

Installation Guide for Christian channels on Optus D2

ST Gold ST 2000F

Thank you for choosing Christian Satellite.

Please note: Christian Satellite cannot be held responsible if any injuries sustained during the installation. If you are not confident to install this kit or follow this guide, we recommend that you use a professional installer.

Prior to installation, please read through the entire instructions

There are 11 steps you will need to follow to successfully install a satellite system. For step 8 you will require the assistance of another person.

Prior to installation a direction to True North needs to be established. This can be done with a compass or by using a Street Directory. (Top of page is always North after orientating to street direction)

Please refer to page 6 or to www.dishpointer.com for the relevant elevation for your location.

This satellite antenna will need to have a totally clear line of sight to Optus D2. This means no trees, buildings or fences etc can be in the line of sight of the satellite antenna.

QUICK OVERVIEW

1. Locate a good position to mount the dish
2. Running cable from your TV to where the dish will be located
3. Install the satellite mount
4. Assembling the satellite dish
5. Connecting and installing the receiver to the TV
6. Attaching the cable to the LNB
7. Setting up the receiver for tuning
8. Tuning the satellite dish
9. Tuning the channels to the receiver
10. Organising your channel list after tuning
11. Enjoying good Christian television and being proud of a job well done (if you made it this far!)

STEP 1 - DETERMINE THE BEST SITE FOR THE DISH.

a) The position needs to be as close as possible to the TV and for roofs over 18 degree pitch the mounting is best to face over the gutter and not up the incline of the roof.

b) The dish is to face in a north easterly direction in the west of Australia, gradually facing to a more northerly direction as you move east until it faces north in the east of Australia. The direction in New Zealand is north westerly. You must have an unobstructed view to the sky at the correct degree of elevation for your location. To find out the correct degree for your location, go to the last page or to www.dishpointer.com. If you are in a built up area, look around and see if there are any Foxtel/Austar dishes and check for their direction. Optus D2 is in almost the same direction as Optus C1 only slightly to the left.

c) Consider the most suitable route for the cable and adjust dish location as required.

STEP 2 - RUNNING CABLES

If you are installing more than one receiver please see page 7 for further information.

- A.** Remove your existing antenna wall plate from the wall – if you have a yellow tongue (a piece of plastic used to join flooring sheets) or a length of conduit handy you can use this to pull the cable up the wall. You could also try dropping the cable down the wall cavity from inside the roof.
- B.** Remove existing antenna cabling from the back of the wall plate
- C.** Tape the satellite cable to the existing antenna cable (like you are joining the cable together)
- D.** Go up in the roof or on your roof and remove a few tiles above the location of your TV and pull the existing antenna cable up through the wall until you see the join
- E.** Undo the join and pull the satellite cable until there is half a metre of cable remaining inside the house.
- F.** Tie the end of the satellite cable somewhere in the roof so it won't fall back down the wall.

Now you need to get the existing antenna cable back down to the wall.

- G. To achieve this, tape the existing antenna cable to the satellite cable in the roof and pull the cables down the wall from the inside until you see the join
- H. Untie the cable in the roof and run it to the satellite dish
- I. Push the satellite cable through the middle of the LNB connection (refer to picture of LNB) cover (the cover comes with the LNB)
- J. The cable is supplied pre-stripped. You will need to push the supplied F-type connectors on to the cable until you see that the inner shield of the cable is a little bit through the centre hole of the connector. Do this on both sides and use ordinary pliers to crimp the connector onto the cable, or, you can leave the connector on the cable without crimping it, just remember not to pull on the cable after putting the connector on.
- K. Attach the cable to the LNB and push the cover forward to hide the connection

STEP 3 – GUTTER MOUNT FIXING OR TIN ROOF MOUNTING BRACKET.

- A. Follow the installation instructions that come with your mounting bracket.
- B. **IMPORTANT!** Mounting pole must be as close to vertical as possible. Use a level to ensure this is done.
- C. Do not use any less fixing bolts or teks screws than is shown in the instructions.
- D. (This step applies to tile mount only)Pre-drill holes if near the edge or end of rafters to prevent the wood from splitting

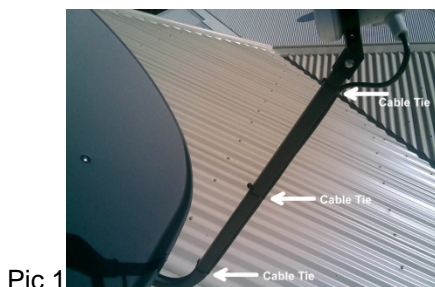
STEP 4 - ASSEMBLING THE DISH

- A. Follow the installation instructions that come with your satellite dish.

