

HITACHI

COMPACT DIGITAL COLOUR CAMERA WITH 5-INCH STUDIO VIEWFINDER

HV-D15&GM-51

3xCCD, 1/2 -Inch, 800TV lines

COST EFFECTIVE VIDEO PRODUCTION SOLUTION



System Configuration

- HV-D15** High performance digital processing colour camera
- HA-15** New design Camera Adapter
- GM-51** High resolution Studio Viewfinder
- RC-Z3** Camera Remote Control Unit

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HV-D15

Hitachi's small 1/2" 3CCD Camera in combination with GM-51P, and RC-Z3 (5-inch viewfinder and remote controller) is the ideal camera system perfectly suitable for small studio, sports and special application.

The built-in 13-18 bit digital signal processor, 10 bit A/D converter, Digital PAL encoder and 470.000 pixel CCD ensures a camera picture quality that satisfies even highest demands.

Technical Specification

Color System:	PAL
Optical System:	1/2" F1,4 prism
Pickup System:	RGB, 3xCCD
Imaging device:	CCD equivalent to 1/2" pickup tube
No of total pixels:	795(H)x596(V)
No of effective pixels:	752(H)x582(V)
Sync System:	Internal or genlock (automatically switched)
Horizontal resolution:	800TVL (Y at centre)
Signal to noise ratio:	61dB (Gamma:1, DTL:off, Gain:0dB, DNR:on)
Standard sensitivity:	2.000 Lx, F8
Minimum sensitivity:	1,0 Lx
Gamma correction:	0,35 to 1,0 (ON/OFF)
Preset colour temperature:	3200K
Electronic filter:	3200K, 5600K
Vertical contour correction:	2H
Lens mount: Bayonet	(Flange focal distance) : 35,74mm
Gain selector:	AGC (0 to +20dB) Norm/High/Max, Ultra gain
Electronic shutter:	Preset Mode: 1/100 to 1/10.000s (7 step) Lock scan mode: 1/50.38 to 1/253.8 in 1H step Auto electronic shutter : off to 1/1.000s (variable up to 4F-stop value in 1H steps) Long term integration: 1/25 to 8 sec. (1 frame step)
Colour bars :	PAL : FULL
Input signal:	Genlock input (BNC or Multi connector) VBS 1.0+/-0, 1Vpp/75 ohm or Blackburst (0,3+/-0, 1Vpp)
Output signal conditions:	
Composite video output:	VBS : 1.0Vpp/75 Ohm , BNC
Y/C output:	Y: 1.0Vpp/75 Ohm C: 0,300Vpp (burst)/75 Ohm (PAL) S-Terminal
RGB outputs (D-Sub Connect)	R : 0,7Vpp/75 Ohm or R-Y: 0,525Vpp/75 Ohm G : 0,7Vpp/75 Ohm or Y: 1:0Vpp/75 Ohm B : 0,7Vpp/75 Ohm or B-Y: 0,525 Vpp/75 Ohm
Sync out:	2Vpp/75 Ohm
Power supply:	12VDC (Operable on 10.5 to 17 VDC no ripple noise)
Power consumption:	Camera head only 8W approx.
Operating temperature:	-10 to 45°C
Storage temperature:	-20 to 60 °C
Dimension:	Camera head only: 80(W)x85(H)x134(D)mm
Mass:	Camera head only: 950g approx.

The Video Signal can be selected on DUB-OUT for Y/C, RGB and Y/R-Y/B-Y



RC-Z3 REMOTE CONTROL UNIT

Hitachi compact size Remote control unit with rotary knob, which is connected to the camera to control camera menu and lens function.

Camera can be easily adjusted by the LED switches and setup Menu on screen.

Direct Control items with HV-D15

BAR/CAM	R.GAIN
WHITE BAL	B.GAIN
GAIN	R.BLK
DTL	B.BLACK
IRIS MODE	IRIS
SHUTTER (ON/OFF)	M.BLK
CONTRAST(ON/OFF)	A.WHT
ULTRA GAIN(ON/OFF)	A.BLK
ENABLE (ON/OFF)	SCENE FILE

Other control items are set from screen Menu with using FUNCTION buttons

Accessories

Remote plug (HR10A-7P-4P(01))

Major specifications

Serial data output:	1.5Vp-p
Maximum cable length:	200m (Cable equiv.to HC-5B2)
Power supply :	9 to 15VDC (supplied from camera)
Power consumption:	0.5W approx.
Dimensions and mass:	116(W)x128(H)x60(D)mm,500g approx.

