



Installation & Operation Manual

CAMcourse

Video Transmitting Magnetic Compass
for Overhead Compass

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Range of Delivery

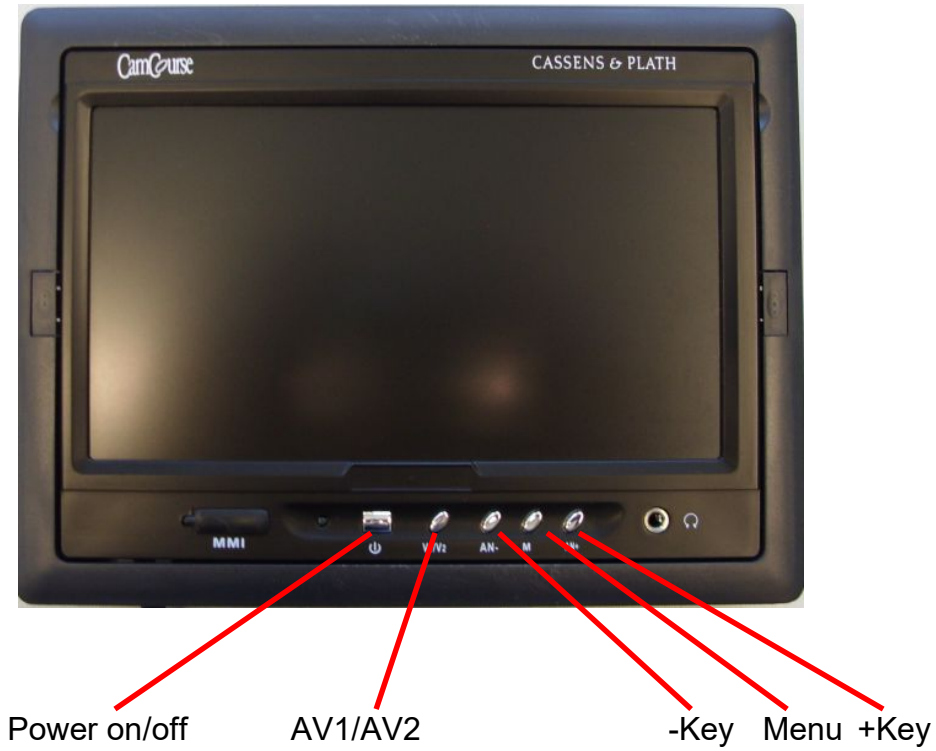
- Main indicator with 10cm cable and plug
- Camera module with mounting plate for installation above the compass with 0,5 m cable and junction box
- Junction box with cable 1m and plug for main indicator
- Built-in frame
- Installation and operation manual

Technical Data

- Adjustable background illuminated 7" TFT Display
- 18 VDC ... 30 VDC main/emergency supply voltage
- Automatic switch over to emergency power supply in case of main supply failure.
- Power consumption: 1 A
- Camera focus adjustable: 22 ... 37 cm
- Maximum distance between camera module and indicator: 40m
- Meets IEC 60945 regulation
- Secondary indicator can be connected
- Operation temperatures:
 - Camera: -30° C ... +70° C
 - Indicator: 0° C ... +70° C
- Weight of Camera: 1 kg , Monitor: 1 kg

Controls:

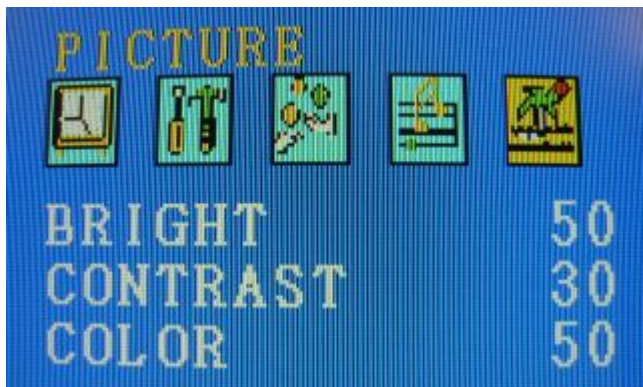
Main Indicator:



Operation:

Switch on unit by pressing power button on monitor. Switch Monitor to AV2 input by pressing "AV1/AV2" button on monitor.