Please note: To prevent the two U bolts from dry-welding, we recommend that you paint the threads on the U bolts with any colour paint prior to assembling the dish



- B. Once the dish is assembled install the LNB bracket and ensure the LNB is pushed back on the LNB bracket as far back as possible so there is no gap as displayed in pic 3. When you have installed the LNB, connect the cable to the LNB connection. Now you will need to point the LNB connection to face between 7 and 8 on a clock face as shown in picture 2.



Pic 1



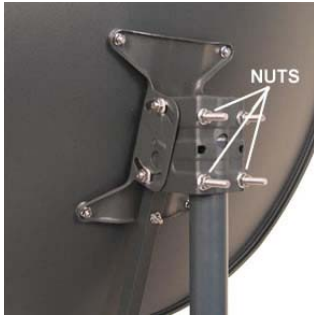
Pic 2



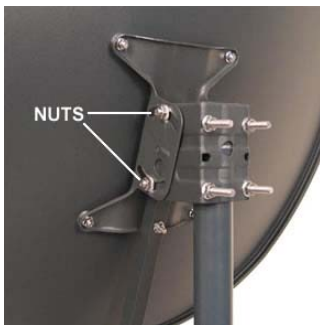
Pic 3

- C. Now mount the dish to the mounting pole and cable tie the cable to the LNB arm as displayed in Pic 1. **DO NOT CONNECT THE CABLE TO THE MOUNTING POLE UNTIL YOU HAVE FINISHED TURNING THE DISH.**

- D. Hand-tighten the 4 U bolts as tight as possible



- E. Hand-tighten the four side nuts as tight as possible



- F. Set the angle indicator on the dish mounting bracket to the corresponding elevation degree for your area (the further north you are, the higher the angle; the further south, the lower the angle)

STEP 5 - CONNECTING SATELLITE RECEIVER BOX TO TV OR VCR

Once you've run your cable to your satellite dish, connect the satellite cable to the back of the wall plate supplied with your kit. Screw wall plate to the wall using the plaster bracket supplied with the kit. Attach the 2m satellite Cable from the wall plate to the back of the satellite receiver where it's labelled "LNB In"

Connect AV cables to satellite receiver box and to the back of your TV if you have a spare input, making sure you follow the colour coding of the connection ends ie: red/white (audio) and yellow(video) for stereo video or white/yellow for mono connection. Ensure you do not connect the cable to "output". If your TV does not have a spare AV input, you can connect it through your VCR's AV input, front or back. Otherwise, you will need to purchase an "AV Selector" from your local electrical retailer or through Christian Satellite – please contact us for pricing.

STEP 6 – SETTING UP THE LNB

- First you need to setup your **LNB** type
- Next go to **MENU** and select **INSTALLATION** and select **ANETNNA SETUP** and press **OK** and enter Password **0000** or **9402**.
- Next go to **ANTENNA** and press **OK** and go down and select Number **15** and press **OK**. Next you should see **OPTUS B3** in satellite.
- Next you need to enter your **LNB FREQ.1 - 11300** or **10700** Please enter **LNB FREQ.2** as the same as **LNB FREQ.1** If you do not know what your **LNB** type is check on your **LNB** and look for the low **FREQ** look for **11300** or **10700**

Press **EXIT** and select **OK** to save

STEP 7 - SETTING UP THE RECEIVER FOR TUNING THE SATELLITE DISH

- A. From the **MAIN MENU** select **INSTALLATION** and press the **OK** button.
- B. The receiver will request a password. Enter **9402** or if that does not work try **0000**
- C. Once you are in the **INSTALLATION** menu, highlight **SCAN TRANSPONDER** and press the **OK** button.
- D. Next scroll down to **DISH** and ensure it is displaying **1 OPTUS B3**.
- E. Next scroll down to **FREQUENCY** and enter **12706** by using the numbers on the remote.
- F. Next scroll down to **POLARITY** and press left or right on the remote and select **VERTICAL**.
- G. Next scroll down to **SYMBOL RATE** and enter **22500** by using the numbers on the remote.
- H. Next scroll down to **CODE RATE** and select **3/4**.
- I. Next scroll down to **SCAN MODE** and select **FREE CHANNEL**.
- J. Next scroll down to **NETWORK SEARCH** and select **ENABLE**.

