FP-40S

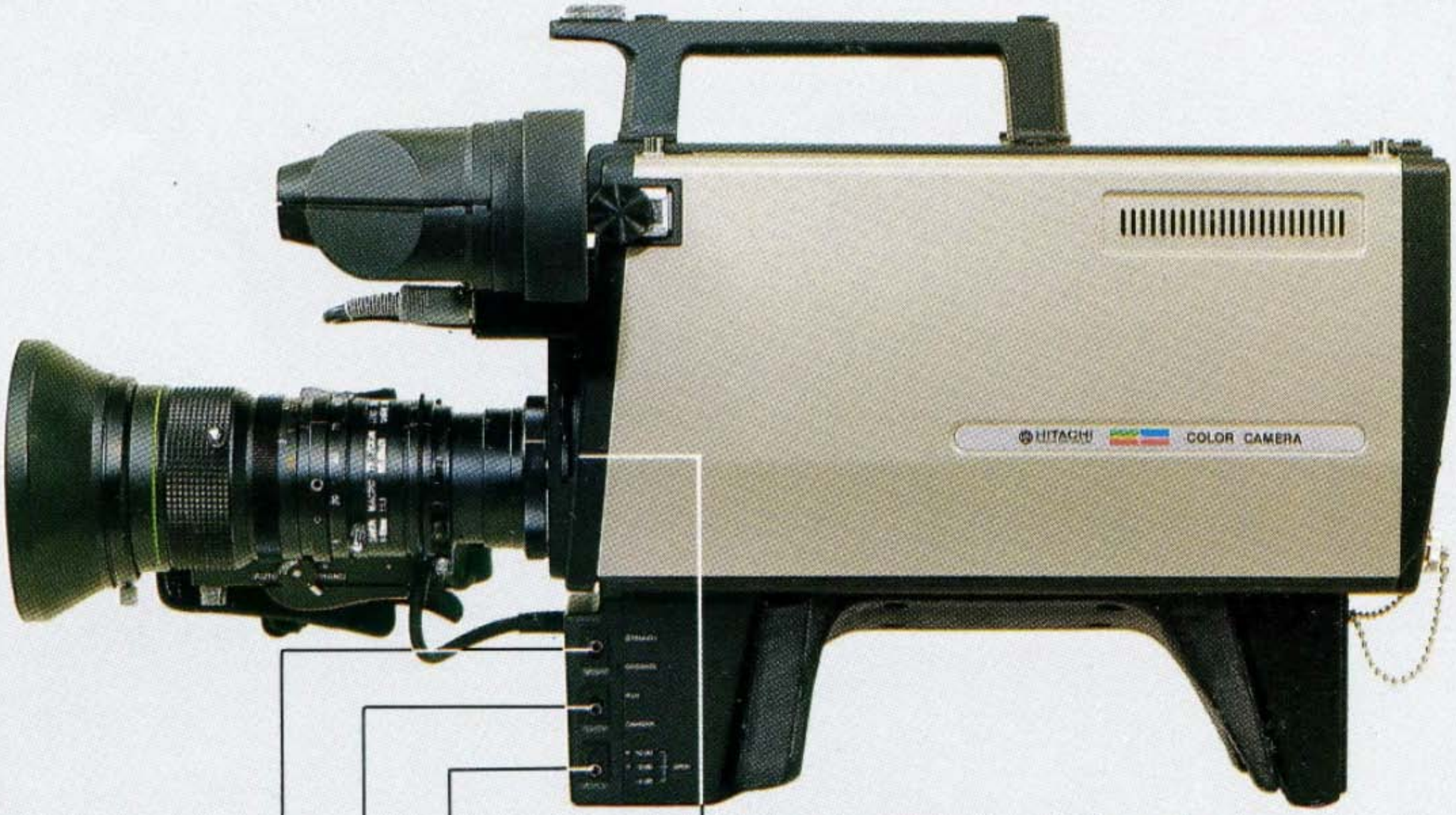
Color Television