\Omega$ Balanced, -78dBV (with WV-PB10) (1/4" phone jack) (possible to use 600 $\Omega$ Unbalanced)
Output Signal	
Video Output :	1Vp-p/75 $\Omega$ (Multiplexed video signal) (BNC)
Audio Output :	-10dBV, 10k $\Omega$ Minimum Load Impedance (with WV-PB10)
Speaker Output :	8 $\Omega$ , 1W Max.
Control Terminal	
Aux-1 :	125V AC, 3.5A (COS $\phi=0.4$ )
Aux-2 :	125V AC, 3.5A (COS $\phi=0.4$ )
Lens Voltage Supply :	6V DC or 12V DC switchable (Fine adjustable)
Ambient operating temperature :	14°F - +122°F (-10°C - +50°C)
Dimension :	2-15/16"(H) x 7-7/8"(W) x 12-5/8"(D) 75(H) x 200(W) x 320(D) mm
Weight :	10.5lbs (4.7kg)

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

## STANDARD ACCESSORIES

14 pin connector (MX5557P14) .....	1pc
12 pin connector (MX5557P12) .....	1pc
Cable Clamp .....	1pc
Rubber Bushing .....	3 pcs

## MAJOR OPTIONAL ACCESSORIES

Audio Board .....	WV-PB10 for WV-RC150 WV-PB11 for WV-RC100
Pre-wired Cable .....	WV-CA50, WV-CA51
System controller .....	WV-CU254
Pan/Tilt Head .....	WV-7225
AV Demodulator .....	WJ-DA450
Camera .....	WV-BL604 WV-CL704

### **CAUTION**

**THE ALL NECESSARY WIRINGS, CONNECTIONS AND ADJUSTMENTS WITH REGARD TO INSTALL THIS PRODUCT MUST BE MADE BY QUALIFIED SERVICE PERSONNEL OR SYSTEM INSTALLER.**

**ONLY THOSE QUALIFIED SERVICE APERSONNEL OR SYSTEM INSTALLER WILL BE ALLOWED TO FOLLOW "INSTRUCTIONS FOR INSTALLATION" FROM NEXT PAGE.**

# INSTRUCTIONS FOR INSTALLATION

For qualified service personnel or system installer only

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EXPLANATION OF FUNCTIONAL FEATUARES .....	8
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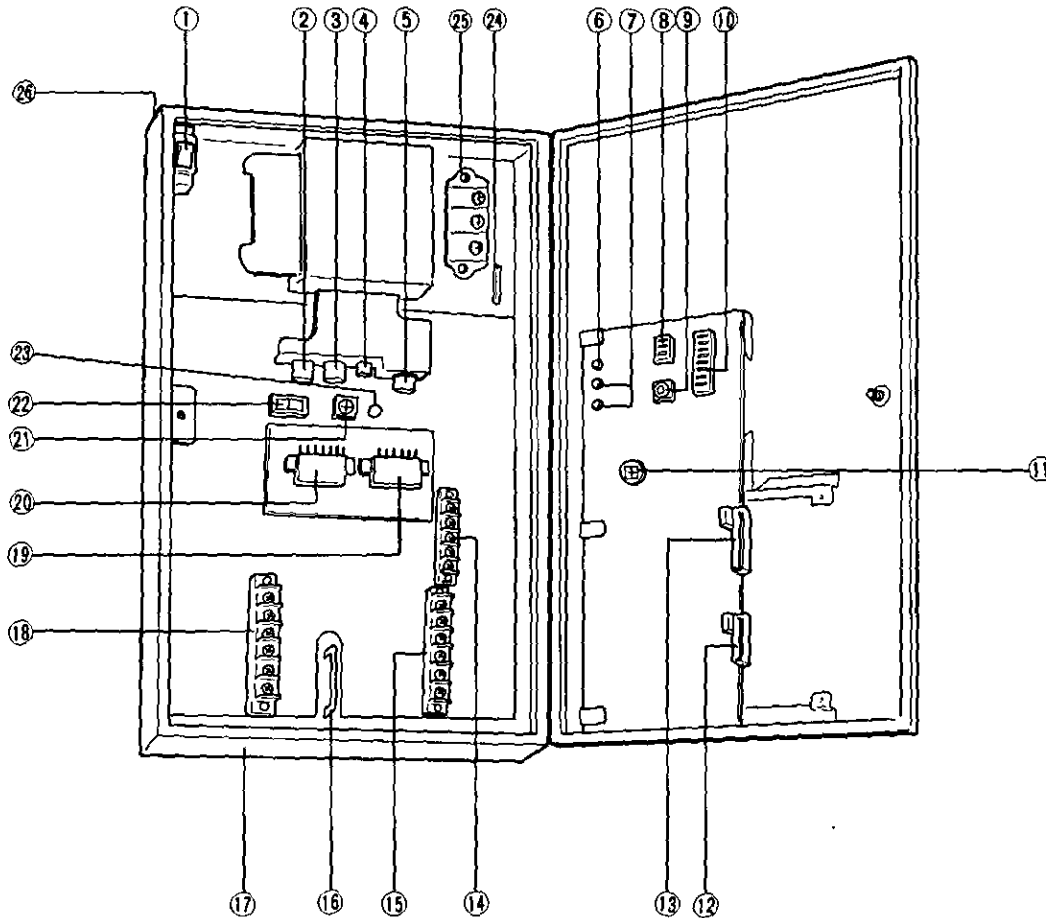
## PRECAUTIONS

