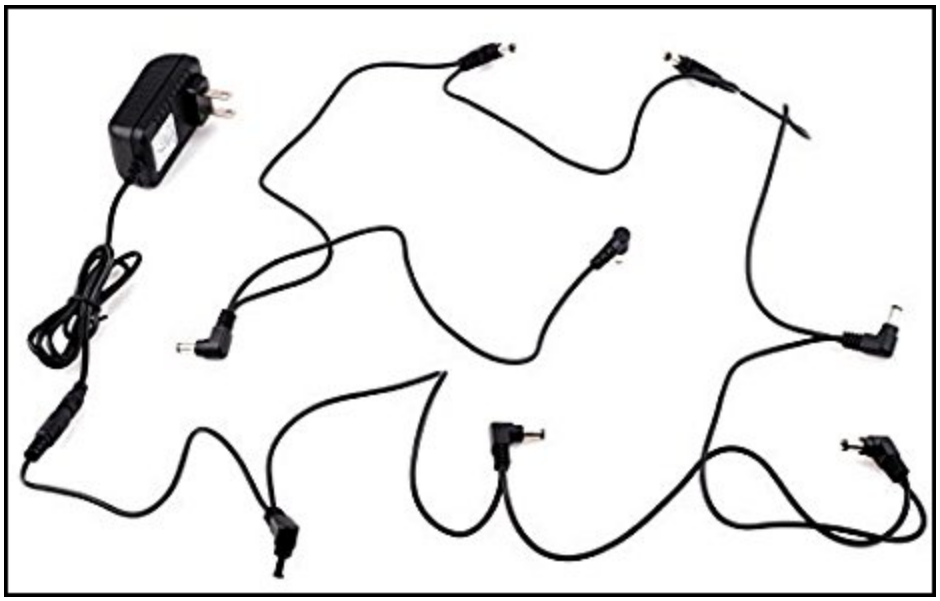
To charge the M5™ Main Battery:

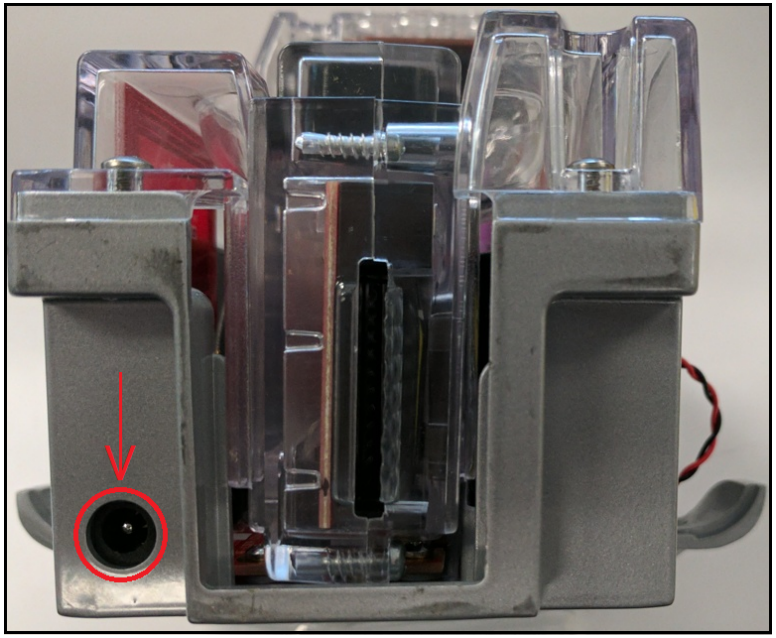
1. Remove the Non-rechargeable Backup Battery door from the SSPM, and disconnect and remove the Non-rechargeable Backup Battery.

