Starlink Tips & Tricks

by Steve Impett

Although the content of this pamphlet sometimes references the Starlink Mini, most of the content is just as applicable to the Actuated (aka V3 or Gen2) and the Standard (aka V4 Gen3).

The Billing Month

Starlink data is paid for in advance and billed on the day of the month that the first dish on that account was first created. This is the billing date. For ongoing data plans, this is the day of the month that the billing month commences and when Starlink debits your credit card for the payment.

If the billing date is in the range 29 to 31 it will default to the last day of the month in cases where the actual date doesn't exist. For example if the billing date is usually the 30th of the month, the billing will happen on the last day of February.

Partial Months

When a dish is activated, the user is billed for the remainder of the month pro rata to the billing date. For example, if the billing date is the 15th of the month and the dish is activated on the roam unlimited plan on the 10th, the account would be billed for the remaining five days:

$210 x 5 ÷ 30 = $35, assuming a 30-day month.

This is a simplified explanation, but illustrates the concept.

Starlink uses UTC time, so the actual change of date happens sometime mid-morning in Australia.

Standard Time: 10:00am in QLD, NSW, VIC & TAS 9:30am in SA & NT 8:00am in WA.

Adjust as appropriate for daylight savings times.

So before 10:00am EST on the 15th of the month is actually still the 14th of the month UTC.

Also, Starlink calculates the pro rata time on a per-minute basis. So for the above example if we say that the dish is activated at 4:00pm on the 10th in Brisbane then the pro rata adjustment is four days and 18 hours, or 4¾ days.

$210 x 4.75 ÷ 30 = $33.25, assuming a 30-day month.

The time can be an important consideration when first activating an account if you want to force a particular billing date (e.g. If you want to be billed on the first of every month you would first activate it after 10am on the 1st of the month. It's not such an issue when changing plans, as it's really only a matter of cents involved. But if you activate a plan at 8am on the billing date, you'll get charged for two hours, then another full-month charge at 10am — the rollover time.

For a capped-data plan, the full data allowance is provided regardless of the activation date. For example, if the $85 roam 100GB plan is activated half-way into the month it will only cost $42.50 but the full 100GB is available.

Plans Paid in Advance

Payment for data plans is taken in advance. When you activate a plan you pay for the data up to the end of the month. If you pause or cancel the plan before the end of the month there is no refund or credit for the unused portion. It is pre-paid and there is no roll-over of unused data. Paused or cancelled plans remain active until the end of the month.

THE DATA PLANS

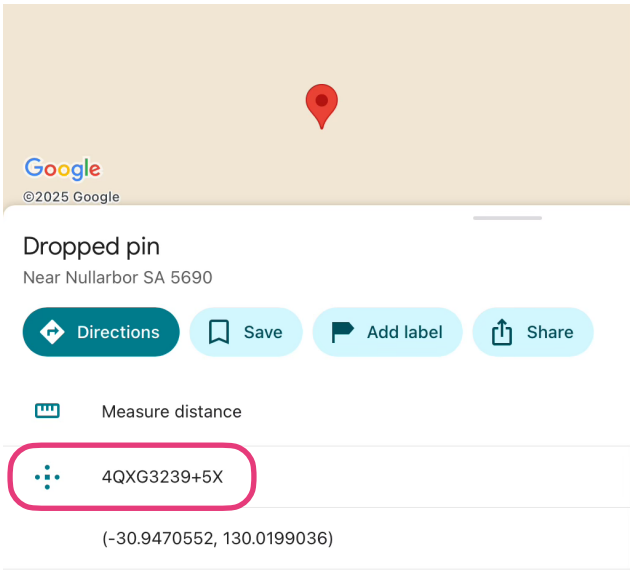
There are several data plans available for everyday or occasional users in Australia: three fixed-address plans that are generally used for home or small business installations – the Residential plans, and two plans available for use anywhere – the Roam plans. The Standby mode is available to "pause" either Residential or Roam plans.

Appendix 2 has some useful tables for estimating the cost of activating and changing plans.

The Residential Plans

These plans can only be used at a fixed address nominated by the owner as the Service Address. If the dish is moved away from the address locality the service will not work. If the actual address entered isn't recognised by Starlink or a street address doesn't exist, then the location's Google Plus Code can be used instead. This code can be found on Google Maps by dropping a pin.

On the image below, the Google Plus Code is 4QXG3239+5X.
Copy the code by clicking or tapping on it.



Residential Max

$150 per month. Fixed location. Unlimited data. Maximum Speed.

The standard plan for a fixed-location Starlink service.

Residential 200

$110 per month. Fixed location. Unlimited data. Limited to 200 MBPS.

Save $40 per month with this lower-cost alternative where the maximum data rate is not required.

Residential 100

$75 per month. Fixed location. Unlimited data. Limited to 100 MBPS.

