

19" LCD MARINE RACKMOUNT MONITOR - CRT REPLACEMENT

29LR193A55UN/X

DATASHEET

* The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

LEGACY & MULTISCAN LCD MARINE MONITOR

In common with normal TFT Liquid Crystal Displays, this monitor can be used with standard PC graphics cards. However, this monitor can also be used with Legacy systems that use nonstandard display controllers where normal TFT Displays cannot be used. Signal Recognition and Scaling software offer the user the ability to adjust the displayed picture in both horizontal and vertical size allowing almost any slow scan video mode to be displayed.

Designed specifically to meet the stringent demands of marine environment in particular IEC 60945 for Maritime Navigation and Radio Communications Equipment & Systems. Resolutions up to 1280 x 1024 pixels can be displayed with superb image quality. In addition to VESA fixing at the rear, there is an optional mounting bracket for Desktop or Overhead installation.

SOLUTIONS FOR MARINE APPROVED MONITORS

- > **Accepts Non-Standard Video Signals**
- > **Advanced Deep Dimming 2000:1**
KME has developed a deep dimming solution for the marine range which provides smooth consistent dimming to 2000:1 (dim to black is available on request).
- > **Analog & TTL Video Inputs**
- > **Certified & Approved**
The marine range is designed to comply with EN 60945 and EN 60950. In the case of the 17" and 19" monitors some are already certified and approved to these standards.
- > **Contrast Enhancing AR Safety Glass**
- > **Versatile Fixing for Arms/Brackets**



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Electrical Description		Mechanical Description	
TFT Characteristics:		Dimensions:	Monitor: 483(w) x 399(h) x 78+14(d)mm Weight: 10kg approx
Type:	19 a-Si AM TFT		
Max Resolution:	1280 x 1024 pixels		
Active Display Area:	376.3 x 301.1 mm	User Controls:	Front Mounted
Response Time:	15ms	Housing:	Aluminium
*Contrast Ratio:	500:1 typical	Sealing:	IP23 (IP65 front)
*Brightness:	250cd/m ² typical	Approvals	
Viewing Angles (at CR>10):	170° / 170°	ECDIS & Radar Compliance:	
Backlight Life:	50,000 typical	IEC 61174:	Designed to comply
No. Colours:	16 million	EMC & Safety:	
Video Signal:	RGB 0.7-1.0Vp-p	EN 60950	Designed to comply
		Marine Communications:	
		IEC 60945:	Designed to comply
Synchronisation Range:			
Horizontal scan:	15-84 kHz		
Vertical Scan:	37-100 Hz		
Display modes:	640 x 480 VGA 800 x 600 SVGA 1024 x 768 XGA 1280 x 1024 SXGA (recommended)		
Power Supply:	90-265V AC 50-60Hz	Part Numbers:	
Power Consumption:	65W (Max)		
Environmental: **Operating Temp:	-15 to +55 °C (IEC 60945 tests)	Ancillaries	Monitor: 29LR193A55UN/1
Storage Temp:	-20 to +60 °C		Resistive touchscreen RS232: Available upon request
Operating Humidity:	30% to 90% (non condensing)		Capacitive touchscreen RS232:
Storage Humidity:	10% to 90% (non condensing)		Resistive touchscreen USB:
Shock:	10g, 11msec ½ sine		Stand Bracket:
Vibration:	+/-1mm, 2 to 13Hz: 0.7g, 13 to 100Hz		
**Quoted EN60945 test. We do not recommend routine operation at extreme temperatures			
* Brightness and Contrast refer to naked LCD panel			

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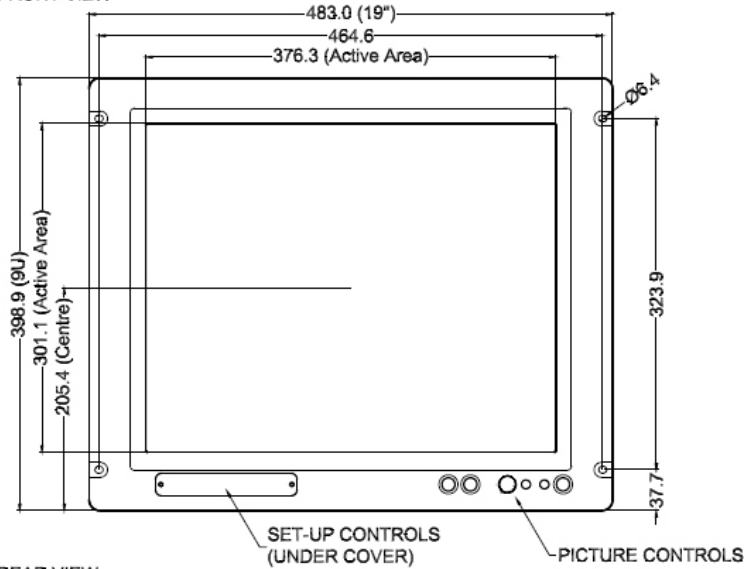
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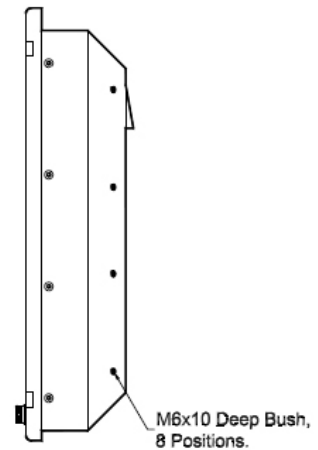
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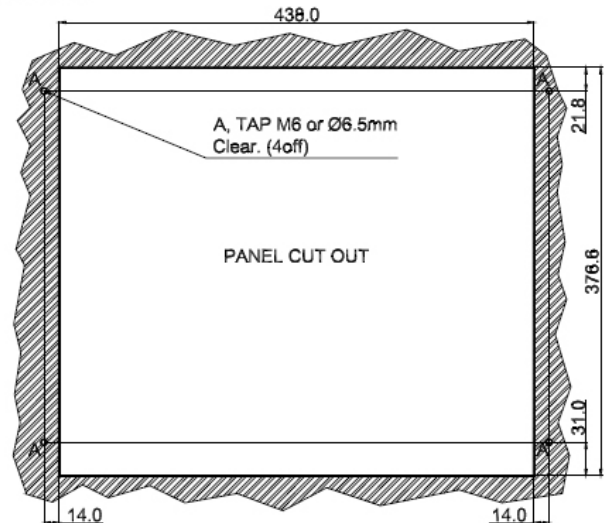
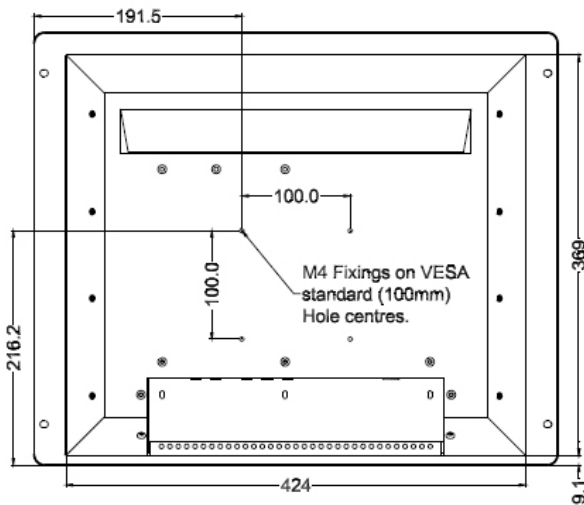
FRONT VIEW



