iDirect Evolution X3
Installation Guide

Bentley Walker
satellite broadband networks

Contents

Please read this entire document before attempting your first Evolution installation. If you are unsure of any part of this procedure contact our technical support team for further advice.

1.   Before you start

a)   Please ensure that you have submitted the online activation form at **http:// www.bentleywalker.com/support**

b)   Once this is done, you will receive the required files to configure you modem; this will include the **option file** (RmtRmtsideLatest-12345.opt) and your **IP details**.

c)   You will also need the corresponding version of iSite:

Evolution W2A (C Band)**/AB1/W3A/W6/T11/T12**: iSite 13.0.0.0

Evolution AM22: iSite 9.0.0.7

It is **very important** that the correct version is used depending on what satellite the modem is on; if you are unsure which version to use, please contact support

The above software can be downloaded from

http://www.bentley-walker.com/support/customerarea

Username: **visitor@bentleywalker.com**

Password: **satellite**

2.   Connecting to the modem

a)   Connect an **RJ45 cable** from the LAN port on the modem to a hub or switch (the interface runs at 100mbps/full duplex) then to a PC

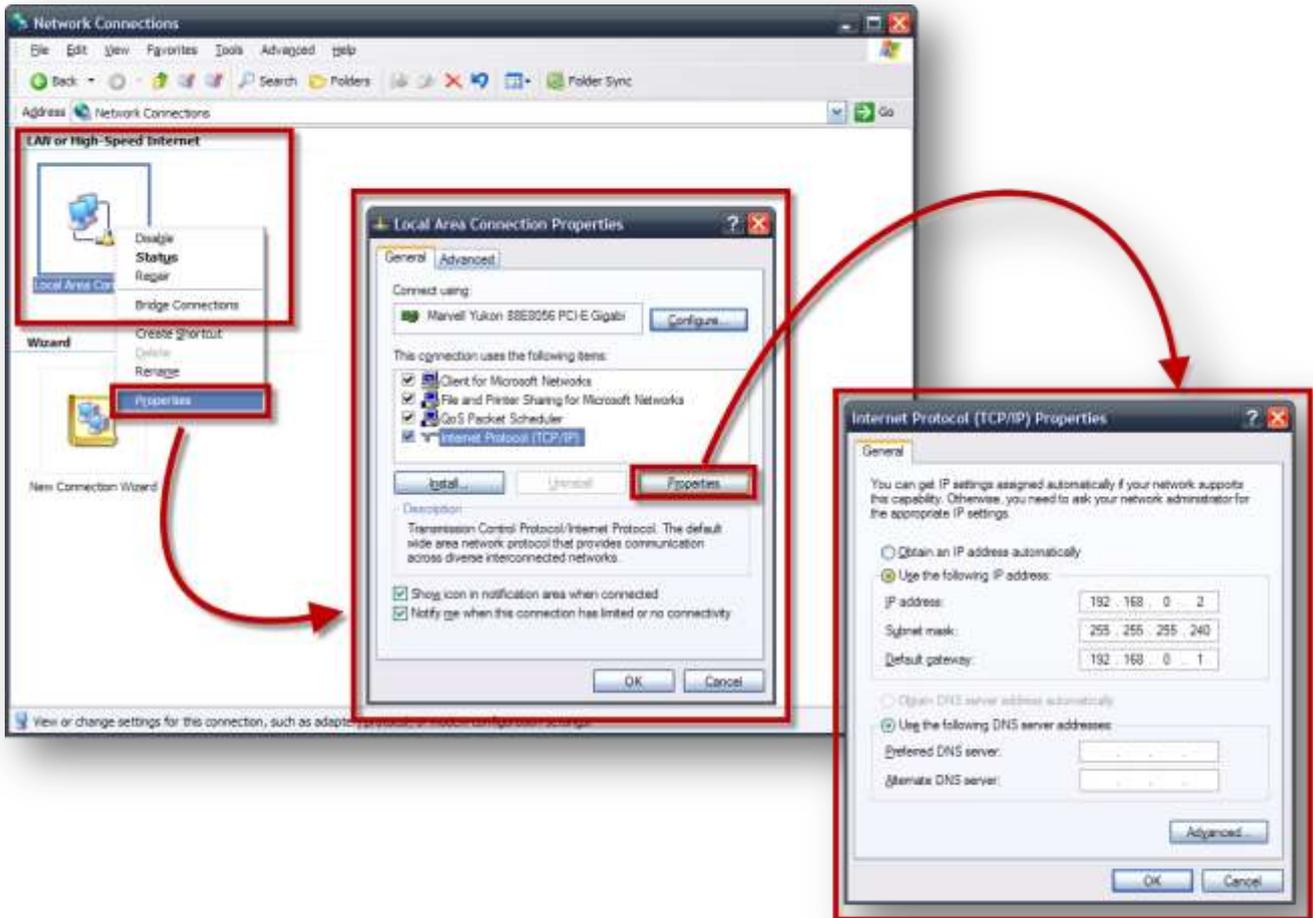If connecting straight from the modem to a PC, you may need to use a crossover cable.

