



EVX-Link Training

What is the EVX-Link

EVX-Link is a fast and easy way to connect multiple DMR digital coverage areas regardless of geography. This system provides a seamless and reliable connection via the use of an existing Local Area Network (LAN) or internet. It works with or without a repeater infrastructure which offers great flexibility. EVX-Link can be used with existing systems or can replace the functionality of legacy high power repeater equipment.

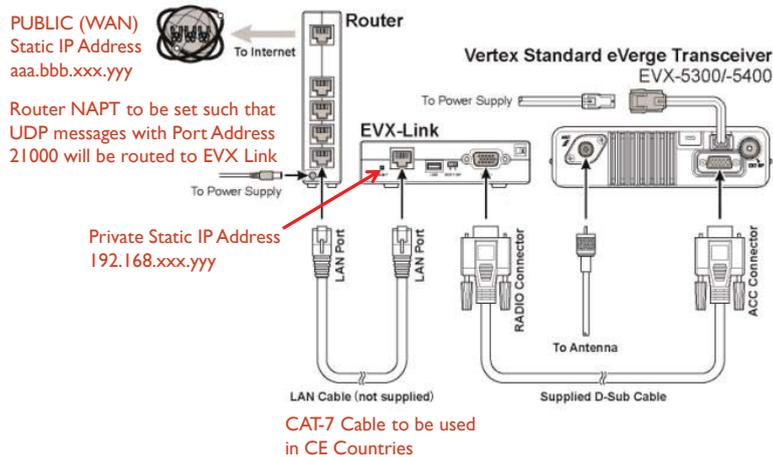
EVX-Link Training Installation

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Connection

Wide Area Network

The most common connection for multi-site configurations. By connecting to the local internet, this configuration allows connection to multiple geographically separated coverage sites.



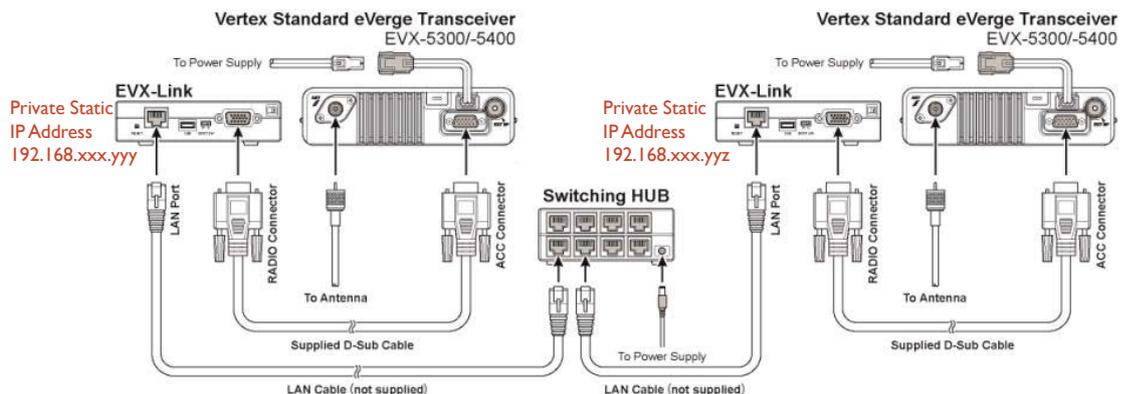
EVX-Link Training Installation

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Connection

Local Area Network

EVX-Link equipment can also be connected locally, without the use of an external internet source. Connect multiple EVX-Link boxes with a switching hub or router for localized communication. For example, two transceivers can be connected with the EVX-Link (as shown in the illustration below) to operate in a similar fashion to a repeater. As a result, you can significantly extend the communication range of the hand-held transceiver that has access to the EVX-Link (eVerge Transceiver).



EVX-Link Training

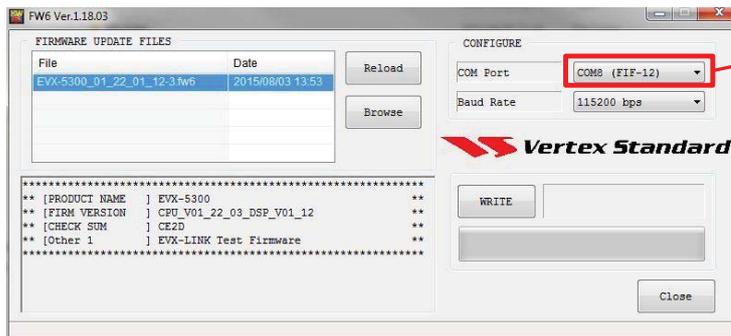
Radio Setup

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Radio Firmware Update

Use the FW6 software to update radio firmware to Ver 01.22.01.12-3

1. Un Zip the EVX-5300_Firmware_V01_22_01_12-3(Package) .zip file
2. Power on the radio and connect to PC via FIF-12
3. Double click FW6 to update the radio firmware
4. Click WRITE to update firmware



