

05/05/2012



Bentley Walker iDirect Evolution X1 (indoor)

1. Before you start

What you will need before configuring the modem

2. Connecting to the modem

How to set up your connection to the modem

3. Loading the option file

How to load the required configuration file

4. Acquiring the satellite signal

What to take into consideration when pointing the dish

5. Activating the modem

How to start the activation process

6. Frequently asked questions

How to access the modem, upgrading/downgrading firmware etc...

1. Before you start

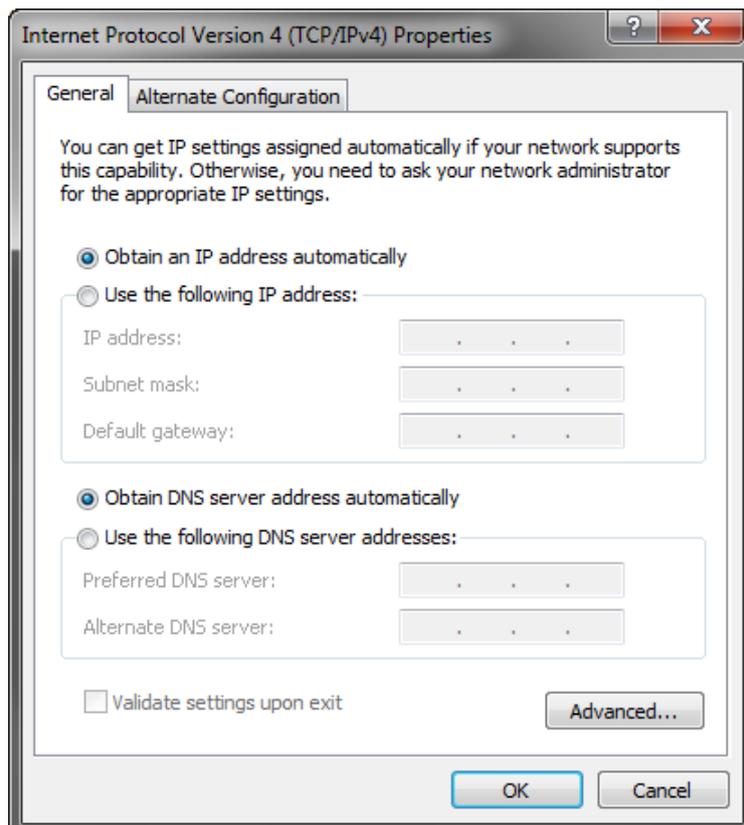
- a) Please ensure that you have submitted the online activation form at www.bentleywalker.com/support
- b) Once this is done, you will receive the required files to configure you modem; this will include the **option file** (RmtRmtsideLatest-12345.opt)

2. Connecting to the modem

- a) Connect a **RJ45 LAN cable** from the LAN port on the modem direct to a PC or laptop
- b) The “TX Out” connects to the transmitter (BUC) on the dish. “RX In” connects to the receiver (LNB) on the dish.



- c) On the X1 modems, DHCP is enabled out of the box. You will therefore need to make sure that PC network card is set to obtain IPs automatically