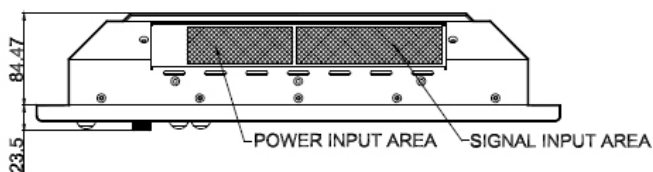
SIDE VIEW



REAR VIEW



BOTTOM VIEW



All dimensions in millimetres
(Not to scale)

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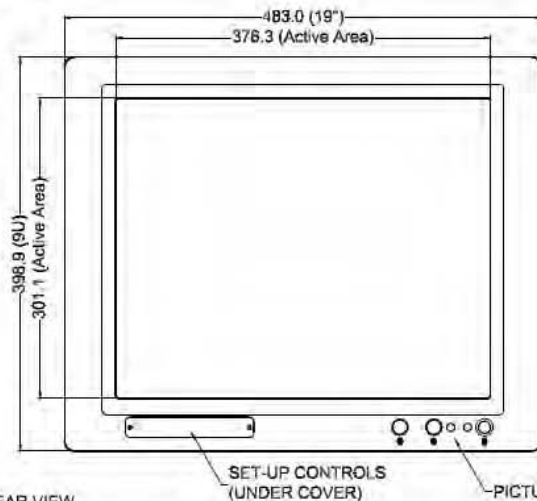
29LR193A55UN/x

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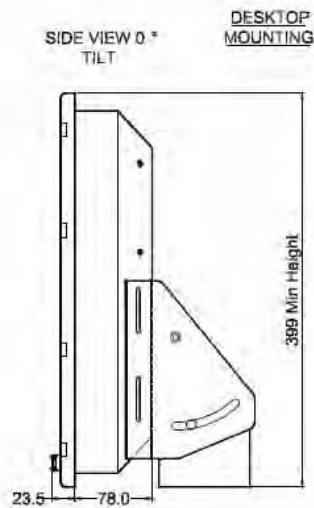
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MOUNTING BRACKET INSTALLATION 29LR193 UN Series

