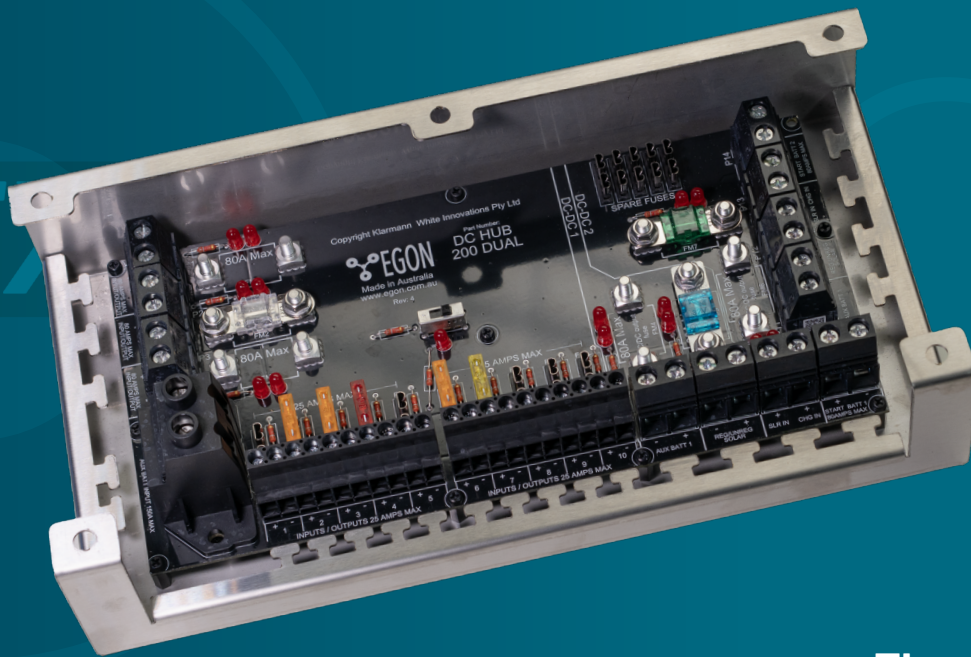


NEXT GENERATION

DC-HUB DUAL

INSTALLATION AND OPERATIONS MANUAL



The solution
for simplifying
and standardizing
DC installations.



**GAME-CHANGING
SIMPLICITY**

THE NESPRESSO OF DC INSTALLATIONS



Thank you for purchasing an EGON product.

Whether this is your first EGON purchase or your 10th, we appreciate your trust in us. You won't be disappointed.

EGON was born from a need for quicker, standardised and more efficient installations. Plain and simple. So, that's what we bring to you in the **EGON DC Hub Dual**.

We like to think of our EGON Hubs as the Nespresso of in-vehicle DC installations. To do something that's been done for decades, but altogether easier, faster, cheaper and just better at everything.

This is the game-changing solution that offers simplicity in vehicle builds you've never dreamed of. Sound too confident? We know.

TIME FOR YOU TO MEET THE DC-HUB DUAL

The quality of the components is top-notch and the device is designed by a German automotive engineer (that's Heiner) and adored by a gallivanting 4WD explorer (that's Andrew). What else do you need to know? Ah, yes! The installation instructions.

If we had few words to describe the DC-Hub DUAL, they'd be:



SIMPLE



VERSATILE



OUT-OF-THE-BOX

The DC-Hub Dual is a compact, engineered DC power distribution hub designed to standardise and simplify 12V and 24V electrical systems in touring vehicles, campers, vans, and mobile setups. Rather than relying on custom, hand-built wiring looms that vary from installer to installer, the DC-Hub Dual provides a single, clearly defined, and repeatable engineered electrical architecture.

That's more time enjoying your build and less time pulling your hair out.

Protect the hair at all costs.

GET TO KNOW THE DC-HUB'S BEST FEATURES

All critical distribution logic—fusing locations, current paths, and connection grouping—has been engineered into the board. Your job is to size cables correctly, install appropriate fuses, and follow the clearly labelled terminals.

