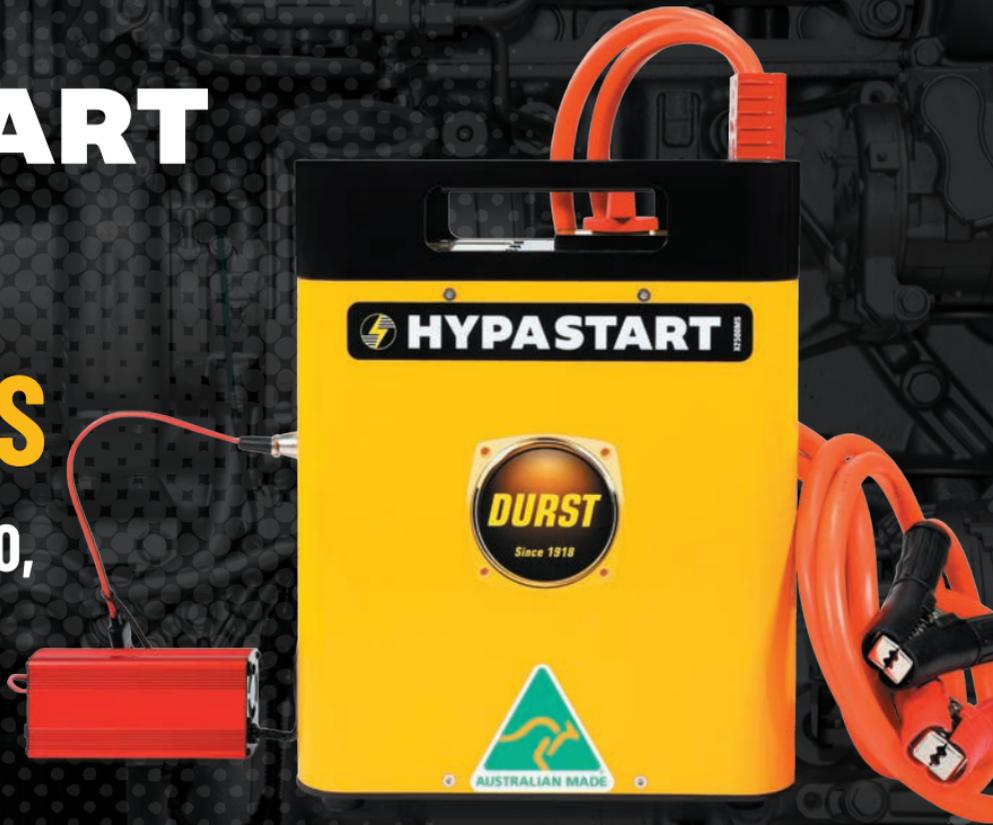




# HYPASTART

## OPERATING INSTRUCTIONS

FOR MODELS: X1500, X2500,  
X2500MS, X4500MS



## HYPASTART FEATURES:

### HYPACHARGE

Ready to use in a matter of minutes

### FUSE PROTECTION

Self resettable Ignition protected fuse

### DESIGN

Fully engineered and made in Australia

### 12V/24V

Two selectable voltages in a single unit

### METAL ENCLOSURE

Built Durst Tough in Australia

### ANTI-SPARK

No sparks when connecting and disconnecting leads

### C.D.S SAFETY

Safely operate with no gassing, fire or explosion even if damaged

### ULTIMATE LIFESPAN

More than 1,000,000+ cycles

### ANTI SPIKE

Complete anti spike protection and Protects Engine Computer

### ALL CLIMATE

Unaffected by extreme temperatures

### LIGHTWEIGHT

Twice the Power and Half the weight of traditional jump starts

### SAFE GUARD

Reverse polarity protection

### LCD MONITOR

Instantly monitor Hypastart capacity and charge levels

### MAINTENANCE FREE

No batteries to maintain or replace

### WHS COMPLIANT



**CONGRATULATIONS ON YOUR PURCHASE AND WELCOME TO HYPASTART! PLEASE READ AND UNDERSTAND THE MANUAL PRIOR TO SWITCHING ON YOUR NEW HYPASTART.**

#### PRODUCT OVERVIEW:

Designed, developed and manufactured by Durst Industries, the Hypastart series are **Australian made** and constructed with a durable, **fully aluminium construction** providing a versatile **lightweight unit, compliant with current WHS regulations.**

Your Hypastart unit can be used to **jump start** an engine even if your Battery is **flat or low powered.**

All Hypastart models are **12/24V systems**, with the exception of the smaller unit being the X1500, making these unique units powerful enough to start every engine, anywhere, it is lightweight and portable!

