# Mini Integration Kit

User Manual and Installation Guide





Caravan and Camping Technologies

cowfish.com.au

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#### **PACKAGE CONTENTS**





Power and Data Combiner

Power and Data Splitter



15m or 25m Mini Integration Kit cable



Cosmo Mini





External weatherproof socket and cap



1 metre or 6 metre ethernet cable



0.4 metre ethernet cable



Internal receptacle



#### **OPTIONAL ADDITIONAL CONTENTS**





Cigarette plug power cable, or Anderson power cable with XT60 connector for Cosmo Mini





Mini Access Point or VanConnect unit



#### INTRODUCTION

The Mini Integration Kit allows you to operate your Starlink Mini dish from your 12V battery system, ensuring reliable and consistent connectivity even in the most remote locations. The Mini Integration Kit removes the requirement to run an inverter to power the Starlink System but instead powers the Dish directly from your caravan battery. By using the Mini Integration Kit you also bring the Internet connection to the inside of the caravan, so that this can be turned into a WiFi network to improve the overall WiFi coverage.

The Mini Integration Kit links the Starlink Mini dish to the VanConnect system or Mini Access Point and allows you to choose the best internet option for your needs, 4G/5G or Starlink, or even have both. By having both 4G/5G and Starlink, you can pause the Starlink service whilst in a good 4G/5G coverage area.

The Integration Kit is not a standalone product, but instead an Add On for the Starlink Mini system and either a VanConnect unit or Mini Access Point. A VanConnect 5G or Mini Access Point is required in order to use the Integration Kit.

NOTE: VanConnect system and Mini Access Point are sold separately. Starlink Mini not included and an active Starlink subscription is required.



HARDWARE OVERVIEW

Starlink Mini power input



Combined Power and Data output

Data connector

Starlink Mini power input



Starlink Mini data connector

Combined Power and Data input





#### INSTALLATION - COSMO MINI AND COMBINER

#### **Installation of the COSMO Mini power supply**

The COSMO Mini is to be installed in a location that is easily accesible and in close proximity to the vanConnect unit or Mini Access point.

Mount the COSMO Mini and connect COSMO Mini to the caravans power supply. In order to supply adequate input power to COSMO Mini, a minimum of 14 AWG (2.5 mm<sup>2</sup>) electrical wire is required. This cable is to be correctly fused. Installation by a certified auto electrician is advised.

IMPORTANT: Insufficient power supply to the COSMO Mini power unit, due to inadequate cable size, long cable runs, or piggy backing of existing power outlets can result in the Starlink system not booting up. See Troubleshooting for more information.

Mount the VanConnect or Mini Access Point next to the COSMO Mini and link the devices together with the Power and Data Combiner.





# INSTALLATION - INTERNAL CABLING AND WEATHERPROOF CONNECTOR

Determine the location where the external weatherproof wall socket is to be installed as well as the internal RJ45 socket. Ensure that there is a cable path available from the internal RJ45 socket to the nominated location for the Weatherproof wall socket, and that the ethernet cable is of sufficient length.

- 1. Run the 1 metre or 6 metre shielded ethernet cable from the preferred internal RJ45 socket location to the preferred location of the external Weatherproof wall socket.
- 2. Drill a hole with a diameter of 24 mm into the external wall of the caravan.
- 3. Connect the Weatherproof wall socket to the 1 metre or 6 metre shielded ethernet cable.
- 4. Mount the Weatherproof wall socket to the caravan wall and ensure the seal is water tight by utilising the included rubber seal and by applying non-hardening silicone around the perimeter of the wall socket.

5. Connect the Weatherproof cap into the Weatherproof wall socket and secure the chain of the Weatherproof cap to the external wall of the caravan.



- 6. Drill a hole of 24 mm into the internal wall for the internal RJ45 socket.
- 7. Connect the 1 metre or 6 metre shielded ethernet cable to the back of the internal RJ45 socket.
- 8. Connect the Power and Data Combiner to the internal RJ45 socket with the provided 0.4 metre cable.



#### **INSTALLATION - SPLITTER**

Connect the 15 metre or 25 metre cable to the Power and Data Splitter:

- 1. Insert the end of the 15 metre or 25 metre cable through the plastic ring.
- 2. Place the silicone ring onto the 15 metre or 25 metre cable, ensuring it tightly wraps around the cable.
- 3. Feed the cable with silicone ring into the Splitter screw cap.







- 4. Install the silicone O-ring onto the base of the Splitter socket.
- 5. Insert the 15 metre or 25 metre cable into the splitter.
- 6. Tighten the Splitter screw cap.







