

CAN KEYBOARD



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.

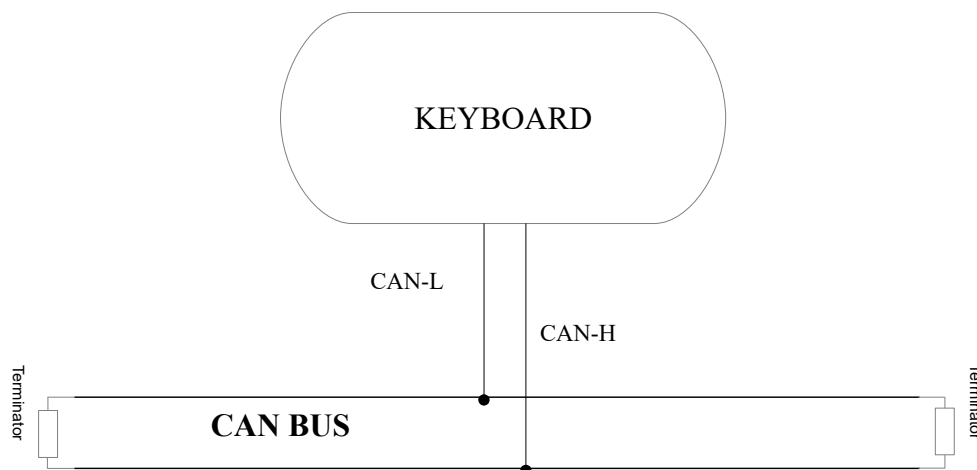
The color indicates current state of the key. Keys inserts are customizable (available icon list included in appendix A). Custom icons are available on request.

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.

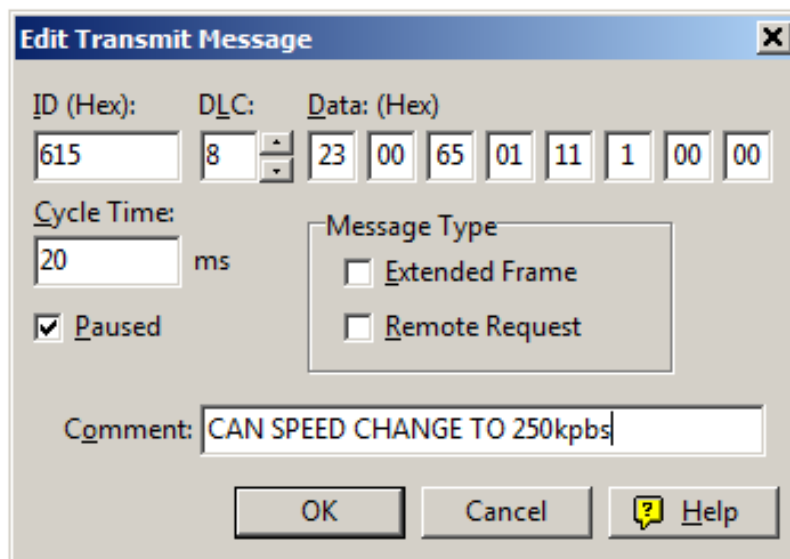
CAN SPEED CHANGE

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

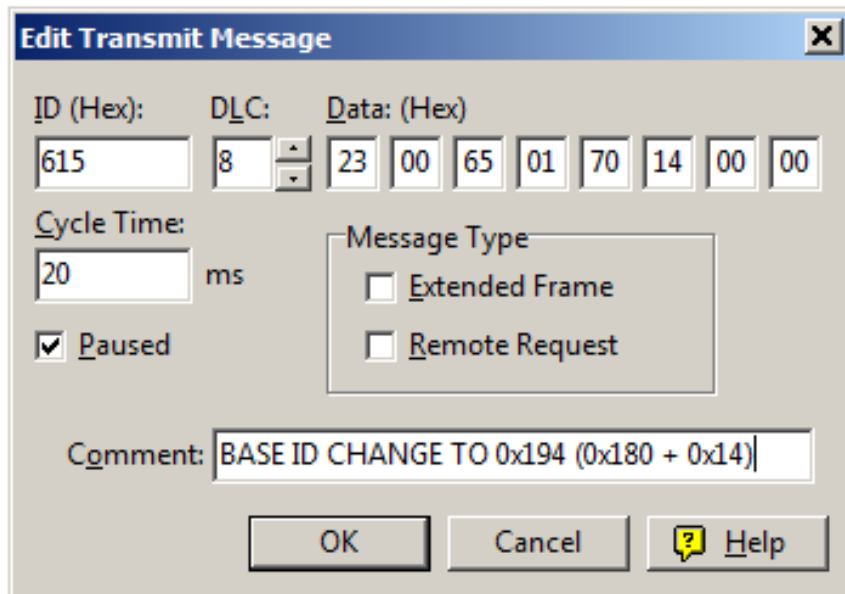
To change BASE ID the following message should be sent:

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

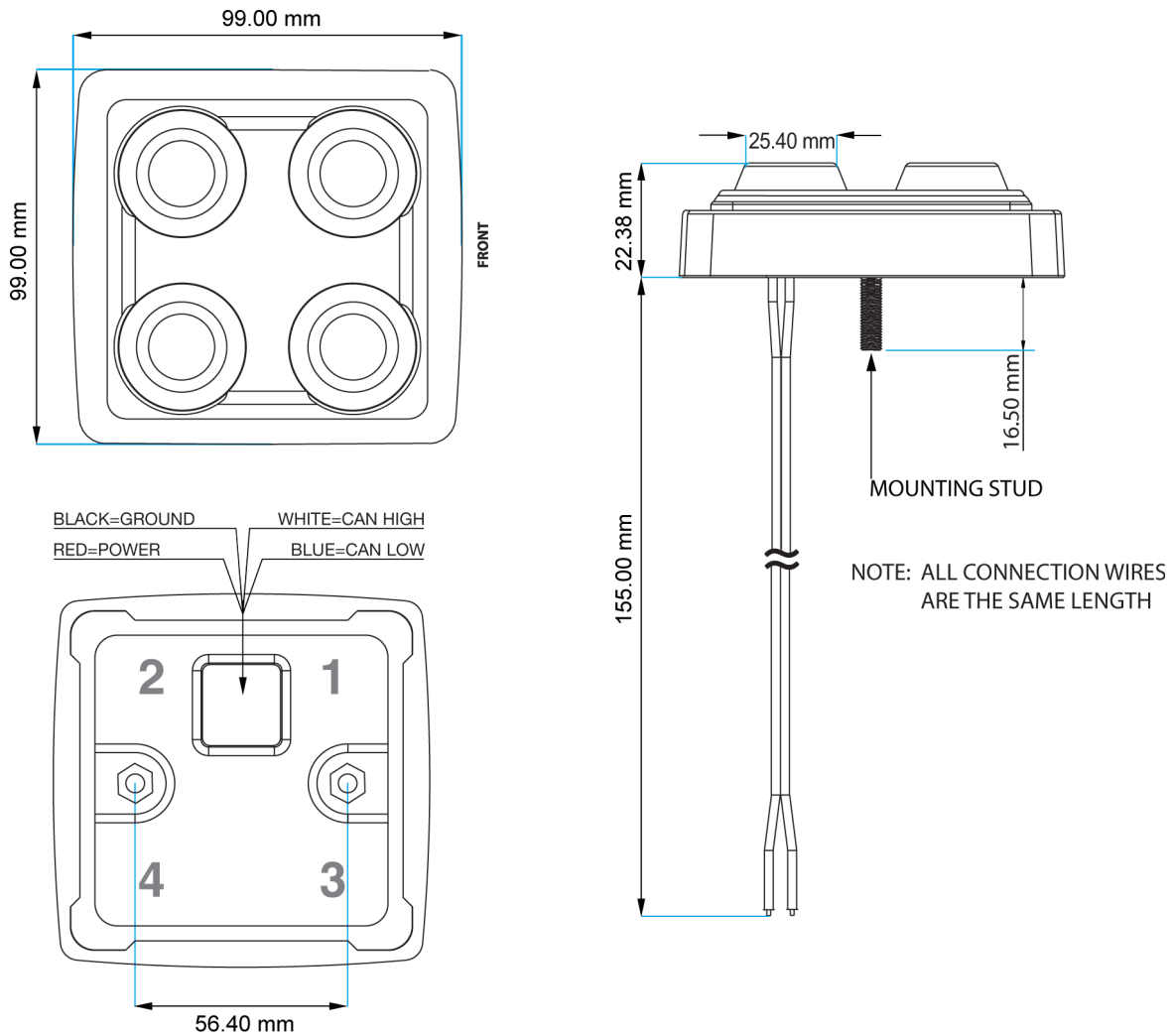


Technical specification

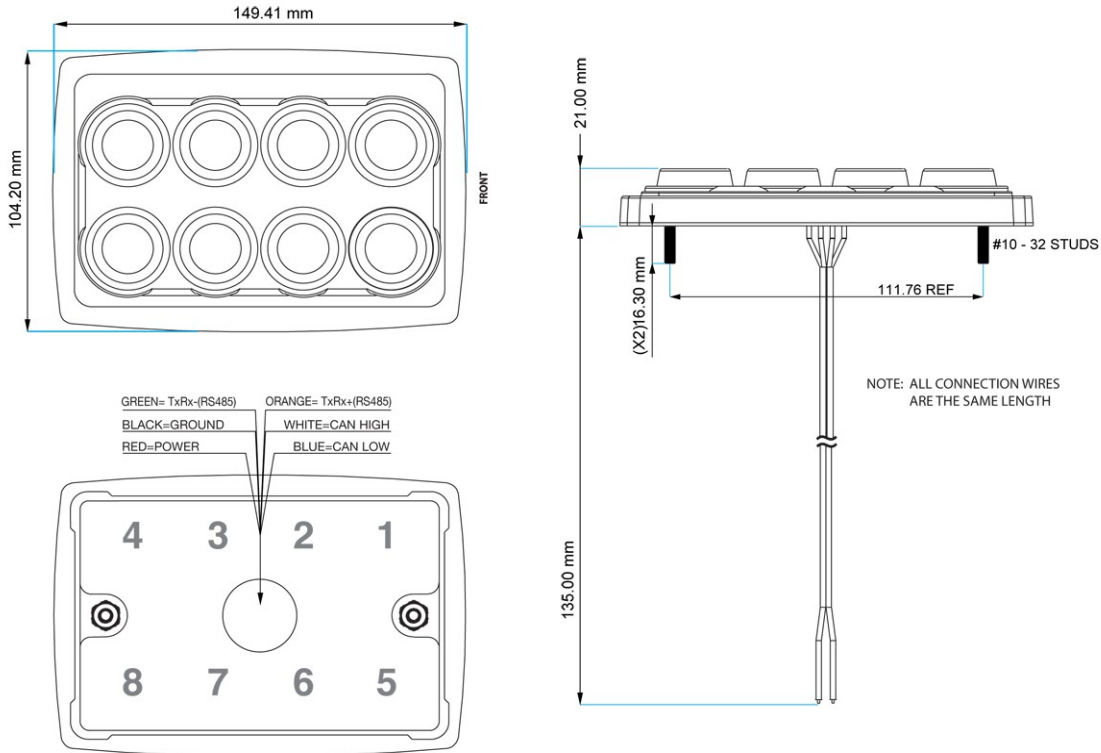
Power supply	8-24V
Standby current	< 50mA
Switch life	3 milion operations
Operating temp.	-40 to 85C
Enclosure protection	IP 67
CAN BUS speed	125kbps, 250kbps, 500 kbps

Technical drawings:

