

Battery Backup

PowerManager

800/1 100/1500/2000VA



When used in conjunction with a ProMate it will provide normal operation of the shutter during a power failure. The only noticeable difference will be a short time delay between pressing the switch or turning the key and the shutter starting to move. If used in conjunction with a Smart tag reader the LED will be off until the tag is presented, it will then flash blue as the battery backup comes online and change to red or green when ready to operate and the shutter will start to move. If Push to Run open is selected it will only operate in Dead-Man until mains power is restored.

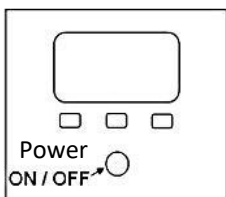
Installation and Connections

The Battery Backup (BBU) should be mounted upright in a ventilated accessible location with free airspace around it. There is a small 3.6 volt battery (Note 1+2) supplied with the BBU, this should be plugged into the white 3 pin connector on the left hand side of the ProMate PCB labelled CON 2. It provides the wake up signal to the BBU in the event of a power failure. It should be secured using the adhesive pad supplied with it.

The cables required are supplied with the BBU and should be connected as shown below, these are:

- 1) An IEC mains lead to connect the BBU to the mains supply 230vac 50Hz (plug socket or fused spur fitted with a 10 Amp fuse)
- 2) An IEC power cable which goes from the BBU output socket to the mains input point on the ProMate. If a mains cable was supplied with the ProMate it should be discarded.
- 3) A control cable which goes from the BBU multi-pin socket labelled RS232 to the ProMate multi-pin socket labelled CON3.

CSL Battery Backup
Front View

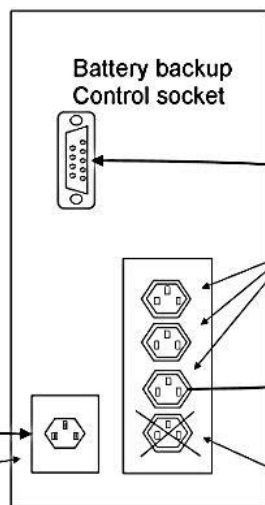


13Amp
Socket or
Fused Spur

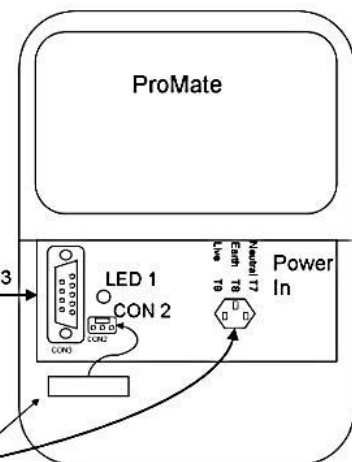


Mains
Power in
Connector

CSL Battery Backup
Rear View



Not Battery
backed Output
(White)
Do Not Use



Operation and Maintenance

Once the ProMate battery has been connected and all the cables plugged in, apply power to the BBU. Next press and release the POWER on/off button on the front of the BBU, it will latch in, the display illuminates on the BBU and LED 1 on the ProMate comes on solid. Once this is ON, either present the tag, turn the key switch or press one of the lid mounted buttons, after a few seconds the BBU output will come on, the ProMate will show Mains power ON and can be used as normal. In the event of a power failure the BBU will go into a sleep mode to save battery power; to operate the shutter either present a tag, turn the key switch or press one of the lid mounted buttons, the BBU will then wake up and after about 10 seconds start to supply power to the ProMate. The shutter can then be operated as normal. After a few seconds of inactivity the BBU will return to sleep mode, the above procedure can then be repeated as required.

Before working on the shutter disconnect the IEC mains lead and turn the BBU OFF at the power ON/OFF switch on the front cover

The BBU carries out a periodic self-test on its internal batteries, their condition is indicated on the BBU LCD display and an alarm will indicate if they need changing this should be checked during routine maintenance inspections. Hazardous voltages are present inside the BBU even when the mains supply is disconnected so maintenance on it should only be carried out by trained persons.

Note 1: The battery in the ProMate for use in conjunction with the BBU should be changed every two years

Note 2: It is a 3.6 volt Lithium Thionyl Chloride (LTC) and should not be confused with a standard AA battery which is 1.5 volts and will not work. Replacements can be purchased from trade suppliers or the supplier.