Save $75 (half the price of the Residential Max plan) if you don't need lightning speeds.

Congestion Charges

In areas of high demand there may be an additional one-off congestion charge to activate a residential plan. The amount of the charge varies, and is largely dependent on the level of demand.

The Roam Plans

The roam plans can be used at any location on land or at sea within 12 nautical miles of the coast, or whilst moving (e.g. in a car). The roam plans can not be used on the open ocean beyond the 12nm limit, but there are other more expensive plans that allow this.

Roam Unlimited

$210 per month. Unlimited data.

Not much more to say, really; it is what it says.

It's the top of the tree cost-wise for the average user. If you need lots of data at different locations throughout the month, this would be the only choice.

Roam 100GB

$85 per month. 100GB included.

For lighter users, this may be an attractive cheaper option to the roam unlimited plan. The data allowance is capped at 100GB. After the 100GB is used up, it reverts to unlimited low-speed data, capped at 0.5 MBPS.

Standby Mode (Pause Option)

$15 per month. Unlimited data. Low data speed – up to 0.5 MBPS

This plan is available should you wish to pause a Residential or Roam service. This mode includes the features of the roam plans, such as roaming, coastal and international, but not in-motion over 16 km/h.

Standby Mode provides unlimited low-speed data for emergency messaging and easy activation in mobile phone dead zones. It should be ample for making and receiving phone calls & messages, email, browsing the Internet, using social media (such as Facebook & Instagram) and audio streaming (e.g. Spotify). It will not support video streaming services (such as YouTube, Kayo, Netflix etc.), although low-definition video may be achievable if available in your viewing app.

If you pause your residential service in an area where demand surcharges normally apply and later resume the service, you will not have to pay the surcharge.

Cancel

(a free alternative to pausing using Standby option)

If you want to pause your service for a lengthy period and do not want to pay for the Standby Mode you will need to Cancel the service instead. The service will remain active until the end of the month. When you need service again, just reactivate as usual.

Note that your billing cycle is associated with your account, not individual service plans. The billing date for an account is fixed; it can not be changed. When you activate a plan from the cancelled state, it will be charged pro rata as explained before.

International Use

The Roam Unlimited plan can be used in any country outside Australia that has Starlink available for up to 30 days, after which a Local or Global Priority Plan must be purchased. The dish must be active within Australia for at least 24 hours to reset the time limit between trips.

!! Pre-registration as an international traveller is required. Search "Traveling" in the Starlink help page for more details.

!! Note that some countries forbid satellite communications devices altogether. If one is found in your possession or luggage it may be confiscated and you might be prosecuted. Check before travelling.

Changing Plans

Sometimes it is desirable to change from one plan to another. A common situation is when taking the Starlink from home on a holiday or to a remote location for work. As a residential plan is only used at a fixed address, it would need to be changed to a roam plan to go travelling.

Another scenario might be upgrading the roam service from the $85 100GB plan to the $210 unlimited plan when it becomes clear that the 100GB will not be enough data.

How Service Plan Changes Work

When changing your Starlink plan, you'll see two options:

- **NOW** — Apply the change immediately
- **DATE** — Apply the change at the end of your current billing cycle
- (The DATE button shows your exact billing cycle end date, e.g. March 12)

Upgrading Your Plan (switching to a higher-priced plan)

- **NOW** — Apply the change immediately. Your new plan and pricing start right away
- **DATE** — Apply the change at the end of your current billing cycle. Your new plan and pricing start on the scheduled date

Downgrading Your Plan (switching to a lower-priced plan)

- **NOW** — Apply the change immediately. You will move to the lower-priced plan immediately, and any remaining time on your current plan will not be refunded
- **DATE** — Apply the change at the end of your current billing cycle. Your new plan and pricing start on the scheduled date

Note: If you've already paid for your current plan and want to continue using it through to the end of your billing period, select the date option. If you selected the end of month, you can cancel this change before the end of the month.

Pro Rata Charging

When upgrading to a more expensive plan part-way through the billing month a payment equal to the cost difference is calculated pro rata for the remainder of the billing month.

For example, the cost difference between the roam unlimited plan and the roam 100GB plan is $210 – $85 = $125. If the upgrade was made with 15 days remaining until the end of the billing month the additional amount charged would be $125 x 15 ÷ 31 = $62.50

As mentioned earlier, this is an approximate figure not taking into account the time the change is made. Note also that the amount payable is dependent on the number of days in the billing month. The approximate upgrade cost per day is shown in the table below. Also see the Upgrade Cost table in Appendix 2.

Days in month	Roam 100GB to Roam Unlimited	Residential Max to Roam Unlimited
28	4.46	2.14
30	4.17	2.00
31	4.03	1.94

Upgrade Cost per Day

Warning when changing from a Residential plan

If you're on a residential plan in a congested area you may have to pay a congestion charge to change back to a residential plan.

