

AHD-CUC CAN-USB Converter



Image is similar.

Integration of the control of external PC systems into the visualization on Bönig 10" and 19" color displays (Panel computers and monitors)

Configurable assignment of mouse and keyboard commands to operating elements of the Bönig display control panels AHD-DC, AHD-DRM R and AHD-DRM T

Configurable assignment of the video source of an external PC with automatic detection on selection

Data communication with the display control panel via CAN bus with conversion for the connection to the USB interface of the external PC system

With the CAN-USB converter AHD-CUC, external PC systems, whose video sources are connected to Bönig 10" and 19" color displays for visualization, can be controlled with operating elements of the Bönig display control panels AHD-DC, AHD-DRM R and AHD-DRM T.

Multiple external PC systems may be integrated each by an AHD-CUC.

With a configuration software, mouse and keyboard commands are assigned to operating elements (keys, push drive or trackball) of the display control panels, which are then transmitted over a standard USB interface to the external PC.

The assignment of control commands is freely configurable and by that, the required control of the external PC can be adapted individually.

Furthermore, with the configuration software is set up, to which interface (DVI, VGA, CVBS) of Bönig color displays the video source of the external PC system is connected.

This configuration allows the automatic activation of the command transmission when a signal source of the color display is selected.

Up to 10 color displays can be individually preconfigured (default setting: DVI).

The color display and its signal source (interface) are selected on the display control panel or on the display.

The CAN-USB converter units AHD-CUC and all color displays and display control panels are connected to the same control CAN bus (CAN 7 interface or CAN interface on monitors).

Interfaces and configuration elements

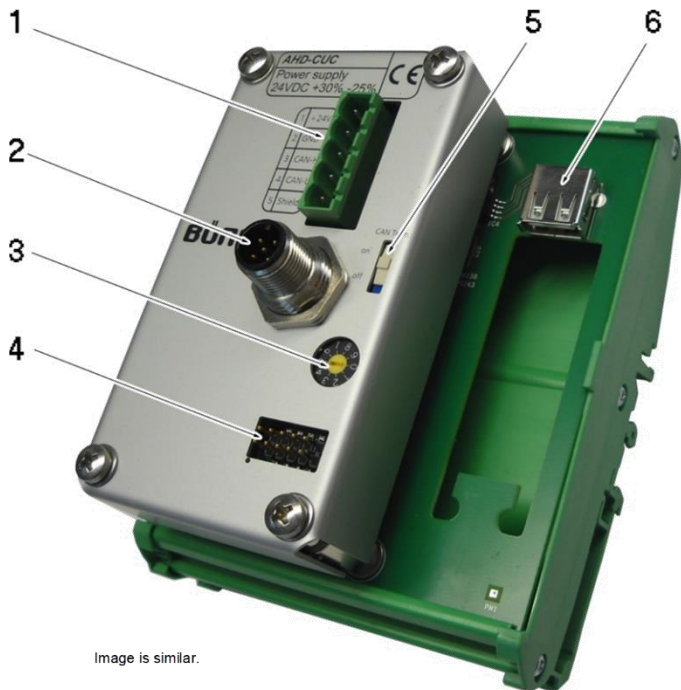


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- (1) 5-pole, pluggable terminal strip for the 24 V DC power supply and the CAN bus (CAN-H, CAN-L, Shield)
- (2) CAN bus plug connector (male) according to DeviceNet standard (M12, Lumberg) for the connection of AHD-CUC to the control CAN bus
- (3) BCD coding switch (currently without function)
- (4) Plug connector for programming the device's firmware
- (5) Selector switch for the integrated CAN bus termination ("On" or "Off")
- (6) USB interface for the connection to the external PC system for transmitting the configured control commands

Integration of external PC-system via AHD-CUC into display control: example 1:

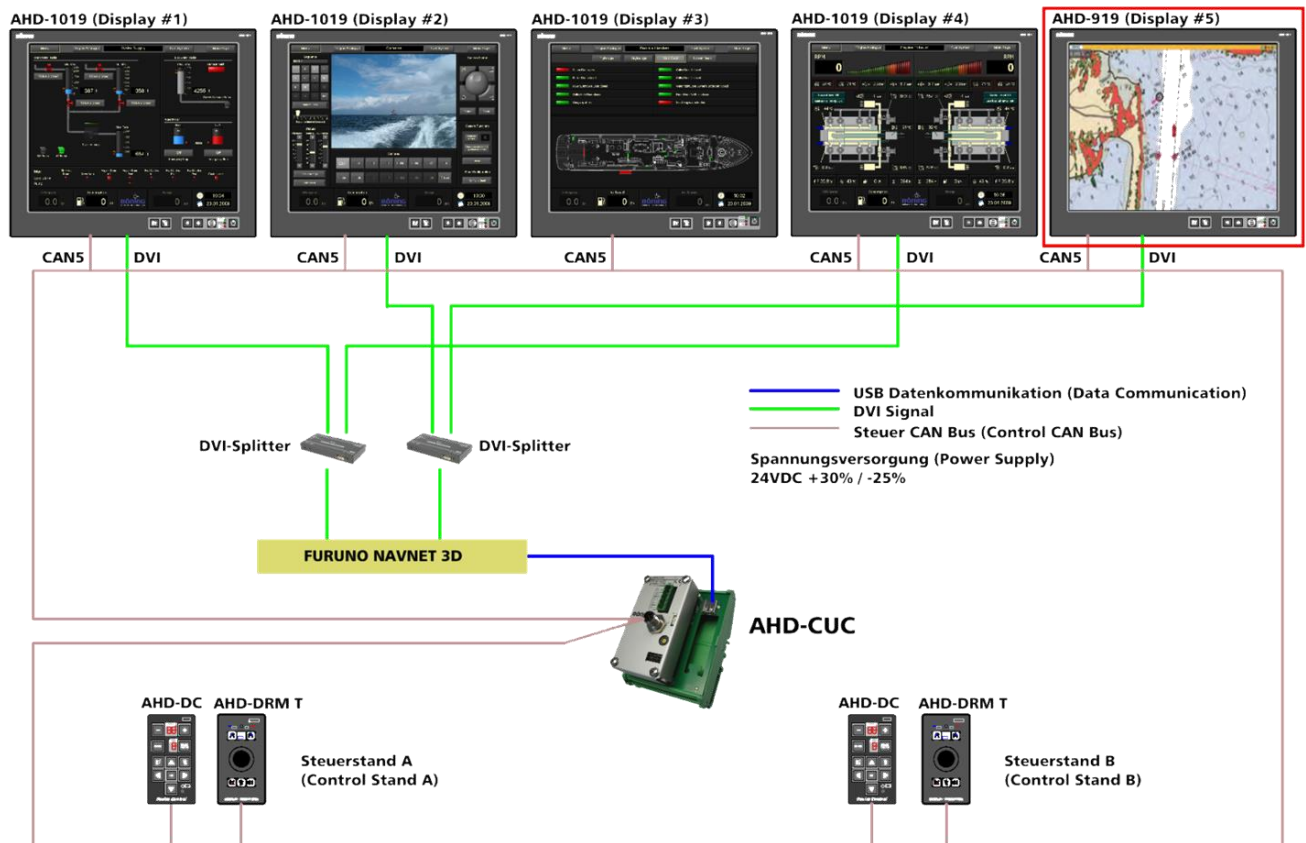
