## **PRODUCT MANUAL**

## **Medistrom Pilot-19 Lite**

**Battery and Backup Power Supply** 



Thank you for purchasing the Medistrom CPAP Battery Portable Power Supply. Please read this product manual carefully before putting the equipment into operation for the first time.

Manual Version: 1

## Contents

## English

English	
1. PILOT-19 LITE	
1.1 Package Contents	3
1.2 PAP Device Compatibility	3
1.3 Important Safety Usage Information	4
1.4 Intended Use and Compatibility	4
1.5 Control Panel	4
1.6 Setup	5
1.7 Specifications	6
2. Care Instructions for Pilot -19 Lite	7
3. Travelling with Pilot-19 Lite Battery Backup Power Supply	7
4. Storage and Disposal of your Pilot-19 Lite Battery Backup Power Supply	7
	8
5. Warnings and Safety Precautions	_
6. Warranty Information	8
7. Troubleshooting Guide	9
Français	
1. PILOT-19 LITE	
1.1 Contenu de l'emballage	11
1.2 Compatibilité des appareils PAP	11
1.3 Informations Importantes sur l'utilisation de sécurité	12
1.4 Utilisation prévue et compatibilité	12
1.5 Panneau de commande	12
	13
1.6 Configuration	
1.7 Spécifications	14
2. Instructions d'entretien pour Pilot-19 Lite	15
3. Voyager avec l'alimentation de secours de batterie Pilot-19 Lite	15
4. Stockage et élimination de votre alimentation de secours de batterie Pilot-19 Lite	15
5. Avertissements et mesures de sécurité	16
6. Informations sur la garantie	17
7. Guide de dépannage	17
_ ~ .	
<b>Español</b>	
1. PILOT-19 LITE	
1.1 Contenido del paquete	20
1.2 Compatibilidad del dispositivo PAP	20
1.3 Información importante de uso de seguridad	21
1.4 Uso previsto y compatibilidad	21
1.5 Panel de control	21
1.6 Configuración	22
1.7 Especificaciones	23
2. Instrucciones de cuidado para Pilot-19 Lite	24
3. Viajar con la fuente de alimentación de respaldo de la batería Pilot-19 Lite	24
4. Almacenamiento y eliminación de la batería y fuente de alimentación de respaldo Pilot-19 Lit	
5. Advertencias y precauciones de seguridad	25
6. Información sobre la garantía	26
7. Guía de solución de problemas	26
The state of the s	
Deutsch	
1. PILOT-19 LITE	
1.1 Packungsinha <b>l</b> t	29
1.2 Kompatibilität mit PAP-Geräten	29
1.3 Wichtige informationen für safety	30
1.4 Verwendungszweck und Kompatibilität	30
1.5 Verwendungszweck und Kompatibilität	30
1.6 Einrichtung	31
1.7 Spezifikationen	32
2. Pflegehinweise für Pilot-19 Lite	33
3. Reisen mit Pilot-19 Lite Batterie-Notstromversorgung	33
4. Lagerung und Entsorgung Ihres Pilot-19 Lite Batterie-Backup-Netzteils	33
5. Warnhinweise und Sicherheitsvorkehrungen	33
6. Garantieinformationen	34
7. Anleitung zur Fehlerbehebung	35
2	
2	

#### **SECTION 1 - PILOT-19 LITE**

## Section 1.1 Pilot-19 Lite Package Contents

#### THIS PACKAGE INCLUDES:

1x Pilot-19 Lite Battery



1x Battery Carry Sleeve





1x Pilot-19 Lite BMC M1 Mini Kit (P19BM1PLK) a. DC Output cable for BMC M1 Mini (P19BM1DOC)

b. Charging Adapter Cable for BMC M1 Mini (P19BM1CAC)

# ADDITIONAL ACCESSORIES FOR PILOT-19 LITE (SOLD SEPARATELY)

1) Car Charger for Pilot Lite (SKU# P99ACCPCC) 2) 50W Solar Panel (SKU# P99ACCS50)

## Section 1.2 Pilot-19 Lite PAP Device Compatibility

## SUPPORTED PAP DEVICES

The Pilot-19 Lite can ONLY be used with the following APAP/CPAP devices:

BMC M1 Mini

Pilot-19 Lite is designed to be charged using BMC M1 Mini AC adapter with the use of the Charging Adapter Cable for BMC M1 Mini (P19BM1CAC).