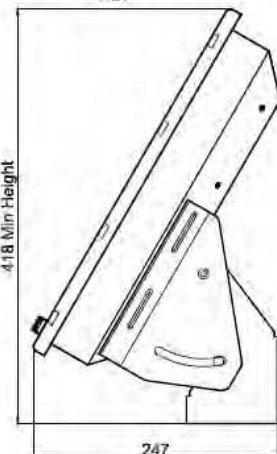
FRONT VIEW



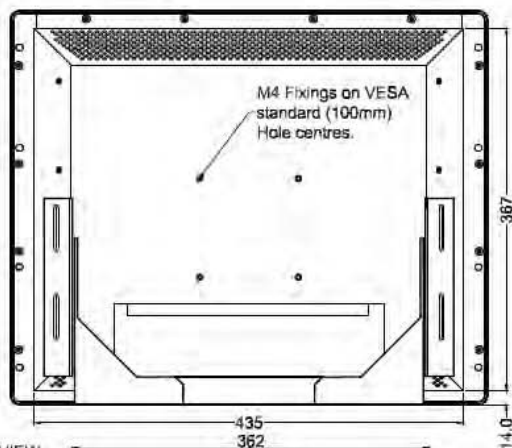
SIDE VIEW 0° TILT



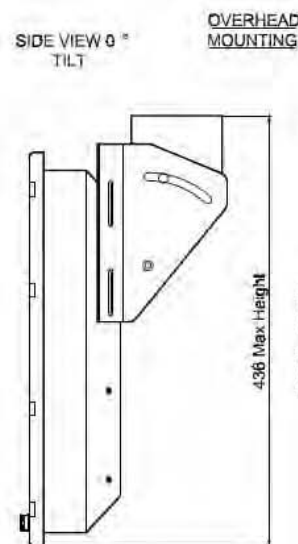
SIDE VIEW 30° TILT



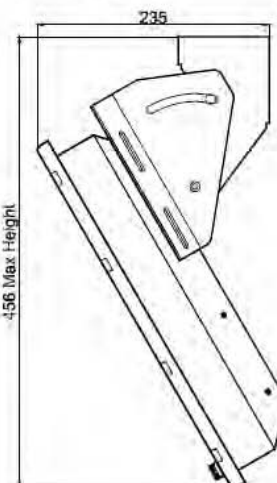
REAR VIEW



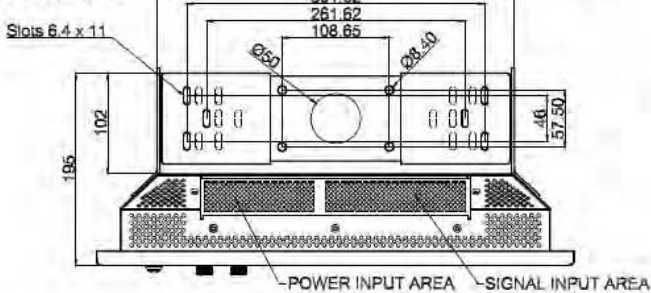
SIDE VIEW 0° TILT



SIDE VIEW 30° TILT



BOTTOM VIEW



All dimensions in millimetres
(Not to scale)

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*Brightness:	250cd/m ² typical	Approvals	
Viewing Angles (at CR>10):	170° / 170°	ECDIS & Radar Compliance:	
Backlight Life:	50,000 typical	IEC 61174:	Designed to comply
No. Colours:	16 million	EMC & Safety:	
Video Signal:	RGB 0.7-1.0Vp-p	EN 60950	Designed to comply
		Marine Communications:	
		IEC 60945:	Designed to comply
Synchronisation Range:			
Horizontal scan:	15-84 kHz		
Vertical Scan:	37-100 Hz		
Display modes:	640 x 480 VGA 800 x 600 SVGA 1024 x 768 XGA 1280 x 1024 SXGA (recommended)		
Power Supply:	24V DC	Part Numbers:	
Power Consumption:	65W (Max)		
Environmental: **Operating Temp:	-15 to +55 °C (IEC 60945 tests)	Ancillaries	Monitor: 29LR193D55UN/1
Storage Temp:	-20 to +60 °C		Available upon request
Operating Humidity:	30% to 90% (non condensing)		Resistive touchscreen RS232:
Storage Humidity:	10% to 90% (non condensing)		Capacitive touchscreen RS232:
Shock:	10g, 11msec ½ sine		Resistive touchscreen USB:
Vibration:	+/-1mm, 2 to 13Hz: 0.7g, 13 to 100Hz		Stand Bracket:
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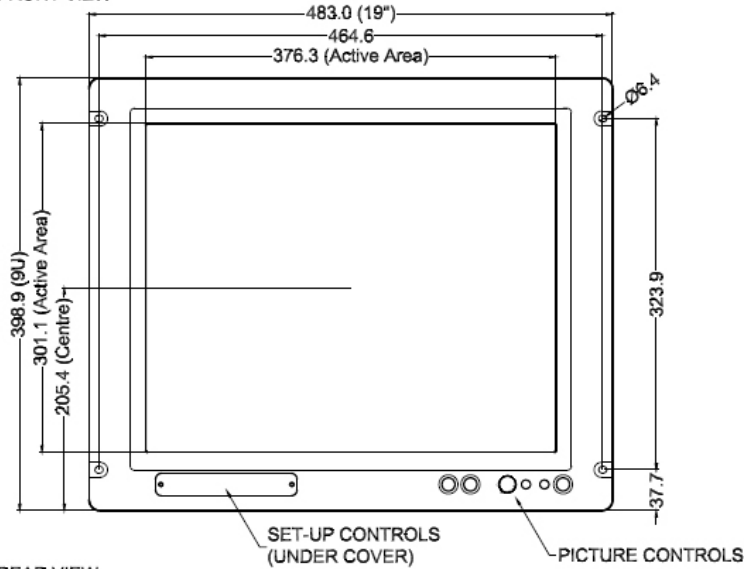
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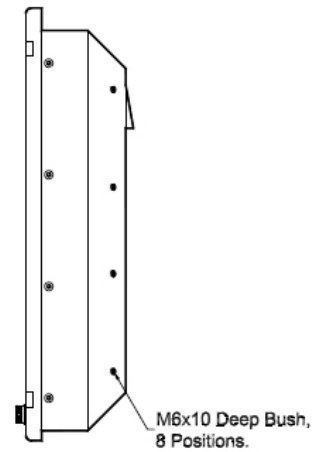
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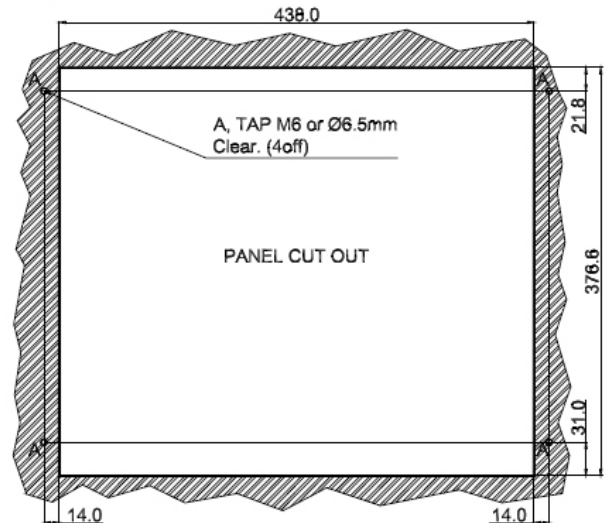
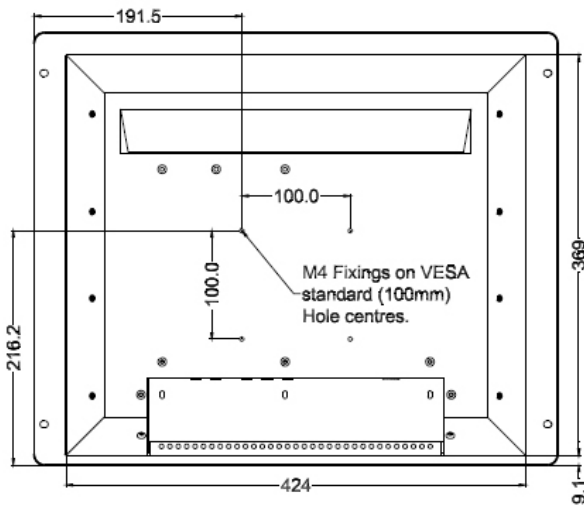
FRONT VIEW



