INTRODUCTION

This Installation Guide Contains the necessary information to Connect the XStream Wireless Modems to the EMR³ Interconnect Box and the Office Computer for running the EMR³ Datalink Program. For Specific Instructions on Running the Program itself, Refer to the Program Manual that is included on the Software Disk and the Quick Start Guide that is included with the Office Kit.

DESCRIPTION:

The Wireless Kits come in three types:

Kit Number	Description	General Contents and Comments
0846000-034	Office Kit - XStream 2.4 GHZ – Europe and Other	The office kit includes: • Wireless USB modem with standard antenna, • Regular USB Cable for connecting the modem to the office PC, • Quick Start Guide, • Installation Guide • Program Disc. The Program Disc includes the USB Drivers and the full Program Manual as a .pdf file.
0846000-035	Truck Kit with Keypad - XStream 2.4 GHZ – Europe and Other	The Truck Kit with Keypad includes: • Wireless modem with standard antenna, • Special RS-232 Cable for Connecting to Interconnect Box • Cord grip and Velcro patch • Installation Guide • Optional Keypad for EMR³ Register Head
0846000-036	Truck Kit - XStream 2.4 GHZ – Europe and Other	The Truck Kit without Keypad includes: • Wireless modem with standard antenna, • Special RS-232 Cable for Connecting to Interconnect Box • Cord grip and Velcro patch • Installation Guide

INDIVIDUAL MODEM UNIQUE ADDRESS - IMPORTANT

Each Serial Modem has a Unique Address assigned by Veeder-Root. This number is on the label on the Modem Itself, and on the Modem Box. For each Truck / Interconnect Box, this number is your traceability from the Specific Truck to the Office Software. The Truck Modem number will be entered into the Office Software and identified with the specific Truck Number (or other local identification).

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TRUCK KIT MODEM:

XStream 2.4 GHz, 0.1 Watt, Approved for use in Europe.	Unique Address Assigned By Veeder-Root Example of Label on Side of Modem
	MODEM NO.: 10126

FOR XSTREAM 2.4 GHZ MODEMS

XSTREAM TRUCK MODEM MOUNTING AND CONNECTION:

1. The dip switches on the XStream modem should be set to: 1=ON 2=OFF 3=OFF 4=OFF 5=OFF 6=OFF

2. Screw the antenna into the modem and hand tighten.

3. Mount the modem to the back window of the vehicle or other surface of the vehicle using the Velcro patch provided, or the modem can be attached with screws or bolts using the tabs on the modem.

