

A faint, light blue world map is visible in the background of the slide, showing the outlines of continents and major landmasses.

HITACHI

ADVANCED DIGITAL TECHNOLOGY

Broadcast & Video System Division

Product Line-up

Broadcast & Video System Division

Camera

HDTV Multi-Standard Camera
(SK-3000 Series)



Digital SDTV Camera
(SK-2600/2700/777 Series)



Professional Digital Camera
(Z-ONE DAY 21, S-3000)



Camcorder (DVC PRO)
(Z-V1A, Z-V1B...)



Special Camera
(Haripicon, Herico, Telecine)

Broadcast System



Non-Linear On-Air Server System

Remote Control System for ENG
Microwave Link and Camera



OB-Van & Studio System
Codec (MPEG-2)
Sync Gen., Router



Microwave



Microwave Link
(Z1-Z7)

STL/TSL (Analog & Digital)



TV and Radio Transmitter

Terrestrial Digital Transmitter



MultiMedia Digital
Microwave
Transmission System

Core Technology

- LSI development
- Camera Video Processing
- Digital Transmission
- Microwave/RF Power Amp
- Video Codec
- Non-Linear Server System

Industrial

Industrial 3-CCD Camera
(HV-D30, HV-D15, HV-D5W)



Codec (M-JPEG)

Robotics/Surveillance/CCTV Camera

SK-3000 High Definition Digital Camera

◆ Fully Digital System

- * 2.2 M pixel FIT CCD
- * Digital Optical Fiber Transmission (1.5 Gbps)
- * HDTV 1080i, NTSC and D1 outputs

◇ Multi Scan Format

- * 1080i/525i (16:9/4:3)
- * 720p/525i (16:9/4:4)

◇ High Quality

- * Resolution : HDTV 1000 lines, NTSC 900 lines
- * f:8.0/2000lx
- * S/N 54 dB

◇ System Compatibility

- * Remote Control & Setup control as SD TV SK 3000



SK-3100P/3300P Next Generation portable HDTV Camera

◆ FEATURES

- ◆ Most Compact & Lightweight body (approx. 4.9Kg w/WF)
- ◆ Good weight balance and operability
- ◆ Lowest power consumption
- ◆ (30W :SK-3100P, 33W :SK-3300P at DC-IN)
- ◆ Good picture quality by Digital process
- ◆ HD-SDI output from Camera head
- ◆ Built-in pixel concealment



SK-2700P/2700PW Digital Camera

- High pixel density CCD
- ◇ * 600k FIT-CCD (SK -2700P)
- ◇ * 740K wide FIT-CCD (SK -2700PW)
- ◇ Easy Operability
- ◇ * Two channel intercom system
- ◇ * 8-mode Gate for Auto iris
- ◇ * VF Slide mechanism
- ◇ (Front and back, right and left)
- ◇ * Digital Encoder / Com b filter (Option)



NEW SK-777 Portable Digital Camera

- ◆ New High pixel density FIT CCD
 - ◇ * 740K wide FIT-CCD
- ◇ High Quality & Easy Operability
 - ◇ * Broadcast quality
 - ◇ * high resolution 850 (4:3) / 800 (16:9) lines
 - ◇ * choice of 1.5-inch view finders
 - ◇ * choice of 5-inch studio VF's
 - ◇ * choice of operation control panels
 - ◇ * Setup control for up to 12 cameras
 - ◇ * digital encoder / comb filter
- ◇ New Studio Adapter, SA-777T available for large lenses
- ◆ Various System Configurations
- ◆ Very cost effective Broadcast Camera



Component Triaxsystem TU-Z3/CX-Z3



SK-777 with CX-Z3



TU-Z3

FEATURES

High quality video transmission

- FM transmission assures high S/N ratio
- Wide bandwidth of Y(10MHz) and Pb/Pr(5MHz)