Camera

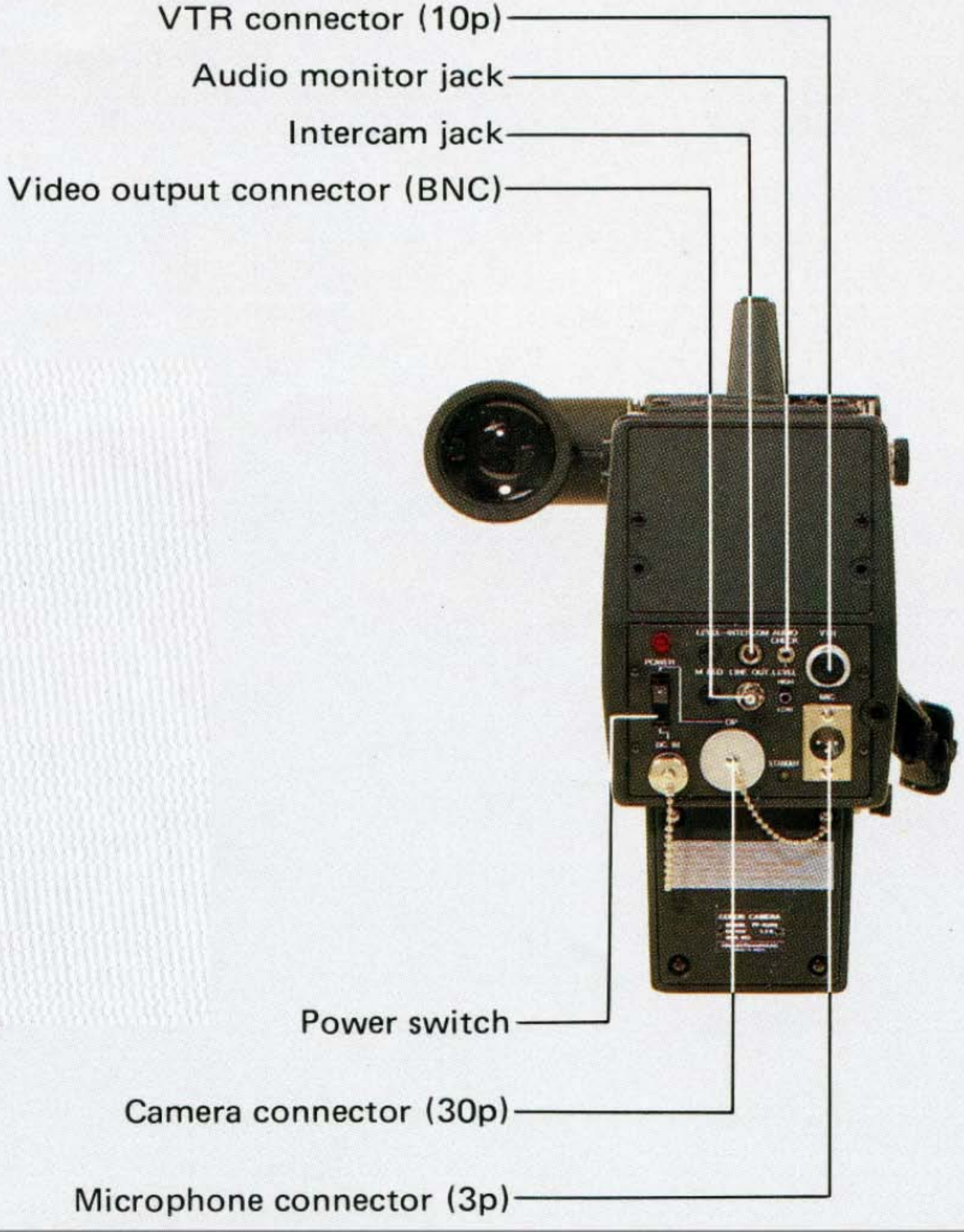