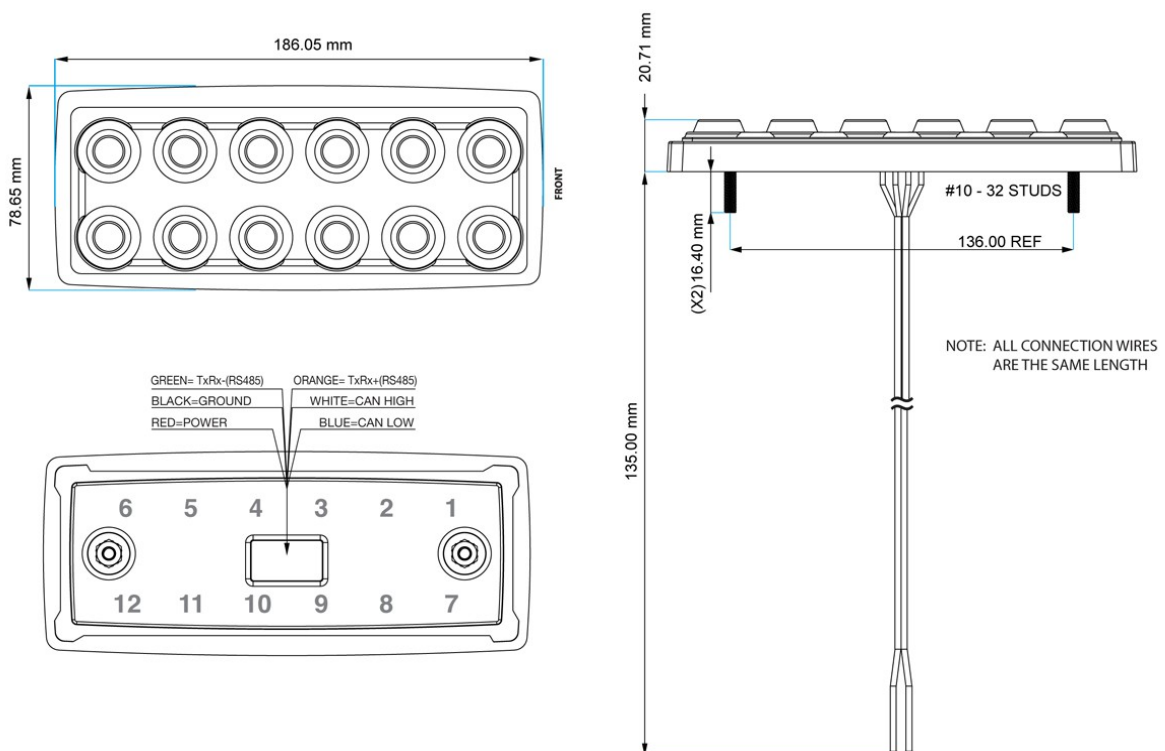
CAN_BUS_KEYBOARD 4POS (old type with 24mm inserts, no longer available):

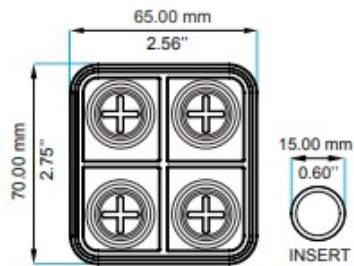


CAN_BUS_KEYBOARD_8POS (old type with 24mm inserts, no longer available):

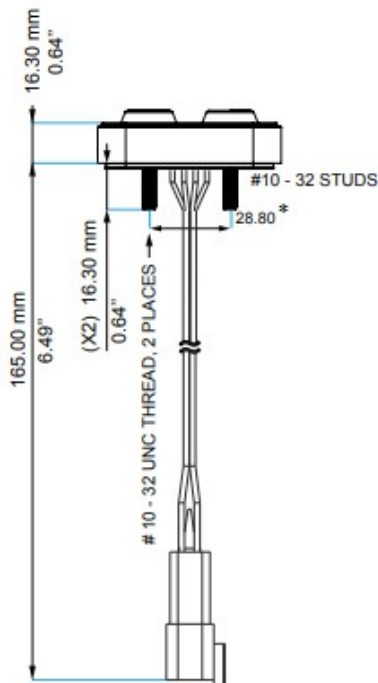
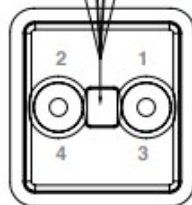


CAN_BUS_KEYBOARD_12POS (old type with 15mm inserts, no longer available):





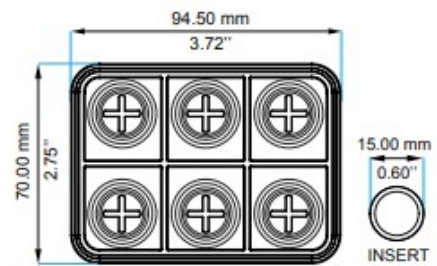
GREEN= TxRx-(RS485) ORANGE= TxRx+(RS485)
BLACK=GROUND WHITE=CAN HIGH
RED=POWER BLUE=CAN LOW