1. The recommended camera which is used with the Receiver is either WV-BL600 series or WV-CL700 series. Also, the other Panasonic 24V AC camera will be able to use in this receiver. Quote the qualified personnel for selection of the camera.
2. This unit should be operated under the temperature of 14°F - +122°F (-10°C - +50°C) and the humidity of 95% or less.
3. WV-RC100 is an indoor type so that do not expose this appliance to rain or moisture.
4. Read carefully the electrical specifications when the optional product is connected with this unit.
5. Both WV-CA50 and WV-CA51 cables can be used with WV-RC100. However, WV-CA50 should be used with WV-7230D, and WV-CA51 should be used with WV-7225/WV-7220D.

## CAUTION:

- (1) To prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for 24V AC Power Terminal.

# MAJOR OPERATING CONTROLS, TERMINALS AND THEIR FUNCTIONS



**1. Power ON/OFF Switch**

When this switch is depressed, the unit is turned on and the Power Indicator LED (6) lights.

Be sure to turn this switch off when connecting the AC power cord to the 24V AC Power Terminal (25) or any other wiring with this unit.

**2. Camera Input Connector (CAMERA)**

The video signal from a camera site will be connected here.

**3. Video Output Connector. (CONTROLLER)**

The multiplexed video signal is supplied from this output to the camera input of the System Controller (WV-CU254).

**4. Audio Output Connector (AUDIO OUT)-(RCA connector)**

An optional audio amplifier can be connected to this connector when the optional Audio Board (WV-PB10) is installed in the Receiver.

**5. Mic. Input Connector (MIC)-(1/4" phone jack)**

A 600Ω balanced type (possible to use 600Ω unbalanced type) microphone can be connected to this connector to pick up the sound of the camera site. This sound will be transmitted to the System Controller WV-CU254.

An optional Audio Board is necessary for both WV-RC150 and WV-CU254. WV-PB10 for WV-RC150, WV-PB11 for WV-CU254.