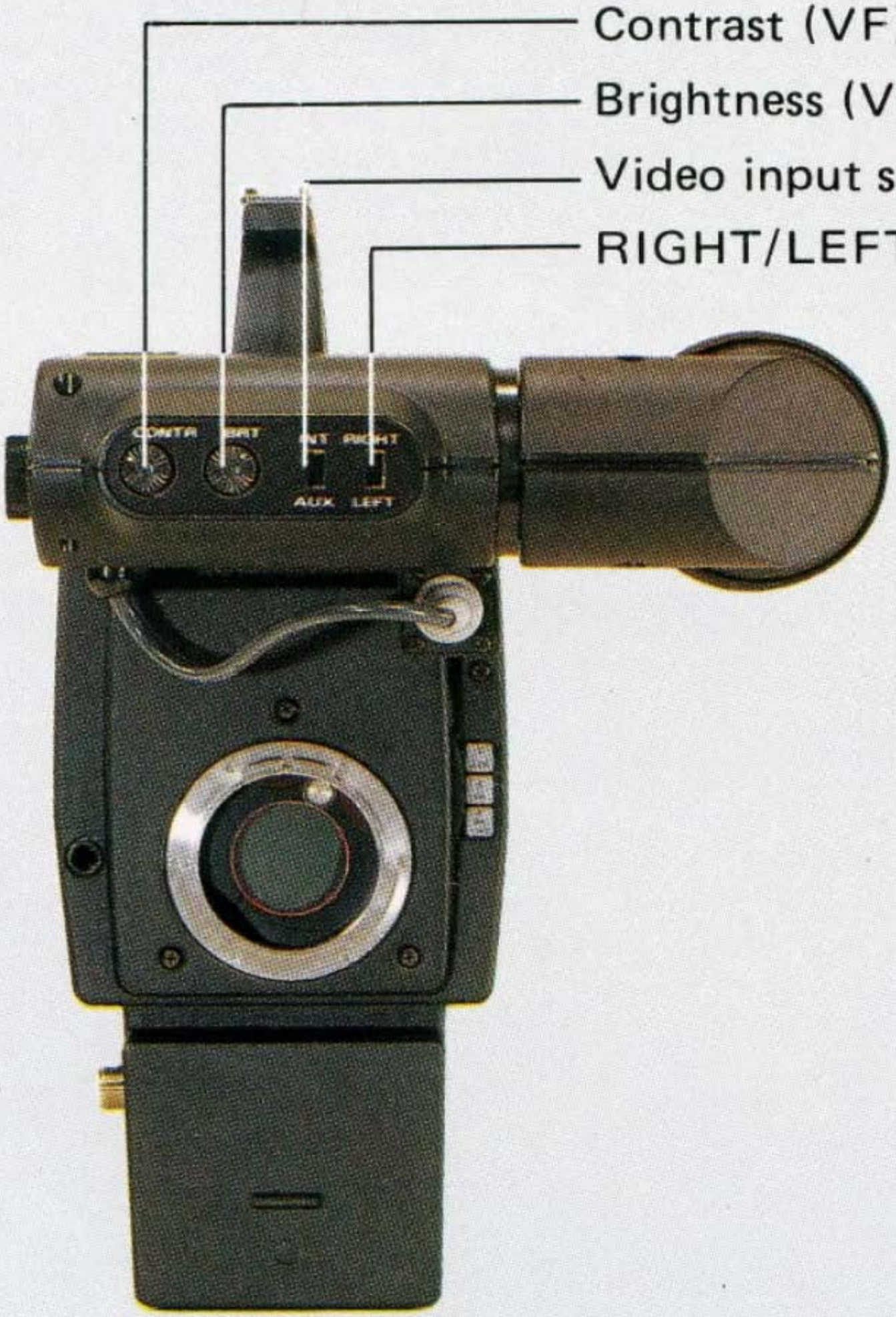
HITACHI
Hitachi Denshi, Ltd.

