



FAQ GMSplus Main Battery Replacement

1. Introduction

- This procedure describes how to replace the internal lead-acid (main) battery of a GMSplus.
- In most cases the main battery should be replaced every 3 years or when a related error is reported by the recorder.
- A good main battery powers the GMSplus in case of a power outage or interruption and provides redundancy for the system.

2. Required Tools

- GMSplus
- Replacement battery (see GMSplus User Manual for more information)
- Hex (Allen) key, size 5
- Computer with access to GMSplus

3. Disassembly

- Remove the instrument's lid by unscrewing the 4 hex screws
- Turn off the instrument by pushing the power button for 5 seconds



- Wait until the instrument is completely turned off (only AC LED is on), then disconnect AC and all the other connectors
- Disconnect the main battery



- Remove the battery holder by undoing the two securing screws (size 5 hex key)
- Remove the old battery

4. Installing the new battery

- Remove the cable/leads from the battery
- Observe the polarity marking of the new battery (+/- sign and/or colour of the battery terminal) and connect the cable to the new battery accordingly (red wire to + terminal, black wire to - terminal)
- Install the new battery to the housing and secure it with the battery holder and the two screws
- Connect AC and all the other connectors
- Connect battery connector
- Turn on the instrument by pushing the power button for 5 seconds

5. Set main battery installation date

- The main battery installation date can either be set from GeoDAS (5.1), through the webinterface (5.2) or from GMSplus serial console (5.3)

5.1 Set main battery installation date from GeoDAS

- In GeoDAS window **Stations: General Information**, right-click on the station and choose **Instrument Control... -> Send a Request -> SETBATDATE YYYY-MM-DD main -> [Send]**