- 7. Tighten the plastic ring.
- 8. Your splitter is ready to use.



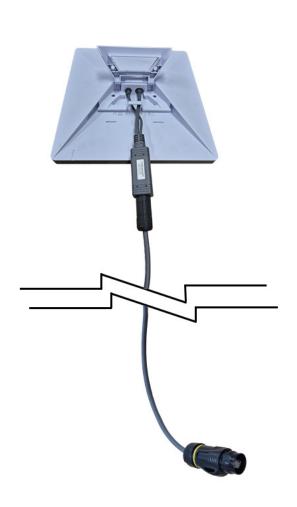


Connect the Splitter to the Starlink Mini Dish:

Remove the cap on the Starlink Mini dish covering the RJ45 data port. Connect the RJ45 plug from the Power and Data Splitter into the Starlink Mini data port.

Connect the power plug from the Power and Data Splitter into the Starlink Mini power port.





OUTSIDE CARAVAN



INSIDE CARAVAN

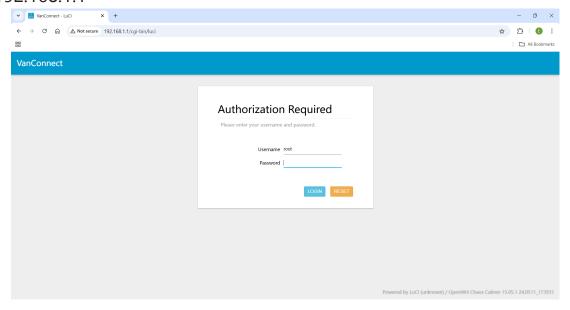


#### **SETUP**

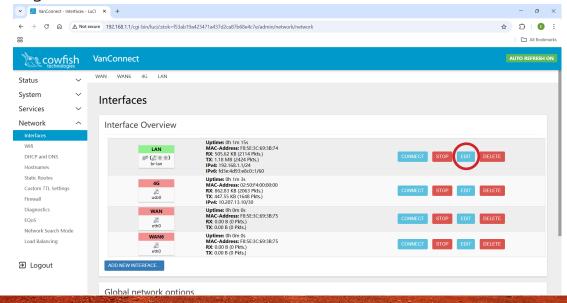
The Mini Access Point is pre-configured to accept a Starlink connection through the Mini Integration Kit. There is no additional setup required when installing the Integration Kit.

The VanConnect 4G and VanConnect 5G units require an update to their IP address to prevent an IP conflict with the Starlink Mini dish.

1. Log into the VanConnect by opening a web broswer and navigating to 192.168.1.1

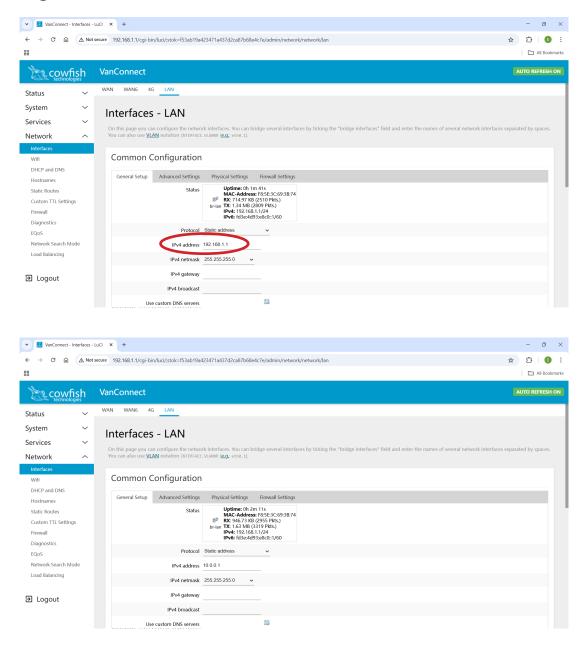


2. Navigate to 'Network' ▷ 'Interfaces' and select 'Edit' for the 'LAN' interface.





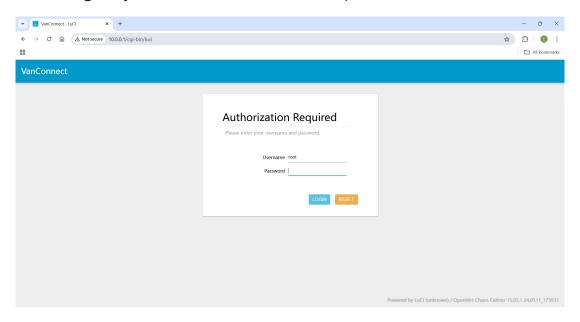
3. Change the IP address from '192.168.1.1' to '10.0.0.1'



4. Scroll to the bottom of the page and select 'Save and Apply'



The IP address of the VanConnect has now been changed and the network will restart. This means that you will be disconnected from the WiFi and you will need to reconnect to the WiFi network. If you wish to log into the VanConnect again you now need to use the updated IP address os '10.0.0.1'



The Starlink Mini dish does NOT require to be put in bypass mode. You can use the Starlink Mini dish with its factory settings.

