



Domestic Installation Manual

Chapter 7A

iQ3 Interconnection Methods

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Chapter 7A – iQ3 Interconnection Methods

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7.0 iQ3 - Interconnect Overview

The following section describes the process for connecting an iQ3 to the customer's equipment.

The Satellite & CABLE iQ3, is a hybrid box capable of broadcast and internet delivery. When connected to the internet via WiFi or Ethernet, the iQ3's full potential will be unlocked further enhancing the customer's viewing experience.

The iQ3 also features one HDMI output with the ability to set it's HD output resolution to best match the HD TV's native resolution.

The iQ3 also features optional Optical or Coaxial Digital Audio Outputs for obtaining improved quality sound when connected to a home cinema system.

The operation of the Remote Control Unit utilises Bluetooth technology.

For satellite customers, there is also the capability to scan local terrestrial channels (FTA) directly into the iQ3.

7.1 For Your Safety iQ3 Precautions

The iQ3 has been manufactured to meet international safety standards. To obtain the best results and operate the iQ3 safely it is important that you read the safety instructions below.

If you have any doubts about the installation, operation or safety of the iQ3, please consult with your Service Provider.

WARNING!

Remember that contact with 240V AC power can be lethal or can cause a severe electric shock. To avoid this risk:

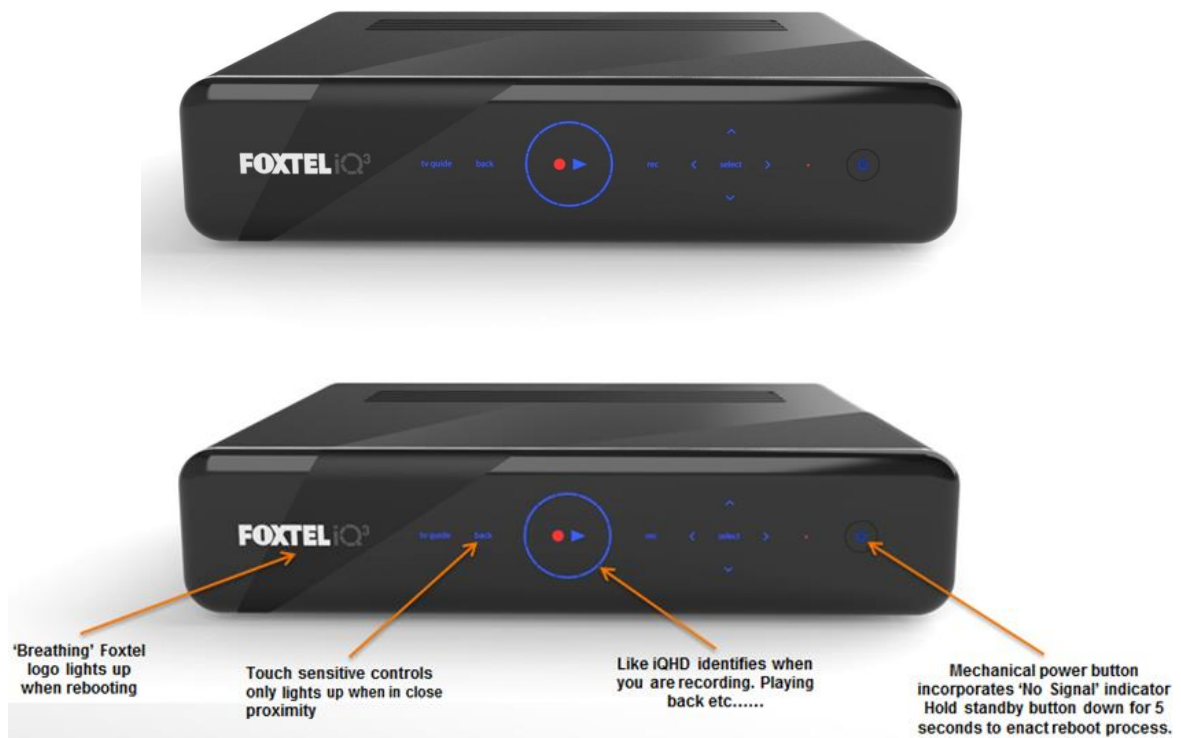
- ⚡ Never remove the top cover from the iQ3 as there are high-voltage live parts inside. There are no user-serviceable parts inside the iQ3.
- ⚡ Make sure all electrical connections are safe and secure.
- ⚡ Do not connect any of the equipment (iQ3, TV etc.) to the power supply until you have properly connected all the other leads.
- ⚡ The iQ3 is designed for use only with the supplied external power supply adaptor. The external power supply meets the required Australian standards and should only be plugged into a power source that provides 220 – 240 volts.
- ⚡ After connecting all other equipment, connect the 12Volt lead to the iQ3 and then insert the external power supply adaptor into the power point.
- ⚡ Disconnect the iQ3 from the power supply before you disconnect any other equipment from it's rear panel (i.e. by removing the external power supply adaptor from the power point not by removing the 12 Volt lead from the iQ3. Therefore you must install the iQ3 near the power point, which should be easily accessible.).
- ⚡ Never push anything into the holes, slots or other openings of the iQ3 case.

The following precautions should be adhered to when handling the iQ3:

- Do not place the iQ3 in an unventilated cabinet or on top of a unit, which emits heat.
- If the iQ3 is placed with other items of audio/video equipment in a cabinet, make sure **all** items have sufficient space all around them, to allow ventilation and prevent overheating.
- Do not stack items of audio/video equipment in a crowded space.
- Never stand the iQ3 on soft furnishings or carpet.
- Place the iQ3 onto a hard smooth surface.
- Do not cover any ventilation holes (never install the iQ3 on its side).
- Do not pick up or otherwise move the iQ3 while it is connected to the mains supply. If you want to move the iQ3, first disconnect it, and then wait at least 30 seconds before continuing.
- To ensure a free flow of air around the iQ3, allow as an absolute minimum
 - 3cm** clearance on sides and
 - 6cm** clearance on top of the iQ3.

Note: the recommended clearances are **10cm** clearance on sides and **15cm** clearance on top of the iQ3.

7.2 Front Panel - iQ3



Note There is no smart card slot as the iQ3 has a Simcard inserted in the rear.

7.3 Rear Panel - iQ3



Satellite iQ3



CABLE iQ3

7.4 Simcard

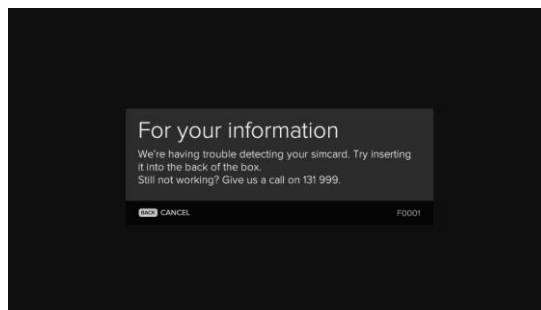
The iQ3 is delivered from the factory with a paired Simcard.

The Simcard is already inserted into the iQ3's Simcard slot and has a blank sticker placed over the top of the slot. Refer to below image.

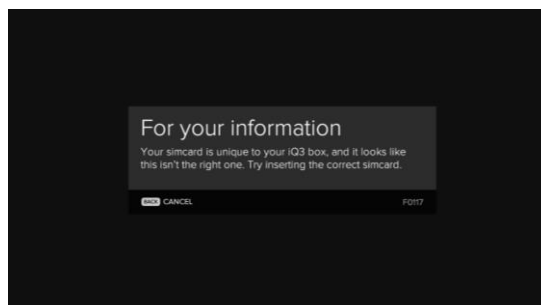


The correct combination of Simcard and iQ3 **MUST** be used at every installation. If there is an incorrect Simcard pairing, it will impact future delivery of services to the iQ3. If the Simcard has been removed and is lost, the iQ3 should be swapped out.

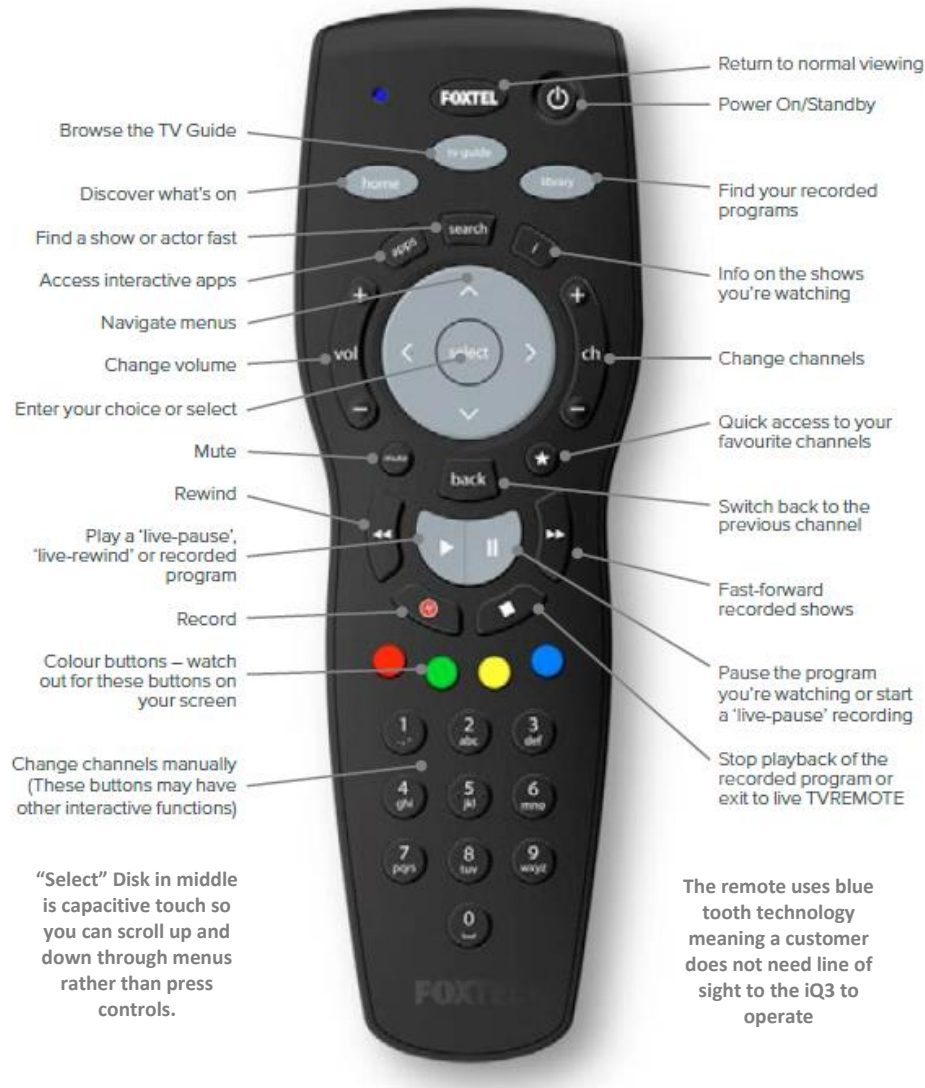
DO NOT remove the blank sticker or Simcard under any circumstances as removal of the Simcard will produce an F0001 Error Message.



Any attempt to use a Simcard other than the one provided with the iQ3 will result in an F0117 Error Message.



7.5 Remote Control



7.6 Remote Control Unit Pairing

The iQ3 Remote Control Unit uses blue tooth technology and needs to be "paired". The iQ3 can only pair with one iQ3 Bluetooth remote at any given time. Pairing a subsequent Remote Control will un-pair the previous one. Once paired, the Remote Control will only work with that iQ3.

To complete the Remote Control pairing process, follow these steps:

1. Insert the supplied batteries into the back of the Remote Control.



- The Remote Control is then held to the front of the iQ3 until the proximity sensor lights up.

The iQ3 is now placed into pairing mode.

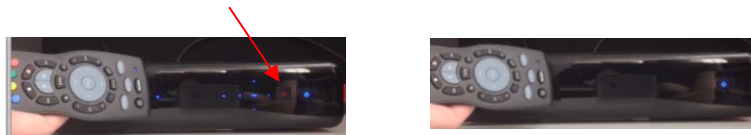


- Now press any button on the Remote Control.

The Remote Control's light will flash blue then stop once it detects the iQ3.



- The iQ3's front light flashes red once it has found the Remote Control and will stop flashing once pairing is complete.



- Now point the Remote Control towards the iQ3 and press any button to confirm that it's operational.

Notes:

- The iQ3 Remote Control will not work on any other Foxtel STU.*
- Legacy iQ Remote Controls will work on an iQ3 for available button functions mapped to that Remote Control.*

7.6.1 Re-pairing Remote Control Unit to another iQ3

If the Remote Control needs to be re-paired to another iQ3, follow the steps below.