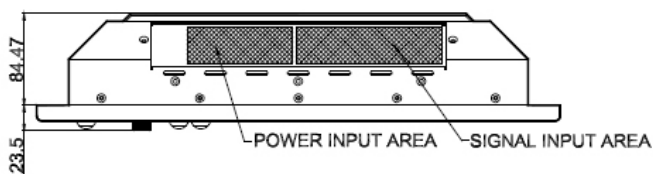
SIDE VIEW



REAR VIEW



BOTTOM VIEW



All dimensions in millimetres
(Not to scale)

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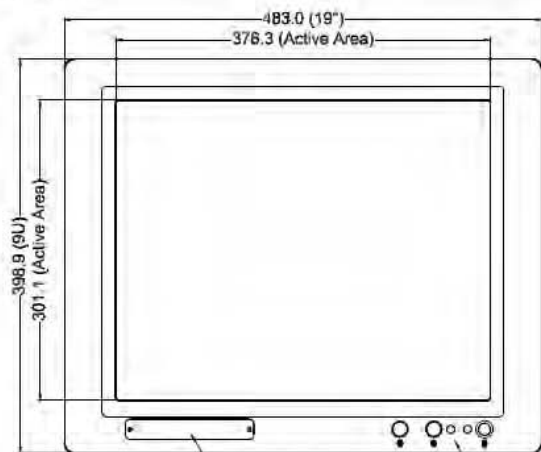
29LR193D55UN/x

DATASHEET

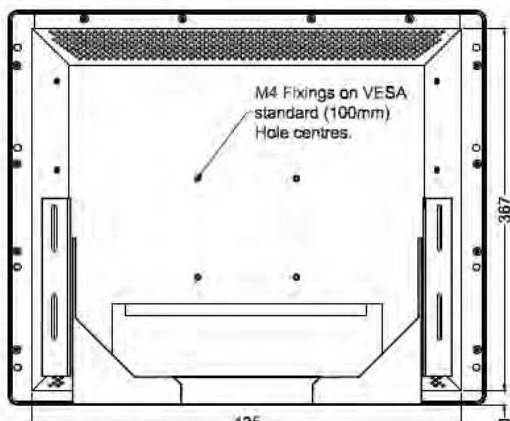
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MOUNTING BRACKET INSTALLATION 29LR193 UN Series

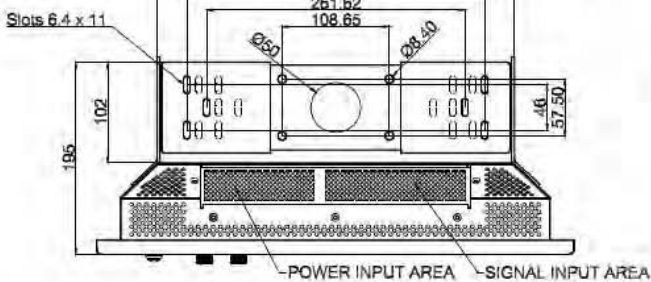
FRONT VIEW



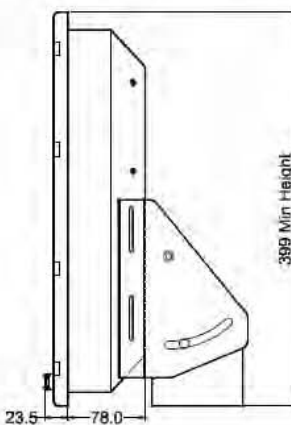
REAR VIEW



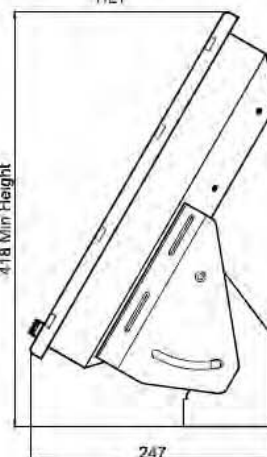
BOTTOM VIEW



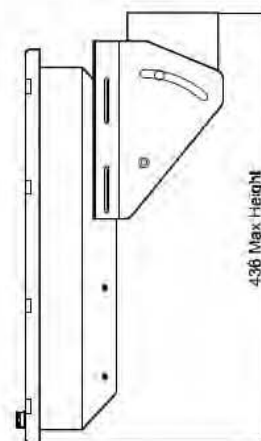
SIDE VIEW 0° TILT
DESKTOP MOUNTING



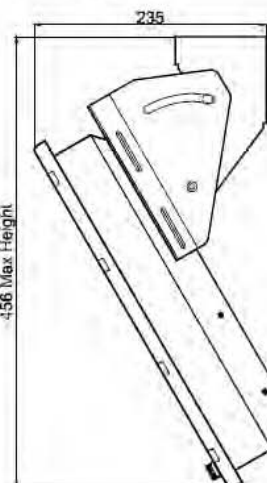
SIDE VIEW 30° TILT



SIDE VIEW 0° TILT
OVERHEAD MOUNTING



SIDE VIEW 30° TILT



All dimensions in millimetres
(Not to scale)

19" LCD MARINE HEAD MOUNT MONITOR - CRT REPLACEMENT 29LM193A55UNP/x

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MULTISCAN LCD MARINE MONITOR

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- > **Designed for Desktop or Panel mount**



