

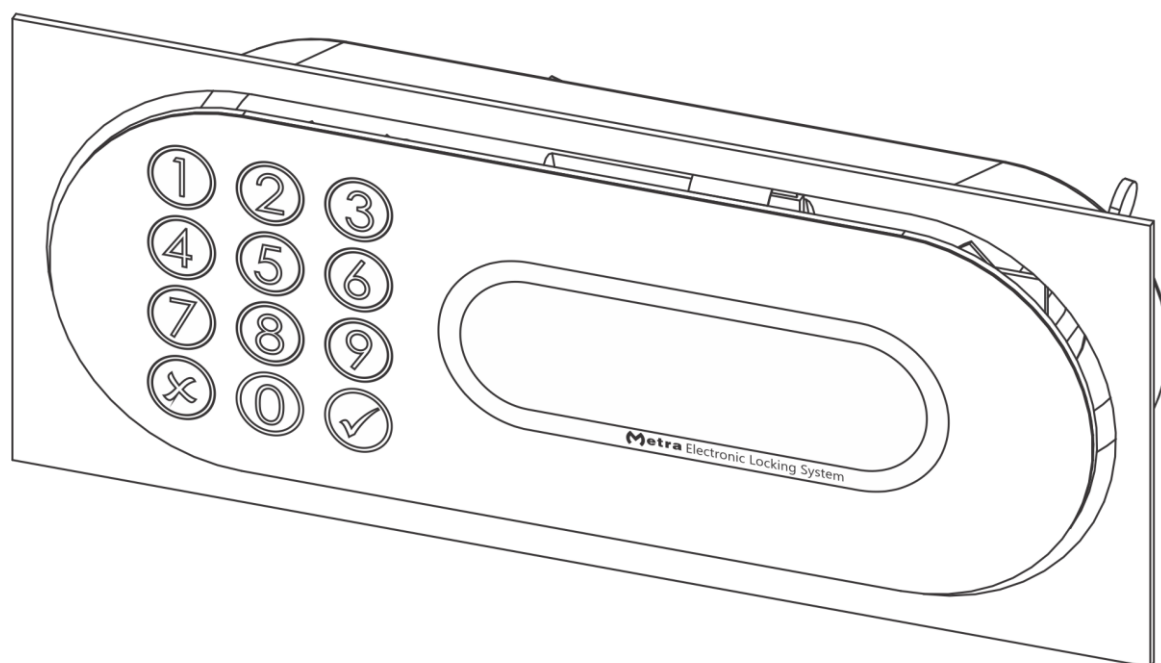


Table of contents

Reader Terminal Combo <i>User Manual</i>	3
Product description.....	3
Connections	4
Power and Metra NET Network connection	4
DIP switch settings	6
Network address	7
Operating indicator.....	8
Maintenance	8
Technical data	9
Appendix	9

Reader Terminal Keypad *User Manual*

Manufacturer:	Metra inženiring d.o.o. IOC Trzin Špruha 19 SI-1236 Trzin, Slovenia	phone: +386 1 56 10 740 fax: +386 1 56 10 744 web: www.metra.si
System:	Metra ELS NET– Electronic Locking Systems	
Product Group:	Reader Terminal	
Types:	• RTKP	
Year of Construction:	2011-2013	

Declaration of Conformity:



The Metra ELS NET products have been developed, designed and manufactured in accordance with the EU directive for *Electromagnetic Compatibility (2004/108/EC)*.

Reader Terminal Keypad User Manual [rev.0-140512]

©2013 Metra inženiring d.o.o.

All Rights reserved.

No part of this manual may be reproduced in any form or by any means without prior written permission of Metra inženiring d.o.o.

The contents of this manual are subject to change without notice.