By pressing menu button on monitor picture menu will be displayed.

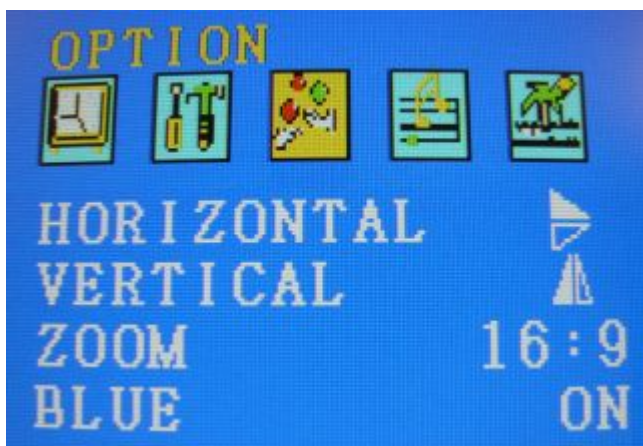


By pressing menu button again, the functions will be selected. Adjustment of function with "+" and "-". Menu will be left automatically after some seconds when no key is pressed.



To mirror image if needed press menu button. Select "option" by pressing "+" key twice.

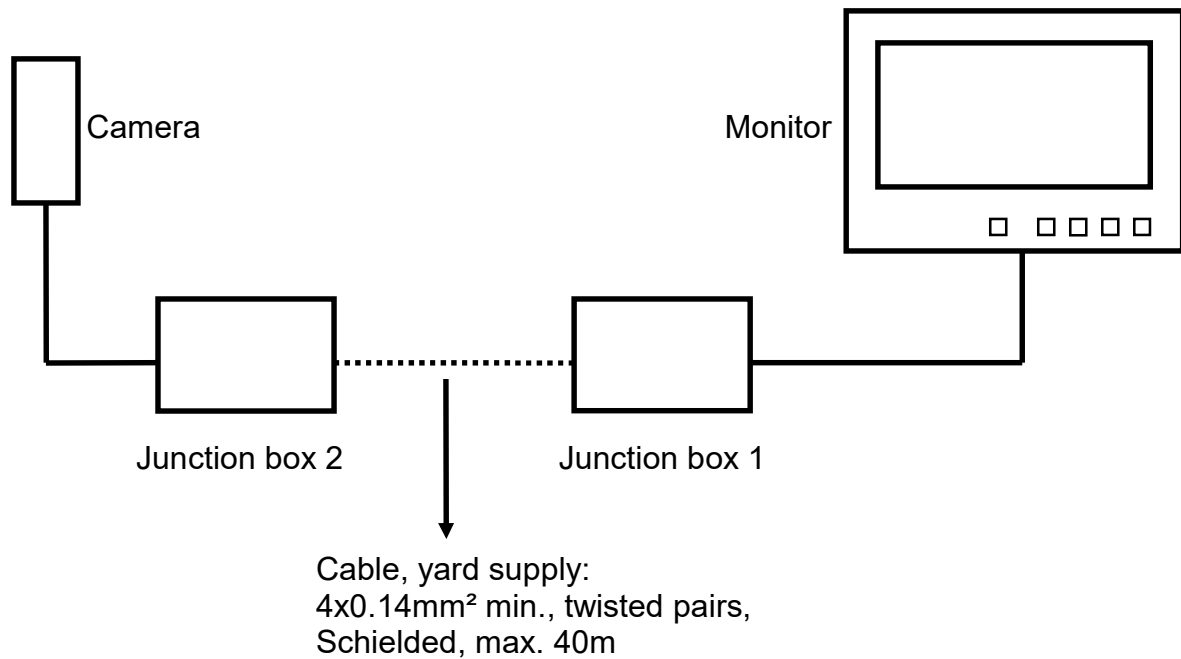
By pressing menu button again the functions for horizontal or vertical mirroring can be selected. Adjustment of function with "+" or "-" key



Settings will be stored in monitor, even if power supply is switched off.