Select COM Port (FIF-12) accordingly

EVX-Link Training

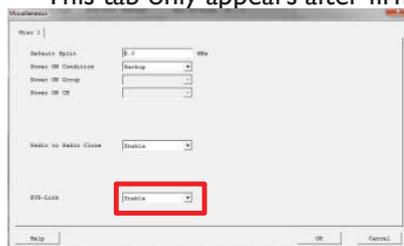
Radio Setup

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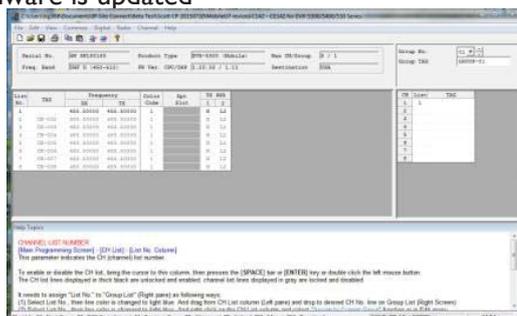
Program the Radio by using CEI42 (Ver 1.14 or later).

User only needs to setup the following two items.

1. Activate EVX-Link mode
 Select [Common] > [Miscellaneous] > [Misc 1] tab
 Select EVX-Link mode to enable
 This tab only appears after firmware is updated



2. Setup mobile frequency
 Color code, TX Power



The EVX-mobile does not require other settings to be programmed in EVX-Link mode.
 The EVX-Link only operates in Digital mode.

EVX-Link Training

EVX-Link Box Setup

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2. USB Setup

Need to connect the EVX-Link box to a powered EVX-mobile radio to program.

1. Setup USB Driver for EVX-Link box by using EVX-Link_Driver_Setup software
2. Connect EVX-Link via USB
3. Check the Device Manager

The COM # will be different

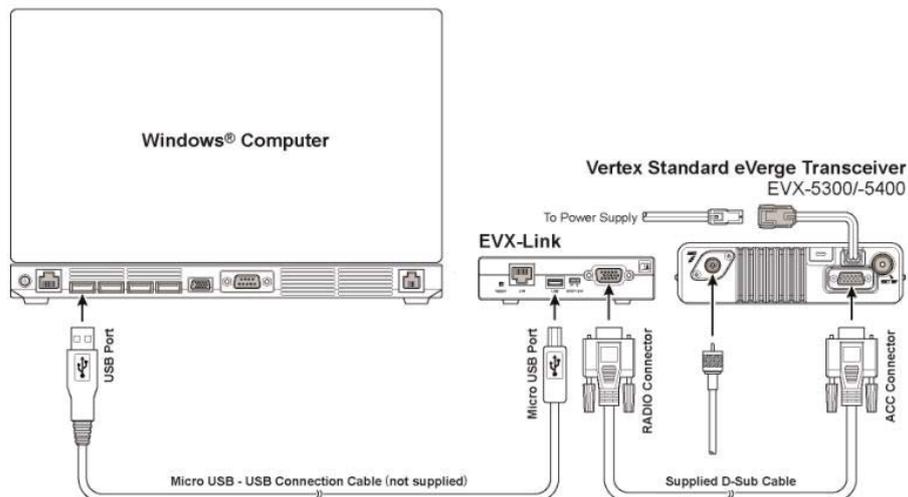


EVX-Link Training

EVX-Link Box Setup

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Connection



EVX-Link Beta test Setup

EVX-Link Box Setup

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Double click “EVX-LinkSetup” to execute the programming software.

If “User account control” box appears, press “Yes” box to continue.

The screenshot shows the 'EVX-Link Setup' window. It has several sections: 'Local IP Address' with fields for IP Address (192.168.0.1), Subnet Mask (255.255.255.0), and Gateway Address (0.0.0.0); 'Serial' with dropdowns for Baud Rate (115200), Parity Bit (NONE), and Stop Bits (1); and 'Setup Data' with buttons for 'Load Setup File...', 'Read From EVX-Link...', 'Save Setup File...', and 'Write To EVX-Link...'. Below these is a 'Destination IP Address' section with a grid of 32 checkboxes and IP address fields, numbered 1 through 32. Checkboxes 1 and 8 are checked.

EVX-Link Beta test Setup

EVX-Link Box Setup

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When using a router, the network address and port translation (NAPT) is necessary. The following UDP (user datagram protocol) port must be connectable: **21000**.

The DMZ feature is easy to setup above requirement and most of the routers have this feature.

The screenshot shows the Belkin router web interface. The top bar includes 'DMZ', 'Page', 'Safety', and 'Tools'. The main header shows 'belkin.020' with a green 'Online' indicator and a password 'me3e8a88'. Below the header are navigation tabs: 'Firewall', 'Port Forwarding', 'MAC Address Filtering', 'DMZ', 'DDNS', 'WAN Ping Blocking', and 'Security Log'. The 'DMZ' tab is selected. The 'IP Address of Virtual DMZ Host' section has an 'Enable' checkbox checked, a 'Static IP' of '119.173.241.6', and a 'Private IP' of '192.168.2.10'. A green 'Save' button is at the bottom. A 'What is the DMZ?' section on the right explains that it allows specifying a device to be placed outside the router's firewall.

