RADIOLINX

RLX-FHS
OEM Protocol

Setup Guide

ProSoft
T E C H N O L O G Y

Application Objective

RadioLinx OEM protocol

Instructions

Application Objective

The purpose of this document is to aid in the setup of the RLX-FHS when using the RadioLinx OEM Protocol. The RadioLinx OEM Protocol allows the user to add a header to the serial packet. This is typically used when the end devices are not addressable.

This allows the end device connected to the master radio to determine the origin of the transmission.

RadioLinx OEM Protocol

The serial packet from the slave radio will have the following format:

1 byte	1 byte	2 bytes	0 – 144 bytes
Type	Byte Count	Address	Data

- Type – Will always be 166, which represents this being a data packet

- Byte Count – Number of bytes in the Data field.

- Address – Programmed with destination radio address when sending; contains originating source address when receiving. 1st byte is most significant – address $= ((1^{st}$ byte $* 256) + 2^{nd}$ byte). Address 65535 is a special address for commands that is accepted by the radio into which the data is entered in place of the radios actual address.

- Data Bytes – 0 to 144

Example:

If Radio 2 is sending "01234" and Radio 3 is sending "567899", the end device connected to your master will receive:

Type | Byte Cnt | Address | Data
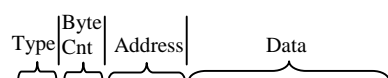
"A60500023031323334" for Radio 2
"A60600033353637383939" for Radio 3

Instructions

1. RadioLinx ControlScape FH Setup

A. Slave Radio Setup
1. Open RadioLinx ControlScape FH
2. Click on Configure, New Network
3. Create a unique network name, use an unused channel, and select Protocol Transparent Point-to-Point protocol
4. Type the desired Encryption Key, and click OK
5. Click on Port Setup, Serial Port Configure
6. Select the proper settings – these settings must match the radios current setup; if these settings are not known, then set these settings to 115200, None, 8, 1, all handshaking off, AND SET THE RADIO TO RS485 MODE
7. Once the Port Setup is complete, click OK
8. Click on Radio, Add Radio – add the number of desired slave radios
9. Starting at each slave radio, click on the black dot, and drag a connection to the Master Radio
10. Double-Click on each slave radio
11. Click on Advanced
12. Verify that all serial port settings match that of the end device
13. Ensure that the Destination is set to Master Radio
14. Put a check in Keep data packet together, and start with a 10ms time
15. With the radio connected to the PC serial port, click Configure Radio
16. Repeat this setup for each RLX-FHS Slave/Remote radio.. DO NOT CONFIGURE THE MASTER

B. Master Radio Setup
1. Click on Properties, Device Networks
2. Click on Protocol Transparent Point-to-Point1 in the gridbox – this will add "Protocol Transparent Point-to-Point1" to the Device Network Name text field
3. In the Protocol pull-down menu, choose RadioLinx OEM Protocol
4. Click Edit Existing List
5. Click OK

Note: The colors of the slave radios may now be gray. This is by design, and the radios are still configured and do not require any changes.

6. Double-click on the Master Radio
7. Click on Advanced
8. Repeat the steps above for setting the serial port settings
9. Click on Configure Radio

Your setup is complete.

For technical assistance, contact ProSoft Technology, Inc., Support Department using the below contact information.

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