

Instructions for setting up Freesat V7HD or V8 Golden

Setting up the dish:

The V8 Installation Menu / V7 Main Menu



Adding a Satellite:

V8 Satellite list / V7 Satellite Installation Menu



Press the red button to “ADD” a satellite.

Click on the “Name” space to bring up the text entry window and type in your sat name.

Name the Satellite to match the satellite your dish is pointing at.

You can add “Ku” or “C” for sats that have both frequency bands. E.g. “New Sat Ku” or “New Sat C”.

Or “C New Sat” “Ku New Sat”. The choice is yours.



Type in the Longitude for your satellite.

This is only used by the dish mover setting for a USRALS dish mover.

It helps to have it correct when you have many satellites on your Sat list.

You can find satellite info from <http://www.lyngsat.com/> or <https://www.satbeams.com/>

There are many internet site that have lists.

LNB's

You need to set the LNB frequency for your satellite.

This is the "Low" frequency marked on your LNB.

The "PBI" has a "L O Freq" of "5.15GHz". This is the common C band LNB that uses setting "5150".

The W S international has no "Low" listed. 5150 is common and not always shown.

The Ku band LNB's on the left have "L O" of "10.75". Use the 10750 setting. Use the Low that your LNB has.



Universal LNB's:

These have two parts. One part is for the lower band and the other for the high band.

Universal LNB's switch between the two parts by turning the "22KHz" tone "ON" for the high part.

When a setting of 9750-10600 has be set the "22KHz" tone setting is set to "Auto" and the STB does this for you. You can use a Universal LNB for high band only by setting "10600" for the "LNB Freq" and 22K "ON".

Here is the specification for a Universal LNB.

Input Frequency Low:10.7 - 11.7GHz & High:11.7 - 12.75GHz

LO Frequency Low:9750MHz & High:10600MHz

Ku- for band Dual polarization and single output

LO frequency switch able through 0/22KHz

Polarity switch able through 13/18V

The LNB setting for this LNB is "9750-10600"

For a C band LNB choice "5150".

There are two band C band LNBs as well. They are "5150-5750" or "5750-5150".



There are many types of LNBs. Some are twin output, that two STBs can connect to. Others have two LNBs side by side that switch from one to the other by using the 22KHz Tone.

If you don't know what your LNB is, try a setting and compare the frequency you scan in to the known frequency of the satellite you are scanning.

DiSEqC Switching:

DiSEqC switches are used to switch between two or more satellites / LNBS.

If you only have one dish you leave these setting set to "Disable".

(Another method to switch just two dishes is with a 22KHz tone switch.

One port is "Off" and the other is "On".)

These switches come in 2 way 4 way and 8 way and more complex.

With a switch you can connect more than one satellite LNB to your STB.

DiSEqC 1.0 is the older specification. Common 2 and 4 way switches use this.

DiSEqC 1.1 is the newer specification that allows 8 way switches and more to work.

These work by pulsing the 22KHz tone in a digital form to send instructions to the switch.

A DiSEqC 1.1 switch can be used first and a DiSEqC 1.0 second on the cable to the LNB.

This means you can have $8 \times 4 = 32$ LNBS.

The 8 way switch locks in the DiSEqC 1.1 command and the DiSEqC 1.0 command is sent through the first 8 way switch to the second DiSEqC 1.0 switch.

This is called "Cascade" switching and the 8 way switch is called an "Uncommitted" switch.

For 4 dishes DiSEqC 1.0 is all you need.

Universal LNBS work through switches. The 22KHz tone stays on after the command has been sent. Set the DiSEqC 1.0 to the switch port your dish is connected to.

If you have cascade switching, like I do, set the DiSEqC 1.1 setting as well.



Polartiy:

Polarity is normally set to "Auto".

If you have a more complex switching / LNB set up, you may set this to just vertical or horizontal.

Vertical polarity send 13 Volts power up the cable to power the LNB.

Horizontal sends 18 Volts.

The LNB's detects this voltage, 13v or 18v, and switches from the vertical to horizontal parts of the LNB.

If the LNB on your dish is not set correctly for your satellite you can scan in the same channels from both the vertical and horizontal parts of the LNB or you may not scan all the signals that are there.

You need to rotate the LNB on your dish to the correct "Skew" for your location and satellite.

This is complex and you need to take care. Expert help may be needed.

You can find your "Skew" and where in the sky your satellite is from this website:

<http://www.dishpointer.com/>

LNB Power:

This is "On" for most STBs.

You can turn this "OFF" if your STB is connected through the "Loop" connector on another STB.

Motor Setup:

This is used for dishes that move.

If you don't have a dish mover leave this set to "None"

There are two main types, DiSEqC 1.2 and USARLS.

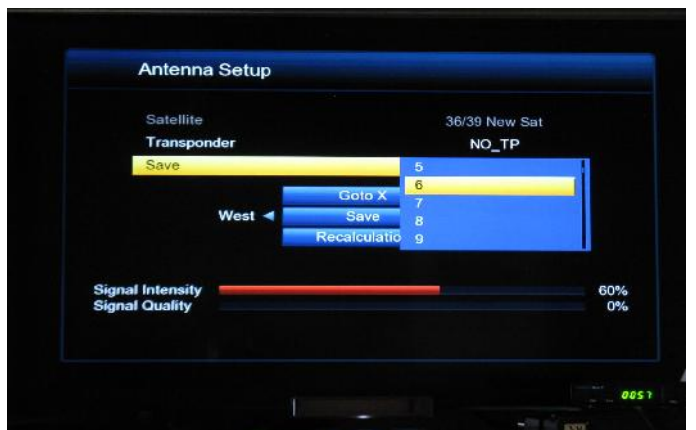
USARLS uses the longitudes that are entered with each sat and your location that you can enter using the Green "Set Location" button when you are on Motor Settings.

