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Installing Mantracourt Input Module on a Fusion Large Display

Mantracourt Radio I/F Module

Connection details and general information In addition to standard manuals

Revision: 2

Warnings

To ensure the IP rating of this display, all fastening screws must be fitted according to instructions. Failure to do so will void the warranty offered on this product. Any lost / broken fixings need to be reported to the manufacturer so as replacements can be costed and sent. The liability for installation lies with the installer, London Electronics Limited takes no responsibility for death, injury, accident or effect for poor / incorrect installation. London Electronics Limited have quoted to supply the display items and mountings only, a full stability report, risk assessment and structural report should be undertaken by the installer prior to installing the products.

Please carefully read this manual and all warnings. Install the display ONLY when you are sure that you've covered all aspects.



Where the product is intended for "UL" installations, removal or addition of option boards is not permitted.



Check that the model number and supply voltage suit your application before you install the display.



Connect the display according to current IEE regulations, IEC61010 & NFPA:70 National Electric Code in USA.



Don't touch any circuitry after you have connected the display, because there may be lethal voltages on the circuit board.



Do not apply power to the display if its case is open.



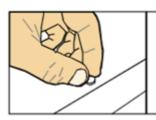
Only adjust on-board switches or connections with the power turned off



Make sure all screw terminals are tight before you switch the meter on.



Only clean the display's case and window with a soft damp cloth. Only lightly dampen with water. Do not use any other solvents.



Rear case screws - please note

The rear panel is held in place with finger-screws, which only need to be gently tightened.

Do not use tools to tighten or loosen the screws, as this could cause damage to the internal threads.

Safety FirstDon't assume anything...... Always double check. If in doubt, ask someone who is QUALIFIED to assist you in the subject.

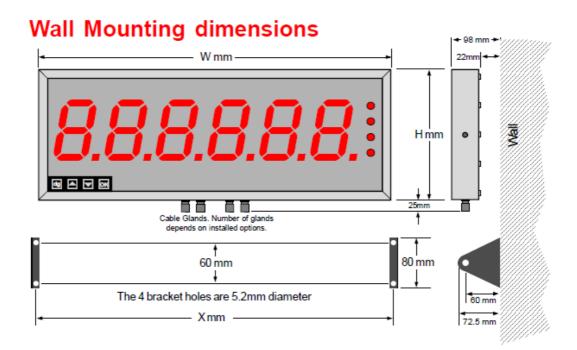
Contents

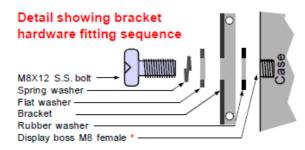
Content	Page
Warnings	2
Brackets/Fixings	4
Large/Custom Display	4
Panel Meter	7
Installing Module	8
Fusion Settings	10
Notes	11

Brackets/Fixings

In addition to standard manuals

Fusion and Intuitive Series.





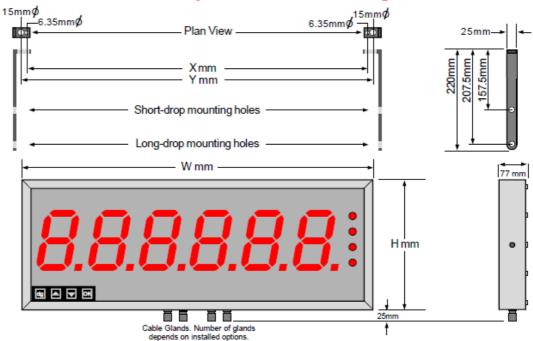
You can order these displays with the cable glands in the bottom surface (as shown) the rear, or top.

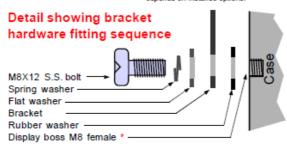
Rear glands allow you to mount the display on top of a cubicle, using the brackets shown.

* Do not use longer bolt threads than 12mm, or you will fracture the female boss and the case will no longer be sealed.

Display Format	X mm	H mm	W mm
2" 4 digit clock	278	154.5	291
2" 4 digit numeric	266.5	154.5	279.5
2" 6 digit clock	387	154.5	400
2" 6 digit numeric	363	154.5	376
4" 4 digit clock	440	195.5	453
4" 4 digit numeric	421	195.5	434
4" 6 digit clock	640	195.5	653
4" 6 digit numeric	603	195.5	616
6" 4 digit	567	246	580
6" 6 digit	807	246	820
8" 4 digit	737	290	750
8" 6 digit	1059	290	1072
12" 4 digit	1037	408	1050
12" 6 digit	1527	408	1540
16" 4 digit	1355	515	1368
16" 6 digit	2007	515	2020

Suspension Mounting dimensions





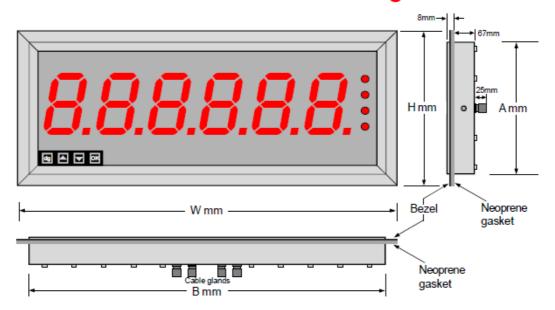
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Rear glands allow you to mount the display on top of a cubicle, using the brackets shown.