Used correctly, the DC-Hub Dual will:

- 1 Dramatically reduce wiring complexity.
- 2 Eliminate many common causes of electrical failure.
- 3 Make installations easier to understand, inspect, and service.
- 4 Provide a professional, repeatable outcome even for DIY installers.

2. Safety Information

2.1 Read before installing.

DC power systems store and transfer significant energy. Incorrect installation can result in fire, damage to equipment, or serious personal injury. Take your time, read this manual fully, and do not proceed if you are unsure about any step.

2.2 General Safety Rules

- Always disconnect all batteries, chargers, and solar inputs before starting work.
- Never work on live circuits. Confirm circuits are de-energized with a multimeter.
- Wear eye protection and remove rings, watches, and metal jewelry.
- Secure all cabling to prevent vibration damage in high-vibration conditions.
- Never exceed the rated current of connectors, cables, or fuses.

2.3 Fusing rules (critical)

All batteries must be externally fused as close to the battery as possible (within 30 cm).

- Fuses on the DC-Hub DUAL do NOT replace battery protection fuses.
- Fuse size must always protect the cable first, then the device.
- Never install a fuse with a higher rating than the cable can safely carry.

DC-HUB DUAL

3. Product Overview

3.1 Brief

The EGON DC-Hub Dual is designed for dual dc/dc charger systems that demand professional-grade distribution, clear fault-finding, and long-term reliability.

3.2 The DC-Hub DUAL provides:

- A centralised connection point for start battery, auxiliary battery, solar, and DC-DC chargers.
- Three high-current 80A fused input/output circuits.
- Ten 25A fused accessory circuits that can be used as inputs or outputs.
- Two independent start battery inputs
- Two independent solar inputs
- Two independent DC-DC charger connections

All load distribution, fault indication, and protection philosophy remains unchanged.

4. Specifications

- System voltage: 12 V / 24 V DC
- Auxiliary (house) battery input: 150 A max (external Mega fuse required)
- High-current I/O circuits: 3 × 80 A max
- General-purpose I/O circuits: 10 × 25 A max
- DC-DC charger inputs: 2 × 80 A max
- Solar inputs: 2 × 60 A max
- Fuse types: MIDI (high-current), standard blade (25 A circuits)

5. Environmental

- Intended for automotive and mobile applications
- Install in a dry, protected location away from extreme heat, direct water (including splashes) and extreme dust exposure

**ALL THE GEAR,
HOPEFULLY
SOME IDEA.**

Here's what you'll need:

- Cable cutters
- Screwdrivers
- This installation guide
- Your music of choice
- **Optional:** Your spectacles. We don't judge.

IMPORTANT
DO NOT USE FERRULES!
THE CONNECTORS ARE
DESIGNED FOR MULTI-CORE
COPPER CABLE.

DC-HUB DUAL

DC INSTALLATION IS NOW FAST AND SIMPLE JUST FOLLOW THE STEPS BELOW

The DC Hub DUAL groups connections. Follow the function labels on the Hub.

