

Force 9600 Recovery

Application Note

v1.1

INTRODUCTION

Force 9600 is a feature of the RAMP products which allows specific serial interface configurations to be temporarily set to known values. Force 9600 can be used to recover a RAMP product when the serial interface is configured to unknown or incorrect values. This document describes how to enable the Force 9600 feature for the ConnexLink packaged products.

REQUIREMENTS

- PC running Windows XP (Preferred) or later
- Laird Configuration Utility (http://www.lairdtech.com/zips/Developer_Kit.zip)
- Straight through RS-232 cable

Note: For 485 versions, an RS-485 to RS-232 converter may also be required.

FORCE 9600 FOR CL024 RAMP PRODUCTS

To force the serial interface to a known value, perform the following steps for CL024 RAMP products:

Note: This process also sets the RF Packet Size and Interface Timeout to default values.

1. Remove power from the radio.
2. Remove the screws on the case and slide the radio out.
3. Reapply power to the radio.
4. Press and hold both pushbuttons S1 and S2 (Figure 1).
5. Release pushbutton S2 while still holding down pushbutton S1.
6. Wait five seconds, and then release pushbutton S1.
7. Connect the radio to the PC via a straight through RS-232 cable.
8. On the PC Settings tab, click **Find Ports**.
9. Select the appropriate port from the drop-down menu.
10. Set the rest of the settings to the following:
 - Baud Rate: 9600
 - Parity: None
 - Handshaking: Hardware
 - Data Bits: 8
 - Stop Bits: 1
11. Under Options, ensure the **Read/Write with AT Commands** check box is selected.
12. Ensure the Port Status is open.
13. On the Configure tab, click **Read Radio**.
14. Set the Interface Baud Rate to the appropriate value and click **Write Radio**.
15. On the PC Settings tab, set the baud rate to the baud rate you configured on the radio.
16. On the Configure tab, click **Read Radio**.

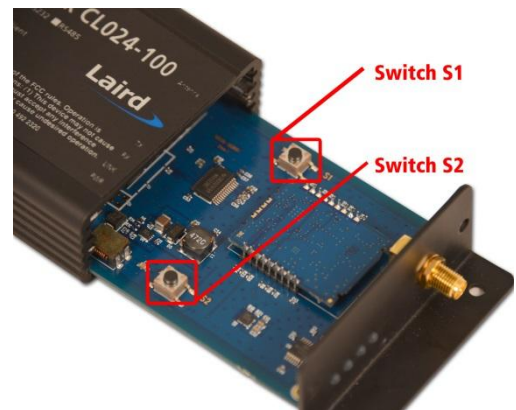


Figure 1: S1 and S2 pushbuttons

FORCE 9600 FOR CL4490, CL4790, CL4424 RAMP PRODUCTS

To force the serial interface to a known value, perform the following steps for CL4490, CL4790, and CL4424 RAMP products:

1. Remove power from the radio.
2. Remove the screws on the case and slide the radio out.
3. Set a jumper between the pins (a wire or even a tweezers work, it is a low voltage line). See Figure 2.
4. Connect the radio to the PC via a straight through RS-232 cable.
5. Power on the radio.
6. On the PC Settings tab of the OEM Configuration Utility, click **Find Ports** and select the appropriate port from the drop-down menu.
7. Set the remaining settings to the following:
 - Baud Rate: 9600
 - Parity: None
 - Handshaking: Hardware
 - Data Bits: 8
 - Stop Bits: 1
8. Under Options, ensure the **Read/Write with AT Commands** check box is selected.
9. Ensure the Port Status is Open.
10. Select the Configure tab and attempt to read the radio.
11. Set the Interface Baud Rate to the appropriate value and write the Radio.
12. Power off the radio.
13. Remove the jumper.
14. Power on the radio.
15. On the PC Settings tab, set the baud rate to the baud rate you configured on the radio.
16. On the Configure tab, read the radio.

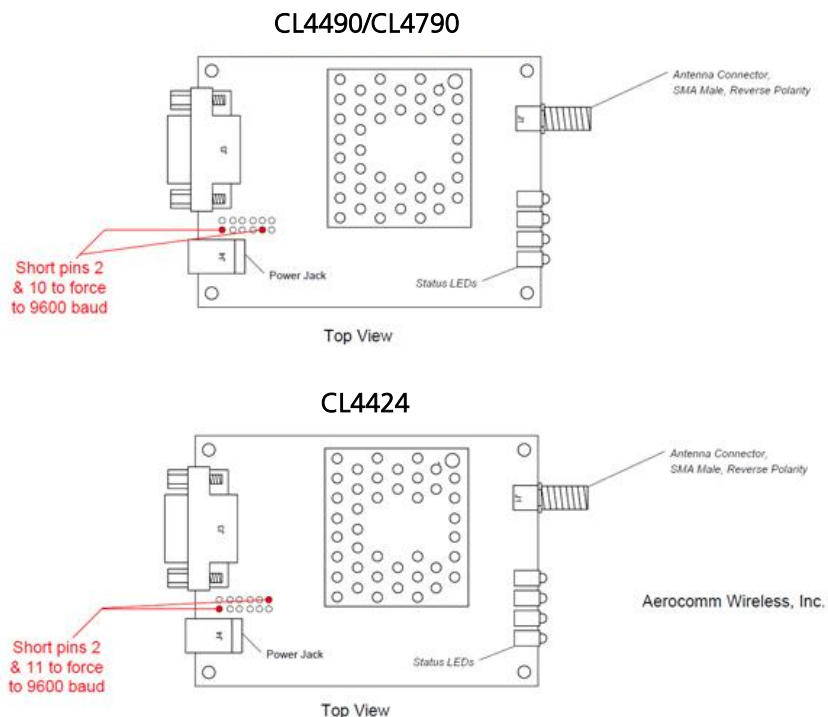


Figure 2: Shorting pins to force to 9600 baud

CONCLUSION

These steps should allow ConnexLink products to recover from most invalid configurations. If these steps do not resolve the issue, please contact our technical support at:

Phone: 1-800-492-2320 Option 2

Email: wireless.support@lairdtech.com

Web: <https://ews-support.lairdtech.com>

For more information about the RAMP products, please visit the RAMP product pages on the Laird Embedded Wireless Support Site: https://laird-ews-support.desk.com/?b_id=1912

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REVISION HISTORY

Revision	Date	Description	Initiated By
1.0	28 Jan 2014	Initial Release	Chris Downey
1.1	08 Jan 2015	Updated links for new website.	Sue White