b)   If the modem is new (no option file loaded), set up the PC with the following **default** IP addresses

IP Address: 192.168.0.2
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.0.1

To do this in Windows XP go to **Start > Control Panel > Network Connections**:

If you are having issues doing this with **Windows Vista/7**, follow the step by step guide in the **FAQ** section at the end of this document.

   a) Open a command window by using **Start** > **Run** and enter **cmd**
   b) At the **Command** window prompt enter ping and the modem IP address. For example ping
      `192.168.0.1`

If you can reach the modem, you should get a reply similar to the following

```
Pinging 192.168.0.1 with 21 bytes of data:
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
```

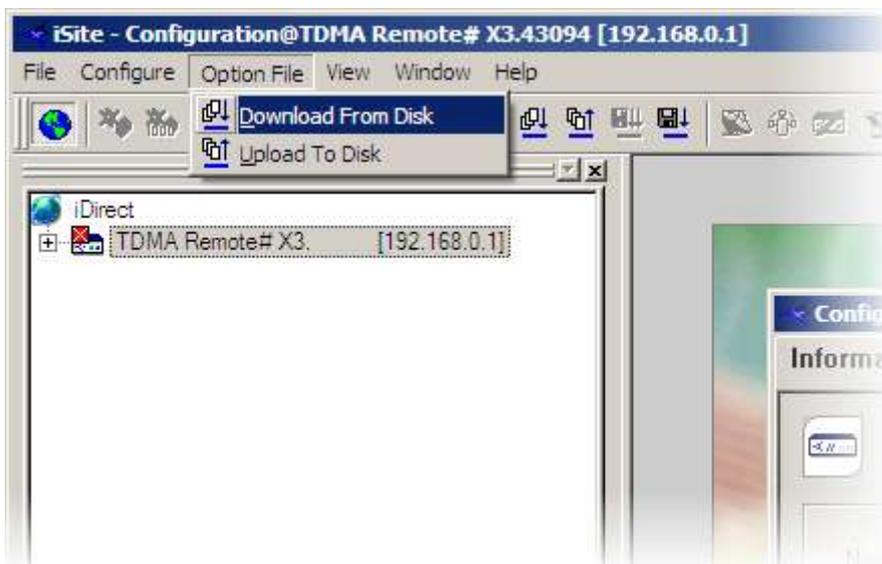If you cannot reach the switch, you should get a reply similar to the following:

```
Pinging 192.168.0.1 with 21 bytes of data:
Request timed out.
```

3. Loading the option file

1. Log in to iSite by clicking on the "TDMA Remote" and clicking "Login". Log in as "Admin". The default password is: **iDirect**
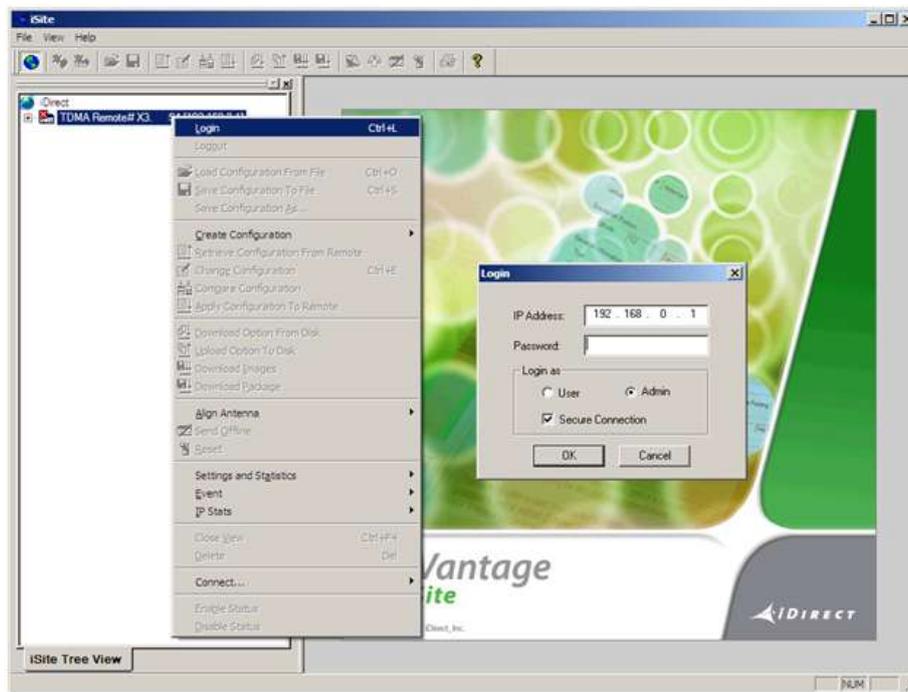
2. Once logged in, click on "Option file" in the top menu, then "Download from disk"

