

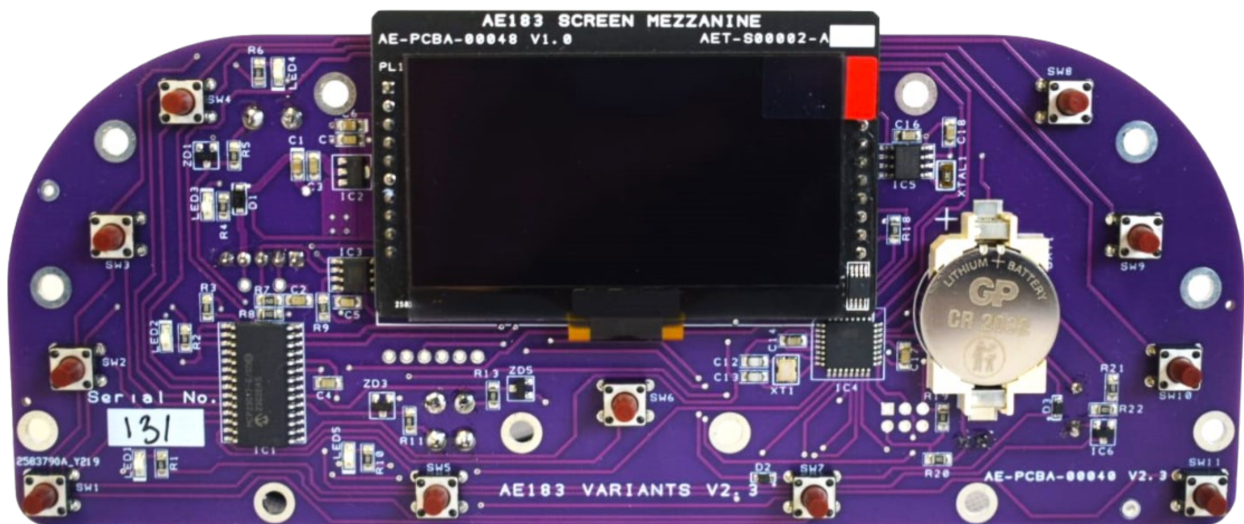


APULJACK

ELECTRONICS LTD

DESIGN AND REPAIR SPECIALISTS

AE 183 Control Panel



Replacement Control Panel PCB for Nord NE183 (1432.183.01)

Product Code: CTP-APU-004-NE

1. General Information

These instructions relate only to the Apuljack Electronics item - Model: AE183, Part number: CTP-APU-004, which is a superior replacement for the Nordelettronica NE183 control panel (1432.183.01) found in many Swift Motorhomes.

The AE183 features a modern OLED display, giving crisp and clear character display and an almost 180°-180° viewing angle. The OLED display does not rely on a back-light, unlike the display on the original NE183 control panel, and draws 5 times less power than the original LCD.

The AE183 will display warnings and appropriate information as to the likely cause for many common faults in the electrical habitation systems in the motorhome.

The original NE183 panels are manufactured in Italy, in limited quantities, whereas the AE183 is manufactured in the UK.

2. Safety & Warnings

Please observe the warnings on the product label along with the items below.

Ensure that your vehicle has been disconnected from the mains and any other sources of power (e.g., batteries, solar, generators etc.) are isolated.

Do not fit the AE183 as a replacement for any other control panel.

3. Installation Instructions

1. Remove the old control panel from the motorhome wall, the plastic bezel can be popped off. Remove the securing screws and pull the panel forwards, and disconnect all the cables connected to the panel.