- Locate the re-pair button inside the battery cover
- Press the re-pair button which will clear the existing pairing
- Then follow the pairing process again.

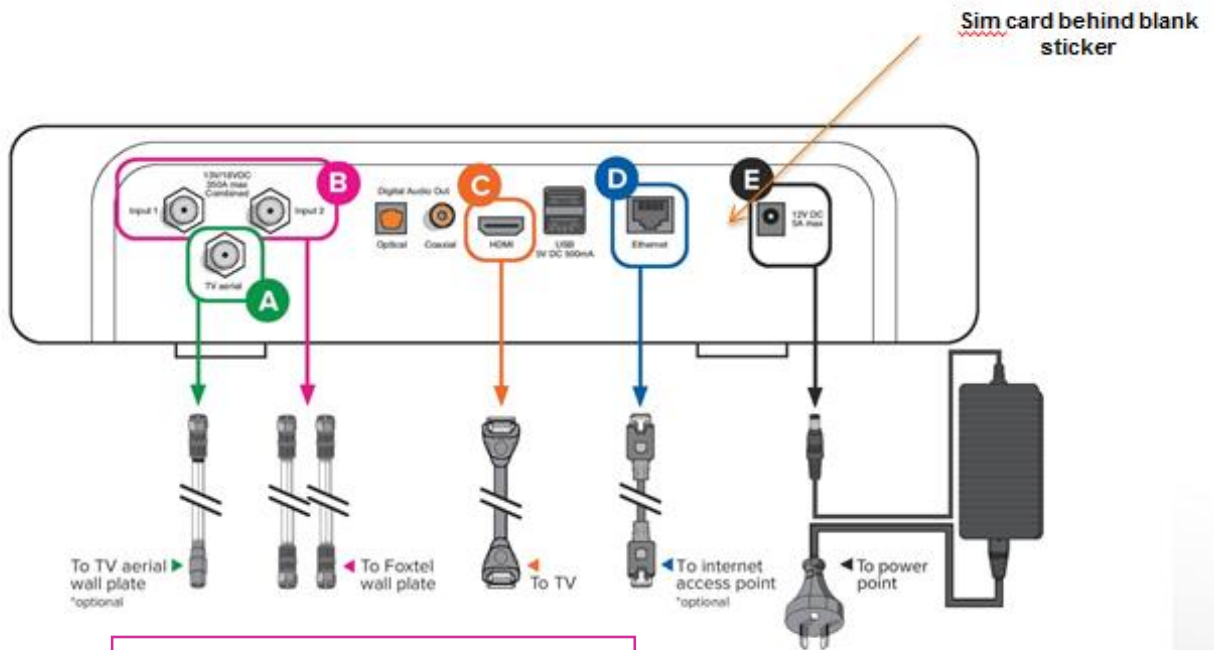
Re-pair button



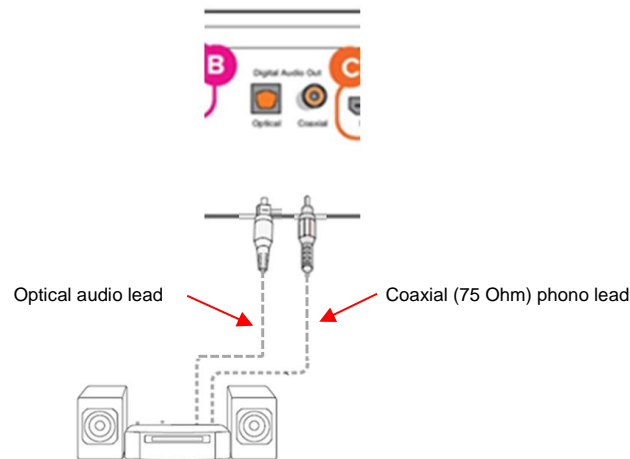
7.7 iQ3 – Interconnection

Interconnection of the iQ3 to the customer’s equipment should be done as shown in the below interconnect diagrams.

7.7.1 Satellite iQ3



MDU LITE installations:
Fit a 2 way splitter with 1 leg power pass from the outlet to the iQ3 Inputs. The splitter’s power pass port **MUST** be connected to Input 1.



Digital Audio Out Options

Where a Stereo Surround System is setup, provide the customer with a Digital Audio interconnection e.g.

Optical- Connect optical audio lead to customer’s digital optical audio (SPDIF) input OR

Coaxial- Connect coaxial (75 Ohm) phono lead to customer’s digital coaxial audio (electrical SPDIF) input

7.7.1.1 Satellite Wallplate Signal Quality

Ensure all eight test satellite transponder frequencies as shown below are measured at the iQ3 (remove RF leads from Input 1 and Input 2) with an approved digital meter.

Satellite	Transponder	Downlink Centre Freq	Polarity	10.7 L.O	Symbol Rate	FEC
C1	T14	12438.0	H	1738.0	27800	3/4
C1	T20	12689.0	H	1989.0	27800	3/4
D3	T10	12094.0	V	1394.0	27800	3/4
D3	T12	12177.0	V	1477.0	27800	3/4
D3	T14	11762.0	H	1062.0	27800	3/4
D3	T18	11928.0	H	1228.0	27800	3/4
D3	T22	12094.0	H	1394.0	29455	3/5
D3	T24	12177.0	H	1477.0	27800	3/4

The signal levels measured must comply with the RF levels in the following table and be recorded on the Order form, this will give a good indication of the reception performance of all satellite transponders.

All readings below are based on clear sky conditions (no cloud cover).

Reading Type	Min	Max	Pre	Post	Min
Digital Channel Power (DCP)	58dBuV	79dBuV			
Bit Error rate (BER) DVB-S (QPSK)			Viterbi <2E-4	Viterbi <2E-7	
Bit Error rate (BER) DVB-S2 (8PSK)			LDPC <1E-2	LDPC <1E-7	
Modulation Error Ratio (MER) DVB-S & DVB-S2					12.5dB

Notes:

- All digital levels are RMS voltage or DCP. DCP measured values may be +/- 2 dB from the levels listed due to test instrument accuracy.
- Due to the higher DCP levels received on the Optus D3 satellite, in the interim Foxtel will allow the upper limit of **81dBuV +2dB for Optus D3 services at the wallplate.**
- LDPC - Low Density Parity Checkcode

If any wallplate performance is found to be substandard during a customer installation, troubleshooting will be required to identify the source of the fault.



7.7.2 FTA Connectivity

If the customer is receiving their FTA TV reception via an external FTA aerial, it is expected the Customer Service Technician provides FTA connectivity to the iQ3.

The exceptions are:

1. where an internal antenna (rabbit ears) is used. In this instance do not connect to the iQ3 as Foxtel does not consider internal antennas as a reliable FTA service.
2. the customer has not given permission to interfere with their FTA connection.
3. if customer has FTA connected to another device and wishes to retain this connection i.e. T-Box
4. if FTA readings are below acceptable levels (see below)

If any of the above situations occur, record relevant details on the Foxtel Work Order.

To provide FTA connectivity to the iQ3, follow the steps below:-

- Measure the FTA signal levels directly from the outlet.

Where the measured FTA signal levels at the outlet are found to be:

- **below** 48dBuV ie. 50dBuV-2dB (DVB-T) or
- **below** 25dB MER or
- **greater than** Pre Viterbi $<8E-4$ BER & Post Viterbi $<2E-7$ BER,

In this instance **do not** connect the FTA to the iQ3 let the customer know of any FTA problems (eg low DCP, low MER).

Record the FTA signal levels and any FTA problems on the Foxtel Work Order under the Comments section.

- Where the signal levels meet specification requirements as shown in tables 7.7.2.1 (FTA Wallplate Signal Quality), completely remove the customer's existing RF lead and fit a new RG6 RF lead directly between the iQ3's TV Aerial input and FTA outlet as shown below.
- The FTA RF Lead must be Foxtel approved RG6 Tri Shield and have a F Male compression connector at the iQ3 end and at the FTA outlet end have either a compression PAL Male connector or compression F connector fitted with a PAL Male adaptor.
Note whilst not mandatory, preference is given to RF Leads that are fitted with compression connectors without the use of screw on adaptors
- All equipment used must be approved on the Foxtel Installer Product List.
- Re-measure the FTA signal levels from the end of the new RG6 RF lead and record on the Foxtel Work Order.
- The customer's existing RF lead **MUST** be returned to the customer in case it is required by the customer in the future.



- At the completion of providing the FTA connectivity to the iQ3, **scan in the local channels** as outlined in section 7.15 Terrestrial (FTA) Channel Scan (Satellite only). **Access to the local channels will not become available in the iQ3 TV Guide until after activation.**

Notes:

- *The picture quality received off the local FTA antenna is dependent on the performance of the customer's FTA aerial and may be subject to break up or blocking if the customer's FTA aerial is not up to scratch.*
- *If the FTA aerial picks up more than one source for a channel number, it will provide the version with the best signal strength.*
- *The customer can change this if they prefer through the Terrestrial Channel Setting, Local Channel Sources menu screens.*
- *In overlap areas ie. Gold Coast and Sunshine Coast, Foxtel are only allowed to broadcast the metropolitan version of local channels and the customer will not be able to tune their preferred regional channels into the iQ3.*

7.7.2.1 FTA Wallplate Signal Quality

The FTA signal levels (DVB-T) measured at any system outlet (wallplate) must comply with the following tables.

Digital signal quality at the system outlet (wallplate)

Broadcast System Type	MER	BER	
	Minimum dB	Pre-Viterbi	Post-Viterbi
DVB-T	25	<8E-4	<2E-7

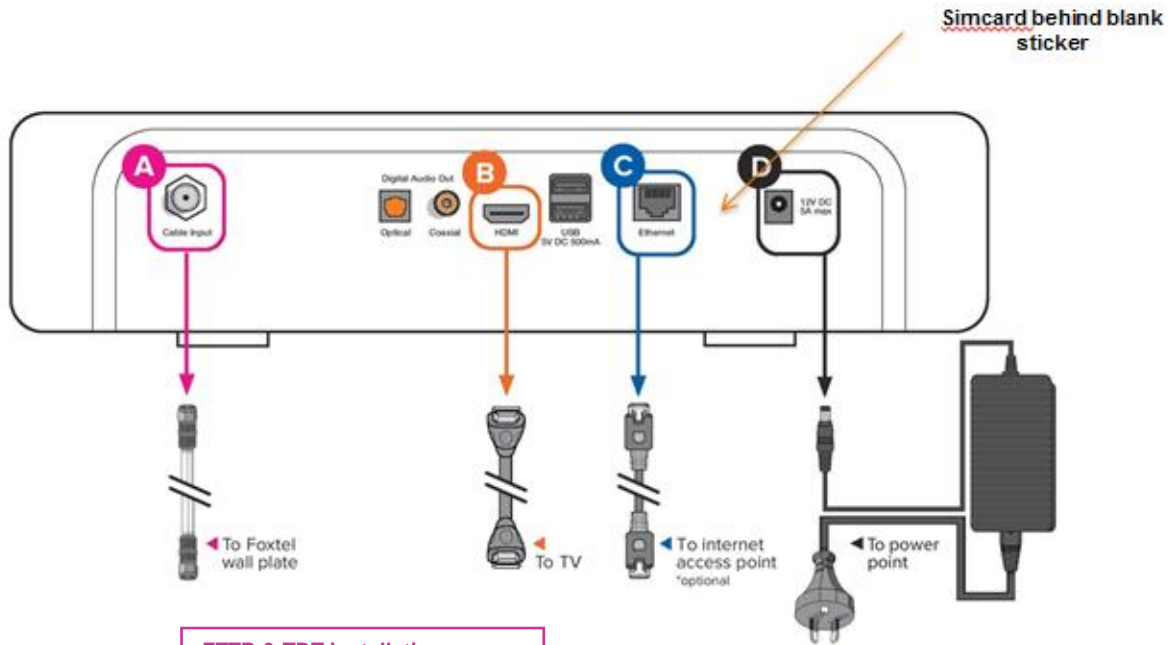
System Signal Level

Broadcast System Type	Min dBuv	Max dBuv
DVB-T	50	80

Note:

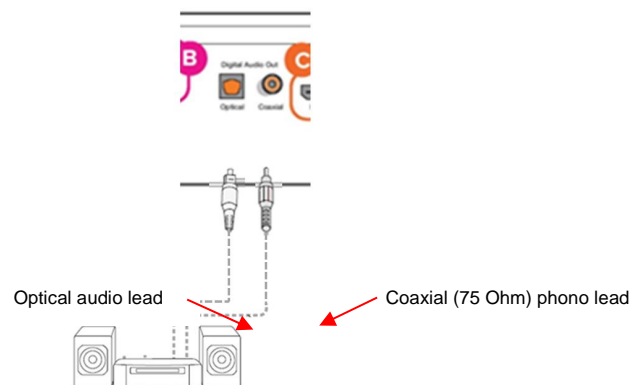
- *All digital levels are RMS voltage or DCP. DCP measured values may be +/- 2 dB from the levels listed due to test instrument accuracy.*

7.7.3 CABLE IQ3



FTTP & TDT installations:

Where required fit a splitter at the outlet to provide dedicated Foxtel and FTA TV outlets



Digital Audio Out Options

Where a Stereo Surround System is setup, provide the customer with a Digital Audio interconnection e.g.