Digital audio transmission

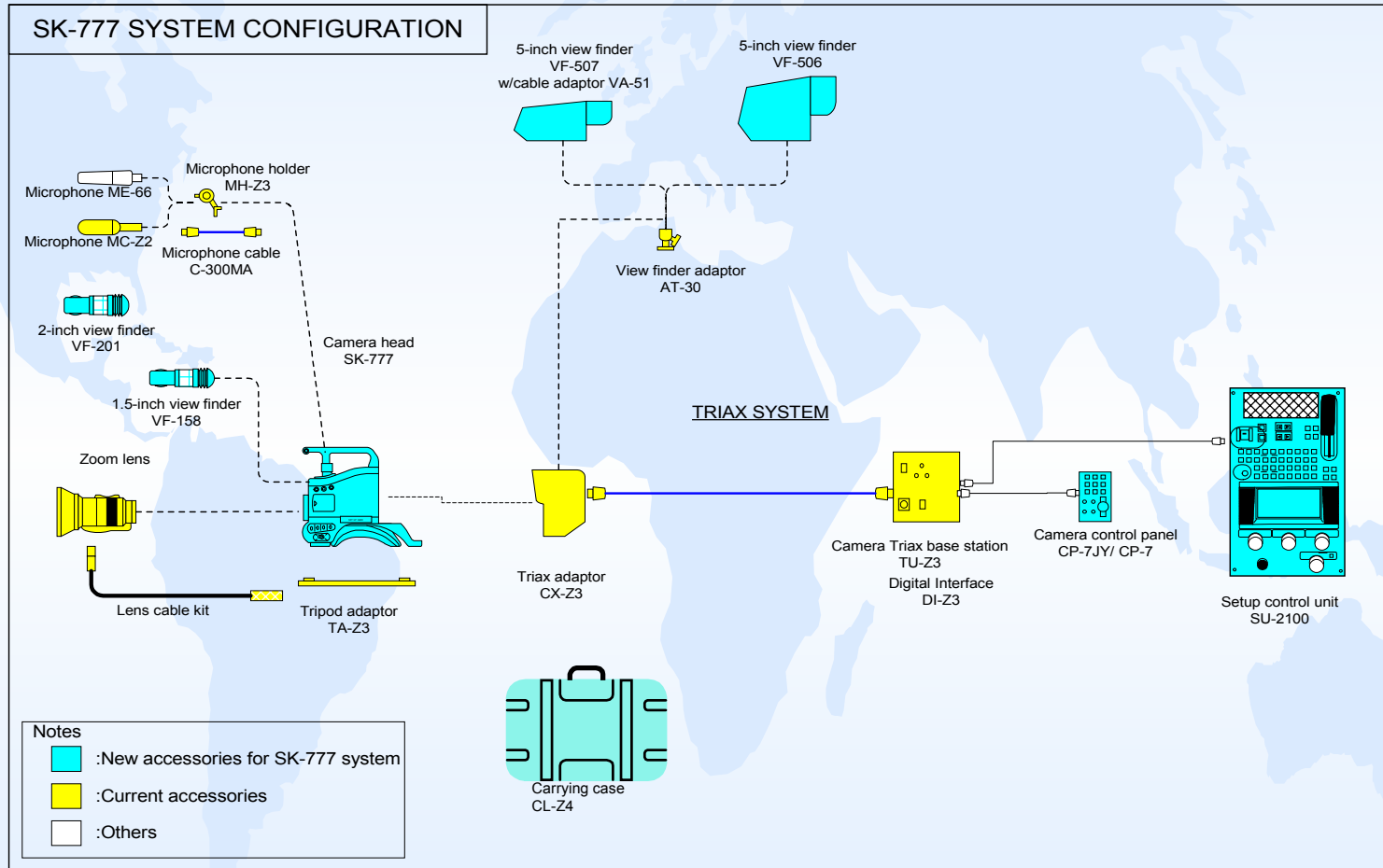
- Bi-directional digital transmission
between camera head and base-station

Digital video interface

- Two D1 serial outputs and two D1 serial inputs for
return video (option)

SK - 777 System configuration

26.05.00



SA-777T Studio Adapter

1,Outline

- The SA-777T studio adapter is specifically intended for use with the SK-777 portable colour camera.
- Not required any change from standard composition for mounting.
- Easy interfacing of portable Broadcast camera with a 5 inch(VF-507) or
- 7-inch (VF-712) viewfinder and large size Standard BTA mount studio lens.

