

Installation Note

HF100 Hands Free Reading Head

IN115

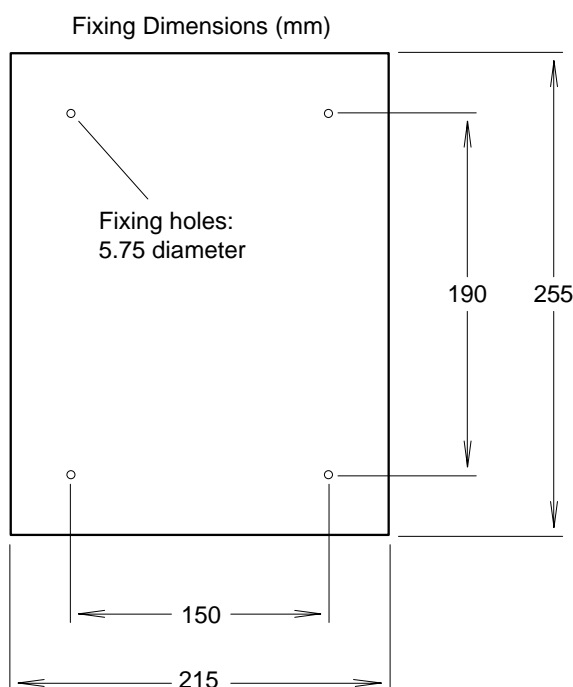
The HF100 Reading Head must be connected either to a 4322 Cotag Reader module or to a 5311 Reader Interface.

Removing the cover

The Reading Head is supplied with the cover separate. If the cover has been fitted for any reason, remove it by pushing in the two lugs on its lower edge using a suitable screwdriver.


Mounting and connecting

1. Choose a suitable position to mount the Reading Head near the door.
If people wear their cards at the hip, mount the Reading Head at a height of 90cm from the floor to the centre of the Reading Head.
If people wear their cards at the lapel or breast pocket, mount it at a height of 120cm from the floor to the centre of the Reading Head.
If people do not wear their cards in a consistent place then mounting the Reading Head at a height of 110cm is a good compromise.
2. The Reading Head should be mounted with the LEDs at the top left. Mark out and drill the four mounting holes. Don't fix the Reading Head to the wall yet. The holes accept 5mm machine screws or No 10 wood screws.



The cover overlaps the base slightly on all sides so you must allow a little extra room all round.

3. Route the cables into the Reading Head: you can use the cut-out in the base of the Reading Head, or one of the knock-outs in the bottom and sides. If you route the cables through the bottom knock-out then you should also pass them through the cable clamp.
4. When you have routed the cables into the Reading Head you can screw it to the wall. Be careful you do not damage the antenna coils.
5. Make the connections shown in the following table:

HF100	4322/5311	Function
HRN		Horn
V+	VA	+12V supply to LED anodes and horn
R	R	Red LED cathode
A	A	Amber LED cathode
G	G	Green LED cathode
<u>RX</u>	<u>Rx</u>	Receive line
<u>RX</u>	<u>Rx</u>	Receive line
<u>TX</u>	<u>Tx</u>	Transmit line
TX	Tx	Transmit line

Note: if corrosion of the terminals due to moisture may be a problem, cover the terminals with silicone grease or petroleum jelly.

The Tx and Rx lines must be connected using individually screened twisted pair cables. For distances up to 200 metres you can use 812 Cable, or cable with 0.38mm² (22AWG) conductors (for example Belden 8723 or equivalent for twin twisted pair). For distances between 200 and 300 metres you must either use 812 Cable, or cable with 0.5mm² (20AWG, 16/0.2) conductors (for example Belden 9402 or equivalent for twin twisted pair). The maximum distance between the Reader Module/Interface and the Reading Head is 300 metres using either 812 Cable or 20AWG screened twisted pairs. Any suitable 5-core cable can be used for the LEDs and horn.

The cable shields should be connected at the 4101-2 Controller or 5311 Reader Interface, but must **not** be connected at the Reading Head end, either to each other or to anything else: they should be cut back and insulated.

6. Use a 922 Test Card to check that the Reading Head is working. (If you want to reduce the transmit range of the Reading Head by approximately 50%, cut link LK1.) Fit the front cover by locating its lugs at the top, then pressing the bottom until it snaps into place.

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