DATASHEET

HATTELAND TECHNOLOGY
an EMBRON Company

Manufacturer:	**Hatteland Technology AS**
Product:	**55.0 inch Multi Vision Display (MVD)**
	Floor Title Model with Optional Integrated Computer (HT C03/C02)
Type:	**HD 55T22 MVD-AAx-LOGy** (Floor Tilt Model)
	Where x=ECDIS Calibration (4) or No ECDIS Calibration (1)

55.0 inch Multi Vision Display - Series X MVD

Features:

The Series X Multi Vision Display (MVD) range of products provides large 4K resolution display solutions to maritime IBS, Automation and Command Control system integrators. The cutting edge high definition LED display technology used, with its high quality brightness and contrast, enables the presentation of large amounts of data onto one screen instead of multiple displays.
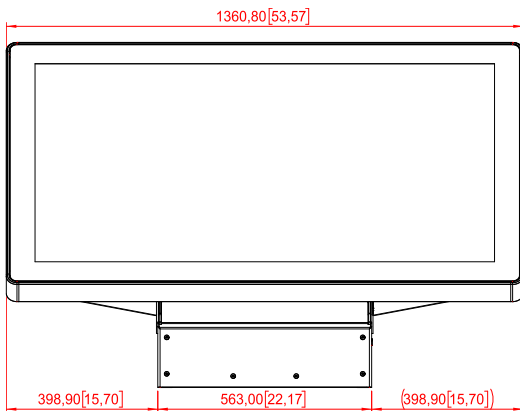
The 4K resolution 55 inch Ultra-High Definition Floor Tilt model is approved for harsh maritime environments, where reliability and long life time are key factors. The 55 inch MVD is a robust, flexible and ergonomic solution, suitable for a wide range of applications including ECDIS, radar, voyage planning, safety systems and tactical command & control platforms.

Features include an optional 40 point Multi-touch touch interface, optical bonding, multi data input, built in On-Screen Display (OSD), full dimming and the option to be supplied calibrated for ECDIS.
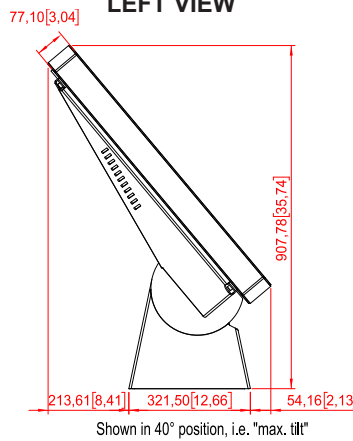
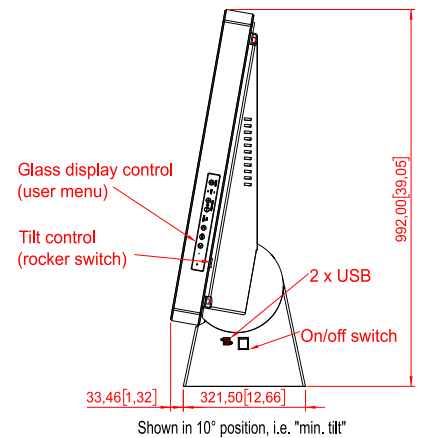The Floor Tilt base houses a Hatteland Technology HT C03/C02 computer (optional).
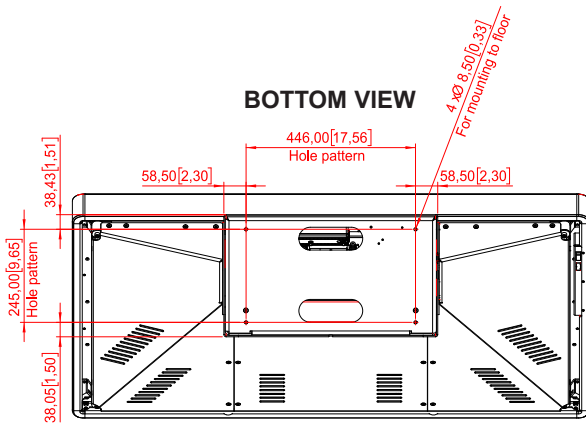
FRONT VIEW

