

ALIEN TECHNOLOGY

ALR-9930-ADEV

ALR-9932-ADEV

8101943-000

Revision C

QUICK START GUIDE



ALIEN™

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FCC COMPLIANCE

This equipment has been tested and found to comply with the limits for Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Any change or modification to this product voids the user's authority to operate per FCC Part 15 Subpart A Section 15.21 regulations.

CAUTION

Reader antennas should be positioned so that personnel in the area for prolonged periods may safely remain at least 23 cm (9 in) in an uncontrolled environment from the antenna's surface. See FCC OET Bulletin 56 "Hazards of radio frequency and electromagnetic fields" and Bulletin 65 "Human exposure to radio frequency electromagnetic fields."

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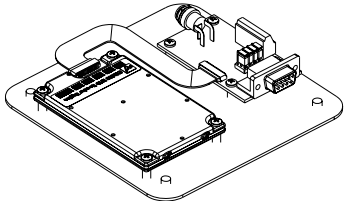
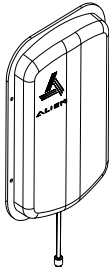
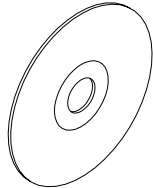
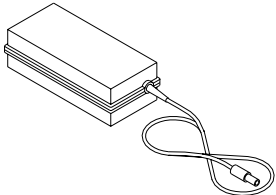
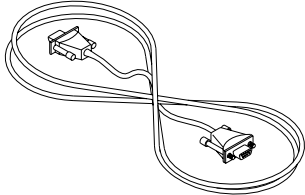
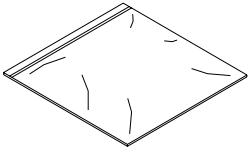
Quick Start Guide ARL-9930/32-ADEV Developer's Kit

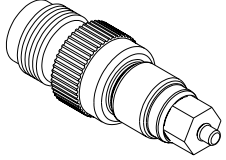
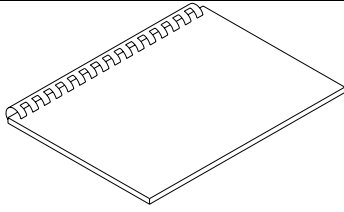
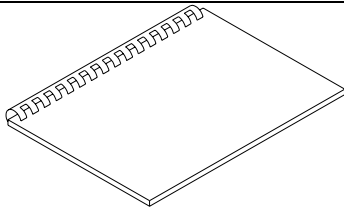


Table of Contents

CHAPTER 1 PART IDENTIFICATION	4
CHAPTER 2 READER HOOK UP	6
CHAPTER 3 SOFTWARE INSTALLATION.....	8
CHAPTER 4 POWERING UNIT	13
CHAPTER 5 OEM INTERFACE BOARD.....	14
CHAPTER 6 ALR-9930 JUMPER SETTINGS.....	16
CHAPTER 7 ALR-9932 JUMPER SETTINGS.....	17

CHAPTER 1 Part Identification

Part	Part Number	Description	Quantity
	0500118-001	ARL-9930/32-ADEV OEM Reader Engine	1
	0500125-001	915 MHz Circular Antenna	1
	1300011-0010	Software CD	1
	6800012-001	6 Volt Power Supply	1
	0800028-001	RS-232 Cable	1
	0500111-001	Variety of Sample Tags	1 Bag

	3600070-001	TNC to MMCX Adaptor	1
	8101943-000	Quick Start Guide	1
	8101932-000	Reader Engine Integration, ALR-9930-A	1
Part Identification Table			

- Identify and locate all components before proceeding to the reader hookup section.
- If any parts are missing or damaged please contact Alien Technology at:

Alien Technology Corporation
 18220 Butterfield Blvd.
 Morgan Hill, CA 95037
www.alientechnology.com

CHAPTER 2 Reader Hook up

CAUTION! Power should be applied to the Reader Engine last.

STEP 1: Install the adaptor to the antenna cable as shown in figure 1.

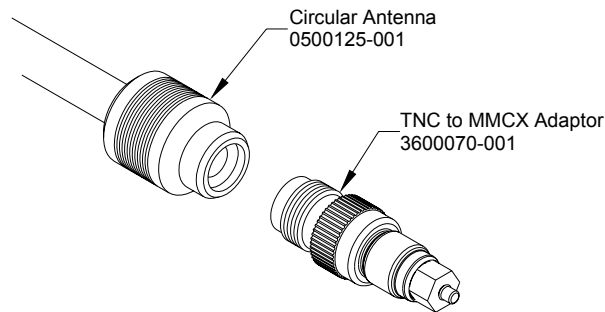


Figure 1.