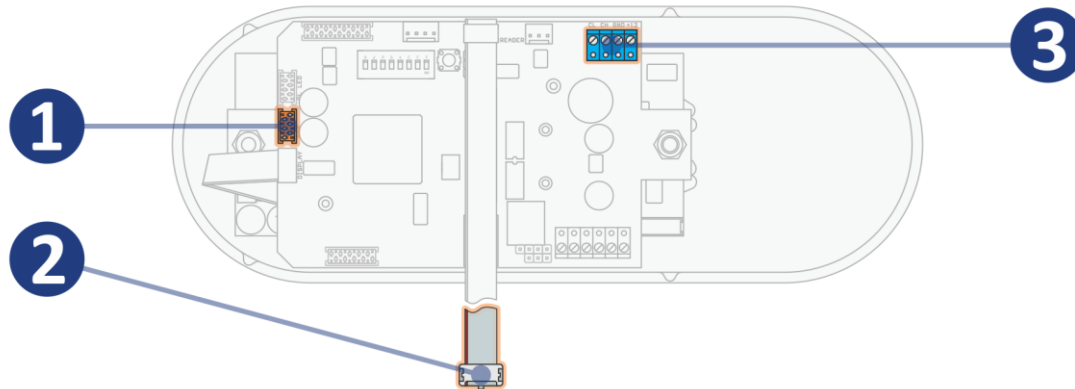
All efforts have been made to ensure the accuracy of the contents of this manual, however, should any errors be detected, Metra inženiring would greatly appreciate being informed of them. Metra inženiring d.o.o. can assume no responsibility for any errors in this manual.

• Product description



Metra Reader Terminal Keypad is a user interface for Metra ELS NET systems. In combination with external reader (e.g. barcode scanner) its primary function is to read tickets as locker keys and show the locker number on a four digit LED display. Twelve key washable keypad is integrated to enable additional user interaction (PIN, locker number, etc.) and can be used for unlocking instead of ticket. Display Keypad also performs audio signalization and shows an alarm message if an attempt of break-in is detected on a Metra Electric Lock connected to a Metra Locker Controller. Master keys and codes are stored in its internal memory for emergency procedures. In these situations it works independent of the Metra ELS NET software.

• Connections



#	description
1	BDM Loader
2	External Reader/Barcode Scanner

#	description
3	Power and Metra NET Network

• Power and Metra NET Network connection

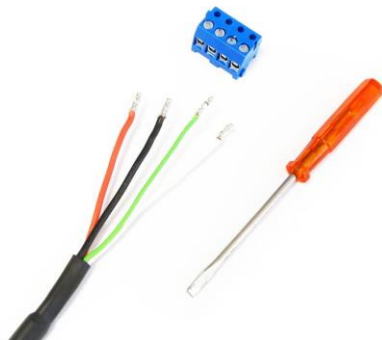
⚠ WARNING ⚠

- Mind the power and Metra NET Network polarity! Wrong polarity could result in irreparable damage to the device.
- Respect power requirements data! Using unsuitable power supply could result in damage to the power supply and to the device.

Regulated DC power supply is required for proper operation. Connect as many units as possible to a single power supply unit. See chapter *“Technical data”* for power requirements.

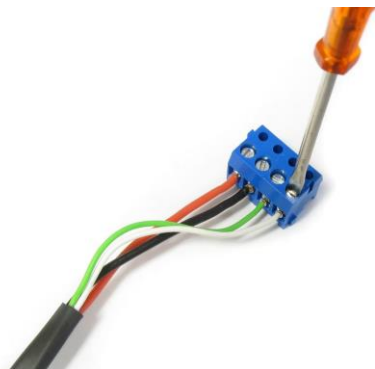
The Metra NET Network connection provides for operational functionality of the Reader Terminal Combo.