Optical- Connect optical audio lead to customer's digital optical audio (SPDIF) input OR

Coaxial- Connect coaxial (75 Ohm) phono lead to customer's digital coaxial audio (electrical SPDIF) input

IMPORTANT NOTES:

- 1 A HDMI connection will produce no picture if the level of **HDCP** support between the display and the iQ3 is not sufficient. Trouble shooting the connection between the IQ3 & TV maybe required. In some instances you may have to refer back to the TV manufacturer for support. See also section 7.8.
- 2 Where a HDMI lead is connected directly to the customer's surround sound system and the surround system is directly connected to the customer's TV via a HDMI lead, then there is no requirement to connect a S/PDIF or TOSLINK lead to the iQ3. The iQ3's S/PDIF Digital Audio Output & HDMI Digital Audio Output settings must be set to AC3. With this set up there is no volume control from the iQ3's HDMI Digital Audio Output. See also section 7.11.
- 3 The iQ3 currently will not support audio through some if not all HDMI Audio Return Channel systems (ARC). In this instance connect the iQ3 directly to the TV via HDMI.

7.7.4 CABLE Wallplate Signal Quality

Ensure all eight digital test channels as shown below are measured at the iQ3 (remove RF lead from Cable Input) with an approved digital meter.

Digital Channel	Centre Frequency
	(MHz)
QAM 14	207
QAM 18	239
QAM 25	295
QAM 57	554
QAM 67	618
QAM 68	626
QAM 76	690
QAM 82	738

The signal levels measured must comply with the RF levels as shown below and recorded on the Order form.

Wallplate Levels		Signal Levels		MER	BER (pre FEC)
		minimum	maximum		
64QAM Channels	1, 2 & all amplified outlets	-7 dBmV	+5 dBmV	greater than 28.5 dB	better than 1×10^{-6}
	3 outlets not amplified	-10 dBmV			
256QAM Channels	1, 2 & all amplified outlets	-3 dBmV	+9 dBmV	greater than 34.5 dB	(1.0E-6)
	3 outlets not amplified	-6 dBmV			

Acceptable Wallplate Levels and Signal Quality

Note: Wallplate BER and MER performance thresholds are not accurate at levels around -5dBmV and less.

If any wallplate performance is found to be substandard during a customer installation, troubleshooting will be required to identify the source of the fault.



7.7.5 FTTP Wallplate Signal Quality

Ensure all eight digital test channels as shown below are measured at the iQ3 (remove RF lead from Cable Input) with an approved digital meter.

Digital Channel	Centre Frequency
	(MHz)
QAM 14	207
QAM 18	239
QAM 25	295
QAM 57	554
QAM67	618
QAM 68	626
QAM 76	690
QAM 82	738

The signal levels measured must comply with the RF levels as shown below and recorded on the Order form.

Wallplate Levels	Signal Levels		MER	BER (pre FEC)
	minimum	maximum		
64QAM Channels	-10 dBmV	+5 dBmV	greater than 28.5 dB	better than 1 x 10 ⁻⁶
256QAM Channels	-6 dBmV	+9 dBmV	greater than 34.5 dB	

Acceptable Wall plate Signal Levels

Note: Wall plate BER and MER performance thresholds measured by a digital level meter are not accurate at levels around -5dBmV and less.

If any wallplate performance is found to be substandard during a customer installation, troubleshooting will be required to identify the source of the fault.



7.7.6 TDT Wallplate Signal Quality

Ensure all eight TDT QAM Test Frequencies as shown below are measured at the iQ3 (remove RF lead from Cable Input) with an approved digital meter.

TDT Channel Number	TDT QAM Test Frequencies 03
	(MHz)
7	298
8	306
10	322
11	330
13	346
14	354
16	370
22	418

Ensure all eight TDT QAM Test Frequencies measured at the wallplate comply with the RF levels in the following table. This will give a good indication of the reception performance of all satellite transponders.

Modulation type	Wallplate Level	Post-Viterbi BER	MER (minimum)
64 QAM	* -4 to +10 dBmV	<2E-7	30 dB
256 QAM	* 0 to +14 dBmV	<2E-7	36 dB

If any wallplate performance is found to be substandard during a customer installation, troubleshooting will be required to identify the source of the fault. Internal customer cabling faults are to be reported to Foxtel for escalation to the Customer.

Notes:

- * Allows for an external two-way splitter at the wallplate
All digital levels are RMS voltage or Digital Channel Power. Digital Channel Power measured values may be +/- 2 dB from the levels listed due to meter accuracy.



7.7.6.1 Changing the Frequency and Region I.D

To change the Frequency and Region I.D. follow these instructions.

Each step will navigate you through the Foxtel Digital Guide to the required screen.

Cable TDT

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**

Advanced Settings

Picture Settings	HDD Status
Audio and Language Settings	Hardware Details
Bluetooth Remote Control Settings	Licences
System Details	Signal Test

⌂ CLOSEFOXTEL

- Press **0611** buttons (Installer PIN code) then press the **Select** button, the **Installer Setup** will appear

Advanced Settings

Picture Settings	HDD Status
Audio and Language Settings	Hardware Details
Bluetooth Remote Control Settings	Licences
System Details	Signal Test
Installer Setup	

⌂ CLOSEFOXTEL

- Select **Installer Setup**



- Select **EPG Stream**
- You are now required to change the Frequency (MHz) to **346** and the Region I.D. to **03** as shown below



Press the **Back** button to return to **Settings** menu or **Foxtel** button to return to normal Foxtel viewing

7.8 High-bandwidth Digital Content Protection (HDCP)

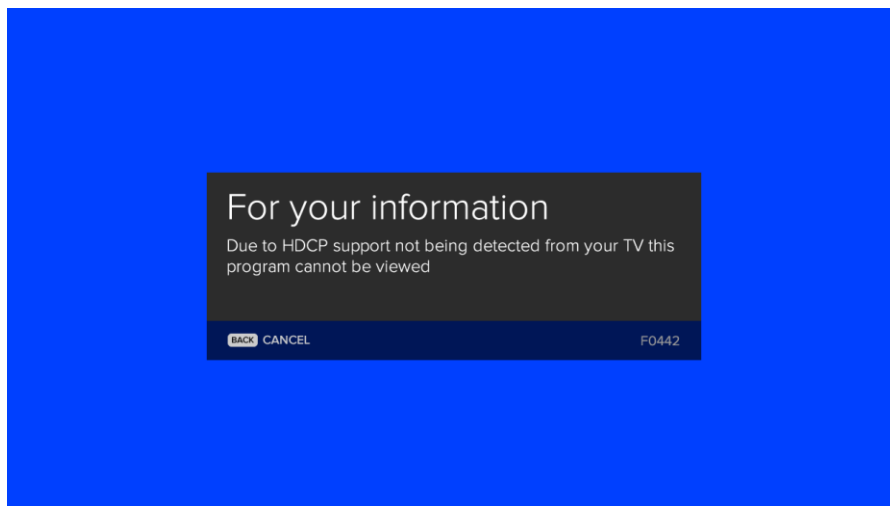
HDCP is a specification for protecting digital entertainment content which is transmitted via HDMI interfaces. It is not 'copy protection' or even 'copy restriction'.

HDCP will not prevent consumers from saving or time shifting their favourite programmes.

By design the HDCP protocol couples a single transmitter with a single receiver and each authorising the other through a set of keys.

Any new HD TV purchased should have a digital HDCP compatible input.

Upon connection and activation of the iQ3 via HDMI interface, the following screen will appear if it is detected that the customer's HD TV does not have a digital HDCP compatible input **when viewing a copy protected Foxtel channel.**



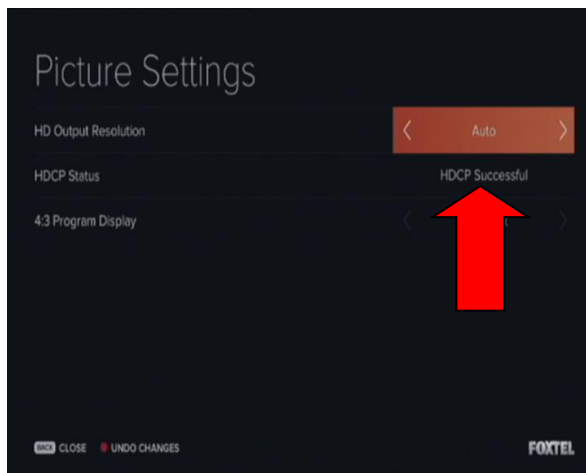
In this scenario, advise the customer that their TV HDMI input is not compatible with the iQ3 and cannot be connected.

7.8.1 Important Tip to confirm if customer's HD TV supports HDCP

To view the HDCP Status, follow these instructions.
Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Select **Picture Settings**
- View the **HDCP Status**
- Press the **Back** button to return to **Advanced Settings** menu or **Foxtel** button to return to normal Foxtel viewing

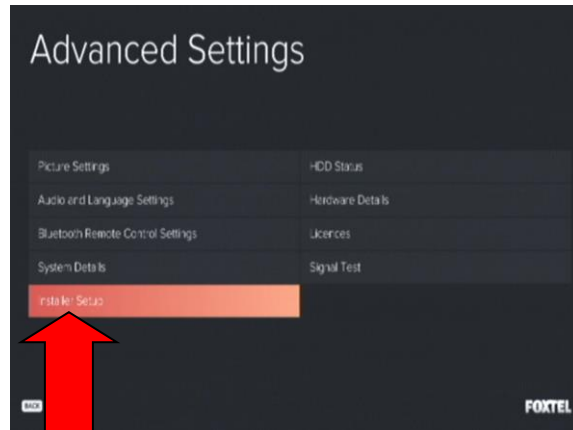


In this scenario the customer's HD TV has a digital HDCP compatible input.

7.9 Installer Menu screens

To correctly setup the iQ3, follow these steps.

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Press **0611** buttons (Installer PIN code) then press the **Select** button, the **Installer Setup** will appear



Do not give the Installer PIN code to the customer

Note the default Parental Control PIN code is **1234**

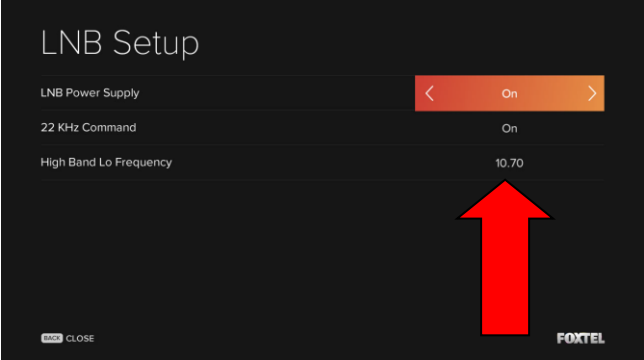
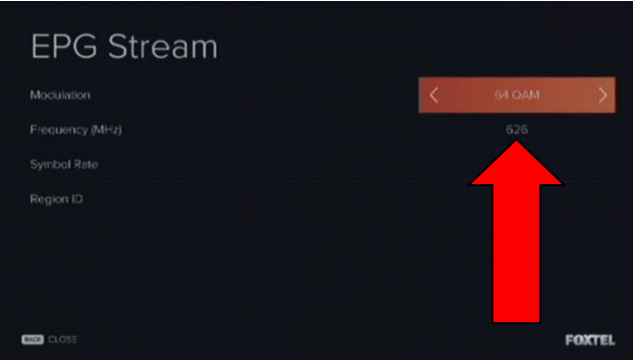
The following menu screens can be accessed by the Customer Service Technician using the Installer PIN code:

Satellite	CABLE
<ul style="list-style-type: none"> ▪ LNB Setup - To change the LNBF Local Oscillator frequency ▪ Home Transponder- To view the Default Transponder settings ▪ Full System Reset – To delete Library recordings, local channels and WiFi settings 	<ul style="list-style-type: none"> ▪ EPG Stream - To view the EPG Stream settings ▪ Full System Reset – To delete Library recordings and WiFi settings



7.9.1 Platform Menu (Satellite/CABLE)

The following menu screens covers both the Satellite and CABLE platforms:

Satellite	CABLE
<p>LNB Setup</p> <p>To change the LNB Local Oscillator frequency, follow these instructions. Each step will navigate you through the menus to the required screen.</p> <p>Fast track through the menu screens</p>  <ul style="list-style-type: none"> ▪ Press the Home button ▪ Arrow right & select Settings menu ▪ Select Advanced Settings ▪ Press 0611 buttons (Installer PIN code) then press the Select button, the Installer Setup will appear ▪ Select LNB Setup ▪ Scroll down to High Band LO Frequency ▪ Change the LNB's Local Oscillator frequency ▪ Press the Back button to return to Installer Setup menu or Foxtel button to return to normal Foxtel viewing 	<p>EPG Stream</p> <p>To view the EPG Stream settings, follow these instructions. Each step will navigate you through the menus to the required screen.</p> <p>Fast track through the menu screens</p>  <ul style="list-style-type: none"> ▪ Press the Home button ▪ Arrow right & select Settings menu ▪ Select Advanced Settings ▪ Press 0611 buttons (Installer PIN code) then press the Select button, the Installer Setup will appear ▪ Select EPG Stream ▪ View the EPG Stream settings ▪ Press the Back button twice to return to Installer Setup menu or Foxtel button to return to normal Foxtel viewing

7.9.2 Home Transponder (Satellite Only)

To view the Default Transponder settings, follow these instructions. Each step will navigate you through the menus to the required screen.

