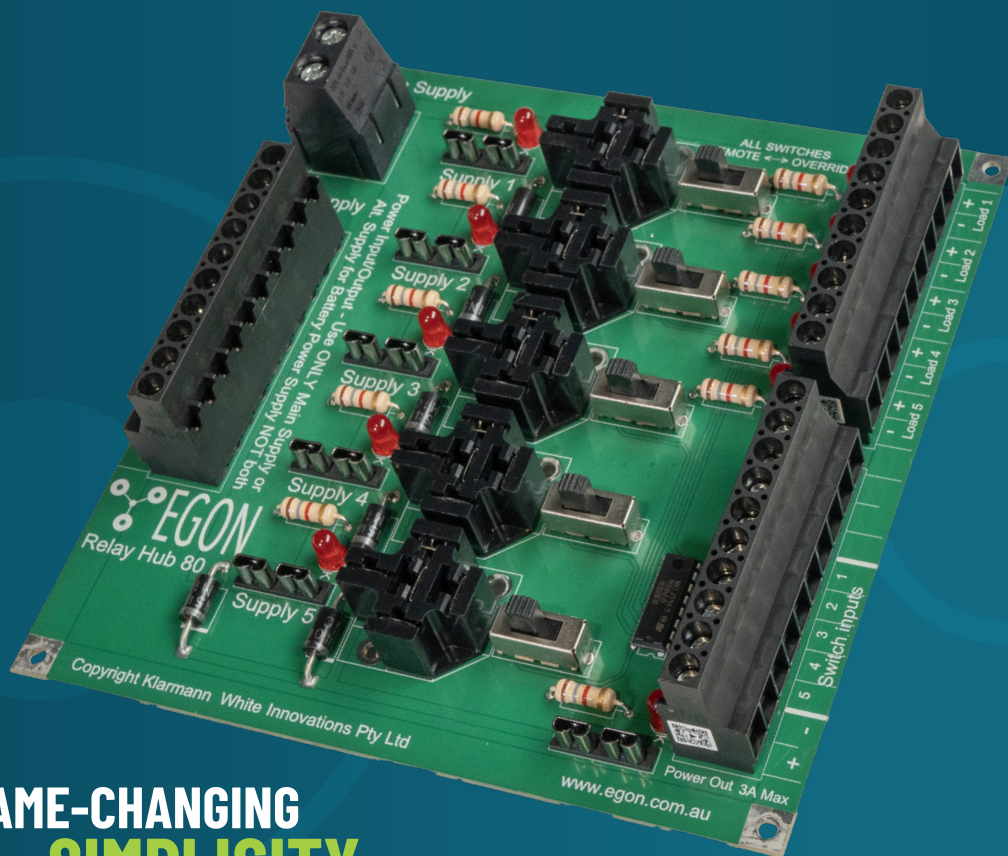


RELAY-HUB

INSTALLATION AND OPERATIONS MANUAL



**GAME-CHANGING
SIMPLICITY**



**The solution
for simplifying
and standardizing
DC installations.**

*Don't think you need the
instructions? True, Egon means
simplicity, but don't throw me away.
I've got some handy tips.*

A WORD FROM THE NERDS.



Thank you for purchasing an EGON product!

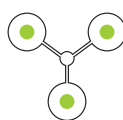
Whether this is your first purchase or your 10th, we appreciate your trust in us. You won't be disappointed.

EGON was born from a need for quicker, standardised and more efficient installations (saving you 6 to 8 hours of labour costs!). Plain and simple. So, that's what we bring to you in this **EGON Relay-Hub.**

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 global 4WD explorer (that's Andrew). It's a duo that works together as well as pavlova and cream.

Let's not get too frazzled. While the installation of Egon Relay-Hub is decidedly simple, we still want you to be safe. Please follow the instructions (we wrote them for you, so read them!) and take the necessary safety precautions.

Scan the QR code to check the installation guide. You'll be wiring faster than you can say, pneumonoultramicro scopic silicovolcanoconiosis.



What are you waiting for? Get to it!
Enjoy the installation process.
It'll be over in a flash.