Now the satellite dish is ready for tuning.

Please note on the screen at the bottom you will see a “Level” percentage bar and a “Quality” percentage bar. The Level and Quality is what you will use to tune the satellite dish.

When you are ready to tune your Satellite Dish (Go to Step 8)

STEP 8 - TUNING THE SATELLITE DISH (Please note this requires two people)

- A. Start by pointing the satellite dish North
- B. Once the dish has moved to North, adjust the elevation of the dish according to your area (For parameters refer to the table on page 6 titled **Dish Pointing Parameters for Optus D2**) or visit www.dishpointer.com
- C. Rotate the dish from North to East while someone is monitoring the TV for the Quality percentage bar. If the quality percentage bar does not move from 0%, move the dish back to north and change the elevation slightly from what you had just tried and repeat the process. Repeat the process of slightly changing the elevation 1 degree at a time eg first attempt 42 degrees, second attempt 43 degrees, third attempt 44 degrees and so on, until you see the quality percentage bar move from **0%**. Once the quality begins to increase from **0% STOP!!** in the position that the dish is in.

Now that you have found the location of the satellite you can now fine tune the satellite dish.

- D. To fine tune, slowly move the dish in a north-east direction whilst monitoring the quality percentage bar. The aim is to achieve the highest possible quality strength. If the quality percentage bar begins to decrease, stop and return the dish to the location where the quality signal was the highest.
- E. When you have located where the quality signal was the highest, slowly tighten the 4 back nuts at the back of the dish a little bit at a time one by one but not all the way (just so the dish is secure)
- F. When you have located where the quality signal was the highest you will need to adjust the elevation up or down and try to find where the quality signal is the highest again.
- G. To do this, slowly move the dish up or down whilst monitoring the quality percentage bar. Again, the aim is to achieve the highest possible quality strength. If the quality percentage bar decreases, stop and locate where the quality signal was the highest.
- H. When you have located the where the quality signal was the highest, slowly tighten the 4 side nuts as tight as possible. This should have achieved the highest possible quality on the quality percentage bar.
- I. Slowly tighten the 4 back nuts on the dish a little bit at a time one by one and monitor the quality percentage bar as you tighten. If the quality percentage bar decreases while you are tightening the bolts, stop and go to the next nut and repeat the process until all the nuts are tightened, ensuring you do not lose any of the signal strength.

Now you will need to fine tune the LNB

- J. To fine tune the LNB, turn the LNB clockwise or anticlockwise while monitoring the quality percentage bar. After each turn move your hand away from the dish and do not stand in front of the dish to make sure you do not block the signals. Try to make the bar go up as much as possible. This will achieve locating the highest possible quality signal.

Quality – High is anything over 50%. An average Signal quality is between 50% and 80% dependant on your location.

Level – High is anything over 50%. An average Signal Strength is between 50% and 99% dependant on your location.

STEP 9 - SEARCHING FOR THE CHANNELS

- A. Next go to **INSTALLATION** and select **CHANNEL SEARCH** and press **OK** and enter password **0000** or **9402**.
- B. Next go to **ANTENNA (SATELLITE)** and press **OK** and go down the list and select Number **15**. You should see **OPTUS B3** in satellite.
- C. Next go to **TRANSPONDER** and enter **12706** press **OK**.
- D. Next you need to tune your satellite dish by following step **10** to **12**. Once you are happy with the Strength and Quality you need to go to **STEP 9.16**
- E. Next you should see the **STRENGTH** and **QUALITY** in red on the right of the screen. If not your DISH is not tune to the right satellite please check your dish or your LNB setup.
- F. Next go down to **SEARCH TP** and press **OK** to start the search. You should be seeing channels downloading in the list.
- G. Next when the search has finish select **EXIT** and press **OK** on your remote. Next go back in to **CHANNEL MANAGER** step 1 and 2.
- H. Next you should see the 10 Christian Channels in the list If you like you can delete or move the channels you don't want up or down on the list when you have finish Press the **EXIT** button and select **OK** to save.