Fast track through the menu screens



- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Press **0611** buttons (Installer PIN code) then press the **Select** button , the **Installer Setup** will appear
- Select **Home Transponder**
- View **Frequency (GHz)**
- Press the **Back** button to return to **Installer Setup** menu or **Foxtel** button to return to normal Foxtel viewing


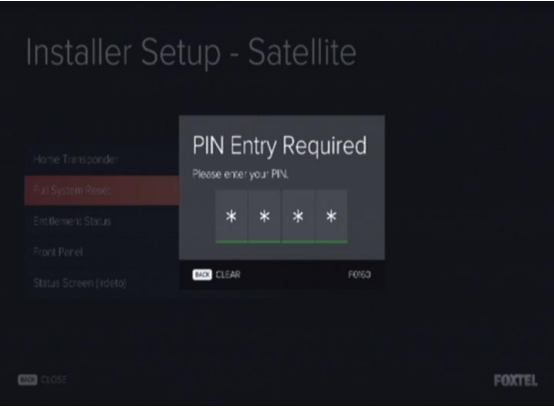
7.9.3 Full System Reset (Satellite/CABLE)

To complete a full system reset on the iQ3, follow these instructions.

Each step will navigate you through the menus to the required screen.

Note: This function will clear Library recordings, local FTA channels (Satellite only), WiFi settings and RCU pairing. You must only use this option after the customer has been made fully aware that all Library recordings, local FTA channels, WiFi settings and RCU pairing will be lost and the local FTA channels will need to be re-scanned and both WiFi and RCU pairing set up once again.

Fast track through the menu screens

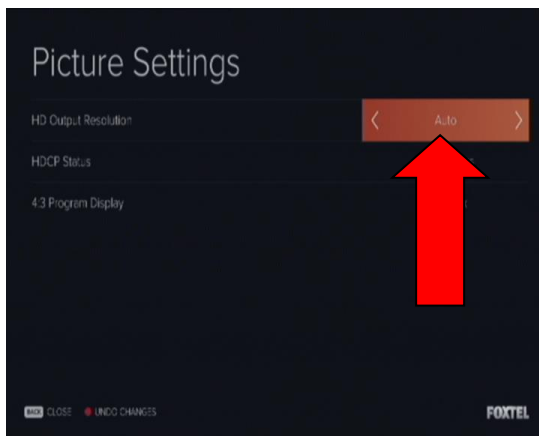
Satellite/Cable
<ul style="list-style-type: none"> ▪ Press the Home button ▪ Arrow right & select Settings menu ▪ Select Advanced Settings ▪ Press 0611 buttons (Installer PIN code) then press the Select button, the Installer Setup will appear ▪ Select Full System Reset then press Select to confirm the reset

<ul style="list-style-type: none"> ▪ Enter the default Parental Control PIN code 1234 to activate the reset

<ul style="list-style-type: none"> ▪ At the completion of the reset, the iQ3 will return to normal Foxtel viewing

7.10 HD Output Resolution settings

To view or change the HD Output Resolution settings, follow these instructions. Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Select **Picture Settings**
- Select **HD Output Resolution** required
- Press the **Back** button to return to **Advanced Settings** menu or **Foxtel** button to return to normal Foxtel viewing



HD Output Resolution settings – **Auto/576P/720P/1080P/1080i/**

Set HD Output Resolution to best match the TV's native resolution.

“**Auto**” setting uses the HDMI connection to the TV to ask the TV what is its preferred resolution.

7.11 Surround Sound & Digital Audio

Where the customer has a surround sound system and iQ3 is being installed, the Customer Service Technician **MUST** supply and where possible connect the correct digital audio lead to the customer's sound system.

Note: S/PDIF TOSLINK Optical & S/PDIF Coaxial leads are the type of cables used to connect directly from the iQ3 to a surround sound system in order to receive Digital Audio.

Where required the installation of the digital audio lead is to be carried out in accordance with sections 7.7.1 or 7.7.3.

7.11.1 Digital Audio Delay (Satellite/Cable)

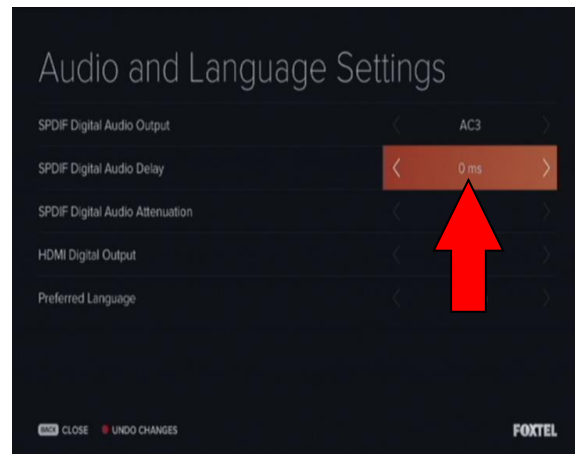
A TV display device which has digital processing may exhibit “lip sync” problems. Small video delays are introduced during video processing, and can result in audio leading video by several frames (80 milliseconds or more). In this case, speech is heard before lips are seen to move.

To compensate for a “lip sync” delay, follow the instructions below.

Important Note: *The Digital Audio Delay option only adjusts S/PDIF (TOSLINK Optical and Coaxial) outputs of the iQ3. To adjust the Digital Audio Delay the iQ3 must be connected to a surround sound system using S/PDIF.*

Fast track through the menu screens

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Select **Audio & Language settings**
- Scroll down to **SPDIF Digital Audio Delay**
- Arrow right to adjust the Audio Delay as required
- Press the **Back** button to return to **Advanced Settings** menu or **Foxtel** button to return to normal Foxtel viewing



7.11.2 Digital Audio Attenuation (Satellite/Cable)

Where a HDMI lead or S/PDIF TOSLINK Optical or S/PDIF Coaxial lead is connected to the customer's surround sound system, the audio level between PCM channels and AC-3 channels may be inconsistent.

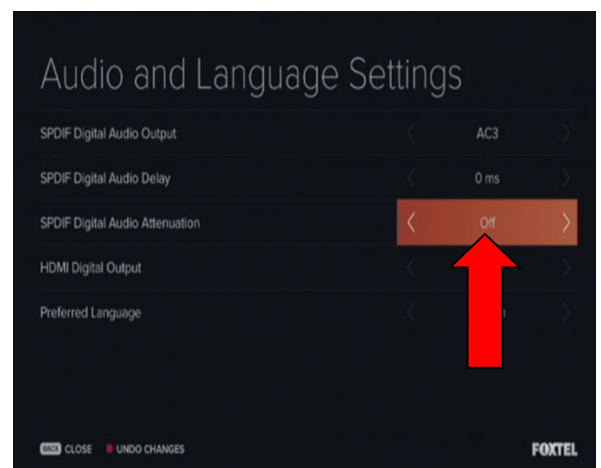
The use of the S/PDIF Digital Audio Attenuation feature increases consistency of audio levels between PCM and AC-3 channels on digital audio outputs (HDMI, S/PDIF).

To compensate for audio level inconsistencies between PCM and AC-3 channels, follow the instructions below.

Each step in turn will navigate you through the menus to the required screen.

Fast track through the menu screens

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Select **Audio & Language settings**
- Scroll down to **SPDIF Digital Audio Attenuation**
- Arrow right to adjust the Audio Attenuation as required
- Press the **Back** button to return to **Advanced Settings** menu or **Foxtel** button to return to normal Foxtel viewing



Important Notes:

- Where a HDMI lead is connected directly to the customer's surround sound system and the surround system is directly connected to the customer's TV via a HDMI lead, then there is no requirement to connect a S/PDIF or TOSLINK lead to the iQ3.
- The iQ3's S/PDIF Digital Audio Output & HDMI Digital Audio Output settings must be set to AC3
- With this set up there is no volume control from the iQ3's HDMI Digital Audio Output.
- The iQ3 currently will not support audio through some if not all HDMI Audio Return Channel systems (ARC). In this instance connect the iQ3 directly to the TV via HDMI.

7.12 Resetting the iQ3 (Power Cycle)

If the iQ3 needs to be reset, press and hold the **Standby** button down for at least five seconds.



Mechanical power button
incorporates 'No Signal' indicator
Hold standby button down for 5 seconds to
enact reboot process.

Initialisation of the iQ3 is complete when the **Standby** button lights up blue and the iQ3 turns itself on.

If the iQ3 has not successfully reset:

- Remove power from the iQ3 and wait 30 seconds.
- Then reconnect the power.
- Initialisation of the iQ3 is complete when the **Standby** button lights up blue and the iQ3 turns itself on.

Important Notes:

- At the completion of the iQ3 reset (power cycle), the iQ3 will default to Sky News channel 601 which is an encrypted channel
- Should you require to view a non encrypted channel prior to activating the service, then tune to TVSN Shopping channel 176
- If you cannot receive the above, recheck signal levels at the wallplate and/or reconfirm the ODU alignment

7.13 iQ3 Forced Download

You are required to update the software running on the iQ3 prior to activating the service.

This can be done by firstly inserting a USB Flash Drive with the latest software into any of the 3 available USB slots which are at the back and side of the iQ3. Then reset (power cycle) the iQ3 by pressing and holding the **Standby** button down for at least five seconds.



During download the following screen will be evident:



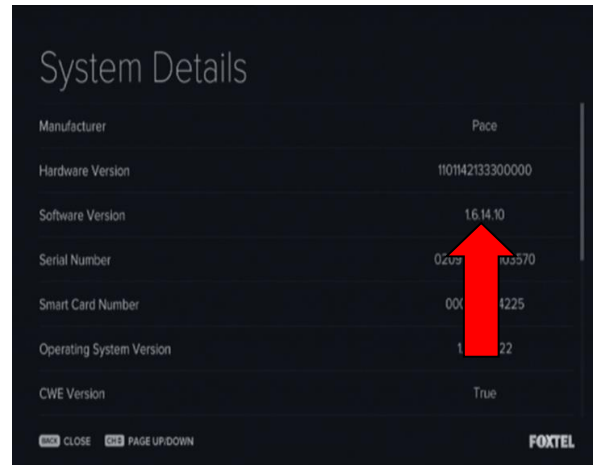
Once the software has updated and the iQ3 has completed the reset (power cycle), remove the USB Flash Drive.

Confirm the software version loaded onto the iQ3 by navigating through to the Hardware Details screen.

Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Advanced Settings**
- Select **System Details**
- View the Software Version
- Press the **Back** button to return to **Advanced Settings** menu or **Foxtel** button to return to normal Foxtel viewing


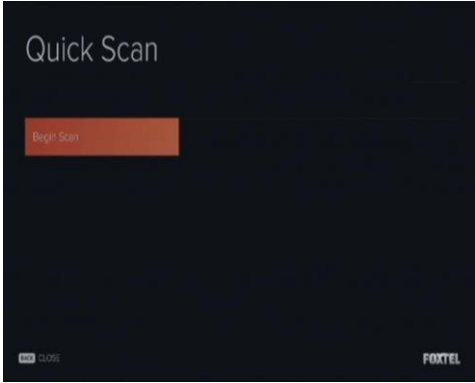



7.14 Terrestrial (FTA) Channel Scan (Satellite only)

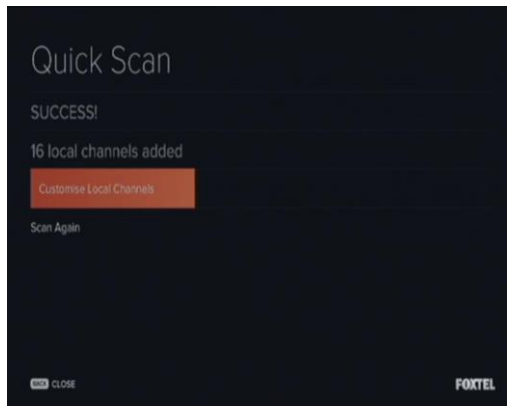
To receive local channels from the external FTA aerial, ensure the iQ3 is connected to the FTA aerial wallplate.

