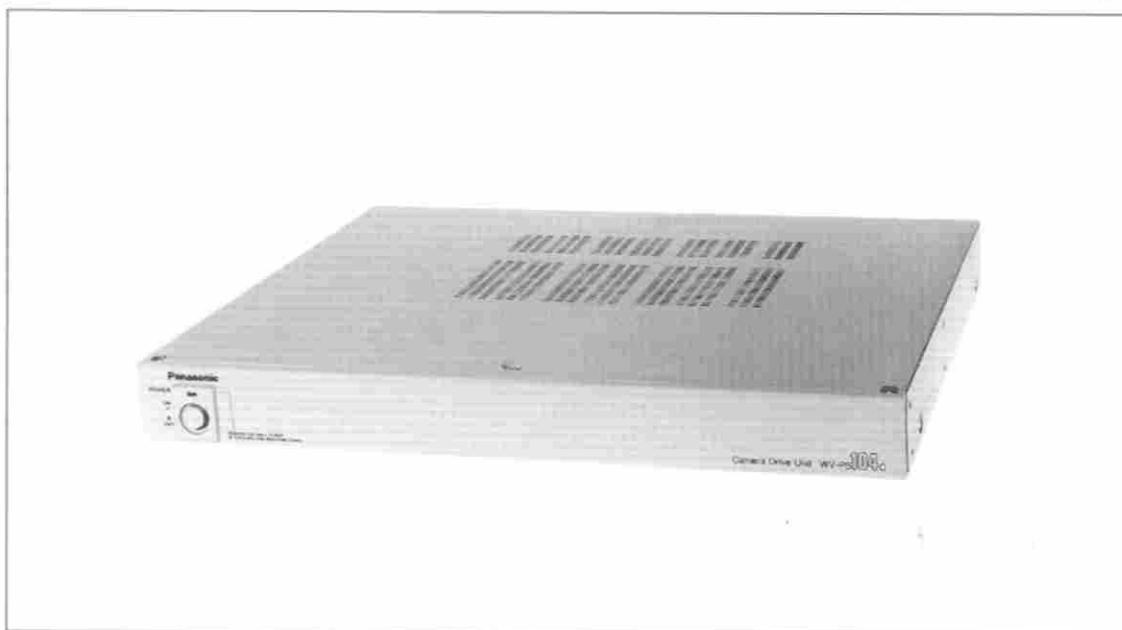


Operating Instructions

Camera Drive Unit
WV-PS104C



Panasonic®

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

PREFACE

The Panasonic Camera Drive Unit WV-PS104C is specially designed to drive up to four specified cameras such as the WV-BP70 or WV-CP100.

This simple system is specially designed for surveillance and security needs at offices, factories, schools, hospitals, public and residential buildings, etc.