2. Unscrew the fixing screws which attach the circuit board to the plastic front fascia.

3. Remove the clear screen protector from AE183 screen.

4. Position the AE183 onto the original panel's plastic front fascia.

5. Secure AE183 with the original fixing screws.

6. Connect all previously disconnected cables to the AE183.

*****NOTE***** There may be some connectors on the AE183 which are left unoccupied.

7. Refit the panel onto the motorhome wall and re-attach the plastic bezel by snapping it over the plastic fascia.

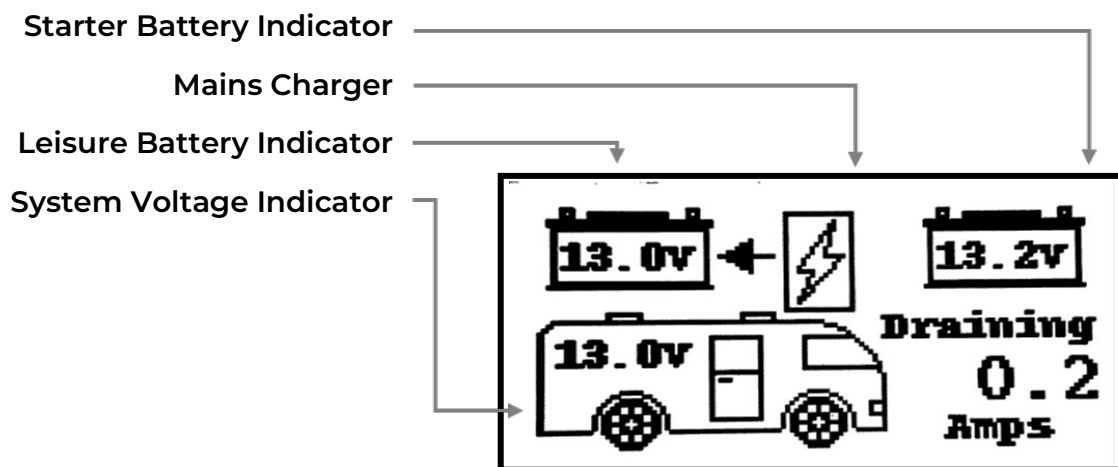
4. Screens

The AE183 features individual screens for displaying information, adjusting settings and seeing warnings. These screens are outlined below:

4.1 Main Screens

The main screens show general information about your system. There are several different versions to suit individual users. The default screen can also be set (see section 4.2.1). To move between main screens briefly push the tick button (✓).

4.1.1 Charging Screen – Charger On



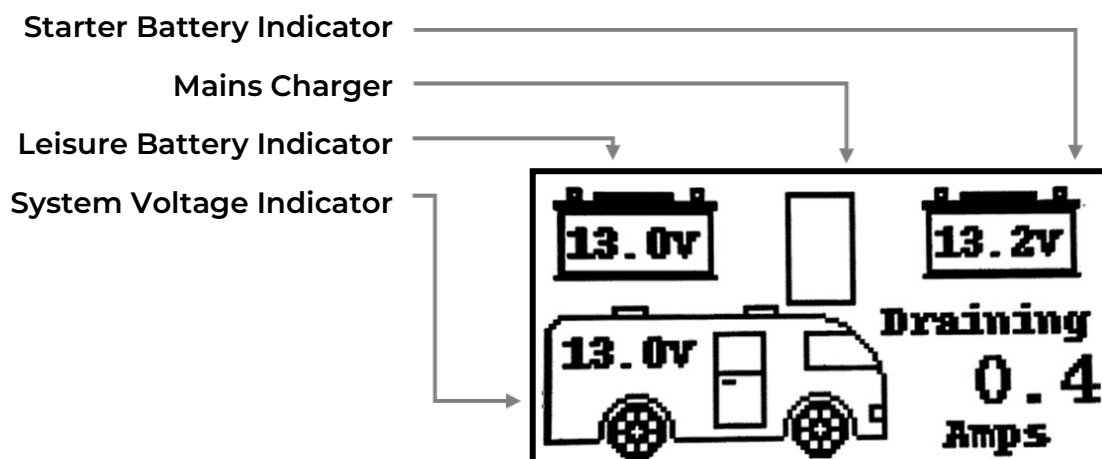
STARTER BATTERY INDICATOR shows Starter Battery VOLTAGE, if connected.

MAINS CHARGER shows (⚡) when mains charger is ON. Arrows Indicate Current Flow.

LEISURE BATTERY INDICATOR shows Leisure Battery VOLTAGE.

SYSTEM VOLTAGE INDICATOR shows volts of the system. Arrows on the screen indicate from where the energy is supplied.