3. Loading the option file

Open a web browser and open the modem web interface: <http://192.168.0.1>

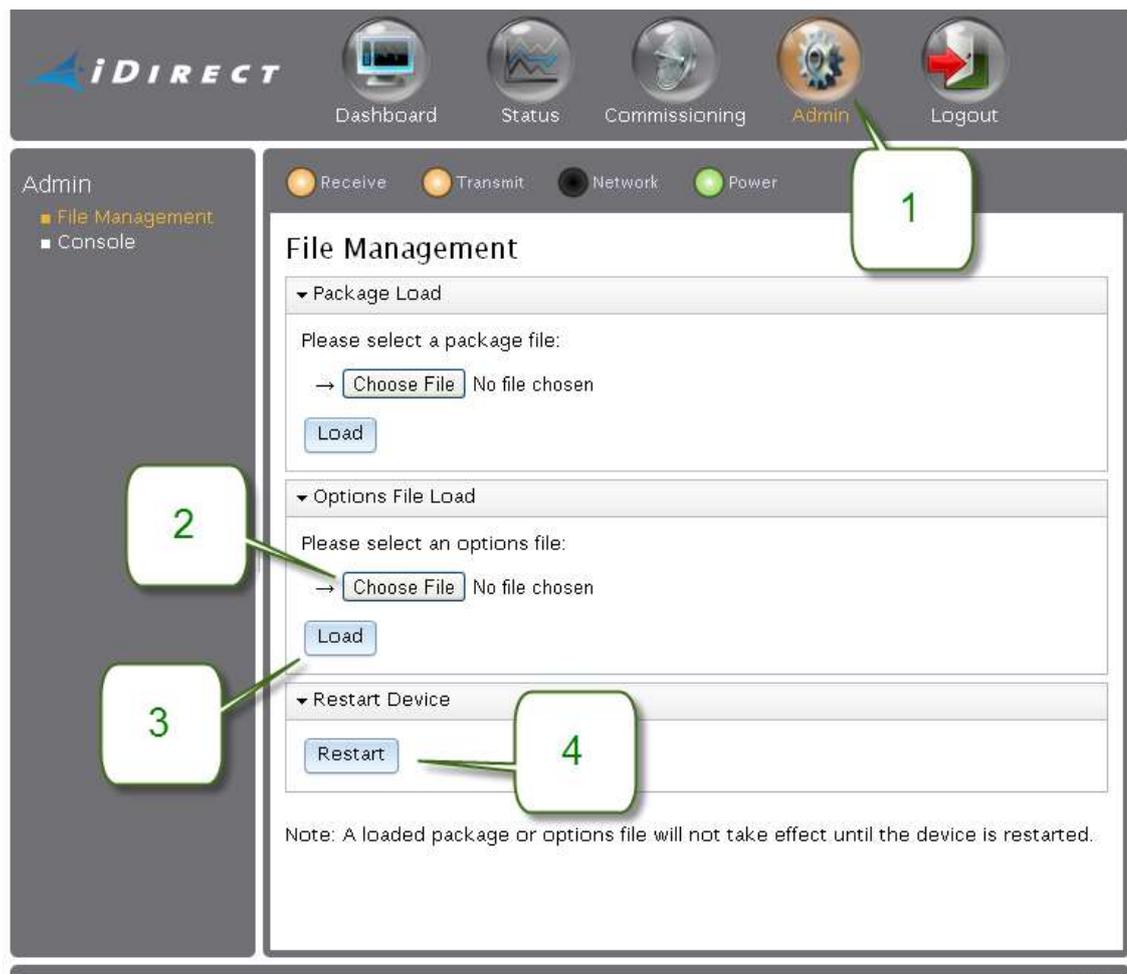
When prompted, the login credentials will be:

Username: **admin**

Password: **iDirect**

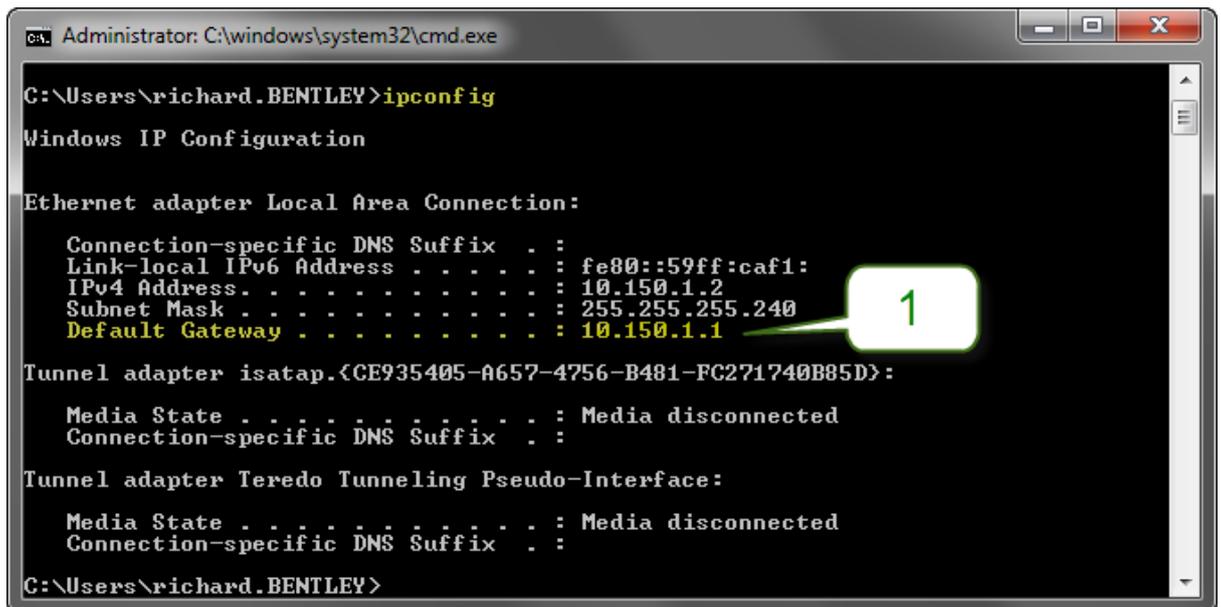
Once logged in, click on the “Admin” icon (1)