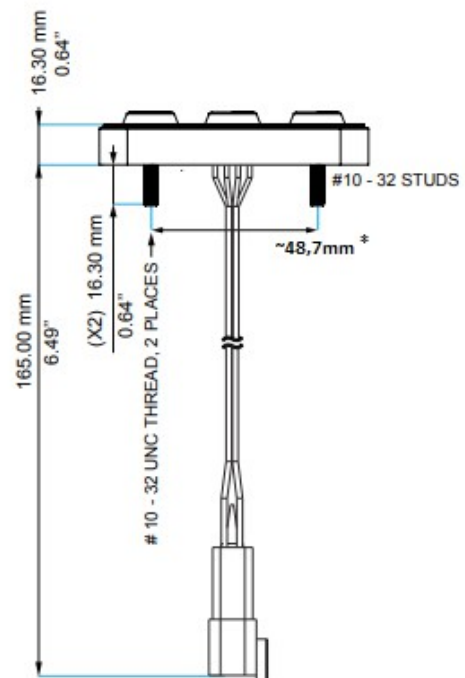
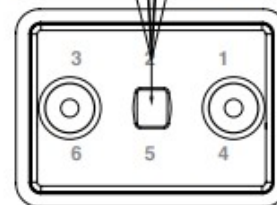
*Bolt spacing may vary depending on the production batch, the dimensions given are approximate

MOUNTING NOTES:
Nuts thread: #10-32
Maximum torque: 0,8Nm

Note: all connection wires are the same length



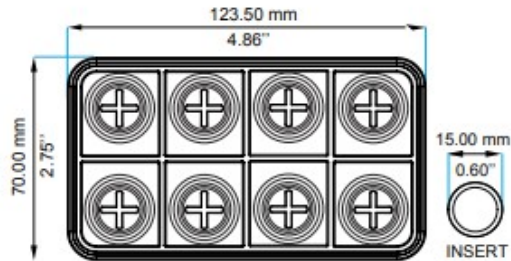
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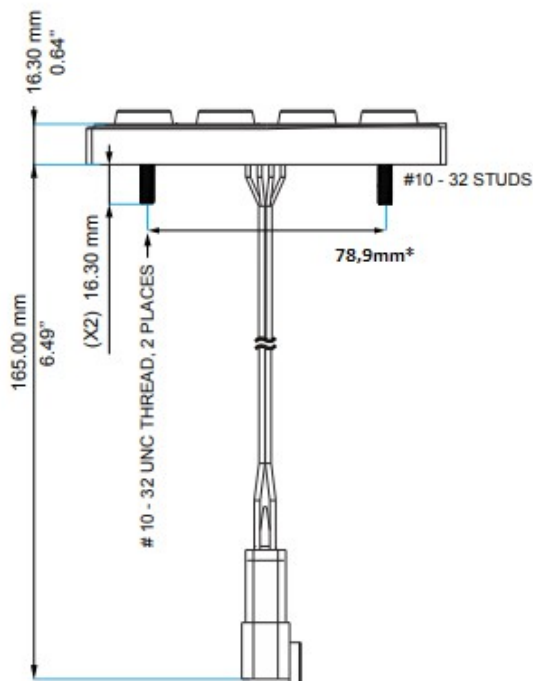
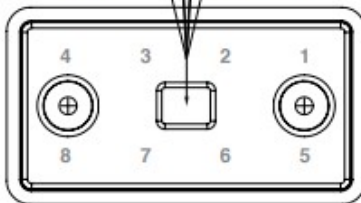
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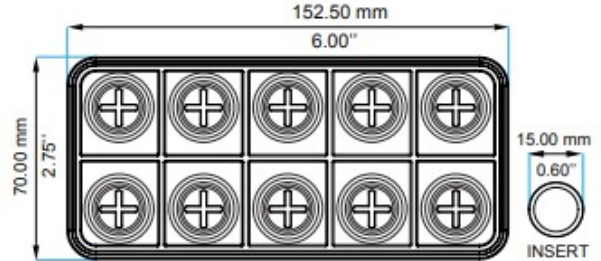
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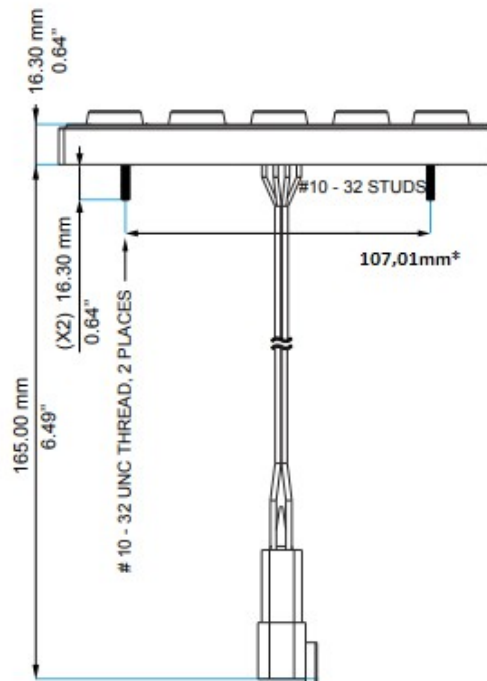
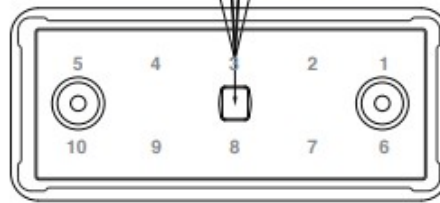
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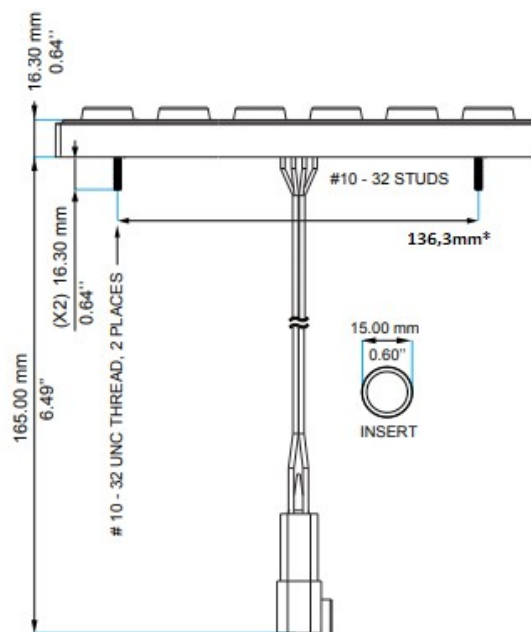
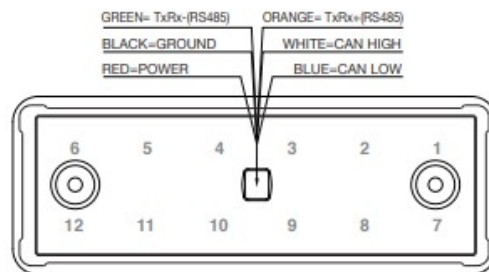
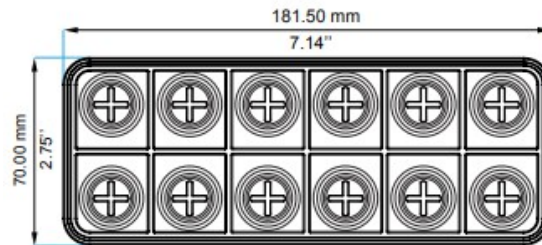
