AHD-DC TS
Display Control Panel with Trackball

- ***Remote control with large trackball***
- ***For Böning Panel PCs and displays of the types AHD 11XX, AHD 12XX, and AHD 13XX, produced 2012 and later and devices by other manufacturers***
- ***Multi-control of displays***
- ***Data communication on CAN bus***
- ***Comfortable control of display menu and visualization with ergonomically integrated trackball***
- ***Robust and elegant design for sophisticated demands***
- ***Compact device for installation in panels, consoles, or arm rests***

The AHD-DC TS display control panel is the large version of the more compact AHD-DC T. The device provides all necessary functions for operating Böning Panel PCs AHD 12XX and AHD 13XX with an internal PC and displays AHD 11XX. With the control panel, for instance all visualization pages can be opened in the display, and their control elements can be operated.

Moreover, AHD-DC TS performs the functions of the control panel AHD-DC, so that it can also be used to select the display to be operated. This reduces the number of devices required in a system.

In combination with a USB-CAN Converter AHD-CUC V3 devices by other manufacturers can be controlled.

AHD-DC TS is operated with the buttons on its front side:

- Selection of the operated display
- Screen brightness
- Switching the screen on and off
- Selecting the video source
- Left and right mouse click
- Alarm acknowledgement
- Opening the main page of the visualization

As with all Böning control panels, the buttons are automatically dimmed together with the Panel PC or display.

The connections for the power supply and CAN bus are at the rear. For trouble-free data communication, AHD-DC TS is operated via a separate Control CAN bus. AHD-DC TS is supplied with the 24 V DC normally used on ships.

BÖNING
SHIP AUTOMATION

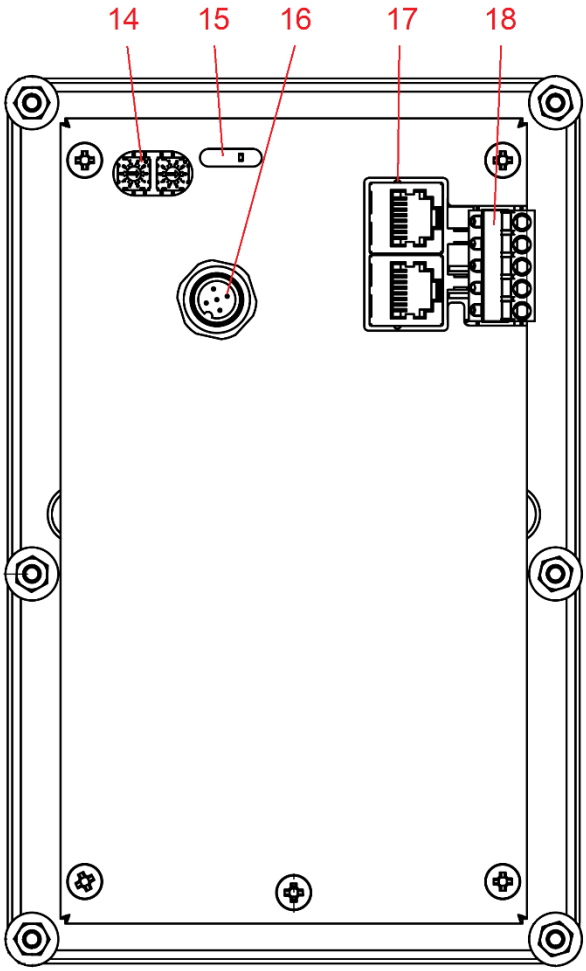
Function and Operation

AHD-DC TS can be used to operate the visualizations on Böning Panel PCs and displays and, in combination with an AHD-CUC V3, the functions of third-party devices, for example to control a chart plotter.

Short Description

	Function	Description
1	Indication of the operated display	Indication of the display currently selected for operation. The LED corresponding to the display ID of the selected display is lit bright.
2	Button “left” for selecting the operated display	Pressing this button selects the display with the next lower display ID for operation. When the lowest display ID has been reached, the selection is not changed.
3	Reduce screen brightness	The screen brightness of the selected display is reduced. This function depends on the selected method for brightness control.
4	ON/OFF button	Switches the screen of the selected display on and off.
5	Increase screen brightness	The screen brightness of the selected display is increased. This function depends on the selected method for brightness control.
6	Button “right” for selecting the operated display	Pressing this button selects the display with the next higher display ID for operation. When the highest display ID has been reached, the selection is not changed.
7	Light sensor	Sensor for automatic brightness control.
8	SOURCE button	Short press: selection of the video source. Each button press switches to the next available video source of the operated display. Sequence with a Panel PC AHD 12XX: Internal Windows PC, DVI 1, DVI 2, VGA, Video 1
9	Left mouse button	Corresponds to clicking the left mouse button.
10	Menu button	Opens the main page of the visualization of the operated display. This applies to Böning standard configurations. The function can be changed on request.
11	Right mouse button	Corresponds to clicking the right mouse button.
12	Acknowledgement button acoustic / optical	Pending alarms of the Böning alarm system are acknowledged acoustically the first time the acknowledgement button is pressed and optically the second time.
13	Trackball	The mouse cursor is moved with the ball. The movable ring corresponds to the function of the scroll wheel on a mouse and can be used, for example, to zoom a nautical chart.