6. Connection Overview

- P1** High-current input/output
 - 80 A max
 - Fused by FM1 (MIDI fuse)
- P2** High-current input/output
 - 80 A max
 - Fused by FM2 (MIDI fuse)
- P3** High-current input/output
 - 80 A max
 - Fused by FM2 (MIDI fuse)
- P4** Auxiliary / house battery input
 - 150 A max
 - MUST be externally fused with a Mega fuse within 30 cm of the battery
- P5** General-purpose inputs/outputs (circuits 1-5)
 - 25 A max per circuit
 - Uses blade fuses F1-F5
 - Five positive/negative in/output pairs
- P6** General-purpose inputs/outputs
 - 25 A max per circuit
 - Uses blade fuses F6-F10- Five positive/negative output pairs
 - Five positive/negative in/output pairs
- DC-DC Charger #1 connections:**
 - P7** DC-DC charger output and ground
 - 80 A max
 - Fused by FM4 (MIDI fuse)
 - P8** Solar input for DC-DC charger #1
 - 60 A max
 - Fused by FM5 (MIDI fuse)
 - P9** Solar and start battery connection for DC-DC charger #1
 - P10** Start battery #1 input for DC-DC #1
 - 80 A max
 - MUST be externally fused within 30 cm of the start battery (MIDI fuse)
- DC-DC Charger #2 connections:**
 - P11** DC-DC charger output and ground
 - 80 A max
 - Fused by FM6 (MIDI fuse)
 - P12** Solar input for DC-DC charger #2
 - 60 A max
 - Fused by FM7 (MIDI fuse)
 - P13** Solar and start battery connection for DC-DC charger #2
 - P14** Start battery 2 input for DC-DC charger #2
 - 80 A max
 - MUST be externally fused within 30 cm of the start battery (MIDI fuse)
- NB** Fuse FM5 and FM7 is only installed when regulated solar (external MPPT) is used.

DC-HUB DUAL

6.1 Solar Configurations

Unregulated solar (DC-DC charger with MPPT)

- For DC-DC charger with in-built MPPT (e.g Redarc BC-DC)
- Solar connects directly to DC-DC charger via P8 or P12.
- DC-DC solar input cable connects via P9 or P13 "SLR IN".
- Fuse FM5 or FM7 must **NOT** be installed.

Regulated solar (external MPPT):

- Solar connect to an external MPPT regulator.
- MPPT output connects to P8 or P12.
- Fuse FM5 or FM7 must be installed.

6.2 Ground Connections

- All ground (negative) connections return to the common negative bus on the DC-Hub. (This operates as a in-built negative bus bar)

Ensure all high-current devices have an appropriately sized negative cable back to the Hub or to a properly engineered common ground point tied into the Hub's ground.

6.3 Wire Guage and Fuse Selection Guide

Always size cables based on current, length, and acceptable voltage drop. The table below is a general guide for typical automotive cable sizes used with the DC-Hub DUAL.

Cable Size	Nom. Area mm ²	Typical Single Core Amp Rating	Typical Dual Core Max Amp Rating	Lug/Crimp	Heatshrink
3mm	1	5A - 10A	7.5A	red	3mm
4mm	2	10A - 20A	15A	blue	6mm
6mm	5	20A - 35A	30A	yellow	10mm
8B&S	8	35A - 65A	50A	10mm ²	10mm
6B&S	14	65A - 120A	100A	16mm ²	13mm
3B&S	25	100A - 175A	150A	25mm ²	19mm
1B&S	35	150A - 200A		35mm ²	19mm
0B&S	50	200A - 250A		50mm ²	25mm
00B&S	68	250A - 300A		70mm ²	25mm
000B&S	90	300A - 350A		95mm ²	25mm

DC-HUB DUAL

7. Installation Steps. In this order

- 1 Mount spacers in the bracket with screws inserted from the back. Do not over-tighten the screws. Just a firm hand will do.
- 2 Mount the bracket in a dry and easily accessible location. (DC-Hub DUAL is not suited to under-bonnet installations.)
- 3 Place external battery fuses near each battery but do NOT insert fuses until installation is complete, or near completion (safety).
- 4 Route and secure all cabling for chargers, solar, batteries and loads.
- 5 Connect loads, chargers, batteries and solar inputs as planned to the Dc-Hub.
- 6 Use cable ties to secure the cables to the T-bars on the mounting bracket. This is IMPORTANT as it reduces vibration wearing the cables loose.
- 7 Verify polarity and connector torques, and then energize the system by installing the battery fuse/s. A small white LED on the board will indicate that the board is energized.
- 8 Insert each fuse step by step and check system behavior at every step. As each fuse is inserted, a red LED that indicated an open but connected circuit, will go out. If one stays on, check the fuse. (the LED will only illuminate if there is an accessory connected).
- 9 **Double check the tightness of ALL the connectors on the Dc-Hub. THIS IS A VITAL FINAL STEP. DO NOT SKIP IT!**

A WORD FROM THE MAKERS.

