

CAN KEYBOARD



Revision A

PRODUCT INFORMATION

CAN keyboard is an universal device that could be connected to PMU and EMU BLACK. All keys are back lighted in 3 colors GREEN, ORANGE and RED.

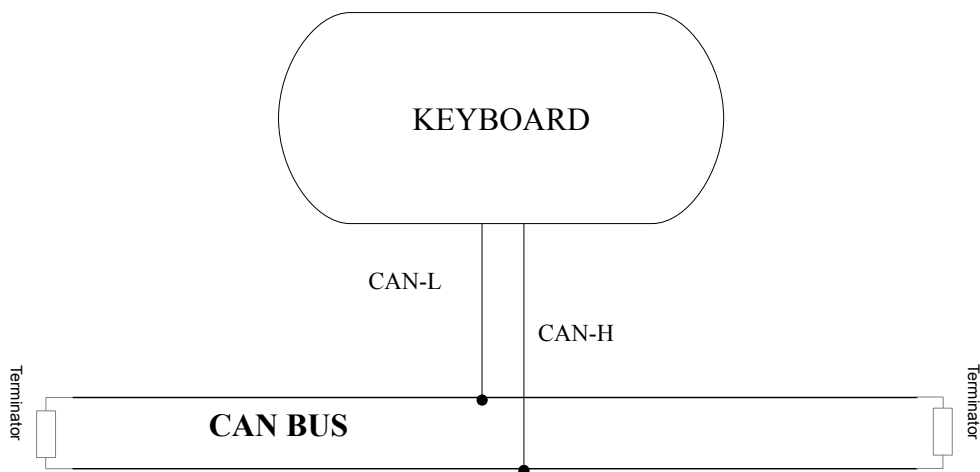
The color indicates current state of the key. Keys inserts are customizable (available icon list included in appendix A). Custom icons are available on request.

The keyboards are water proof (IP67).

CONNECTION

TERMINAL	Function
1 (blue)	CAN L
2 (white)	CAN H
3 (black)	Ground
4 (red)	Power (12-24V)

The mating connector type is Amphenol AT06-4S.



DEFAULT SETTINGS

Parameter	Default vale
CAN Speed	500kbps
CAN IDs	0x195 (BASE), 0x615 (RCV), 0x715 (STATUS)

During the start up the device send out the one status message (0x715 by default).

For **EMU BLACK** only this CAN ID configuration is supported.

For **PMU** the base CAN ID could be in the range of 0x180 to 0x195.

Depends on base CAN ID, RCV and STATUS messages ID changes.

For example for base CAN ID 0x180, RCV = 0x600, STATUS = 0x700.

To determine device base ID status message could be observed.

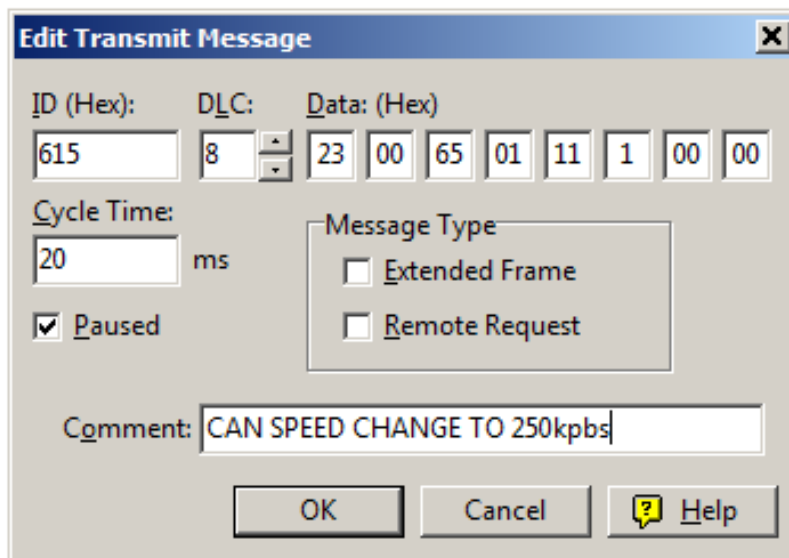
CAN SPEED CHANGE

To change CAN SPEED the following message should be sent:

CAN ID	DLC	0	1	2	3	4	5	6	7
RCV ID	8	0x23	0x0	0x65	0x01	0x11	SPD	0x0	0x0

SPD VALUE	BAUD RATE
0	125kbps
1	250kbps
2	500kbps

Sample message for keyboard with 0x195 BASE ID (from PCAN-View software) to change speed to 250kbps.