STEP 2: Plug the Circular Antenna into the OEM Reader Engine and the RS-232 Cable into the OEM Interface Board as shown in figure 2.

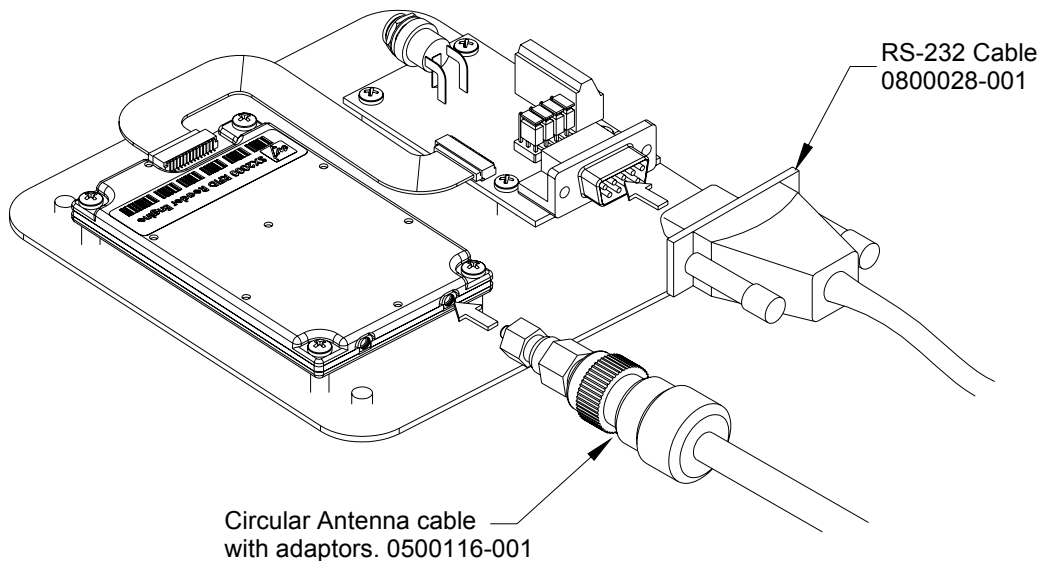


Figure 2.

STEP 3: Plug the free end of the RS-232 cable into the host computer.

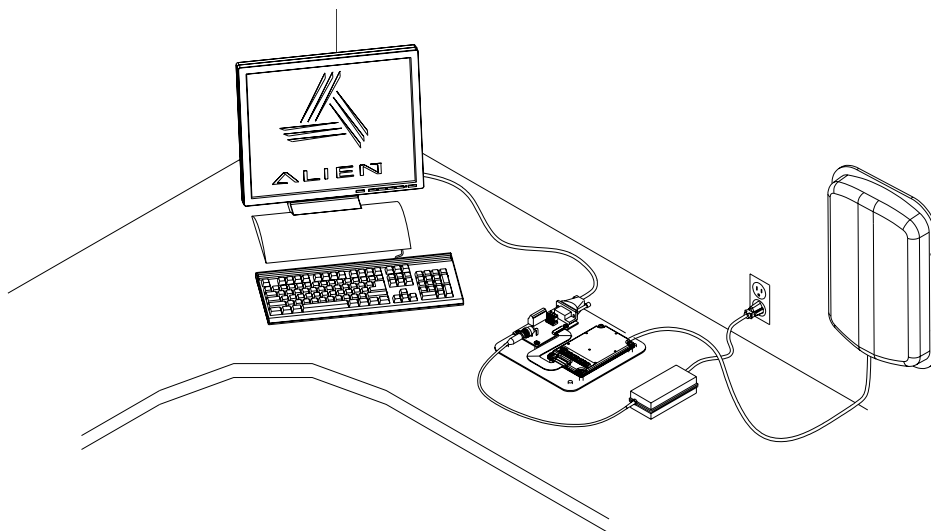


Figure 3 - Typical Bench Test Setup

CAUTION: Reader should be positioned so that personnel in the area for prolonged periods may safely remain at least 23 cm (9 in) in an uncontrolled environment from the antenna's surface. See FCC OET Bulletin 56 "Hazards of radio frequency and electromagnetic fields" and Bulletin 65 "Human exposure to radio frequency electromagnetic fields"

CHAPTER 3 Software Installation

Step 1. Quit all applications/programs currently running on your PC (except Windows Explorer).

