BRADLEY ENGINEERING
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Data Transmitter & Receiver

The Bradley Engineering Data Transmiter and Receiver system is a reliable and simple to operate system for transmitting control data to any of our remote systems. Connection to the transmitter is just one 4 core XLR cable which carries both power and data. Power to the Receiver is supplied via the 4 pin XLR which also outputs RS485 data on pins 2&3.

XLR Pin 1 = GND
XLR Pin 2 = RS485 A ch.
XLR Pin 3 = RS485 B ch.
XLR Pin 4 = +ve 10-30v

Both the Transmitter and Receiver are sealed to IP65 and can be used externally. The cable length to the transmitter can be up to 1 km using good quality balanced cable for the data pair. Star-Quad cable works well with GND on the screen, Data down one half of the pair and +ve on the other two. For shorter runs any standard 4-core cable is sufficient. For long runs it may be necessary to raise the input voltage to the controller above 12 volts towards 30v. (max.) to get enough power to the transmitter.

As supplied, the RX/TX units are configured to handle standard Bradley Engineering protocols optimised for live action moves. The configuration can be changed using the internal jumpers.

The 7 pin Fischer connector pinouts;

Fischer pin1 = n/c
Fischer pin2 = RS485 A
Fischer pin3 = RS485 B
Fischer pin4 = Power +ve
Fischer pin5 = TTL i/o
Fischer pin6 = TTL i/o
Fischer pin7 = GND

It is best to rig the Receiver first. This enables it to display the test signal transmitted when the Transmitter is first powered up.

Receiver

The Receiver is the unit with 2 **GREEN** LEDs on the top and 2 connectors on the base.
Fit the antenna to the BNC socket on the top of the Receiver.
Connect power to the Receiver via the 4pin XLR connector. (Ensure the power supply is capable of supplying at least 1 Amp @ 12v.)
The **RED** LED next to the connector indicates power.
The **GREEN** data LED on the top, nearest the centre will flash 3 times to indicate OK.

Connect the Receiver to the remote equipment using the 7pin to 5pin inter-connection cable. This supplies both power and data to the remote equipment.

Transmitter

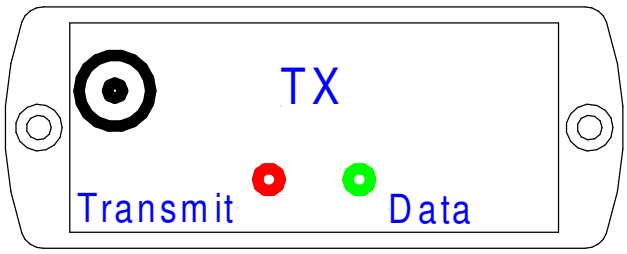
The Transmitter is the unit with a **RED** & **GREEN** LED on the top and **only** an XLR connector on the base.
Fit the antenna to the BNC socket on the top of the Transmitter.
Connect power and data to the Transmitter using the XLR4 cable.
The **RED** LED next to the connector indicates power.
The **GREEN** data LED on the top, nearest the centre will flash 3 times to indicate OK.
The **RED** LED on the top, next to the aerial, will come ON to indicate it is transmitting.

Once the 3 flashes are complete the Transmitter immediately transmits a test signal.
The **GREEN** data LED will then indicate the presence of correct data by continuous fast flashing.
Slow or no LED indicates the lack of correct data.

Receiver

Immediately the transmitter is powered, the **GREEN** signal strength LED, next to the aerial, will indicate the presence of the correct carrier frequency.
The other **GREEN** data LED will flash 5 times quickly, to indicate the test signal has been received OK.
Continuous fast flashing of this LED indicates that correct data is being received.
Slow or no LED indicates the absence of correct data.

Transmitter End



Receiver End