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4. Add the screw clips and screws to the head of the RS-232 cable, plug into the connector, and tighten the screws to secure the connector the modem.
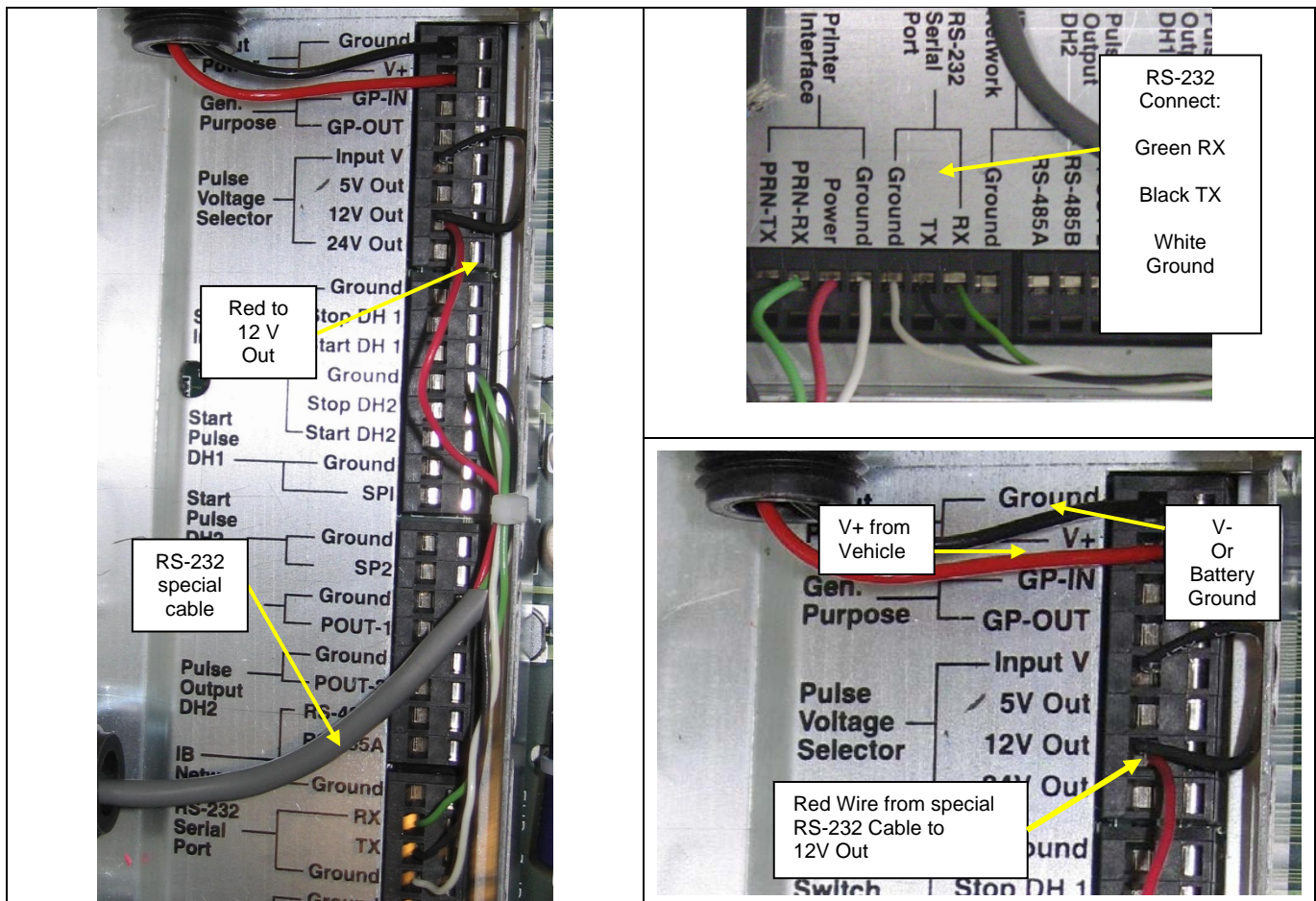
WIRING THE SPECIAL RS-232 CABLE INTO THE IB – TRUCK KIT ONLY –XSTREAM MODEM:

Power should be off to the Interconnect Box before connections are made.

The special RS-232 cable included with the truck kit provides the communication to the wireless modem and also the modem power. Modem power is provided from the "12 V OUT" in the Interconnect Box.

Install the cord grip in the interconnect box and connect the cable wires by color according the pictures. You can shorten the RS-232 cable if you like.

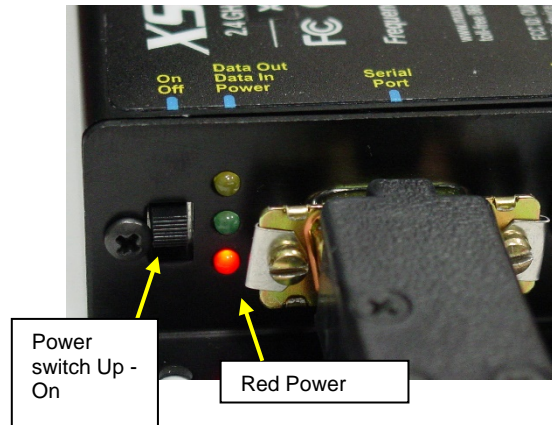**For XStream modem:** Green is RX, Black is TX, White is Ground, Red is 12 V Out

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Upon completion of the wiring and power to the IB is turned on, Turn on the Switch of the XStream modem and the red light on the modem next to the RS-232 connector will be on.

Power switch Up - On

Red Power

Before leaving the vehicle, go to the display, and make sure the PORT 2 ASSIGN under SETUP, SYSTEM ADDRESS is set to OBC.

- Push the MODE button to get to SETUP, Arrow Up to SYSTEM ADDRESS, NEXT to IB ADDRESS, Arrow up to PORT 2 ASSIGN, NEXT, if not OBC the Arrow to OBC and ENTER, ENTER, and ENTER.   You can then push the MODE button to get back to Volume Mode.