19" LCD MARINE HEAD MOUNT MONITOR - CRT REPLACEMENT

29LM193A55UNP/x

DATASHEET

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Electrical Description		Mechanical Description	
TFT Characteristics:		Dimensions:	Monitor: 431.2 x 376.5 x 107.9mm Weight: 11kg approx
Type:	19 a-Si AM TFT	Input Connectors:	
Max Resolution:	1280 x 1024 pixels	RGB Signal:	9-pin Female D-Type (CGA & EGA) 15-pin HD Female D-Type (VESA) x5 BNC with 'Loop-Through' Facility
Active Display Area:	376.3 x 301.1mm	Video Signal:	BNC
Response Time:	15ms	User Controls:	Front Mounted
*Contrast Ratio:	500:1 typical	Housing:	Aluminium
*Brightness:	250cd/m ² typical	Sealing:	IP23 (IP65 front)
Viewing Angles (at CR>10):	170° / 170°	Approvals	
Backlight Life:	50,000 typical	ECDIS & Radar Compliance:	
No. Colours:	16 million	IEC 61174:	Designed to comply
Video Signal:	RGB 0.7-1.0Vp-p	EN 60950	Designed to comply
Sync Signal:	Separate H&V (+/-ve) TTL or Composite (-ve) TTL or Sync-on-Green (-ve) 0.3V	Marine Communications:	
Composite Video Inputs:	PAL & NTSC	IEC 60945:	Designed to comply
Synchronisation Range:	Horizontal scan: 15-84 kHz Vertical Scan: 37-100 Hz		
Display modes:	640 x 480 VGA 800 x 600 SVGA 1024 x 768 XGA 1280 x 1024 SXGA (recommended)		
Power Supply:	90-265V AC 50/60Hz	Part Numbers:	
Power Consumption:	60W (Max)		
Environmental: **Operating Temp: Storage Temp: Operating Humidity: Storage Humidity: Shock: Vibration:	-15 to +55 °C (IEC 60945 tests) -20 to +60 °C 30% to 90% (non condensing) 10% to 90% (non condensing) 10g, 11msec ½ sine +/-1mm, 2 to 13Hz: 0.7g, 13 to 100Hz	Ancillaries	Monitor: 29LM193A55UNP/1 Touchscreen: Available upon request Mounting Bracket: 29ST0011
**Quoted EN60945 test. We do not recommend routine operation at extreme temperatures * Brightness and Contrast refer to naked LCD panel			

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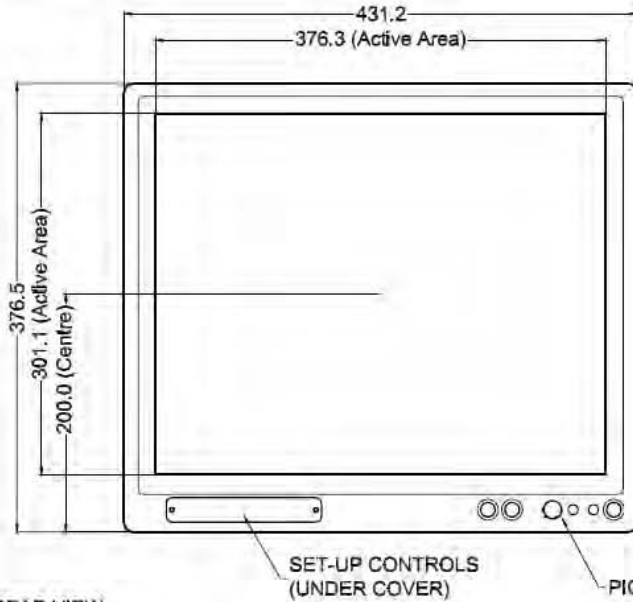
19" LCD MARINE HEAD MOUNT MONITOR - CRT REPLACEMENT

29LM193A55UNP/x

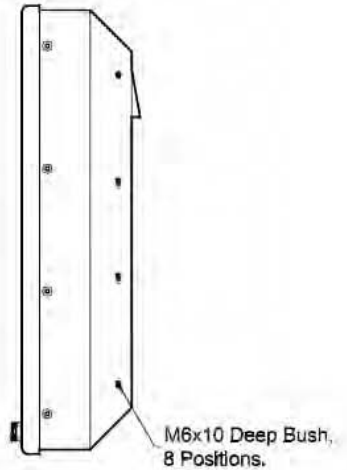
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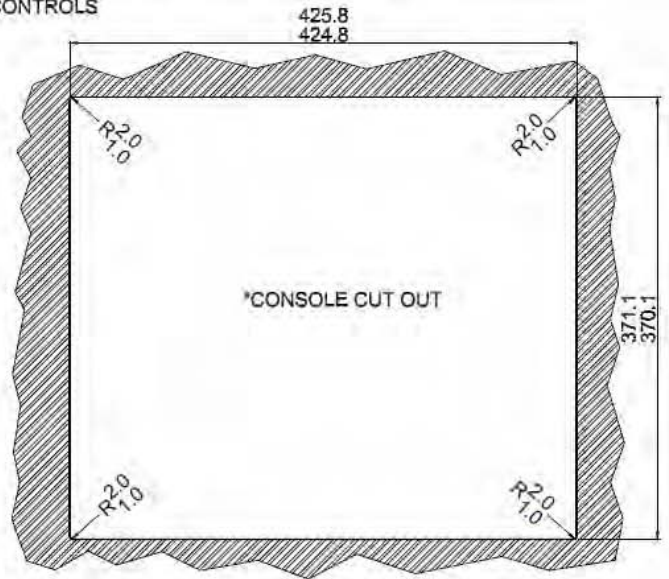
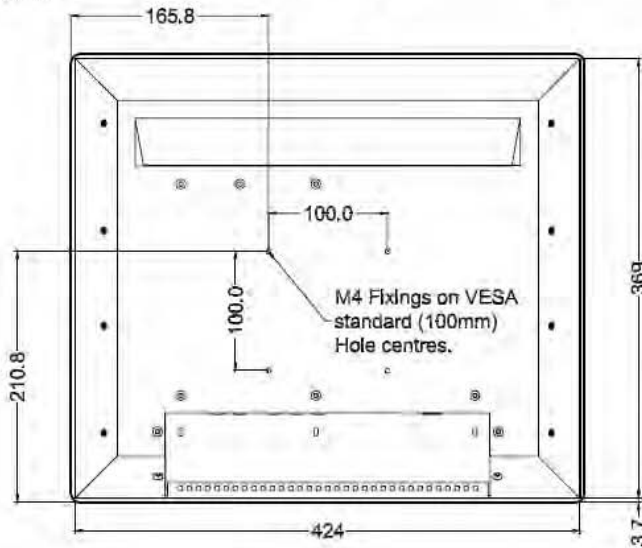
FRONT VIEW



