

24V DC Power Supply Unit



EMPS-8024 24V DC Power Supply Unit

# **Buttons Configuration:-**

- 1. MUTE
- 2. TEST



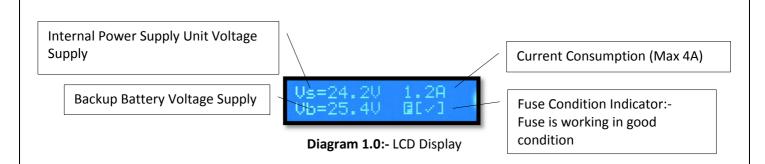
- 3. Press MUTE to mute the device when buzzer activated
- 4. Press **TEST** enter into Self-Test mode on output power, battery status and fuse condition

# **DISPLAY Information:-**

Vs=24.2V 1.2A Vb=25.4V B[/]

**Example: LCD Display** 

No.	Symbol	Definition	Description
1	Vs	Internal Power Supply's Voltage	24.2V (Max 24.5V)
2	Vb	Backup Battery's Voltage	25.4V (Ideal 22V to 27.6V)
3	Α	Real time Current Indicator	1.2A (Max 4A)
4	F [ <b>√</b> ]	Fuse Condition Indicator	Working in Good condition
5	F [X]	Fuse Condition Indicator	Fuse Blown



#### Example B:



Diagram 1.1:- LCD Display as following

- Backup Mode be a sign of AC power failure
- Backup Battery Voltage Supply = 25.1V
- Real time current reading = 1.1A
- Fuse is functioning = F[**v**]

### Example C:



Diagram 1.2:- LCD Display as following

- No Battery is a sign of no backup battery connected
- Internal Power Supply Voltage= 24.2V
- Real time current reading = 1.2A
- Fuse is functioning = F[**v**]

#### Example D:



Diagram 1.7:- LCD Display as following

• The Fuse failed or no Fuse placed in EMPS-8024

### Example E:



Diagram 1.8:- Info Displayed as following

• Fuse OK means the fuse either functioning well or replacement had been made.

### **TEST Button Configuration:-**

1. When **TEST** button is pressed, output power supply is the first to be tested



Diagram 1.3:- LCD Display as following

- Power supply is not detected means AC power failure or the ON/OFF switch is switch to OFF mode.
- \*\* NOTE: Always Double Check on the positive (+) & Negative (-) priority before connecting to the unit



Diagram 1.4:- LCD Display as following

- The "OK" display, when Power supply is detected it will indicate Voltage supply.
- 2. After the **TEST** button is pressed, Battery input will be tested on the second stage.



Diagram 1.5:- LCD Display as following

- Battery is not detected means no backup battery is connected to EMPS-8024 or the battery has to low voltage output for detection
- EMPS-8024 is able to detect voltage from 0.1V(min) to 30V (max)
- \*\* NOTE: If EMPS-8024 couldn't detect any battery, kindly check the battery manually by using Multi-meter or contact us through our website.

If the Battery is connected to the EMPS-8024, the diagram will show as below



Diagram 1.6:- LCD Display as following

- Backup Battery is connected to EMPS-8024
- Vb = 25.1V
- 3. After the **TEST** button is pressed, Fuse status will be tested on the third stage.



**Diagram 1.8:-** Info Displayed as following

• [OK] Status means the Fuse is working



**Diagram 1.7:-** LCD Display as following

- [Failed] Status means the Fuse is fail to perform

#### **MUTE Button Configuration:-**



Diagram 1.9:- Info Displayed as following

- When MUTE button is pressed, the internal buzzer will stop working
- \*\* NOTE: The buzzer won't beep anymore when the muted button is pressed

# **DISPLAY information when WARNING TONE exist:**



Diagram 2.0:- Info Displayed as following

- The message indicates the Fuse failed to perform and Fuse replacement is needed immediately.
- If this [Warning] appears on the LCD, the internal buzzer would beep continuous 6 times then stop for 20 seconds. Subsequently, the buzzer keeps on repeating the same cycle until the Mute button is pressed by user.
- \*\* NOTE: If Mute button pressed, the buzzer will stop from beeping.



Diagram 2.1:- Info Displayed as following

- The message indicates that the voltage of Backup Battery is **LOW**
- The [\*] indicator beside [Vb] indicates the voltage of Backup Battery is lower than 18V
- If the voltage of Backup Battery is drained lower than 18V, EMPS-8024 would cut off drawing the current from battery to prevent 'flat battery' syndrome
- In this case, the internal buzzer will beep continuously in every 5 second once for duration 5 minutes. Next, the internal buzzer will beeps continuously once every 10 seconds for the remaining
- \*\* NOTE: Most of the battery would drained significantly over night



Diagram 3.0: Rear view of the 24VDC power supply unit