6. **Power Indicator LED (LED-3/POWER)**  
When the Power ON/OFF Switch (1) turns ON, this LED lights up (red color).
  7. **Data Indicator LED (LED-1, -2/CHECK)**  
These indicators (amber, green) blink while the Receiver is receiving and transmitting the data. Also it blinks when the System Test Switch (9) is pressed.
  8. **Mode Switch (SW2)**  
This switch is a slide type switch. Three functions are included in this switch such as Aux1, Aux2 and Random Pan mode. See the details of the operation on page 10.
  9. **System Test Switch (SW3)**  
This switch is a push type switch. When this switch is pressed, every optional product which is connected with the Receiver will be tested its operation whether it is worked properly. This switch will be used also for the time setting of the Random Panning operation. See the details of the operation on page 11.
  10. **Active/Non Active Switch (SW1)**  
This switch is a slide type switch. Six functions are included in this switch such as Aux1, Aux2, Auto Pan, Camera AC, Reserved 1, -2. See the details of the operation on page 10.
  11. **Random Panning Control Volume (VR201)**  
This Control Volume adjusts the time of movement of the Random Panning unit and is related to the Random Pan mode of the Mode Switch (8). See the details of the operation on page 10.
  12. **10 pin Connector of the Audio Board (CN12)**  
The optional Audio Board (WV-PB10) will be installed in CN11 and CN12 for the audio transmission. See the WV-PB10 Operating Instructions for details.
  13. **12 pin connector of the Audio board (CN11)**  
The optional Audio Board (WV-PB10) will be installed in CN12 and CN11 for the audio transmission. See the WV-PB10 Operating Instructions for details.
  14. **Speaker Terminal (5 pin)**  
The speaker cable from the optional speaker (8Ω) will be connected to this terminal.  
An optional Audio Board (WV-PB10) should be installed when a speaker is used.  
See the details of the connection on page 11.
  15. **Aux-2 Terminal (6 pin)**  
There is a dual switching circuit on this terminal. See the details of the connection on page 12.
  16. **Cable Clamping Angle**  
All cables should be clamped by the Cable Clamp (supplied) at this angle or another angle (24).
  17. **Bottom Plate**  
The proper hole should be made in order to pass the cables into the Receiver from optional products. There are same type of holes on the Top Plate (26).
  18. **Aux-1 Terminal (6 pin)**  
There is a dual switching circuit on this terminal. See the details of the connection on page 12.
  19. **Prewired Cable Connector (12 pin)**  
The 12 pin connector of the prewired cable WV-CA50/WV-CA51 from Pan/Tilt Head or Camera Housing will be connected to this connector.
  20. **Prewired Cable Connector (14 pin)**  
The 14 pin connector of the prewired cable WV-CA50/WV-CA51 from Pan/Tilt Head or Camera Housing will be connected to this connector.
  21. **Lens Voltage Fine Control (VR301)**  
This is a fine adjustment of the voltage to be supplied to the power zoom lens. See details of the operation on page 12.
  22. **Lens Voltage Selection Switch (SW301)**  
This is a coarse setting switch of the voltage to be supplied to the power zoom lens. See details of the operation on page 12.
  23. **Test Point**  
Use this test point for the fine adjustment of the lens supply voltage.
  24. **Cable Clamping Angle**  
All cables should be clamped by the Cable Clamp (supplied) at this angle or another angle (16).
  25. **24V AC Power Terminal (L  $\frac{\perp}{\perp}$  N)**  
Connect 24V AC power cord (local procurement) with this terminal.  
L : Live, N : Neutral,  $\frac{\perp}{\perp}$  : Earth
- CAUTION:**  
CONNECT TO 24V AC CLASS 2 SUPPLY ONLY.
- Caution:**  
To Prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for AC 24V Input Terminal.
26. **Top Plate**  
The proper hole should be made in order to pass the cable into the Receiver from outside products. There are same type of holes on the Bottom Plate (17).



# EXPLANATION OF FUNCTIONAL FEATURES

The Indoor Receiver, WV-RC100, is composed of several blocks of the functions. The followings is the explanation of each block for further understanding with the Indoor Receiver.

## A. Power Control Function

### 1. 24V AC line control

The following products can be controlled with 24V AC supply.

- Camera
- Pan-Tilt Head (up, down, right, left, auto pan, random pan)

### 2. Lens voltage control

The following items will be controlled with DC voltage supply.

- Iris
- Focus
- Zoom

Adjustable from 2V DC to 15V DC

#### Remarks :

The above powers are supplied through the prewired cable WV-CA51 from WV-RC100.

### 3. Aux terminal control

- The Aux-1, -2 have the power capacity of 3.5A, 125V AC,  $\cos\phi = 0.4$  each. The rush current should be considered when the external product is connected with.

## B. Data Transfer Function

### 1. Multiplexed video transmission

Only single coaxial cable is necessary between the Video Output connector (3) of WV-RC100 and the Camera Input of the System Controller WV-CU254 due to multiplexed data transmission system.

### 2. Internal Dummy Sync Function

Even if no video signal is supplied to WV-RC100, the control data will be transmitted between WV-CU254 and WV-RC100 using a internal Dummy Sync.

## C. Video Signal Function

The control data is multiplexed on the video signal to perform bi-directional data transmission.

## D. Audio Signal Function

When the Audio Board (WV-PB11 for WV-CU254 and WV-PB10 for WV-RC100) is installed in both WV-CU254 and WV-RC100, the following functions will be made.

1. The sound picked up by the external microphone of WV-CU254 can be heard at the camera site by connecting the external speaker with WV-RC100.
2. The sound picked up by the external microphone of WV-RC100 will be transmitted to WV-CU254.
3. WV-RC100 has an Audio Output Connector (4) to hook up an external amplifier for bigger sound.
4. An external speaker (Max. 1W) can be connected to the Speaker Terminal (14).