Step 2. Make sure your monitor is set to display at least 256 colors.
Color settings can be found under: *My Computer / Control Panel / Display / Display Properties / Settings / Color Palette*

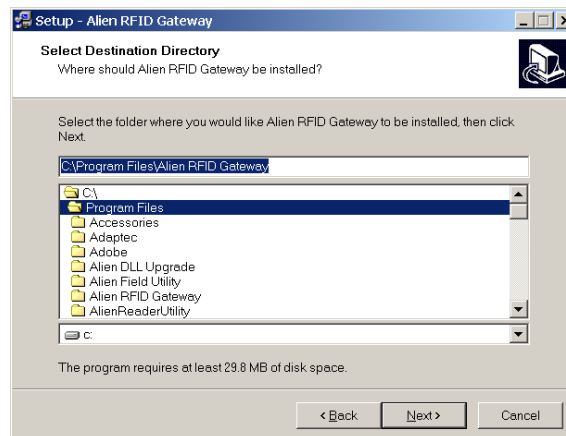
STEP 3. Place the Alien CD in your CD drive. It will auto-run and present you with the following screen.



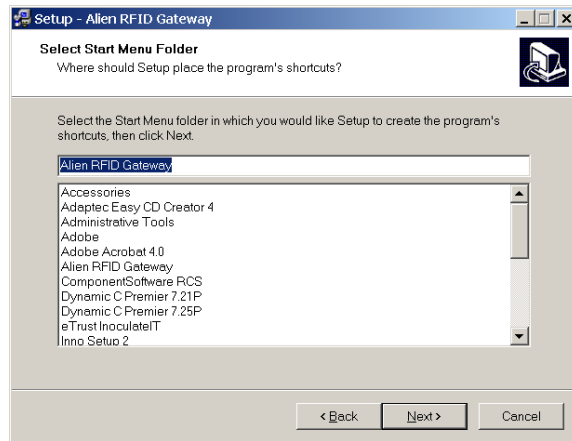
STEP 4. Click on the “Install Demonstration Software...” label to start the installation process. The installation wizard (below) will appear.



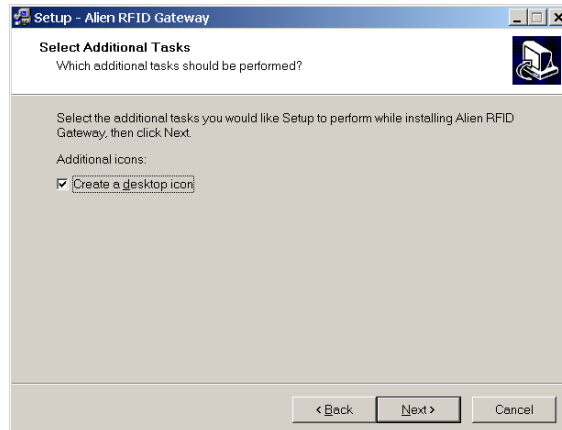
STEP 5. Click on the “Next” button. This will popup a dialog box asking where to install the software. The default location is set to C:\Program Files\Alien RFID Gateway. This can be changed but it is recommended to keep this setting. Click the “Next” button to move to the next screen.



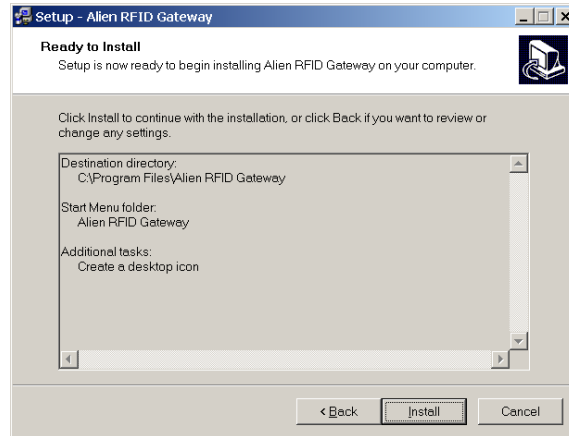
STEP 6. The next screen asks where to place a shortcut to the software in the Windows Start Menu. Click “Next” to use the default settings, which will create an Alien RFID Gateway shortcut in the Programs sub-menu of the Windows Start Menu.