The VanConnect 5G and Mini Access Point standard setup configurations are listed in the respective manuals. Please complete the standard setup prior to enabling the Mini Integration Kit.



#### **OPERATION**

To use the Mini Integration Kit, follow these steps:

- 1. Find an area to place the Starlink dish with a clear view of the sky.
- 2. Plug the Splitter cable into the power and data port of the Starlink Mini dish.
- 3. Connect the other end of the cable into the weatherproof port on the side of the caravan or motorhome.
- 4. Turn on the Mini Integration Kit by placing the On/Off switch in the ON position.
- 5. Turn on the VanConnect or Mini Access Point.
- 6. After a few minutes, Starlink will make an initial connection to the Starlink constellation.

CAUTION: Do not connect the cable between the Mini Integration Kit and the Starlink Dish whilst the Integration Kit is powered on. The Integration Kit will have a live 48V power supply when the ON/OFF switch is placed in the ON position and connecting the cable whilst the unit is on can permanantly damaged the Integration Kit and Starlink Dish.



#### FREQUENTLY ASKED QUESTIONS

#### Do I need to run an inverter to power the Mini Integration Kit?

No, you will not need to run an inverter or have access to mains power (240V). The Mini Integration Kit works in conjuction with the Cosmo Mini which operates off your caravan 12V system, so that you can use it off grid, anywhere, anytime.

#### Do I need to modify the Starlink hardware?

No, there is no need to modify any of the Starlink hardware.

#### Can I still use the Starlink App when using the Mini Integration Kit?

Yes, to access the Starlink router administration dashboard you use the Starlink app, this doesn't change when using the Integration Kit. The Starlink app is available for iOS and Android devices. To access Starlink from the app, be sure you are connected to your VanConnect Wifi network.

# How do I connect to the WiFi and Internet through the Mini Integration Kit?

The Mini Integration Kit is an Add On system to the Cosmo Mini and either a VanConnect unit or Mini Access Point. In order to connect to the Internet, you are required to have one of these units. Please refer to the respective manual for your model, for further details on how to set up the WiFi network.

# Can I use the Mini Integration Kit without a VanConnect or Mini Access Point?

No, the Mini Integration Kit is an Add On system to the VanConnect or Mini Access Point. The Integration Kit supplies power to the Starlink Mini Dish and integrates it with the VanConnect or Mini Access Point. It is not a standalone product.

#### Can I use the Integration Kit with a different router?

No, we cannot guarantee that the Integration Kit will operate as intended with a 3rd party router. The VanConnect is preconfigured to function with the Integration Kit.



# Do I need to make any changes to the VanConnect or Mini Access Point in order to use the Mini Integration Kit?

Yes, you will need to setup these devices. Please refer to the respective manual for your model, for further details on how to set up the WiFi network.

#### What warranty is supplied with the product?

The Starlink Integration Kit comes with a 24 month warranty.



#### TROUBLESHOOTING

#### The Power LED does not light up.

If the Power LED does not light up it means that there is no power coming to the Mini Integration Kit. Please check the power cables and ensure that they are connected properly. Check if the power cables are fused, and if the fuse is still in working condition.

#### The Starlink Dish is not powering on.

Confirm that the Power LED on the Cosmo Mini and Power LED on the Mini Integration Kit are both on. If both LEDs are on, but the Dish is not powering up there is potentially a power supply fault, due to insufficient power supply to the 12v Dishy unit.

Ensure that the electrical cable size to the Cosmo Mini is adequate for the cable length and that the power is supplied directly from the 12V battery system, not from an existing power point in the caravan. Cigarette socket power points can have long cable runs, smaller electrical cabling, or wired in series, resulting in a power drop.



#### **TECHNICAL SPECIFICATIONS**

Ethernet	10/100/1000mbps
Weatherproof rating	IP65
Operating Temperature	-10 to 45°C
Storage Temperature	-20 to 70°C
Input power	DC12V / DC24V at max 4A
Output power	DC48V at max 2A
Max power rating	96W



#### PRODUCT WARRANTY

At Cowfish Technologies Pty Ltd (Cowfish) we want our customers to be completely satisfied with their purchase. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

#### **Warranty Conditions**

Cowfish offers the following warranty in relation to its goods.