Tools required: Small flathead screwdriver



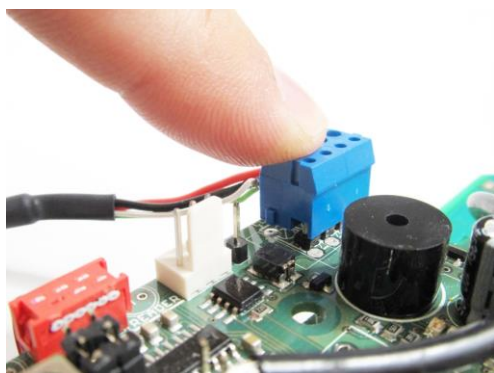
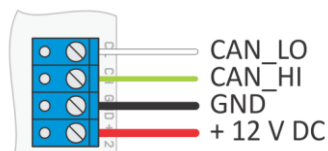
👉 **NOTE** 👉

Cable included with the Metra Reader Terminal Combo already has connector attached and therefore you can skip step 1.



STEP 1:

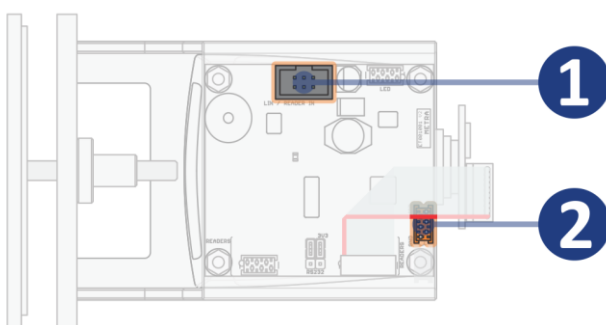
Insert wires from the 12V DC regulated power supply and Metra NET Network cable into the connector and fasten them with screws.



STEP 2:

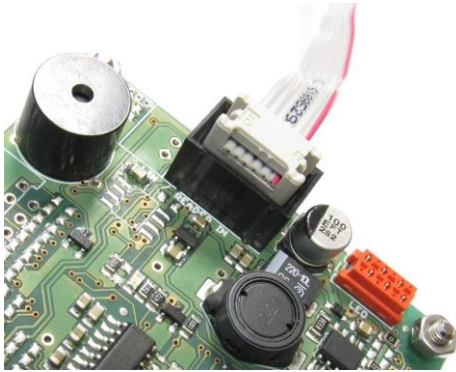
Attach the connector to the Door Access Terminal's main electronics board.

• Barcode scanner connection



#	description
1	Reader IN

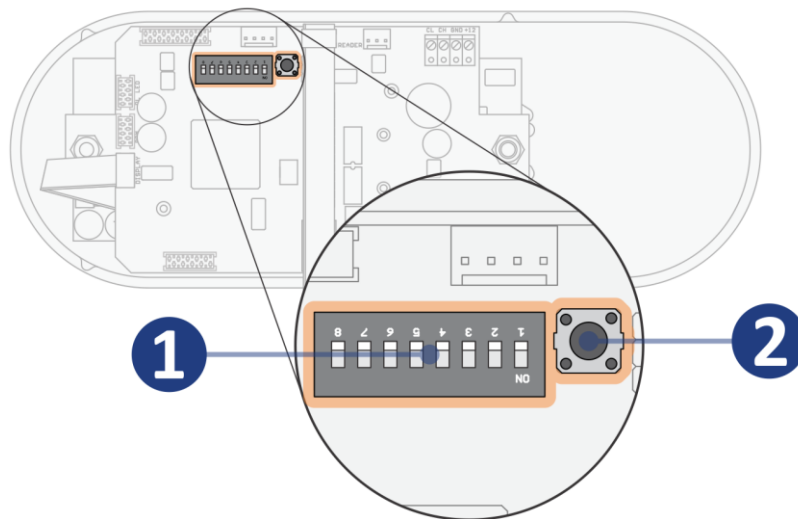
#	description
2	ISP Loader



STEP 1:

Attach the external reader 6 pole flat cable from the Reader Terminal Keypad to the connector on Barcode Scanner electronics board.

