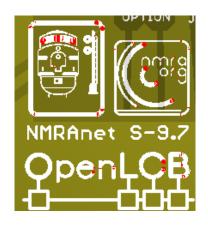
## DevKit / Io v1.0 Manual v0.1





Welcome to the OpenLCB / RailStars / NMRAnet DevKit. This kit is meant to allow you to quickly use it to solve a problem on your model railroad. This manual will help you with that task.

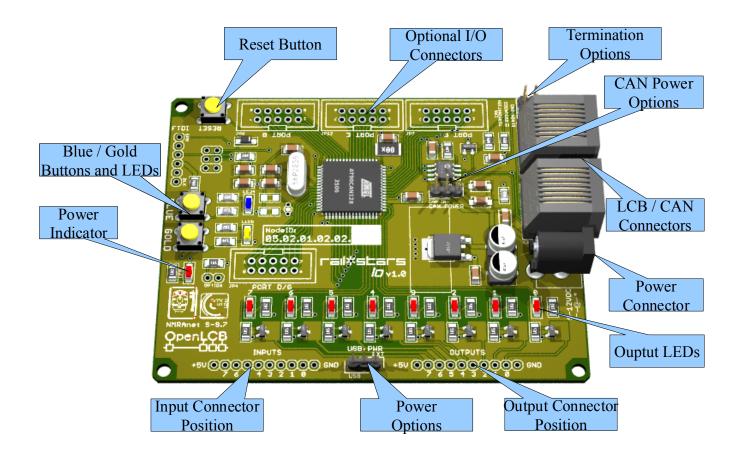
Contents:

- 1. Four Io version 1.0 nodes;
- 2. One USB-serial programming cable;
- 3. One manual (this);
- 4. A assortment of connectors:
- 5. Two 10-position screw-terminals;
- 6. Four shouled 2x5 headers;
- 7. Seven strips of pinheaders;
- 8. Four strips of 1x6 right-angle pinheader;

Please check to make sure you have these.

You will also need to supply a power-supply from 8-15VDC with a centre-positive barrel connector.

The Node as it appears out of the box.



Power:

The nodes can be supplied from three sources:

- 1. Externally from the 2mm Barrel connector. This requires 7-15VDC positive to inside. The USB Power Selector link needs to be set to "EXT".
- 2. Externally through the Serial Connector. The USB Power Selector link needs to set to "USB".
- 3. From the CAN / LCB bus. This requires the CAN Power Selector to be set to "CAN IN".

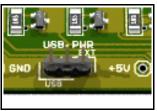
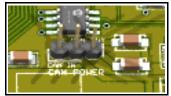


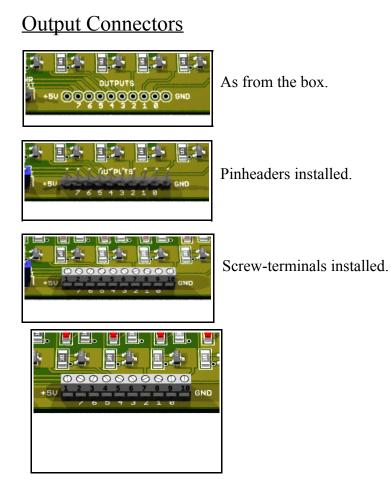
Illustration 1: USB Power Selector



*Illustration 2: The CAN Power Selector.* 

In addition, if the nodes are externally powered then they can provide power to the LCB / CAN bus , and other nodes, by setting the CAN Power Option link to the "CAN OUT" position.

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Blue-Gold

The nodes can be taught to interact quite easily by using what we call "Blue – Gold" programming. There is a Blue and a Gold button with matching LEDs.

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