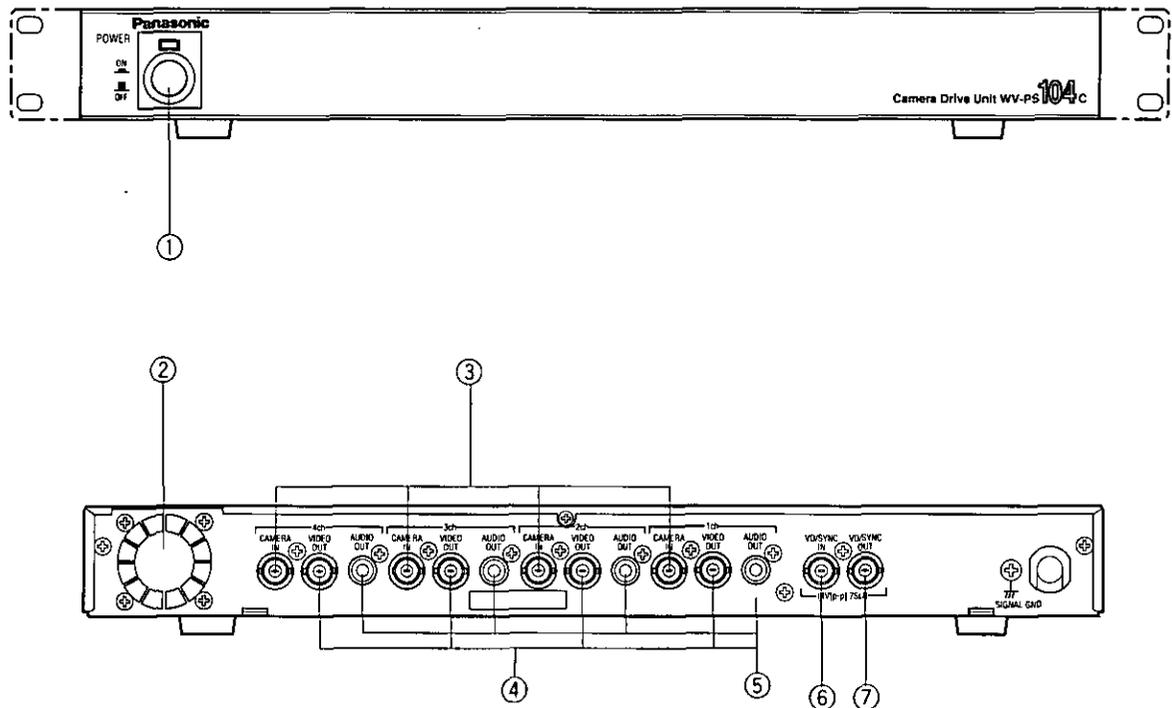
FEATURES

- Up to four specified cameras can be driven by one WV-PS104C.
- Stable DC power is supplied to the specified camera by a regulator in the camera drive unit.
- A single coaxial cable connects the specified camera and camera input of the camera drive unit.
- Three signals, video, DC power and vertical drive pulses, are carried by a single coaxial cable (used with the WV-BP70 or WV-CP100 camera.)
- Audio signals can also be transmitted from the specified camera to the camera drive unit (used with the WV-CP100 or WV-CF20 camera.).
- VD/SYNC IN and OUT connectors for synchronizing in parallel operation.
- Built-in protection circuit protects the appliance in case of wrong connection.

PRECAUTIONS

- Do not block the ventilation opening or slots on the cover to prevent the appliance temperature from rising.
- Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside.
- Handle the appliance with care. Do not abuse the appliance. Avoid striking, shaking, etc. It could be damaged by improper handling or storage.
- Do not expose the appliance to rain or moisture. Avoid trying to operate it in wet areas. Take immediate action if ever the unit becomes wet. Turn the power off and refer servicing to qualified service personnel. Moisture can damage the appliance, and cause danger due to electric shock.
- Do not use strong or abrasive detergents when cleaning the appliance body. 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 drop any metallic parts through slots. This action could damage the appliance permanently. Turn the power off immediately and refer servicing to qualified service personnel.
- Use the appliance under conditions where temperatures are within -10°C - $+50^{\circ}\text{C}$ (14°F - 122°F), and humidity is below 90%. The input power source is 120V AC 60 Hz. Do not operate the appliance in an extreme environment where is out of its specified temperature or humidity range, or power source ratings.

MAJOR OPERATING COMPONENTS AND THEIR FUNCTIONS



① Power On/Off Switch (POWER, ON/OFF)

This switch is used to turn the camera drive unit and connected specified camera power on or off. The indicator lights up when the power of the camera drive unit is on.

② Cooling Fan Unit

This unit prevents the temperature of the camera drive unit from rising

Caution:

Do not block the ventilation opening or slots on the cover to prevent the temperature of the camera drive unit from rising. The power indicator blinks to indicate an unusual temperature rise. Do take immediate action when the power indicator blinks. Turn the power off and refer servicing to qualified service personnel.

③ Camera Input Connector (CAMERA IN)

This connector receives either a color or B/W composite video signal from the specified camera. It also supplies DC power and vertical drive pulses or synchronizing signals to the camera, and receives video and audio signals from the camera.

④ Video Output Connector (VIDEO OUT)

The video signal of the specified camera is provided at this connector for input into the video monitor.

⑤ Audio Output Connector (AUDIO OUT)

The audio signal of the specified camera is provided at this connector for input into the video monitor (used with the WV-CF20 or WV-CP100 camera.).

⑥ VD/SYNC Input Connector (VD/SYNC IN)

The VD (Vertical Drive) pulse or VS (Video Sync) signal is supplied to this connector for synchronizing the system.

⑦ VD/SYNC Output Connector (VD/SYNC OUT)

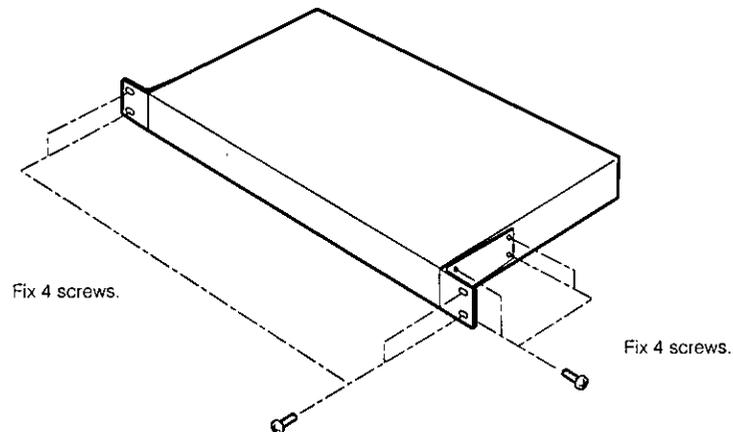
The VD (Vertical Drive) pulse or VS (Video Sync) signal is provided at this connector for synchronizing other system components.

