

GP-US932HT - HD Camera Head
GP-US932CUT - HD Control Unit

See What You've Been Missing!



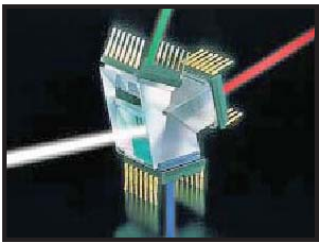
**Panasonic's True High Definition
3CCD Remote Head Camera System**

Panasonic ideas for life

Panasonic's True HD 3CCD Remote Head Camera System

Now, get the sharpest, purest color images imaginable, from Panasonic's first small 3CCD remote head camera with true 16x9 Multi Format High Definition. Ideal for medical, microscopy, inspection, industrial and professional applications, this revolutionary new solution is available only from Panasonic. Take a look - you'll be amazed to see what you've been missing.

True Multi-Format HD



The unit is both 1080i or 720P selectable and uses three 1/3" type 16x9 Progressive HD sensors running at full 60 frames per second. Offering sharp, flicker free images with better vertical resolution.

New High-Sensitivity Progressive CCD

Each pixel has a large light-receiving area, giving this newly developed 1/3" type progressive CCD exceptional high sensitivity. This advanced CCD and a newly developed digital signal processor (DSP) in combination with a very sophisticated offset spatial technology achieves a balance of high resolution and high S/N ratio required for critical HD applications.

New DSP with 14-bit A/D Conversion and 19-bit Processing

Starting from progressive capture, the GPUS932's newly developed digital signal processing uses 14 bit A/D conversion and 19 bit inner processing to attain unprecedented accuracy and results in true 1920x1080i or 1280x720p HD outputs. From this progressive capture the DSP converts the signal to multiple, simultaneous HD and SD outputs.

Excellent Color Performance

12-Axis Matrix Control for Superior Life-like Color Accuracy

Each color can be adjusted separately without changing the white balance of the entire image. Additionally, each of the 12 color axis can be independently adjusted without affecting the adjacent color vector. The red color adjustment is particularly useful for biological and medical applications.



Conventional image



GP-US932 image

Special Expanded Dynamic Range Function

Our unique new dynamic range feature expands the contrast of the dark areas while maintaining detail in the bright areas of the picture.



Conventional image



GP-US932 image

High-Resolution Native Progressive Scan

Progressive to interlace conversion, cross conversion and down conversion all start with the progressive scan. That initial Native Progressive Scan offers a higher level of vertical resolution. The result is outstanding HD and SD video output image quality that electronically processed scans cannot match.

Powerful, Flexible Menu Set-up

Easy Set-up Menu

The on-screen menu facilitates simple and efficient adjustments. Adjustments can be made while observing the image. A list of camera functions are displayed on the monitor screen. Simply select the appropriate presets and press the corresponding buttons to complete the setting.



3 Scene Files

There are 3 separate scene files each with 11 programmable parameter settings that can be customized to the user's preference, ie. surgical modalities.

Full, Flexible Parameter Settings

- Gamma • Red Detail • Precise ELC Control • Gain
- KNEE, Black Stretch • Detail Enhancement (frequency selectable / multiple levels)

Other Features

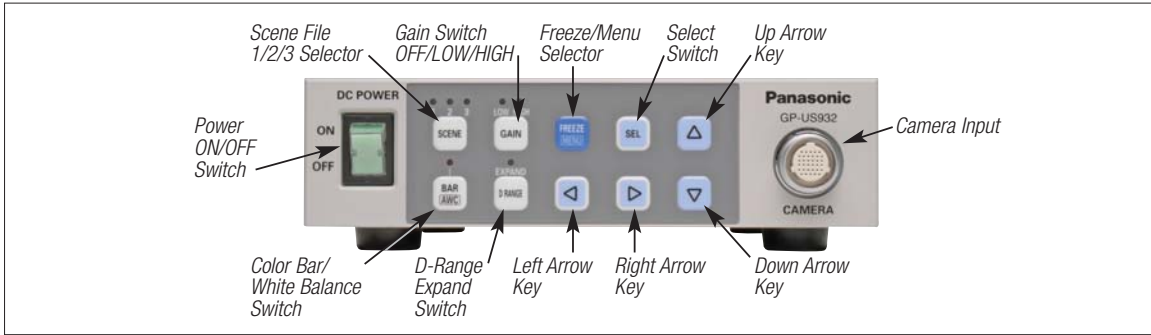
Include Electronic Zoom up to 2.5x and Freeze function