Each step will navigate you through the menus to the required screen.

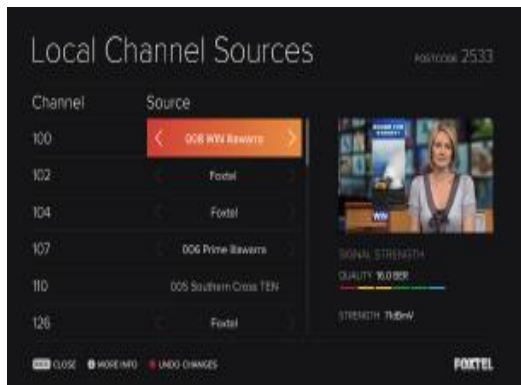
Fast track through the menu screens

Satellite	
<ul style="list-style-type: none"> ▪ Press the Home button ▪ Arrow right & select Settings menu ▪ Select Terrestrial Channels ▪ Select Quick Scan 	
<ul style="list-style-type: none"> ▪ Then select Begin Scan 	
<ul style="list-style-type: none"> ▪ The following screen will appear 	

- Once the scan is complete the following screen will appear



- Select **Customise Local Channels** to view the list of local channels and or change the source for a channel number where more than one source has been picked up



- At the completion of viewing the list of local channels and or changing the source for a channel number, press **Foxtel** button to return to normal Foxtel viewing

7.14.1 Local Channel Sources (Satellite only)


Where the external FTA aerial picks up more than one source for a channel number, the iQ3 will provide the version with the best signal strength in the TV Guide. To change the channel source, follow these instructions.

Each step will navigate you through the menus to the required screen.

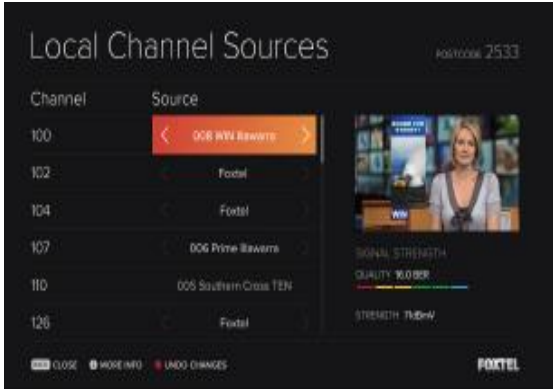
Fast track through the menu screens

Satellite

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Terrestrial Channels**
- Select **Local Channel Sources**



- Scroll down and if required, change the source for a channel number where more than one source has been picked up



- At the completion of changing the source for a channel number, press **Foxtel** button to return to normal Foxtel viewing

7.14.2 Australian Television Bands and Channel Frequencies

AUSTRALIAN TERRESTRIAL TELEVISION 7 MHz BAND PLAN FTA Broadcast & Non-Broadcast Bands			
BAND Channel Number (See notes)	Channel Frequency Limits MHz	PAL Analog Vision Carrier MHz	Digital Channel Centre Freq MHz
BAND I (Non Broadcast)			
0	45 – 52	46.25	NA
1	56 – 63	57.25	NA
2	63 – 70	64.25	NA
BAND II (FM Radio 87.5 – 108)			
3	85 – 92	86.25	NA
4	94 – 101	95.25	NA
5	101 – 108	102.25	NA
VHF – Lower special channels			
S2	111 – 118	112.25	NA
S3	118 – 125	119.25	NA
S4	125 – 132	126.25	NA
S5	132 – 139	133.25	NA
S6	139 – 146	140.25	NA
S7	146 – 153	147.25	NA
S8	153 – 160	154.25	NA
S9	160 – 167	161.25	NA
S10	167 – 174	168.25	NA
BAND III (out of band)			
5A	137 – 144	138.25	NA
BAND III (refer Table A2)			
6	174 – 181	175.25	177.500
7	181 – 188	182.25	184.500
8	188 – 195	189.25	191.500
9	195 – 202	196.25	198.500
9A	202 – 209	203.25	205.500
10	209 – 216	210.25	212.500
11	216 – 223	217.25	219.500
12	223 – 230	224.25	226.500

AUSTRALIAN TERRESTRIAL TELEVISION 7 MHz BAND PLAN FTA Broadcast & Non-Broadcast Bands			
BAND Channel Number (See notes)	Channel Frequency Limits MHz	PAL Analog Vision Carrier MHz	Digital Channel Centre Freq MHz
VHF–hyperband channels			
S11	230 – 237	231.25	233.500
S12	237 – 244	238.25	240.500
S13	244 – 251	245.25	247.500
S14	251 – 258	252.25	254.500
S15	258 – 265	259.25	261.500
S16	265 – 272	266.25	268.500
S17	272 – 279	273.25	275.500
S18	279 – 286	280.25	282.500
S19	286 – 293	287.25	289.500
S20	293 – 300	294.25	296.500
UHF–hyperband channels			
S21	302 – 309	303.25	305.500
S22	309 – 316	310.25	312.500
S23	316 – 323	317.25	319.500
S24	323 – 330	324.25	326.500
S25	330 – 337	331.25	333.500
S26	337 – 344	338.25	340.500
S27	344 – 351	345.25	347.500
S28	351 – 358	352.25	354.500
S29	358 – 365	359.25	361.500
S30	365 – 372	366.25	368.500
S31	372 – 379	373.25	375.500
S32	379 – 386	380.25	382.500
S33	386 – 393	387.25	389.500
S34	393 – 400	394.25	396.500
S35	400 – 407	401.25	403.500
S36	407 – 414	408.25	410.500
S37	414 – 421	415.25	417.500
S38	421 – 428	422.25	424.500
S39	428 – 435	429.25	431.500
S40	435 – 442	436.25	438.500
S41	442 – 449	443.25	445.500
S42	449 – 456	450.25	452.500
S43	456 – 463	457.25	459.500
S44	463 – 470	464.25	466.500

AUSTRALIAN TERRESTRIAL TELEVISION 7 MHz BAND PLAN FTA Broadcast & Non-Broadcast Bands			
BAND Channel Number (See notes)	Channel Frequency Limits MHz	PAL Analog Vision Carrier MHz	Digital Channel Centre Freq MHz
BAND IV (non-broadcast) 7 MHz channels			
20	470 – 477	471.25	473.500
21	477 – 484	478.25	480.500
22	484 – 491	485.25	487.500
23	491 – 498	492.25	494.500
24	498 – 505	499.25	501.500
25	505 – 512	506.25	508.500
26	512 – 519	513.25	515.500
27	519 – 526	520.25	522.500
BAND IV broadcast (refer Table A2)			
28	526 – 533	527.25	529.500
29	533 – 540	534.25	536.500
30	540 – 547	541.25	543.500
31	547 – 554	548.25	550.500
32	554 – 561	555.25	557.500
33	561 – 568	562.25	564.500
34	568 – 575	569.25	571.500
35	575 – 582	576.25	578.500
BAND V broadcast (refer Table A2)			
36	582 – 589	583.25	585.500
37	589 – 596	590.25	592.500
38	596 – 603	597.25	599.500
39	603 – 610	604.25	606.500
40	610 – 617	611.25	613.500
41	617 – 624	618.25	620.500
42	624 – 631	625.25	627.500
43	631 – 638	632.25	634.500
44	638 – 645	639.25	641.500
45	645 – 652	646.25	648.500
46	652 – 659	653.25	655.500
47	659 – 666	660.25	662.500
48	666 – 673	667.25	669.500
49	673 – 680	674.25	676.500
50	680 – 687	681.25	683.500
51 limit	687 – 694	688.25	690.500

AUSTRALIAN TERRESTRIAL TELEVISION 7 MHz BAND PLAN FTA Broadcast & Non-Broadcast Bands			
BAND Channel Number (See notes)	Channel Frequency Limits MHz	PAL Analog Vision Carrier MHz	Digital Channel Centre Freq MHz
Non Terrestrial Broadcast Channels			
52	694 – 701	695.25	697.500
53	701 – 708	702.25	704.500
54	708 – 715	709.25	711.500
55	715 – 722	716.25	718.500
56	722 – 729	723.25	725.500
57	729 – 736	730.25	732.500
58	736 – 743	737.25	739.500
59	743 – 750	744.25	746.500
60	750 – 757	751.25	753.500
61	757 – 764	758.25	760.500
62	764 – 771	765.25	767.500
63	771 – 778	772.25	774.500
64	778 – 785	779.25	781.500
65	785 – 792	786.25	788.500
66	792 – 799	793.25	795.500
67	799 – 806	800.25	802.500
68	806 – 813	807.25	809.500
69	813 – 820	814.25	816.500
BAND V (non-broadcast)			
70	820 – 827	821.25	823.500
71	827 – 834	828.25	830.500
72	834 – 841	835.25	837.500
73	841 – 848	842.25	844.500
74	848 – 855	849.25	851.500
75	855 – 862	856.25	858.500

NOTE: In Australia, some FTA DVB-T centre frequencies may have an offset of + or –125 kHz.

Relevant to in-house use:

The Australian analog PAL channel plan used PAL 'B' 7 MHz channels for VHF and UHF with a mono (L+R)/2 carrier spaced 5.5 MHz above the vision carrier and an A2 or Zweiton stereo audio second FM carrier, 242 kHz above the mono sound carrier that carried R only.

7.15 Internet Connection options

An Internet Connection **MUST** be completed on any iQ3 installation or upgrade provided the customer has broadband Cable, ADSL internet or NBN.

The exceptions are:

- No internet at time of install.
- Customer does not want their IP, interfered with.
- Customer requires WiFi password and PLA is not possible.
- WiFi network is masked.
- Customer has static IP address.
- Unable to pair PLA's (different power circuits) and WiFi is not possible.

If any of the above situations occur, record relevant details on the Foxtel Work Order.

Notes:

- *If the customer does not have their internet connected at the time of the installation or upgrade, the Customer Service Technician is **NOT** required to leave a Powerline Adaptor or Ethernet Patch Lead for future installation.*
- *For the best experience, the recommended minimum broadband speed should be **3Mbps**.*
- *If the customer's broadband speed is around **1Mbps**, advise the customer the iQ3's general non video features ie. posters and search may take some time to download due to the slow internet speed.*

In the above noted exceptions and when relevant, the Customer Service Technician should explain to the customer how to complete the WiFi connection once it is available and record this on the Foxtel Work Order.

Connection to the internet can be completed by utilising the following options i.e.

- **WiFi via Password or WPS set up:** An easy set up however the performance is reliant on the WiFi signal strength between Modem/Router and iQ3 location.
- **Ethernet connection via Ethernet Lead:** This has the best performance but requires close access.
- **Ethernet connection via Powerline Adaptor:** This has the good performance but can be inconsistent and not available for all locations.

The priority order for connecting the iQ3 to the internet is shown below and **MUST** be followed:

Internet connection priority order:	Applicable when:
WiFi & Ethernet Lead	<ul style="list-style-type: none"> • Modem/Router is WiFi capable • Modem/Router & iQ3 are within 3 metres of each other • Spare Modem/Router port is available to connect to iQ3
WiFi only	<ul style="list-style-type: none"> • Modem/Router is WiFi capable • WiFi connection speed is greater than recommended minimum 3Mbps • Modem/Router & iQ3 are greater than 3 metres apart or in different rooms
WiFi & Powerline Adaptor	<ul style="list-style-type: none"> • Modem/Router is WiFi capable • WiFi connection speed is less than recommended minimum 3Mbps • Modem/Router & iQ3 are greater than 3 metres apart or in different rooms with power points on the same electrical circuit • Spare Modem/Router port is available to connect to iQ3
Powerline Adaptor only	<ul style="list-style-type: none"> • No WiFi or cannot set up WiFi • Modem/Router & iQ3 are greater than 3 metres apart or in different rooms with power points on the same electrical circuit • Spare Modem/Router port is available to connect to iQ3

In addition to the above Internet Connection options:

- if required an IP 5 Port Switch may need to be installed
- if required reconnect the existing IP Return Path on an Upgrade Order i.e. Ethernet or PLA.

The following sections within this chapter outline the installation instructions for completing the required Internet Connection option.