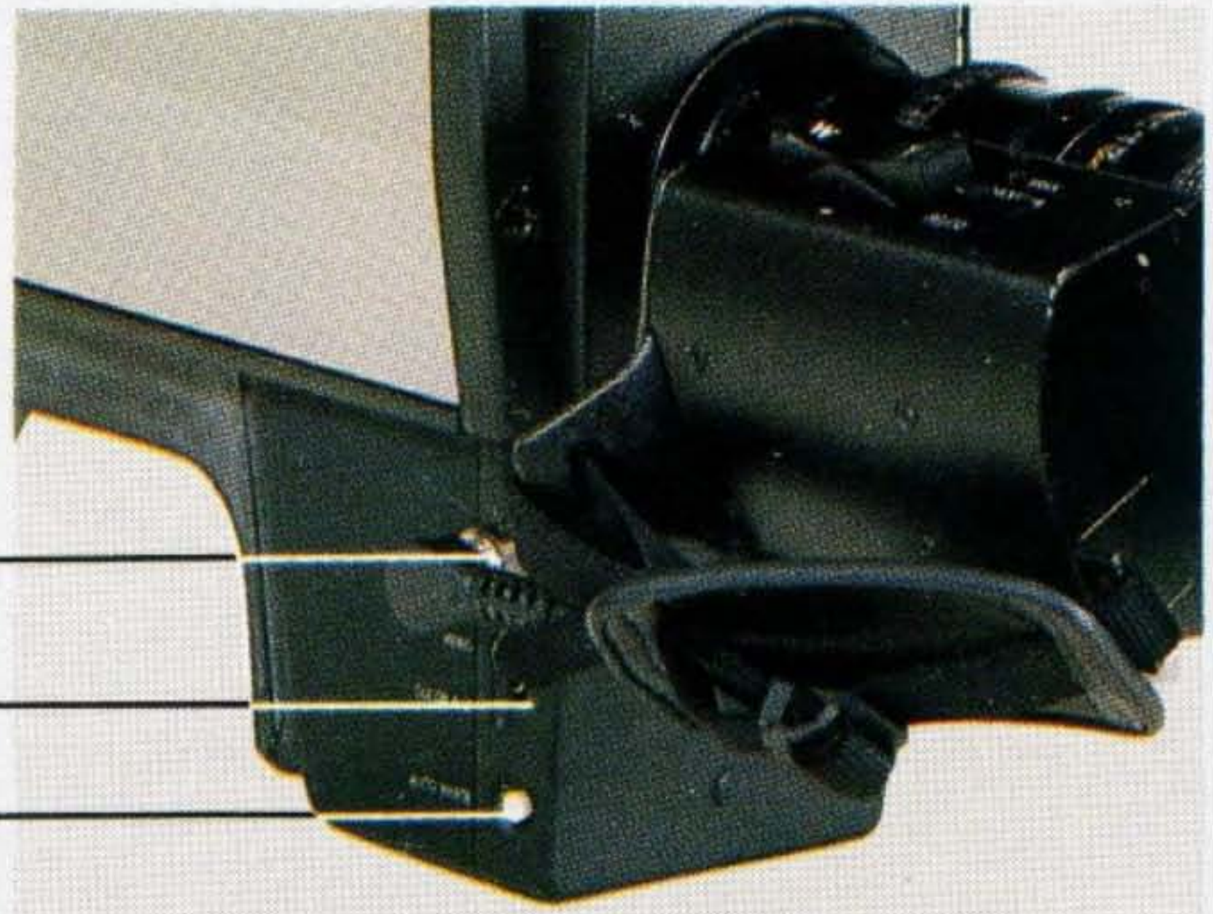
PDF By Centralradio

Color Camera FP-40S




VTR connector (10p)
Audio monitor jack
Intercam jack
Video output connector (BNC)
Power switch
Camera connector (30p)
Microphone connector (3p)