EVX-Link Beta test Setup

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I. Local IP address setup

Program your local IP address (EVX-Link IP)

Program Subnet Mask

Program Gateway Address

Local IP Address

IP Address: 192 . 168 . 0 . 1

Subnet Mask: 255 . 255 . 255 . 0

Gateway Address: 0 . 0 . 0 . 0

IP Address, Subnet Mask and Gateway Address settings are depending on your local area network settings. Please check your IT dept how to setup those numbers.

EVX-Link Beta test Setup

EVX-Link Box Setup

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- Check your Local IP address using Command Prompt window and type *ipconfig*

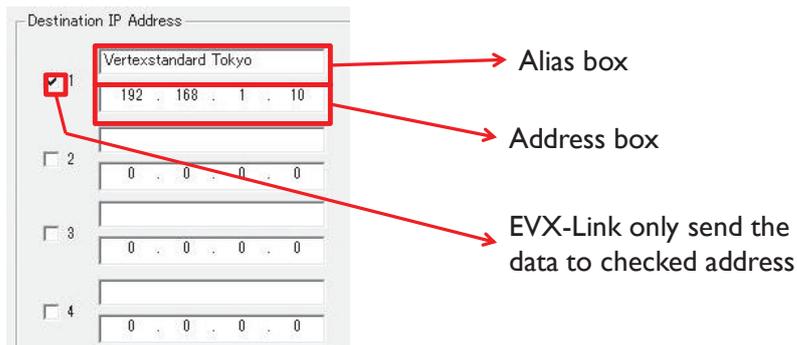
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Command Prompt
Connection-specific DNS Suffix . : ap.mot-solutions.com
Ethernet adapter Local Area Connection 5:
    Connection-specific DNS Suffix . : ap.mot-solutions.com
    Link-local IPv6 Address . . . . . : fe80::5479:987d:e497:d891%17
    IPv4 Address. . . . . : 10.200.113.17
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.200.113.254
Tunnel adapter Teredo Tunneling Pseudo-Interface:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
Tunnel adapter isatap.{80349C2E-E104-4140-A3EA-801BC209F27E}:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
Tunnel adapter isatap.{9AAFB45F-3540-449A-82D5-4E44B6AB93A9}:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . :
```

EVX-Link Beta test Setup

EVX-Link Box Setup



2. Target IP address setup (up to 32)
Program target IP address
Check the target box
You can add the alias to each address

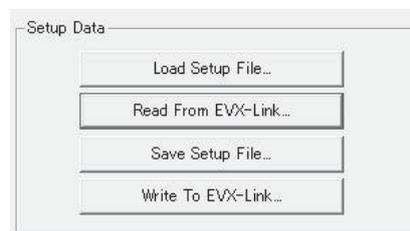


EVX-Link Training

EVX-Link Box Setup



3. Click Write To EVX-Link box to write setup data to EVX-Link
4. Click Save Setup File box to backup your setup data to PC



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EVX-Link Box Setup

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Example setting for 9 sites on same network

EVX-LINK Setup - [Sample 2.dat]

EVX-LINK

Local IP Address

IP Address: 192 . 168 . 0 . 1

Subnet Mask: 255 . 255 . 255 . 0

Gateway Address: 0 . 0 . 0 . 0

Serial

Baud Rate: 115200 tps

Parity Bit: NONE

Stop Bits: 1 bit

Setup Data

Load Setup File...

Read From EVX-Link...

Save Setup File...

Write To EVX-Link...

Destination IP Address

Sample	IP Address	Checkbox
Sample 1	192 . 168 . 0 . 1	<input checked="" type="checkbox"/>
Sample 2	192 . 168 . 0 . 2	<input checked="" type="checkbox"/>
Sample 3	192 . 168 . 0 . 3	<input checked="" type="checkbox"/>
Sample 4	192 . 168 . 0 . 4	<input checked="" type="checkbox"/>
Sample 5	192 . 168 . 0 . 5	<input checked="" type="checkbox"/>
Sample 6	192 . 168 . 0 . 6	<input checked="" type="checkbox"/>
Sample 7	192 . 168 . 0 . 7	<input checked="" type="checkbox"/>
Sample 8	192 . 168 . 0 . 8	<input checked="" type="checkbox"/>
Sample 9	192 . 168 . 0 . 9	<input checked="" type="checkbox"/>
Sample 10	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 11	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 12	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 13	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 14	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 15	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 16	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 17	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 18	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 19	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 20	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 21	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 22	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 23	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 24	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 25	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 26	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 27	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 28	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 29	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 30	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 31	0 . 0 . 0 . 0	<input type="checkbox"/>
Sample 32	0 . 0 . 0 . 0	<input type="checkbox"/>

Remove check mark from same IP address to avoid address conflict !

This setup means Site 192.168.0.1 sends to sites 2 to 9

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Thank you