



## DUAL BATTERY CONTROLLER

COMPANION TO INTELLIGENT SOLENOID



SOUTH AFRICA

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- Alternator charge (volts)
- Timer over-ride function
- Overcharge alarm >14.6V
- Deep discharge alarm
- Display - **on/off** option
- Alarm - **on/off** option

## DUAL BATTERY CONTROLLER

The Dual Battery Controller is a companion to the National Luna **Intelligent Solenoid** or **Portable Power Pack**. It is designed to display the status of a main battery as well as an auxiliary battery.

The Dual Battery Controller monitors both battery voltages and warns the user of excessive discharge and overcharge. In these instances, the Dual Battery Controller will activate an audible and visual alarm.

A special feature of the Dual Battery Controller is its ability to over-ride a National Luna split-charge/isolator and allow the user to force the main and auxiliary batteries to connect.

### Features:

The Dual Controller is has features which allow the user to be warned of safety issues and potential battery damage. If either main or auxiliary battery voltage drops below 11.4V, the Dual Battery Controller will warn the user with a visual and audible alarm. Similarly, if battery voltage rises above 14.65V, the user will be warned of overcharge.

**Alarm** - The user has the option to disable the audible alarm. If this option is selected, the visual alarm will still function normally.

**Display** - The Dual Battery Controller is fitted with two displays (one each for main and auxiliary batteries). The user has the option to turn both displays off. If this option is selected, the Controller will still function normally and will "wake-up" if any error condition occurs.

**Timer Over-ride** - A special feature of the Dual Battery Controller allows the user to send an over-ride signal to a National Luna Split-charge controller, instructing the system to connect main and auxiliary batteries. This feature is particularly useful when a winch is used or for "jump-starting" from the auxiliary battery.

**NOTE** - The Controller will not over-ride if a potential error is detected by the Intelligent Solenoid / Isolator (eg. short-circuit, reversed polarity or absence of the auxiliary battery).

## INSTALLING THE DUAL BATTERY CONTROLLER

Installation of the Dual Battery Controller is simple :  
**(You will need to have a National Luna Intelligent Solenoid or Portable Power Pack already installed)**

Position the Dual Battery Controller in a location where it can be easily seen. Make sure that the installation of the controller does not interfere with normal vehicle operation.

Using the cable supplied, plug one end into the Intelligent Solenoid or Portable Power Pack port. (The plugs are positive mating and can only be inserted in one position) Make sure the cable is plugged in securely and does not pull loose.

Route the cable as desired (away from areas of mechanical movement) to the Dual Battery Controller. Plug the matching end firmly into the port provided.

Once the Intelligent Solenoid / Portable Power Pack is installed, the Dual Battery Controller can be connected. The appropriate displays will show the status of main and auxiliary batteries

### Factory Default settings

When the Dual Battery Controller is plugged in, the audible alarm and display will be operational as default. If these settings are changed and the Controller is subsequently unplugged, the Dual Controller will revert to the default setting once plugged in again. (I.e. Settings are not saved)

### Compatibility

If you have an older version of the National Luna Split-Charge system/Isolator, the Dual Battery Controller can replace the older Dual Monitor. The extra features of the Dual Battery Controller will now be available with the older system.

## OPERATING THE DUAL BATTERY CONTROLLER

Once plugged in, the Controller will immediately show the voltage level of both main and auxiliary batteries.

The main battery level appears on the left display, and the auxiliary battery appears on the right display. If either of these batteries are not installed, the Controller will warn the user of this situation with an audible alarm (if enabled) and a flashing warning on the appropriate display.

The alarm will stop once battery voltage has risen above 12.0V.

### Over-voltage / Excessive discharge

If an over-charge condition exists (above 14.65V) on either battery, the Controller will flash the top 4 green lights on the relevant display and an audible alarm will be heard (if enabled).

Similarly, if the voltage on either battery drops below 11.4V, the Controller will flash the bottom red light on the appropriate display and an audible alarm will be heard (if enabled). The alarm will stop once voltage has risen above 12.0V.

### SET Activating / Deactivating the alarm

The alarm on the Dual Controller is on by default. To deactivate the alarm, press and hold the 'SET' button for 3 seconds or until a short beep is heard and the ALARM light goes out. To activate the alarm, the same procedure is used.

### SET Activating / Deactivating the display

Both displays on the Dual Battery Controller are on by default. To turn the display off, press and hold the 'SET' button until the display disappears (approx. 5 seconds). To re-enable the display, the same procedure is used.

*Note that a beep will occur after 3 seconds (alarm) but the button must be held for an additional 2 seconds until the display goes out. (The alarm is not activated/de-activated in this sequence)*

### ON Timer Over-ride

To enable the timer-overide facility, press and hold the "ON" button for 3 seconds or until a short beep is heard. When active, the "TIMER OVER-RIDE" light will flash and will remain active for 5 minutes only. Use the same procedure to de-activate the timer over-ride option.