## FURUNO

15", 19" Sunlight Viewable

# MU-150HD/190HD

MARINE DISPLAY



The FURUNO MU-150HD/190HD is a multi-purpose marine LCD that features the unmatched quality and reliability that you have learned to depend on.

The MU-150HD/190HD employs 1,000 cd/m<sup>2</sup> extremely bright color TFT LCDs with a special AR (anti-reflective) glass filter to cut down on annoying glare. With its bright colors, excellent contrast and wide viewing angles, the monitor is perfect for any tropical sunlight or low light conditions. Furthermore, the LCDs and the glass are bonded to ensure fog free operation on open fly-bridge installations.

The screen resolutions of the MU-150HD/190HD is: XGA (1024 x 768) and SXGA (1280 x 1024), respectively. The MU-150HD/190HD features a built-in scaler, which enables high resolutions up to SXGA (1280 x 1024).

These units feature a wide range of interface options that include: 1 RGB analog, 2 DVI (Digital Video Interface) and 3 NTSC/PAL video inputs. These displays may be used as either the main or remote display for a variety of marine equipment such as BlackBox Radar, Sounder, Sonar and NavNet series. They can also be used for displaying images from security cameras, DVD player, computers, etc.

## Need a bright idea? How about using FURUNO marine grade monitors in your helm!









MU-190HD
[19" Sunlight Viewable]



- ► Crystal clear 15" or 19" marine grade monitor for use as main or remote display
- ► MU-150HD Resolution: 1024 x 768 XGA
- ► MU-190HD Resolution: 1280 x 1024 SXGA
- ► Built-in scaler allows accepting up to SXGA (1280 x 1024) resolution
- ▶ 1,000 cd/m² brightness and A/R coating provides superior visibility even in direct sunlight
- ► Bonded LCD provides clear view in any weather conditions
- ► Automatic dimmer sensor adjusts the display brightness as light conditions change

- ▶ 1 RGB analog, 2 DVI (Digital Video Interface) and 3 NTSC/PAL interfaces available
- ► Any of the three NTSC inputs are PIP (Picture-In-Picture) capable, with adjustable size and screen location
- ► Table Top/Ceiling or Flush Mount
  (Table Top/Ceiling mounting bracket is optional)
- ► Customizable input names for easy on-the-fly identification and switching between onboard Radar, Sonar, Sounder, Camera, etc.
- ► Automatic signal recognition and scaling for easy setup and installation

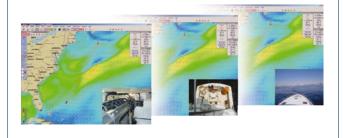


## Flush mount installation

"Low Profile" flush mounting provides a custom console appearance. Two or more MU-150HD/190HD can be fitted side by side seamlessly on your console when flush mounted. The MU-150HD/190HD monitors feature slim case designs that can put a larger display into a more confined helm space.

## **Picture In Picture (PIP)**

Composite video (NTSC/PAL) input is available for displaying video images from an onboard TV/DVD player. With more than two Composite Video Inputs, the images in the PIP window automatically switch every few seconds.



## Low power consumption

Utilizing the latest LED backlight, The MU-150HD/190HD delivers sharp, high quality images with bright colors and all at very low power consumption.



## Slim, light weight and compact

MU-150HD/190HD features a slim depth, light weight and compact body that fits right in your console. It's space-saving design makes optimum use of your dashboard.

COMPATIBILITY		Other models not on the list may also be supp	Other models not on the list may also be supported. Please ask our dealer for details.		
	MODEL	Resolution	Interface		
NAVant 2D naving	MFD8	VGA	DVI		

	MODEL	Resolution	Interface
NAVnet 3D series	MFD8	VGA	DVI
<u>NAV</u> net	MFD12	SVGA	DVI
	MFDBB	SVGA/SXGA	DVI
NAVnet vx2 series  NAVnet	MODEL1824C/BB	VGA	RGB analog
	MODEL1834C/BB	VGA	RGB analog
	MODEL1934C/BB	VGA	RGB analog
	MODEL1944C/BB	VGA	RGB analog
	MODEL1954C/BB	VGA	RGB analog
	MODEL1964C/BB	VGA	RGB analog
Echo Sounder	FCV-1200L/LM* (Landscape installation only)	VGA	RGB analog
Sonar	CH-250*/270*/300*	VGA	RGB analog
Radar	FR-1500 MARK-3 series	XGA	RGB analog
navai	FAR-2117/2127/2137S/BB	SXGA	DVI

## SPECIFICATIONS OF MU-150HD/190HD

DISPLAY CHARACTERISTICS	MU-150HD	MU-190HD	
Screen Size	15 inches	19 inches	
	304.1 x 228.1 mm	376.32 x 301.056 mm	
Resolution *Resolution from VGA to SXGA are accepted	1024 x 768 (XGA)	1280 x 1024 (SXGA)	
Contrast Ratio (typical)	600 : 1	900 : 1	
Viewing Angle			
Vertical	up 80° to down 80° or more	up 80° to down 80° or more	
Horizontal	left $80^{\circ}$ to right $80^{\circ}$ or more	left 80° to right 80° or more	
Brightness	Max. 1000 cd/m <sup>2</sup> , Min. 0.2 cd/m <sup>2</sup> or under		
Interface			
Analog RGB	1 port, D-SUB/15 pins		
DVI	2 ports, DVI-D		
Composite Video	3 ports, NTSC/PAL		
POWER SUPPLY	12-24 VDC, 4.5 - 2.2 A	12-24 VDC, 8.4 - 3.9 A	
ENVIRONMENT (IEC 60945 test method)			
Temperature	-15 °C to + 55 °C		
Waterproofing	IP56 (CFR46 Front Panel), IP22 (Back Panel)		
EMC	IEC 60945 4th		

1 unit

### **EQUIPMENT LIST**

#### Standard

- 1. Display Unit MU-150HD/190HD
- 2. Installation Materials and Spare Parts

## Option

- 1. Interface Cable for DVI 5/10 m, DVI-D/D SINGLELINK5M/10M
- 2. Interface Cable for analog RGB 5/10 m, 3COX-2P-6C 5M/10M
- 3. Mounting Bracket OP26-2/OP26-5
- 4. Viewing Hood OP26-3/OP26-6
- 5. Flush Mount Kit OP26-4/OP26-7

## **INTERCONNECTION DIAGRAM** NavNet vx2. NavNet 3D Analog RGB NavNet vx2 BB, PC, etc. FAR-2xx7 Series, PC DVI x 2 ports MU-150HD MU-190HD CCD Camera NTSC/PAL x 3 ports DVD VCR, etc. Option ---- Local supply 12 - 24 VDC Please contact us to confirm if all of your external devices are compatible.

#### **DIMENSIONS AND WEIGHT** MU-150HD Flush Mount MU-190HD Flush Mount **MU-150HD Bracket Mount** 44 1.7" 247 9.7" 96 3.8 8.2 kg 18.1 lb (Option) 392 15.4" 5.4 kg 11.9 lb 7.4 kg 16.3 lb 15.1" 14.6" 4.3 12.7 17 0.7 17 0.7" 96 3.8" 322 370 15.6" 12.7 372 14.6" 158 6.2" 397 322 MU-190HD Bracket Mount 273 10.7' 109 4.3" 100 3.9" 000000000 (Option) 470 18.5" 11 kg 24.3 lb 372 14.6 450 17.7" 86 3.4 4-Ø18 4-Ø18 15.6" 12.4" 15.3" 364 14.3" 397 314 441 389 442 17.4" 160 6.3" 450 17.7" 14 0.6"

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