Upon determining which internet option applies, follow the appropriate steps to complete the connection **and record the Internet Speed on the Foxtel Work Order.**

7.15.1 Internet Connection using WiFi

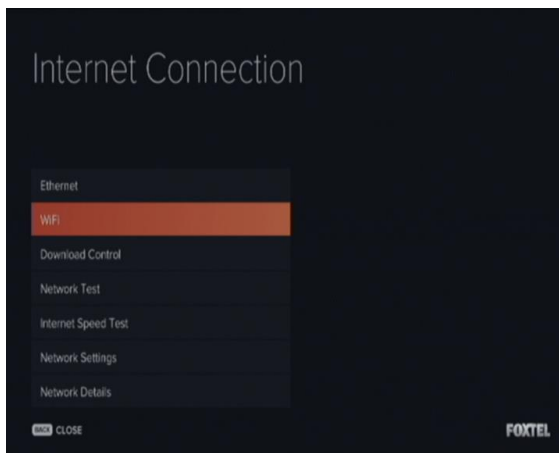
7.15.1.1 Choose WiFi Network option

To connect the iQ3 to the internet using “WiFi”, “Choose WiFi Network” (use this option where WiFi Networks are visible in the list of detected networks), follow these instructions.

Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

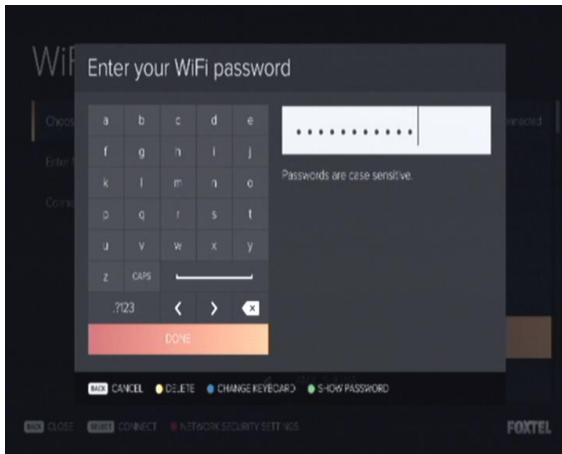
- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **WiFi**



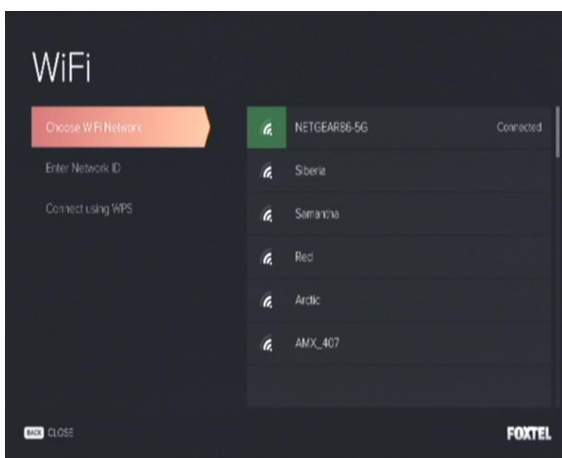
- Select the network required



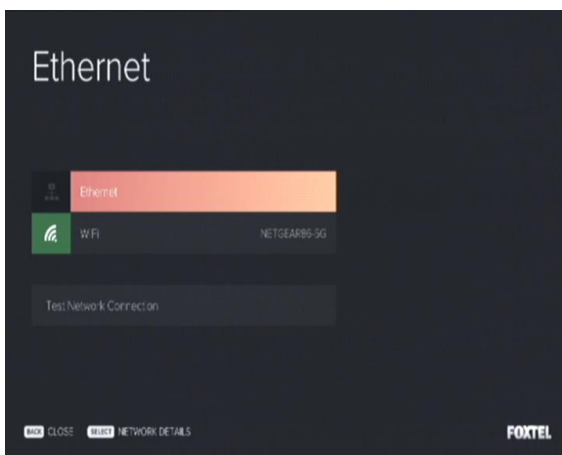
- Using the on-screen keyboard or Remote Control's number buttons, ask the customer to input their WiFi password then select **DONE** to confirm the password entry



- WiFi will be active when the symbol is **green**



- Press the **Back** button then scroll down and select **Ethernet**, the following screen will appear



- Press the **Back** button to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing

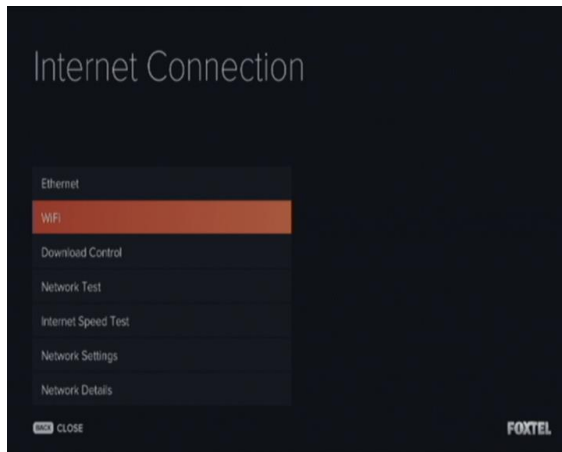
7.15.1.2 Enter a Network ID option

To connect the iQ3 to the internet using “WiFi”, “Enter a Network ID” (use this option where WiFi Networks are masked and not visible in the list of detected networks), follow these instructions.

Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

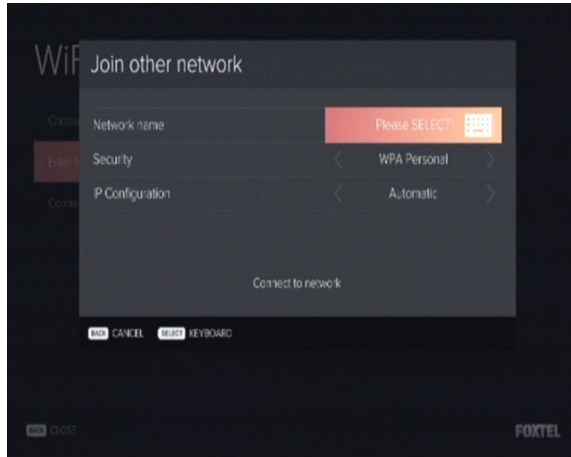
- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **WiFi**



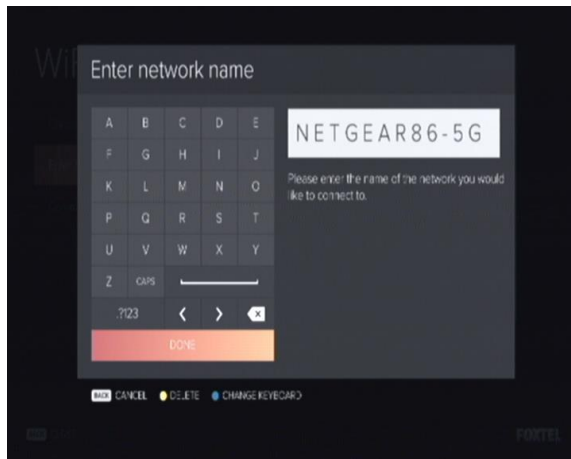
- Select **Enter a network ID**



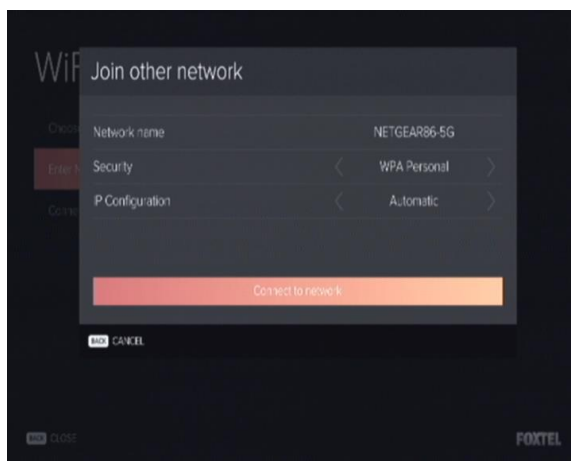
- Press **Select** to enter **Network Name**



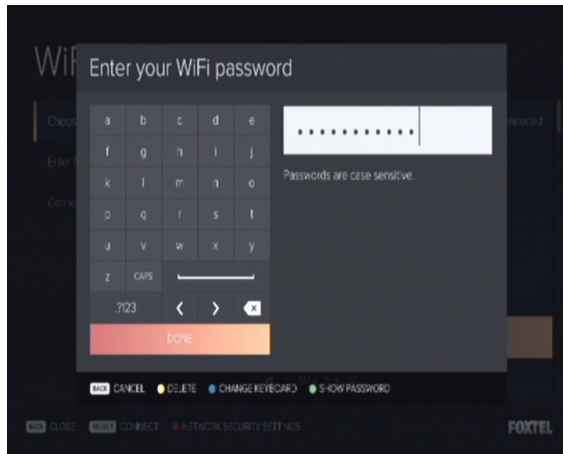
- Using the on-screen keyboard or Remote Control's number buttons, enter the **Network Name** then select **DONE**



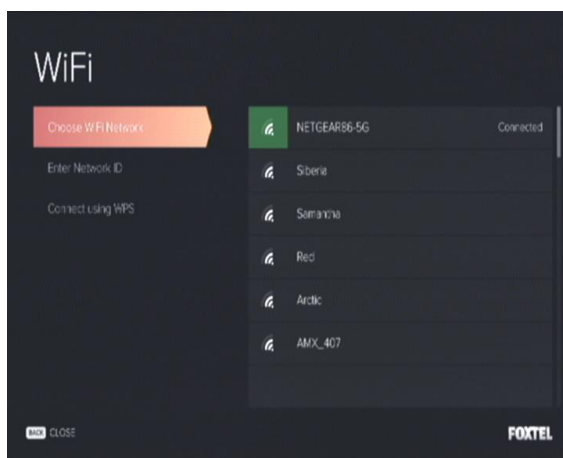
- Select **Connect to network**



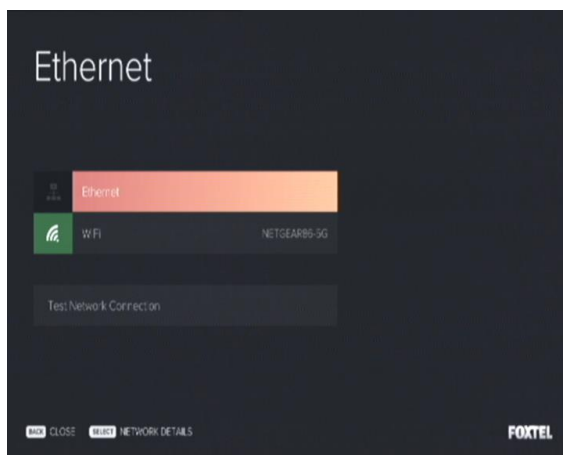
- Using the on-screen keyboard or Remote Control's number buttons, ask the customer to input their WiFi password then select **DONE** to confirm the password entry



- WiFi will be active when the symbol is **green**



- Press the **Back** button then scroll down and select **Ethernet**, the following screen will appear



- Press the **Back** button to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing

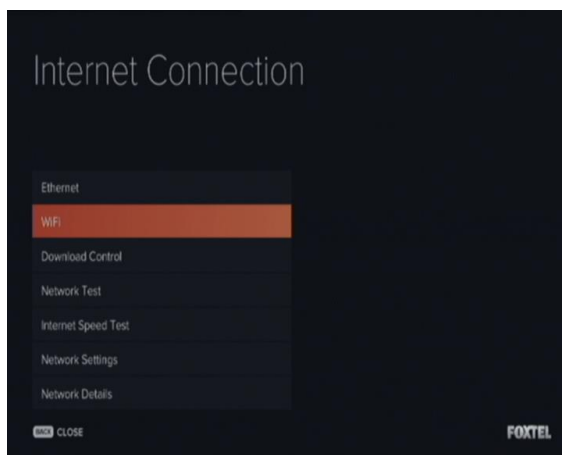
7.15.1.3 Connect using WPS option

To connect the iQ3 to the internet using “WiFi”, “Connect using WPS” (“WiFi Protected Setup” provides a simple way to establish a secure wireless connection between the Modem/Router and iQ3 automatically e.g. let’s you use a push button instead of manually entering a Network Name (SSID) and Password), follow these instructions

Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

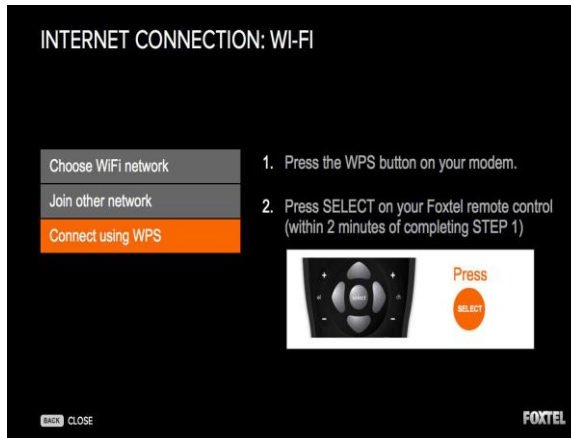
- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **WiFi**