3. Browse to where the option file is saved and open. It should only take a few seconds to load and then the modem will reboot

4. You will now need to change your computers IP settings to DHCP to reflect the update. Follow step 2 again and set IPs to obtain automatically)

5. Also, the password for iSite and telnet access will now have **changed** from the default "iDirect"; depending on what satellite the modem is configured for, it will be:

AB1/W2a/W3a/W6/T11/T12: **bentleys2**
AM22: **eutelsat2008**

4.   Acquiring the satellite signal

If you are aligning the dish yourself, you will need to do the following:

a)   Calculate your estimated dish pointing angles:
   Visit http://www.bentley-walker.com/dishpointer

This will return **azimuth,** which is the left and right movement of the dish; **elevation**, the up and down movement of the dish; and the **polarisation**, which is the rotation angle of the feed assembly. Use these values to point the dish in the right direction

b)   We recommend using a **Satellite Meter** such as a MaxPeak or Horizon to then find the satellite signal
c)   Once you have a lock on the signal, open up the "antenna pointing tool" in iSite, by right clicking on the remote and selecting "Align Antenna" > "Antenna Pointing"
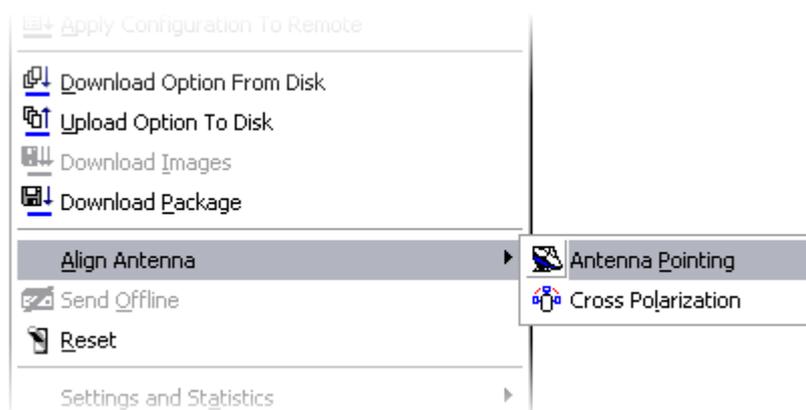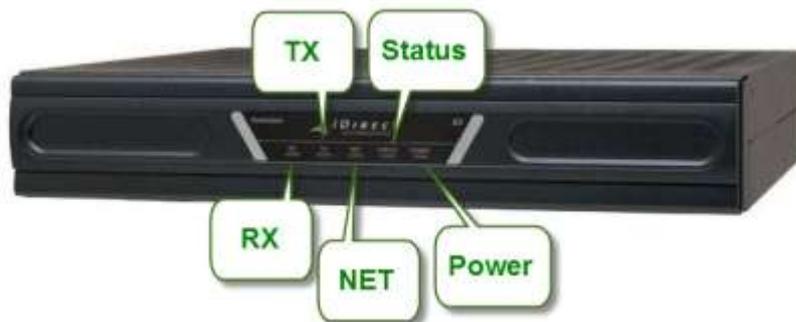

Click on the "Antenna Pointing" tab at the top then click "Start"