Also, changing from Residential Max may invalidate any special deals included in your package.

Pausing the Service

To pause a service is to prevent the plan renewing at the beginning of the next and following months. Known as Standby Mode, it has a small monthly charge and is available to use with the Residential plans and Roam plans.

Be mindful of the time if pausing on the last day of the month; you may inadvertently pause it too late resulting in the higher payment for the next month. It's a good idea to pause the plan early (days or weeks even) as the service remains available until the end of the month.

Because the service has been paid up to the end of the billing month it remains available until then, and will change to Standby for the next month.

If you don't want to use the Standby Mode, with its associated charge, you can Cancel the service instead.

Example Scenario

Consider this scenario: Your billing date is the 22nd of the month. Your service has been paused (in Standby Mode) for a couple of months and you want to activate it on 16th July on the $85 roam plan until the 22nd August billing date (roughly seven weeks).

When you activate the plan on 16th July, you will be charged for the remaining days in that billing month, that is six days: 6 ÷ 30 * (85 - 15) = $14.

You will get 100GB to use until 22nd July.

The plan will roll over automatically on 22nd July, when you will be charged $85.

This will give you 100GB to use until 22nd August.

Change to the Standby Mode any time after the new billing period starts (anytime after 10am EST on the 22nd July) to cause it enter Standby Mode on 22nd August.

Changing the Billing Date

There are some sensible reasons for wanting to change the billing date for your service, but once an account has been activated the billing day can not be changed.

However, you can create a new account (using a different email address) and transfer your dish to that account. Activate the dish on the day of the month that you want to become the new billing day. Remember to do this after 10:00am EST.

Using Plan Changes to Your Advantage

Clever use of the several plans can save some money by choosing when and what plans to activate, and changing plans mid-month.

Example 1. Roaming on the Road

If you're budget conscious and not sure about how much data you would use in a given month you can initially select a cheaper plan then upgrade to a more expensive one when it's clear the first choice is not enough.

Let's say your usual monthly usage is normally less than 100GB, but this month you might be streaming lots of video.

You could start the month on the $85 100GB roam plan as usual. On day 15 you notice that the usage is already 90GB and is likely going to exceed the 100GB monthly cap, so you change up to the $210 roam unlimited plan.

The cost to upgrade then would be $67, a total of $152 for the month (saving $58).

TOP TIP This approach to managing roaming data will always save you money. You can start on the $85 plan until the data runs out, then upgrade to the unlimited plan paying the pro rata difference. You will never pay the full $210. See the table below.

Downgrading back to the $85 plan will take effect at the beginning of the next month.

This table shows the approximate cost to upgrade from the $85 plan to the $210 plan on each day in a 30-day billing period. The right column shows what you'd pay for the month.

Day	+ extra	Total Cost
1	125	210
2	121	206
3	117	202
4	113	198
5	108	193
6	104	189
7	100	185
8	96	181
9	92	177
10	88	173

Day	+ extra	Total Cost
11	83	168
12	79	164
13	75	160
14	71	156
15	67	152
16	63	148
17	58	143
18	54	139
19	50	135
20	46	131

Day	+ extra	Total Cost
21	42	127
22	38	123
23	33	118
24	29	114
25	25	110
26	21	106
27	17	102
28	13	98
29	8	93
30	4	89

Example 2. Taking a Residential Holiday

You can take your residential plan with you instead of paying for the roaming unlimited plan.

If you use the residential plan at home and are taking a holiday at another fixed location for a period of time — such as at a beach house or camping — the service address can be changed to the holiday location for the duration, then changed back again to the home address. Just change the service address before shutting down and packing away and service will be available at the other location when you arrive. If you forget, don't worry, you can change it on arrival if you have mobile phone coverage, but it may take up to half an hour before the changeover happens and the Internet is back online.

Keep in mind whether you may need to pay a congestion charge.

Using the App

The app may ask you to enter a password to access some functions. This is your Starlink account password, not the Wi-Fi password. You will then be asked to enter the verification code emailed to you.

Main Page

Statistics

Technical stuff for geeks.

Network

Shows a list of all connected devices.

You may see more devices than you expect, and some may not be familiar. These are usually other connected devices such as a smart TV, lights, solar charge controller etc. that may have been automatically connected by your phone, for example. If you have appropriately set up the Wi-Fi security these shouldn't be an issue. If you want, you can pause their access until you notice something's not working.

Obstructions

After a few hours operation the obstruction map will start showing where objects, such as trees or buildings, may be obstructing the dish's view of the satellites passing overhead. These will show as red areas on the mostly white map. Obstructions can briefly disrupt reception requiring the dish to re-establish connections with the satellite network. Brief or even long outages may result.

Try re-locating the dish to an area with a clear view of the sky.

