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DCB LX1 Linx Radio
902-922 MHz ISM Band Radio to Asynchronous Serial RS232
June, 2013

Pursuant to FCC 15.21 of the FCC rules, changes not expressly approved by Data Comm for Business, Inc. might cause harmful interference and void the FCC authorization to operate this product.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an output on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This product complies with FCC OET Bulletin 65 & Industry Canada's RSS-102 radiation exposure limits set forth for an uncontrolled environment


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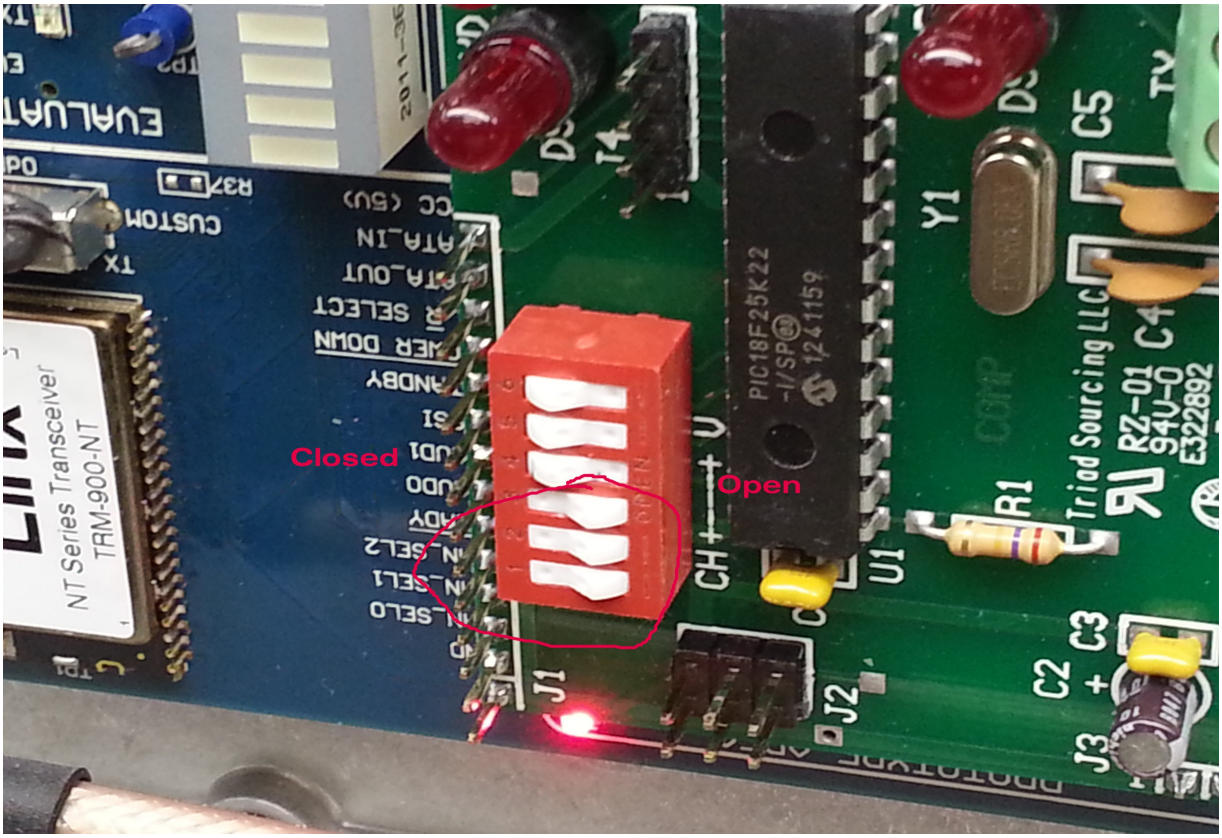
The LX1 radio is asynchronous, serial RS232. It accepts continuous serial data without regard to stop or start bits. It has been designed transport any asynchronous serial RS232 data stream, including asynchronous HDLC protocol. Switch number 4 can be used to squelch or open the receiver of a unit based upon the receipt of 7E HDLC flags.

Transmit is controller by a PTT input. See Section 3 for the location of PTT on the I/O connector.

LX1 Setup Configuration
6/10/2013



Refer to the above picture for the Closed and Open orientation of the switches.

1. Option Switch

The LX1 has a 6 position DIP switch on the adapter board to set the following options:

```
 Switch
 1  2  3  4  5  6
 -  -  -  -  -  -
 |  |  |  |  |  |
 |  |  |  |  |  CLOSED(UP) = TEST MODE
 |  |  |  |  |  OPEN(DOWN) = NORMAL MODE (default)
 |  |  |  |  |
 |  |  |  |  CLOSED(UP) = DISABLE LEDs
 |  |  |  |  OPEN(DOWN) = ENABLE LEDs (default)
 |  |  |  |
 |  |  |  CLOSED(UP) = HOST MODE
 |  |  |  OPEN(DOWN) = VEHICLE MODE (default)
 |  |  |
 0  0  0  (CLOSED-CLOSED-CLOSED) = 903.37MHz
 0  0  1  (CLOSED-CLOSED-OPEN  ) = 906.37MHz
 0  1  0  (CLOSED-OPEN  -CLOSED) = 907.87MHz
 0  1  1  (CLOSED-OPEN  -OPEN  ) = 909.37MHz
 1  0  0  (OPEN  -CLOSED-CLOSED) = 912.37MHz
 1  0  1  (OPEN  -CLOSED-CLOSED) = 915.37MHz
 1  1  0  (OPEN  -OPEN  -CLOSED) = 919.87MHz
 1  1  1  (OPEN  -OPEN  -OPEN  ) = 921.37MHz (default)
```

NOTE: all LX1 VEHICLE radios must be set to the same frequency as the HOST radio.

NOTE: When S4 is CLOSED (HOST MODE), the serial receive data output is squelched until two 7E flag characters are received over the air. The serial data remains unsquelched until the PTT input is closed to ground to transmit a poll.

NOTE: The HOST will work with S4 OPEN (VEHICLE MODE) although the error rate may be higher.

2. LED Indicators

The LX1 has three LEDs:

LED	Description
RXD	flashes with serial port RXD output
TXD	flashes with serial port TXD input
PTT	ON when the PTT input is grounded (transmitter ON)

3. Input/Output Connections

A 5 position barrier strip is provided for serial data
and control connections.

POS	Description
1	TXD serial data input (TTL)
2	RXD serial data output (TTL)
3	PTT input (ground to transmit)
4	+12VDC input
5	GND for power and serial data

4. Other Switches and Jumpers

The Linx board options must be set as shown below:

TX Power Select: 0dBm (middle position)
MODULE VCC (5V): Jumper installed
EVALUATION AREA: (not used - don't care)
MASTER POWER: ON (right position)
MODE SELECT: PROTOTYPE (left position)