Note:

Be sure that the specified camera and camera input (1ch) are connected correctly and firmly. The synchronizing signal is not supplied if this connection is faulty.

INSTALLATION

Mounting in the Rack



1. Loosen and remove four screws on the bottom of the camera drive unit, and remove four rubber feet.
2. Place the rack mounting brackets on both sides of the camera drive unit and tighten the supplied screws.
3. Install the camera drive unit with the rack mounting brackets in the rack by using four screws (not supplied.)

Cautions:

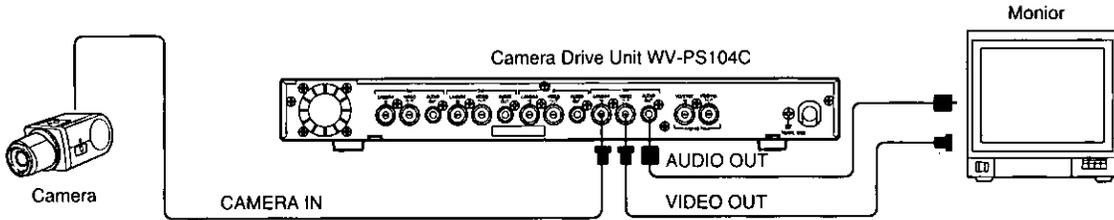
- Do not block the ventilation opening or slots on the cover to prevent the appliance temperature from rising. Always keep the temperature in the rack within 50 °C (122 °F).
- Fix the rear of the appliance on the rack by using an additional mounting bracket (not supplied) if the appliance is exposed to vibration.

CONNECTIONS

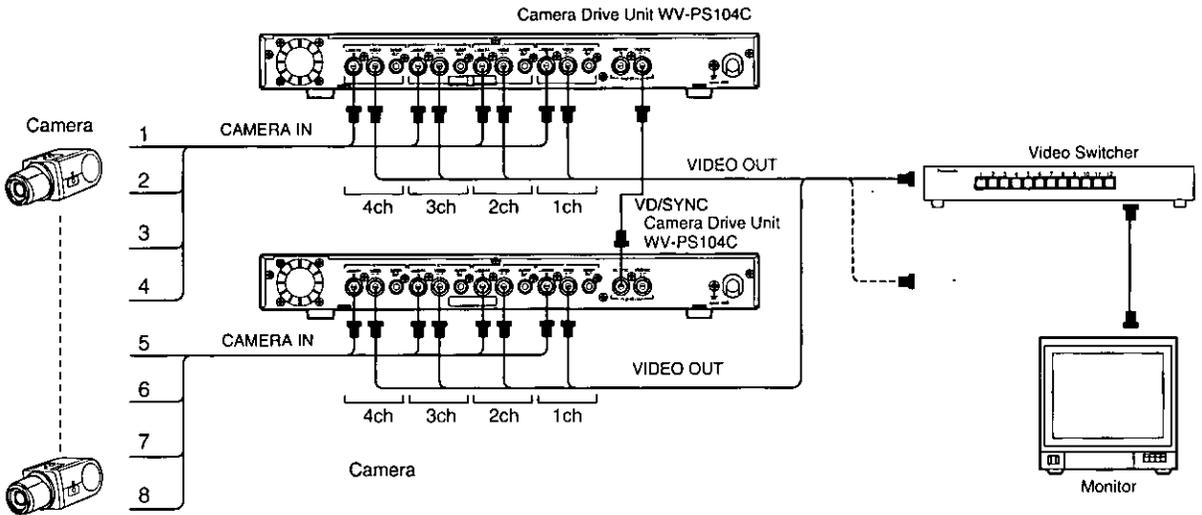
Cautions:

- Set the POWER switch of the camera drive unit to OFF (■) during connections. If the power of the camera drive unit is ON during connections, the protection circuit that protects it in case of wrong connection will operate and prevent the camera from functioning.
- Connect only a specified camera, WV-BP70, WV-CF20 or WV-CP100. If another camera is connected, the camera drive unit will not operate due to activation of the protection circuit.
- Be sure to connect the specified Camera and camera input (1ch) correctly.