- Select **Connect using WPS**



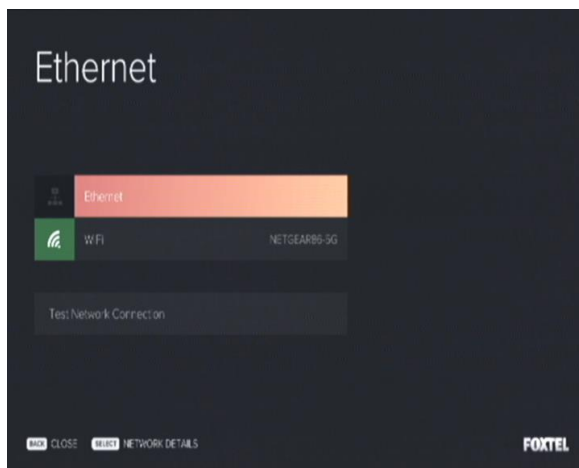
- Press the **WPS** button on the Modem/Router then within 2 minutes, press **SELECT** on the Remote Control



- WiFi will be active when the symbol is **green**



- Press the **Back** button then scroll down and select **Ethernet**, the following screen will appear



- Press the **Back** button to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing

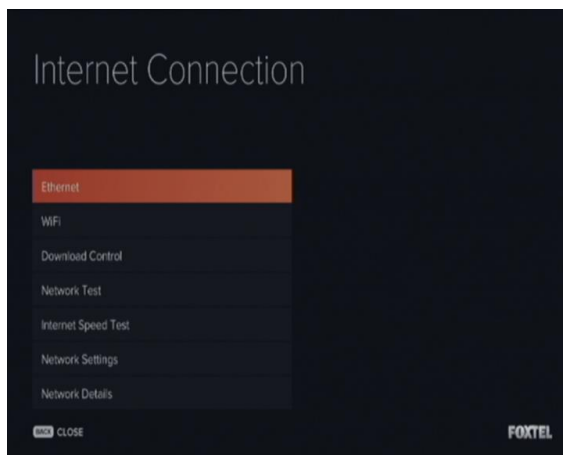
7.15.2 Internet Connection using Ethernet

To confirm connection of the iQ3 to the internet via Ethernet, follow these instructions. Each step will navigate you through the menus to the required screen.

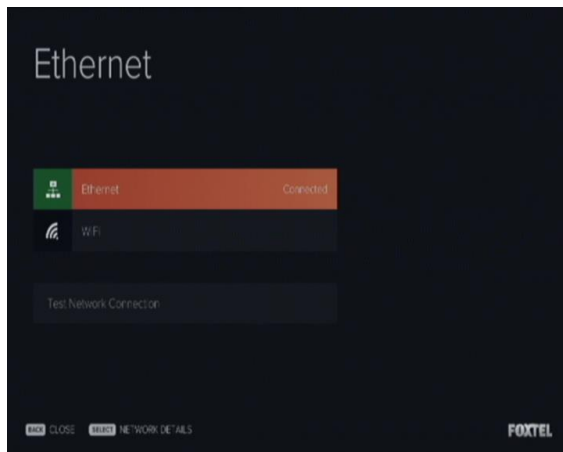
Note the Patch lead must be connected between the customer's Modem/Router and the Ethernet port on the iQ3 or alternatively the Patch Leads connected between the customer's Modem/Router and Ethernet port on the iQ3 via Powerline Adaptor.

Fast track through the menu screens

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **Ethernet**



- Ethernet will be active when the symbol is **green**



- Press the **Back** button to return to Internet Connection screen for further testing (try also selecting **Ethernet** or **Test Network Connection** options)or press **Foxtel** button to return to normal Foxtel viewing

IMPORTANT NOTE:

If the Ethernet connection fails, check the Network Settings Screen:

Confirm if Network Settings have been manually configured, if so ask the customer to set it up as it is their responsibility.

In the interim, show the customer where to find the Network Settings screen and record relevant details on the Foxtel Work Order.

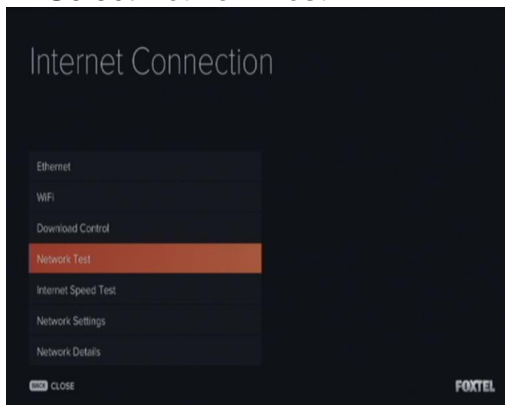
7.16 Network Test

To validate the Network Test (i.e. testing the Internet connection configuration confirming the iQ3 is configured correctly and able to access the Internet) follow these instructions. Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

To fast track to the '**Network Test**' screen, follow the below instructions;

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **Network Test**



- You will see one of the following screens:



- Press the **Back** button to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing

7.17 Network Settings

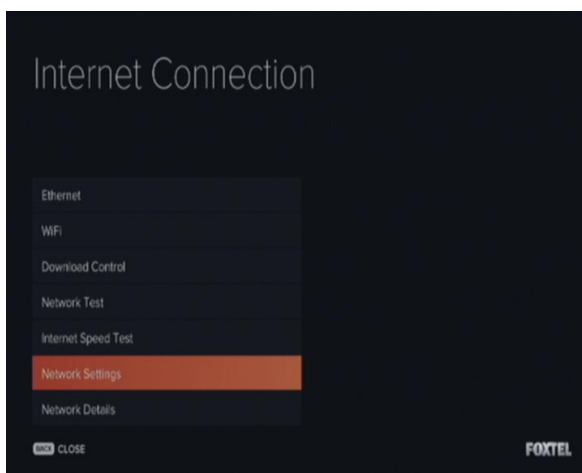
To validate the Network Settings (i.e. testing the Internet connection configuration confirming the iQ3 is configured correctly and able to access the Internet) follow these instructions.

Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

To fast track to the '**Network Test**' screen, follow the below instructions;

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **Network Settings**



- You will see the following screen:



- Press the **Back** button to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing

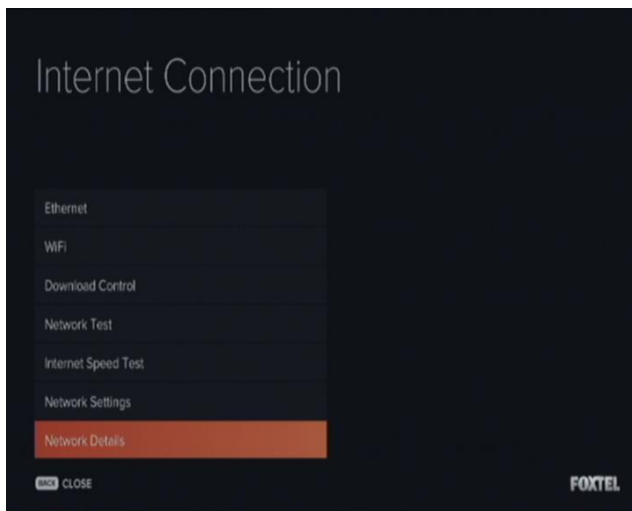
7.18 Network Details

To validate the Network Details (i.e. testing the Internet connection configuration confirming the iQ3 is configured correctly and able to access the Internet) follow these instructions. Each step will navigate you through the menus to the required screen.

Fast track through the menu screens

To fast track to the '**Network Test**' screen, follow the below instructions;

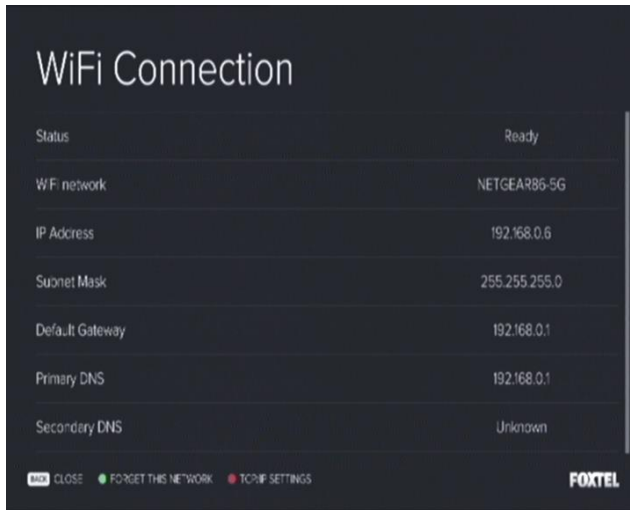
- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **Network Details**



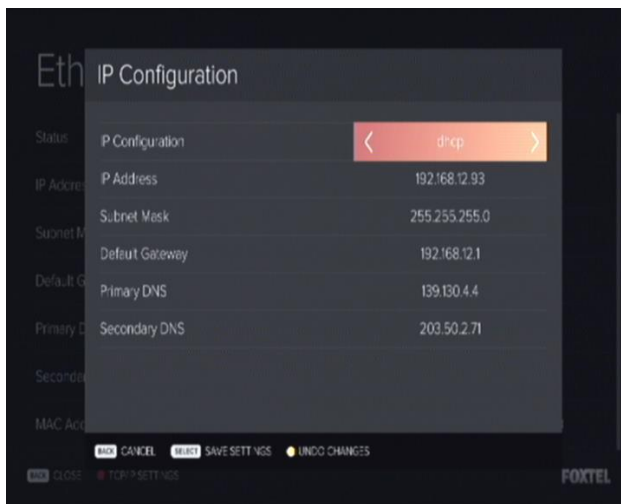
- You will see one of the screens below:



- OR



- Press the **Back** button to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing OR alternatively press the **Red Button** to view the IP Configuration Settings



- Press the **Back** button twice to return to Internet Connection screen for further testing or press **Foxtel** button to return to normal Foxtel viewing

7.19 Internet Speed Test

To validate the Internet Speed Test follow these instructions. Each step will navigate you through the menus to the required screen.

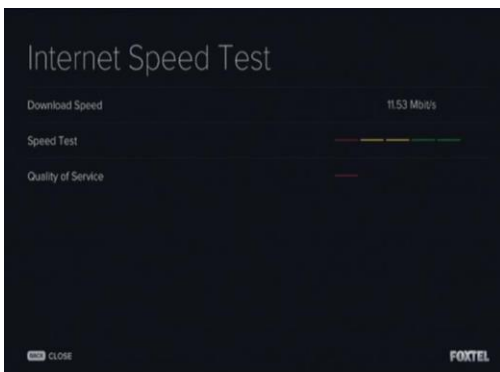
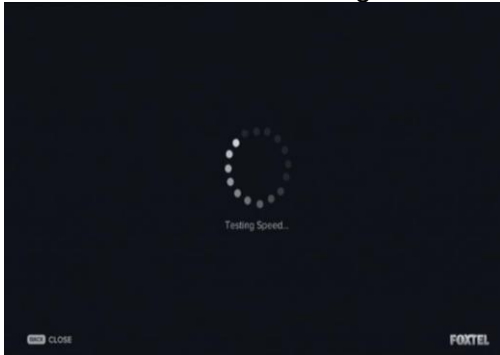
Fast track through the menu screens

To fast track to the '**Network Test**' screen, follow the below instructions;

- Press the **Home** button
- Arrow right & select **Settings** menu
- Select **Internet Connection**
- Select **Internet Speed Test**







- You will see the following screens:



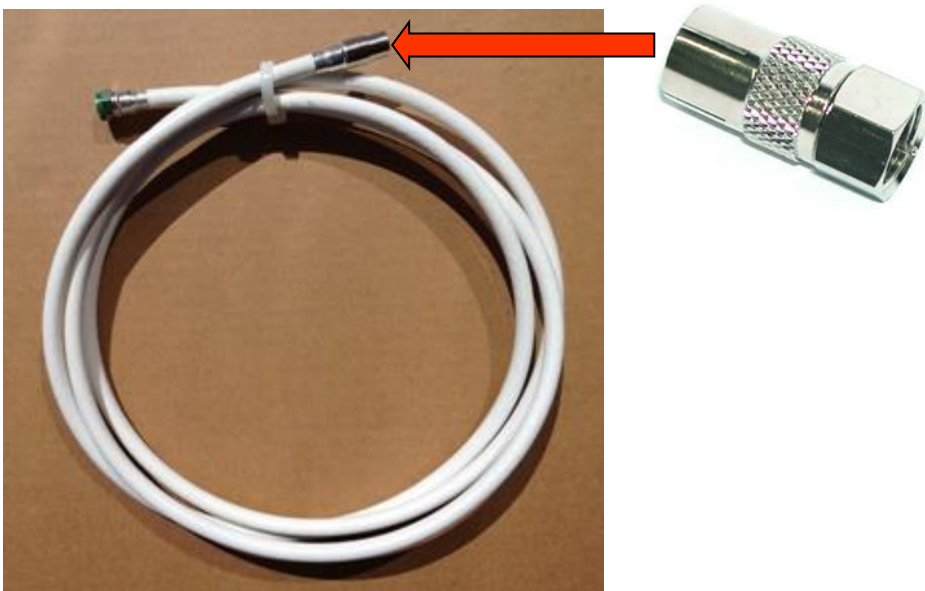
- Note for the best experience, the recommended minimum broadband speed should be **3Mbps**. Record the Internet Speed on the Foxtel Work Order.
- Press the **Back** button to return to **Settings** menu or **Foxtel** button to return to normal Foxtel viewing

7.20 Adaptors

Adaptors certified for Foxtel use are shown below:

 <p>Adaptor Pal Male To F Female (FTA only)</p>	 <p>Adaptor Pal Female To F Male (FTA only supplied in self install kits for customers that have an F wall plate)</p>
 <p>Adaptor Pal Female To F Female (FTA only)</p>	 <p>Adaptor, F Male to Right Angled F Female, 3 GHz (FTA, CABLE & Satellite)</p>

Whilst it is not mandatory, preference is given to RF Leads that are fitted with compression connectors without the use of screw on adaptors. Some customers who choose to carry out a Self Install Kit may have installed a Pal Female to F Male adaptor. As shown below, to convert the Pal Male end of the RF Lead to F type in this instance the use of this adaptor is allowed.



