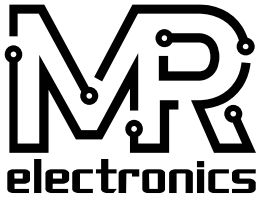


CAN PTT

User's Manual

Description

Allows for CAN activation of traditional radio systems using the original PTT switch input. This means that you can still use traditional radios with CAN based steering wheel modules such as the CSH.

Features:

- Configurable CAN based radio button input
- 3 output modes
- Status indicator
- Manual override / test button
- Compact installation footprint
- Reverse polarity protection

Connections

DTM:

1: Gnd

2: CAN L

3: CAN H

4: + Supply

Operation

The PTT module comes configured listening to bit 0 of byte 0 in message 0x506 (shown below) for the radio input.

CAN Message 0x506:

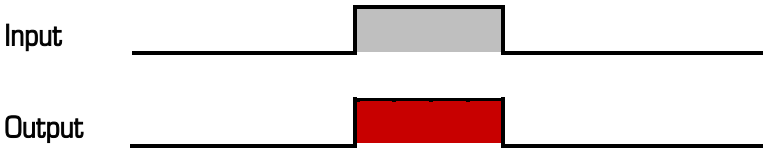
Byte	0								1	2	3	4	5	6	7
Bit	7	6	5	4	3	2	1	0							

Radio Output

The radio output can operate in 3 different modes:

Momentary:

The radio output is the same as the CAN radio input bit.

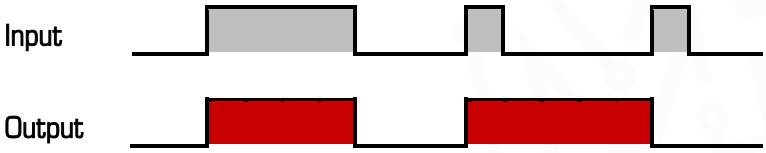


Latch:

The radio output is toggled with each rising edge of the CAN radio input. The output will turn off automatically after 'Latch Timeout' has passed.

Momentary / Latch:

The radio output operates in momentary mode unless the radio input is less than 'Latch Time', in which case the output latches.



Status Information

The PTT module transmits a status message containing serial number, input / output states, device temperature and supply voltage. The format of this message is shown below:

Byte	0	1	2	3	4	5	6	7
0x700	LSB Serial No.	MSB	Radio Button	Radio Output		Device Temp 1 °C	LSB Supply Voltage 0.01V	MSB

Configuration

The CAN-PTT module can be programmed using a Peak PCAN-USB or Kvaser Leaf adapter. The latest version of the software can be found here. Please refer to the software manual for programming instructions.

The following parameters can be adjusted:

Parameter		Permissible Values	Description	Default Value
Baudrate		1M, 500K, 250K, 125K	CAN baudrate setting	1M
CANOpen	Enabled	Enabled, Disabled	CANOpen mode enable	Disabled
	Node ID	0 - 127	CANOpen node ID	10
	Heartbeat Period	10 – 65535 ms (10ms inc)	CANOpen heartbeat period (0 = disabled)	1000 ms
PTT CAN Config	Message ID	0x000 – 0x7FF	CAN message ID	0x506
	Mode	Mom, Latch, Mom / Latch	Button mode	Mom / Latch
	Message Byte	0 - 7	Byte which trigger bit is in	0
	Byte Bit	0 - 7	Bit of the byte that will trigger	0
	Latch Timeout	0 – 65535 ms	Time after which latch will release	10000ms
	Latch Time	0 – 65535 ms	Time after which input becomes momentary	200ms
Status CAN Config	Message ID	0x000 – 0x7FF	CAN message ID	0x700
	Message Format		Contact us if you would like a custom format	Standard
	Message Period	10 – 65535 ms (10ms inc)	Time between messages (0 = disabled)	500 ms