Front and Rear View



Indicators

1: Operated display
7: Light sensor (LDR)

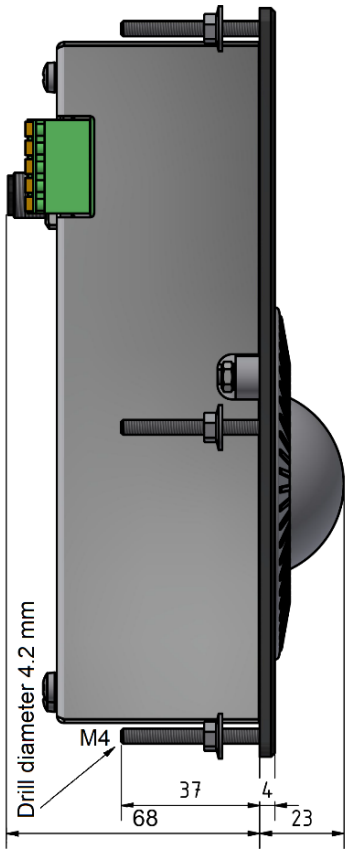
Controls

2: Select display with lower ID
3: Reduce screen brightness
4: Switch screen on/off
5: Increase screen brightness
6: Select display with higher ID
8: Select video source
9: Left mouse button
10: Open main menu of the visualization
11: Right mouse button
12: Acknowledgement button
13: Trackball

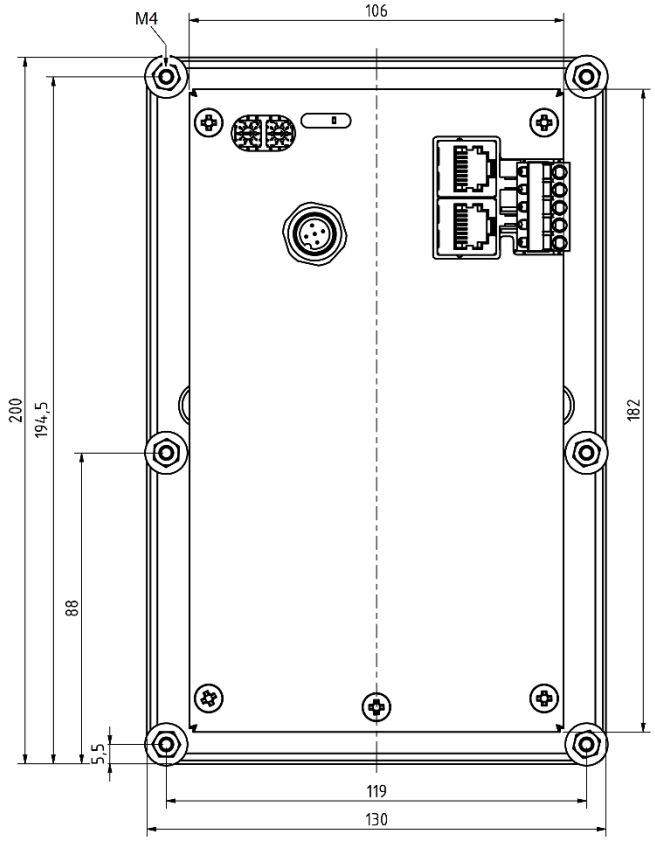
Connections and Switches for Settings

14: Rotary switch for device address in the CAN bus
15: Switch for CAN bus termination
16: CAN connection (M12)
16: CAN connection (RJ45, In/Out)
17: 5-pin terminal strip for power supply and CAN connection

Dimensions



Panel cutout: 110 x 185 mm



Technical Data	
Mechanical Data	
Dimensions, W x H x D	130 x 200 x 91 mm Installation depth: 68 mm (approx. 105 mm including plug)
Panel cutout	110 x 185 mm
Weight	Approx. 0.4 kg
Environmental Data	
Operating temperature	-30°C … +70°C
Storage temperature	-50°C … +85°C
Protection class	IP 20
Minimum distance to magnetic compass	Standard compass: 0.40 m Steering compass: 0.30 m
Electrical Data	
Power supply	24 V DC (+30% / -25%)
Current consumption, max.	Approx. 100 mA (24 V DC)
Interfaces	
1 x CAN	RJ45 (In/Out), DeviceNet (plug), terminal for Control CAN bus (CAN 7 with devices produced 2015 and later, CAN 5 with previous models)
5-pin terminal strip	Connections for 24 V DC power supply and CAN bus
Approvals	DNV, LR
Item number	20837