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CAN KEYBOARD INSERTS (15mm and 24mm keys)

 002	 003	 004	 014	 016	 022
 024	 030	 031	 032	 041	 052
 056	 068	 069	 071	 074	 076
 091	 092	 098	 099	 100	 101
 102	 139	 162	 163	 164	 166
 169	 170	 172	 173	 174	 175
 176	 B188	 B193	 B212	 B265	 B346

 B409	 B526	 B527	 B528	 B529	 B530
 B531	 B532	 B562	 B563	 B564	 B565
 B706	 B846				

Special Keys (15mm):

 B789	 B790	 B791	 S001	 S002	 S003/B838
 S004/B839	 S005	 S006/B852	 S007/B840	 S008/B841	 S009/B842
 S010	 S011	 S012	 S013	 S014	 S015/B853
 S016/B855	 S016/B855	 S017/B854	 S017/B854	 S018/B857	 S019/B843

 S020	 S021	 S022/B851	 S023/B856	 S024	 S025
 S026	 S027	 S028	 S029	 S030	 S030
 S031	 S032	 S033	 S034	 S035	 S036
 S037	 S038	 S039	 S040	 S041	 S042
 S043	 S044	 S045	 S046	 S047	 S048
 S049	 S050	 S051	 S052	 S053	 S054
 S055	 S056	 S057	 S058	 S059	 S060