For more detailed instructions, please see SECTION 1.6 Pilot-19 Lite Setup, Step 1.

For complete PAP compatibility information including compatibility for Bi-Level devices, please visit www.medistrom.com or contact Medistrom technical support at 1-877-407-4791 or email support@medistrom.com.

Medistrom is not responsible for any damage caused by improper use of the Pilot-19 Lite.

#### Section 1.3 Important Pilot-19 Lite Safety Usage Information

- DO NOT expose battery to temperatures above  $40^{\circ}\text{C}$  /  $104^{\circ}\text{F}$  (Fire Hazard!)
- DO NOT expose battery to temperatures below -10°C / 14°F (Cell Damage Hazard!)
- DO NOT expose battery to relative humidity above 85% (Electrical Hazard!)
- Normal operating ambient temperatures are 0°C / 32°F to 35°C / 95°F
- Fully charge battery before storage and at least once every 6 months thereafter

## Section 1.4 Pilot-19 Lite Intended Use and Compatibility

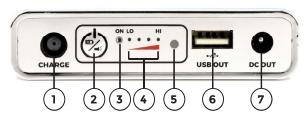
Pilot-19 Lite is manufactured with genuine LG industrial grade rechargeable lithium-ion cells. The Pilot-19 Lite can be used as a backup power source to prevent interruption to PAP therapy in the case of a power outage.

Pilot-19 Lite can serve as a portable PAP battery during travel by air, land, or sea when the main power source is not available.

Pilot-19 Lite is designed to be used with most 19V PAP Devices (Refer to Section 1.2 PAP Device Compatibility)

Pilot-19 Lite has a USB port (output: 5V 2.5A) which can be used to charge cellphones, tablets and other commonly used handheld devices rated for receiving the above USB power output.

#### Section 1.5 Pilot-19 Lite Control Panel



#### 1. Charge Port

Plug the compatible AC adapter into this port (use the short charging adapter cable if required). Ensure that the AC adapter is plugged into the main power outlet. Once the battery is charging the 4 green Charge Level Indicator Lights will turn on.

#### 2. Multi Function Buttor

Pressing the button once will show the battery's charge level (If the battery is in Standby Mode, refer to Stand-by Mode in Section 1.6) Holding the button for 3 seconds will turn the LED Flashlight On and Off .

## 3. Blue "ON" Indicator Light

The light will shine solid blue once the battery is connected and is sending power to a compatible PAP device. (If this light is flashing, please check the error code in Section 7).

## 4. Green Charge Level Indicator Lights

When the battery is being charged, the lights will blink, and then shine solid green showing the level of charge going from Lo to Hi. Refer to Section 7 for a guide to charge levels.

#### 5. LED Flashlight

Can be turned ON and OFF by holding the Multi Function Button for 3 seconds. Note: If the Pilot Lite battery is not connected with a device, the flashlight will turn OFF automatically after 10 minutes, otherwise, the flash light will remain ON.

#### 6. USB Port (5V 2.5A Out)

Can be used to charge handheld devices (please check that the output Voltage and Amperage is compatible with the device that needs charging via the USB before connecting). Once connected press the Multi Function Button to turn on the battery.

#### 7. DC Out Port

This port is used to connect a compatible PAP device to the battery by using the matching DC output cable.

#### Section 1.6 Pilot-19 Lite Setup

NOTE: Power adapters are NOT included with your Pilot-19 Lite Battery and Backup Power Supply. The Pilot-19 Lite is designed to be charged using the AC power adapter included with the BMC M1 Mini with the use of the Charging Adapter Cable for BMC M1 Mini (P19BM1CAC).