Please don't skip any of these steps, especially the last one. We've built the DC-Hub from the best components we can find anywhere in the world. We assemble them in Western Australia and everyone who has a part in them is proud of this amazing product. 1000's of DC-Hubs are working faultlessly all over the world, and the reliability is already legendary. So please make sure you read all this boring stuff. Hey, that means you, bloke with a beer in hand. We understand. Truly we do! Get it right, and it'll serve you right year after year after year.

DC-HUB DUAL

RECOMMENDED TORQUE SETTINGS

We don't mess around when it comes to tightening screw terminals on the DC-Hub DUAL properly, and neither should you:

- 150A connector: 3Nm
- 80A/40A connectors: 1.8Nm
- 25A connectors: 0.8Nm

Don't forget to check screw tensions regularly with high-vibration applications.

8. Troubleshooting and Maintenance

If a circuit stops working:

- Check the relevant fuse and LED indicator.
- Inspect wiring and terminations.
- Confirm the load itself is functioning correctly.

Maintenance

Inspect the system periodically, especially after rough travel. Check terminal tightness, fuse condition, and cable routing. Early inspection prevents small issues becoming major failures.

9. Warranty and Support

The EGON DC-Hub Dual is covered by EGON's standard warranty against defects in materials and workmanship when installed correctly. Damage caused by incorrect installation or misuse is not covered.

For support, installation guidance, and updates, contact EGON through the EGON website.

Refer to EGON's video installation guides and wiring examples for further help.



WHAT'S WITH THOSE CLEVER RED LEDS?

Each fused circuit on the DC-Hub includes an LED indicator. If a fuse blows and a load is present, the LED will illuminate, making fault-finding fast and intuitive.

Take an even closer look at how it works in our **Connection Example Video Library**.