CHECK OUT THE EGON RELAY-HUB

If we had three words to describe the Egon Relay-Hub, they'd be



SIMPLE



QUICK



OUT-OF-THE-BOX

The Egon Relay-Hub packs a punch. Features:

- Blown fuse indicators
- Outputs active indicators
- 5 individual switching / constant power supply circuits
- Override switches on the board for added redundancy
- Switch power supply circuit
- High-quality screw connectors for easy connection of cables (no special tools needed)
- Sockets for 5 x standard automotive relays (available worldwide)
- 80A maximum current throughout
- 5 x 25A output circuits

The Egon Relay-Hub is the reliable hero of timesaving wiring solutions, using common automotive relays that can be found anywhere. For adding switching relays and power distribution circuits to DC installations, this is the piece of kit for you. Get ready to say 'goodbye' to tedious toiling, messing heat shrink, and spade connections that just won't hold and say 'hello' to the Egon Relay-Hub, and **spend less time fussing over wiring.**

**GEAR THAT
YOU SHOULD
KEEP NEAR.**

Here's what you'll need:

- Screwdriver
- Allen key
- Spanner
- Installation Guide
- Music you like
- Pat on the back for a job done fast (Optional, but highly suggested)

FEELING POWERED UP? JUST TAKE A SECOND.

Before you get started, there are some things that you should know about the Egon Relay-Hub. It's a lot like its bigger brother, the Egon DC-Hub, a real connector of circuits. Here are some things you need to know:

- 1 There's one main power supply, but more can join the party!
 - The Egon Relay Hub, as long as it is configured correctly, can connect multiple power supplies of different voltages to different load outputs and relays through its five alternate supply connectors.
- 2 5 x 25A output circuits and 5 individual switching / constant power supply circuits.
 - Getting your head around the workings isn't too complicated the circuits are labelled e.g. Supply 1, Load 1, Alt. Supply 1, and Switch Input 1 are all for the same circuit.
- 3 This party has plenty of lights! There are LEDs for each fuse to indicate if it is blown and LEDs that light up for active outputs, allowing for easy fault finding.
- 4 There are override switches that can be used if your external switching fails (also super handy for fault finding).

WORDS FROM THE NERDS.

- When connecting the Main Supply with an external fuse, use 80A maximum.
- The recommended torque setting for 25A connectors is 0.6Nm.
- When connecting additional power supplies through the Alt. Supply use an exterior fuse.

Check out this video.



DON'T GET STUCK! NEED SUPPORT?