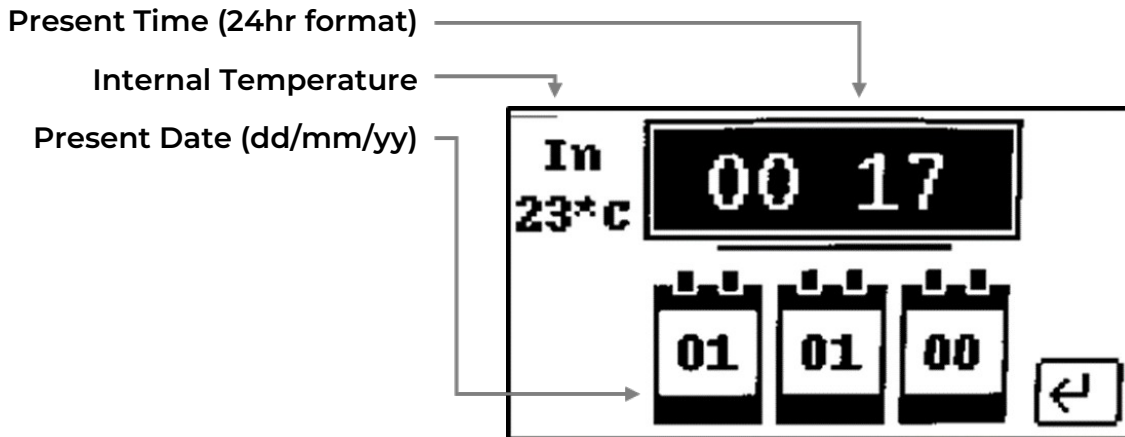
4.1.2 Charging Screen – Charger Off



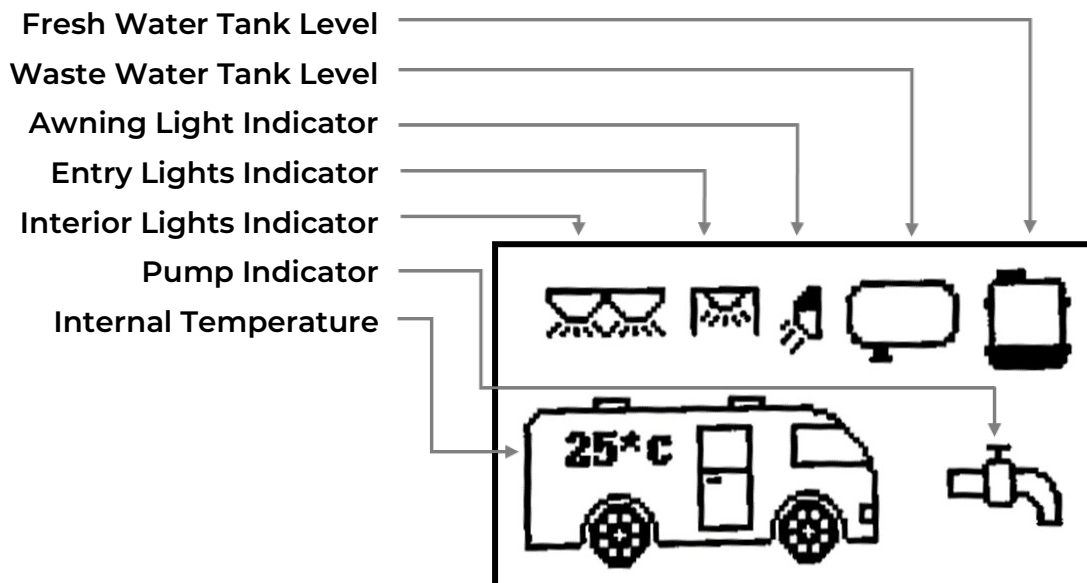
MAINS CHARGER shows no symbol when charger is OFF.

4.1.3 Time Screen

To adjust the date and time on this screen, press the ENTER (↵) button. Use the up and down buttons to make adjustments. Press the CANCEL (C) button to save changes.



4.1.4 Consumers Screen



FRESH & WASTE WATER TANK LEVEL display fill level in quarter increments. Tank level on screen will indicate tank fill level by how much of the indicator is filled in.

- FRESH tank symbol will FLASH when tank is EMPTY.
- WASTE tank symbol will FLASH when tank is FULL.

AWNING, ENTRY & INTERIOR LIGHTS indicators signal each respective lights are ON.

PUMP INDICATOR signals that the PUMP is POWERED.

- The pump symbol will FLASH when the pump is RUNNING.

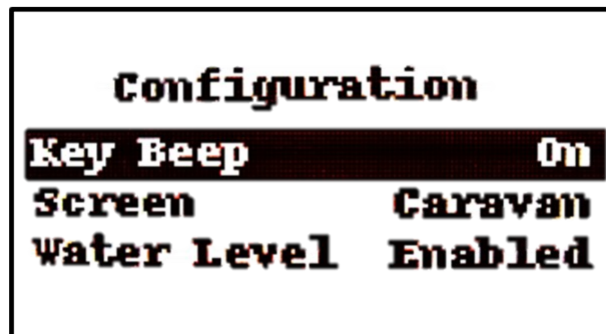
INTERNAL TEMPERATURE indicator shows the current temperature in the VEHICLE.

4.2 Sub Screens

The sub screens allow the configuration to be changed and shows useful information. To move between screens briefly press the power button (⏻)

4.2.1 Configuration Screen

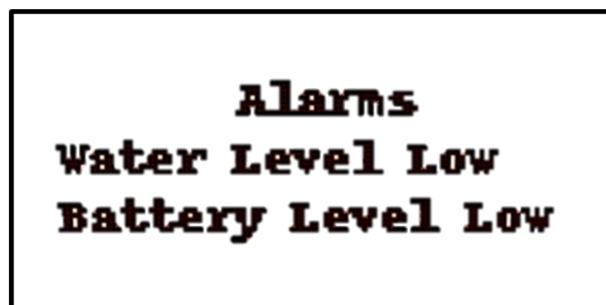
- Set keys to sound a tone when pressed ↗
- Set the default screen to display after power up →
- Set to enable water level alarms ↗



If the vehicle does NOT have tank sensors, water level alarms should be DISABLED.