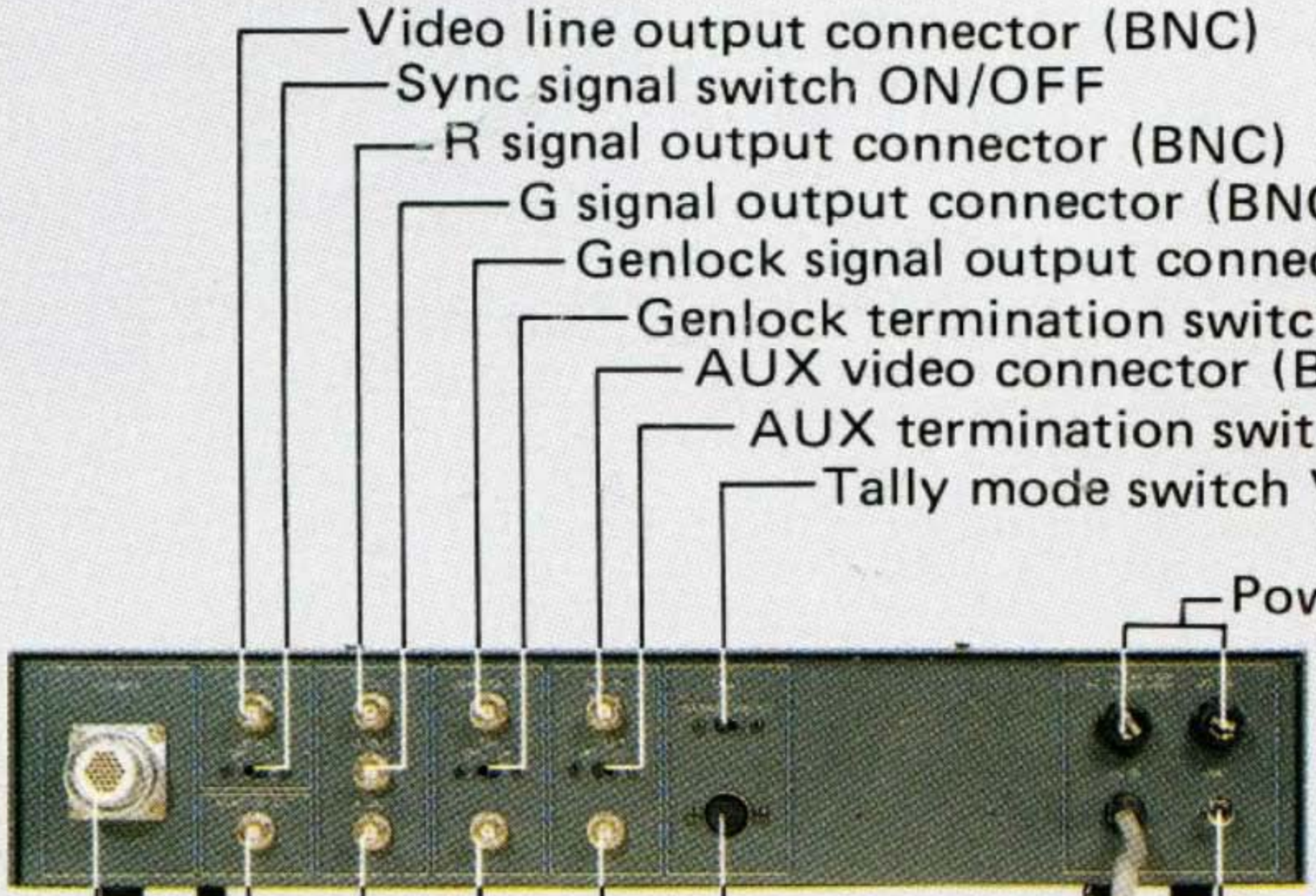

Contrast (VF)
Brightness (VF)
Video input selection switch INT/AUX (VF)
RIGHT/LEFT Switch (VF)
CONTR
BRT
INT
RIGHT
AUX
LEFT


s connector
Video switch VIDEO/COLOR BAR
Auto white balance switch

Operation Panel OP-40



Genlock lamp
Video switch BAR/CAM
Operation lamp
Power pilot lamp
Genlock switch ON/OFF
High gain switch NORMAL/HIGH
Aut while balance switch
Tally lamp
Power switch
Cable length alarm lamp
Intercam jack
Intercam level control
Tally call switch
Iris control
Master pedestal control
R gain control
B gain control
H phase control
SC phase control



Video line output connector (BNC)
Sync signal switch ON/OFF
R signal output connector (BNC)
G signal output connector (BNC)
Genlock signal output connector (BNC)
Genlock termination switch ON/OFF
AUX video connector (BNC)
AUX termination switch ON/OFF
Tally mode switch VOLTAGE/CONTACT
Power fuse holder
Grounding terminal
AC power cord
Tally connector (DIN 5p)
AUX video bridge connector (BNC)
Genlock signal bridge connector (BNC)
B signal output connector (BNC)
Video monitor output connector (BNC)
Camera connector (30p)

OPERATION PANEL, OP-40

Specifications

Control items	Power ON/OFF Iris R/B Gain Master pedestal Auto white balance 0/+6 dB High gain selection VIDEO/COLOR BAR selection Horizontal phase Subcarrier phase Genlock ON/OFF Tally Tally mode selection VOLTAGE/CONTACT
Genlock video input	Color composite 1.0Vp-p, BNC or Black burst 0.45Vp-p, BNC
AUX video input	Color composite or Black/White composite 1.0Vp-p, BNC

Video output	LINE	: Composite or Black burst 1.0Vp-p, BNC
	MONITOR	: Composite 1.0Vp-p, BNC
	R, G, B	: 0.7Vp-p, BNC (each)
Ambient temperature	0 to +40°C (32 to 104°F)	
Power requirements		
	U and C types	: 120V AC 60Hz, 90W
	E type	: 220V AC 50Hz, 90W
	K type	: 240V AC 50Hz, 90W
Dimensions (W×H×D)	482 x 88 x 330 mm (19.0 x 3.5 x 11.8 in)	
Weight	Approx. 8.5 kg	