Alignment Tool

The alignment tool will help you align the dish to achieve optimum reception and performance.

Speed Test

Warning: Using the speed test utility will use up a lot of data; up to 500MB per test.

The app has a built-in speed test. The basic one will give an end-to-end measure (from your device to the Internet) of the data throughput.

Selecting the advanced speed test will show the rates between the Starlink dish and the Internet, and between the Starlink router and your device. This can help to understand what the cause of apparent slow data speeds may be. If between your device and router is slower than expected, it's likely because of the distance from the router or obstructions, such as walls that is at fault. It may be that your device is connected using the 2.4GHz Wi-Fi connection (maximum rate 50mb/s) instead of the 5GHz connection. Switching off then on your device Wi-Fi could resolve this issue.

Settings

Under the heading, there's two options: Router or Starlink.

Router

Some options for rebooting, resetting and setting up advanced features not covered by this guide, plus:

Networks

This is where you give the Wi-Fi network a name and password, and split the 2.4 / 5GHz networks if you need to.

The default name is STARLINK and is not secured with a password. Use this section to secure your Wi-Fi after a reset.

Content Filtering

Options to include malicious and adult content filters.

Starlink

Some options for rebooting and resetting the Starlink, plus:

Snow Melt

Unless you're in snow country in winter you can turn this off.

Sleep Schedule

Set up an automatic sleep schedule to turn off the Starlink at certain times. It can only be over-ridden by removing power from the Starlink. It's probably easier to just remove power when you're done.

Account Page

At the top right of the main page is a head & shoulders icon.
Tap this to take you to the account page. 

Manage Account

At the top of the account page is the account holder's name. Tap this to take you to the Manage Account page.

Billing

To see your billing activity, change the payment method etc.

Orders

Past and current orders from the Starlink shop.

Messages

From Starlink, usually related to support tickets.

Shop

Buy more accessories. You will only see accessories applicable to your models of dish.

Data usage

This page will show you how much data you've used over the month; useful if you're on a capped data plan. Tap and hold on the graph to see finer details. If you've used multiple plans in the month it will display how much data was used from each plan.

Manage subscription

To change, pause or cancel the current plan.

When changing the data plan, remember the one you're looking for may be at the bottom of the list, so scroll down until you find the plan you want.

Give the dish a Nickname - only visible on the app or web portal. Handy if you have multiple dishes.

Change the service address, where a dish on a residential plan is located.
(This is not the account holder's billing address)

TECHNICAL STUFF

Assuming that your account is set up and the dish is registered to that account.

Power Requirements & Usage

The Starlink Mini requires a power supply of between 12V and 48V capable of delivering at least 60W. The supplied 240V power adapter provides 30V 2A and is suitable for use with the supplied 15m cable.

It is not recommended to power the device directly from a 12V source, such as a car battery, as the start up power draw could be up to 5A. This current may result in a voltage drop along the cable causing the dish to behave erratically. It is better to up-convert the voltage to around 24V, or use the Starlink USB-C PD power adapter and 5m cable that supplies 20V 5A.

The Mini can also be powered from a portable power bank with at least a 100W USB-C PD output, (20V, 5A) making it backpack portable.

Typically, the Starlink Mini uses 20 to 25 Watts during normal operation.

View of the Sky

For ideal performance, Starlink needs a clear view of the sky from just above the horizon to just beyond the vertical, and about 55° either side of its recommended pointing direction. There may be degradation of the signal or brief drop outs if there's obstruction from trees, buildings etc. within that field of view. There may also be a noticeable drop in performance if the dish is not pointing in the recommended direction, although this may not actually affect your experience if you don't need the higher data rate.

If you do experience performance issues, try checking the obstruction map for clues about what's affecting reception. You may need to move the dish to a clear location or use the app to do an alignment check. You could try pointing the dish straight up to avoid occasional drop-outs.

In Motion Use

The Starlink dish can be used whilst moving at up to 160 km/h.

It almost goes without saying that you would need to ensure the dish is properly secure so that it doesn't come flying off (if mounted external to the vehicle) or become a missile in an accident if inside. If mounted inside on the dash, ensure the driver's view of the road is not impaired.

Ideally, the dish will be mounted flat, pointing straight up so that the direction of travel has less effect on the performance. In any case, performance is likely to be somewhat impacted but still very useable.

Conserving Data

Your device will see the good Internet Wi-Fi connection and assume it will provide generous data at low cost. This isn't always the case and may become an issue when using a data-capped plan.

In your phone and tablet Wi-Fi settings select low data mode or metered data mode.

Set video apps streaming quality to standard definition (SD).

See Appendix 1 for more detail on data conservation.