• DIP switch settings



#	description
1	DIP switch

#	description
2	Parameters request button

By changing the DIP Switch **1** pins position, different network address can be set. To change between different pins positions, use a small flat headed screwdriver or similar object to push DIP switch pins to desired position.

After each address change or after device's first installation power off and back on the device (for the new settings to take effect) and obtain operating parameters.

Operating parameters are obtained through the Metra NET Network. The server must be set up and running for that purpose. To obtain operating parameters, press the PARAMETERS REQUEST **2** button.

NOTE

Network based functionality will be present only if the server is running and the Reader Terminal has been properly configured.

• Network address

After installation is complete, the device network address must be set by DIP switches.

NOTE

Each Metra device must have different address setting.

Switch **#1** must be set to OFF (switch down).

Look up the code for desired address in the coding table. Set switches **#2 through #8** to indicated positions, where:

- 0 indicates the corresponding switch is in OFF position (switch down)
- 1 indicates the corresponding switch is in ON position (switch up)

Coding table:

switch positions							address
2	3	4	5	6	7	8	
0	0	0	0	0	0	0	100
0	0	0	0	0	0	1	101
0	0	0	0	0	1	0	102
0	0	0	0	0	1	1	103
0	0	0	0	1	0	0	104
0	0	0	0	1	0	1	105
0	0	0	0	1	1	0	106
0	0	0	0	1	1	1	107
0	0	0	1	0	0	0	108
0	0	0	1	0	0	1	109
0	0	0	1	0	1	0	110
0	0	0	1	0	1	1	111
0	0	0	1	1	0	0	112
0	0	0	1	1	0	1	113
0	0	0	1	1	1	0	114
0	0	0	1	1	1	1	115
0	0	1	0	0	0	0	116
0	0	1	0	0	0	1	117
0	0	1	0	0	1	0	118
0	0	1	0	0	1	1	119
0	0	1	0	1	0	0	120
0	0	1	0	1	0	1	121
0	0	1	0	1	1	0	122
0	0	1	0	1	1	1	123
0	0	1	1	0	0	0	124
0	0	1	1	0	0	1	125
0	0	1	1	0	1	0	126
0	0	1	1	0	1	1	127
0	0	1	1	1	0	0	128
0	0	1	1	1	0	1	129
0	0	1	1	1	1	0	130
0	0	1	1	1	1	1	131
0	1	0	0	0	0	0	132
0	1	0	0	0	0	1	133
0	1	0	0	0	1	0	134

switch positions							address
2	3	4	5	6	7	8	
1	0	0	0	0	0	0	164
1	0	0	0	0	0	1	165
1	0	0	0	0	1	0	166
1	0	0	0	0	1	1	167
1	0	0	0	1	0	0	168
1	0	0	0	1	0	1	169
1	0	0	0	1	1	0	170
1	0	0	0	1	1	1	171
1	0	0	1	0	0	0	172
1	0	0	1	0	0	1	173
1	0	0	1	0	1	0	174
1	0	0	1	0	1	1	175
1	0	0	1	1	0	0	176
1	0	0	1	1	0	1	177
1	0	0	1	1	1	0	178
1	0	0	1	1	1	1	179
1	0	1	0	0	0	0	180
1	0	1	0	0	0	1	181
1	0	1	0	0	1	0	182
1	0	1	0	0	1	1	183
1	0	1	0	1	0	0	184
1	0	1	0	1	0	1	185
1	0	1	0	1	1	0	186
1	0	1	0	1	1	1	187
1	0	1	1	0	0	0	188
1	0	1	1	0	0	1	189
1	0	1	1	0	1	0	190
1	0	1	1	0	1	1	191
1	0	1	1	1	0	0	192
1	0	1	1	1	0	1	193
1	0	1	1	1	1	0	194
1	0	1	1	1	1	1	195
1	1	0	0	0	0	0	196
1	1	0	0	0	0	1	197
1	1	0	0	0	1	0	198