Please note that the receiver will scan all the channels on that Frequency so the Christian Channels will not be grouped and will be mixed between the other foreign channels.

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STEP 10 – DELETING UNWANTED CHANNELS

Deleting unwanted Channels

- A. Scroll to **CHANNEL MANAGER** and select **TV CHANNEL** and press the **OK** button. The receiver will request a password. Enter **0000** by using the numbers on the remote and press the **OK** button
- B. Next press the **RED (AUDIO)** Button until you see **X DELETE CH** displayed in red on the top of the screen.
- C. Next scroll through the list on the right of the screen and then press the **OK** Button on the channels you wish to delete. The channels that you have selected should have an **X** in front of them
- D. Next press the **EXIT** button on the remote and the receiver will display a message “**ARE YOU SURE TO DELETE MARKED CHANNELS?**” highlight **OK** on the screen and press the **OK** button on the remote

STEP 11 – GROUPING YOUR FAVOURITE CHANNELS TOGETHER IN THE CHANNEL LIST

- A. Scroll to **CHANNEL MANAGER** and select **TV CHANNEL** and press the **OK** button. The receiver will request a password. Enter **0000** by using the numbers on the remote and press the **OK** button
- B. Next press the **YELLOW** Button on the remote and you should see **MOVE** displayed in yellow on the top of the screen.
- C. Next scroll through the list on the right of the screen and then press the **OK** Button on the channels you wish to move
- D. Next by using the up and down arrow on the remote. Scroll to where you would like the channel to appear in the list and press the **OK** button
- E. Continue this with the various channels until you are satisfied with the list.
- F. Once you are finished press the **EXIT** button on the remote twice to exit out of the menu

Please make sure all of the channels are working and are in your order of preference.

The Christian Channels:

1. **Hope Channel**
2. **3ABN**
3. **Trinity**
4. **JCTV**
5. **The Church Channel**
6. **Smile of a Child**
7. **God TV**
8. **Daystar TV**
9. **Inspiration Network**
10. **EWTN**

11. Apostolic Oneness Network (AON)

Other Channels of Interest

1. Press TV
2. Russia Today

Dish Pointing Parameters for Optus D2

Refer to www.dishpointer.com for exact parameters for your location.

The parameters below are approximations for each location.

Location	Elevation°	Compass Bearing° (Azimuth)
Adelaide, SA	47	23
Alice Springs, NT	56	39
Auckland, NNZ	41	326
Brisbane, Qld	60	357
Broken Hill, NSW	50	20
Christchurch, SNZ	36	332
Darwin, NT	60	62
Devonport, Tas	42	0
Geraldton, WA	36	58
Hobart, Tas	41	7
Invercargill, SNZ	35	343
Kalgoorlie, WA	40	49
Karratha, WA	43	62
Melbourne, Vic	46	11
Mt Isa, Qld	62	34
Napier, NNZ	37	323
Perth, WA	36	53
Sydney, NSW	51	1
Townsville, Qld	66	17
Wellington, NNZ	37	328

OPTUS D2 CHRISTIAN CHANNELS

Freq # 12706 V 22500

The Hope Channel

Freq # 12644 V 22500

The Church Channel

Daystar TV

Trinity

JCTV

The God Channel

Smile of a Child

Inspiration TV

EWTN

Freq # 12546 V 22500

3ABN

Freq # 12519 V 22500

Aon

Other Channels

Press TV Freq # 12706 V 22500

Russia Today Freq # 12734 V 22500

INSTRUCTIONS FOR INSTALLING MORE THAN ONE RECEIVER

If you have purchased a DIY 2, 3 or 4 Kit, these steps will help you to install the kit.

- With your kit you will be provided with a splitter with a cable connected to it. This cable is to be connected to the LNB
- Follow the instructions as outlined above,
- You will need to run a cable from each point that you intend to have a receiver to the dish and connect each cable to the splitter to the "OUT" terminals as shown in the diagram below
- IMPORTANT INFORMATION – When tuning the receivers it is very important that you have only one receiver powered on at a time (only the one you are tuning)
- With more than one receiver installed, you are able to only view the Christian channels or any other vertical channels at the same time. We recommend deleting all horizontal channels from the channel list. To make it simple, delete all channels other than those listed above.



Set up for more than one receiver