Wi-Fi Range Limits

The Starlink Mini has the Wi-Fi access point built into the dish. This constrains the performance somewhat as the dish needs to be outdoors and the user is typically inside. It also has a lower power than you may be used to. The cited effective range at maximum performance is around six metres, but will work satisfactorily out to 15m or so with no obstructions. Basic functions like web browsing and email will work fine over longer distances. The higher the demand for a high-speed connection, the closer you need to be. Careful selection of the dish location will help.

The Router Mini, available in the Starlink store, can be used as a wired or wireless mesh node(s) to extend the range or to bring the Wi-Fi network inside.

Using the Web Portal

You don't need to be located near your Starlink dish to use the web portal, you just need Internet access.

The Internet domain www.starlink.com can be accessed by an inactive dish in order to login to the user's account, activate a plan, manage billing etc. Access to domains outside this are blocked until a data plan is established.

Log into your account at www.starlink.com to update addresses and billing information, add dishes to your account, manage devices, change plans etc. Logging in to your account requires you to enter a two step verification code sent to your email address or SMS. If out of a mobile coverage area, you may not receive this code, so it's a good idea to keep a logged-in browser page or the app open when venturing to a remote location to ensure you're able to access your account.

But I'm out of mobile coverage!

If you do find yourself out of mobile range and not able to access your account, go to the Help Centre and enter "two step verification" in the search box. Open the article and follow the instructions.

!! It's a really good idea to at least put your dish's service to Standby Mode if intending to venture outside reliable mobile coverage so that you can receive emails and make emergency calls. At around 30 cents per day it's pretty good value for peace of mind.

Firmware Updates

Starlink automatically sends firmware updates to the dish when required, and then usually delays installing and re-booting to around 3:00am local time to avoid disruption. This will be flagged in the app, and can be initiated early or deferred if you wish.

If the dish has not been powered on for some time, on the next power up it will download updates and perform re-boots to bring it up-to-date. If it has been a longer while since it was last on, this could take half an hour or longer to complete.

You can keep the system firmware updated by just powering up the dish and pointing it to the sky.

There's no need to have an active data plan as the updates are not included in the billed data. Doing this every six months or so will help to ensure there's minimal delays when you next need it. It's also a good idea to do this before heading off to remote areas where you may need to rely on ready access.

For Real Tech Heads Only

At the very bottom of the main page in the app is the discreet word: ADVANCED.

The really curious can tap on this to unlock a page of boring numbers, some status figures and the option to teleport your dish to Mars or other fun locations.

But wait … right at the bottom of that page is the enticing "Debug data" button.

Also, 192.168.100.1

On the Back of the Mini

Status light

On the bottom left.

Slow blinking - powered on

No light - no power to the Starlink

Fast blinking - will fast blink for 3 seconds when the reset button is held down.
Then will turn off as the Starlink reboots.

Reset button

On the Mini it is located centrally under the power inlet.



Press and hold for 3 seconds until the status light flashes.

Other models

To reset the Gen 3 router, push the reset button located between the two Ethernet ports.

To reset the Gen 2 router, cycle the power off then on six times.

Factory reset will clear your Wi-Fi network name & password.

Pole mounting

Replace the kickstand with the pole mount to support the dish on a pole, 31 to 51mm diameter.

Ethernet port

To use an RJ-45 Ethernet plug to connect to a router, switch, laptop, TV or other device.

This is particularly useful on the Mini if you need to extend the Wi-Fi coverage to inside a building using an Ethernet-connected access point or Wi-Fi router.

Although a standard RJ-45 plug can be used, the genuine Starlink connector is preferred to maintain the watertight integrity of the connection.

Remove the water-tight plug to access the socket.

DO NOT LOSE THIS PLUG!

Other models

The Gen 3 router has two Ethernet sockets on the rear.

The Gen 2 router requires the purchase of an Ethernet adapter.

The Router Mini has a single Ethernet port and can be used with any model as part of a mesh.

Where to Get Help

Starlink On-Line Help

There's an extensive help section on the Starlink web site and through the app. If you can't resolve your issue there, you can raise a support ticket.

www.starlink.com/au/support

Facebook

There's several Facebook groups with knowledgeable members able to help. It's worth searching through past posts to see if your issue has been raised before (it probably has). Try to filter guesses from well-meaning individuals versus actual knowledge in the responses.

A good starting place for the groups is the Featured posts and Files at the top of their home pages.

Is Starlink Off in my Area?

Probably not. Starlink has a network of over 9,000 satellites orbiting the planet 500km up. They down-link to ground stations that carry the data to Point of Presence nodes where it plugs into the Internet. There are more than 20 of the ground stations located across Australia. If a particular ground station goes off-line, data is re-routed through linked satellites to another station.

So, if your Starlink doesn't appear to be working it's most likely that the problem is with your equipment rather than the network.

Reboot your Starlink. Check that all the connections are fully plugged in and that power is on. Remove and re-plug to ensure a good connection. Check for obstructions and proper alignment. Check that your device is connected to the right Wi-Fi. Then go to the Starlink help pages for more assistance.