0	1	0	0	0	1	1	135
0	1	0	0	1	0	0	136
0	1	0	0	1	0	1	137
0	1	0	0	1	1	0	138
0	1	0	0	1	1	1	139
0	1	0	1	0	0	0	140
0	1	0	1	0	0	1	141
0	1	0	1	0	1	0	142
0	1	0	1	0	1	1	143
0	1	0	1	1	0	0	144
0	1	0	1	1	0	1	145
0	1	0	1	1	1	0	146
0	1	0	1	1	1	1	147
0	1	1	0	0	0	0	148
0	1	1	0	0	0	1	149
0	1	1	0	0	1	0	150
0	1	1	0	0	1	1	151
0	1	1	0	1	0	0	152
0	1	1	0	1	0	1	153
0	1	1	0	1	1	0	154
0	1	1	0	1	1	1	155
0	1	1	1	0	0	0	156
0	1	1	1	0	0	1	157
0	1	1	1	0	1	0	158
0	1	1	1	0	1	1	159
0	1	1	1	1	0	0	160
0	1	1	1	1	0	1	161
0	1	1	1	1	1	0	162
0	1	1	1	1	1	1	163

1	1	0	0	0	1	1	199
1	1	0	0	1	0	0	200
1	1	0	0	1	0	1	201
1	1	0	0	1	1	0	202
1	1	0	0	1	1	1	203
1	1	0	1	0	0	0	204
1	1	0	1	0	0	1	205
1	1	0	1	0	1	0	206
1	1	0	1	0	1	1	207
1	1	0	1	1	0	0	208
1	1	0	1	1	0	1	209
1	1	0	1	1	1	0	210
1	1	0	1	1	1	1	211
1	1	1	0	0	0	0	212
1	1	1	0	0	0	1	213
1	1	1	0	0	1	0	214
1	1	1	0	0	1	1	215
1	1	1	0	1	0	0	216
1	1	1	0	1	0	1	217
1	1	1	0	1	1	0	218
1	1	1	0	1	1	1	219
1	1	1	1	0	0	0	220
1	1	1	1	0	0	1	221
1	1	1	1	0	1	0	222
1	1	1	1	0	1	1	223
1	1	1	1	1	0	0	224
1	1	1	1	1	0	1	225
1	1	1	1	1	1	0	226
1	1	1	1	1	1	1	227

• Operating indicator

When the unit is running, blue dot on the left side of the display panel is blinking.



• Maintenance

No special maintenance is needed. Regular cleaning is recommended. The unit should be cleaned using soft cloth and dedicated cleaners for plastic surfaces e.g. car dashboard cleaning agents. Do not

use any aggressive or abrasive agents or solvents as they might cause permanent damage to the device surface.