You can change from east to west or north to south by pressing the left or right arrows.

Use the number keys to enter your Lat and Long.



DiSEqC 1.2 movers need their positions to be entered. Click on "Motor Setting" and you enter the setting menu.



Set your position for your satellite and you need to press "Save" to save this.

Be careful. When you save it will also send a save instruction to the Dish mover controller.

I set up these setting with the mover controller turned off.

Also the DiSEqC 1.2 setting in "Motor setting" will not be saved if you go to the Mover menu with out exiting the antenna menu first.

Some versions of software for the Freesat V8 Golden have not allowed dish mover commands to be sent through switches. The early versions did not do switching and dish mover.

Versions from 2016 on did, but some later versions have not.

Satellite Search:

Once you have your dish setting set you can scan your satellite.

To allow a satellite to be scanned you must "Tick" each satellite you want to use in the Satellite List.



To search press single satellite search in the Installation menu on the V8 or press the Satellite Installation in the V7.

You can do a Multi search if you have more than one satellite set up.

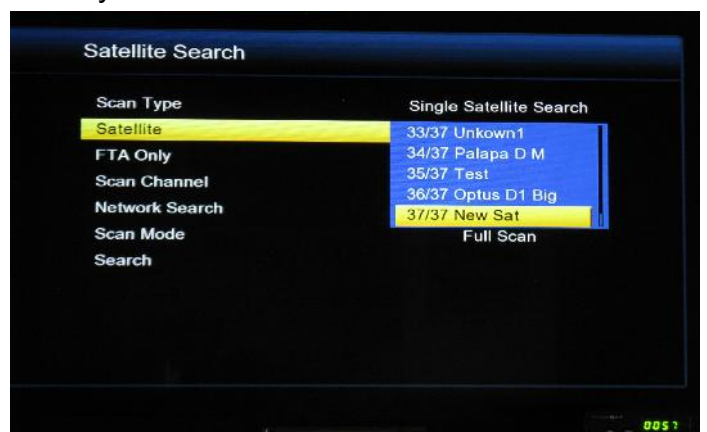


Select the satellite you want to scan.

Press the Blue button on the V7 to enter the Search menu.



On the V7 select "Single Search" and select the satellite you want to scan.



There are two scan modes, "Full Scan" and "Blind Scan"

Full Scan will search the frequencies that are already in your STB for that satellite.

Blind Scan will search the dish "blindly" for any frequencies it can find.

Blind scan is good if you have no information for your satellite.

Some blind scans will not find all the frequencies.

Some frequencies that are very close together or are weak can be missed.

You can manually enter these frequencies though the TP Menu.

Network search will only work with a "Full Scan". This scans in only those channels for the network specified. I have found no way of selecting a network in the freesat units.

Leave Network set to "No".

"FTA Only"

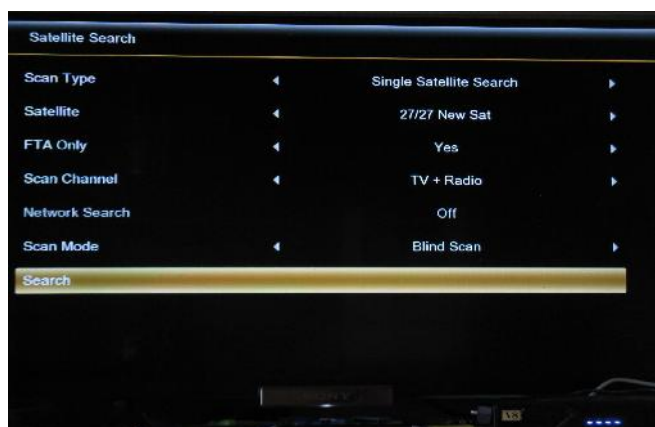
FTA is "Free To Air". This is the channels that are not scrambled.

This is used if you do not want all the scrambled channels to scan in and clutter your channel lists.

FTA Only set to "Yes" will only scan the free channels.

The "TV + Radio" allows you to select if you want to scan just TV or TV + Radio or just Radio.

When you have your choice for setting, move to "Search" and press OK.



The Scan page will be displayed and any Tps and channels found will be displayed.



When the scan is finished it will list the number of channels found and ask for "OK" to be pressed. Press "OK" and you will see the first channel that was scanned.

You can now use the Channel List menus to move, delete or add channels to your favourites lists.

If the frequencies listed for channels is not what is listed for your satellite on website list, you can change your LNB frequency in the Antenna menu to one that does give the correct frequency.

Good luck and happy TV watching.

Owen (aka Feralkiwi)
Christchurch, New Zealand.

Dishes:

Here are some pictures of different dishes.

On the left is 3m mesh C Band dish. This is a "Prime Focus" dish, the LNB is in the center.

On the right are three "Off Set" Ku band dishes. The top two have Dual LNBS.

Lower Left is a very large solid 4.1m dish with a Prime focus Ku band LNB.



The Ku band dishes are pointed at, from bottom to top;

Intelsat 19, Optus D1, Optus D2 and Intelsat 18.

Note the LNB "Skew" (the twist of the LNB) change from Optus D1 to Optus D2.

"Off Set" Ku band dishes reflect the signal, so the dish surface does not point at the satellite.

The 4.1m dish is pointing at the same satellite, Intelsat 19, that the lower Ku dish is.

Below is a Dual LNB. This is two LNBS side by side. These were use to access Optus D1 and Optus C1 by Sky New Zealand. They switch form one LNB to the other by turning "On" the 22KHz tone.

They have four outputs, allowing four STB's to use the dish.

The last picture is of two dishes pointed at Asiasat 5 and Asiasat 7, both are very low in the sky.