## E. Other Useful Functions

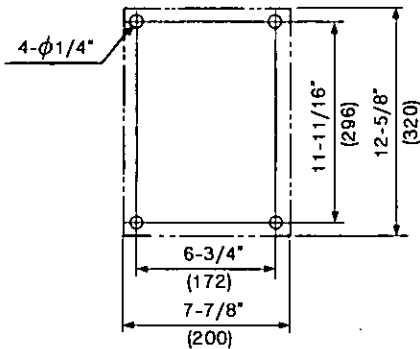
1. Two kinds of the random operation mode for the Pan/Tilt Head can be selected.  
Mode-1 : This mode operates like an intermittent auto panning movement.  
Mode-2 : This is a random panning which is almost impossible to predict a movement of the Panning Head.  
Refer to item-B of OPERATION on page 10.
2. The setting up of the status for the optional accessories can be displayed on the monitor through WV-CU254.  
Refer to item-A of OPERATION on page 10.
3. Automatic testing for the optional accessories will be performed by simply pressing a System Test Switch (9)-(SW3).  
Refer to item-C of OPERATION on page 11.
4. The mode of the relay for auxiliary switching circuit can be set up either a Latch mode or Momentary mode by the Mode Switch (SW2)-(8).  
Refer to item-B of OPERATION on page 10.
5. The supply voltage for the power zoom lens can be adjusted.  
Refer to item-F of OPERATION on page 12.

# INSTALLATION

## 1. Installation of the Receiver

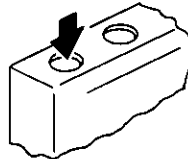
### Caution :

- WV-RC100 is designed for indoor use. Avoid mounting it outdoors under the eaves or in areas of rain or moisture.
  - Never install it up-side down.
  - It is recommended to install WV-RC100 close to the Pan-Tilt Head.
  - To prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for 24V AC Power Terminal (25).
- (1) Drill four holes for mounting the bolts onto the mounting surface referring the following measurements.

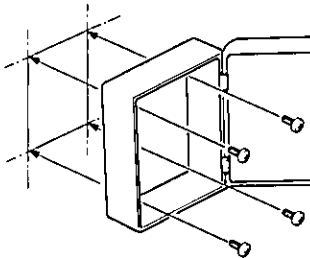


- (2) Push out the desired holes on the Top Plate (26) or the Bottom Plate (17).

Push with tool



- (3) Mount the Receiver with four mounting bolts. (To be local procurement)



- (4) Make a necessary wiring with terminals through the hole of the Top Plate (26) or the Bottom Plate (17).

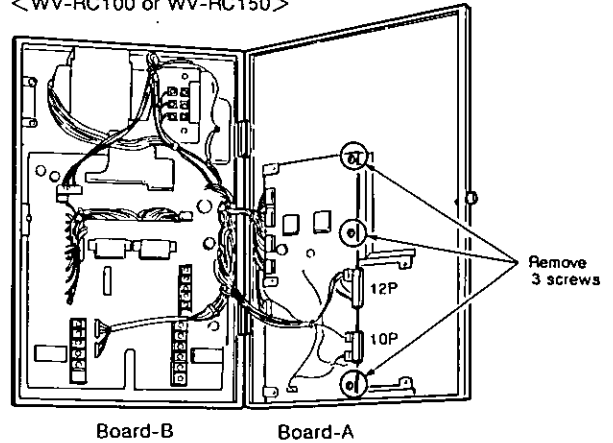
### Notes :

- (1) When the prewired cable WV-CA50 or WV-CA51 is used, pass the 8 pin/10 pin connectors of WV-CA50 or 6 pin/10 pin connectors of WV-CA51 through wiring hole from inside to outside of WV-RC100. After this, insert the rubber bushing of cable into the wiring hole. (No necessary to use the rubber bushing of accessories when using a prewired cable.)
  - (2) When the local procurement cable is used, use the rubber bushing of accessories into the wiring hole.
- (5) Be sure to secure all cables to the Cable Clamping Angle (16) or (24) with a Cable Clamp (provided). If the hole on the Top Plate (26) is used, use the Cable Clamping Angle of (24). And if the hole on the Bottom Plate is used, use the Cable Clamp Angle of (16).

## 2. Installation of the Audio Board (WV-PB10)

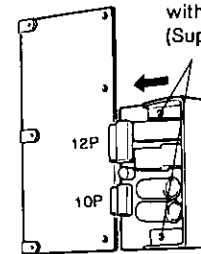
- (1) Turn off the power of the Receiver.
- (2) Remove three screws of the circuit board-A. (See Fig. 1.)
- (3) Insert the connectors of WV-PB10 into the connectors on the circuit board-A. (See Fig. 2.)
- (4) Fix the circuit board-A with WV-PB10 back on the chassis with three screws.
- (5) Fix WV-PB10 with two screws. (See Fig. 2.)

