

HD Remote Head Camera

GP-US932X series

3MOS HD Camera Head

GP-US932HX

HD Camera Control Unit

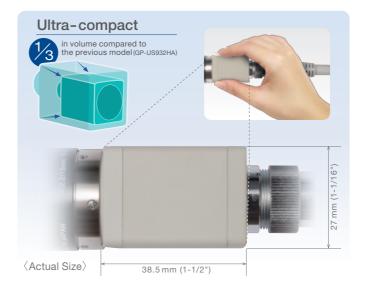
GP-US932CSX



1/3 type 3MOS Full HD Camera with Compact Camera Head

Key Features

- 1/3 type Full HD 3MOS sensors
- 1080/59.94p, 50p resolution at HDMI output
- 1000 TV lines (typical) of horizontal resolution
- Multi-format:
- (59.94Hz; GP-US932CSX)
- 1080/59.94p, 1080/59.94i, 1080/29.97p(sF), 720/59.94p, 480/59.94p, 480/59.94i (50Hz; GP-US932CSXE)
- 1080/50p, 1080/50i, 1080/25p(sF), 720/50p, 576/50p, 576/50i
- Various video outputs: HDMI, SDI x2, RGB/YPbPr, Video, S-video
- Synchronization: Internal or External
- Required illumination: 2000 lx at F12 (when BINNING:ON)
- 3 Scene files allow to register each of adjustable parameter settings in accordance with an installation location or an intended purpose.
- Dynamic range function improves high-contrast images that include light and dark areas.
- Color matrix function allows independent hue and chroma adjustment in each of 12 axes.
- Functions: Camera title, ELC, Electronic shutter, Gain adjustment, Electronic sensitivity enhancement, Binning, Red detail, White balance, Black balance, Electronic zoom (up to 2.5x), Freeze, Flip, Mirror, Status display
- HD camera cable can be selected from 4 m (13.1 ft.) / 6 m (19.7 ft.)
 /10 m (32.8 ft.).
- Compact and lightweight camera head (GP-US932HX):
 27 mm (W) x 30 mm (H) x 38.5 mm (D)
 (1-1/16 inches (W) x 1-5/32 inches (H) x 1-1/2 inches (D)),
 Approx. 70 g (0.15 lbs)



Recommended lenses

(As of September, 2012)

Manufacturer	Product name	Model	
	High Definition Fixed Lens	HAF4.8DA-1	
	High Definition Zoom Lens	XA4x7.5DA-1	
	3CCD Camera Lens	TF2.8DA-8, TF4DA-8, TF8DA-8B, TF15DA-8	

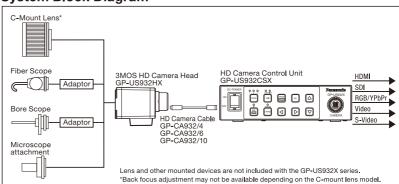
^{*}Use lens with projection length from mount part of 4 mm (5/32 inches) or less.

^{*}The recommended lens aperture range is from F2.2 to F16.

