



Telematics – Installation Guide for Centurion™ 4 panel-based systems

Installation, Operation, and Troubleshooting Manual

Installation Steps

Mount the EMIT Data Relay (20410 – EDR) inside the Centurion™ enclosure utilizing the spare DIN rail if needed.

Mount the multi-channel antenna (see Figure 1) and connect the 3 antenna cables to the EDR input for cell, wifi, and GPS accordingly.¹

Connect the EDR RS-485 master port to Centurion Annunciator Port 2 RS-485 slave port (see Figure 2). Provide 24V DC power and GND to the EDR battery input. Configure Centurion™ control port 2 as RS-485, select 9,600 baud, and set the Port 2 Reply Delay to 10ms.²

The following 5 pre-labeled wires are provided for each unit to make connection between the EDR and the Centurion™ electronics:

RS-485 connection from EDR Master ANNUN terminal to Centurion™ RS-485

EDR1,3/C4,102 (from EDR pin #3 (C) to Centurion™ Annunciator pin 102 [RS-485 SHLD])
EDR1,4/C4,101 (from EDR pin #4 (B) to Centurion™ Annunciator pin 101 [RS-485 B])
EDR1,5/C4,100 (from EDR pin #5 (A) to Centurion™ Annunciator pin 100 [RS-485 A])

Power Supply

EDR1,1/+24V (from EDR pin #1 to 24V supply terminal, use 1A or 2A fuse)
EDR1,2/GND (from EDR pin #2 to GND terminal)

¹ The antenna can also be mounted externally to the enclosure if the antenna does not fit on top of the enclosure or if the enclosure is indoors while the antenna needs uninterrupted exposure to the sky for GPS to function properly. Use the separately provided antenna bracket for mounting. **Important:** In this case ensure the 3 coax cables are protected from direct sunlight exposure (e.g. wrap cables with wire loom tubing).

² To update the Centurion configuration, enter the passcode, navigate to the “Miscellaneous Setup” and the “CTRL Port 2 Mode” sub-menu, and configure mode=RS485, delay=10, and baud rate=9600.



Optional connections (to get additional engine data):

ADEM 4 or ADEM 3 CAN connection: ³

16-WHT-EDR1,12/ADEM,COMMON (from EDR pin #12 to ADEM 4 or ADEM 4 GND)

16-WHT-EDR1,13/ADEM,CAN- (from EDR pin #13 to A4 or A3 pin CAN-)

16-WHT-EDR1,14/ADEM,CAN+ (from EDR pin #14 to A4 or A3 pin CAN+)

ADEM 3 CDL connection: ⁴

16-WHT-EDR1,9/A3,CDL+ (from EDR pin #9 to ADEM3 pin CDL+)

16-WHT-EDR1,10/A3,CDL- (from EDR pin #10 to ADEM3 pin CDL-)

16-WHT-EDR1,11/A3,COMMON (from EDR pin #11 to ADEM3 pin GND)

³ For an ADEM 4, run a cable from the “ECU CAN” port to the “CAN H/L/SHLD” of the ADEM control panel. Typically, the CANH is Yellow and the CANL is Green in the CAT panel. The terminal block number of the ADEM CAN wires vary by engine- see the engine schematic if unsure. Typically, an EMIT wire bundle for the panel will include wires that go from the appropriate terminal block that connects to ECU CAN to the ADEM CAN terminal block.

⁴ For an ADEM 3, there will be two connections required. Run the first connection from the “ECU CAN” port to the “CAN H/L/SHLD” of the ADEM control panel. Typically, the CANH is Yellow and the CANL is Green in the CAT panel. Run the second cable from the “ECU J1708” port to the “CDL+/-” connections in the ADEM panel. (Note: “A” connection on the EDR is CDL+ on the ADEM, and the “B” connection is CDL-). Typically, CDL+ is pink and CDL- is purple in the CAT panel. The terminal block numbers in the CAT panel for the CAN and CDL wires vary by engine- see the engine schematic if unsure.