After a short period, the graph will start showing data; use this to adjust the dish to get the reading as high as possible (**15v** or higher)
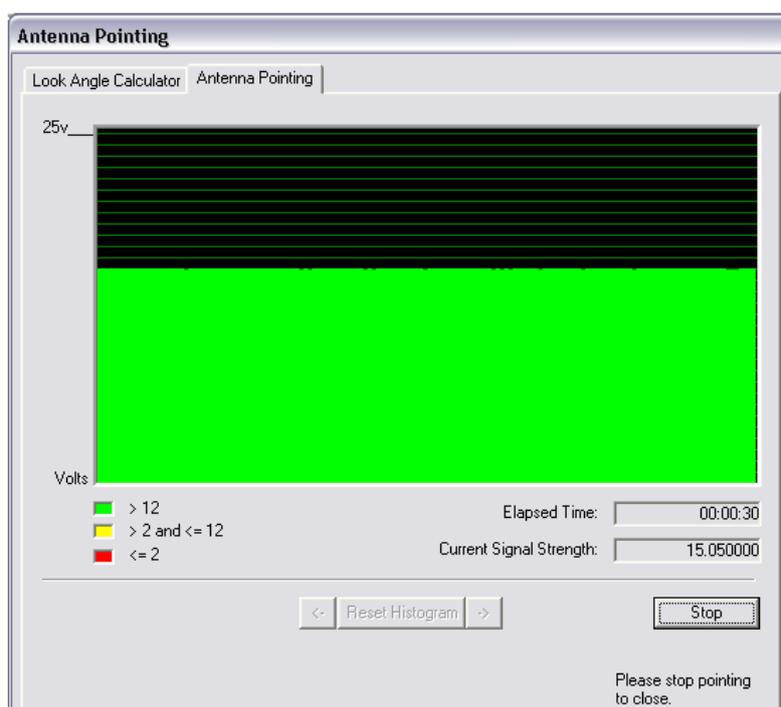
5.   Activating the modem

a)   Before we can activate the modem, it should have a solid receive (RX) light and a strong receive signal strength.

b)   You will then need to contact Technical Support to request activation.
     +44 2392 311 118
     support@bentleywalker.com

6.   Frequently asked questions

Q: What is my password for iSite/telnet?

A: For a new modem, the default password is: **iDirect**

Once the option file is loaded, the password will change to: **bentleys2** (for AM22 modems: **eutelsat2008**)

Q: How do I telnet to the modem (required for troubleshooting)?

A: Open a command prompt (Click Start > run/search > type **cmd** > hit enter) In the command prompt, type **telnet [modem IP address]** (for example, telnet 192.168.0.1)

Q: Command prompt says telnet is not a recognised command, how do I enable it in Windows 7/Vista?

A: To install the telnet client on Windows 7 or Windows Vista, follow the steps below:

1. Start
2. Control Panel
3. Programs And Features
4. Turn Windows features on or off
5. Check Telnet Client
6. Hit OK
   Now you can start Telnet via Command Prompt

Q: How do I check my receive signal strength?

A: Telnet to the modem and type the following command: **rx snr**

On most networks, the average receive strength is **10.0dB**

Q: How do I check the modem firmware version?

A: Telnet to the modem and type the following command: **version**

Q: Why can't I access the modem via telnet or iSite?

A: This can be caused by many reasons:

- Computers IPs are not configured correctly.
- Problem with LAN cable/not connected direct to X3 modem. Make sure you are not connecting through a router.
- Modem firmware version does not match the option file version. In this case, the recovery procedure will need to be performed. Contact Support for more details.

Q: How do I upgrade/downgrade the modem firmware?

A: Download the correct version and follow the below steps:

1. Connect 1 PC directly the modem, bypassing any routers
2. Open up iSite and login
3. Right click on the remote and choose "download package"
4. Load linux_2.4_bsp-x.x.x.x.pkg **first**, **then** evo_x3_rmt-x.x.x.x.pkg
5. **DO NOT RESET WHEN COMPLETE**
6. Download the option file provided
7. Reset the modem
8. Telnet into the terminal and type "version" to confirm

Q: How do I change my computer IPs in Windows Vista/7?

1. Open the Start menu and choose Control Panel.

2. Select Network and Internet.

3. Choose Network and Sharing Centre.

4. Select Change adapter settings.

5. Right-click on the network to be changed and select Properties, from the drop down context menu.

6. Click the Networking tab, from the resulting pop-up window.

7. Choose "Internet Protocol Version 4 (TCP/IPv4)." Click on the Properties button.

8. There are two options to choose from when changing the IP address. A user can either obtain an automatic IP address or manually set a new one.

9. Click the OK button at the bottom of the window. The IP address should now be changed.

Support	
Online Ticket System	http://62.49.2.48/sitehelpdesk/user/log.asp
Bentley Walker Support	support@bentleywalker.com
	+44 23 9231 1118
	www.bentley-walker.com/support
Customer Information Portal (CIP)	http://88.202.61.64/
Bentley Walker Downloads	http://www.bentley-walker.com/support /customerarea

Product Documentation	
Setup Video	http://www.youtube.com/watch?v=HnLxxcTZbXQ
Grade of Service Documentation	http://www.bentley-walker.com/helpfiles /24_evolution_gos.pdf
Recovery Procedure	http://www.bentley-walker.com/helpfiles /39_doc170.pdf