Click “Choose File” under “Options File Load” (2) and browse for the options file supplied by Bentley Walker. Click “Load” (3) to load the configuration into the modem, then “Restart” (4)



Once your option file has been successfully loaded, **the IP address to access the modem will change.**

To check what it has changed to, open a command prompt (Start > Run/Search > type: **cmd**) and type the following command: **ipconfig**



```
Administrator: C:\windows\system32\cmd.exe
C:\Users\richard.BENTLEY>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::59ff:caf1:
    IPv4 Address. . . . . : 10.150.1.2
    Subnet Mask . . . . . : 255.255.255.240
    Default Gateway . . . . . : 10.150.1.1

Tunnel adapter isatap.<CE935405-A657-4756-B481-FC271740B85D>:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

Tunnel adapter Teredo Tunneling Pseudo-Interface:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : 

C:\Users\richard.BENTLEY>
```

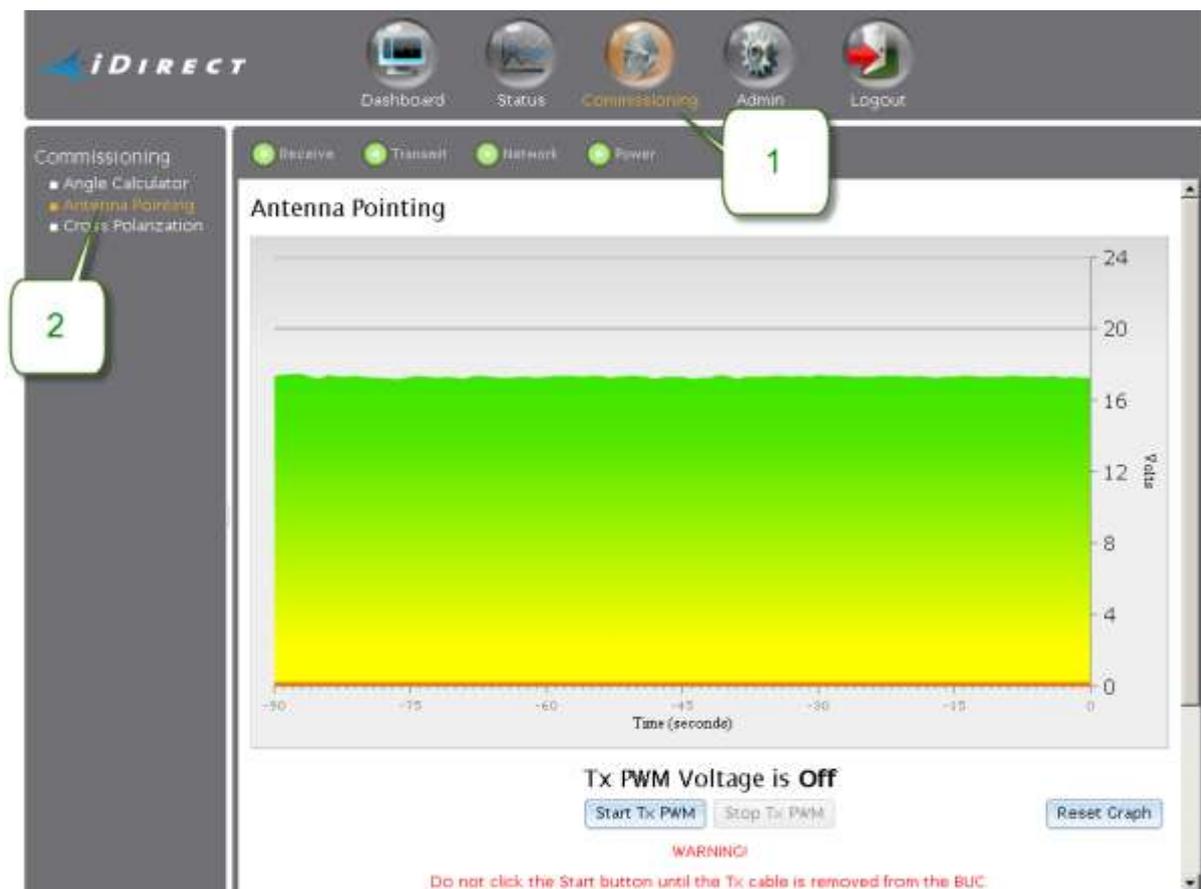
The “**Default Gateway**” IP (1) is the modem IP address. You will use this IP to access the modem Web interface (in this example: <http://10.150.1.1>)