BASE ID CHANGE

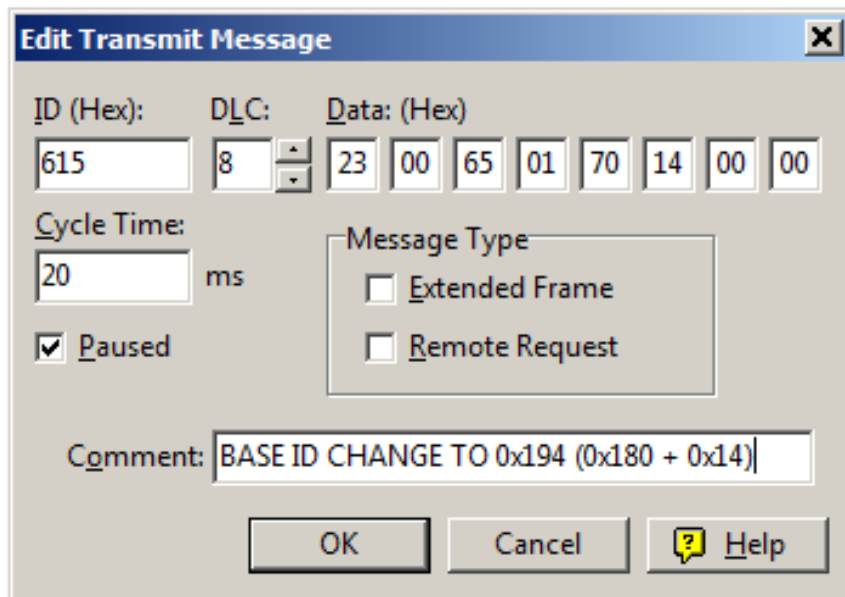
To change BASE ID the following message should be sent:

CAN ID	DLC	0	1	2	3	4	5	6	7
RCV ID	8	0x23	0x0	0x65	0x01	0x70	NEW ID	0x0	0x0

New BASE ID = 0x180 + NEW ID

New RCV ID = 0x600 + NEW ID

Sample message for keyboard with 0x195 BASE ID (from PCAN-View software) to change BASE ID to 0x194



Edit Transmit Message

ID (Hex): 615 DLC: 8 Data: (Hex) 23 00 65 01 70 14 00 00

Cycle Time: 20 ms

Paused

Message Type

Extended Frame

Remote Request

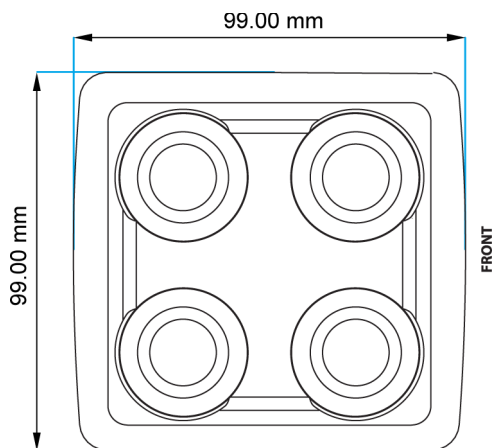
Comment: BASE ID CHANGE TO 0x194 (0x180 + 0x14)

