UNIVERSAL BATTERY CONTROL CENTER

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The Universal Battery Control Center (UBCC) is a microprocessor controlled, programmable fused battery control center that offers OEMs, up fitters and vehicle converters a high level of flexibility in battery power management.

Low Battery Voltage Monitoring

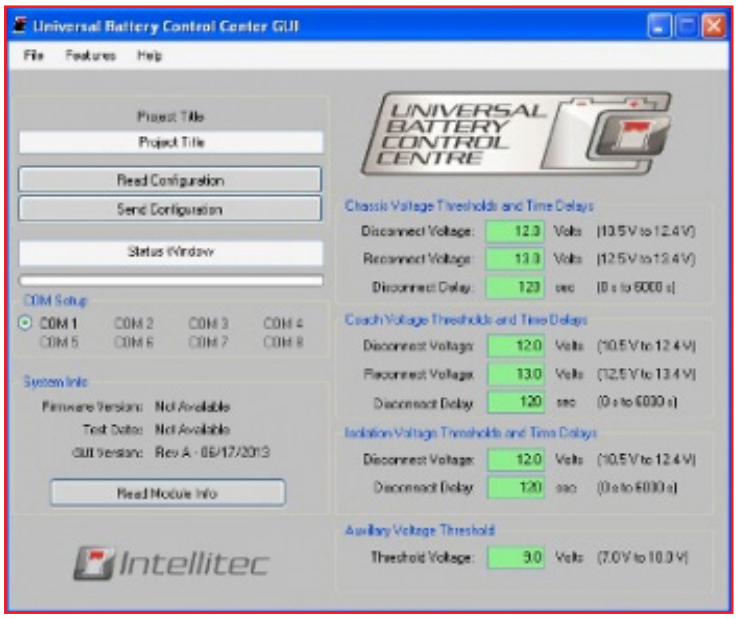
The Universal BCC monitors both the chassis and auxiliary (coach) batteries continuously. If either drops below a threshold (12.6V for chassis or 12.0V for coach), a 2 minute timer begins. When the 2 minutes elapses, if the battery voltage continues to decline below the threshold, it will disconnect that battery from its loads to preserve battery life and maintain starting capability. An external alarm may be activated through an on-board relay. The Universal BCC will also indicate a problem by flashing the red status indicator LED.

If the problem battery begins charging (a threshold of 13.3V for chassis or auxiliary/coach), the Universal BCC will automatically reconnect the disconnected loads. If an ignition signal is present, the chassis battery will not disconnect as a safety interlock feature.

The disconnect and reconnect thresholds and timers are completely configurable through a Windows “Graphical User Interface” software package. The device itself also offers basic programmability of thresholds with no PC needed through a simple 4 button interface.

Battery Voltage Display

Battery voltage is displayed on the switch panel by pressing the display switch or indeed on the control
Itself via the interface. This is useful for techs when installing the system if any parameters need to be changed. On the control, if you press either the “Chassis” or “Coach” button, the actual voltage of that battery is displayed on the 3 digit LED display in real time. The LED display will also flash the current status of the associated disconnect solenoid. “DIS” means that solenoid is currently disconnected and all loads are removed from that battery. “CON” means that solenoid is currently connected.



Part No 00-01088-000

Auxiliary Start Feature

An external auxiliary start switch may be connected to the Universal BCC through the aux start input. If the aux start input is switched **high (+12V)** the battery isolation relay will power **ON**, effectively connecting both chassis and auxiliary (coach) batteries together, providing extra starting power similar to a “jump start.” If the chassis battery falls below 9.0 volts with the ignition signal input **ON** (typical for engine cranking), the isolation relay will automatically connect both batteries together. The voltage threshold is also user configurable.

Automatic Split Charging

When either the chassis or auxiliary (coach) battery is above a 13.3V charging threshold, the isolation relay will power ON, connecting both batteries together for charging. If the ignition signal is present, and the auxiliary battery is above the charging threshold, the isolation relay will **NOT** connect the two batteries together. This is to prevent the auxiliary battery charger from fighting the vehicle’s alternator.

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Manual Disconnect and Reconnect from switch panel

Manual disconnect and reconnect of both battery banks is carried out via either the UBCC switch panel, press and hold the disconnect switch for 3 seconds and the battery will be disconnected from the loads, to reconnect either battery bank press the switch and release.