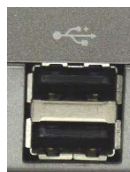VEEDER-ROOT

FOR XSTREAM 2.4 GHZ OFFICE USB MODEMS

XSTREAM OFFICE KIT INSTALLATION:

1. Screw the antenna into the modem and hand tighten.   The antenna should point upwards. If using the High Gain Antenna, it connects to the same location.

2. Insert the power supply cable connector into the modem completely, and attach the USB CABLE

3. Plug the power supply into a normal 110 volt outlet, or with the proper non-Americas Plug. The three green signal lights on the modem will be lit.

4. The modem can sit on a desk, but for best results it should be place as high as possible. Or, the modem can be attached with Velcro, or screws or bolts using the tabs on the modem to a surface.   A high gain antenna will enhance the modems capability.

5. Attach the other end of the USB Cable to a USB port on your computer.

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INSTALLING USB MODEM DRIVERS

The Modem is a "plug-and-play" device that should automatically be detected by your PC.

"Found New Hardware Wizard" dialog box appears
1. Verify the Program CD is inserted into the CD Drive.
2. Select the 'Install from specific list or location (Advanced)' option; then select the 'Next' button.
3. Select the "Search for best driver in these locations" option and check the 'Search removable media (CD-ROM…)' box.
4. Select the 'Next' button.

Hardware Installation "Windows Logo Testing" alert box appears
5. Select the 'Continue Anyway' button.
6. Select the 'Finish' button.
7. Repeat steps 1 through 5 to install the second driver.
8. (Re-boot computer if prompted to do so.)

Once the Modem drivers are successfully loaded the Red LED on the Modem will be lit indicating a successful USB Link.