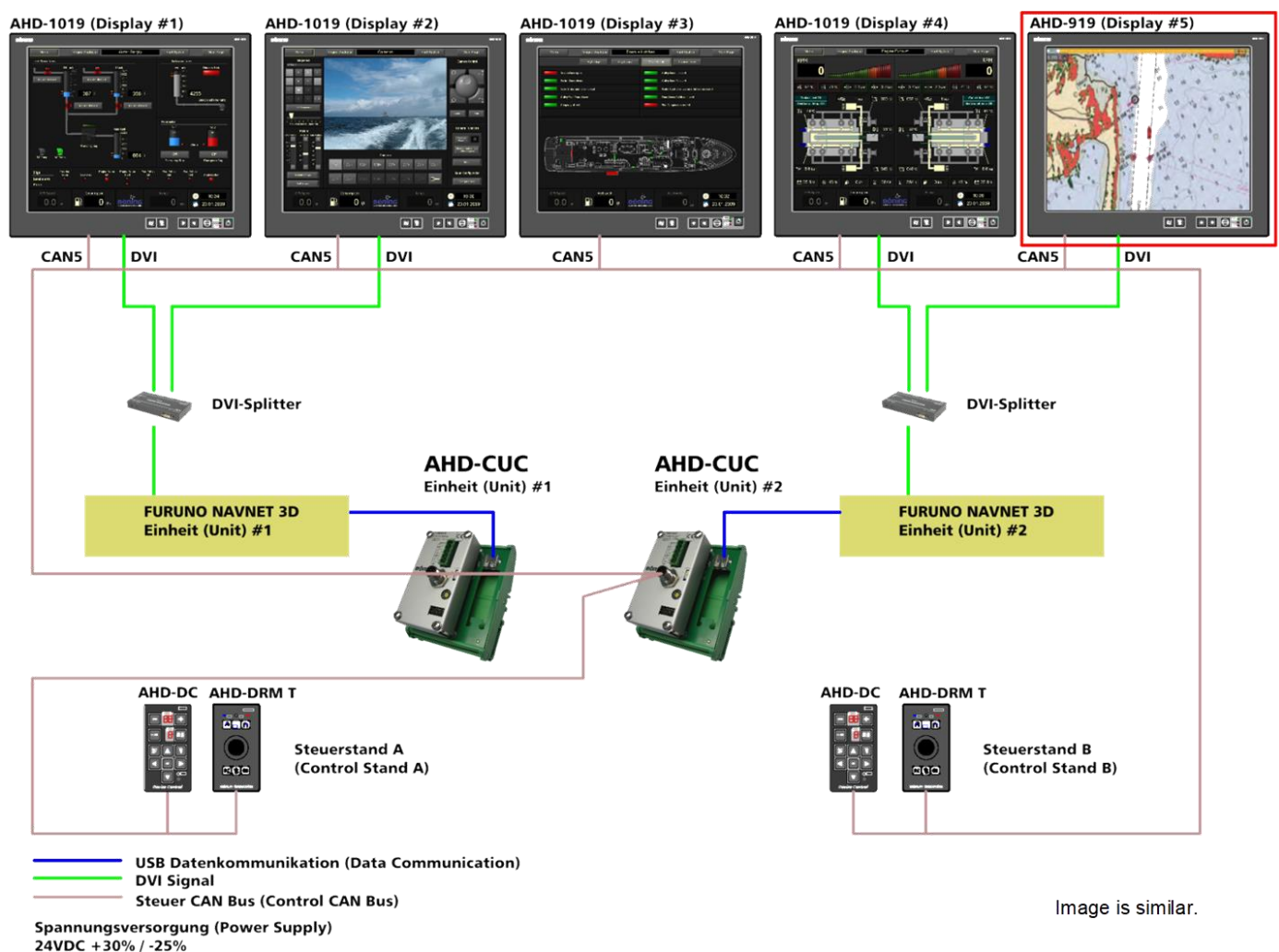