My Starlink Isn't Working - Do I Have To Buy a New One?

No. Well, maybe not.

Starlink make their money from ongoing subscriptions to the service plans, and they are very keen on keeping existing customers happy.

Go to the Starlink help pages on their website and type in your issue.

If after following this process you have not resolved it, lodge a support ticket.

A Starlink representative will be in touch to help resolve the issue, and if it's identified as a hardware problem they are more likely than not going to send you a replacement part or a whole new kit. Even if you're out of the warranty period. And perhaps even if the damage was your fault.

❗ If this happens and they send you a new kit, they may want the old one sent back at their cost. If you are sending the old kit back in the same box the new kit came in, remember to remove or obliterate the bar code or QR code or kit number on the box. If you don't, they will scan the box back in and cancel your new dish — this might happen some weeks later. Raising a support ticket will resolve the issue, but it's a headache you can easily avoid.

If you don't send the old one back, eventually the new one will stop working too.

Does Starlink Have a Phone Number I Can Call?

Yes. (02) 4406 8213

If you've tried everything else and getting nowhere give this number a call and request a call back.

Support 1800 297 017 **Sales** 1800 577 513

Why Do my Apps or TV Think I’m in Sydney, Melbourne or Perth?

The Point of Presence (PoP) nodes are located there. These are where the Starlink network plugs into the Internet. Unless the app uses GPS location, or you can nominate your location, or if you have a VPN then you may be stuck with this.

Why Do my Apps or TV Think I’m in Another Country?

IP address are assigned by Starlink and associated with the country they service. Some apps and browsers use geographic IP locator services to look up the location and base their access rules on that data. If the app is telling you that you’re in another country, it’s likely they need to update their location server.

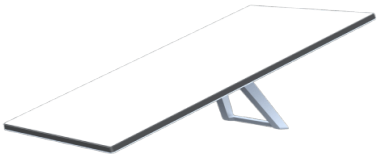
Switching off your Starlink for a while and then back on may result in your dish being assigned a different IP address that will work.

What Dish Do I Have?



Actuated (V3 Gen 2)

515 x 300



Standard (V4 Gen 3)

595 x 380



Mini

300 x 260

The Standard and Actuated both have a separate router/power supply (not interchangeable).

The Standard has two Ethernet ports on the back of the router. The Mini has one Ethernet port on the back of the dish. The Actuated needs an Ethernet adapter (purchased separately) if you need this feature.

Extended Mobile Phone Coverage (Wi-Fi Calling)

Using Starlink, you can extend the coverage of your mobile phone to the entire country. Make & receive mobile phone calls and text messages even when in the most remote regions.

Most mobile phones nowadays have the capability to connect to the provider when out of range of their mobile network by using a Wi-Fi connection to the Internet. Telstra, Optus and Vodafone all support this feature. If yours doesn’t automatically do this, check that Wi-Fi calling is enabled in the phone’s settings.

Sometimes you may find yourself on the very edge of the mobile carrier range. You may see the network name, e.g. Telstra, but only one or zero bars of signal. Making phone calls or texting might work only occasionally or drop out unexpectedly. Since the phone still has a connection to the network it doesn’t change to a Wi-Fi connection. You can try resolving this by switching to airplane mode and leaving Wi-Fi on — this will force the phone to use the Wi-Fi connection.

You probably won’t even notice when Wi-Fi or phone carrier is in use.

This is also very handy feature for those that use cheaper re-sellers that access only part of the wholesaler’s network or whose network has limited coverage outside populated areas. Your ALDI SIM will work everywhere, provided you are connected to the Wi-Fi.

Note that Starlink isn’t providing the phone service; it is still the mobile phone company, and the billing is still the same. It’s just that Starlink is providing the connection to your mobile carrier by Wi-Fi and Internet.

Appendix 1

Managing Data Usage on Starlink Roam 50GB and 5GB Backup Plans: Avoiding Speed Test Pitfalls

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[Note: Updates to the original document are in blue font.]

If you're using **Starlink Gen 3, Gen 2, or Starlink Mini** with a **100GB Starlink Roam plan** or the ~~5GB Backup plan~~, managing data usage is essential to ensure it lasts through the billing period. Many users experience high data consumption even with light activities such as browsing and email. Understanding how your data is used and optimising your settings can help prevent overages.

The Hidden Cost of Speed Tests on Starlink

Running speed tests—whether through third-party sites like Speedtest.net or **within the Starlink app itself**—can use a **significant** amount of data:

- **Each speed test can consume between 100MB and 1GB** depending on factors such as connection speed and test duration.
- Conducting multiple speed tests throughout the month can rapidly deplete your capped data plan.
- **Recommendation:** Avoid unnecessary speed tests; perform them only when diagnosing connection issues.

