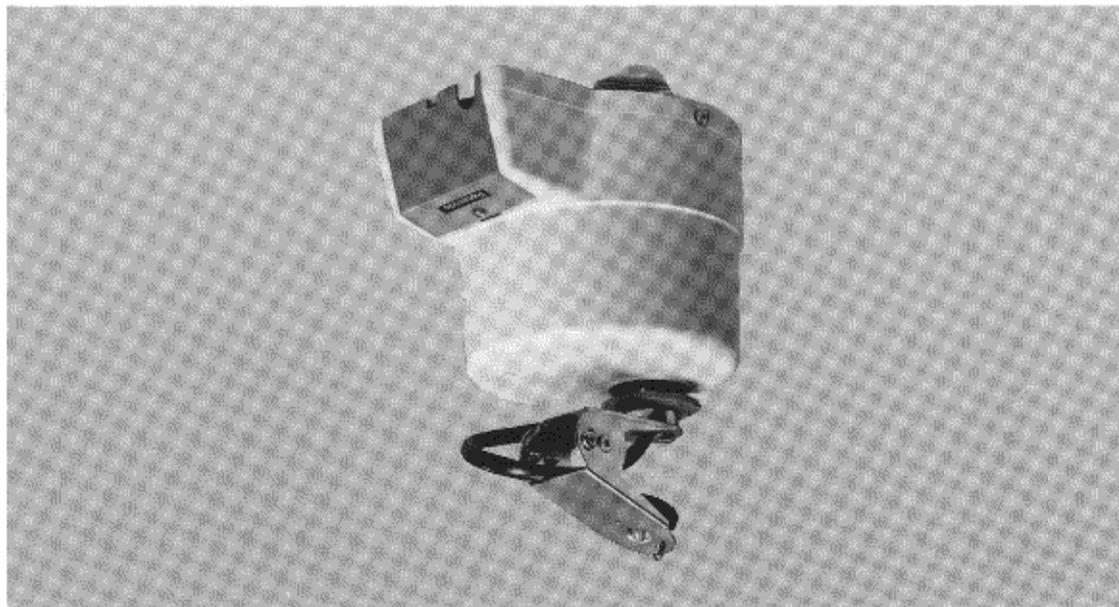


Operating Instructions

Indoor Panning
WV-7220D



Panasonic®

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

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INTRODUCTION

The WV-7220D Indoor Panning with WV-CU254 System Controller and WV-RC100 Indoor Receiver allows to operate the automatic remote control of camera panning. The panning unit can be ceiling mounted or bracket mounted to any flat surface. The camera can be panned an angle from 20° to 320° at a speed of 6.8°/sec. This unit allows to operate the Manual Panning, Auto Panning or Random Panning using with the system controller WV-CU254 and the indoor receiver WV-RC100.

PRECAUTIONS

1. Do not attempt to disassemble this unit. There are no user serviceable parts inside. Refer servicing to qualified service personnel.
2. Use this unit within its rating.
 - (a) Designed for indoor use.
Ambient temperature: 14°F - 122°F (-10°C - +50°C)
 - (b) Avoid using this unit when humidity is above 90%.
3. Do not use this unit in the place which has a high percentage steam or oil.
4. Select a flat location which can support the entire weight (panning head, camera, camera housing).
5. The input power source must be 24V^{+10%}_{-20%} (19.2 - 26.4V) AC 60 Hz for WV-7220D. (Supplied by Indoor Receiver WV-RC100)
6. Use only a low voltage camera (24V AC).
7. Every necessary procedures with regard to install this product should be made by qualified Service Personnel or System Installers.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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



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.



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.