Image is similar.

Example 1 shows a system with five Böning color displays (AHD 1019 M, AHD 1015 MTC, AHD 919 etc.), which are installed e.g. in the bridge control console of a vessel. Integrated into this system is an external navigation PC (i.e. Furuno Navnet 3D), whose DVI video signal is displayed via DVI splitters on four Böning color displays. The CAN-USB converter AHD-CUC interfaces the control CAN bus with the navigation PC and functions there as a USB mouse and keyboard. The scheme shows two control stations, each with a display control panel AHD-DC and AHD-DRM T (Trackball) connected to the control CAN bus. Each control station may control both the navigation PC and the internal visualization software of the Böning system in the connected displays. The CAN-USB converter AHD-CUC allows concurrent access for simultaneous control of the display from two display control panels.

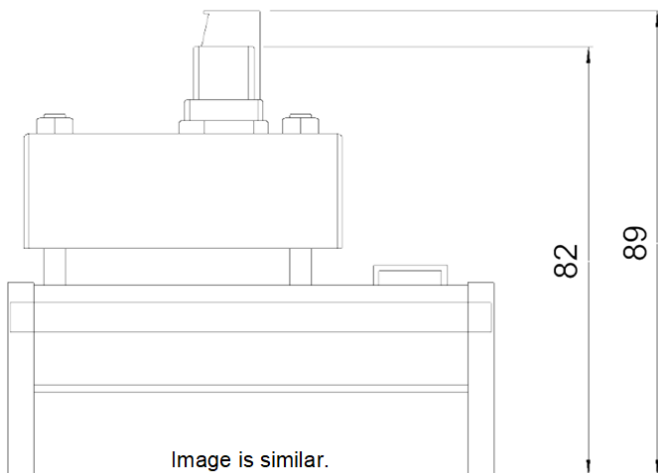
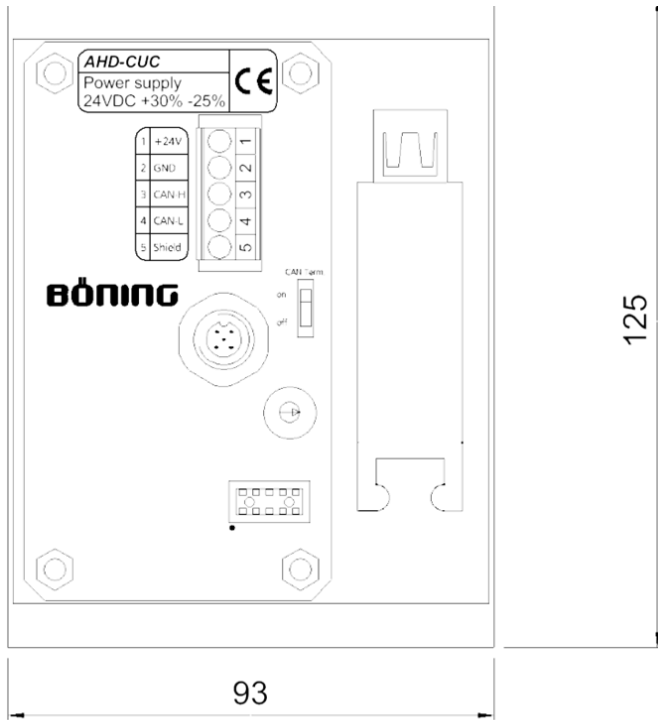
Integration of external PC-system via AHD-CUC into display control: example 2:



Example 2 shows the above system with two separately operating navigation PCs. The control of each external PC is integrated into the control CAN bus by an AHD-CUC. Mouse and keyboard commands are transmitted individually for each PC in accordance with the defined configuration tables assigned to the AHD-CUC and the evaluation of the feedback message of the display for the selection of the defined video signal source. Here too, each navigation PC and the internal visualization software of the Böning system can be controlled with the display control panels of each control station.

Technical Information

Dimensions



Technical data

• Mechanical data:

Dimension W x H x D 93 x 125 x 89 mm

Weight Appr. 0.25 kg

• Environmental data

Operating temperature -25°C ... +70°C

Storage temperature -30°C ... +85°C

Protection class IP 20

• Electrical data:

Power supply 24 V DC (+30% -25%)

Current consumption, max. appr. 30 mA (24 V DC)

• Interfaces

1 x CAN Data communication with displays and control panels on the control CAN bus (display CAN port 7)

1 x USB Transmission of converted commands for mouse and keyboard control to the external PC system

5-pole terminal strip Connection of the 24 V DC power supply
Alternative connection of the CAN bus

Notice:

The CAN-USB converter AHD-CUC can also be used for PCs running Windows® 7 or higher.