



Installation & Operation Manual

analog:mag NEMAcourse

Magnetic Heading Repeater

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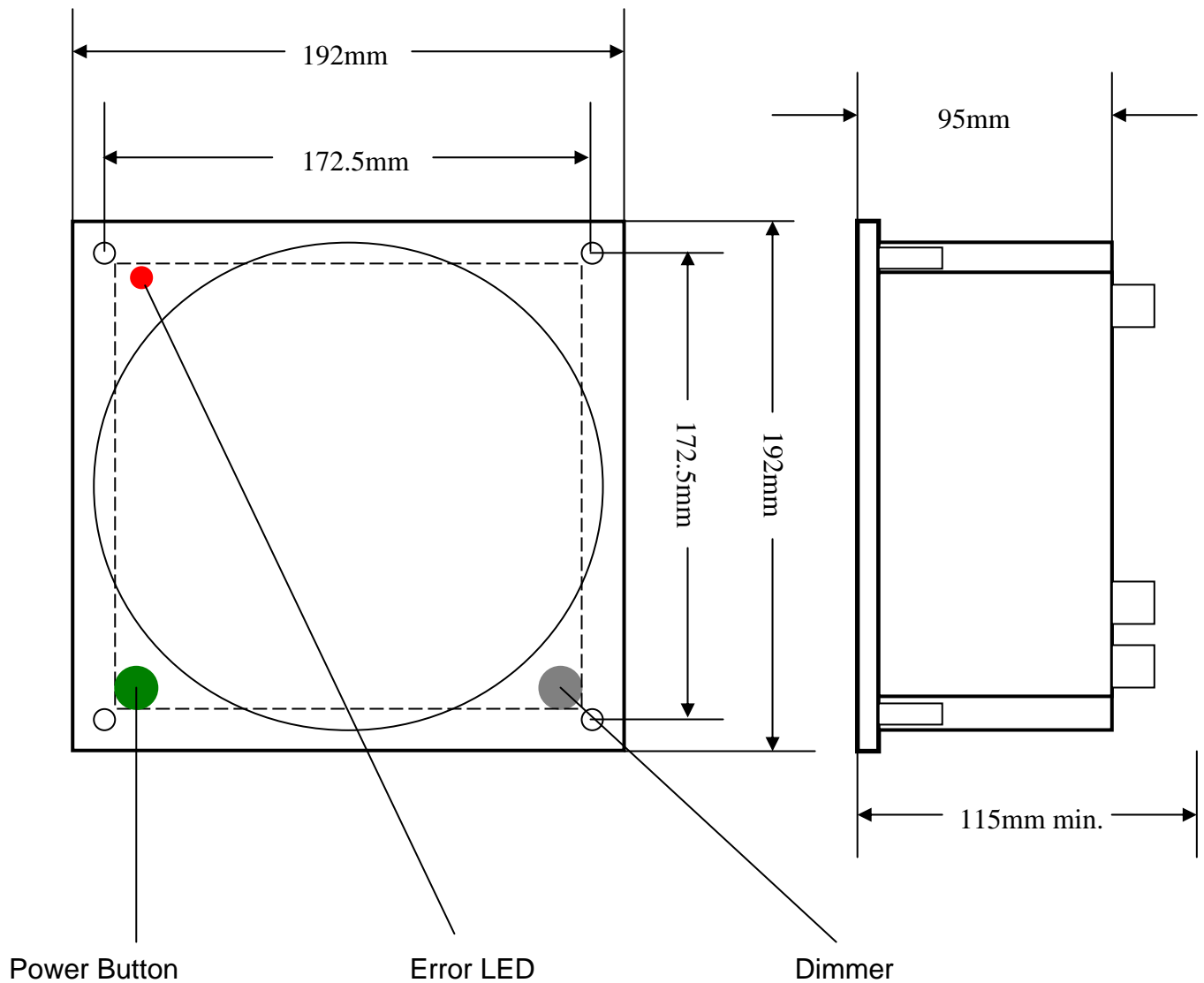
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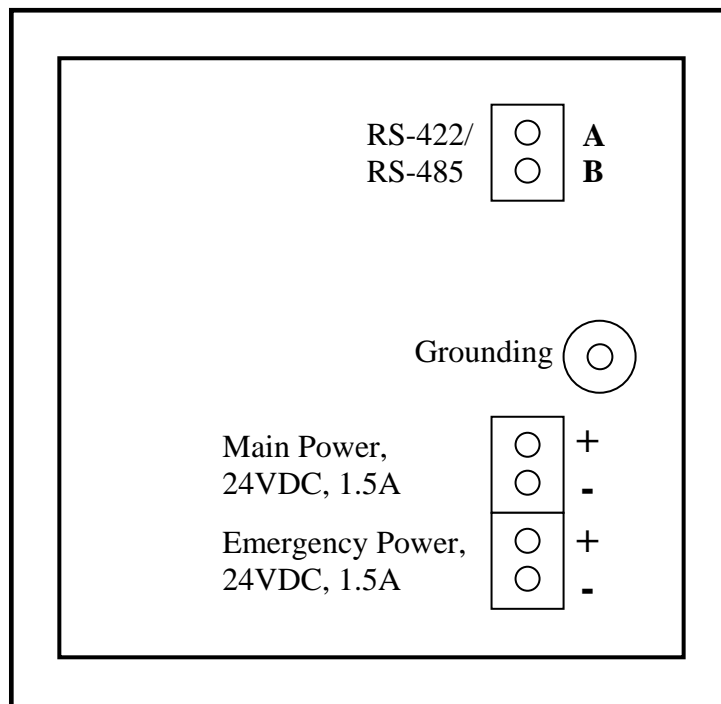
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1) Dimensions and Mounting (Front View of Unit)