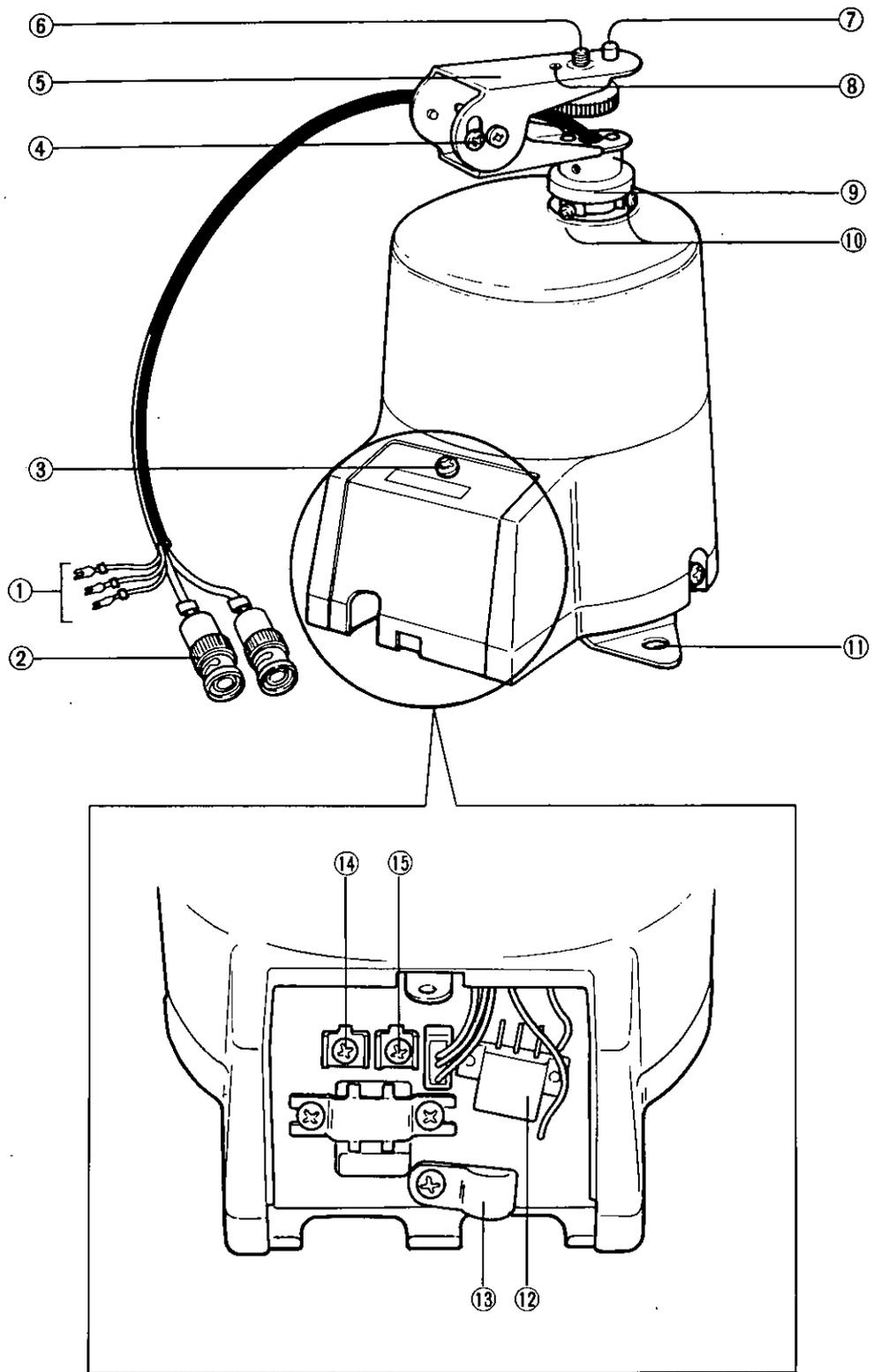
The serial number of this product may be found on the bottom of the unit.
You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

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

MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS _____



- (1) **Camera Power Cable**
 Indicate 1 — Power Supply 1
 Indicate 2 — Power Supply 2
 Indicate G — Camera Ground

- (2) **Camera Cables**
 BNC Type Connectors
 Indicate V — Video
 Indicate S — Ext. Sync.