The power for lens and VF are supplied from the AC output of CCU (TU-Z3)



3CCD Colorcamera

S-3000

FEATURES

1 4:3 Dockable Camera

- 2/3" CCD 620K pixel
- High Resolution 900TV line
- High sensitivity (F11, 2000lx)

2 High performance DSP

- Fully digital signal process including encoder block
- Digital noise reduction (S/N 63dB)

3 Lightweight diecast body

4 Auto pixel concealment

5 DVCPRO 50(4:2:2) Dockable

6 Betacam SX + D9 Dockable

7 Component Triax available



3CCD Colorcamera

S-3000W

FEATURES

1 16:9/4:3 Switchable Camera

- 2/3" CCD 600K pixel
- High sensitivity (F11, 2000lx)

2 High performance DSP

- Fully digital signal process including encoder block
- Digital noise reduction (S/N 63dB)

3 Lightweight diecast body

4 Auto pixel concealment

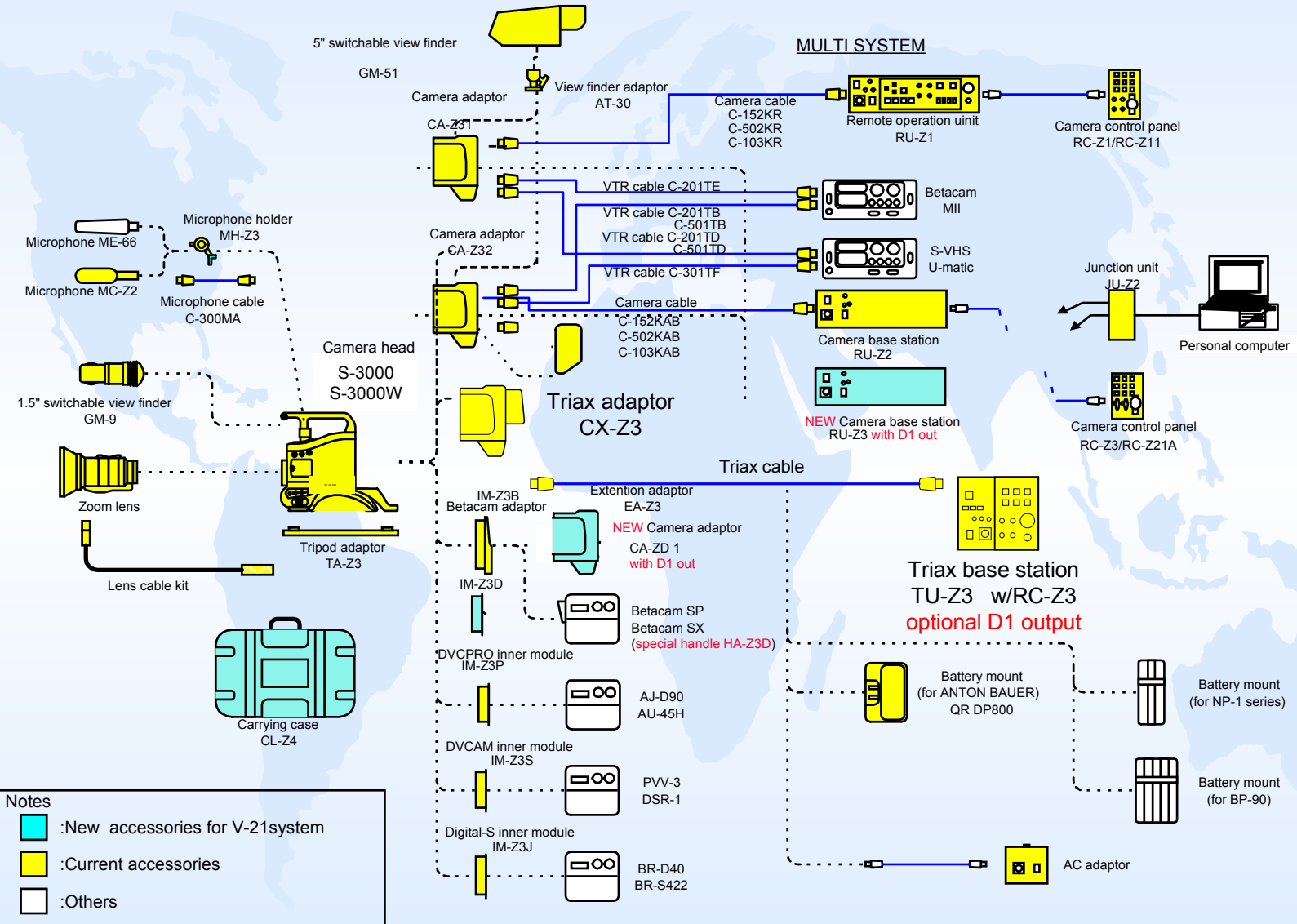
5 DVCPRO 50 (4:2:2) Dockable

6. Betacam SX + D9 Dockable

7. Component Triax available



S-3000/3000W system configuration



Component Triaxsystem TU-Z3/CX-Z3



S-3000W with CX-Z3



TU-Z3

FEATURES

High quality video transmission

- FM transmission assures high S/N ratio
- Wide bandwidth of Y(10MHz) and Pb/Pr(5MHz)

Digital audio transmission

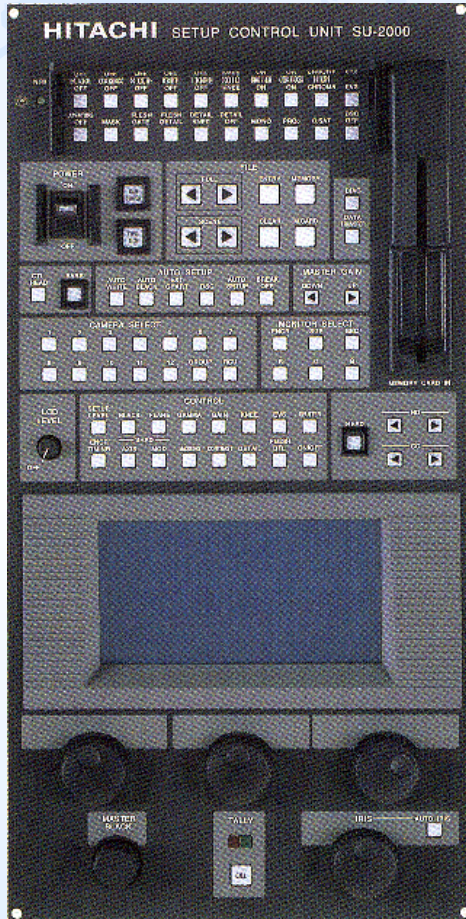
- Bi-directional digital transmission
between camerahead and base-station

Digital video interface

- Two D1 serial outputs and two D1 serial inputs for
return video (option)