SIDE VIEW

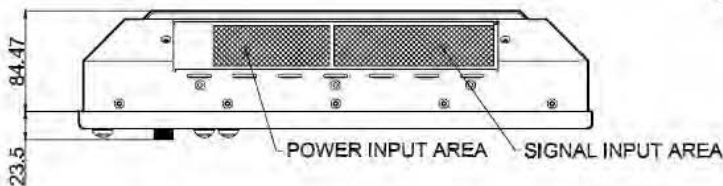


REAR VIEW



*Console Mounting
Particular care must be taken that the corner Radii Maximum of 2mm and Minimum of 1mm along with tolerances shown are adhered to. Deviation from these tolerances will result in the cut out being visible!

BOTTOM VIEW



All dimensions in millimetres
(Not to scale)

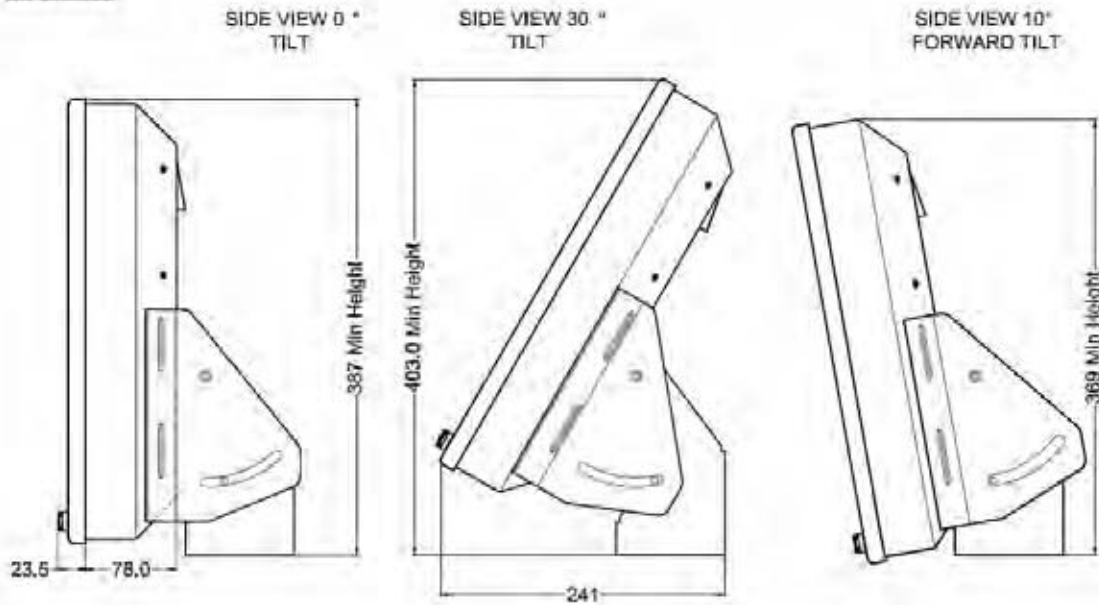
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DATASHEET

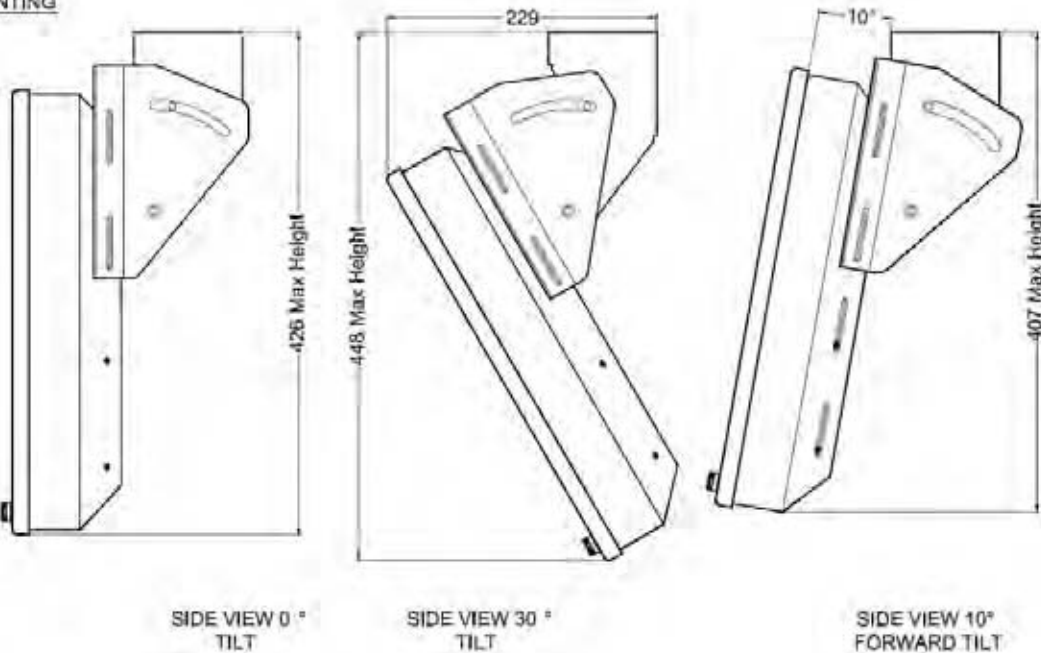
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Mounting Bracket Installation