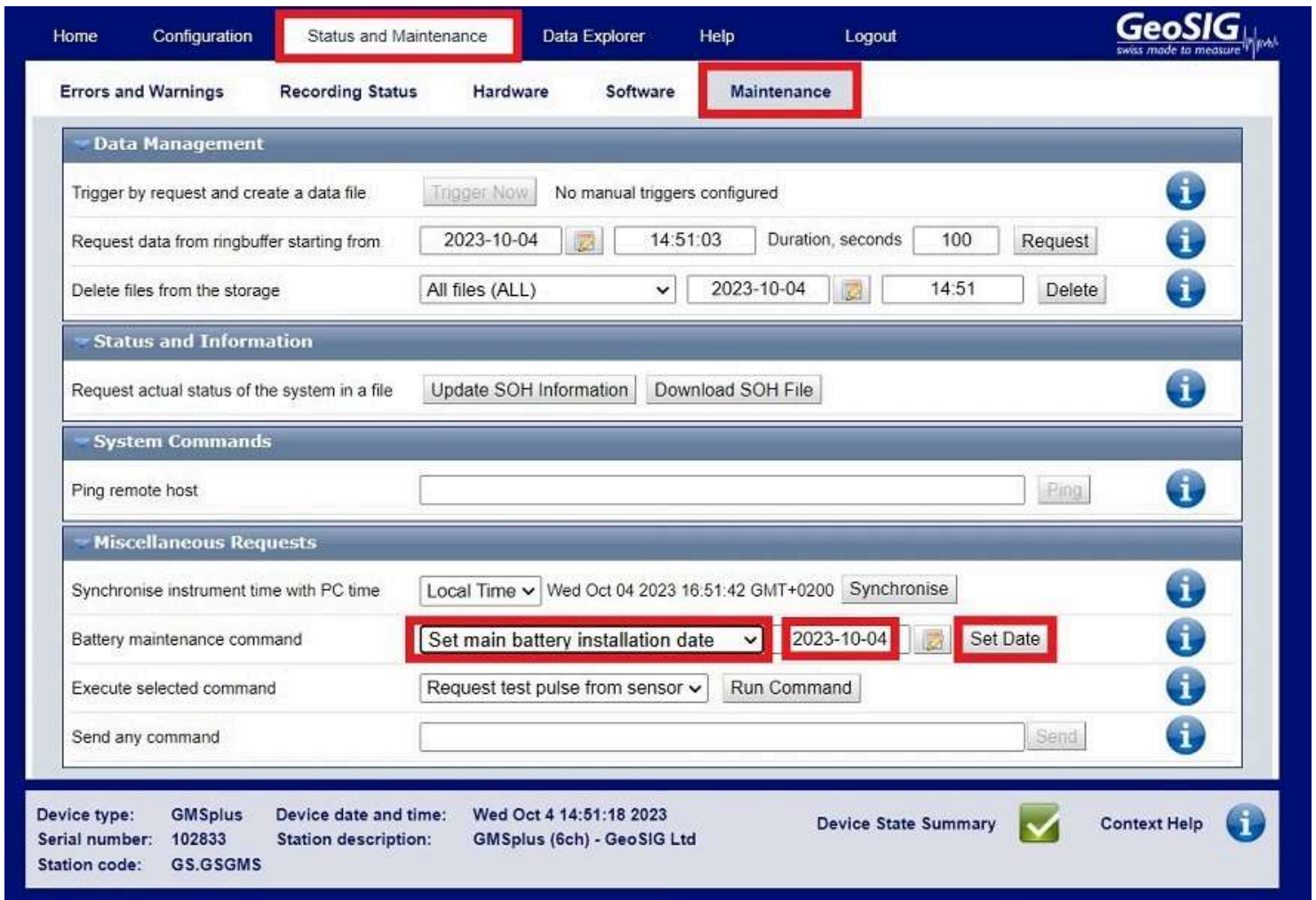


5.2 Set main battery installation date from Webinterface

- Open your webbrowser, enter the IP address of your GMSplus and login as admin (default password 123456)

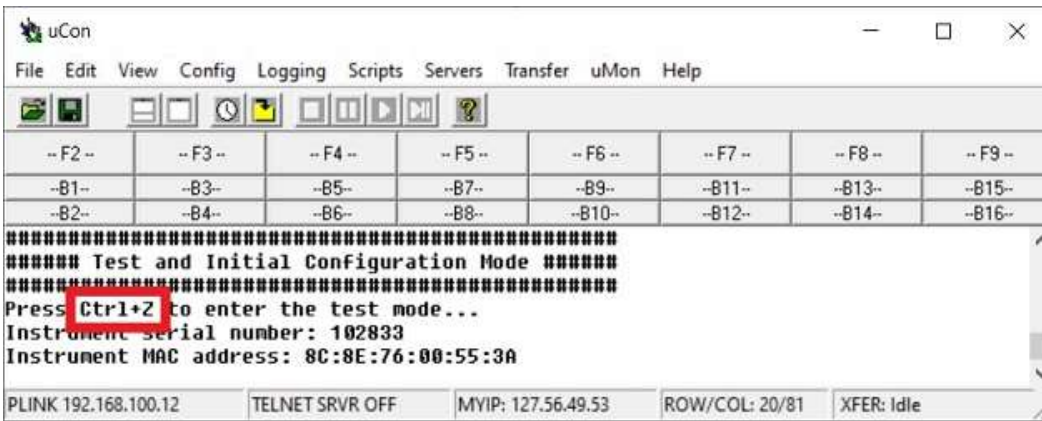


- Choose tab **Status and Maintenance -> Maintenance**
- Under **Battery maintenance command**, choose **Set main battery installation date** from the dropdown and enter the replacement date in format YYYY-MM-DD in the next field
- Click **[Set date]** to apply the change