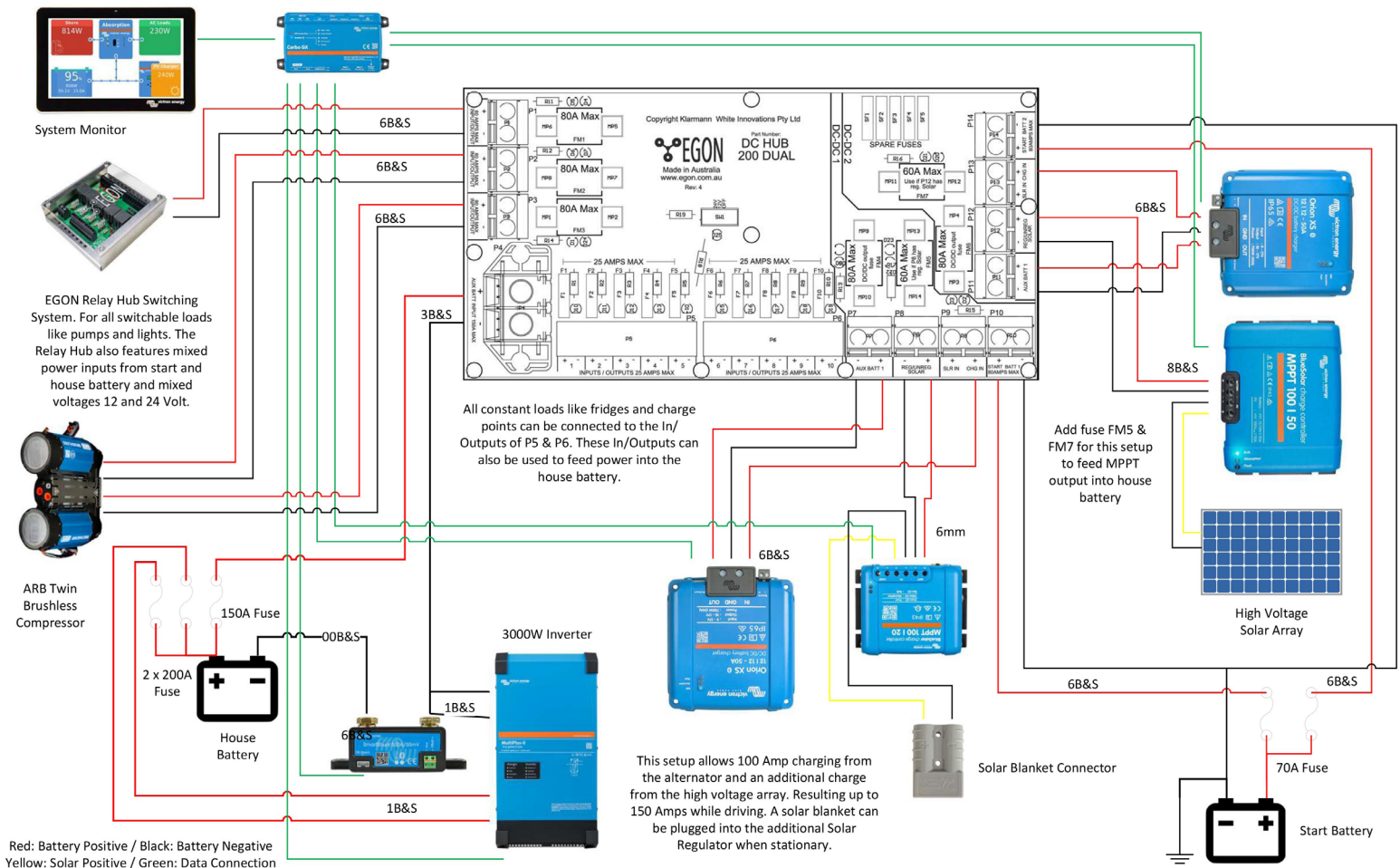


DC-HUB DUAL

VICTRON SYSTEM

This final connection example features 2 x Victron Orion XS DC/DC chargers, 50A roof solar, 20A solar blanket connection, the EGON Relay Hub switching system, a smart shunt, Cerbo GX with Touch-50 display, and a Multi Plus inverter/charger.