OK Cancel Help

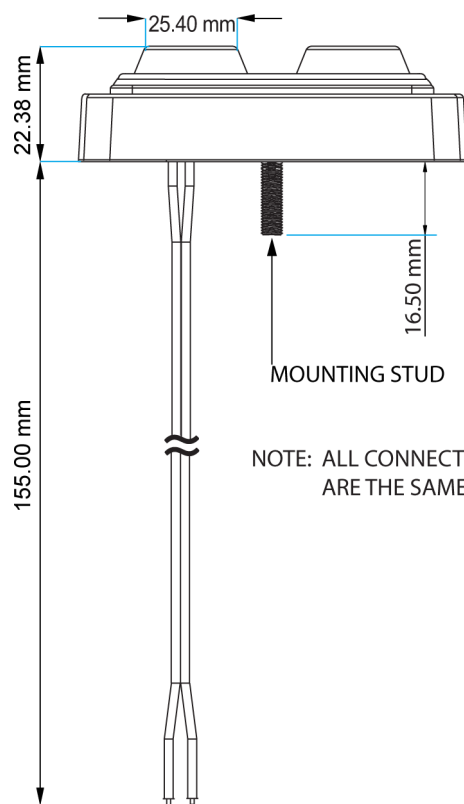
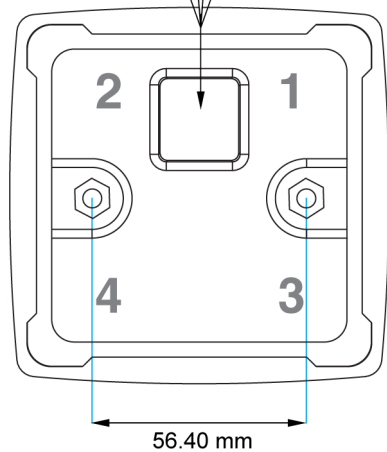
Technical specification

Power supply	8-24V
Standby current	< 50mA
Switch life	3 milion operations
Operating temp.	-40 to 85C
Enclosure protection	IP 67
CAN BUS speed	125kbps, 250kbps, 500 kbps