Contact support@egon.com.au

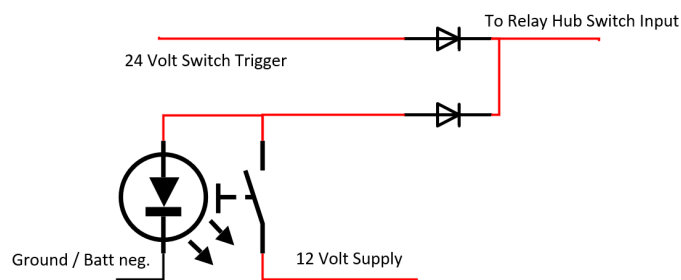
DESCRIPTION

CIRCUIT DIAGRAM SIMPLE SCHEMATIC

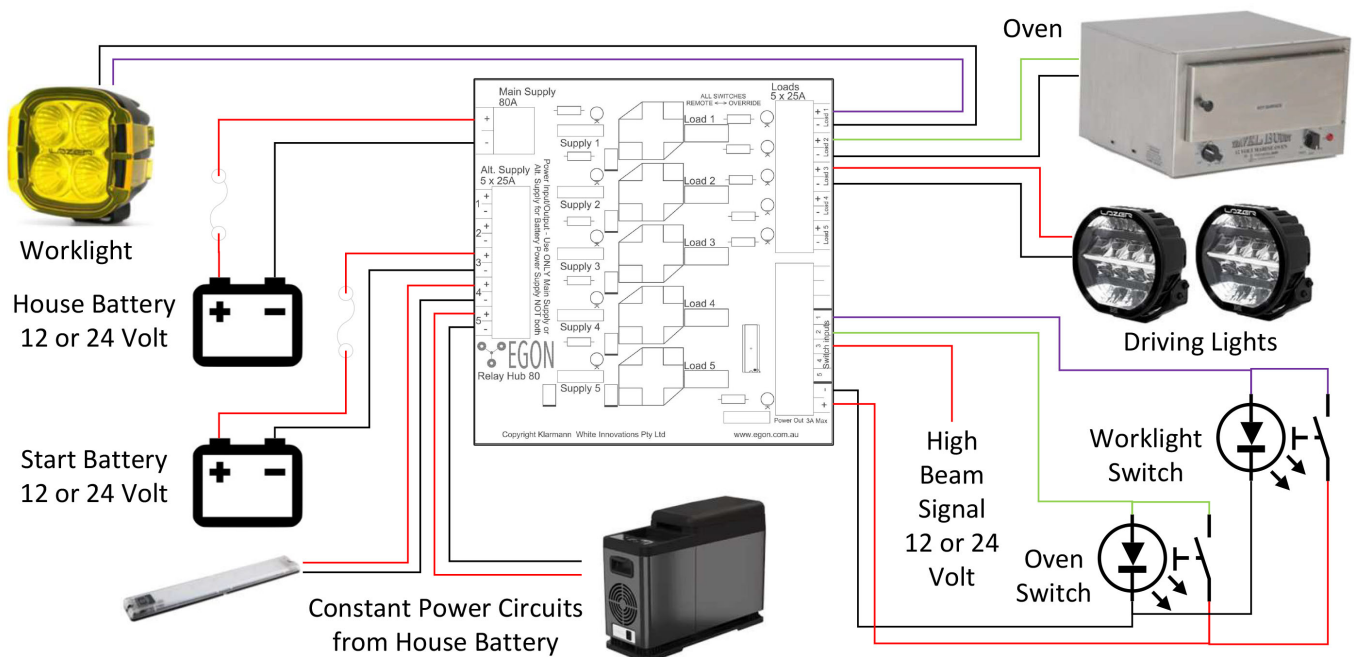
The Relay-Hub is supplied with 12V or 24V power to the Main Supply from the system's house battery. When inserting a fuse into Supply-1, Supply-2, Supply-4 and Supply-5, power from the house battery becomes available for switching the Worklight at Load-1 and the oven at Load-2. There is also constant power available at Alt. Supply-4 and Alt. Supply-5 from the house battery to run constant power lights and a fridge. The switches can be supplied from Switch Inputs Power Out and the trigger signal can be returned to the board's Switch Inputs.

The Relay-Hub is also being supplied with 12 Volt or 24 Volt at Alt. Supply-3 from the start battery. This is a separate battery circuit and it needs to be fused externally and NOT on the Relay-Hub. Do not insert a fuse on the Relay-Hub when you supply the unit externally (please read that again and make sure you understand this!). This setup can be used to run the driving lights through the Relay-Hub. Just use the High-beam signal at Switch Input-3 to trigger the driving lights.

IMPORTANT: You can mix a 24-Volt start battery system and a 12-Volt house battery system or vice versa. You can even use a 24-Volt and a 12-Volt input trigger signal to the same switch input. Just make sure you separate the two with diodes to prevent return current through the cables to the Switch Input.



12 and 24 Volt batteries and input signals can be mixed with the Relay Hub. See description in Manual for more details.