DESKTOP MOUNTING



CEILING MOUNTING



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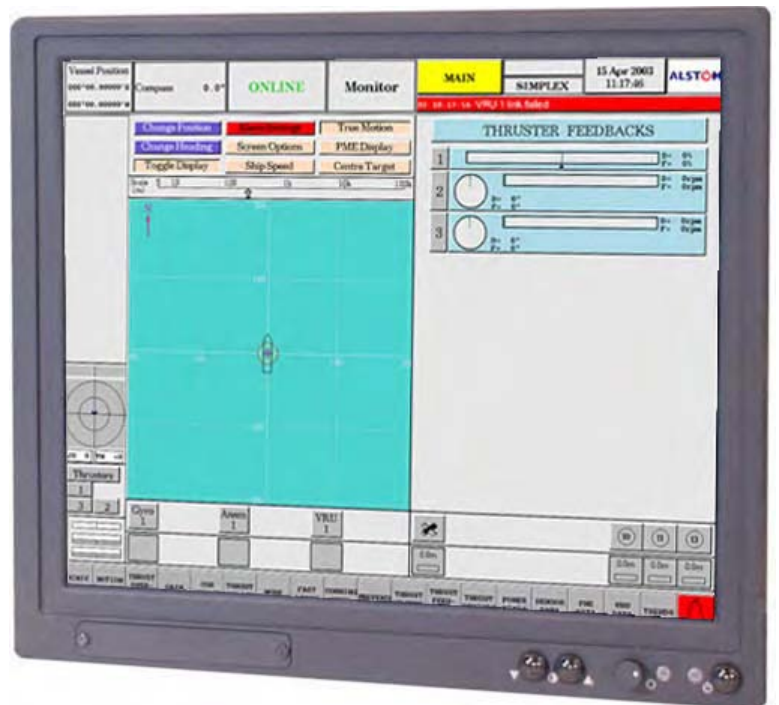
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Response Time:	15ms	RGB Signal:	9-pin Female D-Type (CGA & EGA) 15-pin HD Female D-Type (VESA) x5 BNC with 'Loop-Through' Facility BNC
*Contrast Ratio:	500:1 typical	Video Signal:	BNC
*Brightness:	250cd/m ² typical	User Controls:	Front Mounted
Viewing Angles (at CR>10):	170° / 170°	Housing:	Aluminium
Backlight Life:	50,000 typical	Sealing:	IP23 (IP65 front)
No. Colours:	16 million	Approvals	
Video Signal:	RGB 0.7-1.0Vp-p	ECDIS & Radar Compliance:	
Sync Signal:	Separate H&V (+/-ve) TTL or Composite (-ve) TTL or Sync-on-Green (-ve) 0.3V	IEC 61174:	Designed to comply
Composite Video Inputs:	PAL & NTSC	EN 60950	Designed to comply
Synchronisation Range:		EMC & Safety:	
Horizontal scan:	15-84 kHz	IEC 60945:	Designed to comply
Vertical Scan:	37-100 Hz		
Display modes:	640 x 480 VGA 800 x 600 SVGA 1024 x 768 XGA 1280 x 1024 SXGA (recommended)	Marine Communications:	
Power Supply:	15-30V DC	Part Numbers:	
Power Consumption:	60W (Max)		
Environmental: **Operating Temp:	-15 to +55 °C (IEC 60945 tests)	Ancillaries	Monitor: 29LM193D55UNP/1
Storage Temp:	-20 to +60 °C	Touchscreen:	Available upon request
Operating Humidity:	30% to 90% (non condensing)	Mounting Bracket:	29ST0011
Storage Humidity:	10% to 90% (non condensing)		
Shock:	10g, 11msec ½ sine		
Vibration:	+/-1mm, 2 to 13Hz: 0.7g, 13 to 100Hz		
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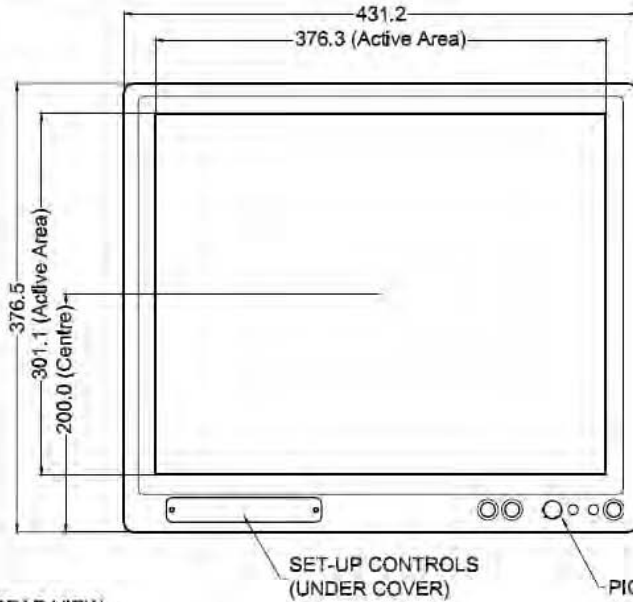
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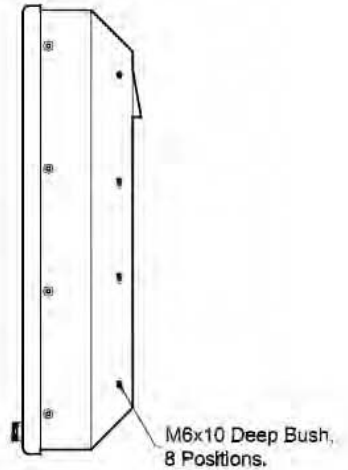
DATASHEET