## Using Pilot-19 Lite as a Backup Power Supply for PAP devices

#### STEP 1 - Connecting Pilot-19 Lite to the BMC M1 Mini **AC Power Adapter**



Plug the power connector from the BMC M1 Mini adapter into the Charging Adapter Cable for BMC M1 Mini (P19BM1CAC) and then plug it into the Charge Port of the Pilot-19 Lite and plug the other end into the power outlet.

STEP 2 - Connecting Pilot-19 Lite to PAP Device



Plug the long L-shaped yellow tipped end of the DC Output cable for BMC M1 Mini (P19BM1DOC) into the DC Out Port of your Pilot-19 Lite and plug the short L-shaped yellow tipped end of the DC Output cable for BMC M1 Mini (P19BM1DOC) into the BMC M1 Mini device.



Once the Pilot-19 Lite is connected to your PAP device, the Charge Level Indicator Lights will turn on briefly and then the ON Indicator Light will turn solid blue. At this point your PAP device will show that it is receiving power. If your PAP device is not receiving power, please check the cable connections and press the Multi Function Button.

## Stand-by Mode

Once the Pilot-19 Lite is connected to your PAP device, the Charge Level Indicator Lights will turn on briefly and then the ON Indicator Light will turn solid blue. At this point your PAP device will show that it is receiving power. If your PAP device is not receiving power, please check the cable connections and press the Multi Function Button

## **Charging Pilot-19 Lite**

Follow STEP 1 above. Charge times for the Pilot-19 Lite via the BMC M1 Mini device AC adapter is approximately 4-5 hours. Charge time via other compatible power adapters may vary. The Pilot-19 Lite can also be charged using the Medistrom Pilot Lite AC Adapter (P24ACCACA).

NOTE: The Medistrom Pilot Lite AC Adapter (P24ACCACA) should NOT be used in the backup configuration.

## Using Pilot-19 Lite as a Portable Battery with a compatible PAP device

Follow STEP 2 above. Run times will vary based on prescribed pressure, patient breathing pattern, mask seal, use of any additional features or attachments such as pressure relief.

**ATTENTION!** Mask leaks or high PAP pressures can greatly decrease run times.

#### Section 1.7 Pilot-19 Lite Specifications

- Capacity: 95Wh
- Cell Type: LG Industrial grade genuine rechargeable lithium-ion cells
- Rated Input: 19V, 60W(NORMAL) 80W(MAX)
- Rated Output: DC 19V, 3.0A
- USB Out: 5V, 2.5A
- Life Span: Over 500 full charge/discharge cycles
- · Case: Aluminum
- Dimensions: 17cm x 9cm x 2cm, Weight 1.3lbs
- Power Gauge: 4 stage Charge Level Indicator Lights
- Recharge time: 4-5 hours via BMC M1 Mini device AC adapter (charging via other compatible adapters may vary)

#### **SECTION 2 - CARE INSTRUCTIONS FOR PILOT-19 LITE**

CAUTION! Fully charge your Pilot-19 Lite before storage and at least once EVERY 6 MONTHS thereafter. Failure to do this will be considered negligence and will void the warranty.

**CAUTION!** Do not expose the battery to liquids of any kind. Keep out of direct sunlight.

If your unit becomes soiled, disconnect it from the power source and the PAP device and wipe the exterior casing with a clean, dry cloth.

#### SECTION 3 - TRAVELLING WITH PILOT-19 LITE BATTERY BACKUP POWER SUPPLY

The Pilot-19 Lite Battery Backup Power Supplies each have a 95Wh capacity. Many airlines will allow batteries under 100Wh to be taken into the cabin for travel. Please always consult with your particular airline and flight to confirm that your Pilot-19 Lite can be taken with you in your carry-on prior to travelling.

If you plan on charging your Pilot-19 Lite with the car charger, please make sure to test the car charger before travelling.