5. Wiring of Junction Boxes:

System Overview:



Main Indicator

(Measures Junction Box 1: w125xh80xd60mm)



Screening of cables have to been fixed in cable glants!

To Monitor:

- 1) +12V DC
- 2) GND
- 3) GND
- 4) Video

To 2nd Monitor (optional):

- 5) +12V DC
- 6) GND
- 7) GND
- 8) Video

To Junction Box 2 (Camera):

- 9) +12V DC
- 10) GND
- 11) GND
- 12) Video

Cable, vard supply!:4x0.14² min., twisted pairs, shielded, max. 40m**Power supply:**

- 13) +24V DC
- 14) GND
- 15) +24V DC emergency
- 16) GND

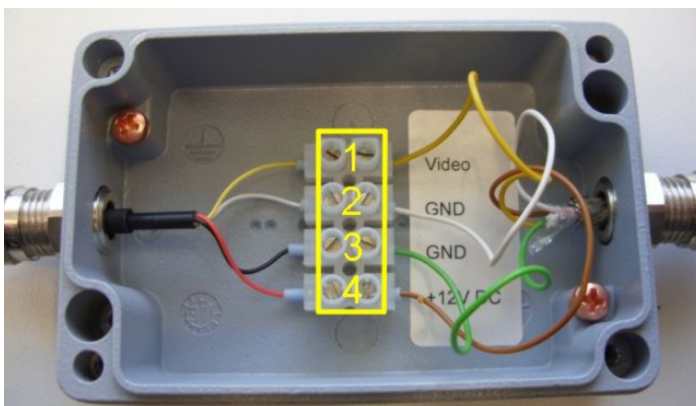
Emergency supply (15 + 16) only needed if seperated from main supply (13 + 14).

Cable, vard supply!:

2x0.25² min., twisted pair, shielded, max. 5m
(2 pieces for main- and emergency supply)

Camera

(Measures Junction Box 2: w100xh65xd35mm)

**To Junction Box 1 (Monitor):**

- 1) Video (yellow)
- 2) GND (white)
- 3) GND (black)
- 4) +12V DC (red)

Cable, vard supply!:

4x0.14² min., twisted pairs, shielded, max. 40m
(refer junction box 1)

6. Installation of Camera:

Longitudinal Compass Mounting:



First install overhead compass (refer to manual of overhead compass).

Then install monitor unit (ref. para. 8) and make connections between junction box 1 and junction box 2 (ref. para. 5).

Switch on unit. The picture of camera should be seen on monitor. Camera is already pre-adjusted by manufacturer. Mirror of camera plate is faced ahead.

Now position the camera so that the picture of card and lubberline is displayed in centre of monitor. Mark the four mounting holes of camera plate, and fix camera plate.