- (3) **Cover Locking Screw**

- (4) **Tilting Angle Adjusting Screw**
 Adjustable tilting angle 0° - 45°.

- (5) **Camera Mounting Plate**

- (6) **Camera Mounting Screw**
 Standard photographic pan head screw (U-1/4").

- (7) **Camera Guide Screw**

- (8) **Camera Guide Hole**

- (9) **Panning Angle Indicator**

- (10) **Panning Angle Limit Adjusting Screw**
 Adjustable panning angle.
 20° - 320°.

- (11) **Mounting Plate**

- (12) **Control Connector (6 Pins)**

6	5	4
3	2	1

- 1: LEFT
 2: RIGHT
 3: AUTO
 4: CAMERA
 5: AC Connector
 6: Ground

- (13) **Cable Clamp**
 Clamp for connector cable

- (14) **Video Terminal Board (VIDEO)**
 This terminal is connected with the video input of the Receiver WV-RC100.

- (15) **Ext. Sync Terminal Board (EXT SYNC)**
 This terminal is connected with the external sync generator.

APPLICABLE CAMERAS, LENSES AND HOUSINGS

The recommended combination of the Panasonic camera, lens and housing to WV-7220D is shown in the following table.

Housing \ Lens		None		WV-7110		WV-7120D	
		for 1/2"	for 2/3"	for 1/2"	for 2/3"	for 1/2"	for 2/3"
		fixed	fixed	fixed	fixed	fixed	fixed
2/3" Tube	WV-1414	/	○	/	/	/	○
	WV-1464		○				○
	WV-1504		○				○
	WV-1554		○				○
2/3" CCD	WV-CD134	/	○	/	×	/	×
	WV-CD24		○		○		
	WV-BD404		○		○		
1/2" CCD	WV-BL204	○	○	○	○	○	○
	WV-CL304	○	○	○	○	○	○
	WV-BL604	○	○	○	○	○	○
	WV-CL704	○	○	×	×	○	○

- Possible
 × Impossible
 <Panasonic Lens Only>

PRECAUTIONS ON INSTALLATION

- This panning unit Model WV-7220D is designed for indoor use. Avoid mounting it outdoors under the eaves or any other place where rain or moisture could be problem.
- If the panning unit is mounted upside down, as shown below, the image on monitor TV will also be upside down. Therefore, remove the camera mounting plate from the top of the camera and attach it to the bottom of the camera.

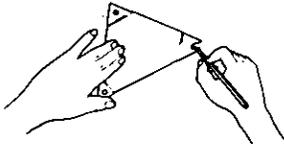
- A camera with various lenses and a camera housing (Model WV-7110 and 7120D) can be used. Select a location where the total weight is sufficiently support and firmly fix the units onto plywood, gypsum board, plaster board or concrete. Install the panning unit before mounting the camera on it.
- Mount on flat surface - flat ceiling or mounting bracket Model WV-7030.
- Avoid a location which is susceptible to vibration, such as close to a motor or ventilation fan.

INSTALLATION

CAUTION:

The following installation should be made by qualified service personnel or system installers.

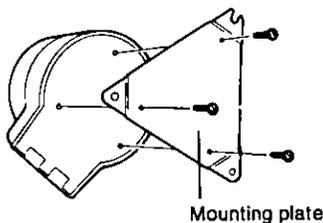
1. Make holes which align to those on the Mounting Plate and mount on the panning head.
 - (a) Plot the three points for making holes



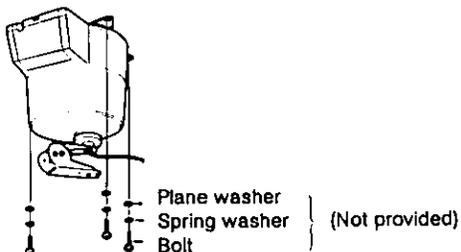
- (b) Make three preliminary holes.



- (c) Mount the Mounting Plate to the base with its three screws on the base.