1360,80[53,57]
398,90[15,70] 563,00[22,17] (398,90[15,70])

LEFT VIEW

77,10[3,04]
907,78[35,74]
213,61[8,41] 321,50[12,66] 54,16[2,13]
Shown in 40° position, i.e. "max. tilt"

RIGHT VIEW

Glass display control (user menu)
Tilt control (rocker switch)
2 x USB
On/off switch
992,00[39,05]
33,46[1,32] 321,50[12,66]
Shown in 10° position, i.e. "min. tilt"

BOTTOM VIEW

4 xØ 8,50[0,33] For mounting to floor
446,00[17,56] Hole pattern
58,50[2,30] 58,50[2,30]
38,43[1,51]
245,00[9,65] Hole pattern
38,05[1,50]
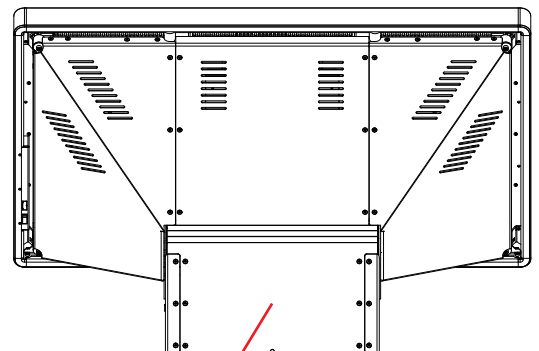
BACK VIEW
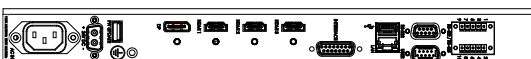
Integrated HT C03/C02 computer inside floor base (optional)

CONNECTOR VIEW

Dimensions might be shown with or without decimals and indicated as mm [inches]. Tolerance on drawings is +/- 1mm. For accurate measurements, check relevant DWG file.

Hatteland Technology AS | www.hattelandtechnology.com | Enterprise no: NO974533146

1/2

Note: All specifications are subject to change without prior notice!
Please visit www.hattelandtechnology.com for the latest electronic version.

HATTELAND TECHNOLOGY
an EMBRON Company

TFT Technology:

- High Quality TFT with LED Backlight Technology
- 55.0 inch viewable image size, Widescreen, Aspect Ratio 16:9
- TFT active-matrix liquid crystal panel, RGB vertical stripe
- MVA (Multi-domain Vertical Alignment) LCD Technology

TFT Characteristics:

- Native Resolution   : 3840 x 2160 (UHD, 4K)
- Pixel Pitch (RGB)   : 0.315 (H) x 0.315 (V) mm
- Response Time   : 6.5 ms (typical) (G to G)
- Contrast Ratio   : 4000:1 (typical)
- Light Intensity   : 450 cd/m² (typical)
- Viewable Angle   : +/- 89 deg. (typical) (Up/Down/Left/Right)
- Active Display Area   : 1209.6 (H) x 680.4 (V) mm
- Max Colors   : 16.7 million

Synchronization:

- Digital separate synchronization
- Composite synchronization
- Synchronization on green
- Auto detects VGA -> UHD (Supports VESA Standards)

Synchronization Range:
- Horizontal   : 31.44 kHz to 133.31 kHz
- Vertical   : 30 Hz to 70 Hz

Supported Signals:

Resolutions:
VGA (640 x 350) to UHD (3840 x 2160*)
- Review Timing Table in User Manual
 *Recommended for optimal picture quality

Power Specifications:

- 100-240V AC 50/60Hz

Power Consumption:
Operating with HT C02 computer   : 300W (typ) - 1037W (max)
Operating with HT C03 computer   : 300W (typ) - 865W (max)
Operating without HT C03/C02 computer : 250W (typ) - 625W (max)

Environmental Considerations:

- Operating   : Temperature -15°C to +55°C
- Storage   : Temperature -20°C to +60°C
- Humidity   : Up to 95% (Operating / Storage)
- IP Rating   : Protection: IP66 front - IP22 rear (EN60529)
- Compass Safe Distance : Standard: 410cm - Steering: 240cm

Lifetime Considerations:
Even though the test conditions for bridge units provide for a maximum operating temperature of 55°C, continuous operation of all electronic components should, if possible, take place at ambient temperatures of only 25°C. This is a necessary prerequisite for long life and low service costs.