PRECAUTIONS AND SAFETY REGULATIONS



The information provided within this manual must be observed and understood as it concerns SAFETY related issues:

- a) THE UPS AND BATTERY BOX MUST NOT OPERATED WITHOUT AN EARTH CONNECTION. Do not remove the plug from the mains power supply as this will disconnect the earth connection from the devices being powered. Avoid the disconnection of the UPS supply and/or the battery charger mains plugs during normal operation.
- b) Avoid connecting the output neutral to the input neutral or to the earth as this could cause a malfunction of the system.
- c) Hazardous voltages inside. This UPS receives power from more than one source. Disconnection of the AC source and DC source is required before servicing
- d) The UPS and the Battery Box internally generate DANGEROUS electrical voltages. All maintenance operations must be carried out SOLELY by qualified operators.
- e) The UPS and the Battery Box contain an internal power source: the batteries. Therefore the output sockets may be live even when the UPS is not connected to the mains supply.
- f) The total battery voltage can induce an electric shock. Do not touch the battery terminals once the cover has been removed. Any replaced batteries should be considered as TOXIC and DANGEROUS WASTE and be treated as such, by observing any all local regulations and laws involving the disposal of toxic waste. Do not throw the batteries onto a fire: as they may explode. Do not attempt to open the batteries: they do not require any maintenance. Furthermore the electrolyte is dangerous if it comes into contact with the skin or the eyes and may be toxic.
- g) Always connect additional Battery boxes to the UPS using connectors supplied by the manufacturer or an authorised distributor.
- h) The cable connecting the Battery Box to the UPS must not be altered or extended by the user. Contact the supplier if this is required.
- i) When changing the battery, ensure that the same number and type of batteries are installed.
- j) If the conditions are dangerous, switch the UPS off using the switch located on the front panel and remove the input connection.
- k) The UPS generates an earth leakage current (for the correct leakage current value please refer the user's manual). Ensure that the sum of both the UPS and load leakage current is below 3.5 mA. If the load leakage current exceeds this limit, ensure that the UPS is connected to a power supply with an industrial type connection, in conformity with the regulations, sized in accordance with the rating of the UPS. This operation should only be carried out by qualified personnel
- l) Do not switch the UPS on if there are any signs of leaking, or if a residual white powder is noted.
- m) Do not allow water, liquids in general and/or other foreign bodies to enter the UPS. Do not expose the device to direct sunlight or other sources of heat.
- n) The detachable power supply cable is intended as an isolation device. Ensure that sufficient space is left at the rear of the UPS and the Battery box around the cable connection to allow for easy removal.
- o) This series of UPS's have been designed for professional use
- p) If the neutral (N) and phase (F) instructions are observed for the plugs and sockets, the UPS will not alter the existing neutral arrangements when inserted into a system. The resistance on the neutral connection is less than 0.1Ω. The neutral arrangements will however be changed if an isolation transformer is connected or when the UPS is operating with the neutral isolated upstream. The exact position of the neutral pin in the various UPS plugs and sockets are shown on the picture.
- q) **DO NOT OPEN THE BATTERY EXPANSION CONNECTORS OR PROTECTIONS WHILST THE UPS IS POWERING THE LOAD FROM THE BATTERIES. An interruption of the battery DC current may cause an electric arc which will result in a failure of the equipment and/or fire.**
In addition, during a power failure, the energy required to supply the load is provided by the batteries therefore, if the battery protections are opened, the load would be disconnected.



Plug Schuko / French
front view



Plug IEC10A
front view



Socket IEC10A
front view



Plug IEC16A
front view



Socket IEC16A
front view

WARNING: This equipment can be used and installed by anyone, once they have READ CAREFULLY AND FOLLOWED THE INSTRUCTIONS PROVIDED WITHIN THIS SAFETY MANUAL AND THE SUPPLIED USER MANUAL.

Model	Max Load (Watts)	Input Current (Amps)	Charging Time (Hrs)	Dimensions (H/W/D)mm
PM800	640	3.9	4-6	247x120x443 10.5kg
PM1100	880	5.3	4-6	247x120x443 11.3kg
PM1500	1200	7.4	4-6	247x160x443 16.5kg
PM2000	1600	9.7	4-6	247x160x443 18.5kg