If you plan on travelling and you have not used your Pilot-19 Lite in the battery configuration, we strongly suggest that you test run the unit in the battery configuration prior to travelling in order to get an idea of what run-time you could expect. For optimal run times please disable any additional features such as EPR as well as properly adjust your mask to minimize air leakage.

If you have any other inquiries or would like to download the Medistrom Travel Letter please visit www.medistrom.com or www.choiceonemedical.com. For further technical support please email support@medistrom.com.

## SECTION 4 - STORAGE AND DISPOSAL OF YOUR PILOT-19 LITE BATTERY BACKUP POWER SUPPLY

**CAUTION!** Fully charge your Pilot-19 Lite before storage and at least once EVERY 6 MONTHS thereafter. Failure to do this will be considered negligence and will void the warranty.

Store the Pilot-19 Lite in a cool, dark, well-ventilated place with normal temperatures of 0 °C / 32 °F to 35 °C / 95 °F. CAUTION! Keep out of direct sunlight!

The disposal of this unit should be carried out in accordance with applicable laws and regulations reflecting the purchaser's geographic location. For more information on where to recycle this product, please call 1-877-723-1297 or visit: www.call2recycle.org

#### **SECTION 5 - WARNINGS AND SAFETY PRECAUTIONS**

- Please read this product manual carefully in its entirety before putting the equipment into operation for the first time. Observe all safety instructions.
- Do not expose the Pilot-19 Lite to any hard, physical impact.
- Do not expose the Pilot-19 Lite to water, rain or moisture of any kind.
- Do not expose the Pilot-19 Lite to an open flame or extreme heat, including direct sunlight. Exposure to any of these may result in damage to the lithiumion cells and may cause an explosion.
- Do not disassemble or attempt to repair the Pilot-19 Lite.
- Ensure the product is thoroughly inspected for any physical damage. If any damage is found, the equipment should not be used.
- Any improper use or operation of the device, i.e., that is not consistent with the instructions, will result in forfeiture of all claims under the manufacturer's warranty.
- Prevent the risk of electric short circuit by using only the appropriate AC adapters and DC output cables outlined in this manual.
- If the battery pack becomes damaged and is leaking, do not touch the
  battery leakage directly: electrolyte leakage can cause skin irritation. In case
  the electrolyte comes into contact with the eyes, rinse with water as soon as
  possible. Do not rub eyes. Seek medical attention as soon as possible.
- Do not operate the device if the battery housing or AC adapter you are using is damaged. Immediately disconnect the damaged device from the power by pulling the plug and disposing of the unit appropriately.
- Do not expose the equipment to extreme temperatures, aggressive chemical vapors, moisture, shocks, vibration, or strong electromagnetic fields.
- Do not allow liquids to enter the device.
- Keep out of reach of children.

**CAUTION!** Fully charge your Medistrom Pilot-19 Lite battery pack every six months or less, failure to charge the unit regularly will cause damage to the lithium-ion cells and permanently diminish run time. Failure to charge the unit regularly is considered neglect and will not be covered under warranty.

## **SECTION 6 - WARRANTY INFORMATION**

Please contact your CPAP battery dealer for any warranty related issues or you can contact Medistrom technical support by emailing support@medistrom.com. Medistrom guarantees that Pilot-19 Lite Battery Backup Power Supply shall remain free from manufacturer defects for twelve months from the date of purchase.

This warranty is not transferrable and will only be available to the original purchaser.

This warranty does not cover physical damage resulting from improper use. Medistrom reserves the right to choose whether to repair or replace the product.

CAUTION! Fully charge your Medistrom Pilot-19 Lite Battery Backup Power Supply before storage and once EVERY 6 MONTHS. Failing to do so will void the warranty.

Medistrom reserves the right to update the warranty policy without notice. For the most up to date warranty information please visit www.medistrom.com or contact support by emailing support@medistrom.com.