Camera setup unit SU-2100 for S-3000 /SK-777 series

FEATURES

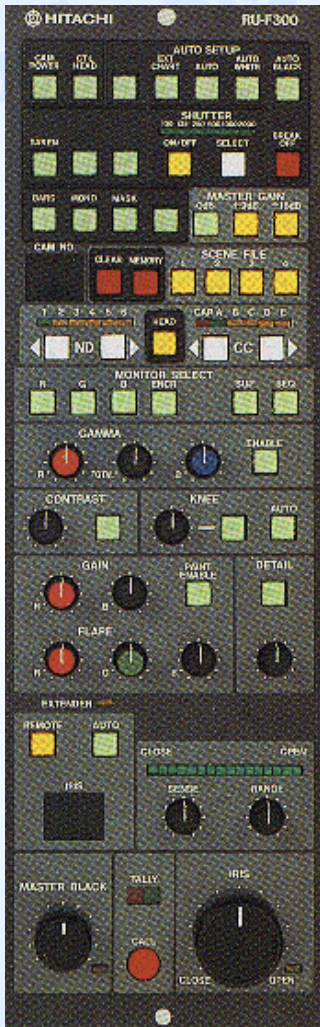


- Camera setup up-to Max 12 x S-3000 /SK-777 series
- Easy operation with TU-Z3
- Large liquid crystal display with touch panel
- Direct SW control
- Built-in external control for video switcher
- Data transfer between cameras
- Memory card filing

Camera control panel RU-777 for S-3000/SK-777 /TRIAX System

FEATURES

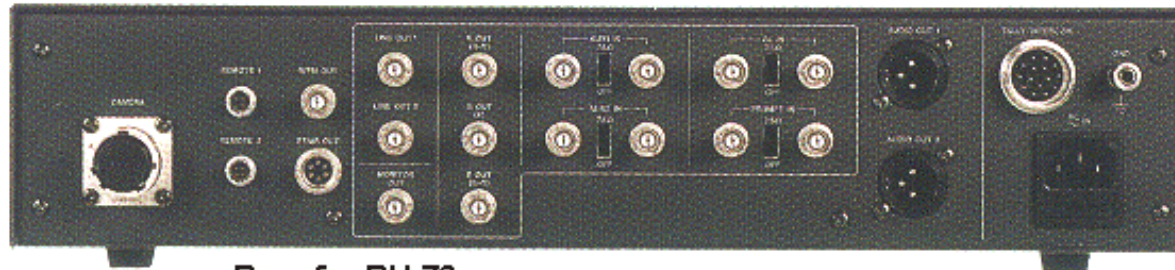
- Easy Adjustment of the camera functions by the lighting LED switch and the potentiometer.
- Max 100 m control cable
- The CS (Customer Selection) switch is established to set the key function switch which meet the user`s need



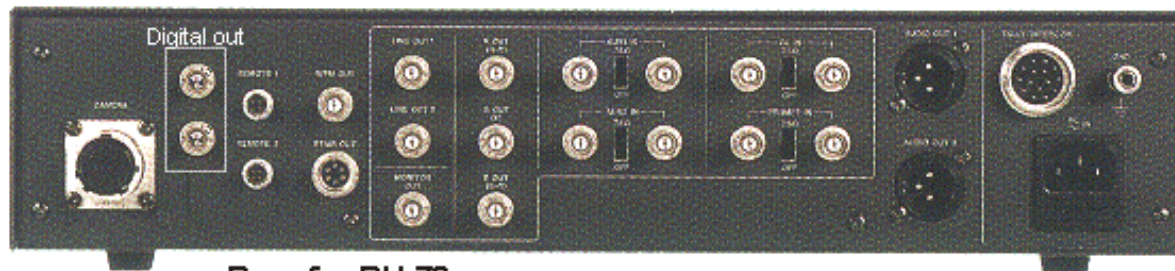
Camera base station

RU-Z3 with D1 output

Camera Base Station RU-Z2/Z3



Rear for RU-Z2



Rear for RU-Z3

NEW Camera Adapter, CA-ZD1 for S-3000 series

FEATURES

Direct D1 output from camera head
selectable : BNC or VTR connector

for direct digital stand-alone recording
or
direct use / transmission of D1 signal



NEW Carrying case, CL-Z 4 for S-3000 / SK -777 series

FEATURES

To fit in :

cam era head incl. 1.5-inch V F

tripod adapter

ENG lens

+

cam era adapter

or

dockable VTR 's :