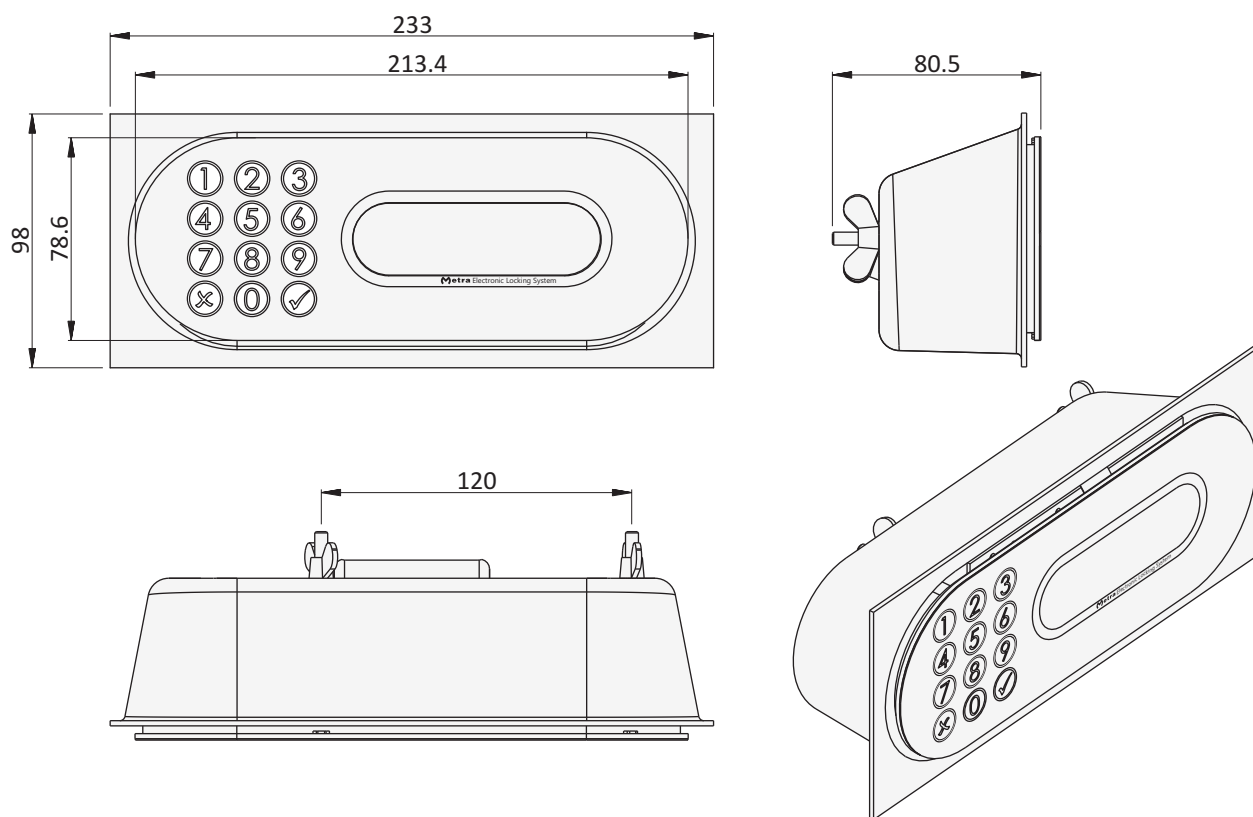
• Technical data

Operating voltage	12V DC regulated (11.5 – 15V DC tolerated)
Current consumption	0.50 A
Operating temperature range	-10 to +50 °C
Audio signal	integrated piezoelectric beeper
Visual signalization	4 digit LED display with decimal points.
Connectors	Power, Metra NET Network
Dimensions in mm (w/h/l)	214/79/83

• Appendix

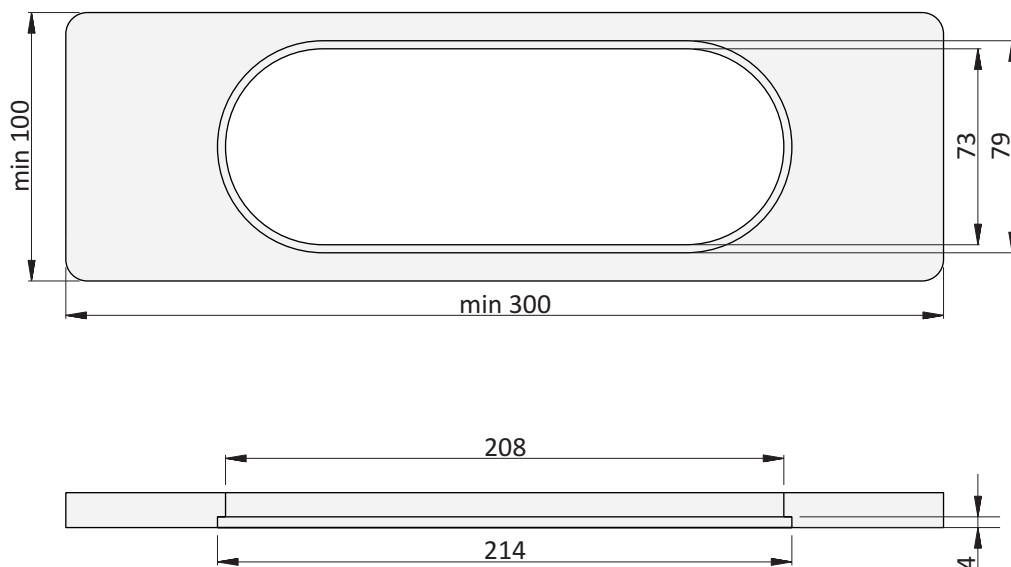
- 1 **Physical dimensions**
Reader Terminal Keypad
Reader Terminal Mounting hole
- 2 **Physical dimensions**
Barcode Scanner
Barcode Scanner Mounting hole
- 3 **Inner connections schematic**