4. Acquiring the satellite signal

If you are aligning the dish yourself, you will need to calculate your estimated dish pointing angles at <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

- a) You will need to use a **satellite meter** (such as a MaxPeak or Horizon meter) to then find the satellite signal
- b) Once you have a lock on the signal, open up the “Commissioning” (1) tab in the web interface and click “Antenna Pointing” (2)



After a short period, the graph will start showing data; use this to adjust the dish to get the reading as high as possible in the green (Minimum **16v**)

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.

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support@bentleywalker.com

6. Frequently asked questions

Q: What is my password for the web interface?

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

Once the option file is loaded, the password will change to: **bentleys2**

Q: How do I telnet to the modem?

A: Telnet is no longer supported on the X1; everything is accessed through the web interface: <http://192.168.0.1>

Q: How do I check the modem firmware version?

A: In the web interface, on the “Status” tab (1)

Q: How do I check my receive signal strength?

A: In the web interface, check the “Status” tab (2)

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



The screenshot displays the iDirect web interface. At the top, there is a navigation bar with icons for Dashboard, Status, Commissioning, Admin, and Logout. The main content area is divided into a left sidebar and a main panel. The sidebar contains 'Status' (with sub-items: Modem Status, Ethernet Status, IP Configuration, Remote Events) and 'Graphs' (with sub-item: Satcom Graphs). The main panel shows 'Modem Status' with four status indicators: Receive, Transmit, Network, and Power. Below this, there are two sections: 'Modem Information' and 'Modem State'. The 'Modem Information' section includes fields for Model Type (EvolutionX1 IndoorRemote), Serial Number, MAC Address, and Software Version (IDS 13.0.0.0 Build 173). A callout bubble with the number '1' points to the Software Version field. The 'Modem State' section is expanded to show 'Rx State' with fields for Downlink Center Freq (11353.532999 MHz), Symbol Rate (8953 ksym/s), Rx Composite Power (-28 dBm), Rx SNR (11.8 dB), CRC 8 (45309), and CRC 32 (24967). A callout bubble with the number '2' points to the Rx SNR field.

Modem Information	Value
Model Type:	EvolutionX1 IndoorRemote
Serial Number:	[REDACTED]
MAC Address:	00:60:43: [REDACTED]
Software Version:	IDS 13.0.0.0 Build 173