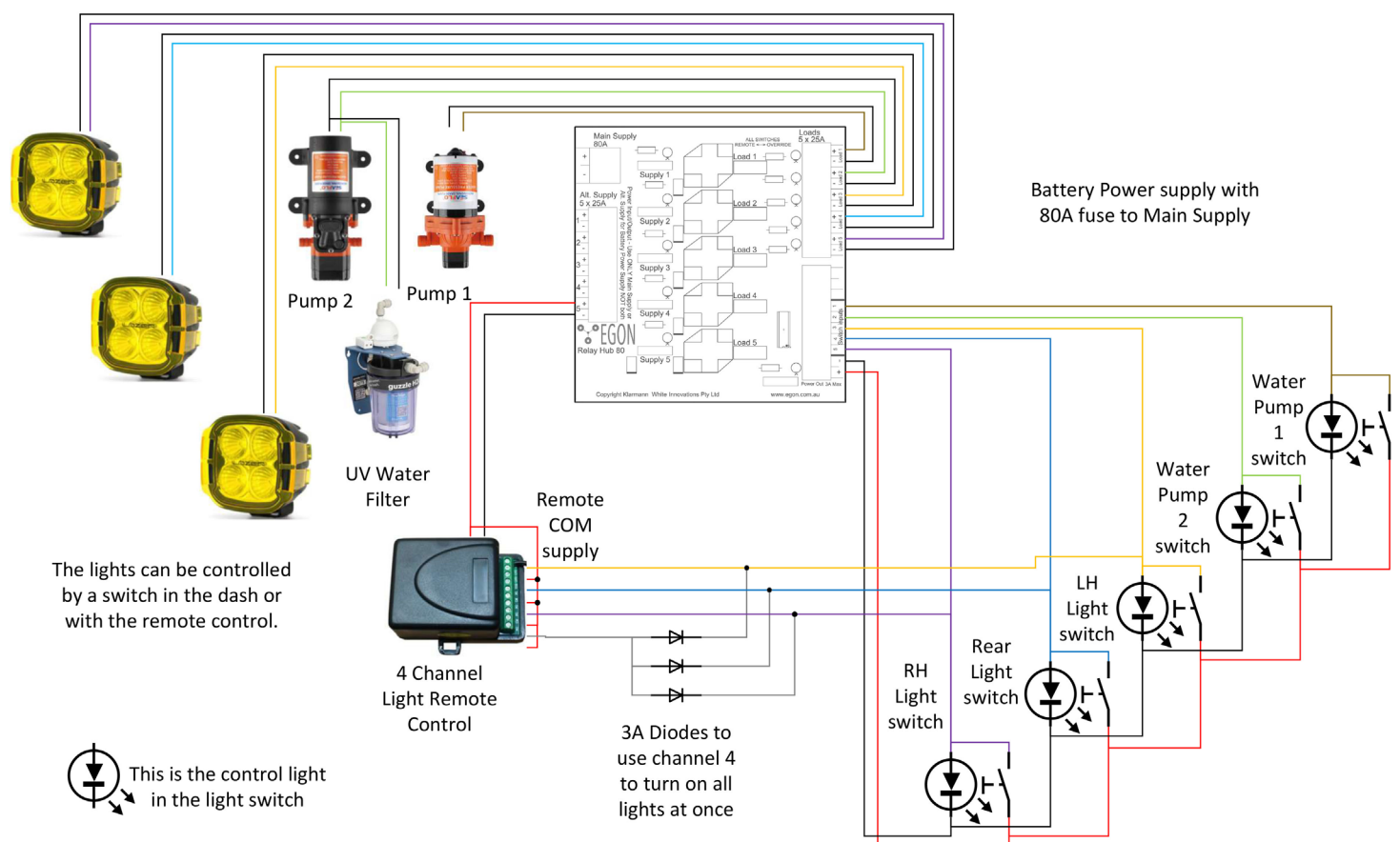
DESCRIPTION

CIRCUIT DIAGRAM COMPLEX SCHEMATIC

Here, three worklights and two pumps are connected to the Relay-Hub. Each product can be controlled individually. The Relay-Hub gets supplied with power from the battery of choice to the Main Supply connector. Each circuit gets fused on the board. Pump-2 has got a UV filter that turns on as soon as Pump-2 is switched on. The lights can be controlled through the switches or the remote control. Channel-4 of the remote control can switch all three lights on at the same time. To prevent return current on channel-4, all channels are separated with diodes. The pumps can be switched with the switches. The remote is being supplied with constant power through the Supply-5 fuse.