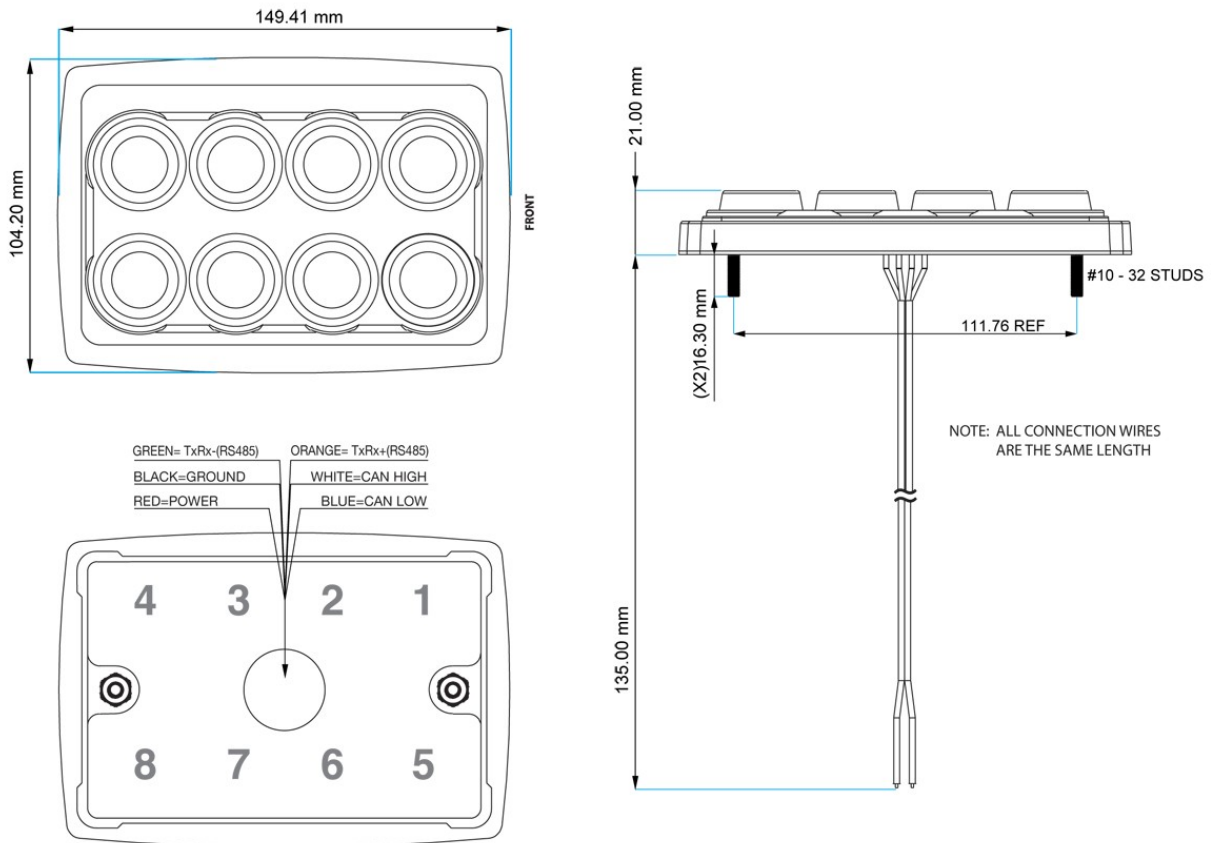
Technical drawing for 4 keys keyboard



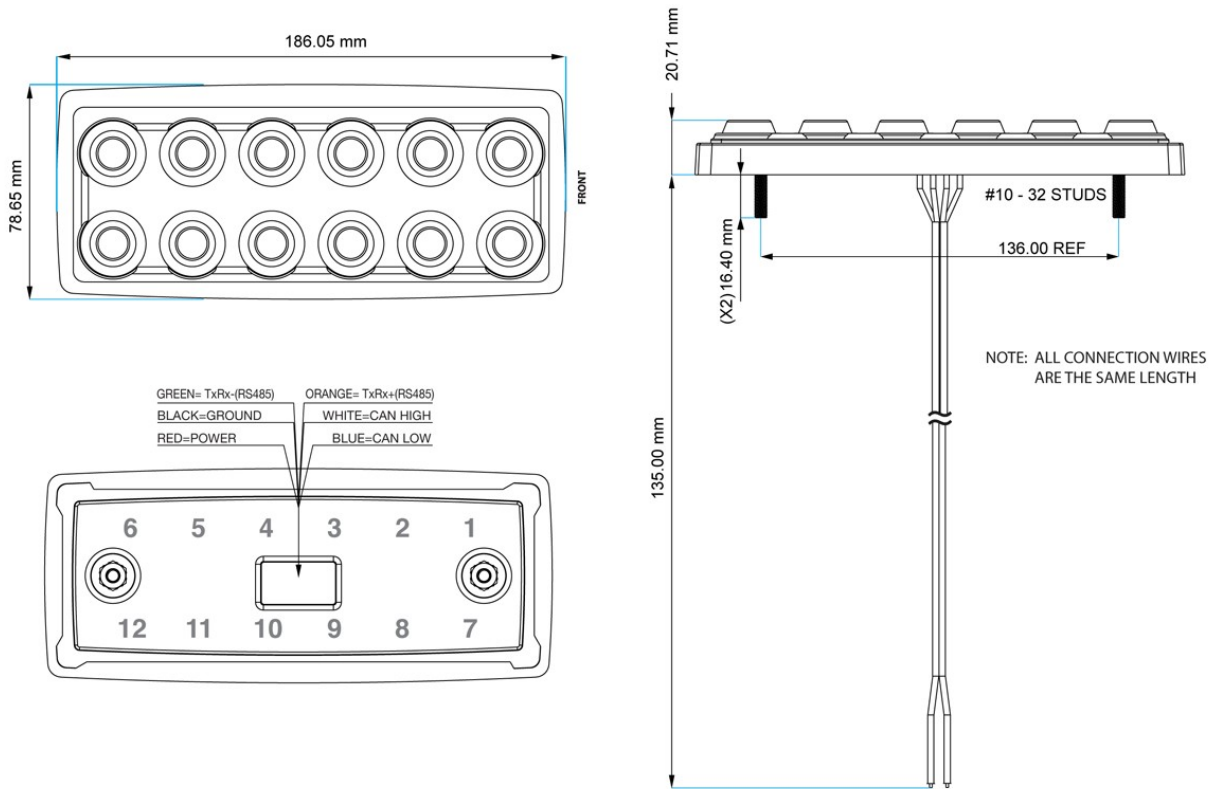
BLACK=GROUND
 RED=POWER
 WHITE=CAN HIGH
 BLUE=CAN LOW



Technical drawing for 8 keys keyboard



Technical drawing for 12 keys keyboard



CAN KEYBOARD INSERTS

(15mm for 12 keys keyboard, 24mm for 4 and 8 keys keyboard)

 002	 003	 014	 016	 022	 024
 030	 031	 032	 041	 052	 056
 068	 069	 071	 074	 076	 091
 092	 099	 100	 101	 102	 162
 164	 169	 170	 172	 173	 174
 175	 176	 163	 98	 166	
 B409	 B193	 B212	 B265	 B346	