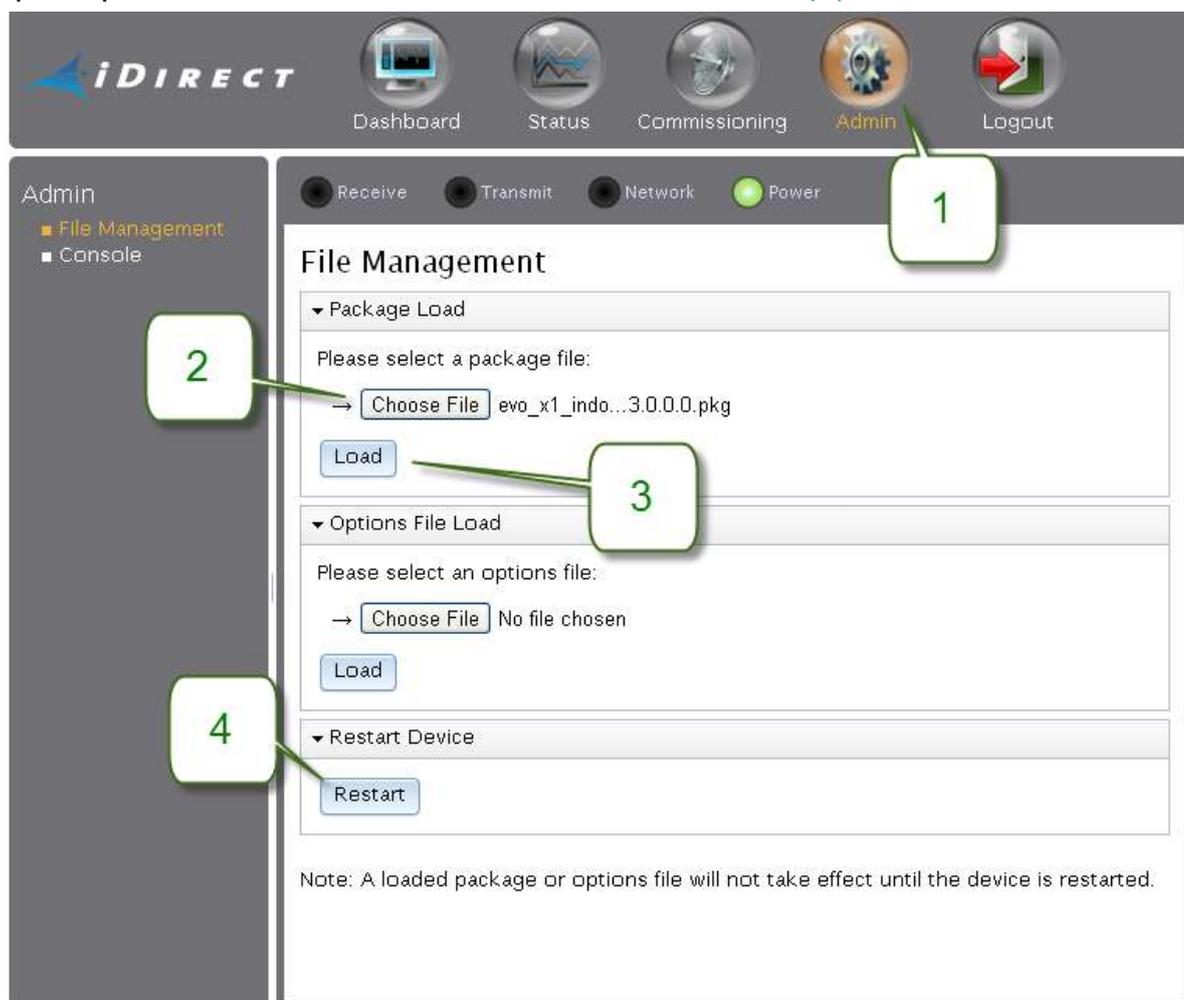
Rx State	Value
Downlink Center Freq:	11353.532999 MHz
Symbol Rate:	8953 ksym/s
Rx Composite Power:	-28 dBm
Rx SNR:	11.8 dB
CRC 8:	45309
CRC 32:	24967

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

A: Do not change the firmware version unless requested by a Bentley Walker technician.

Download the correct version and follow the below steps:

1. Connect 1 PC directly the modem, bypassing any routers
2. Open up the web interface and click the “Admin” tab (1)



3. Click “Choose file” (2)
4. Select the correct firmware file evo_x1_indoor_rmt-x.x.x.x.pkg (included with iSite, under “images” folder)
5. Click “Load” (3)
6. Reset the modem (4)

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