

TESLA Large Drive Unit Kit



The following information is based on a standard Tesla Large Drive Unit. There are a series of upgrades available which are listed within this document. Please contact us with your requirements and we will generate a price. All our drive units are tested & reconditioned.

With the Zero EV control board and coolant system mod, much higher performance is possible.



Large Drive Unit Spec

Input voltage	160-400 DC
Input current HV	900 AMP DC
Output power	335 KW (450 HP)
Output torque	450 NM
Output power continuous	45 KW
Output power (12 minute)	160 KW
Motor speed (max)	16,000 RPM
Regenerative Braking Max	140 KW/ 500 AMP/ 200 NM
Transmission	Single Speed 9.73:1
Dry weight	132 KG
Cooling	3/4"
Max coolant temp	85 C
Max coolant pressure	19 PSI
Min coolant pressure	5 PSI
Gears	F, N & R

Zero EV Control System

We are the only company in the world to currently offer a non-Tesla software restricted system by replacing the OEM logic board in the drive unit with our own design. Allowing users to unlock the full potential of the Tesla drive unit giving complete control to adjust every parameter, whether it is for daily driving, rally, racing or even drifting.

Our system has a user-friendly interface with wifi connectivity that allows the user to have a series of preset parameters, easily adjustable from any smart device, offering real time monitoring and remote shutdown.

- Smart device interface
- No software limitations
- Multiple adjustable parameters allowing different settings, depending on use.
- Driver swap, each with their own set up, driver profiles are swappable between multiple cars at the touch of a button.
- Live system monitoring
- Remote shutdown for motorsport use
- Supports range of throttles
- Supports range of gear selectors
- Adjustable regen
- Launch power adjustment - as much or as little power from 0 RPM
- Multiple in-car display options





Differential Options

Every drive unit comes with an open differential as standard, but if you plan on using it for anything other than road use, you will probably require an upgrade.

That is why we have developed two upgrade options: a limited slip differential and a locked differential, allowing our drive units to perform in all areas.

Currently available differentials are:

- Standard open diff
- Quaife ABT limited slip diff
- Quaife Spool locked diff



Drive Shaft Adaptors

We have developed a set of drive shaft adaptors Based on the standard GKN Tripode joint, allowing fitment to any drive shaft outer joint by simply having a drive shaft made to measure at your local machine shop or we can have them made for you.

The drive shaft adaptors are custom built by Quaife in the UK, allowing us to guarantee quality.

Digital Display

We have developed a beautiful Digital Display, which displays all the vital information required for day-to-day use. It is modelled around the Tesla gen 1 dashboard giving it a modern yet practical appearance when coupled with our high quality display screen. There are two-screen options either a 7" rectangular or a 3.5" round display, perfect for fitting within your classic cars original dashboard dial case.

Our display system also integrates with our tesla 10kw charger and bms so you only requires one display for all your components.



Throttle Options

There is a range of throttle options currently available, but we can reprogram the system to accept most OEM drive-by-wire or mechanical pedals.

We offer a top-mount, floor-mount and cable/ pinion option (perfect for pedal boxes).



Gear selection

Selecting a drive gear has never been easier - it's as simple as pressing a button.

We offer a push button panel with 3 simple selections: drive, neutral and reverse. All that is required is a 12v feed from the control electronics.

Other gear selection options are currently under development. With our system accepting can bus signals and being programmable, the possibilities are endless.

Low Voltage Junction box with loom

To complete our system we have developed a plug and play junction box which keeps everything neatly in one place simply plug your drive unit into the LVJB then using the screw terminals add in the relevant wires from each component like your throttle peddle.



We have also added relays to power waters pumps and fans so the system will automatically monitor and activate them when needed.

Drive Unit Coolant System Upgrade

If you are looking for a high-performance electric drive unit, then our coolant system upgrade is a must.

We are the only company able to offer this upgrade.

After testing, we soon realised the standard cooling system was restricting performance due to the inverter and motor being on the same coolant loop. Therefore we have developed a modification that splits the inverter and motor so that they are on their own separate cooling loops, offering massive performance improvements. You can now push power to the drive units for much longer with reduced risk of overheating.

Standard Kit £9,895

Included in kit: Large Standard Drive Unit, Zero EV Control System, Open Diff, Drive Shaft Stumps, Display, Throttle, Gear Selector & Low Voltage Junction Box with Loom.

Optional Upgrades additional cost

Performace Large Drive Unit 150BHP increase £3,995

Quaife ABT Limited Slip Diff (Highly recommended) £1095*when bought with drive unit kit.

Quaife Spool Locked Diff (for drift/ off road use only) £750*when bought with drive unit kit.

Drive Unit Coolant System Upgrade £795

Please Contact us to discuss your build and to purchase your Tesla drive unit kit.