Physical Considerations:

- W:1360.68 [53.57"] x H:See below x D:See below mm [inch]
- Height from Max: 992.00 [39.05"] to Min: 907.78 [35.74"] mm [inch]
- Depth from Max: 589.27 [23.20"] to Min: 354.96 [13.97"] mm [inch]
- Approx. 115.5kg / 254.1lbs (including optional HT C03/C02 computer)
- Approx. 102.5kg / 225.5lbs (without optional HT C03/C02 computer)

Internal Signal Terminals:

- HDMI 1.4 Input   : 2 x 19p HDMI (female) - Max 3840x2160@30Hz
- HDMI 2.0 Input   : 1 x 19p HDMI (female) - Max 3840x2160@60Hz
- DP 1.2 Input*   : 1 x 20p DisplayPort (female) - Max 3840x2160@60Hz
- SCOM+Touch*   : 1 x USB TYPE A Connector (female)
- SCOM RS-422/485 : 1 x 5-pin Terminal Block 3.81 non-isolated + Buzzer
- SCOM Ethernet   : 1 x RJ45 Connector
- SCOM RS-232   : 1 x 9p D-SUB (female) non-isolated
- User Interface   : 1 x 9p D-SUB (male) - Potentiometer Analog Input, User Brightness (BRT), I2C and +5VDC & 12VDC OUT
- FW Update   : 1 x USB TYPE A (female) for Firmware Update
- GDCx Interface   : 1 x 15p D-SUB (male) for GDC Hardware Comm.
- AC Power IN   : 1 x Junction Box enclosure w/Terminal Block

* If optional HT C03/C02 computer was delivered with Floor Tilt Model, these are connected by factory default to the internal Computer.
If no optional HT C03/C02 computer was delivered with Floor Tilt Model, the miniDP, USB Touch and AC Cables are provided to allow connection to alternative computer.

Floor Base Signal Terminals:

- USB2.0 (<5m)   : 2 x USB Type A (4-pin) - Right side of Floor Base

User Controls:

On right side - Glass Display Control™ (GDC) IP66:
- Power On/Off (display), On Screen Display Menu (OSD)*
- Brightness Control (-/+)
- Hotkeys (left/right), Mode Status Indicators (ECDIS, Service)
- Buzzer (not visible), Light Sensor (not visible)
- Main Power ON/OFF switch (switch for internal Computer and Display)

Under Right Side:
- Tilt Button Controls

*OSD Key Codes: 321=Get access to OSD, 362=Advanced Mode

Available Accessories:

- HD REM SX1-A1 : 1 x External Remote Control, EN60945 Tested
- 5240-15   : 1 x Fabric Protection Top Cover, Stretch/Washable, Cotton

Please see user manual/datasheet for more information

Factory Default:

- Optical Bonding Technology
- 1 x 5240-15: Fabric Protection Top Cover, Stretch/Washable, Cotton

Factory Options:

- Projected Capacitive Touch Screen (Multitouch, USB, Pen/Glove support)
- Color Calibrated models (ECDIS)

Prepared for:

- Tactor (Rotation Angle Value, X/Y Position, 1 x Button) supported Model
- Active Stylus Pen Supported Model

APPROVALS & CERTIFICATES

These products have been tested / type approved by the following classification societies:

IEC 60945 4th (EN 60945:2002)   **IACS E10**   **EU RO MR** - Mutual Recognition   **ClassNK** - Nippon Kaiji Kyokai
CCS - China Classification Society