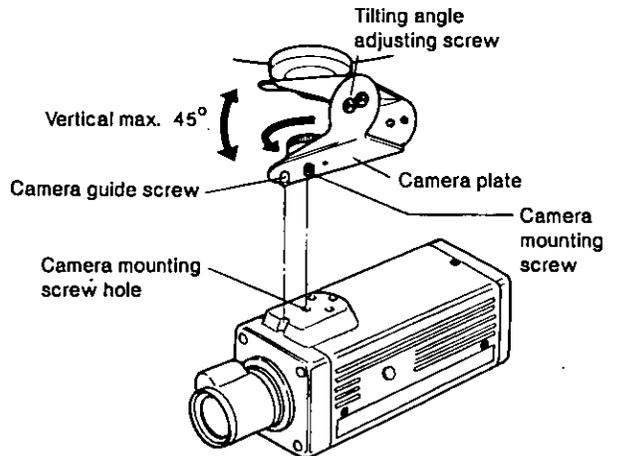


2. Mount the panning head.

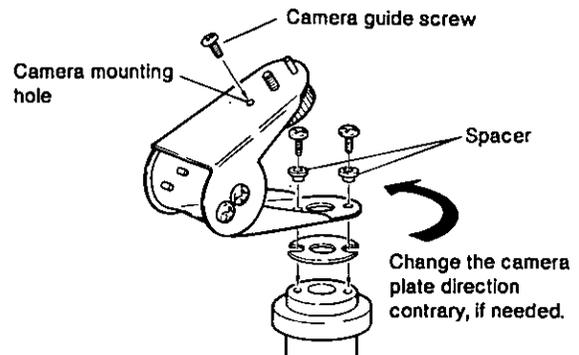


3. Mount the low voltage camera (24V AC) with fixed focal lens on the Camera Plate.

- (1) Mount the camera using with Camera Mounting Screw.
Use rear side of the camera mounting screw hole for better weight balance. Proper weight balance will put less strain on the gears in the motorized head.
- (2) Adjust the tilt angle with Tilt Angle Adjusting Screw.
- (3) Set the focus ring at the proper distance.

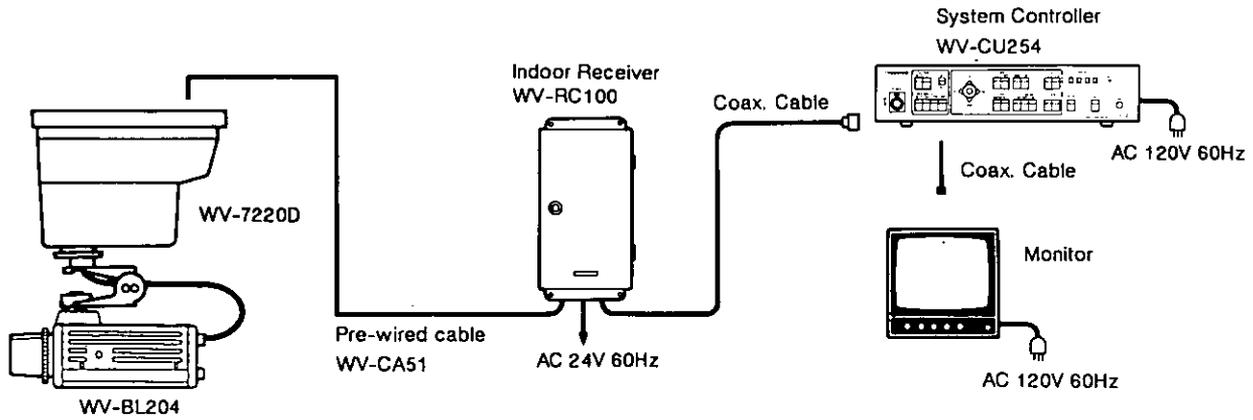


4. When mount the panning unit upside down and camera is aimed downward, remove the Camera Guide Screw to the Camera Guide Hole. If needed, change the direction of the Camera Plate.



CAUTION: After changing the camera plate direction, replace these spacers.

