

# iDirect iQ Desktop Installation Guide



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## Contact Information

Bentley Walker Support

[support@bentleywalker.com](mailto:support@bentleywalker.com)

(+44) 02392 311118 (From 07:00 > 19:00 UK Time)

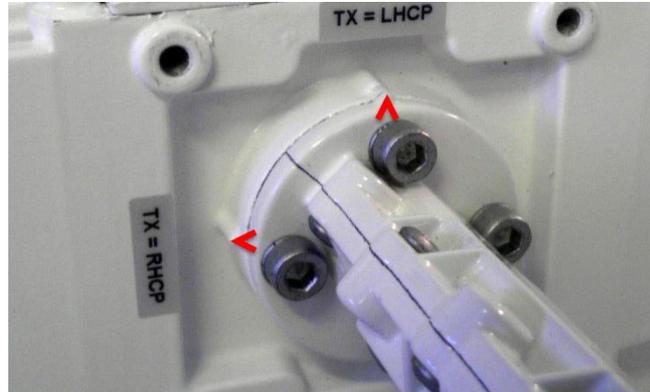
Current Account Status/Performance Testing  
Sales Team

<http://portal.freedomosat.com/> & <http://iraqcip.freedomosat.com/>  
(+44) 02392 311103

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## 1. Equipment Preparation

- Install earth cabling. As dishes are generally installed at height, they pose a risk. You can use any standard earth wire, but it is important to ground the equipment.
- The beam you are on will dictate the polarisation. This must be checked before aligning the dish as per the below markings. Not setting this correctly will result in no visible signal lock.



- RF cable: Many problematic installations can be traced back to shoddy cabling. **RG6/WF100** foam fill, \*copper cored\* cabling is to be used for both transmit and receive. Steel/tin cable is not satisfactory.

Installations using more than **35metres/100ft** should use **WF125** and above **50metres/165ft**, **WF165** should be considered especially for underground runs. Step down F-connectors will be required for these due to the thicker gauge. Leave a single drip loop at the rear of the dish once finished.

It is important that the right quality cable is used in order to achieve the right signal levels. Satellite TV cable (intended for receive only) will not be suitable and transmit issues will likely occur. Good quality cabling will have both a braid and film shielding. Examples below.



Bad – Low loss TV coax cable, insufficient shielding

Bad – Steel core/braid RG6, not suited to sat internet

Good - Quality WF100 Foam Fill



Bad-CT100 (Air Spaced) vs. Good-WF100 (Foam Fill)



Fitting connector – How braid should be trailed/trimmed.

- You will need to specify the modem serial and GPS/location when requesting the activation pin – If the location data configured is wrong, the modem will not lock to the transmit beam.



Unlike older iDirect models, the new iQ modems do not require standalone iSite software to install or upgrade configuration, instead using a browser-based interface. The setup is further simplified by having separate LAN Ports for modem configuration and internet access.

### 3. Accessing and configuring your modem

To access the modem, please connect your laptop/PC directly to LAN2 of the iQ modem ensuring that the below IPs are manually set to the network card:

IP Address: 192.168.0.2

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

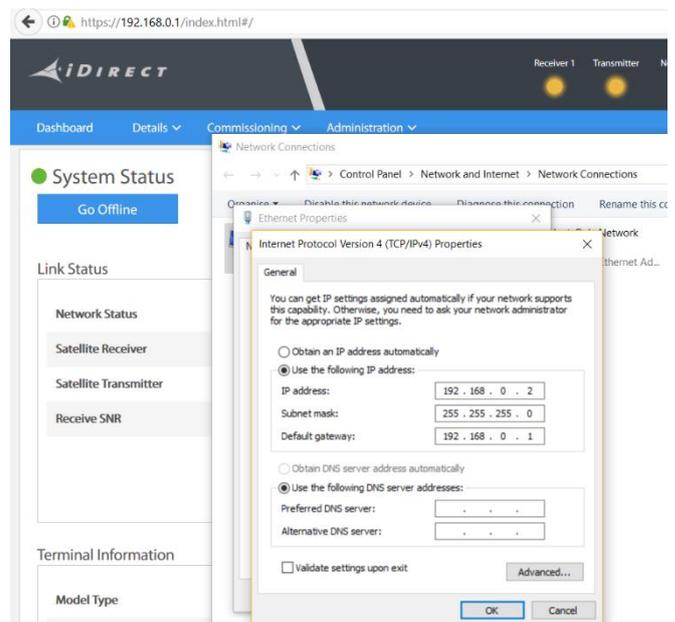
Once set you will be able to access the modem using the below URL:

<https://192.168.0.1/>

Log in credentials:

Username: **admin**

Password: **iDirect** (changes to **bentleys2x** after the option file is loaded)



The modem software should already be loaded to the iQ modem, once you have logged in you will see the software version; please check and ensure that the modem is utilising at least software version 21.0.1.1 – Such information should be visible on the modem's main page. Should this not be the case, please call us, so we can advise further.

## Loading the configuration/Option File:

The option file contains all the information about the satellite to which you are pointing. Without it, you will not see any signal or lock to the satellite.

Once you have submitted an activation form with your preferred service plan and location information, we will send you configuration and pointing details at this stage (along with this guide).