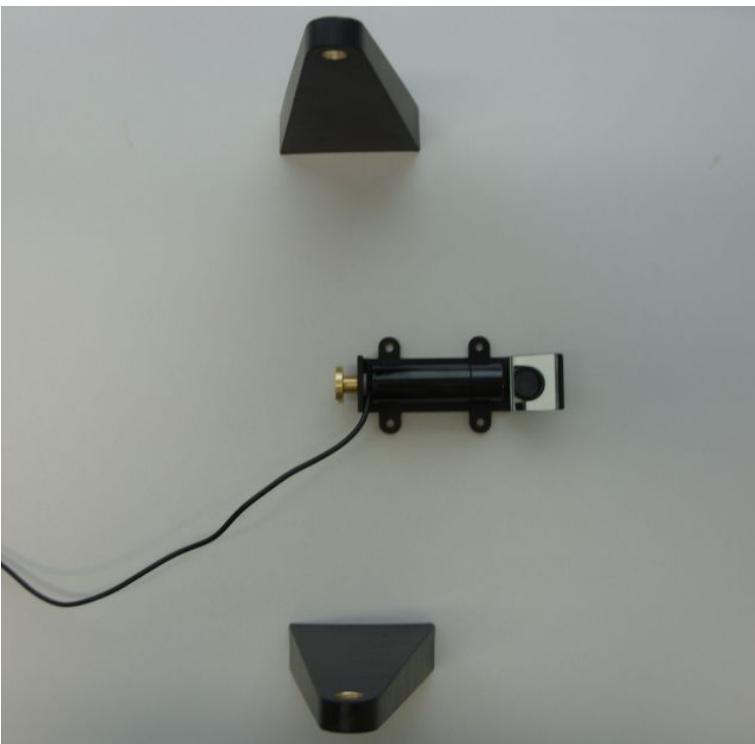
Junction box 1 and junction box 2 can be fixed with adhesive tape applied on the back of boxes.

If necessary adjust camera (ref. para. 7).



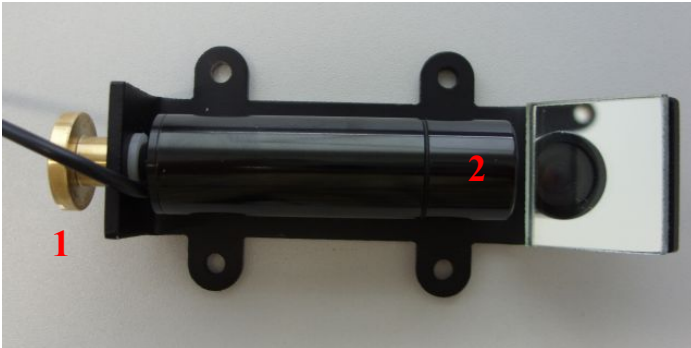
Ahead

Athwardship Compass Mounting:



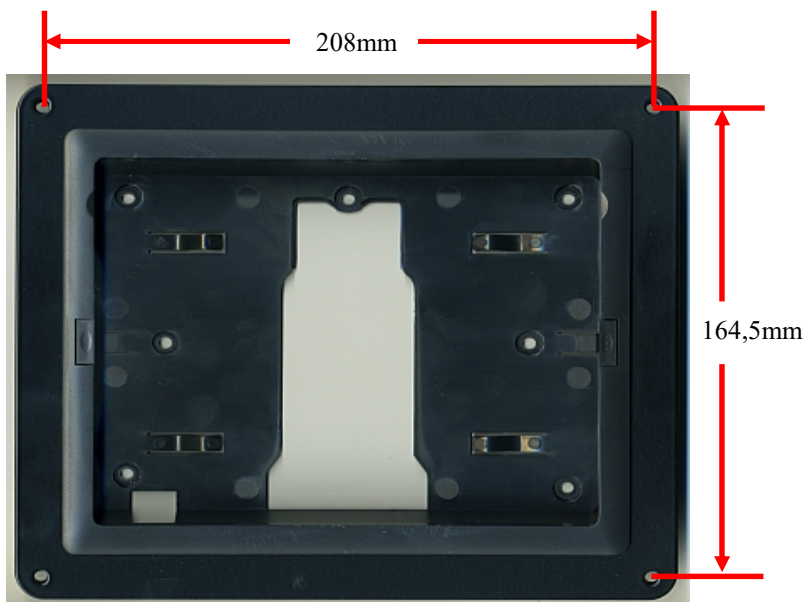
Ahead

7. Adjustment of Camera:



To adjust camera loosen arrest knob (1). Rotate camera until image is centered. Fix camera in that position with arrest knob. After that focus camera by turning the camera lens (2).

8. Installation of Monitor Unit:



Cut out: 190mm x 140mm

Monitor will be snapped in frame. Plug monitor jack into socket of junction box 1. For wiring refer to paragraph 5.