



**Sea Line MK3, Sea Line MK2, O'Sean Line, Accessories**  
**- *Comprehensive Product Catalogue***

**Display Accuracy!**

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Monitor designation

Each Sea Line MK3, MK2 and O’Sean Line Monitor is designated as follow:

Sea Line MK3 23.1”

SL	231	01	MON	03	0001
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Sea Line MK2 19.0”

SL	190	02	MON	02	0002
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O’ Sean Line 25.5”

GB	255	01	MON	01	0001
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Where “SL/GB” stands for SeaLine/GlassBridge, “150/190/213/231/255” for the display’s Size, “01/02” for the hardware Revision, “MON“ for Monitor, “03/02/01” for Version MK3/MK2/O’SL and “0001/0002” for the Configuration type.

Contacts



## Sea Line MK3 - ECDIS approved monitors

### Sea Line MK3 - 15.0"

Resolution: 1.024 x 768 pixels (XGA)  
 Light intensity: 450 cd/m<sup>2</sup>  
 Response time: 19 ms  
 Contrast ratio: 450:1  
 Viewing angle: 150°  
 Type number: SL150-01.MON.03.0001



### Sea Line MK3 - 19.0"

Resolution: 1.280 x 1.024 pixels (SXGA)  
 Light intensity: 250 cd/m<sup>2</sup>  
 Response time: 13 ms  
 Contrast ratio: 1.000:1  
 Viewing angle: 178°  
 Type number: SL190-01.MON.03.0001

Alimentation: 115/230 VAC, 24 VDC  
 Water proofness: IP 66 & IP 67  
 Operating Temp.: -15/+55°C. +5/131°F  
 Storage Temp.: -25/+70°C. -13/158°F  
 Backlight life: Typ. 50.000 hours  
 Dimming range: 0-100% (ratio 1.000:1)  
 Inputs: DVI-I  
 VGA

### Sea Line MK3 - 21.3"

Resolution: 1.600 x 1.200 pixels (30-65 Hz)  
 1.280 x 1.024 pixels (30-100 Hz)  
 Light intensity: 300 cd/m<sup>2</sup>  
 Response time: 16 ms  
 Contrast ratio: 900:1  
 Viewing angle: 178°  
 Type number: SL213-01.MON.03.0001

Composite video  
 S-Video  
 AC power IEC Inlet &  
 DC screw terminal  
 Standards: IEC 60529 (IP)  
 IACS E10  
 ECDIS approved by BSH  
 Designed to comply to MIL-STD  
 -810F & MIL-STD-901D

### Sea Line MK3 - 23.1"

Resolution: 1.600 x 1.200 pixels (30-65 Hz)  
 1.280 x 1.024 pixels (30-100 Hz)  
 Light intensity: 250 cd/m<sup>2</sup>  
 Response time: 20 ms  
 Contrast ratio: 500:1  
 Viewing angle: 170°  
 Type number: SL231-01.MON.03.0001

Accessories: Sunshade  
 Stand (simple/dual layers)  
 Stand + Turntable  
 Sealing Kit





## Sea Line MK2 - ECDIS approved Swap



**Alimentation:** 115/230 VAC  
**Water proofness:** IP 66 & IP 67  
**Operating Temp.:** -15/+55°C. +5/131°F  
**Storage Temp.:** -25/+70°C. -13/158°F  
**Backlight life:** Typ. 50.000 hours  
**Dimming range:** 0-100% (ratio 1.000:1)  
**Inputs:** DVI-I  
VGA  
Composite video  
S-Video  
AC power IEC Inlet  
**Outputs:** Same as supplied voltage  
**Standards:** IEC 60529 (IP)  
IACS E10  
To be ECDIS approved by BSH  
Designed to comply with MIL-STD-810F & MIL-STD-901D

### Sea Line MK2 - 19.0"

**Resolution:** 1.280 x 1.024 pixels (SXGA)  
**Light intensity:** 250 cd/m<sup>2</sup>  
**Response time:** 13 ms  
**Contrast ratio:** 1.000:1  
**Viewing angle:** 178°  
**Type number:** SL190-01.MON.02.0001

### Sea Line MK2 - 23.1"

**Resolution:** 1.600 x 1.200 pixels (UXGA)  
**Light intensity:** 250 cd/m<sup>2</sup>  
**Response time:** 20 ms  
**Contrast ratio:** 500:1  
**Viewing angle:** 170°  
**Type number:** SL231-01.MON.02.0001





## Sea Line - ECDIS approved accessories



- Material:** Marine Aluminium Grade
- Colour:** Matching with monitor's colour
- Test:** BSH approved accessories
- Use:** External (e.g. open bridge) / Internal (e.g. desk/roof mounting)
- Water proofness:** Custom size sealing kits
- Extra features:** Reinforced stands & turntables for larger monitors
- Mode Wizard:** Identical Human Machine Interface (OSD) for all monitors
- Delivery:** User Manual on CD Rom, Power and VGA cables