2. Plug the charging cable into an AC power supply.

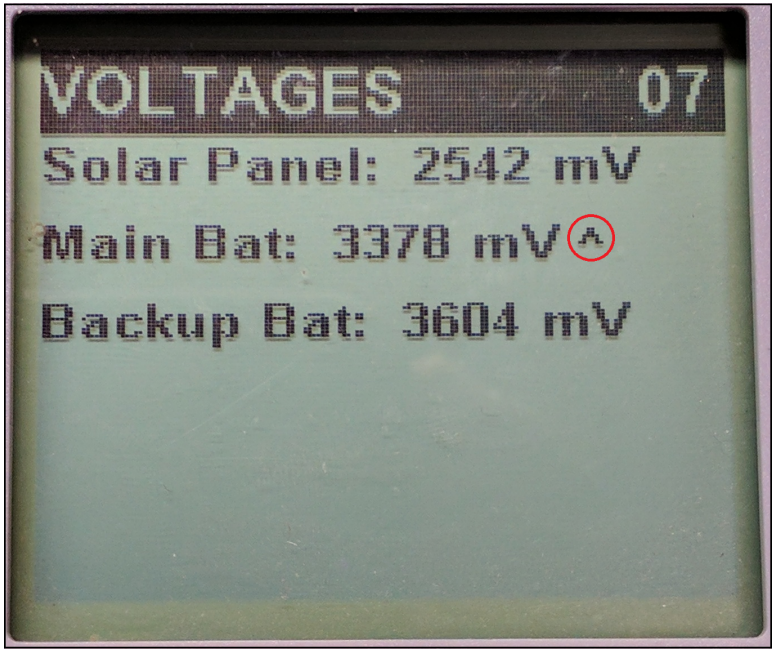


Caution: At the JMP6 header on the main board, ensure the jumper (JMP0002) is properly connected.

3. Plug a male connector from the charging cable into the female connector of the SSPM (on the bottom of the SSPM).



4. On the SSPM, quickly insert and remove a Diagnostics card from the EMV card reader to enter *Diagnostics* mode.
5. Press **+ Time** (more time) / **— Time** (less time) to scroll to *Voltages*, and ensure the meter enters “Charging” mode indicated by **^** on the display.



6. Continue charging the battery ≥ 4 hours.

   Caution: Do not leave the battery charging unattended / overnight. All battery-charging activities carry inherent risk and must be supervised at all times.

7. In ≥ 4 hours, disconnect the meter from the charging cable.
8. Re-connect and replace the Non-rechargeable Backup Battery, and battery door.
9. Check the battery voltages to ensure Non-rechargeable Backup Battery and the Rechargeable Main Battery both measure > 3100 mV. (See How To Check the M5™ Battery Voltage for more details).
   - If the both batteries measure > 3100 mV, deploy the M5™ SSPM for use or place it into Sleep state for future use.
   - If the Rechargeable Main Battery is < 3100 mV, repeat this procedure from the beginning, or send the SSPM to IPS Group, Inc. for servicing / replacement.
   - If the Non-rechargeable Backup Battery is < 3100 mV, send the SSPM to IPS Group, Inc. for servicing / replacement..

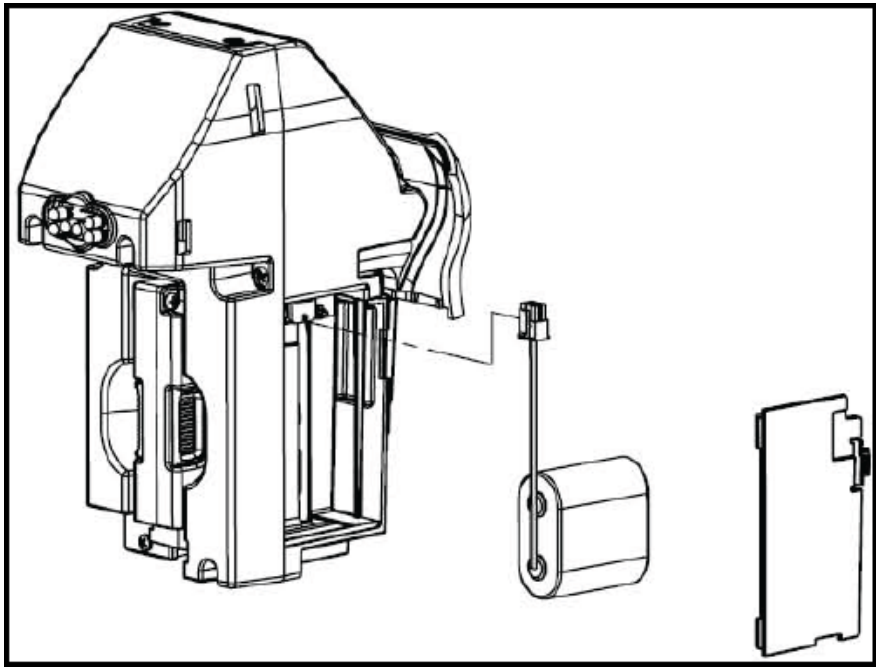
How To Replace an SSMP Backup Battery

This task topic discusses how to replace the IPS Group, Inc. SSPM backup battery.

The Backup Battery life of the SSPM is among the best in the industry. The battery is easily serviced in the field, requiring no tools to remove.

To replace the SSPM Backup Battery:

1. Remove the meter mechanism from the meter base housing.
2. Remove the battery compartment door from the left side of the meter mechanism.
3. Disconnect the wire harness, from the battery pack to the meter mechanism.



4. Using a new Backup Battery, connect the wire harness from the battery pack to the meter mechanism, replace the battery compartment door, and reinstall the meter mechanism into the meter housing.