GP-US932X Components

System Block Diagram

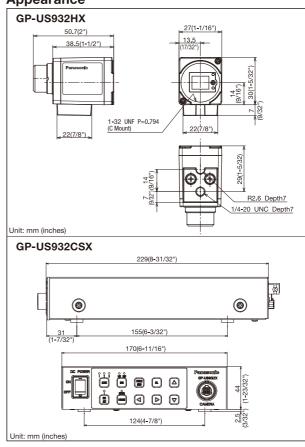




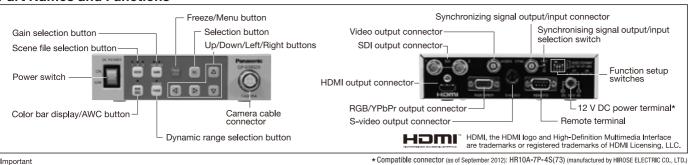
Specifications

opecino	ations			
Model No.		GP-US932CSX	GP-US932CSXE	
Frame Frequer	ncy	59.94 Hz	50 Hz	
Power source		12 V DC ±10 %		
Power consumption		Approx. 14.4 W (including camera head)		
Pick-up system		Micro prism system		
Image sensor		1/3 type 3MOS		
Synchronization		Internal or external synchronization		
Video output				
Video output		BNC connector x1, 1.0 V [p-p]/75 Ω		
S-video output		S-video connector x 1 Y: 1.0 V [p-p]/75 Ω C: 0.286 V [p-p]/75 Ω	S-video connector x 1 Y: 1.0 V [p-p]/75 Ω C: 0.3 V [p-p]/75 Ω	
RGB/YPbF		D-sub 9-pin connector x1 G: $1.0 \text{ V } [p-p]/75 \Omega$ B, R: $0.7 \text{ V } [p-p]/75 \Omega$ Y: $1.0 \text{ V } [p-p]/75 \Omega$ Pb, Pr: $0.7 \text{ V } [p-p]/75 \Omega$ SYNC: $0.286 \text{ V } [p-p]/75 \Omega$ VIDEO: $1.0 \text{ V } [p-p]/75 \Omega$	D-sub 9-pin connector x1 G: 1.0 V [p-p]/75 Ω B, R: 0.7 V [p-p]/75 Ω Y: 1.0 V [p-p]/75 Ω Pb, Pr: 0.7 V [p-p]/75 Ω SYNC: 0.3 V [p-p]/75 Ω VIDEO: 1.0 V [p-p]/75 Ω	
HDMI output		HDMI connector x 1		
SDI output		BNC connector x2		
Video format				
Video output		480/59.94i	576/50i	
S-video output		480/59.94i	576/50i	
RGB/YPbPr output		1080/59.94i, 1080/29.97p(sF), 720/59.94p, 480/59.94i	1080/50i, 1080/25p(sF), 720/50p, 576/50i	
HDMI output		1080/59.94p, 1080/59.94i, 1080/29.97p(sF), 720/59.94p, 480/59.94p	1080/50p, 1080/50i, 1080/25p(sF) 720/50p, 576/50p	
SDI output		1080/59.94i, 1080/29.97p(sF), 720/59.94p, 480/59.94i	1080/50i, 1080/25p(sF), 720/50p, 576/50i	
Required illumination		2000 lx (3200 K, F12, BINNING: ON)		
Minimum illum	ination	5 Jx (F2.2, GAIN: HIGH, BINNING: ON, 30 % output, at center)		
S/N		54 dB (at output using 1080i)		
Horizontal resolution		1000 TV lines at center (typ. when 1080i output)		
Color bar		SMPTE color bar with 0 % set-up		
Functions		Camera title, ELC, Electronic shutter, Gain adjustment, Electronic sensitivity enhancement, Binning, Output signal changeover, Scene file, White balance, Black balance, Electronic zoom, Freeze, Flip, Mirror, Status display, Display format changeover for the SD format		
External control		RS-232C D-sub 9-pin connector x1		
Ambient operating temperature				
Ambient operating humidity		30 % to 90 %		
Dimensions	GP-US932CSX	170 mm (W) x 44 mm (H) x 229 mm (D) (6-11/16 inches (W) x 1-23/32 inches (H) x 9 inches (D)} (excluding rubber feet and projections)		
	GP-US932HX	27 mm (W) x 30 mm (H) x 38.5 mm (D) (1-1/16 inches (W) x 1-5/32 inches (H) x 1-1/2 inches (D)} (excluding the tripod mount base and projections)		
Weight	GP-US932CSX	Approx. 1.35 kg (2.98 lbs)		
	GP-US932HX	Approx. 70 g (0.15 lbs)		
Finish		Ivory color coating		

Appearance



Part Names and Functions



Important

- -Safety Precaution: carefully read the operating instructions and installation manual before using this product.
- -These products do not have medical standard approvals.
- -This product is intended for usage in general electronics applications.
- The usage of this product for special purposes, such as traffic control instruments, transportation instruments, and medical instruments,
- may be prohibited without authorization under the applicable laws and regulations of each country or region where this product is in practical use. Specifications are subject to change without notice. The arrangement for the authorization shall be made under customer's or user's own responsibility.
- · All TV pictures are simulated.
- Masses and dimensions are approximate.
 - These products may be subject to export control regulations.

DISTRIBUTED BY:

anasonic