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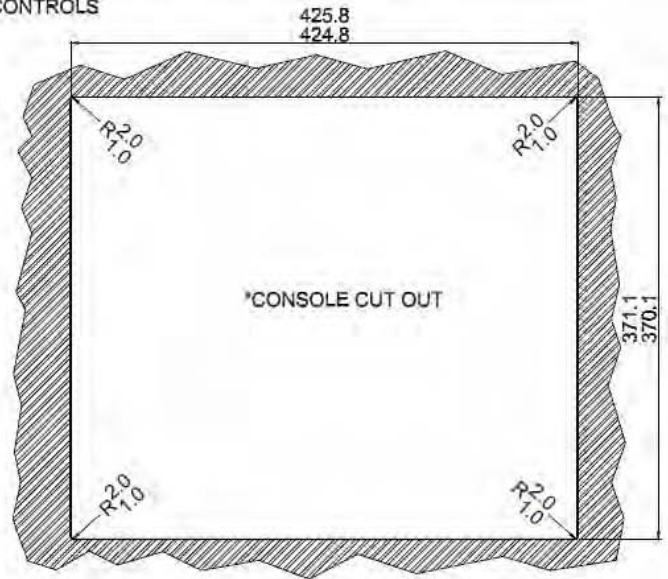
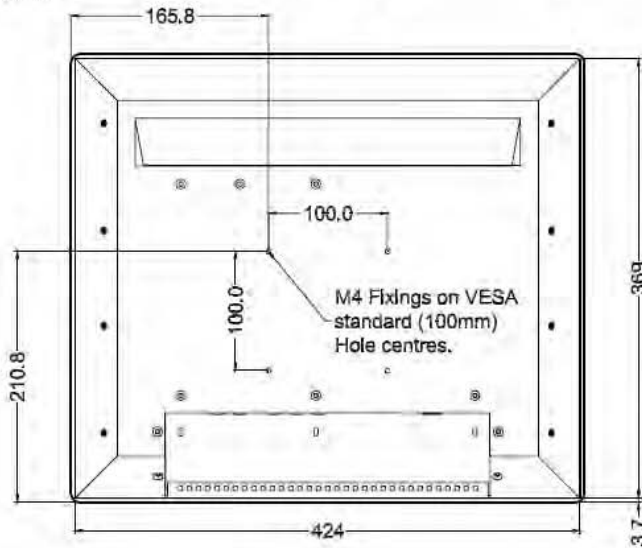
FRONT VIEW



SIDE VIEW

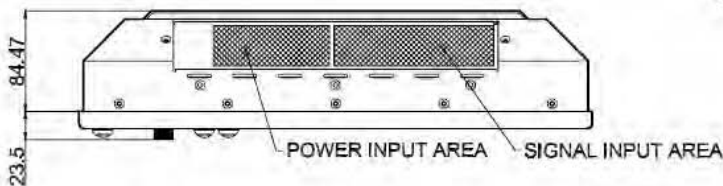


REAR VIEW



*Console Mounting
Particular care must be taken that the corner Radii Maximum of 2mm and Minimum of 1mm along with tolerances shown are adhered to. Deviation from these tolerances will result in the cut out being visible!

BOTTOM VIEW



All dimensions in millimetres
(Not to scale)

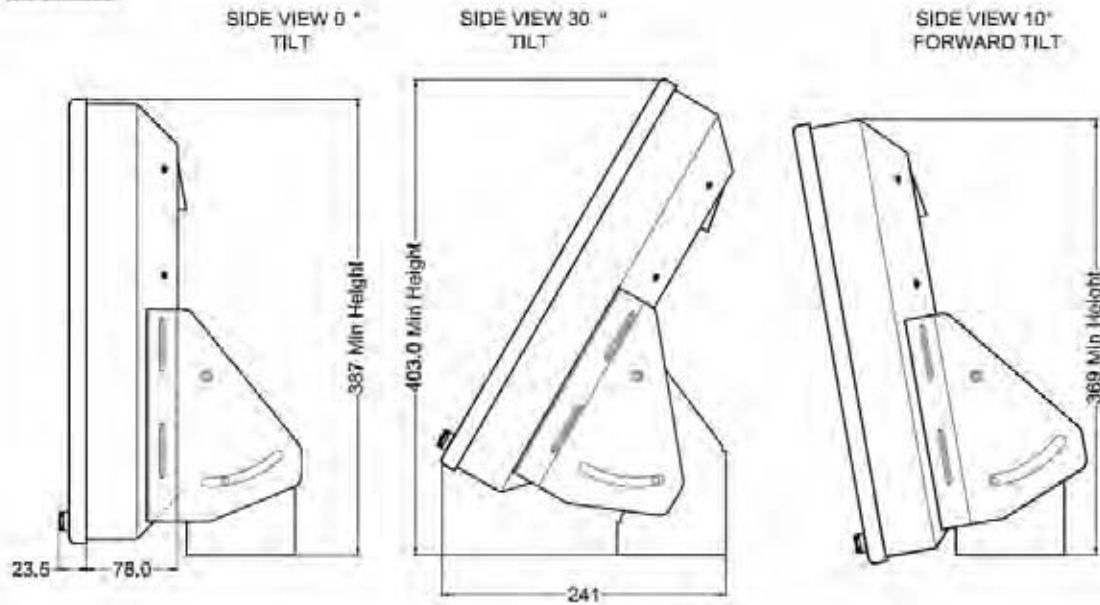
19" LCD MARINE HEAD MOUNT MONITOR - CRT REPLACEMENT 29LM193D55UNP/x

DATASHEET

*The slash number behind the part number refers to the version number. A different TFT panel could be used. Therefore these values may vary.

Mounting Bracket Installation

DESKTOP MOUNTING



CEILING MOUNTING

