

AHD 880 E **8,8" Touch Screen Engine Display**



- **Applicable for engine systems of reputable engine manufacturers**
- **Operation with touch screen**
- **Transflective display with high luminous intensity (250 cd/m²)**
- **Automatically adjusted display brightness**

The AHD 880 E colour display was developed for operation as an engine display for indication and alarm presentation of relevant operating data of connected engine systems.

The data communication is performed via CAN-Bus, where engine data may be recorded and presented from most varied data protocols like e.g. SAE J1939, Modbus, NMEA 0183, NMEA 2000 etc.. Therefore, the AHD 880 E display is excellently convenient in applications with engine systems of reputable engine manufacturers (MAN, MTU, Caterpillar, Volvo-Penta, Cummins etc...).

The 8,8" colour display with transflective screen provides best clearness of display of data information even in case of strong solar radiation. The scrolling through screen pages and the execution of all further display functions is performed by touch screen operation. Additionally, a remote control can be connected to the remote control input.

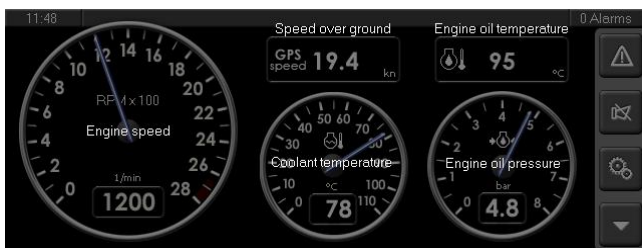
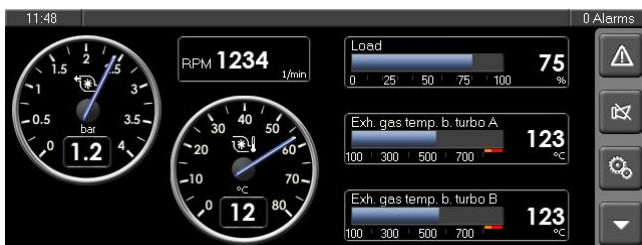
The compact design of the unit with a degree of protection IP 56 at the front side allows operation of the display in wheelhouse control consoles as well as in fly bridge consoles.

The engine operating data and display configuration is presented on multiple instrument, alarm, measuring point and configuration pages by means of graphical resp. tabular visualization. The applied instruments are available with black or in some applications also with white scale.

In addition, a GPS-receiver can be connected to the RS232 interface for presentation of ship speed over ground.

Extensions of existing systems and retrofits with AHD 880 E can be carried out efficiently inclusive integration of additional analog measuring values by means of data acquisition modules.

Screen pages (Examples)



Instrument pages:

The engine display AHD 880 E provides several instrument pages, presenting the most important engine data by as analog instruments or bar graphs. The actual measuring value is highlighted by an additional clearly readable digital display. Further analog measuring point data are presented by digital indicators as well.

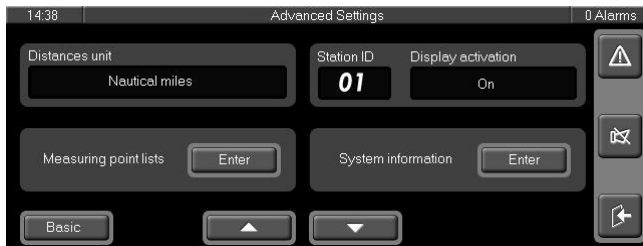
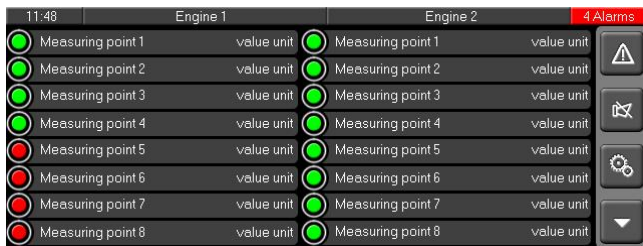
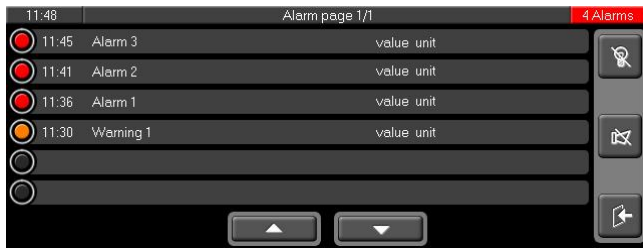
Limit ranges for warning and alarm are marked in the scales of instruments as appropriate colours. Dynamically altered limit ranges, e.g. in dependence of engine speed can be displayed, too.

Existing alarm messages in the system are indicated on each instrument page. An internal buzzer is activated in addition at each new alarm and may be acknowledged by pressing the acknowledgement push button. The function keys for operation are available in the right side area of the touch screen.

Additional information with a text indication of the function of displayed instruments can be called up by touching the screen at any point of the display area of the instrument page. This information text is hidden by touching the display area again or automatically after the expiration of an internally predefined display time.

By default, the instrument pages are displayed in the design shown in the above examples of screen pages, where scales of instruments are presented with black background and white instrument dial.

In some applications it is also possible to select the instrument pages with a design shown in the example shown in the picture on the left side, where scales of instruments are presented with white background and a black instrument dial. (Design options on request).



Alarm pages:

The alarm page of the engine display AHD 880 E is opened by pressing a function key on instrument page. All existing alarms and warnings are shown indicated with LEDs in a clearly structured table and in chronological order of appearance, combined with the current measuring value.

Emergency monitoring page:

For dual engine applications, AHD 880 E is provided with an emergency monitoring page. If the second engine display fails, the engine data of both engines are presented in a table.