TYPICAL SYSTEM CONNECTIONS



CONNECTIONS

CAUTIONS:

- The following connections should be made by qualified service personnel or system installers.
- Make all connections with the power turned OFF.
- Avoid shorting the terminals, as this may blow a fuse.
- If the installation is to be upside-down, the Pan Left-Right directions will be reversed. This must be considered when the wiring is done. In this case, replace 1 and 2 pin of CN1. If the pre-wired cable WV-CA51 is used, replace them using with MOLEX brand tool 57031-6000.

A. Video and Ext. Sync Terminal Board

1. Wiring precautions:

- Do not bend coaxial cable into a curve whose radius is smaller than 10 times diameter.
- Never staple the cable - not even with circular staples.
- Never crush or pinch the cable.

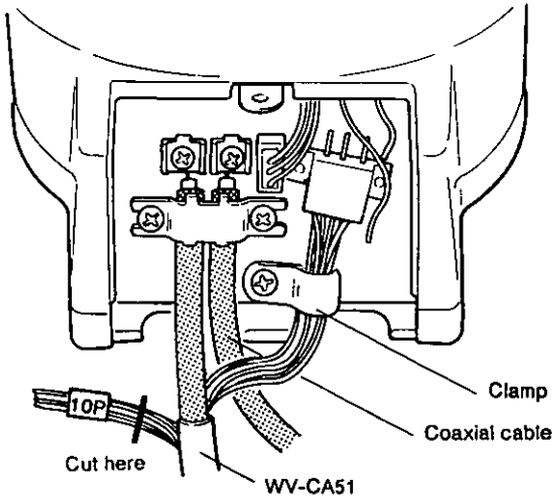
All these will change the impedance of the cable and cause poor picture quality.

2. Use the following conditions cable.

Impedance: 75Ω

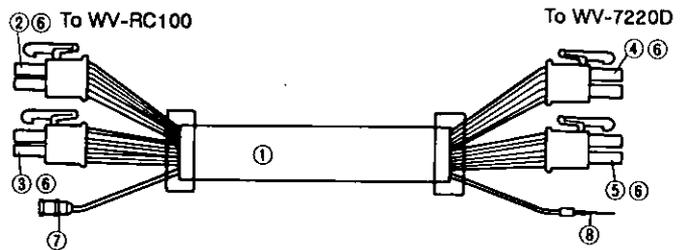
Diameter: φ8 mm or less

Example: RG - 59/U (BELDEN 9259)



B. In case of using the Connection Cable (WV-CA51):

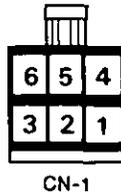
The appearance and cord length is shown in the drawing.



- The parts name of WV-CA51 is shown in the following.

No.	Parts name
1	17 wires cable
2	14P housing
3	12P housing
4	10P housing
5	6P housing
6	Contact
7	BNC connector
8	Contraction tube

C. In case of using the accessory connectors (MX555706):



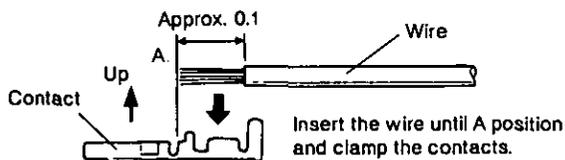
CN Pin No. WV-7220D	Usage of Terminal	Power Source
CN1-1 CN1-2 CN1-3 CN1-4	LEFT RIGHT AUTO PAN 24V AC CAMERA	24V AC
CN1-5	AC COMMON	24V AC Common
CN1-6	GND	

Copper wire gauge AWG No. (UL1007, UL1015)	Impedance at 68°F (20°C) (Ω/km)		Cable length
#24	77.9	ft	55
		m	14
#22	50.4	ft	90
		m	25
#20	32.3	ft	140
		m	40
#18	19.9	ft	220
		m	60

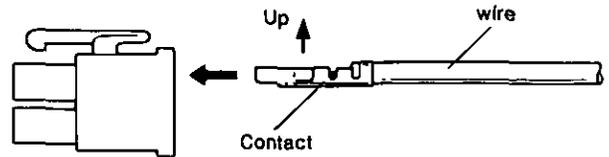
The above length indicated are approximate.