GM-51 STUDIO VIEWFINDER

Hitachi High performance and high Resolution, 5-inch Viewfinder

Specifications

CTR:	VS 1Vpp, sync negative
Input signal:	5 inch black and white
Power requirement:	12 VDC
Resolution:	700 TVL or more
Maximum brightness:	1100ft-L or more
Deflection linearity:	1 % at centre ,2% or less at corners (picture height)
Geometric distortion:	2% or less
Dimensions and weight:	140(W)x138(H)x252(D)mm 1,8kg
Power consumption:	7,6W approx.
Operating temperature :	-10 to 50°C
Storage temperature:	-20 to 60°C

HV-D15&GM-51 CONNECTOR PIN ASSIGNMENT

D-SUB-) PIN CONNECTOR (Plug:HDE8-9PF(05))

- 1-GND
- 3-WEN OUTPUT
- 3-R/R-Y/C OUTPUT
- 4-G/Y OUTPUT
- 5-B/B-Y OUTPUT
- 6-NC
- 7-SYNC OUTPUT
- 8-TALLY IN *
- 9.GENLOCK IN

*Tally switch only to GND

AUX/VIEWFINDER CONNECTOR (HR 10A-10R-12PB)

- 1-GND
- 2-(+)12V (used for VF)
- 3-Zoom out
- 4-Focus out
- 5 -GND
- 6-TALLY OUT (used for VF)
- 7-VD INPUT
- 8-PAN OUT
- 9-TILT OUT
- 10-GND
- 11-Y OUT (used for VF)
- 12-GND

LENS CONNECTOR (HR 10A 10R 12SB)

- 1-NC
- 2-NC
- 3-GND
- 4-ENF AUTO
- 5-IRIS CONT
- 6-UNREG+12V
- 7-IRIS POS
- 8-IRIS A/R
- 9-NC
- 10-NC
- 11-NC
- 12-NC

Y/C CONNECTOR

- 1-Y GND
- 2-C GND
- 3-Y OUTPUT
- 4-C OUTPUT

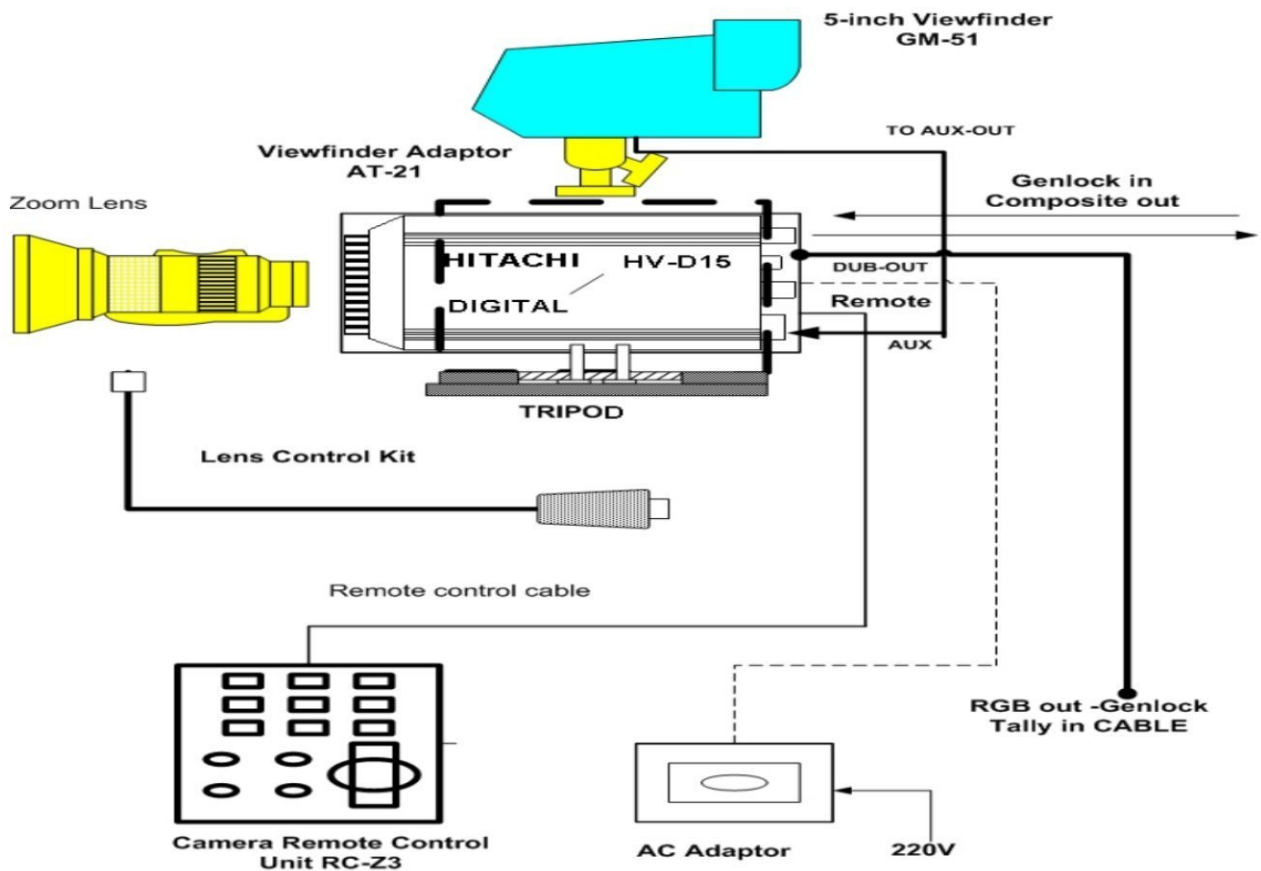
REMOTE CONNECTOR (Plug:HR 10A-7P-4P)