## **SECTION 7 - TROUBLESHOOTING GUIDE**

NORMAL OPERATION			
Green Charge Level Indicator Lights			
4 solid green lights	Greater than 90% capacity remaining		
3 solid green lights	65% - 90% capacity remaining		
2 solid green lights	40% - 65% capacity remaining		
1 solid green light	10% - 40% capacity remaining		
Green lights flashing consecutively	Battery is charging		

ERROR CODES				
Error	Possible Cause	Solution		
Blue and green LEDs alternate flashing (Over Discharge State)	Battery has entered over-discharge protection to prevent damage to the cells.	Contact Medistrom technical support at 1-888-407-4791 (North America), 1-300- 146-358 (Australia) or email support@ medistrom.com		
Blue LED flashing rapidly accompanied by short (200ms) beeping pattern	Incorrect AC adapter	Pilot-19 Lite: use the AC adapter provided with your BMC M1 Mini PAP device. (see section 1.2)		
	Power source is damaged	Power strip or outlet wiring may be damaged. Plug AC adapter directly into wall outlet or try using the battery with a different wall outlet.		
Blue LED flashing accompanied by long (1s) beeping pattern	The environmental temperature is too high for the battery to operate safely	Ensure that the battery is placed where there is no excess heat. Do not rest the battery on top of radiators or electronic devices that may emit heat. Do not attempt to use the battery in temperatures exceeding 40° C / 104° F		
Blue LED flashing accompanied by short (500ms) and long (1s) alternate beeping pattern	Incorrect AC adapter being used	Pilot-19 Lite: use the AC adapter provided with your BMC M1 Mini PAP. (see section 1.2)		
	PAP device connected to battery is incompatible	Ensure that the PAP device you are using is compatible with the Pilot-19 Lite (see section 1.2)		
Four green LEDs flashing together accompanied by long (1s) beeping pattern	Incorrect AC adapter being used	Pilot-19 Lite: use the AC adapter provided with your BMC M1 Mini PAP (see section 1.2) If problem persists, please contact Medistrom technical support at 1-888-407-4791 (North America), 1-300-146-358 (Australia) or email support@medistrom.com		
Blue LED flashing accompanied by a short (500ms)	PAP device connected to battery is incompatible	Ensure that the PAP device you are using is compatible with the Pilot-19 Lite (see section 1.2)		
short (500ms) long (1s) beeping pattern	DC output cable is damaged	Ensure that the cable connecting the Pilot-19 Lite to your compatible PAP device is not damaged		
Blue LED flashing accompanied by three short (500ms) beeping pattern	PAP device connected to battery is incompatible	Ensure that the PAP device you are using is compatible with the Pilot-19 Lite (see section 1.2)		

Blue LED periodically flashing (no pattern)	Maximum battery power output	No action required, the battery is operating correctly. Depending on your prescribed pressure, enabled PAP device features and breathing rate the battery may reach maximum power output which is indicated by the periodically flashing blue LED
Blue LED flashing every 0.5 seconds	Battery capacity is below 5%	Charge the battery as soon as possible. The battery power level is critically low. Not charging the battery for a prolonged period will cause it to go into Over Discharge State.
Battery Not Providing Power (PAP Device or USB)	Battery is in Stand- by Mode	Press the Multi Function Button to wake the battery from Stand-by Mode
		Disconnect all devices and cables. Plug your DC output cable into the DC Out port on the battery and press the Multi Function Button
		For USB Devices: Disconnect all devices and cables. Plug your DC output cable into the DC Out port on the battery then plug in your USB device into the USB Out port and press the Multi Function Button.
Coil whine	e Battery is being charged on lower voltage or lower wattage	No action required; the battery is operating correctly.
		The Pilot-19 Lite is a 19 Volt battery. You may hear coil whine (a faint buzzing sound) in later stages of charging if the battery is charging on lower voltages or on a lower wattage

If errors persist after taking the recommended action(s) contact Medistrom technical support toll-free at 1-888-407-4791 (North America), 1-300-146-358 (Australia) or via email at support@medistrom.com. Do not disassemble the device or attempt to service the device yourself.