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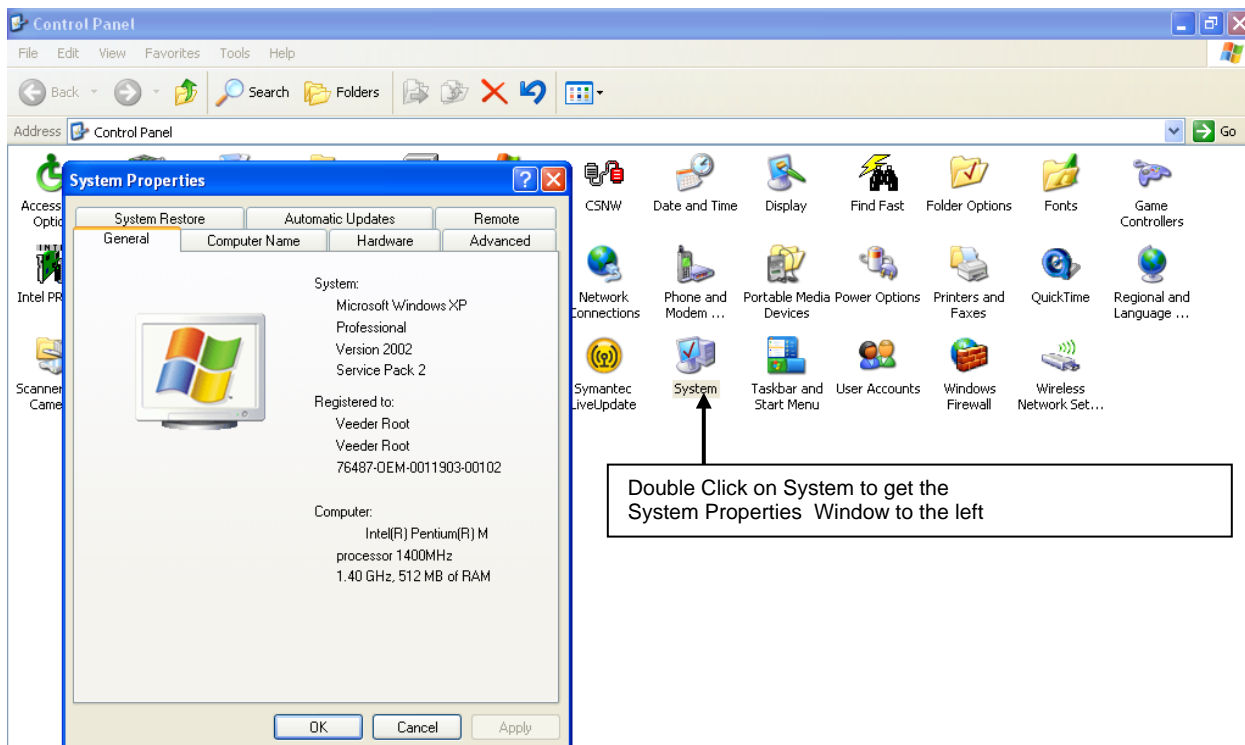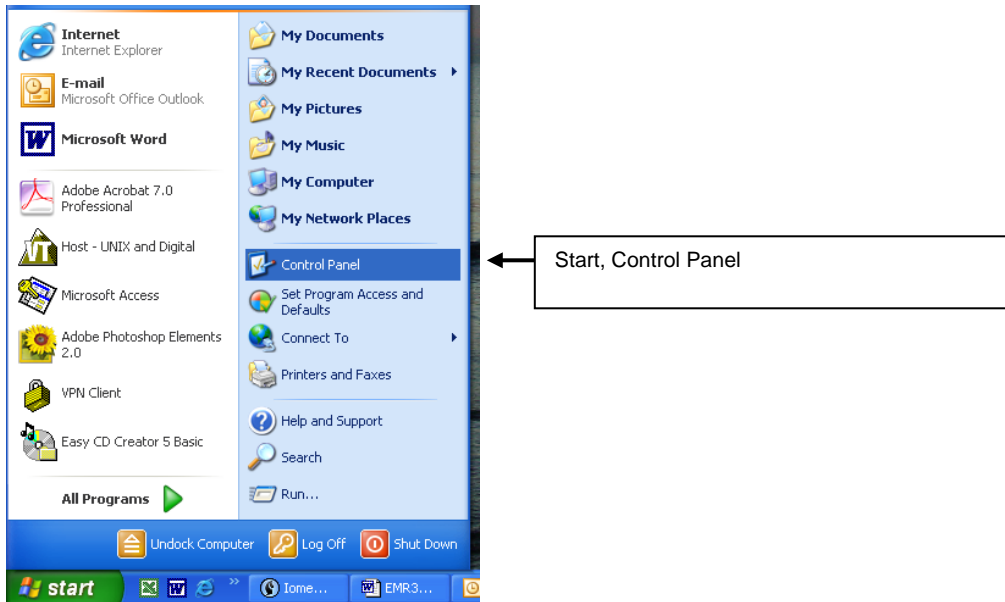
Finding the communications port for using the USB Modem with the DataLink Program

Start, Control Panel

Double Click on System to get the
System Properties Window to the left

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Click on the Hardware Tab

Device Manager Screen:

Click on the "+" of Ports and you will find the MaxStream USB Modem Communication Port.

When you click on the "+" of Ports, you will find the MaxStream PKG-U Modem and the computer assigned Com port - In this example "6".

This Communication Port Number will be entered on the Configuration page of the DataLink program.

Note: If there is no MaxSteam Port, then the Drivers for the MaxStream Modem have not been loaded.   Plug the MaxStream USB Modem into your computer and follow the Plug-and-Play instructions, or got to Add Hardware on the Control Panel.

For use with the DataLink Software, refer to the Quick Help Guide 577013-860.

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OPTIONAL KEYPAD INSTALLATION:

In order to install the optional Keypad, the Display will need to be disconnected from the wiring and gently removed from the housing.