Reader Terminal Keypad

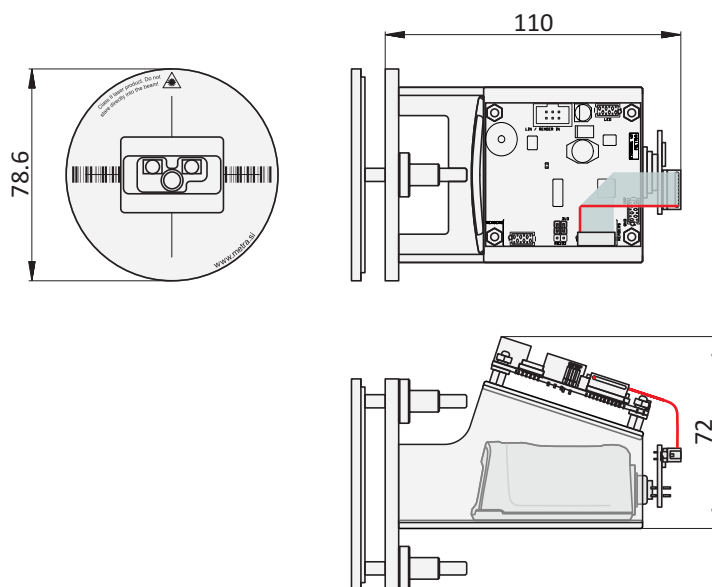


Reader Terminal mounting hole

Oval hole must be provided for mounting the Reader Terminal unit.
If not already CNC machined on locker assembly, a special dummy drill mask is available to facilitate the drilling procedure.