- 1-(+)12V OUTPUT
- 2-SD INPUT
- 3-SD OUTPUT
- 4-GND

12V IN CONNECTOR (Plug:RM 128PG-35)

- 1-(+)12V IN
- 2-GND
- 3-NC

SYSTEM CONFIGURATION



HV-D15&GM-51 OPTIONAL ACCESSORIES

FUJINON PROFESSIONAL ENG LENS LINE UP

S 12x5 BRM-24	12xZOOM RATIO, 5mm FOCAL LENGTH
S 13x4.6 BRM-SD	13xZOOM RATIO, 4.6mm FOCAL LENGTH
S 13x4,6 BERM-SD	13xZOOM RATIO, 4.6mm FOCAL LENGTH WITH 2xEXTENDER
S 17x6.6 BRM-24	17xZOOM RATIO, 6.6mm FOCAL LENGTH
S16x7.3 BRM-SD	16xZOOM RATIO, 7.3mm FOCAL LENGTH
S 20x6.4 BRM-SD	20xZOOM RATIO, 6.4mm FOCAL LENGTH
S 20x6,4 BERM-SD	20xZOOM RATIO, 6.4mm FOCAL LENGTH WITH 2xEXTENDER

CONTROL FOR FUJINON LENS

MS-01 SEMI SERVO KIT
 SS-01 FULL SERVO KIT
 ECE-22 EXTENTION CABLE FOR HV-D15

CANON PROFESSIONAL ENG LENS LINE UP

YH19x6.7 KRS	19xZOOM RATIO, 6.7mm FOCAL LENGTH
YH16x6.7 KRS	16xZOOM RATIO, 6.7mm FOCAL LENGTH
YH12x4.8 KRS	12xZOOM RATIO, 4.8mm FOCAL LENGTH

CONTROL FOR CANON LENS

MS-210 SEMI SERVO KIT
 MS-220 SEMI SERVO KIT
 MS-15 SEMI SERVO KIT
 ADAPTER CABLE FOR HV-D15

VIDEO AND REMOTE CONTROL CABLES

CH0015 DUB	15M
CH0030 DUB	30M
CH0050 DUB	50M
CH0015 RM	15M
CH0030 RM	30M
CH0050 RM	50M
CH0100 RM	100M
CH0200 RM	200M

VIDEO MONITORS

CPM-2104 21-INCH COLOR MONITOR WITH PLASTIC CASE
 CPX-1498MS 14-INCH COLOR MONITOR WITH METAL CASE

CAMERA SUPPORT

VIN-3AP1 VINTEN TRIPOD PACKAGE 1
 VIN-3AP2 VINTEN TRIPOD PACKAGE 2
 3219-78 VINTEN PAN BAR
 3319-3C VINTEN ENG STUDIO SKID
 3319-3ST VINTEN ENG STUDIO SKID -SMALL
 3449-900SP VINTEN WEDGE PLATE