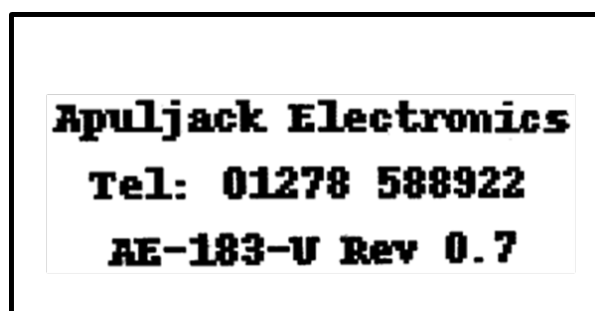
4.2.2 Alarms Screen

The currently active alarms are shown on this screen. To clear the alarm, resolve the issue that it lists.



4.2.3 Help Screen

Should you have any questions that this manual cannot answer, the software version information is stated at the bottom of the screen. Call the telephone number on screen, or email info@apuljackelectronics.co.uk, quoting the software version on screen for additional support.



5. Functions

The AE183 has several additional features in addition to the legacy functions of the NE183:

5.1 Engine Run D+

When the vehicle engine is running, the habitation systems will be switched off. Button presses will not operate outputs while the engine is running. In addition to this, 'Engine Running' will appear on the screen.

5.2 Pump (incl. pump run)

To engage the pump, press the pump button. When the pump is running, both the LED indicator and the pump symbol on the display will flash. The indicators will remain solid when the pump is switched on, but not running.

5.3 Awning, Entry and Interior Lights

The awning, entry and interior lights are switched by the respective buttons on the panel. When switched on, the relevant indicator will appear on the display.

5.4 Battery Selection

To change from powering your habitation systems from the leisure battery to the starter battery, press the VEHICLE button.

5.5 Charger

The AE183 is powered directly from the system voltage, to supply loads. The AE183 can be used to select which battery the mains charger is supplying. This can be changed between starter battery and leisure battery. Natively, the leisure battery will be selected. The starter battery can be charged instead by pressing the vehicle button. A red LED will illuminate to indicate that the starter battery has been selected. If this light is not illuminated, then the leisure battery is being charged.

5.6 Mains Available

The AE183 displays the MAINS INDICATOR (⚡) when mains hook-up is detected. Please note, if your mains charger has an isolator/ON-OFF switch this will need to be in the ON position for the symbol to appear.


5.7 Water Heater

To engage the water heater, press the water heater button (🔥). Each subsequent press of this button will cycle through the menu of three options: ON, OFF and Timer. When the water heater is on, the LED indicator will illuminate.

Water heating operation may be automatically scheduled with the timer function.

1. Set the mode 'Timer'.
2. Use the arrow keys to set the time at which you would like the water heating to turn on. The time can be set at 15 minute increments.
3. Press the enter key to now set the stop time.
4. The water heating will now turn on/off at the defined times.

5.8 Space Heater


To engage the space heater, press the space heater button (). Each subsequent press of this button will cycle through a menu of three options: ON, OFF and Thermostat. When the space heater is on, the LED indicator will illuminate.

Space heating operation may be set automatically with the thermostat function.

1. Set mode to 'Thermostat'.
2. Use the arrow keys to set the internal temperature at which you would like the space heater to turn on at.
3. When the internal temperature reading is lower than the set temperature, the space heater will turn on.
4. Once the internal temperature has risen above the set temperature, the space heater will turn off.

5.9 Air Conditioning

Not all NE184 fuse boards are capable of switching the air conditioning ON/OFF.

NE184.1, NE184.2 and NE184.3 fuse boards have a permanently on output to air conditioning. For these fuse boards, the air conditioning button () will have no operation.

For fuse boards with version numbers of NE184.4 and higher, the air conditioning button may be used to switch the 12V power supply to the air conditioning ON and OFF. When the power to the A/C is on, the LED indicator will illuminate.

6. Warnings & Alarms

To alert the user to potential issues or advise on proper use, the AE183 displays a range of warnings and alarms to help the user.

6.1 Communication Errors

The AE183 sends messages on a communications link to the NE184 fuse board. If this link fails or has errors, the AE183 displays E3.

6.2 Low Battery Voltage Warning

If the system voltage falls below 11.0V, the system will turn off the consumers and display a warning message on screen. To clear this message, charge your batteries and press the power button on the panel to re-start the system.



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