Major Operating Control & Switches

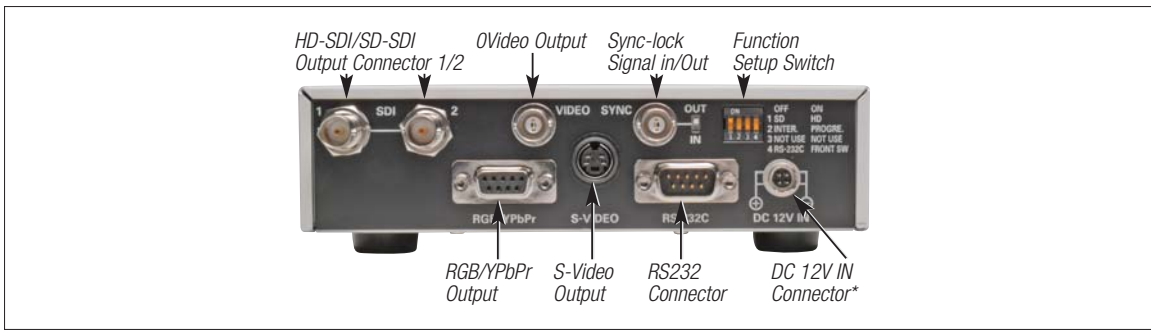
- HD Outputs: HD-SDI; Analog Component (RGB/YPbPr)
- Std outputs: S-Video, composite
- RS-232 for control

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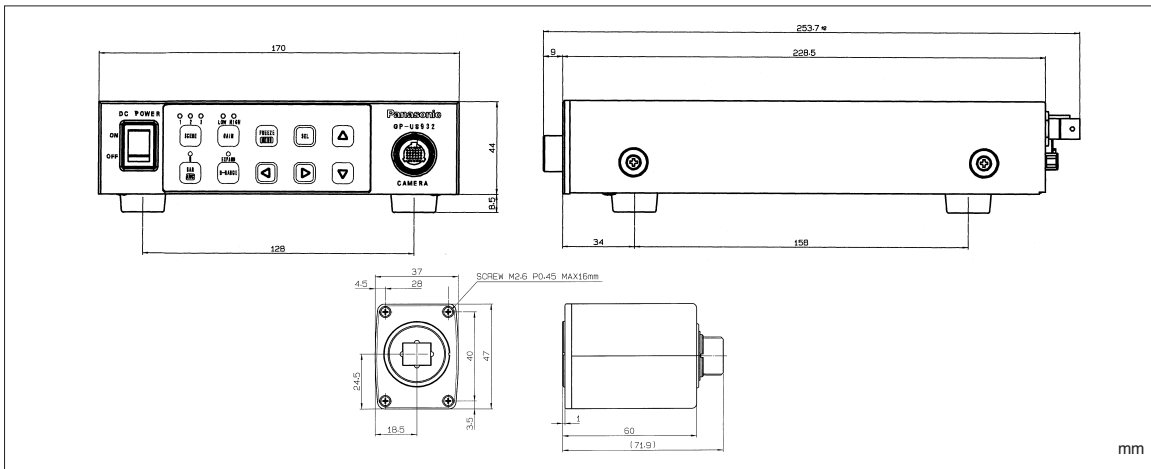
Front View