How to assemble the connector:

- Strip back the cable jacket approx. 0.1 inch (3 mm) and separate the individual conductors.
- Prepare the individual conductors for clamping. If clamping, use MOLEX brand tool part number 57027-5000 (for UL-Style Cable UL1015) or 57026-5000 (for UL-Style cable UL1007).



- After clamping the contacts, push them into the proper holes in the connector housing until they snap in place.



CAUTION:

Shrinking the cable-entry seal is a one-time procedure. DO NOT shrink the cable-entry seal until it has been ascertained that the unit is functioning.

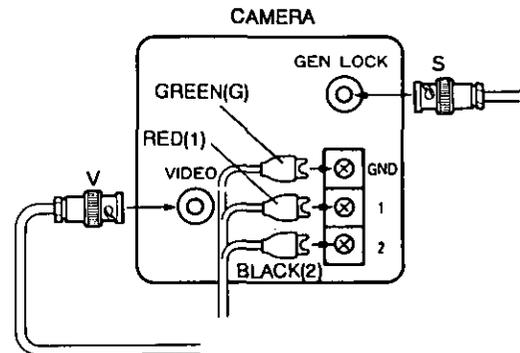
D. Connect with TV camera

Camera Power Cable

Connect the connectors to the 24 V AC Power Terminal Strip of the low-voltage camera according to the diagram.

Camera Cable

Connect the Camera Cable to the video output connector of the low-voltage camera.



E. End of wiring

- Turn on the Power ON/OFF Switch of the TV camera.
- Connect the Power Cord of the Indoor Receiver WV-RC100 to the 24V AC camera.
- Turn on the Power ON/OFF Switch of the indoor receiver.

CAUTION:

- CONNECT THIS TO A 24V AC CLASS 2 POWER SUPPLY ONLY.

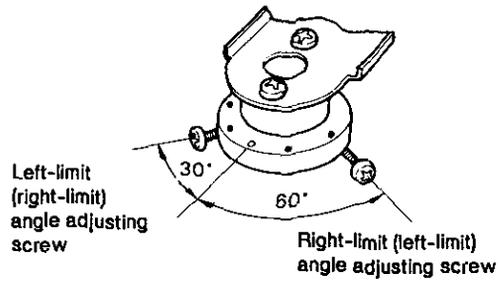
Caution: To prevent fire or shock hazard, the UL listed wire VW-1, style 1007 should be used for the cable for 24V AC Input Terminals.

ADJUSTMENTS

CAUTION:

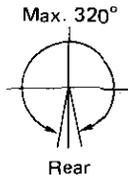
The following adjustment should be made by qualified service personnel or system installers.

1. Adjust the panning angle limits.
 - (a) Determining the right - limit and left - limit angle.
 - (b) Move the Right - limit Angle and Left - limit Angle Adjusting Screws to the appropriate position on to the Panning Angle Indicator.
2. Adjust the tilting angle with Tilting Angle Adjusting Screws.
3. Adjusting the focus and iris of the camera.