All switches are supplied from the Relay-Hub Power Out. The return signals from the switches are connected to Switch Inputs 1 to 5. A standard 7-core trailer cable can be used to make the connection of the switches quick and simple. The switches have a control light diode built in (like most switches do) which will illuminate when the output is active. The way this diagram is drawn, the light switch control lights will also illuminate when the remote control turns the worklights on.

Additional switch panels can be added the same way the Remote Control has been added.



TIME FOR MOUNTING. IT'S NOT COMPLICATED.

Just three easy steps.

The Egon Relay-Hub comes with a stainless-steel mounting bracket and cover (made by yours truly) to protect the relay hub and allow for easy connections. Fastening nuts and screws are provided to hold the circuit board in place.

STEP ONE

Peel off the proactive covering and attach all the nuts to the bracket using the small holes in the base — four for the corners and ten staggered in the centre.

It's important to attach all the nuts to make sure the board is supported properly.

STEP TWO

Find a place and bolt it down. The large holes in the back provide several options for securing the bracket in the ideal place for the project you're working on.



STEP THREE

Insert the board into the bracket, ensuring that the connection holes in the brackets line up with the connectors (the left and right edges of the bracket are different).

Attach the board to the bracket by screwing it onto the nuts you placed earlier.

Finally, screw the cover in place.

SECRET STEP FOUR. GOTYA!

Enjoy connecting your switch relays and power distribution with none of the hassle!

Not following along?
Check out this video.



MAKING CONNECTIONS

With just a bit of electrical knowledge, the Egon Relay-Hub is easy to understand with a clearly labelled board.

Main Supply

- connect with an external fuse (80amps maximum) to a power supply.

Fuses

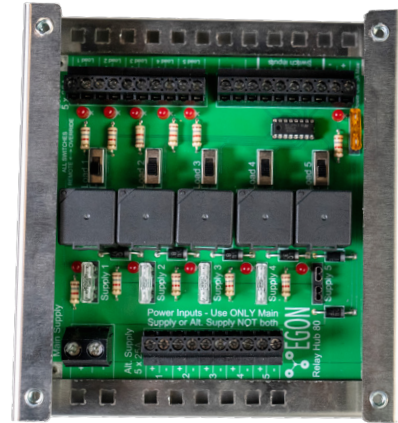
- add a fuse to the Supply #, which will then power the corresponding Alt. Supply # circuit and the corresponding Load Relay #.

Load Relay

- switching the Load Relay on will power the corresponding Load terminals. (LED will light up to indicate the active output).

External Switches

- uses 3-core cable (up to 7 for multiple switch circuits) from the Switch Input terminals on the board to your switch.
 - A fuse to the Power Out circuit (3amps maxim) will power the Switch Input terminals.



Switch Load

- connect using twin core cable to the Loads terminals on the board.

Constant Power Load

- connect using twin core cable to Alt. Supply terminals.



- **Optional stainless Relay-Hub bracket**
- This bracket is specifically designed to hold the Relay-Hub securely, ease mounting in any location or orientation, and also secure all wiring, preventing connection failures due to vibrations.
- Available from www.egon.com.a

ABOUT TO SAY, SEE YA LATER!

Well, firstly, if you've just experienced the delight of installing your first Egon Relay-Hub, then we're jealous! Enjoy the time saved and future time that this device will save you for many more installations down the line.

Remember:

- **80A maximum** current through the board. We've used the best parts, but please don't push your luck! Having an Egon Relay-Hub makes you lucky enough.
- Locate the device in a safe place. When your client goes 4WD and floods the engine, we don't want the Egon Relay-Hub flooding with it. It's really not a great swimmer.
- Take care when getting complicated. The Egon Relay-Hub is a versatile piece of kit that can mix multiple battery supplies and switch source voltages on the same board. However, external diodes may be required depending on what you're doing. Heiner has some great tips in the videos.
- Our connectors are reliable. The recommended torque settings for 25A connectors is 0.8Nm.

GAME-CHANGING SIMPLICITY

Support Email: support@egon.com.au

Online Guides and Information: egon.com.au

Relay-Hub
Installation

