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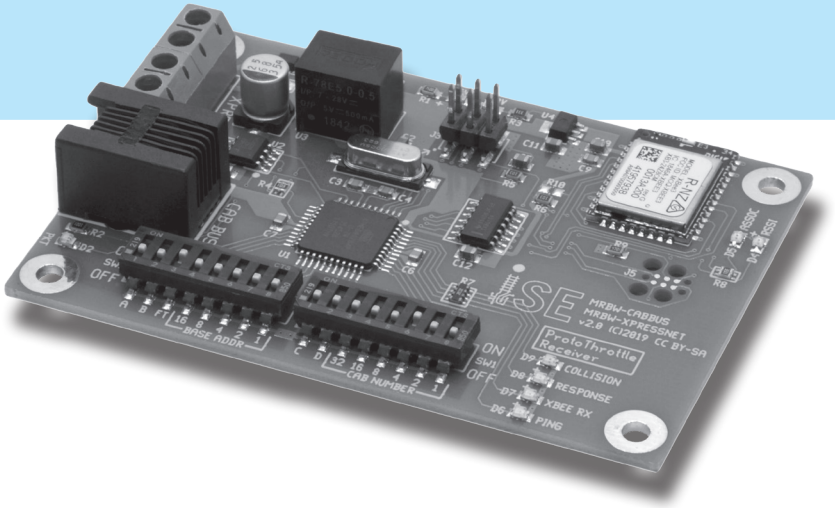
ProtoThrottle™

Realistic Control Stand Throttle



Receiver for NCE Cab Bus
and Lenz XpressNet

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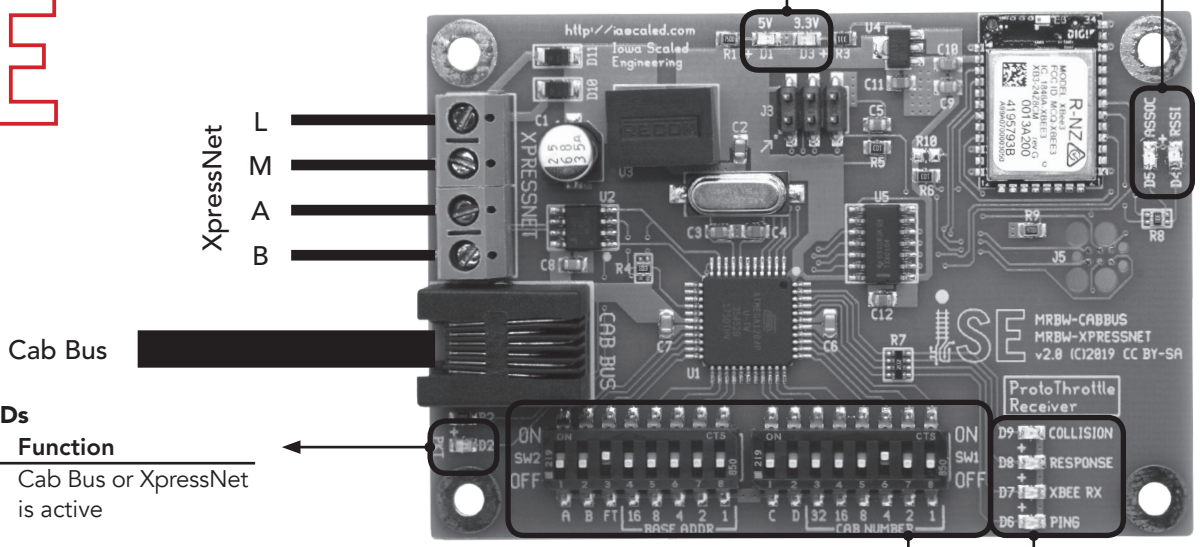
Power Status LEDs

LED	Function
Green (D1, 5V)	5V power is on
Green (D3, 3.3V)	3.3V power is on

Radio Module Status LEDs

LED	Function
Red (D5, ASSOC)	(Blinking) Radio module is working
Yellow (D4, RSSI)	RF data is being received by the radio module



Packet Status LEDs

LED	Function
Orange (D2, PKT)	Cab Bus or XpressNet is active

Note: the throttle and receiver ship with a default base address of zero (0). Any address will work as long as both the throttle and receiver are configured to the same value. The only time to change it would be to avoid conflicts with other ProtoThrottle systems nearby.

Receiver Status LEDs

LED	Function
Red (D9, COLLISION)	(Blinking) Another receiver is using the same Base Address; (Solid) Another Cab Bus or XpressNet device is using the same Cab Number
Blue (D8, RESPONSE)	A command from a ProtoThrottle was successfully sent over Cab Bus or XpressNet
Blue (D7, XBEE RX)	A valid ProtoThrottle command was received by the radio module
Blue (D6, PING)	The command station is actively polling this receiver's Cab Number

Getting Started

Step 1: Configure the DIP Switches

Step 2: Connect to the command station

Step 3: Configure the ProtoThrottle

Have Fun!

DIP Switch SW2 Configuration Settings

Switch	Function
A	ON = Lenz XpressNet OFF = Cab Bus
B	Unused
FT	ON = Broadcast NCE fast clock data OFF = Do not transmit fast clock data
Base Address:	Set the radio base address of this receiver. Add the value(s) of the switches that are in the ON position to get the address. Program this value into the ProtoThrottle using the COMM CFG – BASE ADR menu. The base address should not be the same on any receivers within radio range of each other. Example shown above: 2 + 1 = 3 If there is a base address conflict, the Collision LED (D9) will blink red.

DIP Switch SW1 Configuration Settings

Switch	Function
C	Unused
D	Unused
Cab Number:	Set the Cab Bus cab number, or XpressNet address, of this receiver. Add the value(s) of the switches that are in the ON position to get the address. The cab number or address should not be the same as any other device connected to the command station. Example shown above: 4 If there is a cab number or address conflict, the Collision LED (D9) will light solid red.