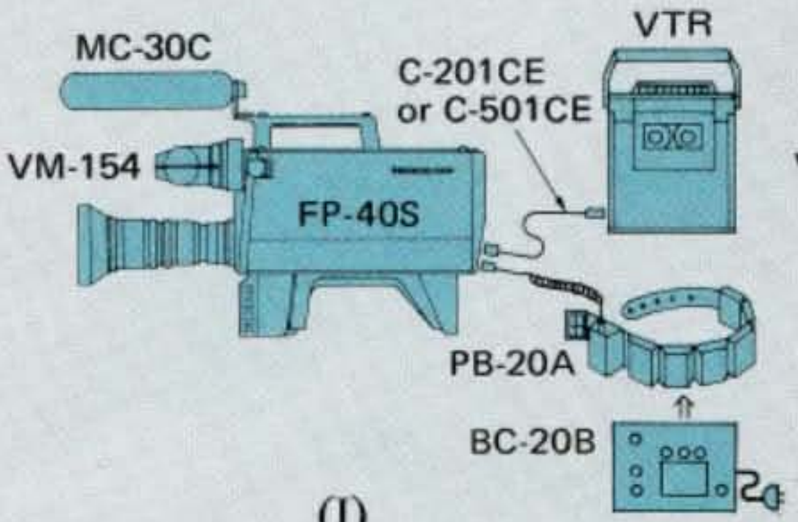


Suggested Compositions and Applications

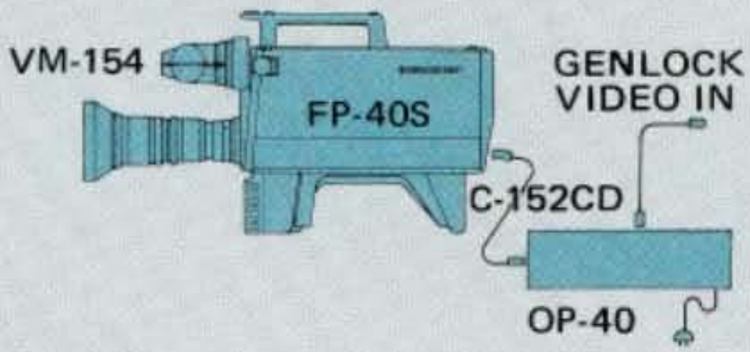
Items		Type	Surveillance		Telecine		Portable			Studio	Remarks
			I	II	I	II	I	II	III		
Camera		FP-40S	○	○	○	○	○	○	○	○	
1.5-inch VF		VM-154			△		○	○	○		1.8W, 0.9kg (2 lb)
5-inch VF		VM-508				△				○	With VF adaptor
Zoom lens (Auto iris)	Manual	J6x12BHKLS	○*4	○*4			○*1	○*1	○*1		F1.6
		J10x11BHKLS	○*4	○*4			○*1	○*1	○*1		F1.6
		B10x10.5RH-6	○*4	○*4			○*1	○*1	○*1		F1.6
	Power	J10x11BHKRS					○*1	○*1	○*1		F1.6
		J13x9BHKRS					○*1	○*1	○*1		F1.6
		A12x9RM-6					○*1	○*1	○*1		F1.7
	Push-rod	J10x11BHMIS								○*2	F1.4
	Cable drive	J10x11BHEIS								○*2	F1.4
Microphone		MC-30C					○				
AC adaptor		AP-60	○		○				○		
Battery charger		BC-20B					○				
Battery belt		PB-20A					○				
Operation panel		OP-40		○		○		○		○	Including camera cable, C-152CD Approx. 8.5kg (18.5 lb)
Genlock unit		GL-40			○				○		
Tripod mounting attachment		TA-40				△	△	△	△	○	
VTR cable (2m)		C-201CE					○*3				
VTR cable (5m)		C-501CE					○*3				
Carrying case		CL-40					△	△	△		

○.....Required　　△.....Recommended　　*.....Select any one of identical numbers.

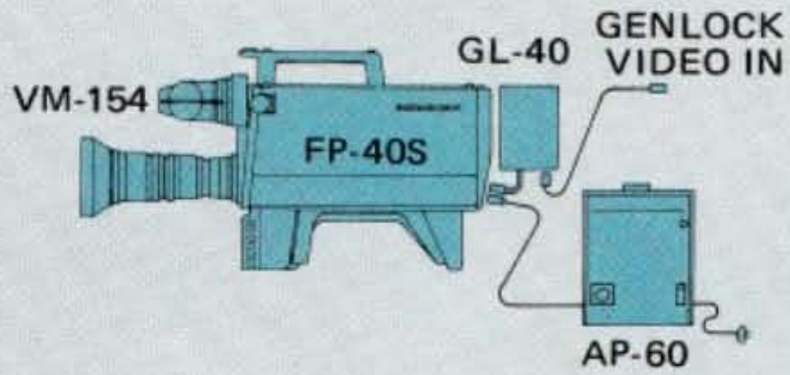
Portable camera



(I)