Example:

- Running **10 speed tests** at an average of 500MB each can use **5GB**, which is **5% of the 100GB Roam plan.**

How To Enable Low Data Mode on Your Devices

Activating **Low Data Mode** can help significantly reduce data usage by limiting background processes and prioritising essential activities.

On iOS (iPhone/iPad):

1. Go to **Settings**.
2. Tap **Wi-Fi**.
3. Select the connected **Starlink network**.
4. Toggle Low Data Mode ON.

Benefits:

- Reduces app background activity.
- Limits automatic system updates and cloud backups.
- Lowers video call and media quality to save data.

On Android Devices:

1. Open **Settings**.
2. Select Network & Internet (or Connections).
3. Tap **Wi-Fi**, then choose your **Starlink network**.
4. Tap Advanced and enable Metered Network/Data Saver Mode.

Benefits:

- Limits automatic background data usage.
- Prevents large downloads and cloud syncs.
- Helps stretch your data for essential tasks.

On Other Devices:

Windows and MacOS computers have similar settings for low data mode, metered network, data saver modes or similar.

How Much Data Can You Save with Low Data Mode?

Enabling Low Data Mode can significantly reduce your data usage by optimising your connection for essential tasks only. Below is a comparison of typical usage with and without Low Data Mode:

Activity	Without Low Data Mode	With Low Data Mode
Web Browsing (1 hour)	60 MB	30 MB
Emails (with attachments)	200 MB	50 MB
Video Calls (1 hour, SD)	500 MB	250 MB
Cloud Sync (Photos/Videos)	2-10 GB per sync	500 MB – 1 GB
Background Updates (monthly)	10+ GB	1-2 GB

Starlink Updates Are Not Metered

All updates related to **Starlink services**, including:

- Starlink router firmware updates
- Starlink terminal software updates

These updates are not counted against your data plan. This means that the system ensures your Starlink hardware operates optimally without affecting your monthly data allocation.

Why This Matters:

While these updates ensure system performance and stability, they can involve significant data transfers. Knowing they are unmetered allows you to focus on managing data for personal activities like browsing, streaming, or online meetings.

Tips To Reduce Data Usage on Starlink

1. Disable Automatic Updates:
   - Turn off automatic updates for operating systems, applications, and software to prevent large downloads.
2. Adjust Cloud Sync Settings:
   - Set photo and file backups (iCloud, Google Drive, OneDrive) to manual or limit uploads to Wi-Fi.
3. Lower Streaming Quality:
   - Set Netflix, YouTube, and other streaming services to **Standard Definition (SD)** to reduce data usage.
4. Monitor Usage with the Starlink App:
   - Regularly check your usage and avoid unnecessary bandwidth-heavy tasks.
5. Turn Off Background Data for Apps:
   - Disable background app refresh and auto-sync for social media, email, and messaging apps.
6. Avoid Speed Tests:
   - Only run speed tests when troubleshooting, as each test can consume a significant portion of your data.
7. Disconnect Unused Devices:
   - Ensure that devices such as smart TVs, tablets, and game consoles are disconnected when not in use.

Example: How Long Your Data Will Last

Activity	Estimated Usage Per Hour	Duration on 100GB Plan	Duration on 5GB Plan No longer available
Web Browsing (light)	60 MB	1660 hours	83 hours
Video Calls (SD)	500 MB	200 hours	10 hours
Streaming (SD)	1 GB	100 hours	5 hours
Streaming (HD)	3 GB	32 hours	1.5 hours
Speed Tests (Starlink app)	100MB–1GB per test	100+ tests	5–50 tests

Conclusion

Managing your data on the **Starlink Roam 100GB plan** ~~or the 5GB Backup plan~~ requires careful monitoring and adjustments. Enabling **Low Data Mode**, avoiding excessive speed tests, and optimising device settings will help you make the most of your limited data without interruptions.

By following these strategies, you can enjoy essential online activities while staying within your data allowance.

Appendix 2

Quick Reference Cost Tables

The following tables can be used to quickly find the approximate cost to activate or upgrade a plan from the number of days remaining in the billing month. Only the 30-day month is shown. The daily amount for February will be a few cents more and for the 31-day months a few cents less.