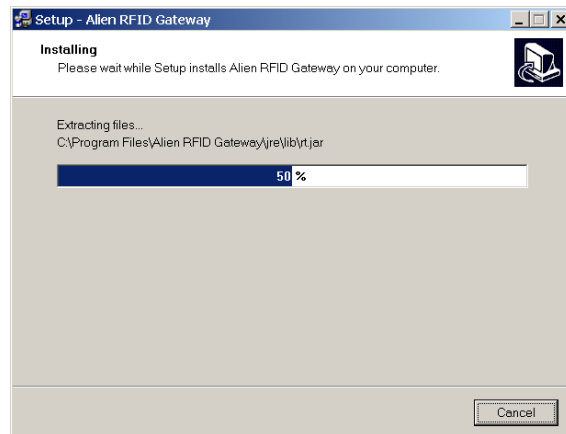
STEP 7. Click “Next” to move on to the Desktop Icon screen. This screen asks whether or not to create a shortcut icon to the Alien RFID Gateway and to place this shortcut on the desktop. The default setting is to go ahead and create the shortcut. Click “Next” to move to the next screen.



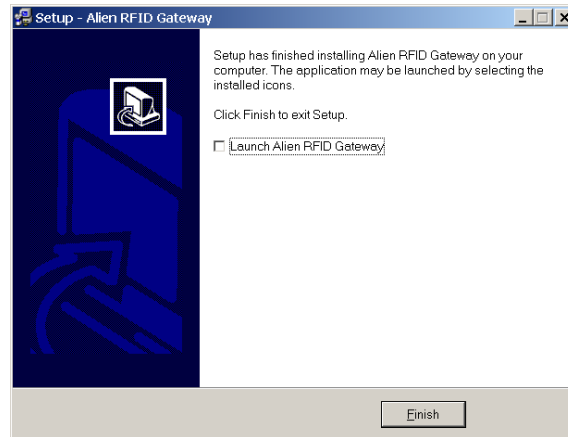
STEP 8. The screen entitled “Ready To Install” shows the complete set of installation options that have been chosen. Click the “Install” button if all options are acceptable.



STEP 9. The software will now proceed with the installation. Progress is shown by the window below.



STEP 10. When the Alien RFID Gateway installation has finished the following screen will appear. Click “Finish” to dismiss the window and exit the installation procedure.



The software installation process is complete.

Remove the software CD from the CD drive and store it for future use.

CHAPTER 4 Powering Unit

Plug the Power Supply into the OEM Interface Board as shown in figure 3.

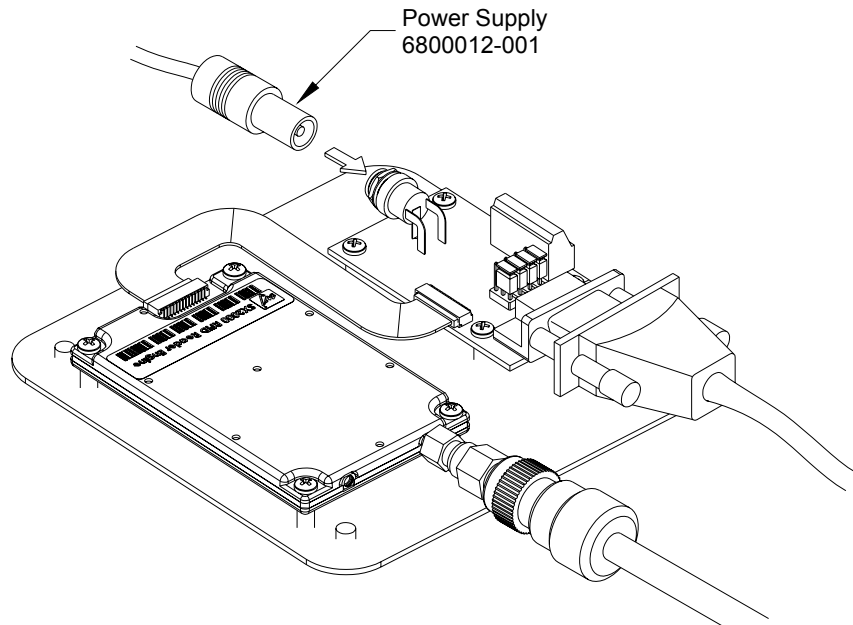


Figure 4.

Your OEM Reader Engine is now ready for use. Please refer to the *Alien RFID Reader Engine Integration guide* for instructions on the use of the unit.

CHAPTER 5 OEM Interface board

Pin location and test point identification is shown in figure 4. The definitions of the pin functions are shown in tables 1 and 2.