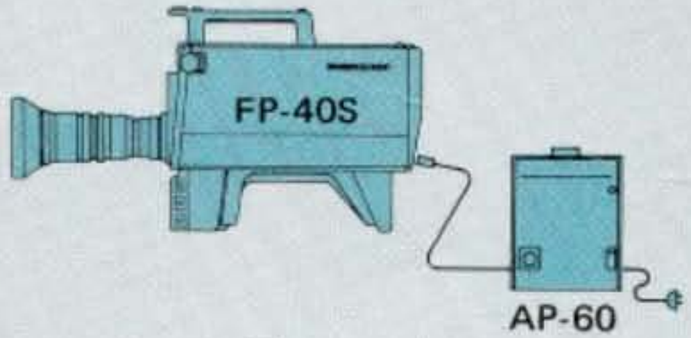


(II)

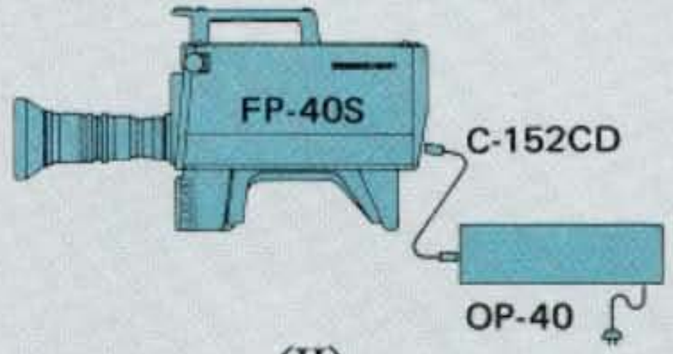


(III)

Surveillance camera

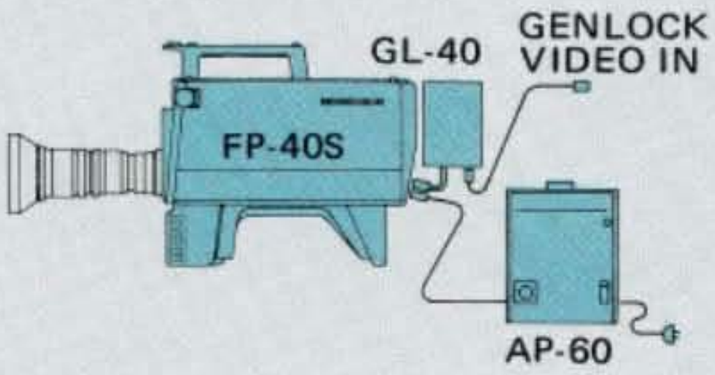


(I)

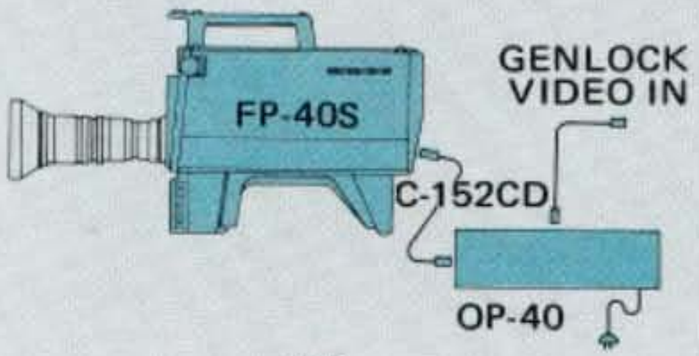


(II)