Activation Cost

Days Left	$150	$110	$75	$210	$85	$15.00
30	150.00	110.00	69.00	210.00	85.00	15.00
29	145.00	106.33	66.70	203.00	82.17	14.50
28	140.00	102.67	64.40	196.00	79.33	14.00
27	135.00	99.00	62.10	189.00	76.50	13.50
26	130.00	95.33	59.80	182.00	73.67	13.00
25	125.00	91.67	57.50	175.00	70.83	12.50
24	120.00	88.00	55.20	168.00	68.00	12.00
23	115.00	84.33	52.90	161.00	65.17	11.50
22	110.00	80.67	50.60	154.00	62.33	11.00
21	105.00	77.00	48.30	147.00	59.50	10.50
20	100.00	73.33	46.00	140.00	56.67	10.00
19	95.00	69.67	43.70	133.00	53.83	9.50
18	90.00	66.00	41.40	126.00	51.00	9.00
17	85.00	62.33	39.10	119.00	48.17	8.50
16	80.00	58.67	36.80	112.00	45.33	8.00
15	75.00	55.00	34.50	105.00	42.50	7.50
14	70.00	51.33	32.20	98.00	39.67	7.00
13	65.00	47.67	29.90	91.00	36.83	6.50
12	60.00	44.00	27.60	84.00	34.00	6.00
11	55.00	40.33	25.30	77.00	31.17	5.50
10	50.00	36.67	23.00	70.00	28.33	5.00
9	45.00	33.00	20.70	63.00	25.50	4.50
8	40.00	29.33	18.40	56.00	22.67	4.00
7	35.00	25.67	16.10	49.00	19.83	3.50
6	30.00	22.00	13.80	42.00	17.00	3.00
5	25.00	18.33	11.50	35.00	14.17	2.50
4	20.00	14.67	9.20	28.00	11.33	2.00
3	15.00	11.00	6.90	21.00	8.50	1.50
2	10.00	7.33	4.60	14.00	5.67	1.00
1	5.00	3.67	2.30	7.00	2.83	0.50

Upgrade Cost

Days Left	$15 to $85	$85 to $210	$15 to $75	$75 to $110	$110 to $150	$150 to $210
30	70.00	125.00	60.00	35.00	40.00	60.00
29	67.67	120.83	58.00	33.83	38.67	58.00
28	65.33	116.67	56.00	32.67	37.33	56.00
27	63.00	112.50	54.00	31.50	36.00	54.00
26	60.67	108.33	52.00	30.33	34.67	52.00
25	58.33	104.17	50.00	29.17	33.33	50.00
24	56.00	100.00	48.00	28.00	32.00	48.00
23	53.67	95.83	46.00	26.83	30.67	46.00
22	51.33	91.67	44.00	25.67	29.33	44.00
21	49.00	87.50	42.00	24.50	28.00	42.00
20	46.67	83.33	40.00	23.33	26.67	40.00
19	44.33	79.17	38.00	22.17	25.33	38.00
18	42.00	75.00	36.00	21.00	24.00	36.00
17	39.67	70.83	34.00	19.83	22.67	34.00
16	37.33	66.67	32.00	18.67	21.33	32.00
15	35.00	62.50	30.00	17.50	20.00	30.00
14	32.67	58.33	28.00	16.33	18.67	28.00
13	30.33	54.17	26.00	15.17	17.33	26.00
12	28.00	50.00	24.00	14.00	16.00	24.00
11	25.67	45.83	22.00	12.83	14.67	22.00
10	23.33	41.67	20.00	11.67	13.33	20.00
9	21.00	37.50	18.00	10.50	12.00	18.00
8	18.67	33.33	16.00	9.33	10.67	16.00
7	16.33	29.17	14.00	8.17	9.33	14.00
6	14.00	25.00	12.00	7.00	8.00	12.00
5	11.67	20.83	10.00	5.83	6.67	10.00
4	9.33	16.67	8.00	4.67	5.33	8.00
3	7.00	12.50	6.00	3.50	4.00	6.00
2	4.67	8.33	4.00	2.33	2.67	4.00
1	2.33	4.17	2.00	1.17	1.33	2.00

Note that the total cost for a month will be what was paid to activate the original plan plus the upgrade.

To find the cost to upgrade, say, from the $15 plan to the $210 plan, simply add the $15 to $85 and the $85 to $210 figures for the date. For example, with 24 days to go add $56 + $100 = $156.

Similarly, if doing so on different days, say at 24 and 12 days to go, $56 + $50 = $106.

Approximate cost to upgrade from the $85 plan to the $210 plan on each day in a 30-day billing period. The right column shows what you'd pay for the month.

Upgrade from $85 to $210

Days Left	Extra	Month Total
30	125.00	210.00
29	120.83	205.83
28	116.67	201.67
27	112.50	197.50
26	108.33	193.33
25	104.17	189.17
24	100.00	185.00
23	95.83	180.83
22	91.67	176.67
21	87.50	172.50
20	83.33	168.33
19	79.17	164.17
18	75.00	160.00
17	70.83	155.83
16	66.67	151.67
15	62.50	147.50
14	58.33	143.33
13	54.17	139.17
12	50.00	135.00
11	45.83	130.83
10	41.67	126.67
9	37.50	122.50
8	33.33	118.33
7	29.17	114.17
6	25.00	110.00
5	20.83	105.83
4	16.67	101.67
3	12.50	97.50
2	8.33	93.33
1	4.17	89.17