If jump starter safety is a concern for you, rest assured that Durst Industries have engineered an, **Anti-Spike and Anti-Spark, GFE protected unit to safely operate without the fear**

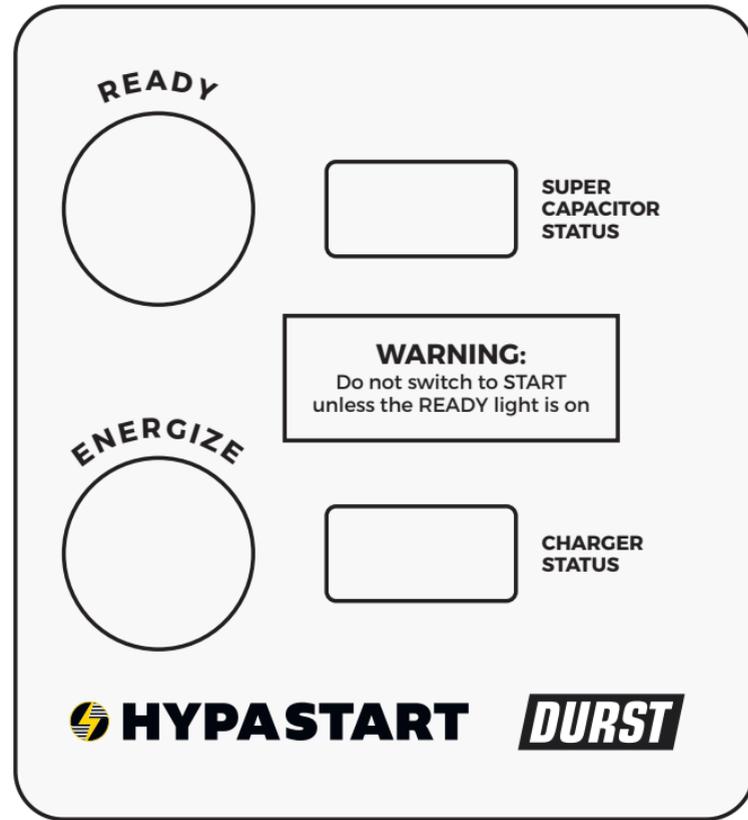
**of gassing, fire or explosion**, even if the Hypastart has been damaged!

Your Hypastart **stores electrical energy in banks of super-capacitors**, controlled by a custom made mechanical cam operated switch and custom circuitry enclosed in the Hypastart Control. This control is responsible for the energizing and charging the supercapacitors and illuminates on the units control panels.

**ALL HYPASTART MODELS ARE 12V SYSTEMS INTERNALLY.**

**HYPASTART MODEL X1500 IS THE ONLY 12V UNIT. MODELS X2500/X2500MS/X4500MS ARE DUAL 12/24V UNITS**

**NOTE: THE INTERNAL VOLTAGE OF THE HYPASTART IS 12V, VOLTAGE & CAPACITY FIGURES DISPLAYED WILL HAVE A MAXIMUM RANGE OF UP TO 15V**

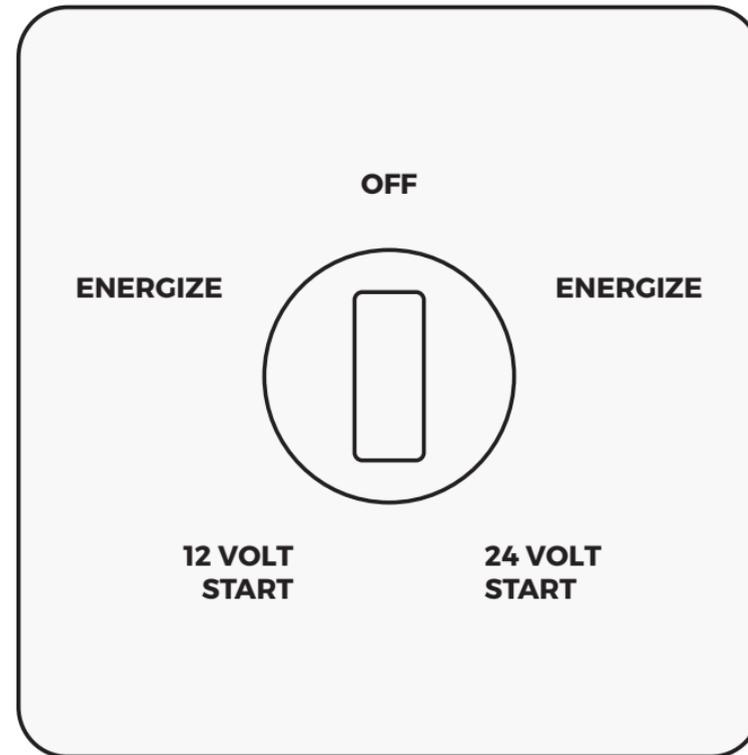


**READY** - The green light indicates your Hypastart is ready for operation. The green light will turn on when the supercapacitor voltage reaches 13.5V being 50% capacity level. The Hypastart will continue to charge to a maximum of 15.0V.

**ENERGIZE** - Indicates that the charge/energize process is active.

**SUPERCAPACITOR STATUS** - This LCD display shows the supercapacitor active voltage and capacity level indicated in a 0-100 percentage form. Supercapacitor voltage and capacity ranges from 12V to 15V, with 12V being 0% and 15V being 100% with a maximum of 15.0V.