-D SR -1

-B V V -5

-D N V -5

-P V V -1, P V V -3

-A J -D 90, A U -45H

-B R -D 40, B R -S 422

High Performance 3-CCD Digital

HV-DSW

FEATURE

Switchable aspect ratio 16:9 / 4:3

Newly developed high performance DSP

- Fully digital system including Encoder block
- Digital noise reduction for high picture quality
- Double speed Y channel processing for high resolution

Flexible interfacing with a broad range of applications

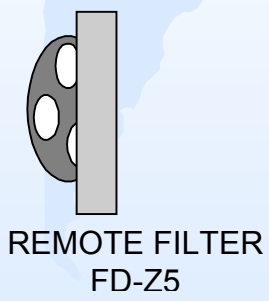
- Multiple video signal output (D1, VBS, RGB, YC, Component)
- Remote filter (option), remote control from a PC
- Built in AUX connector for external control such as Pan/Tilt

Digital Output option

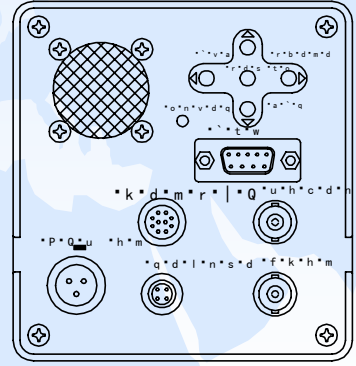


HV-D5W

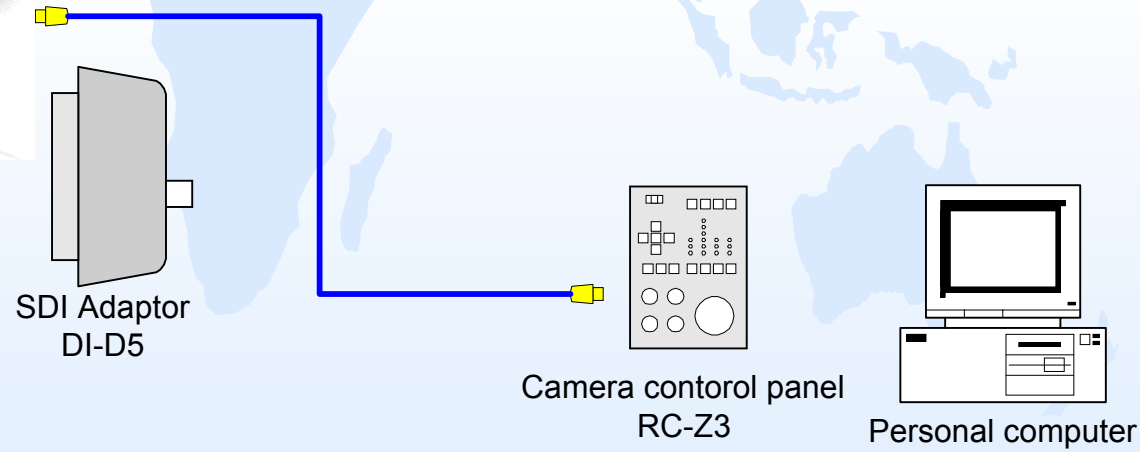
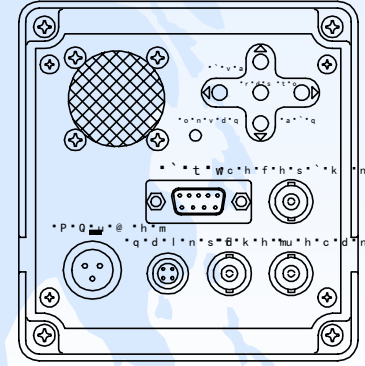
System Configuration



Standard Rear Panel



SDI Adaptor Rear Panel



SDI Adaptor DI-D5

Camera control panel RC-Z3

Personal computer

Typical HV-D5W Broadcast Applications

- ◆ Cable TV studios
- ◆ Remote controlled Soap Productions (Big Brother)
- ◆ NASA Project
- ◆ Long Distance remote controlled Parliament camera (YLE)
- ◆ All type of small High quality camera applications where
 - switchable aspect ratio
 - D1 output
- ◆ is required