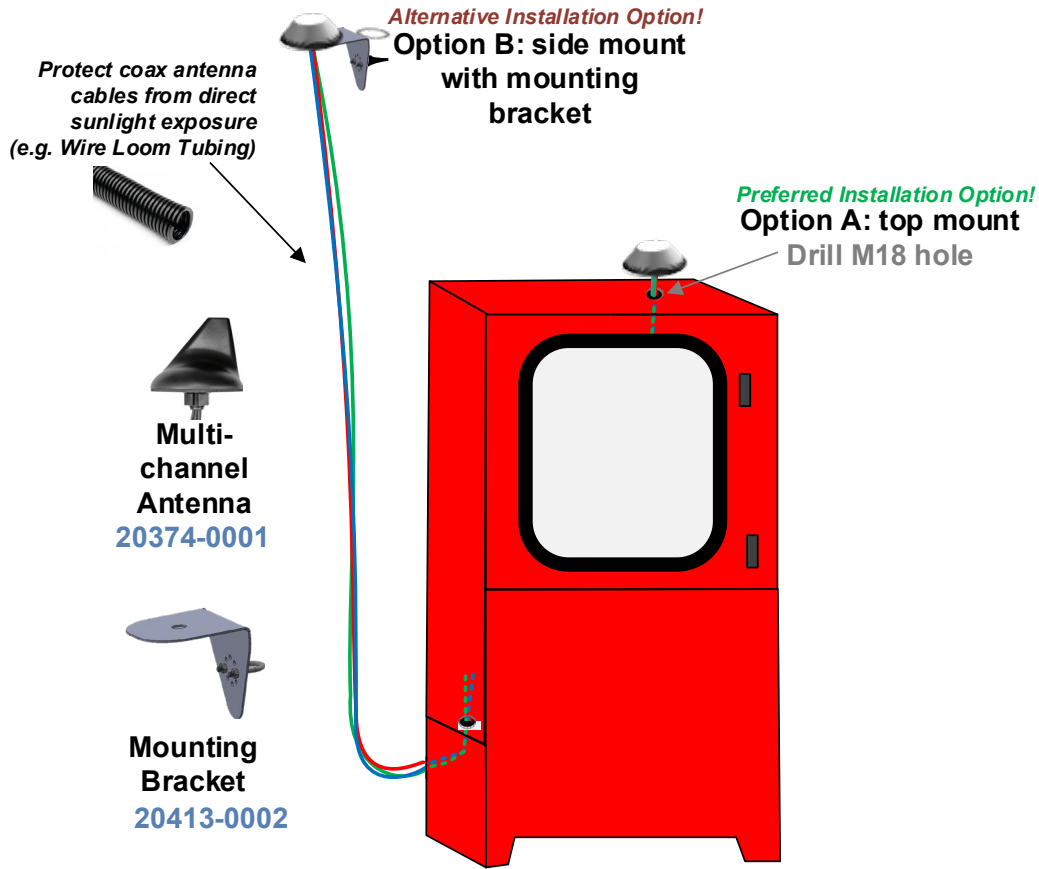


Figure 1: Antenna Installation

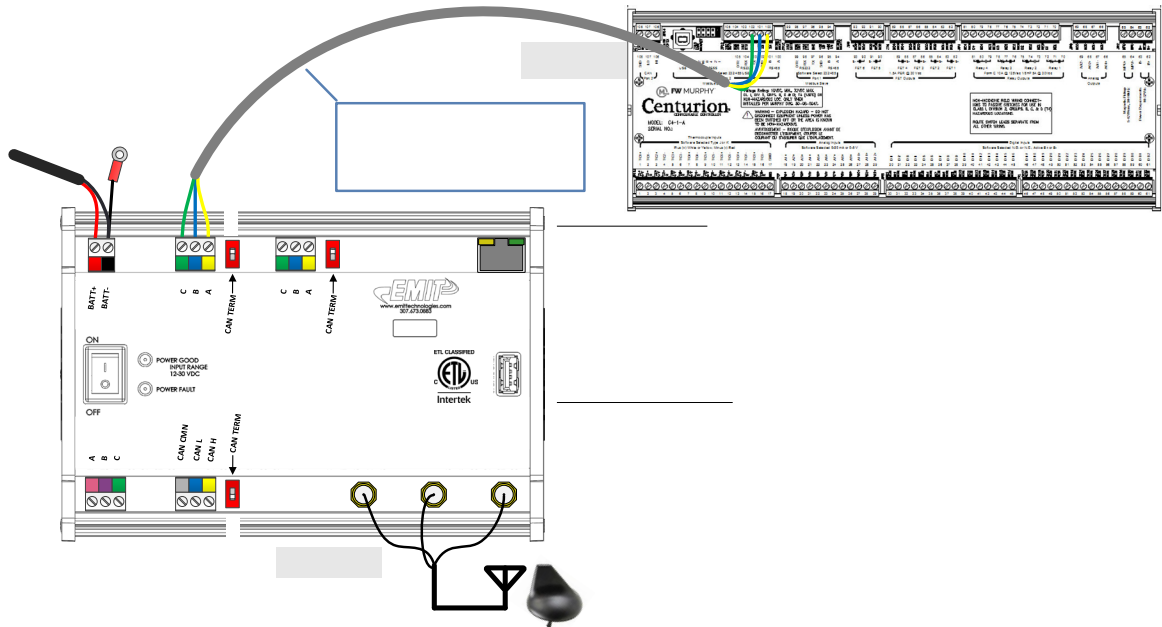


Figure 2: EDR connections