<WV-RC100 or WV-RC150>



(Fig. 1)

Board-A  
Fix WV-PB10 with screws (Supplied)



WV-PB10

(Fig. 2)

### Caution :

The electrical parts on the back of the circuit board should not touch the chassis when re-install the circuit board.

## 3. Installation of the prewired cable WV-CA50 /WV-CA51

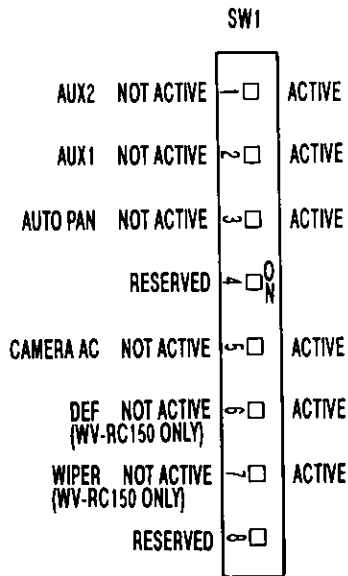
- (1) Connect the BNC connector of WV-CA50/WV-CA51 to the Camera Input Connector (2) of WV-RC100.
- (2) Connect the prewired connectors, 12-pin and 14-pin, of WV-CA50/WV-CA51 to the Prewired Cable Connectors (19), (20) of WV-RC100.

# OPERATIONS

## A. Active/Non-Active Switch (SW1)-(10)

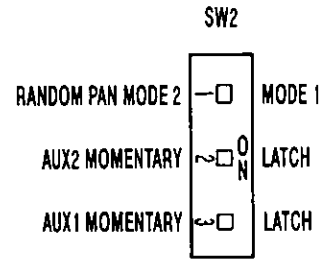
There are eight individual switches in SW1 and is corresponding to each input function. In case that any of these switches is turned to ACTIVE position, its function will become active status. On the contrary, when the switch is turned to NOT ACTIVE position, its function will not work even if the product is hooked up with WV-RC100. The switch number 4,6,7 and 8 are not used for WV-RC100. These status will be displayed on the monitor TV through WV-CU254.

- Switch 1 (AUX2):  
For the product of Aux-2
- Switch 2 (AUX1):  
For the product of Aux-1
- Switch 3 (AUTO PAN):  
For the Panning Head which has an Auto Pan function.
- Switch 4 (RESERVED):  
This switch is for the future function and should be in the off position all the time.
- Switch 5 (CAMERA AC):  
For the power supply for the 24V AC camera.
- Switch 6 (DEF):  
For WV-RC150 only. No use for WV-RC100. Should be in NOT ACTIVE position.
- Switch 7 (WIPE):  
For V-RC150 only. No use for WV-RC100. Should be in NOT ACTIVE position.
- Switch 8 (RESERVED):  
This switch is for the future function and should be in the off position all the time.



## B. Mode Switch (SW2)-(8)

There are three individual switches in SW2 and is correspond to each input function. The SW2 is a switch for selecting the mode of the function.



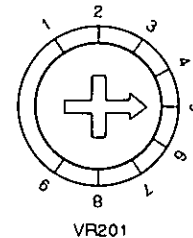
### 1. Switch 1 (RANDOM PAN/MODE2 - MODE1)

For the selection of MODE1 or MODE2 of the Random Panning function.

#### (1) MODE1

- This mode operates like an intermittent auto panning movement.
- Turn the Power ON/OFF switch (1) on while pressing the System Test Switch (9). The panning head moves to right (or left) for a pre-adjusted time. Then it stops. And it starts to move again to reverse direction. The time of the movement can be adjusted by the Random Panning Control Volume (VR201)-(11).
- For the reference of the adjustment of the Random Panning Control Volume VR201, see the table below. WV-7220D and WV-7225 are used for the reference of Panning Head.

Position of Arrow	The rough calculation of the panning angle	The rough calculation of the panning time (Approximate)
1	35°	5 sec
2	35° or 70°	5 or 10 sec
3	70° or 100°	10 or 15 sec
4	135° or 170°	20 or 25 sec
5	200° or 235°	30 or 35 sec
6	270° or 300°	40 or 45 sec
7	Up to maximum panning angle of the Panning Head.	50 or 55 sec
8		55 or 60 or 65 sec
9		65 or 70 sec



Random Panning Control Volume (VR201)

#### Note :

No numbers along the VR201 on the actual circuit board.

When the setting up of the panning angle or the panning time of above table exceeds the pre-set limitation than that of WV-7220D/WV-7225, the Panning Head will turn back from the Pan Limit Stops of WV-7220D/WV-7225.