Flush mounting (cut-out: 182 mm x 182 mm)



2) Wiring and Pin Connection (Rear View of Unit)



Cables have to be screwed to the terminals.

Screening has to be fixed with clamp at unit.

Grounding has to be connected to the ships superstructure or grounding terminal in ships electric.

Cable Requirements, to be supplied by yard:

1 piece of data cable:

Min. 2x0.14mm², twisted pair, screened, max. 100m

2 pieces of power cable:

Min. 2x0.25mm², screened, max. 20m

1 piece of grounding cable:

Min. 1x1mm², max. 2m

3) Data Formats

All data formats accepted by analog:mag NEMAcourse have to be RS-422/ RS-485, 4800 or 38400 Baud, 8 databits, 1 stop bit and no parity.

Accepted data sentences are "\$HCHDG" and "\$HCHDM" according to IEC61162-1 with checksum and without leading zeros. analog:mag NEMAcourse will autodetect these data sentences during start up, after changing data sentence analog:mag NEMAcourse has to be switched off and switched on again. analog:mag NEMAcourse will check data sentence by checksum.

4) Error Messages/ Error Removing

No or wrong data sentence:

If analog:mag NEMAcourse receives no data sentence for more than 5 seconds, analog readout will move to 0° and red error LED will turn on. The same will appear when analog:mag NEMAcourse receives wrong data sentences for more than 5 times successively.

In this case check:

- Wiring okay? (Ref. to chapter 2)
- A and B interchanged? (Ref. to chapter 2)
- Data sentence at transmitting unit is selected properly? (Ref. to chapter 3 and manual of transmitting unit)

After removing the failure or changing data sentence analog:mag NEMAcourse has to be switched off and switched on again.

Power failure:

If power supply of analog:mag NEMAcourse drops below 18V, red error LED will turn on and illumination of power button will turn off.

In this case check:

- Unit is turned on?
- Wiring okay? (Ref. to chapter 2)
- Power supply okay? (Check with voltmeter that analog:mag NEMAcourse is supplied with 24VDC)

analog:mag NEMAcourse will go back to normal operation after error is eliminated.