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Display Format	X mm	H mm	W mm	Ymm
2" 4 digit clock	231	154.5	291	247
2" 4 digit numeric	219.5	154.5	279.5	249.5
2" 6 digit clock	340	154.5	400	370
2" 6 digit numeric	316	154.5	376	346
4" 4 digit clock	393	195.5	453	423
4" 4 digit numeric	374	195.5	434	404
4" 6 digit clock	593	195.5	653	623
4" 6 digit numeric	556	195.5	616	586
6" 4 digit	520	246	580	550
6" 6 digit	760	246	820	790
8" 4 digit	690	290	750	720
8" 6 digit	1012	290	1072	1042
12" 4 digit	990	408	1050	1020
12" 6 digit	1480	408	1540	1510
16" 4 digit	1308	515	1368	1338
16" 6 digit	1960	515	2020	1990

Panel mounting dimensions



Panel cutout dimensions A+3mm(h) x B+3mm(w)

Neoprene gasket Panel M8 x 15 bolt Spring washer Flat washer

Detail showing bracket hardware fitting sequence

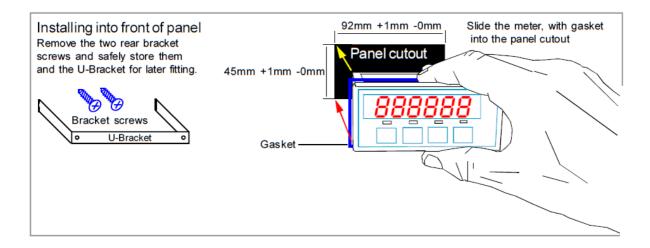
Display Format	H mm	A mm	B mm	Wmm
2" 4 digit clock	172.5	154.5	291	309
2" 4 digit numeric	172.5	154.5	279.5	297.5
2" 6 digit clock	172.5	154.5	400	418
2" 6 digit numeric	172.5	154.5	376	394
4" 4 digit clock	213.5	195.5	453	471
4" 4 digit numeric	213.5	195.5	434	452
4" 6 digit clock	213.5	195.5	653	671
4" 6 digit numeric	213.5	195.5	616	634
6" 4 digit	264	246	580	598
6" 6 digit	264	246	820	838
8" 4 digit	308	290	750	768
8" 6 digit	308	290	1072	1090
12" 4 digit	426	408	1050	1068
12" 6 digit	426	408	1540	1558
16" 4 digit	533	515	1368	1386
16" 6 digit	533	515	2020	2038

Wall Bracket

Fit last - M8 x 20 bolt, gasket compresser

Panel Mounting and Installation - Class II

Install the meters in a suitable protective electrical control enclosure according to local wiring regulations. See specifications for maximum allowable temperature in enclosure. Allow adequate air circulation.



Securing into the panel

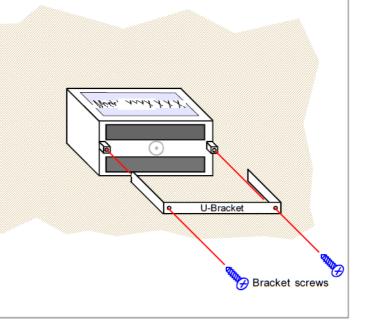
Re-fit the U-Bracket and tighten the bracket screws to firmly clamp the meter in place. Check that the gasket is evenly pinched between the meter's front bezel and the enclosure front

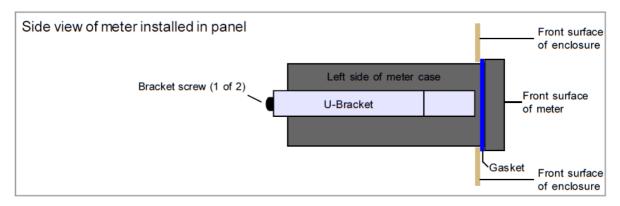
Ventilation

There should be sufficient ventilation in the enclosure to ensure that the meter's case is always kept to less than 60C.

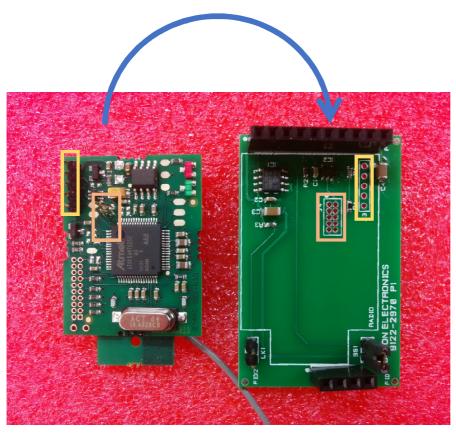
Meter Spacing.

Meters should be spaced apart sufficiently to allow a free flow of ventilation air around the meters, such that no part of the case will exceed 60C





Installing Module



Solder the Radio I/F Module onto the handling board. Ensuring the highlighted connections are attached.

Radio I/F Module

Handling Board



Left. Attached Radio I/F Module to handler board.

Right. Empty handling board.



The Handling board attaches to the Fusion Display main card using the highlighted header pins.



Left. Handling Board attached to Fusion Display main card.

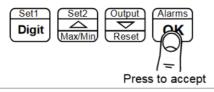
Fusion Settings

Match Fusion Input settings with Mantracourt T-24 Board output settings.

In addition of the standard fusion_S manual, where all settings can be found.









Notes

- Non-standard firmware is required in the Fusion display. Mantracourt.hex
- Additional Fusion Information can be found in the Fusion_S manual. This can be downloaded from the London Electronics website.
- T-24 Information can be found on the Mantracourt website.