



PTDC12V20A



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BATTERY CHARGER

DC TO DC 3 STAGE CHARGING SYSTEM

Model No:	PTDC12V20A
Type	3 Stage
Input	12.8 to 16.0Volt DC
Output Voltage	12Volt DC
Output current	20Amp
Minimum Start Volt	1.5Volt
CHARGE CONTROL	
Soft Start	Yes
Bulk Charge	14.3V (Gel) 14.7V (Lead Acid & AGM) 15.3V (Calcium)
Absorption	Constant voltage with automatic amperage control
Equalization	Automatic
Float	13.7V (Lead Acid & AGM), 13.7V (Calcium), 13.3V (Gel)
BATTERY RANGE	
Deep Cycle	36~350Ah
Automotive	300~800CCA



<http://shendian.co>
MADE IN CHINA



BATTERY CHARGER

DC TO DC 3 STAGE CHARGING SYSTEM

USER MANUAL



12Volt 20Amp

always default to its last setting.

When using cable extensions we recommend the charging unit be closer to the main battery rather than the auxiliary battery.

The charger will continue to operate for some time after the motor has been switched off, once the main cranking battery falls to below 12.8Volts the charger will automatically turn off. Alternatively if the auxiliary battery has reached its desired charge level the charger will turn off.

OPERATING INSTRUCTIONS

Once correctly installed the Power Train DC to DC charger is very simple "set and forget" switch.

Charger Display:

Red LED indicates POWER SOURCE, Green indicates CHARGING, Yellow indicates FLOAT CHARGING. And Battery chemistry selection is GREEN LED.

Turn the vehicle on and let sit at idle, the charger will automatically recognise that there is a charge applied to the main battery and once the main battery has reached 13volts the charger will turn on and begin to operate. The default setting for the battery chemistry is set to Lead Acid, you can change that according to the requirement by just pushing the battery type. The charger will now memorise the chemistry settings and automatically it will make it as default setting when turned back on. If you need to change the chemistry, repeat the instructions above. Remember the charger will always default to its last setting. The cable lengths can be altered using a Matson cable extension kit. Make sure unit is wired up closer to the main battery rather than the auxiliary battery. selector switch until the correct type is set.

*NOTE- Once the main cranking battery falls below 12.4volts the charger will stop operating and switches itself off. Alternatively if the auxiliary battery has reached its desired charge level the charger will turn off and goes to yellow LED (float charging).

Maintenance:

The charger is maintenance free. Note that disassembly of the charger is not covered under warranty.

The PTDC12V20A DC to DC battery charger has been built tough for the all environment.

Automatic chargers prevent your battery from being overcharged and consequently becoming damaged. The Power Train DC to DC charger can be connected to the battery indefinitely.

The DC to DC charger can be programmed for different battery types including GEL, AGM, Sealed Lead Acid and Calcium Batteries.

Feature:

- Fully sealed aluminium housing
- Micro-chip monitoring and control
- Electronic touch-button controls
- Chemistry selection: Lead acid & AGM / GEL / Calcium
- High frequency charging for efficiency
- Polarity protection. Prevents output leads from sparking due to reverse connection or short circuit.
- Over temperature protection.
- Over current protection. Charger will automatically reduce current for optimum battery condition.

INSTALLATION INSTRUCTIONS

- Locate the charger in a suitable dry location in the vehicle or caravan.
- To ensure you get the best performance from your DC-DC Charger please mount the charger as close a practical to the auxiliary battery, and use the cable size guide below for both the main battery to charger, and auxiliary battery & charger connections.

The sizes given are the minimum requirement to insure minimal voltage drop, you may use larger diameter cable if desired.

Cable Length(Meters)	Cable core* Diameter (mm)	AWG
0 to 2.0 M	2.5 mm	10
2.1 to 4.0 M	4.0 mm	6
4.1 to 6.0 M	6.0 mm	3
6.1 to 10 M	8.0 mm	0

* Cable core diameter is the copper cable only & does not include insulation

- Connect the auxiliary battery to the "OUTPUT" terminal of the charger, ensure the correct size cable is used to prevent any voltage drop (see above)
- Connect the "INPUT" terminal on the rear of the charger using suitable cable to the main battery of the vehicle, it is recommended to place a circuit breaker (not supplied) in the main positive cable.
- Connect the "COMMON EARTH" to the main chassis of the vehicle and ensure that the negative terminals of both batteries are securely to a grounded to the metal chassis of the vehicle. Or you can connect the "COMMON EARTH" terminal to the negative of each battery.
- Check all connections are tight.



Operating Instructions:

Once correctly installed the Power Train DC to DC charger is a simple "set and forget" switch.

Turn the vehicle on and let sit at idle, the charger will recognise that there is a charge being applied to the main cranking battery and once this battery has reached 12.8Volts the charger will turn on and begin to operate.

The default setting is set at Lead Acid, if you are charging a different chemistry other than Lead Acid you will have to change the setting by pushing the Battery Type Selector switch until the correct type is set.

The charger will now set this battery as its default and operate on that charge level when turned back on. If you need to change the chemistry of the charger you can repeat the instructions above, the charger will