



FAQ GMSplus Set RTC Time from Recorder Serial Console

1. Introduction

- This procedure describes how to set the time of the GMSplus realtime clock (RTC) manually.

2. Required Tools

- GMSplus
- Computer, connected to Recorder Serial Console with ucon
https://www.geosig.com/files/FAQ_GMSplus_How_to_Connect_Serial_Console_with_uCon.pdf

3. Set RTC Time

- In the main menu, select **[H]** to set RTC time

```
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--

GMSplus s/n 102833 version 21.12.29
Main menu:
C - Configuration
H - Messages ->
S - Shell command
L - List firmware images
N - List network tunnels
X - Display errors (0) and warnings (0)
W - Clear errors and warnings
F - View/reset RTC trim values
T - File statistics
G - View RTC status
A - View Alarm status
P - View GPS information
H - Set RTC time
U - User Request
R - Restart
Q - Quit

PLINK 192.168.100.12 TELNET SRVR OFF MYIP: 192.168.100.11 ROW/COL: 21/71 XFER: Idle
```

- Enter the time in format **YYMMDDHHMMSS** and confirm with **[Enter]**
The sample below is for a time of 18:45:00 on January 19th of 2024

```

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--
Main menu:
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U - User request
R - Restart
Q - Quit
H
New date & time (YYMMDDHHMMSS): 240119184500
PLINK 192.168.100.1 TELNET SRVR OF MYIP: 192.168.100.1 ROW/COL: 21 XFER: Idle

```

- When entering the time, it may happen that log messages are written into your input. If this happens, just continue your input and confirm with **[Enter]**
The input may be split over several lines as below

```

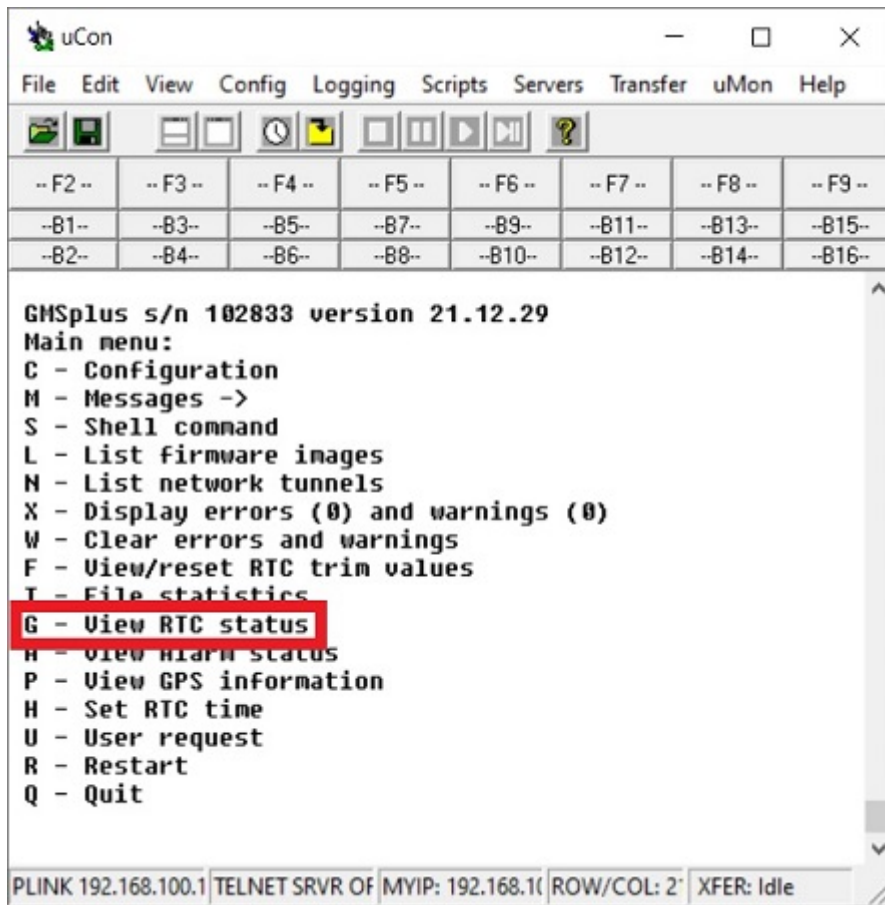
uCon
File Edit View Config Logging Scripts Servers Transfer uMon Help
--F2-- --F3-- --F4-- --F5-- --F6-- --F7-- --F8-- --F9--
--B1-- --B3-- --B5-- --B7-- --B9-- --B11-- --B13-- --B15--
--B2-- --B4-- --B6-- --B8-- --B10-- --B12-- --B14-- --B16--
Main menu:
C - Configuration
M - Messages ->
S - Shell command
L - List firmware images
N - List network tunnels
X - Display errors (0) and warnings (0)
W - Clear errors and warnings
F - View/reset RTC trim values
T - File statistics
G - View RTC status
A - View Alarm status
P - View GPS information
H - Set RTC time
U - User request
R - Restart
Q - Quit
H
New date & time (YYMMDDHHMMSS): 2401 8:45:38.759 Server
19184500
PLINK 192.168.100.1 TELNET SRVR OF MYIP: 192.168.100.1 ROW/COL: 21 XFER: Idle

```

- GMSplus will adapt its time to the new setting, it will close the old ringbuffer recording (RBF) and open a new one with the new time setting. This process may take a few seconds.

4. Check RTC Time

- In the main menu, select **[G]** to see the current RTC time



```
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--
GMSplus s/n 102833 version 21.12.29
Main menu:
C - Configuration
M - Messages ->
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L - List firmware images
N - List network tunnels
X - Display errors (0) and warnings (0)
W - Clear errors and warnings
F - View/reset RTC trim values
T - File statistics
G - View RTC status
H - View HiARN status
P - View GPS information
H - Set RTC time
U - User request
R - Restart
Q - Quit
PLINK 192.168.100.1 TELNET SRVR OF MYIP: 192.168.1 ROW/COL: 2 XFER: Idle
```

- Under **Current RTC Local Time**, the time will be shown in format YYYY.MM.DD HH:MM:SS.ms

The screenshot shows the uCon terminal window with a menu bar (File, Edit, View, Config, Logging, Scripts, Servers, Transfer, uMon, Help) and a toolbar with various icons. Below the toolbar is a grid of function keys labeled --F2-- through --B16--. The main terminal area displays the following text:

```
Q - Quit
g18:45:14.464 Server 192.168.100.11: no new files
18:45:15.466 Ringbuffer files: 1 item(s) to upload (oldest first)

Current RTC Local Time: 2024.01.19 18:45:15.562
RTC Status:
Source="RTC"
Status="Frozen"
PulseDetected="False"
SourceValid="False"
AutolockEnabled="False"
LastLock="3h+"
LastLockTime="2024-01-29T17:30:12.088Z" ClockDriftRate="3"
StatusRegisters="12 40 00 11 00"
18:45:15.966 Uploaded RBF_102833_20240119_184510.msd (229376 bytes) --> 192.168.100.11
18:45:15.969 File /media/mncblk0p1/Ringbuffers/RBF_102833_20240119_184510.msd deleted after transmission
18:45:16.271 Uploaded 1 file(s) to the server 192.168.100.11
PLINK 192.168.100.1 TELNET SRVR OF MYIP: 192.168.100.1 ROW/COL: 2 XFER: Idle
```

- If the new time has not been taken, repeat from step 3. and check if the backup battery voltage is still good (See FAQ's Maintenance Guideline for more information)