## Type Numbers

SL150-01.STA.01-0001	Brackets, Single layer	15"
SL150-01.STU.01-0001	Brackets, Single layer + turntable	15"
SL190-01.STA.01-0001	Brackets, Single layer	19"
SL190-01.STU.01-0001	Brackets, Single layer + turntable	19"
SL190-01.STA.02-0001	Reinforced Brackets, Double layer	19"
SL190-01.STU.02-0001	Reinforced Brackets, Double layer + turntable	19"
SL213-01.STA.01-0001	Brackets, Single layer	21"
SL213-01.STU.01-0001	Brackets, Single layer + turntable	21"
SL213-01.STA.02-0001	Reinforced Brackets, Double layer	21"
SL213-01.STU.02-0001	Reinforced Brackets, Double layer + turntable	21"
SL231-01.STA.01-0001	Reinforced Brackets, Double layer	23"
SL231-01.STU.01-0001	Reinforced Brackets, Double layer + turntable	23"
SL150-01.SUN.01-0001	Sunshade	15"
SL190-01.SUN.01-0001	Sunshade	19"
SL213-01.SUN.01-0001	Sunshade	21"
SL231-01.SUN.01-0001	Sunshade	23"
SEAL-KIT-150	1 O'ring 15.0" gasket, 4 O'ring for screws, 1 vaseline box	15"
SEAL-KIT-190	1 O'ring 19.0" gasket, 4 O'ring for screws, 1 vaseline box	19"
SEAL-KIT-213	1 O'ring 21.3" gasket, 4 O'ring for screws, 1 vaseline box	21"
SEAL-KIT-231	1 O'ring 23.1" gasket, 4 O'ring for screws, 1 vaseline box	23"







## O'Sean Line - Exclusive glass front monitors

### O'Sean Line - 15.0"

Resolution: 1.024 x 768 pixels (XGA)  
 Light intensity: 450 cd/m<sup>2</sup>  
 Response time: 19 ms  
 Contrast ratio: 450:1  
 Viewing angle: 150°  
 Type number: GB150-01.MON.01.0001



*Wide Screen 26" format  
 allowing for Multiple  
 Screens Displays*

### O'Sean Line - 19.0"

Resolution: 1.280 x 1.024 pixels (SXGA)  
 Light intensity: 250 cd/m<sup>2</sup>  
 Response time: 13 ms  
 Contrast ratio: 1.000:1  
 Viewing angle: 178°  
 Type number: GB190-01.MON.01.0001

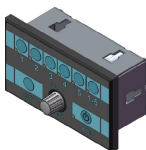
### O'Sean Line - 25.5" WS

Resolution: 1.920 x 1.200 pixels (WUXGA)  
 Light intensity: 500 cd/m<sup>2</sup>  
 Response time: 12 ms  
 Contrast ratio: 800:1  
 Viewing angle: 178°  
 Type number: GB255-01.MON.01.0001





*Sideway fixing features  
for ease of installation.*



*Remote control allowing for  
individual, or all at once, monitors  
management  
and setup.*

Alimentation: 115 / 230 VAC  
 Water proofness: IP 66 & IP 67  
 Operating Temp.: -15/+55°C. +5/131°F  
 Storage Temp.: -25/+70°C. -13/158°F  
 Inputs:  
 DVI-I  
 VGA  
 Composite video  
 S-Video,  
 AC power IEC Inlet & Power out  
 Designed to be ECDIS approved



## North Invent history

- The Danish company **North Invent A/S**, was established in 2004 by a trio of well experienced, high profile, entrepreneurs, combining a very large cumulated experience within the fields of maritime displays, having had previous key positions among leading Scandinavian manufacturers.



- From its inception the company has been driven by the challenge of offering state of the art display solutions, dedicated to the maritime market, while always bearing the customers, and end-users, in mind. That is why, for instance, all our monitors are designed following a modular concept, downsizing our production lead time, allowing for fast deliveries, and ease of maintenance.



- In 2007 the company moved in a single location and has now at disposal more than 2.000 Sqm. In a unique location both in-house and outsourced R&D are conducted, allowing for fast decision and expertise sharing, while an all step quality check is implemented on the production floor, from reception to shipping.



## Unique expertise

- Our extensive range of rugged monitors can be used as all purpose Signal Platforms (Radar, Sea Charts, Conning, Supervising) and allow for multiple input sources and viewing. The stringent vibration tests for approval have been successfully conducted with monitors mounted on brackets, as used on board, in near real life situations.

- The sealing method used when assembling the displays behind their impact proof glass is done in dust reduced rooms, with time proven material, joints and methods and leaves no uncertainties as for their durability and efficiency in time.

- Furthermore, no monitors leave the factory before having satisfied to an intensive 72hrs burn-in test. Displays with pixel faults are just discarded.



- Today **North Invent A/S** is among the most dynamic, and reliable, LCD maritime displays provider. We can partner with you on any OEM, Private Label or Retro-fitting projects, matching with a.o. IEC, MIL-STD, IACS standards.



## North Invent A/S

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