High Performance B-Mount 3-CCD

Digital

FEATURE

HV-D15

Newly developed high performance DSP

- Fully digital system including Encoder block
- Digital noise reduction for high picture quality
- Double speed Y channel processing for high resolution

Flexible interfacing with a broad range of applications

- Multiple video signal output (VBS, RGB, YC, Component)
- Remote control from a personal computer or remote control unit
- Built in AUX connector for external controls such as Pan/Tilt

Small size and low power consumption



Typical HV-D15 Broadcast Applications

- ◆ Caption scanner (ZDF Germany)
- ◆ Automated night news (ZDF Germany)
- ◆ Long Distance remote controlled Parliament camera (YLE)
- ◆ Big brother (Turkey)
- ◆ Video Conference applications

C-mount 3CCD color camera HV-D25

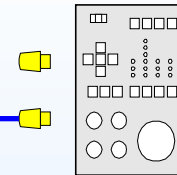
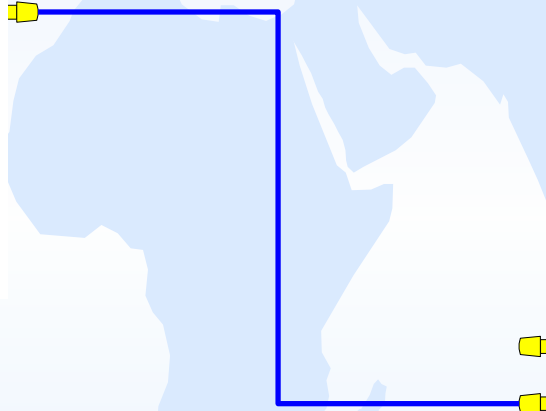
NEW FEATURES

- Basic characteristics are same as HV-D15
- Various kinds iris control (Video type, Cosmocar type, DC control type)
- Auto iris over-ride function by using Video type lens
- Changeable control speed of AGC and AES functions (slow, standard, fast)
- Changeable gamma table by function menu (low, standard, high)
- Can use the lens for the HV-C20 series

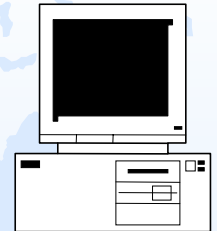


HV-D15/25

Newly control the full function of camera from RC-Z3



Camera control panel
RC-Z3



Personal computer

Count 3 CCD color cameras

HV-D 27/HV-D 37

MAJOR FEATURES

Remote head cameras

- Small and lightweight camera head
- HV-D 27: 1/2 inch CCD type HV-D 37: 1/3 inch CCD type

One-chip VLSI

Cable length : 3m , 10m , 20m

Extended A E S function (1/50,000 sec)



KP-D8

DSP Mini-Color Camera

FEATURE

- ◇ Compact and Lightweight
- ◇ DSP Performs HIGH Quality Picture
- ◇ Remote Control from PC (RS-232C)
- ◇ Built-in 2H Enhancer Aperture Knee
- ◇ Auto electronics shutter
- ◇ Auto White Balance

SPECIFICATIONS

IMAGE DEVICE	: 1/3" 752x582 PIXEL PAL
H RESOLUTION	: 460 TV-L PAL
S/N	: 48dB (AGC OFF)
MIN ILLUMINATION	: 4 lx (F1.2 AGC ON)
SYNC SYSTEM	: INTERNAL
POWER SUPPLY	: DC 12V 150mA
SIZE	: 22x22x86 mm
MASS	: 80g



Ideal applications : Car racing

: A Helmet Camera

Typical K P-D 8 Broadcast Applications

- ◆ Sports like i.e.
 - Cricket (BBC)
 - Sailboat races
 - DTM series Car racing Germany (W ige TV)
 - Big Brother (Turkey)