Telecine camera

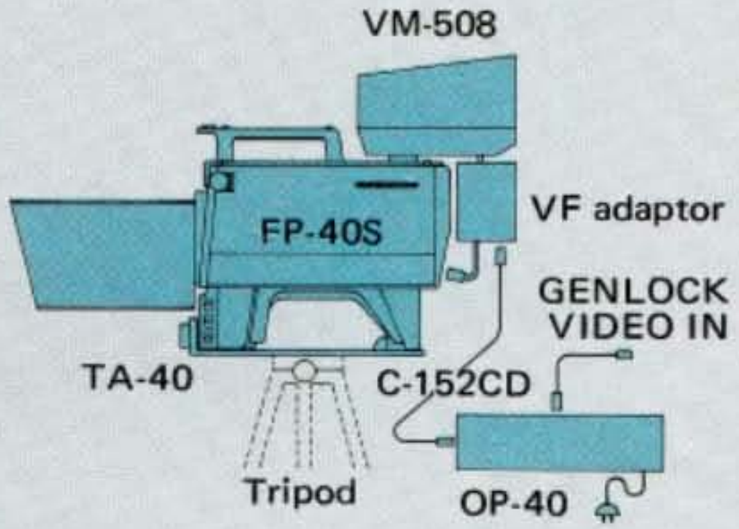


(I)



(II)

Studio camera



A completely self-contained color television camera with three 2/3-inch SATICON* pickup tubes. Prism optical system ensures Optimum Performance.

Features

■ **Self-contained portable camera**
The newly developed FP-40S is a completely self-contained portable color camera designed for ENG and other location shooting. It assures consistently excellent picture quality resulting from built-in automatic operating features, ultra-stable circuits, and other features.

■ **Prism optics**
High-transmission F1.6 prism optics provided with bias light assures superb sensitivity, resolution, and colorimetry.

■ **Rugged camera design**
The camera optical section, composed of a lens, the prism optics and deflection assemblies, is mounted on a rugged magnesium die-cast alloy plate forming an integral part of the camera front. Optimum mechanical and thermal stability is ensured.

■ **Quick-release lens mount**
The camera lens is attached by a quick-release bayonet mount without the need for tools.

■ **Low power consumption**
Power consumption including a 1.5-inch viewfinder is a remarkably low 19 watts, implying improved camera stability.

■ **Remote operation**
An optional remote operation panel, OP-40, enables the FP-40S to be operated as a standard camera with a camera control unit. This panel is connected to the camera by a multicore cable up to 300m (1,000 ft) long. The remote operation panel provides the following functions:

- Subcarrier phase control (COARSE/FINE)
- H Phase control
- R and B gain control
- Master black level control
- Lens iris control (at manual)
- Genlock (ON/OFF)
- Active video/Color bar selection (CAM/BAR)
- Actuating automatic white balance
- Extra video gain, +6dB/0dB (HIGH/NORMAL)
- Camera call
- Tally
- Tally mode selection (VOLTAGE/CONTACT)
- Intercom
- Power (ON/OFF)
- RGB output signals

■ **Detachable viewfinder**
A 1.5-inch detachable viewfinder can be mounted in reverse position for the convenience of a left-handed camera operator In this instance, a normal picture can be displayed by the RIGHT—LEFT switch on the viewfinder front.

■ **Auto white balance**
White balance is obtained simply by shooting a white reference in the scene and depressing the white balance button.

■ **Contour correction**
The camera incorporates both horizontal and vertical (1H delay line method) contour correctors for providing crisp, sharp pictures.

■ **Extra video gain**
For operation under extremely low light conditions, the extra video gain of +6dB or +12dB is available on the camera head. On the remote operation panel, only the +6dB gain is available.

■ **Built-in sync generator and color encoder**
A sync generator and a standard color encoder (NTSC: IQ, PAL: PAL—B) are built in the camera head. By utilizing an optional genlock unit or a remote operation panel, the camera can be locked to external black burst or color composite video signal.

■ **Built-in filter wheel**
A filter disc wheel with color and ND filters is built in the camera optical block. The wheel near the lens compensates for incident light.

■ **Automatic iris control**
The camera is equipped with an automatic iris control, which assures excellent picture quality in combination with color and ND filters under changing light conditions.

■ **Power sources**
Since the FP-40S operates on a +12 volt DC source, a variety of power sources can be used.

■ **Power-saving standby operation**
In the "Standby" mode, power consumption is reduced to 17% of the normal.

■ **R, G, and B signal outputs**
Noncomposite R, G, and B signal outputs are available for chroma-key and other applications. The signals can be transmitted to the remote operation panel through up to 30m of camera cable.

■ **Other features**

- With the color bar generator in the camera head, the color bar or active video can be selected by switch.
- Built-in microphone amplifier is available for program audio signals which can be monitored with an earphone.
- Sound level of the intercom is adjustable.
- A 5-inch viewfinder, its mount, and a VF (viewfinder) adaptor are provided for studio applications (option).

*Trademark