Configuration pages:

The configuration pages of the display allow extensive adjustments and settings for the presentation of data to adapt the display to the individual requirements of the operator.

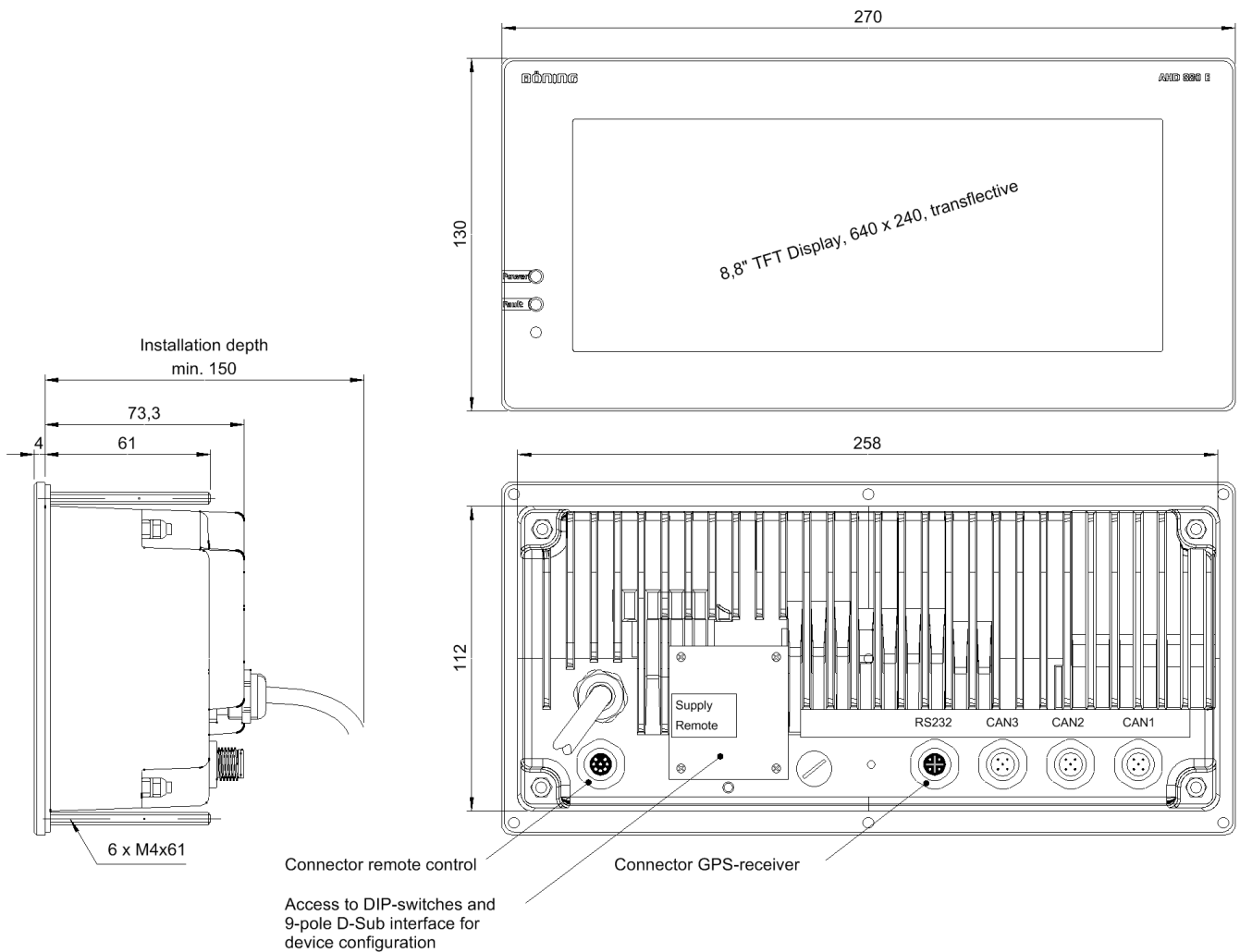
This includes the setting of the language (6 languages are available), date and time, selection of the unit system (metric or non- metric), display brightness and further advanced settings.

Installation example

The image on the left side shows the control console of a dual engine yacht, equipped with one engine display AHD 880 E each for both propulsion engines.

The control console is provided with further components of Böning Automationstechnologie GmbH:

- 19" Colour display AHD 919, e.g. for presentation of electronic sea charts
- Engine Start Stop units AHD-EOP for each propulsion engine
- 8,8" Colour display AHD 880 TC for presentation of further alarms/event messages of connected ship alarm system.



Technical Data

Dimension W x H x D: 270 mm x 130 mm x 95 mm

Desk cut-out W x H: 259 mm x 114 mm

Required installation depth: Min. 150 mm

Weight: Appr. 2,0 kg

Operating temperature: -20°C ... +70°C

Storage temperature: -30°C ... +85°C

Degree of protection: IP 56 (front side)
IP 22 (rear side)

Required distance to compass: Steering magn. compass: 0.70 m
Standard magn. compass: 0.40 m

Power supply: 9 ... 32 V DC

Current consumption: Appr. 700 mA (24 V DC)

Display: 8,8" LCD colour display

Visible display area: 209.28 mm x 78.48 mm

Luminous intensity: 250 cd/m², transfective

Display resolution: 640 (H) x 240 (V) pixels

Colour depth: 15 bit

Viewing angle: Horizontal: min. 40°/typ. 50°
Vertical: min. 35°/typ. 45°

Interfaces: 3 x CAN Bus
1 x RS232
1 x Video In (Composite Video, PAL 50 Hz)

Inputs: 1 x binary (Opto coupler)

Outputs: 2 x Relay contact 40 VDC/1 A

Installation: Panel/console desk installation

Approvals: DNV, CR, LR, RS

Classification societies