**PLEASE NOTE THAT THE HYPASTART DOES NOT NEED TO BE AT 100% CAPACITY LEVEL TO OPERATE**



**OFF** - Your Hypastart should **always** be in the off position when not in use.

**ENERGIZE** - Your Hypastart has two Energize switches and is used to energize the unit prior to starting the engine. Depending on the engine size you are starting, you can either select 12V or 24V start.

**12V START** - This is the 12V starting position and only be used on a negatively grounded vehicle.

**ONLY SWITCH TO THE 12V START WHEN THE GREEN LIGHT IS ON**

**24V START** - This is the 24V starting position and only to be used on a negatively grounded vehicle

**ONLY SWITCH TO THE 24V START WHEN THE GREEN LIGHT IS ON**



# HYPASTART

## OPERATION

THE HYPASTART IS DELIVERED CHARGED AND READY TO USE, HOWEVER, EXTENDED PERIODS OF TIME MAY ELAPSE IN SHIPMENT OR STORAGE DEPLETING THE STORED CHARGE.

### HOW TO CHECK THE STATUS AND CAPACITY OF THE HYPASTART

Make sure the starting leads are not connected to a battery, simply turn the switch to the energize position.

The SUPERCAPACITOR STATUS LCD will display internal voltage and capacity level. If there is enough stored energy the GREEN READY LIGHT will come on indicating the unit is ready to use, if the green ready light does not illuminate and the capacity and voltage is lower than 13.5V then energizing/charging the HYPASTART will be required before use.

Please note that the ready light will turn on when the capacity level reaches approximately 50% or 13.5V. There is enough energy to start most vehicles but if you require extended crank times or the engine is of very large displacement please charge the HYPASTART to 100% before attempting to start.

### ENERGIZING/STARTING AN ENGINE

If the Vehicle voltage is above 8V (for a 12V vehicle) or 16V (for a 24V vehicle) the vehicle battery can be used to energize the Hypastart.

- **STEP 1.** Switch the Hypastart to the off position.
- **STEP 2.** Connect the + Positive red lead clamp to the battery terminal
- **STEP 3.** Connect the - Negative clamp as far away from the battery as possible and to a non-moving metal part of the engine or chassis block
- **STEP 4.** Turn the switch to the energize position, if a red light comes on, this indicates the charge has begun
- **STEP 5.** When the green light illuminates, turn the switch to the start position and start your engine
- **STEP 6.** Let the Hypastart run for 10 seconds once the engine is started. This will recharge your unit.

- **STEP 7.** Turn the Hypastart to the off position
- **STEP 8.** Disconnect the lead clamps

**PLEASE REFER TO YOUR ENGINE'S INSTRUCTION MANUAL ON JUMP STARTING PRIOR TO USING HYPASTART.  
NEVER CONNECT TO FUEL LINES  
ALWAYS DOUBLE CHECK YOUR CONNECTIONS**

## **CHARGING/ENERGIZING THE HYPASTART USING THE CHARGE PORT**

Located on the side panel of your Hypastart you will find a 3 pin canon socket. This socket can be used to energize/charge your Hypastart from a 12V source only. Supplied with your Hypastart is an AC charger with a canon plug adaptor.

## **THE AC WALL CHARGER MUST BE SWITCHED ON BEFORE CONNECTING TO THE HYPASTART**

It's important you have the AC Wall Charger switched on before connecting to your Hypastart.

With the Hypastart in the OFF position, simply plug the wall charger into the AC outlet, plug the charger output lead into the Hypastart by using the supplied 3 pin canon plug, switch the charger on to charge the unit.

You can connect to a 12V vehicle supply for ALWAYS ON STANDBY charge. Connecting directly to the vehicle 12V system will keep the unit fully charged and ready to use. Simply connect the vehicle power source to the 3-pin socket, charging will start when the engine is started and will automatically switch off the charging system shortly after the engine has been switched off to prevent draining the vehicle starter battery.

For more information on this feature please call Durst Industries and speak with a technical representative.

**PLEASE NOTE: WHEN USING THE CHARGE SOCKET MAKE SURE THE HYPASTART IS IN THE OFF POSITION OR DAMAGE MAY OCCUR TO THE CHARGING SYSTEM.**

## **WARNING!**

Eye protection (wear safety glasses) is recommended when performing any procedures with the Hypastart.

## **WARNING!**

Never attempt to jump start a battery with frozen electrolyte. A frozen battery could explode from applying a charge.

## **WARNING!**

Super capacitors contain an electrolyte solution that may irritate the skin if exposed. If bodily contact occurs, flush with water for 15 minutes. If burning persists seek medical attention.

## **WARNING!**

DO NOT short circuit the starting leads.

# CAPACITOR DISCHARGE STARTER

-  ALWAYS READY
-  LIGHTWEIGHT & PORTABLE
-  WHS COMPLIANT





# HYPASTART



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To get the latest copy of the Hypastart User Manual, scan the QR code above or visit;

[DURST.COM.AU/HYPASTART](https://www.durst.com.au/hypastart)



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