Refer to the Operating Instructions of WV-7220D/WV-7225 for the adjustment of the Pan Limit Stops.

- Adjust the panning angle or the panning time longer than that of the angle or time between two Pan Limit Stops of WV-7220D/WV-7225.
- The stopping time of the Panning Head is double as moving time. That is, if Panning Head moves for 5 sec, it stops for 10 sec.

## (2) MODE2

- This is a random panning which is almost impossible to predict a movement of the Panning Head.
- Turn the Power ON/OFF Switch (1) on while pressing the System Test Switch (9).
- Adjust the Random Panning Control Volume (VR201)-(11) in order to pan the Panning Head just slightly wider than the angle of the Pan Limit Stops of WV-7220D/WV-7225.

## 2. Switch 2 (AUX2/MOMENTARY - LATCH)

The mode of AUX2 relay can be switched either a MOMENTARY mode or a LATCH mode.

MOMENTARY mode :

The Relay of AUX2 makes on while Auxiliary Switch (19) of WV-CU254 is pressing.

LATCH mode :

The relay of AUX2 keeps on when Auxiliary Switch (19) of WV-CU254 is pressed.

## 3. Switch 3 (AUX1/MOMENTARY - LATCH)

The mode of AUX1 relay can be switched either a MOMENTARY mode or a LATCH mode.

MOMENTARY mode :

The relay of AUX1 makes on while Auxiliary Switch (19) of WV-CU254 is pressing.

LATCH mode :

The relay of AUX1 keeps on when Auxiliary Switch (19) of WV-CU254 is pressed.

## C. System Test Switch (SW3)-(9)

When this switch is pressed, the optional accessories which are connected with the Receiver will be operated for a short time automatically in order to make sure of they function properly.

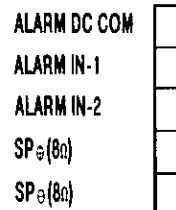
The following items will be tested in order.

- (1) Pan/Tilt Head
  - To Left for 5 sec then stops for 2 sec.
  - ↓
  - To Right for 5 sec then stops for 2 sec.
  - ↓
  - To Up for 5 sec then stops for 2 sec.
  - ↓
  - To Down for 5 sec then stops for 2 sec.
  - ↓
  - Auto Pan for 5 sec then stops.
  - ↓
- (2) The power of the camera shuts off for 5 sec then turn on again.
  - ↓
  - After 12 sec
  - ↓
- (3) Iris (Motor driven manual iris only)
  - Open (+) for 5 sec then stops for 2 sec.
  - ↓
  - Close (-) for 5 sec then stops.
  - ↓
- (4) Focus (Motor driven manual focus only)
  - FAR (-) for 5 sec then stops for 2 sec.
  - ↓
  - Near (+) for 5 sec then stops.
  - ↓
- (5) Zoom (Motorized power zoom only)
  - Tele (+) for 5 sec then stops for 2 sec.
  - ↓
  - Wide (-) for 5 sec then stops.
  - ↓
- (6) Aux-1 relay makes for 5 sec then breaks.
- ↓
- (7) After 2 sec, Aux-2 relay makes for 5 sec then breaks.
- ↓
- (8) Returns to the normal operation mode.

### Note :

1. Above times are approximate.
2. The marked (+), (-) means a polarity of DC supply voltage.
3. When the System Test Switch (9) is pressed during the system testing, the testing will stop and keep its condition.  
Press switch again to start the testing again from that condition.

## D. Speaker Terminal (5 pin)-(14)



- SP ⊕ (8Ω), SP ⊖ (8Ω)

In case that an optional Audio Board (WV-PB10) is installed in WV-RC100, hook up the speaker (8Ω) to this terminal. The Hot of the speaker line should be connected to SP ⊕ (8Ω).

The voice from the System Controller WV-CU254 will be transmitted to the speaker.

### Note :

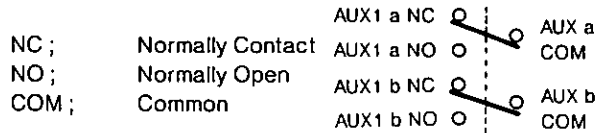
1. ALARM DC COM, ALARM IN-1, ALARM IN-2  
These terminal are for the future functions. It is of no use at this moment.
2. An optional Audio Board (WV-PB11) should be installed in WV-CU254.