<Basic System>



<Extended System >



1. Connect the coaxial cable between the camera and CAMERA IN connector of the camera drive unit. The approximate maximum cable length is as:

Coaxial Cable Type	DC R/1000 ft. of Inner Conductor	Maximum Cable Length
RG-59/U	Less than 30 Ω	200 m (660 ft.)
RG-6/U	Less than 12 Ω	500 m (1650 ft.)

The maximum DC resistance of the cable between the camera and camera drive unit is 20 Ω .

2. Connect the coaxial cable between the video monitor and VIDEO OUT connector of the camera drive unit. The approximate maximum cable length is as follows:

Type of coaxial cable		RG-59/U (3C-2V)	RG-6/U (5C-2V)	RG-11/U (7C-2V)
Recommended	(m)	250	500	600
Maximum cable length	(ft)	825	1,650	1,980

Note:

If the length of the coaxial cable between the camera drive unit and the video monitor exceeds the distance shown in the above table, a cable loss compensator should be used between the camera drive unit and the video monitor.

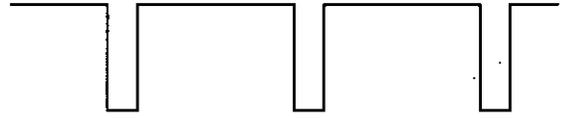
3. After connecting the specified camera to the camera drive unit, connect the audio cable between the monitor and AUDIO OUT connector of the camera drive unit.

External VD/SYNC Signal

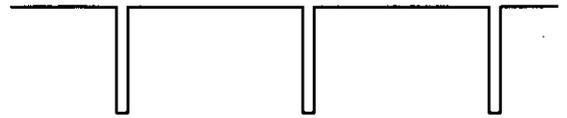
Signal Level

The VD/SYNC IN connector accepts the VD or VS synchronizing signal for external synchronization.

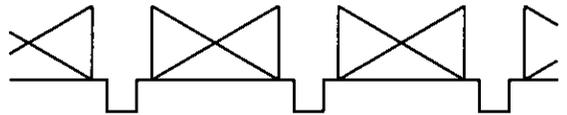
- VD: 4 V[p-p] / 75 Ω



- Composite Sync: 4 V[p-p] / 75 Ω



- VS: 1 V[p-p] / 75 Ω



Accuracy of vertical signal

Vertical frequency: 59.940052 Hz \pm 0.00161 Hz

Relation between VD/SYNC IN and VD/SYNC OUT

The signal from the VD/SYNC OUT connector differs according to the connected camera and the signal supplied to the VD/SYNC IN connector of this unit.

The signal supplied from VD/SYNC OUT is as follows:

Signal to VD/SYNC IN / Connected Camera	No signal	VD signal	Composite signal
WV-BP70 or WV-CP100	Composite signal	VD signal	Composite signal

SPECIFICATIONS

Power Source:	120 V AC 60 Hz		
Power Consumption:	Approx. 65 W		
Camera Input:	1.0 V[p-p] / 75 Ω, BNC Connector		
Video Output:	1.0 V[p-p] / 75 Ω, BNC Connector		
Audio Output:	-10 dB / 600 Ω unbalanced, RCA pin jack		
Camera Power Supply:	Regulated current multiplex method (310 mA)		
Maximum Distance to Camera:	Coaxial	DC R/1000 ft. of	Maximum
	Cable Type	Inner Conductor	Cable Length
	RG-59/U	Less than 30 Ω	200 m (660 ft.)
	RG-6/U	Less than 12 Ω	500 m (1650 ft.)
Maximum DC Resistance:	Between camera and camera drive unit: 20 Ω.		
VD/SYNC Input:	4.0 V[p-p] / 75 Ω Negative going or VS 1 V[p-p] / 75 Ω, BNC Connector		
VD/SYNC Output:	4.0 V[p-p] / 75 Ω Negative going, BNC Connector		
Ambient Operating Temperature:	-10 °C – +50 °C (14 °F – 122 °F)		
Ambient Operating Humidity:	Less than 90 %		
Dimensions:	420 (W) X 44 (H) X 350 (D) mm		
	16-9/16" (W) x 1-3/4" (H) x 13-3/4" (D)		
Weight:	4.2 kg (9.3 lbs.)		

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

STANDARD ACCESSORIES

Rack Mounting Bracket	1 set
Screw for Rack Mounting Bracket	8 pcs

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