The benefits of this warranty are in addition to any rights and remedies imposed by Australian State and Federal legislation that cannot be excluded. Nothing in this warranty is to be interpreted as excluding, restricting or modifying any State or Federal legislation applicable to the supply of goods and services which cannot be excluded, restricted or modified.

Cowfish warrants to the original purchaser that, subject to the exclusions and limitations below, all parts of the manufacture and assembly of the goods carried out by Cowfish will be free from defects in materials and workmanship for a period of 24 months from the date of purchase (Warranty Period). This warranty is not transferable to a subsequent customer if the goods are sold by the original customer during the Warranty Period.

If a defect appears in Cowfish's manufacture or assembly of the goods before the end of the Warranty Period and Cowfish finds the goods to be defective in materials or workmanship, Cowfish will, in its sole discretion, either repair or replace the goods or the defective part of the goods free of charge, or provide a credit or exchange.

Cowfish reserves the right to replace defective parts of the goods with parts and components of similar quality, grade and composition where an identical part or component is not available. Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

Where your rights under the Australian Consumer Law or this warranty do not apply, we may provide you with an indicative cost estimate to repair the goods.



#### Damaged goods

If any goods arrive damaged, please contact Cowfish as soon as possible so a Return Authority Number can be arranged for the goods to be inspected. Goods must be returned within a reasonable time. The acceptance of the goods delivered shall be deemed for all purposes to have taken place 30 days\* from the date of delivery.

If a purchaser receives a product that is damaged in transit from Cowfish, the purchaser should: Refuse to accept delivery of the product; Direct the courier to "Return goods to sender"; and Notify the Cowfish Customer Service or Warranty Department immediately.

No goods will be accepted for return until a Return of Goods Authority Number has been supplied to you. Goods must be returned in the condition received by you with all original packaging, accessories and/ or manuals.

#### Returns and repairs

Goods returned for repair or credit will be assessed and repaired or replaced within a reasonable time. Credits will normally be processed within 14 days\* of your goods being returned to Cowfish's nominated warehouse. Where goods have been assessed to be repairable under the manufacturers' warranty, you may be supplied with details of an authorised repairer. You may also be provided with an indicative repair and/ or replacement time, which may vary due to reasons beyond our control, or the repairer's reasonable control, such as part availability and incorrect fault description. Cowfish does not take any responsibility for any repairs and/ or replacements carried out without our prior written consent.

Where goods are assessed to have been damaged by misuse or accident, no credit will be issued and no further action will be entered into. Where your rights under the Australian Consumer Law or any manufacturer's warranty do not apply, we may provide you with an indicative cost estimate to repair the goods.

If a replacement item is required, Cowfish will require the location of the caravan and owners for the next 14 days to allow for pick, pack and postage. If the owners are traveling, Cowfish require next major town or city location. Otherwise, the warranty procedure as in place at present will remain.



#### Replacement item warranty

Should a replacement item be supplied by Cowfish 'under warranty' due to damage or product failure of original item purchased, Cowfish will warrant the replacement item for the remaining warranty period only of the original item warranty.

#### Warranty Claims

If a fault covered by warranty occurs, the customer must first contact the Cowfish Customer Service or Warranty Department.

Any warranty claim must be accompanied by proof of purchase, full details of the alleged defect (including clear photos), and appropriate documentation (such as historical and maintenance records).

The customer must make the goods available to Cowfish or its authorised repair agent for inspection and testing.

If such inspection and testing finds no defect in the goods, the customer must pay Cowfish's usual costs of service work and testing. The customer must bear the cost of the transport of the goods to and from Cowfish or the authorised repair agent, and all insurance of the goods.

Goods returned for repair or credit will be assessed and repaired or replaced within a reasonable time.

Credits will normally be processed within 14 days\* of your goods being returned to Cowfish's nominated warehouse. Where goods have been assessed to be repairable under this warranty, you may be supplied with details of an authorised repairer. You may also be provided with an indicative repair and/ or replacement time, which may vary due to reasons beyond our control, or the repairer's reasonable control, such as part availability and incorrect fault description. Cowfish does not take any responsibility for any repairs and/ or replacements carried out without our prior written consent. If a replacement item is required, Cowfish will require the location of the caravan and owners for the next 14 days to allow for pick, pack and postage. If the owners are traveling, Cowfish require next major town or city location.

#### Limitations

Cowfish makes no express warranties or representations other than set out in this warranty.

The repair or replacement of the goods or part of the goods is the absolute limit of Cowfish's liability under this express warranty.



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