

# IMARK

## PRODUCT DESCRIPTION

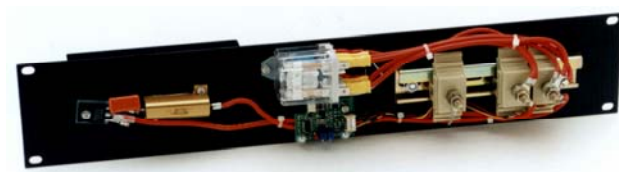
### LVBD-1 LOW VOLTAGE BATTERY DISCONNECT MODULE

Low Voltage Battery Disconnect Module for  
Battery Backed-Up Equipment Sites

Imark Stock # [928704](#)

#### Features:

- 2RU size
- Switches up to 32 Amps DC
- Easily installed at equipment sites
- Suitable for any 12 Volt Battery Backed-Up system
- Low quiescent current
- Adjustable DC Voltage Sense level
- Can be used as a simple DC Distribution Panel
- Low Voltage Output Alarm



#### DESCRIPTION:

The **Imark LVBD-1 Low Voltage Battery Disconnect Module** is a 2RU electronic module that detects when the Battery Back-Up power source voltage falls below a pre-set level and disconnects the battery supply from the equipment load. It is ideal for installation at remote unattended Radio sites as a means of protecting both the batteries and the equipment. It also provides an audio tone output when the low voltage condition is reached and this tone can be used to indicate to users that the voltage has fallen to a critical level.

Disconnection is accomplished by the use of a relay connected in parallel, which is activated by the relay driver on the PCB. The relay coil is energised (closed) when the battery is in the correct state, and open in the low voltage state, thus reducing battery drain to the minimum. Whenever the supply voltage becomes less than the preset voltage level on the PCB module, the relay driver activates, and an alarm tone is generated. This alarm tone is ON for 600mS and OFF for 400mS.

This tone is normally applied to the transmitted signal during the transmitter TX Delay Period as a means of providing users with an audible tone to indicate that the supply voltage is below the present level. Users can then curtail the use of the equipment to conserve the electrical energy remaining in the batteries.

The **Imark LVBD-1 Low Voltage Battery Disconnect Module** is normally installed at Solar Powered, or battery backed-up mains powered radio equipment sites.

SPECIFICATIONS:	
Operating Voltage	11 - 15 Volts
Relay Switching Current	32 Amps
Relay Coil Consumption	2.2VA, 1.3W
PCB Stand-by Current	0.5mA
PCB Active Current	18mA
Low Voltage Detection Range	8 - 14 Volts Adjustable
Hysteresis	0.5V
Alarm Tone	1KHz Tone Repeating at 600mS ON, 400mS OFF.
Busy and PTT Level	HIGH = 3 - 10 Volts, LOW = 0 - 2.5 Volts
Mod Output Impedance	>100K $\Omega$
Mod Output Level	0 - 5Volts p-p
Unit Dimensions	483(L) x 88(H) x 100(D) mm
Shipping Dimensions	520(L) x 130(H) x 85(D) mm
Unit Weight:	940 Grams
Shipping Weight:	950 Grams
Inclusions	M6 Mounting Screws, Washers, & Cage Nuts
Approvals	
Imark Stock #	928704