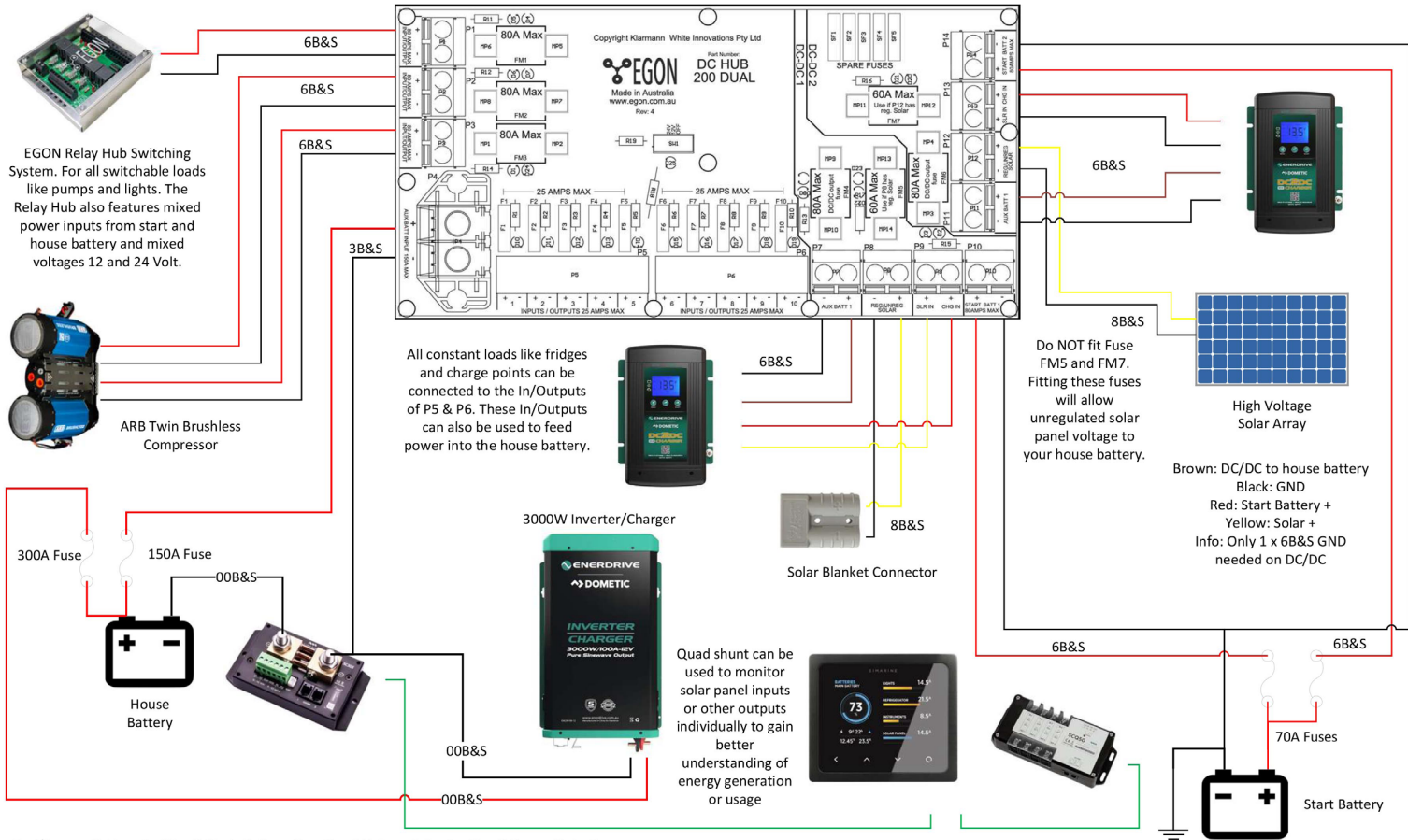
Maxing out at 150A of house battery charging, it's the ultimate solution for RVs, caravans, camper trailers with more complex setups.



DC-HUB DUAL

ENERDRIVE AND SIMARINE

This setup allows full 100 Amp charging from the alternator. It also allows to supplement the Alternator charge with solar panels to draw less current from the alternator. The Simarine screen can monitor the battery charge status and through the quad shunt also the power consumption / generation of a variety of chargers and loads.



A FINAL WORD. PAY ATTENTION TO THIS ONE:

- **All** batteries **MUST** be fused as close to the battery as possible. Do not rely on the fuses built into the DC-Hub NANO for this. **Read that again. Now.**
- Cables that are too thin can cause heat build-up and reduce the efficiency of chargers and accessories.
- DC-DC chargers should be placed as close as possible to the battery being charged, otherwise your system will not charge the battery efficiently.
- MPPT chargers should be also be placed as close as possible to the battery being charged.
- When inserting wires, the copper must be clean and enter into the connection cleanly.
- Tighten the screw terminals properly (see torque recommendations). **PLEASE PAY ATTENTION TO THIS** and double check them before signing off.
- Fuses protect the cables from burning in case of a short-circuit. So fuses must be capable of handling the current required to run the accessory, but **NOT MORE THAN 25%** of that. Accessory manufacturers recommend fuse sizes for a reason.
Cue: "We didn't start the fire" by Billy Joel.

DON'T GET YOUR WIRES CROSSED! NEED SUPPORT?

Contact support@egon.com.au

By now, you should be experiencing the game-changing simplicity of the EGON DC-Hub DUAL.

But if you've run into any trouble (or if you have any issues in the future), we've got your back.

Online Guides and Information: [Installation guides click here](#)

**DC-Hub
Installation:**



**Video
How-Tos**