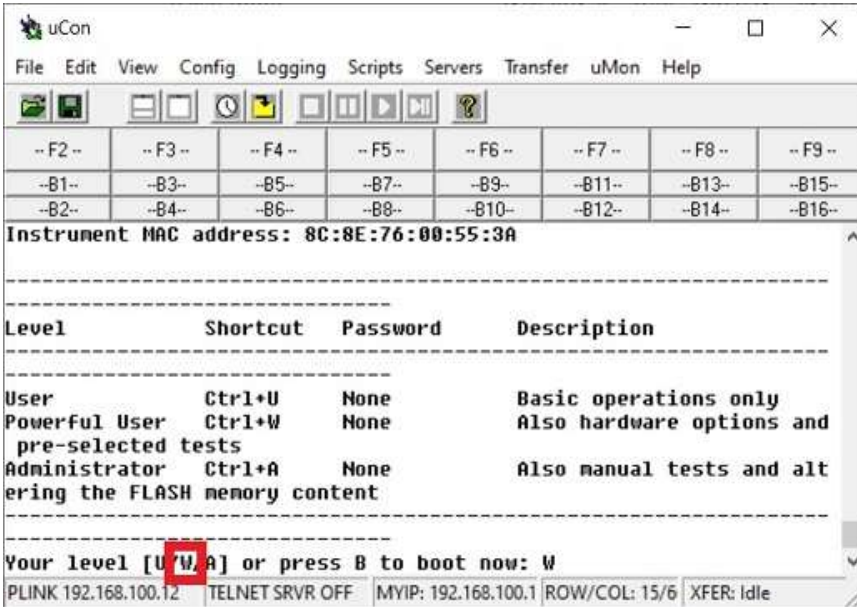


5.3 Set main battery installation date from Serial Console

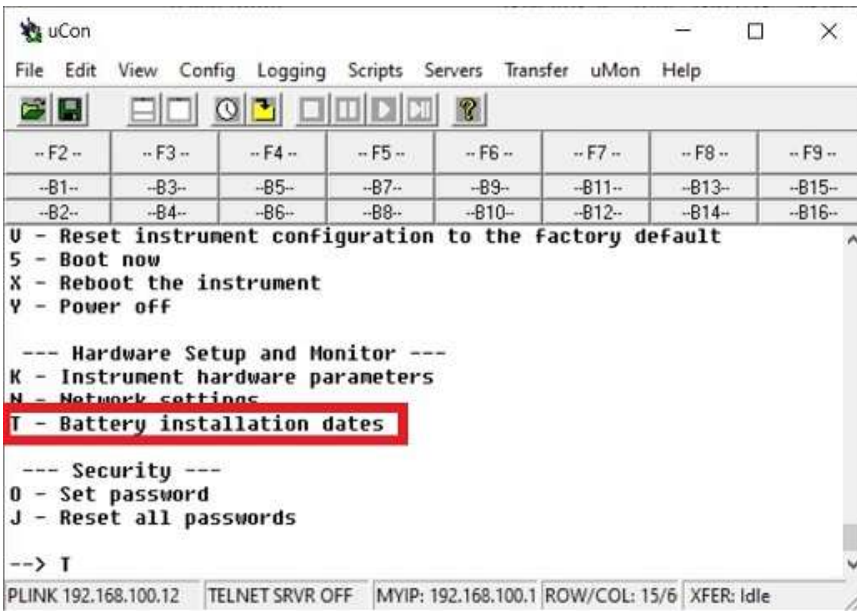
- Connect the serial console of the GMSplus to your computer
- Turn on GMSplus
- Press **Ctrl+Z** as soon the below message appears on the console to enter the test mode.



- By default no passwords are set, select **W** to enter the Powerful User Mode



- Select **T** to enter the menu Battery installation dates



- Set the Main battery installation date by pressing C or E, use format YYYY-MM-DD if needed
- Confirm with **Enter**


```
uCon
File Edit View Config Logging Scripts Servers Transfer uMon Help

--F2-- --F3-- --F4-- --F5-- --F6-- --F7-- --F8-- --F9--
-B1-- -B3-- -B5-- -B7-- -B9-- -B11-- -B13-- -B15--
-B2-- -B4-- -B6-- -B8-- -B10-- -B12-- -B14-- -B16--

0 - Set password
J - Reset all passwords

--> T
Current RTC UTC Date and time: 04.10.2023 15:01:20.463
Whenever you replace the main and/or backup battery, please update
this information
If the instrument does not have the main battery, please enter zer
o date 0000-00-00
Main battery installation date: 2022-06-13
Hit <Enter> to leave the date intact or set the date to Current da
te or Enter a date [C/E]? 2023-10-04
```

- Press **Enter** to skip setting the Backup battery installation date
- Choose **X** and press **Enter** to initiate a reboot that will apply the changes

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uCon
File Edit View Config Logging Scripts Servers Transfer uMon Help

--F2-- --F3-- --F4-- --F5-- --F6-- --F7-- --F8-- --F9--
-B1-- -B3-- -B5-- -B7-- -B9-- -B11-- -B13-- -B15--
-B2-- -B4-- -B6-- -B8-- -B10-- -B12-- -B14-- -B16--

Bootloader Menu of the GMSplus s/n 102833
Access level: User

--- Flash Images and Boot Options ---
L - List flash images
Q - Reset instrument configuration to the user default
U - Reset instrument configuration to the factory default
5 - Boot now
X - Reboot the instrument
Y - Power off

--- Hardware Setup and Monitor ---
N - Network settings

--- Security ---
0 - Set password

--> X

PLINK 192.168.100.12 TELNET SRVR OFF MYIP: 192.168.100.11 ROW/COL: 18/78 XFER: Idle
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