All equipment used must be approved on the Foxtel Installer Product List.

7.21 Customer Education

The Customer Service Technician must educate the Customer on all aspects of the iQ3 so that the Customer can use all Consignment Equipment and is able to enjoy their Foxtel without needing further assistance. This includes, but is not be limited to, the following:

- How to turn iQ3 on and off and adjust volume
- How to set up Parental Control and Closed Captions if required
- Overview of Remote (Bluetooth) and setting Favourites
- How FTA is connected and what you get (satellite only)
- How to view Live TV via TV Guide, changing channel via up down and numbers
- Pause/Play/Rewind/FF Live TV
- How to record, series link, maximum consecutive recordings
- How iQ3 is connected to Internet and Why
- What is Home? How suggested works
- Accessing Recordings and Scheduled Recording via Library
- What is Anytime and Store
- Demo Start Over TV and explain Look Back
- Explain Foxtel id and how to get My Account, TV Guide app and Go
- Show Help Page Videos, FAQ's and provide Welcome Book.

As part of the Customer Education, the Customer Service Technician must provide the Customer the opportunity to use the Foxtel functions while in attendance.

7.22 Troubleshooting

7.22.1 Troubleshooting Inbound interconnect path

Refer to Chapter 8 for Satellite or CABLE Inbound interconnect path troubleshooting.

7.22.2 Troubleshooting Internet Connections

7.22.2.1 Features that require the internet

The customer can view and record live TV on an iQ3 without the internet connected, but to receive the true iQ3 experience the iQ3 needs to be connected to the internet. Where there is no internet connected, the following will be evident:

- The Home menu will be vacant with no suggested programmes
- No Anytime or Store content will be available
- There is no Start Over or Look Back feature (content will not show Play icon)
- Programme posters will be replaced by channel logos
- There is no search functionality
- And no visibility of channel locks on channels the customer is not subscribe to

7.22.2.2 Trouble connecting to the internet

- Check the connection between the outlet and the Modem/Router
- Check that the Modem/Router is turned ON
- Check the Modem/Router's lights are ON. ie Power, Receive (downstream channel is OK), Send - (upstream channel is OK), Online - (modem is connected)
- Re-start the Modem/Router if any of its lights are not ON
- Check the internet connection on the customer's computer e.g. Google
- Check the Internet Speed (recommend minimum broadband speed of 3Mbps for the best experience)
- Confirm the customer's account has not been blocked by their ISP *ie. ask customer to contact their ISP*
- If required, advise customer to call their ISP for further assistance

7.22.2.3 Trouble connecting to the internet via WiFi

- Check that Wi-Fi is enabled by looking at the Modem/Router lights or testing the connection from another device ie.customer's computer
- Check the Wireless Security Key or WPA/WEK has been correctly entered ie. case sensitive
- Make sure that the Wi-Fi network isn't masked
- If it is, select iQ3's Internet Connections, WiFi, Join Other Network screen for the list of detected networks
- Check the Internet Speed by going to the iQ3's Internet Connections, Internet Speed Test screen (recommend minimum broadband speed of 3Mbps for the best experience)
- Check the distance between the iQ3 and Modem/Router, what's in between the two of them and potential interference from other electrical devices

Note internal walls of the home may attenuate the radio signals (especially masonry walls), reducing the data speed or Wi-Fi availability throughout the home

- Where the iQ3 may not be able to locate the Modem/Router either move them around or use an Ethernet cable

Note the Modem/Router or Wireless Extender should ideally be positioned in the same horizontal plane as the devices that will be used to access it. For a two-storey home it should be positioned as high as possible in the lower floor or as low as possible in the upper floor to maximise coverage to the other floor

7.22.2.4 Trouble connecting to the internet via Ethernet connection

- Check the Ethernet connection between iQ3 and Modem/Router
- Check the status of the internet connection by going to the iQ3's Internet Connections screen e.g. Network Test, Network Settings & Network Details
- Check Internet Speed by going to the iQ3's Internet Connections, Internet Speed Test screen (recommend minimum broadband speed of 3Mbps for the best experience)

Note the actual broadband speed available on the iQ3 will vary with the number of computers and internet devices using the access connection at the same time, the type of home network connection and the customer's broadband plan

- If the Modem/Router is listed as not connected, re-start Modem/Router

7.22.2.5 Trouble connecting to the internet via PLA

- Check the power is switched on to PLA's
- Check the PLA lights are all ON
- Check the Ethernet leads at Modem/Router and iQ3
- Check the status of the internet connection by going to the iQ3's Internet Connections screen e.g. Network Test, Network Settings & Network Details
- If Modem/Router is listed as not connected, re-start Modem/Router
- Check the Internet Speed by going to the iQ3's Internet Connections, Internet Speed Test screen (recommend minimum broadband speed of 3Mbps for the best experience)
- Reset the PLA's

7.22.3 Troubleshooting Free To Air Channels

7.22.3.1 Cannot get all the free-to-air channels

- Ensure that the customer is not using an internal antenna (rabbit ears) to receive their free to air channels
- Check connections between the TV outlet and the iQ3/TV
- Measure signal levels at the TV outlet
- If signal levels are below specification, advise the customer the issue is related to their TV aerial and they may wish to seek advice from a professional TV Antenna Installer
- Make sure the channels which are missing are actually available in the location
- Re-scan free-to air channels by going to the iQ3's Terrestrial Channels, Full Scan, Begin Scan screen

7.22.4 Troubleshooting Remote Control Unit

- Check the Remote Control batteries are not flat and inserted correctly
- Check Remote Control has been correctly paired
- Confirm Remote Control is not being used on another iQ3 or other Foxtel STU

7.23 iQ3 F-Code Messages and Error Codes

Note: The following list is subject to change

Area	ID	Message Header	Error Message
Smartcard	F0001	Simcard Missing	We're having trouble detecting your simcard. Try inserting it into the back of the box. Still not working? Give us a call on 131 999.
	F0002	Simcard Missing	We're having trouble detecting your simcard. Check that it's inserted correctly at the back of the box. Still not working? Give us a call on 131 999.
	F0114	Simcard Not Authorised	It looks like this simcard isn't authorised. If you've just installed this box call 1300 732 681 to activate. Otherwise call us on 131 999 for help..
	F0117	Incorrect Simcard	Your simcard is unique to your iQ3 box, and it looks like this isn't the right one. Try inserting the correct simcard.
	F0100	No Signal Received	There is no satellite signal being received. Please wait, if the problem persists please call 131 999
	F0102	For Your Information	We are getting your entertainment now, please wait.
Remote Control	F0103	For Your Information	You need to add batteries to your shopping list, they're running low! Press [BACK] to return..
Channels	F0106	For Your Information No Signal	No cable signal is being received. If the problem persists, give us a call on 131 999.
	F0108	For Your Information	<Channel name> currently has a technical fault. Please check back soon.
PIN Entry	F0160	Enter PIN	You'll need to enter your pin to get access here. Go to Settings/Help for more info. Press back to cancel.
	F0161	Incorrect PIN	Oops! That's the wrong PIN. You have two more attempts. Enter your PIN {...} or press back to cancel.
	F0164	For Your Information PIN Blocked	Your PIN entry is blocked for the next 10 minutes, please try back then. If you need help, give us a call on 131 999.
Planner	F0322	Recording Issue	Playback and Recording don't seem to be working, and we think this might be an issue with your box. Please give us a call on 131 999 and we'll help you sort it out.
	F0325	For Your Information	You are not able to play back this programme. Please give us a call on 131 999 for assistance.
	F0343	For Your Information Signal Lost	You lost signal during recording so have missed a piece of the action. You can keep watching or head to SEARCH to see if it's on again later. Press back to exit.
	F0350	No Signal	Your iQ3 box has been without a signal for over 5 days, and you need a signal for Playback. Try reconnecting, and then give us a call on 131 999.
	F0362	For Your Information	We're just powering up from Energy Saver mode, give us a few moments. Press back to return.

	F0363	Full System Reset	Are you sure you want to do that? This will delete all your existing and scheduled recordings. Press select to confirm, or back to cancel.
On Demand	F0442	For Your Information	Due to HDCP support not being detected from your TV this program cannot be viewed
TV Guide	F0501	No Internet Connection	You need to connect your iQ3 to the internet to access our Anytime and Store entertainment. See Settings - Help for more info. Press back to return.
Video On Demand (VOD)	F0512	No Internet Connection	Your internet connection has dropped out so we've had to pause your download. Please check your internet connection in Settings > Help. To try again, press select.
	F0513	No Internet Connection	Your internet connection has dropped out so we've had to pause your download. Please check your internet connection in Settings > Help. To try again, press select.
	F0514	No Internet Connection	We're having trouble detecting your internet. Please check your internet connection in Settings. To try again, press select or back to cancel.
	F0531	Programme Not Ready	Your download isn't ready just yet. Wait until it's finished downloading and try again.
	F0560	Valid IP Address Required	You need to enter a valid IP address, hit <confirm button> to try again.
Network Test	F0561	For Your Information	We're just testing your network, give us a few moments.
	F0562	For Your Information	We're done! The Network Test has been successful
	F0563	Network test Unsuccessful	The Network test has been unsuccessful. Please go to Settings Help for more information.
Video On Demand (VOD)	F0588	No Internet Connection	We're having trouble detecting your internet. Double-check it's connected, you can head to Settings > Help for more information.
	F0589	No Internet Connection	We're having trouble detecting your internet. Double-check it's connected, you can head to Settings > Help for more information.
Other	F1001	N/A	To access our world of entertainment you need to connect your iQ3 box to the internet. See Settings > Help for more info.
	F1002	N/A	To search our world of entertainment you need to connect your iQ3 box to the internet. See Settings > Help for more info.
Terrestrial	F1010	For Your Information	A channel scan is already in progress. Please wait.
	F1012	For Your Information	We're having trouble getting your channels. Please call us on 131999.
	F1013	For Your Information Acquiring Channels	We are getting your entertainment now, please wait.
	F1024	For Your Information	Channel Scan Unsuccessful please check your FTA aerial
	F1025	No Signal	Signal issues please contact your local channel
	F1026	For Your Information	Channel Scan Successful. 1-XX channels found
	F1027	No TV Aerial Signal	No signal is being received for this local channel from your TV aerial. Please check your connections or call your local antenna company.

	F1029	TV Aerial Not Connected	We can't bring up your local channels; you need to have your iQ3 connected to your TV aerial. Head to Settings >Help for more info.
	F1030	Channel Not Found	We have a TV aerial connection but can't find a channel here. Head to Settings > Help for more info.
	F1031	Weak Signal	We have a TV aerial connection but your signal strength is poor. Please contact your local TV antenna company for help.
Internet Connection	F1040	For Your Information	Sorry, that network name can't be found. Please try again.
	F0141	For Your Information	Sorry, that SSID can't be found. Please try again..
	F1042	Incorrect Password	Sorry, that password appears to be incorrect, Please try again.
	F1043	For Your Information	Sorry, WPS connection has been unsuccessful Please try again.
Bluetooth	F1050	Success!	Your iQ3 remote is now paired.
	F1051	Remote Control Not Found	Sorry, iQ3 remote pairing was not successful. Please try again.
	F1052	Pairing Lost	Bluetooth pairing has been lost, please use the front panel to re-pair

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