

HD Remote Head Camera GP-US932X series

3MOS HD Camera Head

GP-US932HX

HD Camera Control Unit

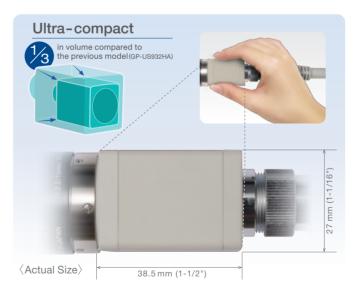
GP-US932CSX



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

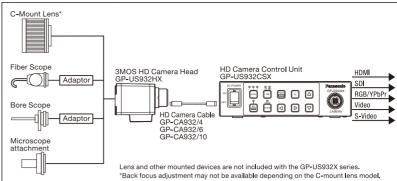
^{*}Use lens with projection length from mount part of 4 mm (5/32 inches) or less.

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

GP-US932X Components

System Block Diagram

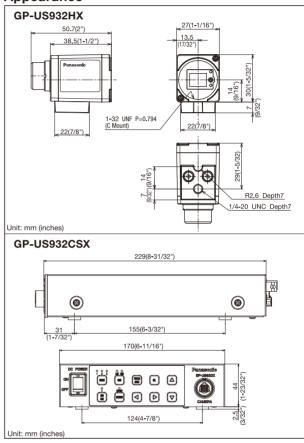




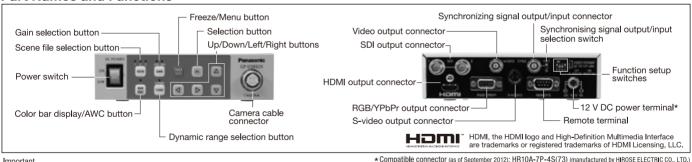
Specifications

Frame Frequency	-				
Power consumption	Model No.		GP-US932CSX	GP-US932CSXE	
Power consumption Approx. 14.4 W (including camera head)		icy		50 Hz	
Pick-up system			12 V DC ±10 %		
Image sensor	Power consumption		Approx. 14.4 W (including camera head)		
Internal or external synchronization Video output	Pick-up system		Micro prism system		
Video output	Image sensor		1/3 type 3MOS		
Video output	Synchronization		Internal or external synchronization		
S-video output S-video connector x 1 Y: 1.0 V [p-p]/75 Ω Y: 1.0 V [p-p]/75 Ω C: 0.286 V [p-p]/75 Ω C: 0.3 V [p-p]/75 Ω	Video output				
S-video output Y: 1.0 V [p-p]/75 Ω Y: 1.0 V [p-p]/75 Ω	Video output		BNC connector x1, 1.0 V [p-p]/75 Ω		
RGB/YPbPr output	S-video output		Y: 1.0 V [p-p]/75 Ω	Y: 1.0 V [p-p]/75 Ω	
SDI output	RGB/YPbPr output		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: 0.286 V [p-p]/75 Ω	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 otrput	HDMI output		HDMI connector x 1		
Video output	SDI output		BNC connector x2		
S-video output	Video format				
RGB/YPbFr output	Video output		480/59.94i	576/50i	
T20/59,94p, 480/59,94i T20/50p, 576/50i T20/50p, 576/50i T20/50p, 576/50i T20/59,94p, 480/59,94p T20/50p, 576/50i T20/59,94p, 480/59,94p T20/50p, 576/50p T20/50p, 576	S-video output		480/59.94i		
T20/59,94p, 480/59,94p T20/50p, 576/50p T20/50p T20/5	RGB/YPbPr output			1080/50i, 1080/25p(sF), 720/50p, 576/50i	
T20/59,94p, 480/59,94i	HDMI output			1080/50p, 1080/50i, 1080/25p(sF) 720/50p, 576/50p	
Minimum illumination 5 x (F2.2, GAIN: HIGH, BINNING: ON, 30 % output, at center)	SDI output		720/59.94p, 480/59.94i		
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 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 0°C to 40°C (32 °F to 104 °F) Ambient operating humidity 170 mm (W) x 44 mm (H) x 229 mm (D) GP-US932CSX (excluding rubber feet and projections) 27 mm (W) x 30 mm (H) x 32.5 mm (D) GP-US932LY (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-US932ZX Approx. 1.35 kg (2.98 lbs) GP-US932HX Approx. 70 g (0.15 lbs)	Required illumi	nation			
Horizontal resolution	Minimum illumi	ination	5 Ix (F2.2, GAIN: HIGH, BINNING: ON, 30	% output, at center)	
Color bar SMPTE color bar with 0 % set-up 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 RS-232C D-sub 9	S/N		54 dB (at output using 1080i)		
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 Ambient operating temperature 0°C to 40°C (32 °F to 104 °F) Ambient operating humidity GP-US932CS S W to 90 % 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) 27 mm (W) x 30 mm (H) x 38.5 mm (D) (1-16 inches (W) x 1-5/32 inches (H) x 1-1/2 inches (D)) (excluding the tripod mount base and projections) GP-US932CSX GP-US932CSX Approx. 7.3 5 kg (2.98 lbs) GP-US932HX Approx. 70 g (0.15 lbs)	Horizontal resolution		1000 TV lines at center (typ. when 1080i output)		
Functions Electronic sensitivity enhancement, Binning, Output signal changeover, Scene file, White balance, Black balance, Electronic coom, Freeze, Flip, Mirror, Status display, Display format changeover for the SD format R8-232C D-sub 9-pin connector x1 Ambient operating temperature Potential of the State of the SD format Parameter of the S	Color bar		SMPTE color bar with 0 % set-up		
RS-232C D-sub 9-pin connector x1	Functions		Electronic sensitivity enhancement, Binning, Output signal changeover, Scene file, White balance, Black balance, Electronic zoom, Freeze, Flip,		
Ambient operating humidity 30 % to 90 % 170 mm (W) x 44 mm (H) x 229 mm (D) (1-1/16 inches (W) x 1-23/32 inches (H) x 9 inches (D) (excluding rubber feet and projections) 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) (9-US932HX Approx. 1.35 kg (2.98 lbs) (9-US932HX Approx. 7.0 g (0.15 lbs)	External control				
170 mm (W) x 44 mm (H) x 229 mm (D)			0°C to 40°C (32 °F to 104 °F)		
170 mm (W) x 44 mm (H) x 229 mm (D)	Ambient operating humidity		30 % to 90 %		
27 mm (W) x 30 mm (H) x 38.5 mm (D) (Fig. 1) (Fig	Dimensions		{6-11/16 inches (W) x 1-23/32 inches (H) x 9 inches (D)} (excluding rubber feet and projections)		
GP-US932HX Approx. 70 g (0.15 lbs)			{1-1/16 inches (W) x 1-5/32 inches (H) x 1-1/2 inches (D)} (excluding the tripod mount base and projections)		
GP-05932HX Approx. 70 g (0.15 lbs)	Woight				
Finish Ivory color coating		GP-US932HX			
	Finish		Ivory color coating		

Appearance



Part Names and Functions



- 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.

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