Manual disconnect and reconnect from controller

Hold the CHASSIS button and press and release the DOWN button to perform a manual disconnect on the chassis disconnect solenoid. The solenoid will remain disconnected until a manual reconnect is performed. Hold the CHASSIS button and press and release the UP button to perform a manual reconnect on the chassis disconnect solenoid

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Hold the COACH button and press and release the DOWN button to perform a manual disconnect on the coach disconnect solenoid. The solenoid will remain disconnected until a manual reconnect is performed. Hold the COACH button and press and release the UP button to perform a manual reconnect on the coach disconnect solenoid.

Inputs
- Ignition interlock
- Auxiliary Start
- Accessory Input
- RS232 Header for Programming and External Switch Panel

Outputs
- 6 Chassis 20 amp max fused outputs
- 2 Chassis 30 amp max fused outputs (High Current)

- 4 Ignition Controlled Chassis 15 amp max fused outputs
- 1 Ignition Controlled Chassis 20 amp max fused output (High Current)

- 5 Accessory Controlled Chassis 15 amp max fused output
- 1 Accessory Controlled Chassis 25 amp max fused output(High Current)

- 6 Auxiliary Battery 20 amp max fused outputs
- 2 Auxiliary Battery 30 amp max fused outputs(High Current)
- 6 Auxiliary Battery 20 amp max fused outputs (after disconnect solenoid)
- External Alarm relay (10A max)
- 2 battery disconnect relays (7.5A max)
- 1 isolation relay (7.5 A max)

Easy Diagnostics
- LED indicators on all fuses point to blown fuses
- Push coach or chassis button for instant battery voltage reading and solenoid status
- Status LED will flash red if either battery is in a disconnected state

Programming via the controller.

NOTE: The COACH button functions as the NEXT button and the CHASSIS button also functions as the ENTER button.

1. Hold the UP and DOWN buttons simultaneously for 1 second. The three dots on the LED displays will flash indicating you are now in the programming menu.

2. Press and release the NEXT button. The LED Display will show “CHA” and status LED will be red. Press and release UP or DOWN once to show the current CHASSIS disconnect voltage threshold. To change this threshold, press UP or DOWN to reach the desired threshold and press and release the ENTER button. The three dots on the LED displays will appear indicating you are now back in the main programming menu.

3. Press and release the NEXT button two times. The LED Display will show “CHA” and status LED will be green. Press and release UP or DOWN once to show the current CHASSIS automatic reconnect voltage threshold. To change this threshold, press UP or DOWN to reach the desired threshold and press and release the ENTER button. The three dots on the LED displays will appear indicating you are now back in the main programming menu.

4. Press and release the NEXT button three times. The LED Display will show “COA” and status LED will be red. Press and release up or down once to show the current COACH (auxiliary) disconnect voltage threshold. To change this threshold, press UP or DOWN to reach the desired threshold and press and release the ENTER button. The three dots on the LED displays will appear indicating you are now back in the main programming menu.

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5. Press and release the NEXT button four times. The LED Display will show “COA” and status LED will be green. Press and release UP or DOWN once to show the current COACH (auxiliary) automatic reconnect voltage threshold. To change this threshold, press UP or DOWN to reach the desired threshold and press and release the ENTER button. The three dots on the LED displays will appear indicating you are now back in the main programming menu.

6. Press and release the NEXT button five times. The LED Display will show “ISO”. Press and release UP or DOWN once to show the current ISOLATION relay connect voltage. (When either battery is above this threshold, the isolation relay will connect both batteries in parallel to charge both from one charging source.) To change this threshold, press UP or DOWN to reach the desired threshold and press and release the ENTER button. The three dots on the LED displays will appear indicating you are now back in the main programming menu.

7. Press and release the NEXT button six times. The LED Display will show “AU.” Press and release UP or DOWN once to show the current AUXILIARY START connection voltage. (When the chassis battery drops below this threshold, the isolation relay will connect both batteries in parallel to effectively “Jump Start” the chassis.) To change this threshold, press UP or DOWN to reach the desired threshold and press and release the ENTER button. The three dots on the LED displays will appear indicating you are now back in the main programming menu.

8. Press and release the UP or DOWN button from the main programming menu to exit the programming and save values. “END” will briefly display and the BCC will resume normal operation.

NOTE: If at any time you do not want to save a changed value, press and release the NEXT button and press and release the UP or DOWN button to exit programming and discard the change.

For further information on this product, please contact Intellitec.