1. Remove the cover from the hole in the right side of the display head housing.
2. Put the rubber gasket over the threads on the keypad outlet.
3. Align the gasket and keypad to the holes in the housing and with a T-15 Torx, secure the keypad to the housing with the screws provided.
4. Insert the display in the housing, gently pushing down to seat completely.
5. Reconnect the wires to the display per the following wiring information:

IB Box Cable Connections

Terminal	Signal	Wire Color
24	PWR	Red
25	GND	Black
26	IB-B	White
27	IB-A	Green

Pulse Encoder Cable Connections

Terminal	Signal	Wire Color
11	+5V	Red
12	GND	Black
13	CHB	White
14	CHA	Green

Optional Temperature Probe Cable Connections

Terminal	Signal	Wire Color
20	TP	Black
21	TP	White

ESS Switch Connections

Terminal	Signal	Wire Color
18	GND	Black
19	ESS	White

Transfer Interlock Connections

Terminal	Signal
15	Terminal 3 (PTR switch)
16	GND

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Corner Mounted C&C Switch

Removal of corner bolt releases actuator lever of C&C switch allowing entry into C&C Mode

6. Connect the keypad wires per this diagram:

Route cables as shown to avoid interference with flexible shaft. Use tie wraps to attach cables firmly to mounting base

#6 Self tapping screws (3)

Rubber gasket (1)

Display assembly terminal block

9/64" (3.58 mm) max

Note Maximum screwdriver size for attaching wires to Display Head terminal block

Optional keypad (shown on right side)

Pulse Encoder Cable Connections

Terminal	Signal	Wire Color
11	+5V	Red
12	GND	Black
13	CHB	White
14	CHA	Green

Keypad Cable Connections

Terminal	Wire Color
02 KP2	Red
03 KP3	Black
04 KP4	White
05 KP5	Green
06 KP6	Yellow
07 KP7	Blue
08 KP8	Orange

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Warranty of Modems by MaxStream :

MaxStream XStream-PKG-R™ RS-232/485 RF Modem Product Manual V4.2B5:

RF Modems from MaxStream, Inc. (the "Product") are warranted against defects in materials and workmanship under normal use, for a period of 1-year from the date of purchase. In the event of a product failure due to materials or workmanship, MaxStream will repair or replace the defective product. For warranty service, return the defective product to MaxStream, shipping prepaid, for prompt repair or replacement.

The foregoing sets forth the full extent of MaxStream's warranties regarding the Product. Repair or replacement at MaxStream's option is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND MAXSTREAM SPECIFICALLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL MAXSTREAM, ITS SUPPLIERS OR LICENSORS BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS, OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. THEREFOR, THE FOREGOING EXCLUSIONS MAY NOT APPLY IN ALL CASES. This warranty provides specific legal rights. Other rights which vary from state to state may also apply.

MODEM CERTIFICATIONS:

Extracted from MaxStream XStream-PKG-R™ Modem Product Manual V4.2B5 and XStream-PKG RF Modems Datasheet 2005.

European Compliance (2.4 GHz only) XStream

The 24XStream has been certified for use in several European countries. For a complete list, refer to http://www.maxstream.net.

Restrictions

France – France imposes restrictions on the 2.4 GHz band. Go to www.art-telecom.Fr or contact MaxStream for more information.

Norway – Norway prohibits operation near Ny-Alesund in Svalbard. More information can be found at the Norway Posts and Telecommunications site (www.npt.no).

24XStream Declarations of Conformity

MaxStream has issued Declarations of Conformity for the 24XStream modems concerning emissions, EMC and safety. Files are Available.

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Important Note

MaxStream does not list the entire set of standards that must be met for each country. MaxStream customers assume full responsibility for learning and meeting the required guidelines for each country in their distribution market. For more information relating to European compliance of an OEM product incorporating the 24XStream modem, contact MaxStream, or refer to the following web sites:

CEPT ERC 70-03E – Technical Requirements, European restrictions and general requirements: Available at www.ero.dk/

R&TTE Directive – Equipment requirements, placement on market: Available at www.ero.dk/

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DAMAGE CLAIMS
1. Thoroughly examine all components and units as soon as they are received. If damaged, write a complete and detailed description of the damage on the face of the freight bill. The carrier's agent *must* verify the inspection and sign the description.

2. Immediately notify the delivering carrier of damage or loss. This notification may be given either in person or by telephone. Written confirmation must be mailed within 48 hours. Railroads and motor carriers are reluctant to make adjustments for damaged merchandise unless inspected and reported promptly.

3. Risk of loss, or damage to merchandise remains with the buyer. It is the buyer's responsibility to file a claim with the carrier involved.

RETURN SHIPPING
For the parts return procedure, please follow the appropriate instructions in the "General Returned Goods Policy" and "Parts Return" section of the Veeder-Root EMR³ price list.