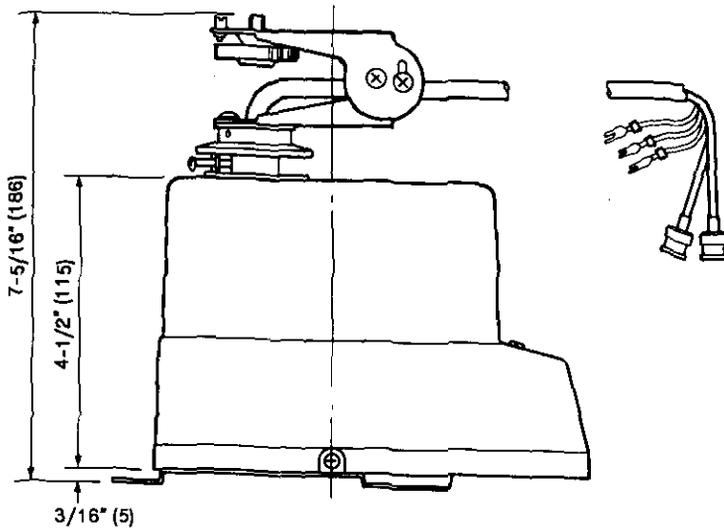
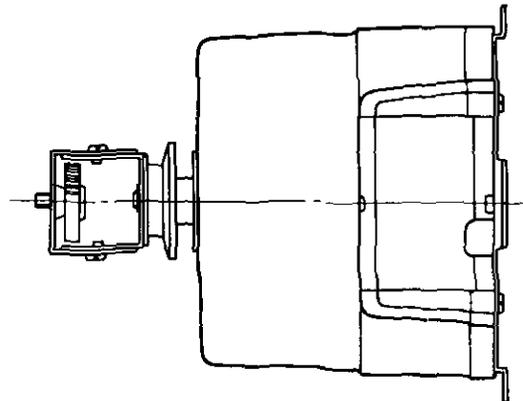
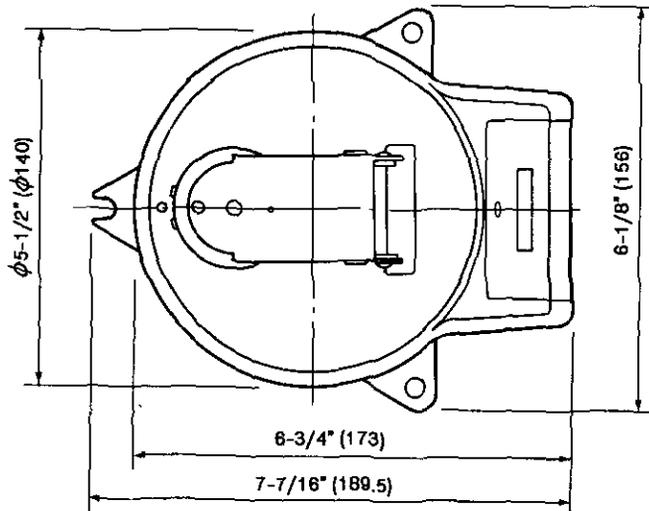


CAUTION:

It is impossible to set the panning angle passing the rear side.



OUTLINE DRAWING



SPECIFICATIONS

System controller:	WV-CU254 (Optional)
Indoor receiver:	WV-RC100 (Optional)
Mountable housing:	WV-7120D, WV-7110 (Optional)
Bracket:	WV-7030 (Optional)
Power source:	24V AC from the indoor receiver WV-RC100
Power consumption:	Approx. 15W Max.
Panning:	● Automatic, Manual or Random (Selectable)
Panning angle:	20° - 320° (Adjustable)
Tilting speed:	Approx. 6.8°/sec
Load weight:	Approx. 11 lbs. (5 kg)
Operating ambient temperature:	14°F - 122°F (-10°C - +50°C)
Operating ambient humidity:	Less than 90%
Dimensions:	Approx. 5-7/16"(W) x 7-1/4"(H) x 7-7/16"(D) [140(W) x 186(H) x 190(D) mm]
Weight:	Approx. 7 lbs. (2.5 kg)

- **REMARK:**

This unit allows to operate the Manual Panning, Auto Panning or Random Panning using with the system controller WV-CU254 and the indoor receiver WV-RC100.

STANDARD ACCESSORIES

Connector

[Part No.: MX5557P06] 1pc.

OPTIONAL ACCESSORIES

Pre-wired Cable WV-CA51

Panasonic

Communications & Systems Company

Panasonic Communications & Systems Company
Division of Matsushita Electric Corporation of America

CLOSED CIRCUIT VIDEO EQUIPMENT DIVISION

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