Using RX4 With BDL168

Each RX4 requires a BDL series detector as a host. BDL16 & BDL162 allowed only one RX4 to be used per BDL. The instructions contained in this manual explain how to use a single RX4 with ANY BDL series detector (BDL16, BDL162 & BDL168).

BDL16 & BDL162 boards are labeled with AUX1 & AUX2. Only the AUX2 connection should be used for an RX4.

BDL168 is labeled with RX4-A (corresponds to AUX2) and RX4-B (corresponds with AUX1). Both RX4-A and RX4-B can host an RX4.

Using 2 RX4s with your BDL168

1. Plug two RX4s on to the RX4-B & RX4-A connections of the BDL168. Follow the instructions in this manual for spacing and mounting your RX4s. The same cautions regarding spacing around the RX1s must be followed for accurate operation.

2. Your BDL168 supports 16 detection sections 1-16. You can set up transponding for the detection sections in any way you choose. You can run one or more DS wires through any of the RX1s. For example, you might have 8 transponding zones and 8 detection sections. Many combinations are possible to accomplish your goals.

Each BDL168 detection section (or a combination of detection sections) can be set up for transponding by:

1. Running one or more wires from the detection section connection(s) on the BDL168;
2. Keeping the wires loosely twisted as instructed in this manual;
2. Through any one of the RX1s mounted as shown in this manual entering on the non-text side of the RX1 and exiting on the text side of the RX1;
3. To the gapped piece of track on your layout that you are setting up as a transponding zone.
4. Zone common wires from BDL168's Zone A, B, C, & D connections should be connected together and wired directly to the booster Rail A or B terminal. Use the RAIL A terminal when Rail A is gapped for detection and RAIL B terminal when rail B is gapped for detection.

RX4-A Supports Zones A,B,C, & D.
Your DT400 will display Zone 00, 02, 04, 06.

RX4-B Supports Zones E,F, G, & H.
Your DT400 will display Zone 08, 10, 12, 14.

New Option Switch Settings Available with BDL168

Option switch settings detailed in this manual for BDL162 are available on BDL168. In addition the following new features that will affect your transponding operations have been added to the BDL168:

Option Switch 39 Transponder Tracking Mode

thrown=Sequential Mode (Factory Default Setting)
This allows the system to track a transponder only in the first instance in any zone. For example as a transponder moves from one transponding zone into another, it will briefly occupy both transponder zones. In sequential mode, the system will report the transponder in only one of the zones. This is how BDL16 & BDL162 handled transponder tracking.
closed=Verbose Mode
This allows the system to track all transponders in all zones. For example as a transponder moves from one transponding zone into another, it will briefly occupy both transponder zones. In verbose mode, the system will report the transponder in both zones simultaneously.

Note that you can use BDL16, BDL162 & BDL168 on the same layout but if OpSw 39 is set to closed you will see a difference in reporting from the different BDLs

Option Switch 43 Anti-chatter filtering

This feature improves transponding operation on dirty track by filtering the transponder release time.

thrown=Anti-chatter filter enabled (Factory Default Setting)

closed=Anti-chatter filter disabled

Option Switch 44 Anti-chatter filter sensitivity

Active only when Option Switch 43 is enabled. This feature allows you to adjuts the amount of anti-chatter filtering (transponder release time filtering) that is implemented to improves transponding operation on dirty track.

thrown=Maximize anti-chatter filter (Factory Default Setting)

closed=Standard anti-chatter filter