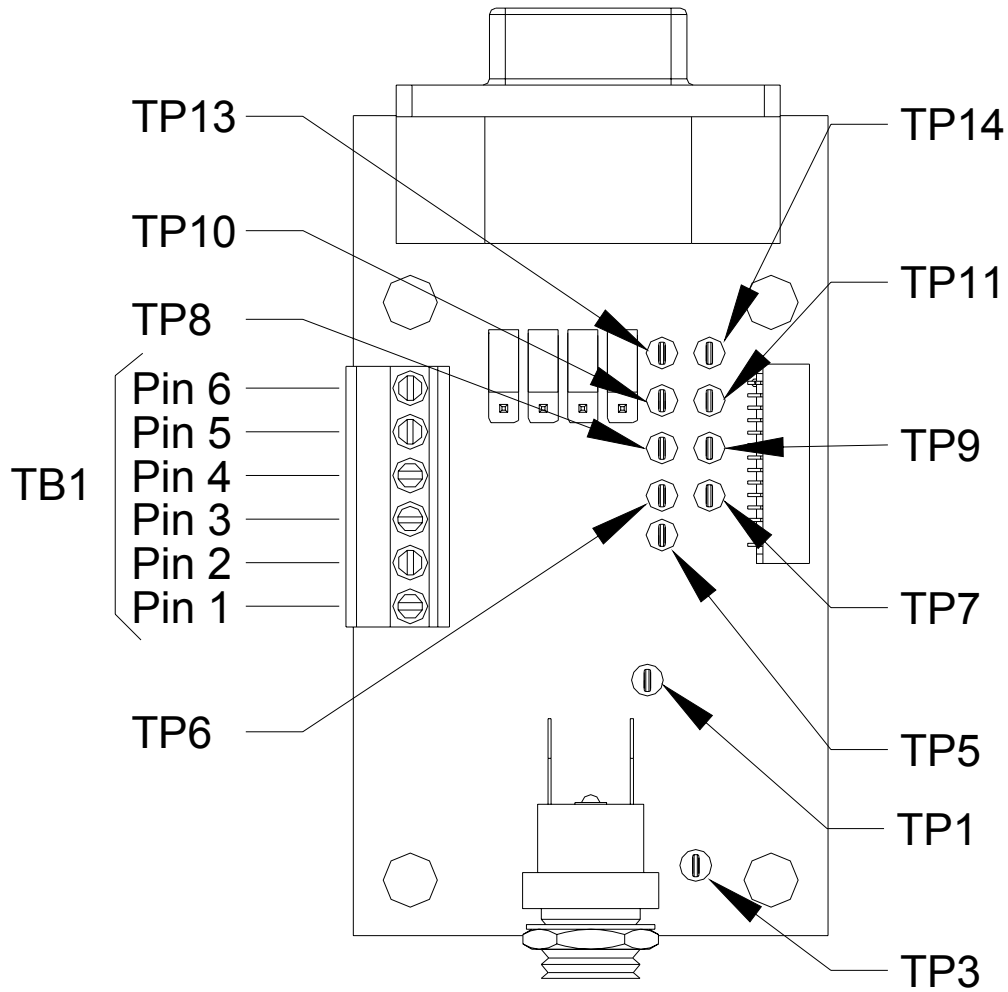


Figure 5.

Pin definition for TB1.

Pin Number	Function
1	General Purpose I/O #3
2	General Purpose I/O #2
3	General Purpose I/O #1
4	General Purpose I/O #0
5	+5V
6	Ground

Table 1.

Test point definitions.

Reference Designator	Function
TP1	+VDC 5 TO 6 Volts
TP2	Ground
TP5	Reserved – Not Connected
TP6	General Purpose I/O #3
TP7	General Purpose I/O #2
TP8	General Purpose I/O #1
TP9	General Purpose I/O #0
TP10	In-phase raw receive signal (Not normally used by OEM's)
TP11	Quadrature raw receive signal (Not normally used by OEM's)
TP13	Serial Receive (from host to module)(TTL or RS-232)(PC connecting RS-232 to DB-9 – pin 3 or to DB25 – pin 2)

TP14	Serial Receive (from host to module)(TTL or RS-232)(PC connecting RS-232 to DB-9 – pin 2 or to DB25 – pin 3)
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Table 2.

CHAPTER 6 ALR-9930 JUMPER SETTINGS

For use with the TTL Version of the OEM reader engine the jumper shunts should be installed as shown in figure 6.