5. Quickly insert and remove a Diagnostics card from the card reader to enter *Diagnostics* mode.
6. Press √ **OK** > **X Cancel** to enter *Diagnostics* mode - level 2.
7. Press **+ Time** (more time) / **— Time** (less time) to select *COMMS Test*.
8. Press √ **OK** to enter the *COMMS Test* menu, to set the meter to the current time.
9. Press **+ Time** (more time) / **— Time** (less time) to select *Replace Bat*.
10. Press √ **OK** to enter *Replace*, then press **— Time** (less time) to *confirm* the battery replacement.

    The battery replacement *Date* is set to the current time, and the *Use* data resets to zero (0) days.

11. Press **X Cancel** repeatedly to exit *Diagnostics* mode.

How To Force an SSPM to Update

This task topic discusses how to force the IPS Group, Inc. SSPM to update.

The SSPM receives firmware updates and configuration updates through the DMS. At initial installation, the SSPM is configured to call-into the DMS for updates at a specific events and / or time interval. To test an SSPM's communications, or to initiate an immediate updated, it can be forced to call-in at any time (before the next specified call-in interval).

To force an SSPM to update:

1. On the SSPM, quickly insert and remove a Diagnostics card from the card reader to enter *Diagnostics* mode.
2. Press **+ Time** (more time) / **— Time** (less time) to scroll to *Comms Test*.
3. Press √ **OK** to *Start* the communications test.
   The SSPM LCD shows *GSM Start*.

   The test may require a few minutes to complete as the SSPM attempts to connect to the DMS for firmware, configuration, and time stamp updates.

   Note: Do not press any buttons on the keypad until the communications test is complete, as this may interrupt the test session. Press **X Cancel** at any time to cancel the communications test, and return to the *Diagnostics* menu.

4. Once the communication test is complete, and the LCD shows *GSM Close*, press **X Cancel** repeatedly until the meter returns to normal operating mode.

Glossary

D

DMS
Data Management System

E

EMV
Europay, MasterCard, and Visa

F

FCC
Federal Communications Commission

G

GPRS
General Packet Radio Services

GSM
Global System for Mobile Communications

L

LCD
Liquid Crystal Display

LED
Light Emmiting Diode

Li-SOCI2
Lithium-Thionyl Chloride

N

NFC
Near Field Communication

P

PCBA
Printed Circuit Board Assembly

R

RFID
Radio Frequency Identification

S

SIM
Subscriber Identification Module

SSPM
Single-Space Parking Meter

Index

A

Access Cards 41
- Collection 42
- Diagnostics 41
- Maintenance 43

After Hours 52

Antenna
- NFC 38

B

Battery 29, 35, 77
- Backup 29
- Main 29, 77

Battery Cover 35

C

Card Entry Slot 34

Card Operation 67

Card Reader 36, 38
Card Reader Sub-Assembly 36
Card Slot 45
Card Test 24
Cards 16, 41
Chassis 36-37
Chassis Plate 37
Cleaning
    Display 61
    General 60
Coin 66
Coin Decal 34
Coin Entry Slot 34
Coin Entry Slot Plate 36
Coin Operation 66
Coin Slot 46
Coin Test 24
Coin Validator 34
Coins 17
Comms Test 25

Contact us 9

D

Decal 53
Diagnostics 47
Button 34, 47
Card 41
Mode 20
Level 1 20
Level 2 21
Level 3 22
Sub-menus 23
Display 34, 48, 61
PCBA 38
Display PCBA 36

E

Error messages 57
Expired 13, 52
Expiry Indicator 37

F

Fault 16

Fault codes 58

Fault Logging 26

Faults 23

FCC 10

Functions 36

G

GPRS 25

GSM 25

H

Head Lens 40-41

Head Upper Casting 39-40

I

Idle 13, 52

Interface Gasket 40-41

Issues 58

Coin 59

Communication 59

Power 58

J

jumper 77, 79

Jumper 29, 64

K

Keypad 34, 50

L

LCD 38

LCD Spacer 38

LED 51

LEDs 34

M

Main Battery 77

Main PCBA 36-37

Maintenance 60

Meter Swap 27

Module Case
Front 36
Rear 36

N

NFC 35
Antenna 36, 38
Bezel 36
No Parking 52
No Payment 19

O

Off 65
On 63
Out Of Order 18, 53

P

Paid 15, 53
Parts 35
PCBA Chassis 36
Prepay 19

R

Rear Expiry LEDs 36

RFID 43

- Reader 44
- Tag 43

S

Sleep 29

Solar

- Assembly 36
- Gasket 39, 41
- Panel 29, 34, 37, 55
- PCBA 37

T

Top Covers 39

- Model 132 40
- Model 147 40
- Model 795 39

Trademarks 10

Troubleshooting 58

Tun On 63

Turn Off 65

V

Validator 36, 56

Validator Connector 36

Voltage 28-29