### E. AUX Terminal (6 pin)-(15), (18)



The AUX1 is composed of dual switching circuit such as AUX1 a, AUX1 b. (Same as AUX2)

The circuit diagram of AUX1 is shown below. (Same as AUX2)



The electric capacity of each contact, such as AUX1 a, is 3.5A, 125V AC at a load of  $\cos\phi=0.4$ . (Same as AUX1 b) AUX1 or AUX2 has a choice of mode with relay operation. Refer to E-4 of FUNCTIONAL FEATURES on page 8.

Either Latch mode or Momentary mode of operation will be available.

For example, a Lighting kit for the camera, Buzzer, Door-Lock etc. may be connected with this auxiliary terminals.

**Note :**

- The AUX relay will be damaged if the rush current exceeds the specifications of the relay.
- The specifications of the contact of this relay is,
  - 3.5A, 125V AC at  $\cos\phi=0.4$
  - 1/10 HP, 125V AC

### F. Supply of the power for the Power Zoom Lens

There are a coarse setting and a fine adjustment for the supply of the lens voltage.

**1. Coarse Setting :**

When the Lens Voltage Selection Switch (SW301)-(22) is turned to left, the center voltage will be 6V DC. And when this switch is turned to right, the center voltage will be 12V DC. Select either 6V DC or 12V DC according to the lens.

**2. Fine Adjustment :**

Use the Lens Voltage Fine Control (VR301)-(21) for fine adjustment of the voltage.  
 6V DC can be adjusted from 2V DC up to 9V DC.  
 12V DC can be adjusted from 8V DC up to 15V DC.

**Note :**

Observe the Test Point (23) when adjusting the Lens Voltage Fine Control (VR301)-(21).

**Caution :**

- The Lens Voltage has been set at 6V DC at factory.
- The reference voltage and current to the lens.
  - In case of 6V lens, the total current should be less than 180 mA.
  - In case of 12V lens, the total current should be less than 330 mA.
- See the Service Manual of WV-RC100 for the procedure of the adjustment.

### G. Pre-Wired Connector (12 pin, 14 pin)-(19), (20)

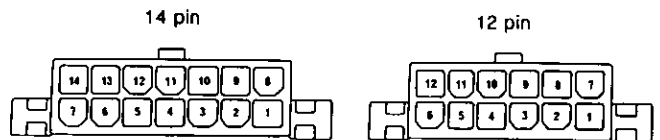
These connectors are used for the connection of the pre-assembled cable, WV-CA50/WV-CA51.

WV-CA50/WV-CA51 is a multi-conductors cable which is connected between WV-RC100 and the Outdoor Pan-Tilt Head or the Outdoor Camera Housing.

The control signals and the powers for the Pan-Tilt Head and the Camera Housing are transmitted over this cable.

The pin configuration is shown below.

(14 pin connector)		(12 pin connector)	
NBR	Contents	NBR	Contents
1	(N. C.)	1	(N. C.)
2	AC common	2	(N. C.)
3	AC common	3	(N. C.)
4	AC common	4	GND
5	(N. C.)	5	GND
6	(N. C.)	6	Lens DC common
7	(N. C.)	7	(N. C.)
8	(N. C.)	8	(N. C.)
9	Pan Left	9	Lenz Zoom
10	Pan Right	10	Lenz Focus
11	Tilt Up	11	Lenz Iris
12	Tilt Down	12	(N. C.)
13	Pan Auto		
14	Camera 24V AC		