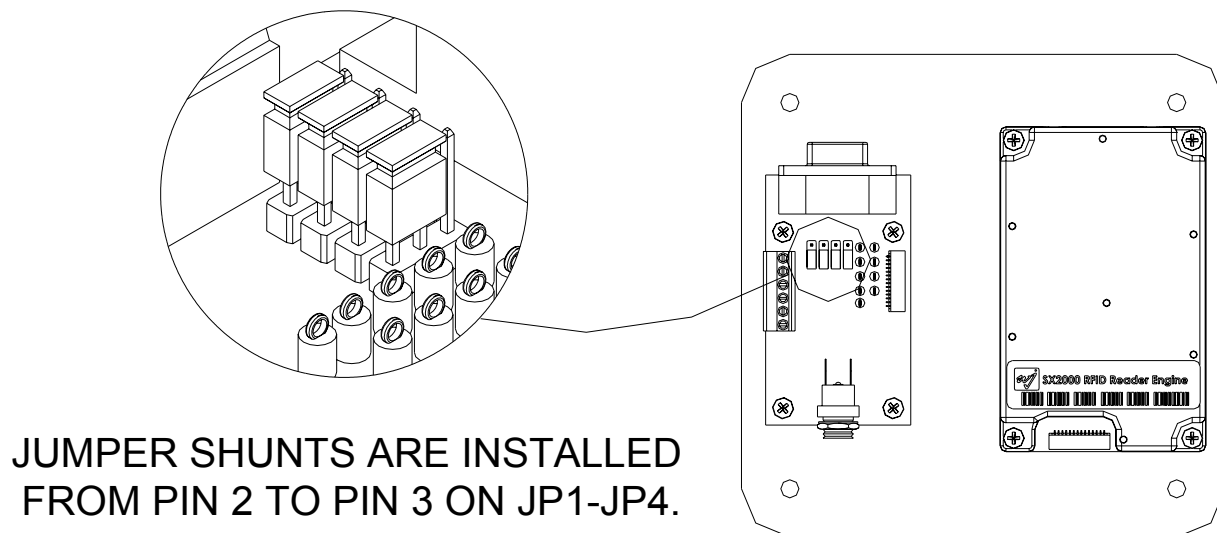
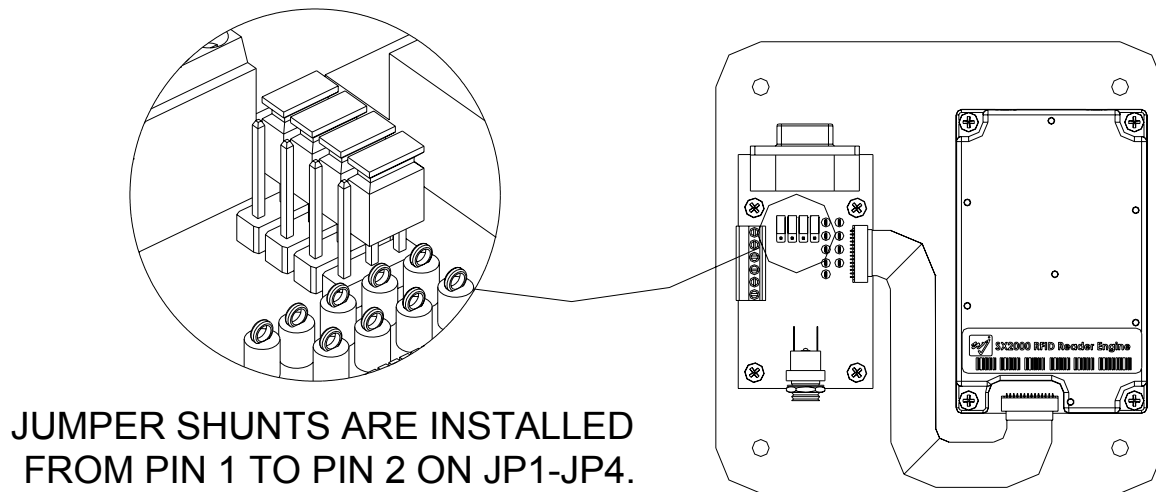


Figure 6.

JUMPER SETTINGS

For use with the RS_232 Version of the OEM reader engine the jumper shunts should be installed as shown in figure 7.



JUMPER SHUNTS ARE INSTALLED
FROM PIN 1 TO PIN 2 ON JP1-JP4.

Figure 7.