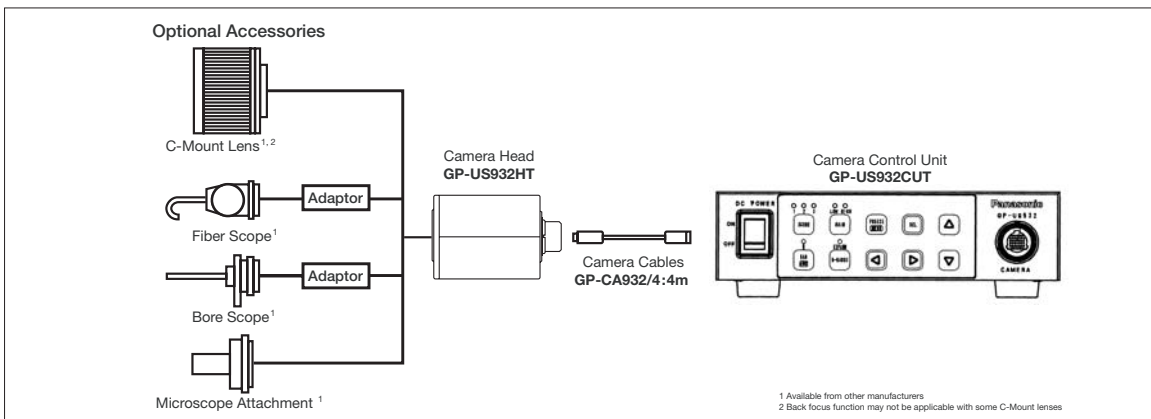
Rear View



Dimensions



System Block Diagram



Remote Camera System GP-US932 Series Specifications

Model No.	CCU	GP-US932CUT
	Camera Head	GP-US932HT
Pick-up Device	Three 1/3"- type progressive CCDs	
Synchronizing System	Internal or External (SYNC)	
Video Format	1080/60i (16:9) 720/60P (16:9) 480/60P (16:9) (4:3 side-cut) 480/60i (16:9) (4:3 side-cut)	
Video Output	Analog	YPbPr/RGB (HD or SD selectable); SD: Y/C, VBS x 1 each
	Digital	HD-SDI/SD-SDI x 2
Required Illumination	2000 lx at F5.6, 3200K	
Signal-to-Noise Ratio	54 dB (Typical)	
Pixel Output	1920 (H) x 1080 (V) 1080i mode 1280 (H) x 720 (V) 720P mode 720 (H) x 480 (V) 480P, 480i mode	
White Balance	AWC, ATW or Manual	
Electronic Shutter	Auto: 1/60 - 1/10000 s Step: 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 s	
Gain Control	AGC or Gain Up	
Controls	R Gain, B Gain, Brightness, Enhance and Electrical Zoom	
Computer Interface	RS-232C: D-Sub 9-pin Connector x 1 for Command Communication and EVR Communication	
Lens Mount	C-Mount	
Power Source	12 V DC (10.8V - 13.2V) 4-pin connector	
Power Consumption	12.0 V, 1.5 A or less	
Operating Temperature	0 - 40 °C	
Specification Assured Temperature	10 - 35 °C	
Storage Temperature	-10 - 60 °C	
Operating Humidity	30 - 85 %	
Storage Humidity	30 - 90 %	
Dimensions	CCU	170 (W) x 44 (H) x 229 (D) mm excluding Rubber Foot and Connector
	Camera Head	37 (W) x 47 (H) x 60 (D) mm excluding connector and Pedestal for Tripod
Weights	CCU	1.2 kg (2.64 lbs)
	Camera Head	143 g (0.32 lbs)
Power connector Spec:		
	Manufacturer	Hirose
	Part Number	HR10A-7P-4S(73)
	Pin Configuration	Pin 1 & 2 (+12V) Pin 3 & 4 (GND)
	Digi-Key Part #	HR1584-ND

- Lens and cable are optional equipment
- All TV pictures and menus are simulated and shown for the purpose of explanation
- Weights and dimensions are approximate
- Specifications are subject to change without notice
- These products may be subject to export control regulations

IMPORTANT– Safety Precaution: carefully read the operating instructions and installation manual before using this product

Panasonic is registered with "ISO 14001," the international standard for the environment. To ensure a bright future for the earth, Panasonic has begun numerous activities to promote clean global manufacturing.

Panasonic

Panasonic System Solutions Company

Unit Company of Panasonic Corporation Of North America

Medical Vision
3 Panasonic Way, 2H-2
Secaucus, N.J. 07094
1-888-880-8474
www.panasonic.com/visionsystems

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