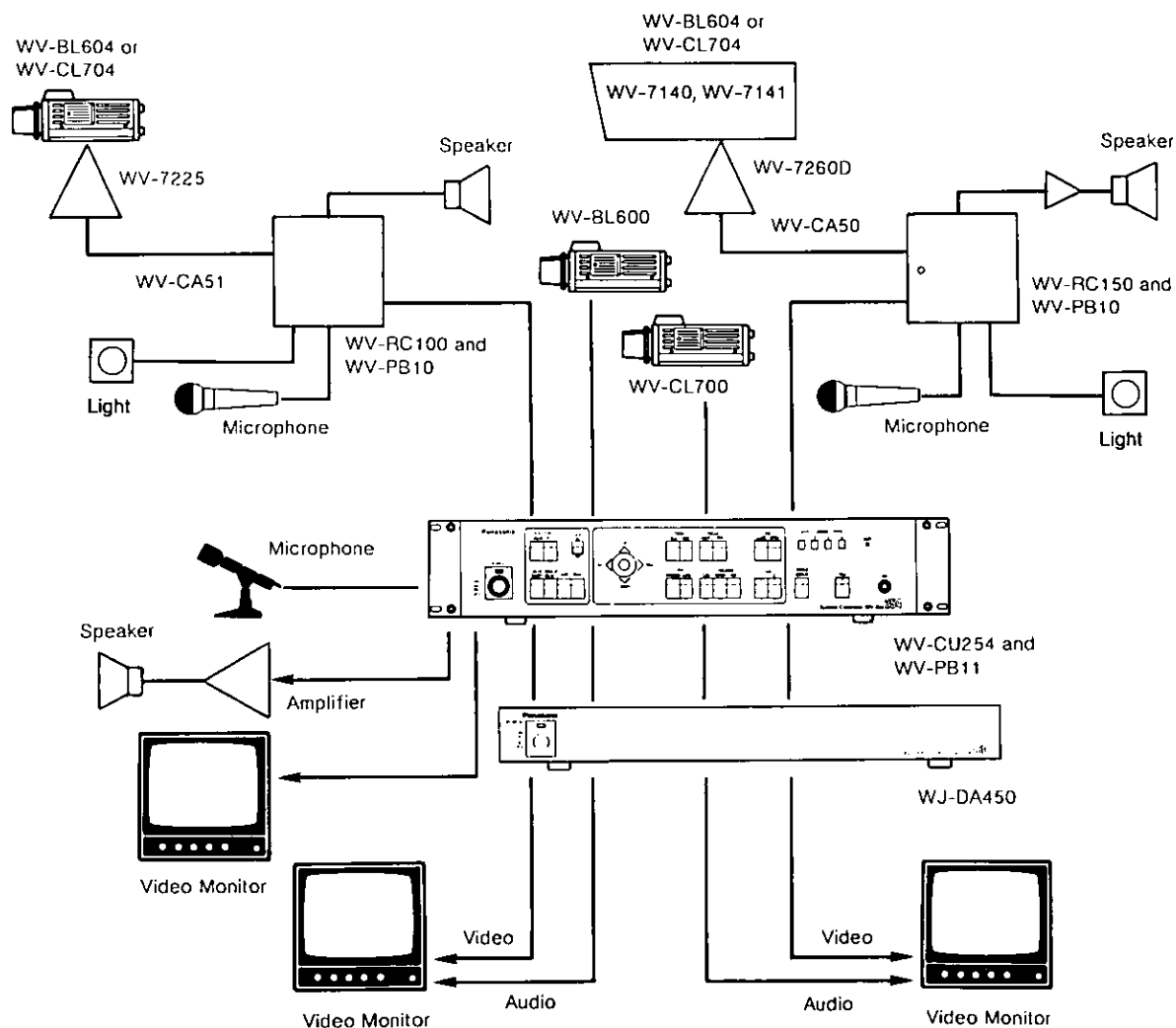
<Front View of the Male Connectors>

**Remarks :**

When the local procurement cable is used with provided 12 pin and 14 pin connectors, instead of using WV-CA51, refer to the Operating Instructions or the Service Manual of the Camera Housing or Pan-Tilt Head.

## SYSTEM CONNECTION

- The following chart shows a typical system connection of the closed circuit camera system which Panasonic newly introduces to the field. Refer to the Operating Instructions for the details of the connection for each product.



- Connection of WV-RC100**

Be sure to turn the Power ON/OFF Switch (1) to off.

1. Connect the coaxial cable of WV-CA51 between the Camera Input Connector (2) of WV-RC100 and the Coaxial Cable Terminal (15) of WV-7225.
2. Connect the 14 pin and 12 pin connectors of WV-CA51 to the Prewired Cable Connectors (19), (20) of WV-RC100 and connect the 10 pin and 8 pin connectors of WV-CA51 to the Control Connector-1 (18), -2 (19) of WV-7225.
3. Connect the coaxial cable between the Video Output Connector (3) of WV-RC100 and the Camera Input Connector (26) of WV-CU254.
4. Connect the speaker cable between the Speaker Terminal (14) of WV-RC100 and the external speaker.

The Audio Board WV-PB10 should be installed in WV-RC100 in this case. The speaker output is 1W Max.

**Remarks :**

- If the speaker output is required more than 1W, connect the external audio amplifier to the Audio Output Connector (4) with a audio cable.
- 5. Plug the external microphone into the Mic. Input Connector (5) of WV-RC100. The Audio Board WV-PB10 should be installed in WV-RC100 in this case.
- 6. Connect the optional equipment with cable to the Aux-1 Terminal (18) and Aux-2 Terminal (15). Refer to the page 12 for specifications.

**Note :**

Refer to the Operating Instructions of each optional product for details.



# Panasonic

Communications & Systems Company

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