- When logged in via <https://192.168.0.1/> click on the “Administration” link and then ‘Software and Configuration’.
- Click ‘Upload Configuration File’ under ‘Configuration Files’ (falcon.opt by default) and then point to the option file emailed to yourself. If this was sent in a .zip or .rar file you will need to first extract this.

The screenshot displays the iDirect Administration interface for 'Receiver 1'. At the top, there are status indicators for Receiver 1, Transmitter, Network, Power, and Status. The navigation menu includes Dashboard, Details, Commissioning, and Administration. The main content area is titled 'Administration - Software & Configuration'.

**Receiver 1 Configuration:**

Mode	Auto
IF Frequency	1,541.5999990 MHz
Symbol Rate	20,190.0000000 Ksps
Rolloff	5 %

**Manage Software Packages:** Includes a 'Reboot Terminal' button and an 'Upload Software Package' section with a 'Select Files...' button.

Software	Package Name	Creation Date	Version	Action
active1	Evolution Remote	10/05/2017	20.0.0.0-32	Activate Software Package
active0	Evolution Remote	10/05/2017	20.0.0.0-32	Software package is currently active
factory	Evolution Remote	10/05/2017	20.0.0.0-32	Activate Software Package

**Configuration Files:**

Description	Filename	Version	Date	Size	Action 1	Action 2
iDirect manual configuration	downstream_config.json		01/01/1970	371	Upload Configuration File	Download Configuration File
iDirect remote configuration	falcon.opt		01/01/1970	5382	Upload Configuration File	Download Configuration File

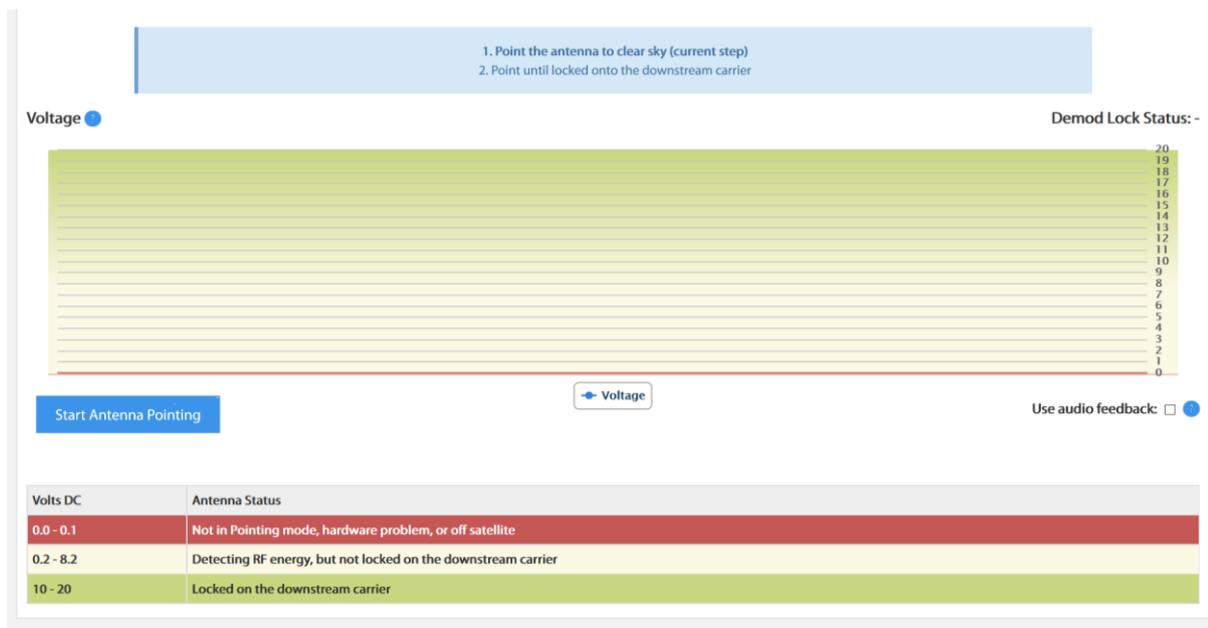
A red arrow points to the 'Upload Configuration File' button for the 'falcon.opt' file.

## 4. Acquiring the satellite signal

If you are aligning the dish yourself, you will need to calculate your estimated dish pointing angles at [www.bentley-walker.com/dishpointer](http://www.bentley-walker.com/dishpointer) selecting 'Hylas 2' or '31E Hylas 2' on [www.dishpointer.com](http://www.dishpointer.com)

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 which you can disregard for this service. Use these values to point the dish in the right direction.

Ideally, you will use a **satellite meter** (such as the Bentley Walker 'Nano') to then find the satellite signal. You are looking to increase the base noise level by 11/12dB. A minimum of 10.5dB is in-place for new activations. Once you have a lock on the signal, open up the web interface and click 'Commissioning' > 'Antenna Pointing'.



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**). Anything below 12volts is generally considered to be noise. A large spike is normal when you hit the satellite.

## 5. Activating the modem

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

At this point you will need to contact Technical Support, details of which are at the top of this guide. You should be able to access a computer and see the satellite modem at this time in case any extra steps are required. **When we have activated the modem, swap back to LAN Port 1 on the modem** as this is the port used for accessing the internet.