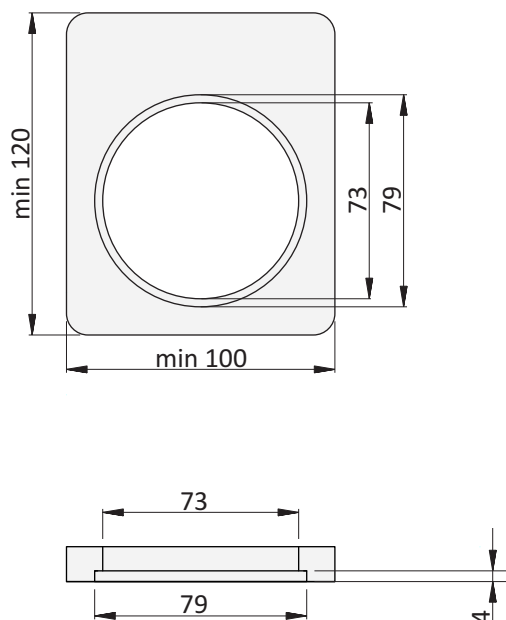


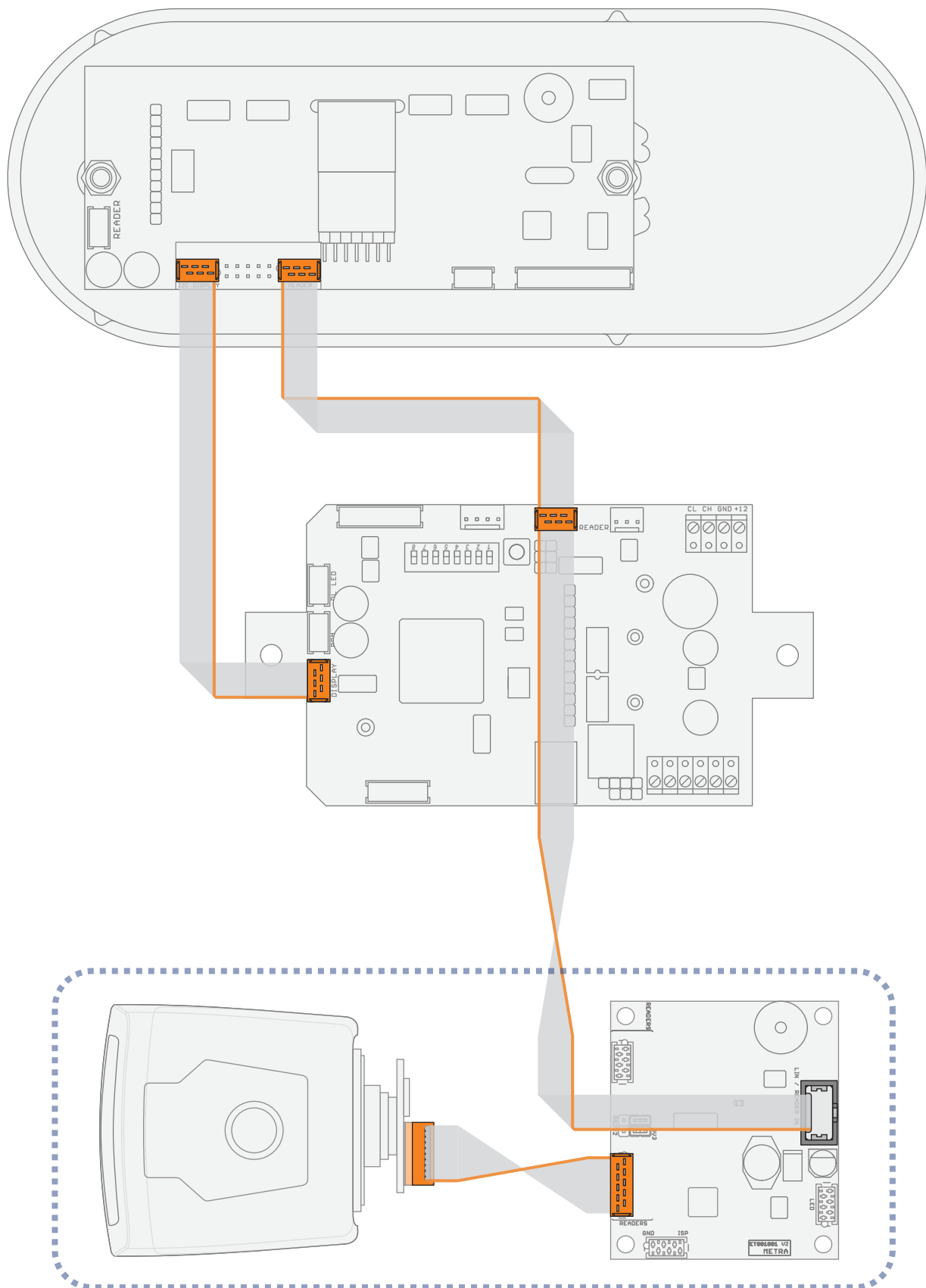
Barcode Scanner



Barcode Scanner mounting hole

Round hole must be provided for mounting the Barcode Scanner.





Schematic shows
Barcode Scanner