Upgrade Receiver Firmware

PHOENIX GEOPHYSICS

Version: 220413   ID: DAA23

Testing before an upgrade

Make sure the battery that the receiver is using is **fully charged** and the cables are properly connected. Run a quick recording to note the current receiver OS version and to make sure that the receiver is working as expected before upgrade.

1. Insert an **SD Card** for recording
(>= 64GB, formatted as exFat)
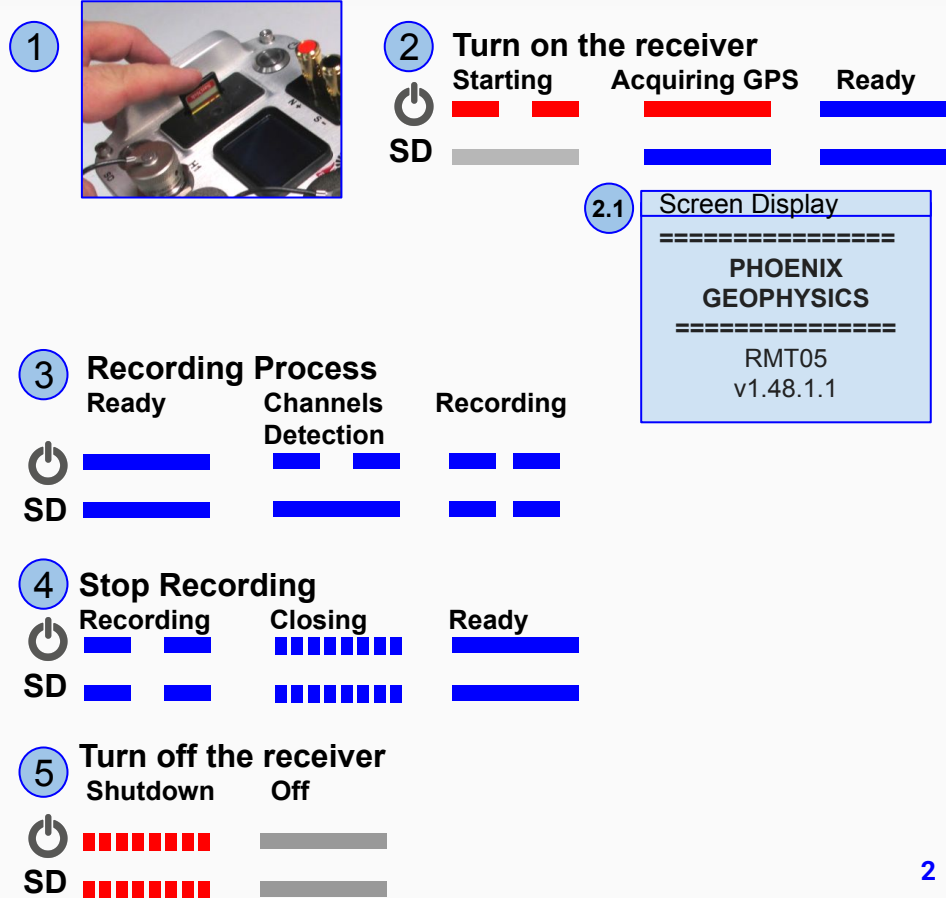
2. Turn on the **receiver**
2.1. Review the OS version

3. Run a quick data recording test (2 minutes)

4. Stop the recording

5. Turn off the receiver

This will help to keep a record of the current OS version that the receiver has prior to upgrade

(1)

(2) **Turn on the receiver**
Starting   Acquiring GPS   Ready
SD

(2.1) Screen Display
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PHOENIX GEOPHYSICS
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RMT05
v1.48.1.1

(3) **Recording Process**
Ready   Channels Detection   Recording
SD

(4) **Stop Recording**
Recording   Closing   Ready
SD

(5) **Turn off the receiver**
Shutdown   Off
SD

Upgrading the Receiver Firmware

1. Download **"osImage"** and **"upgrade"** files from
   http://phxgeo.ca/releases/LATEST/Receiver%20Firmware
   - There are two files. In Chrome/ Edge / IE, make sure to save the file "upgrade" without any extension
     Don't save file name with any extension (.tar)
   - Using Firefox, the file will keep its name as "upgrade"

2. Put both files on a **32GB** or **smaller SD card** *(must be FAT32 formatted)* https://www.sdcard.org/downloads/formatter/

3. Put the SD card in receiver and power on
   - Wait for power button to be violet, and SD card button turn blue

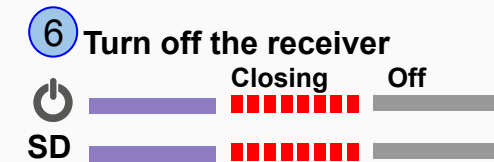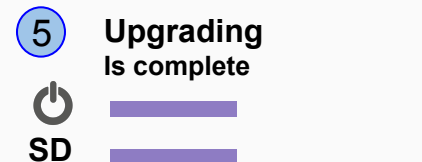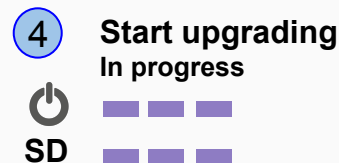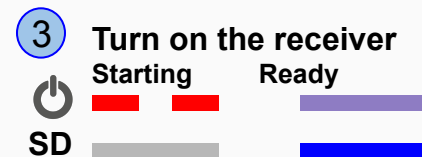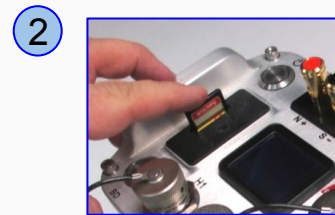4. Briefly push and release the **Power button** to start upgrading
   - Both LEDs will blink violet, indicating upgrade is in progress

5. Wait until both LEDs are solid violet (~15 minutes)

6. Push and hold power button for >5 seconds to power off the receiver
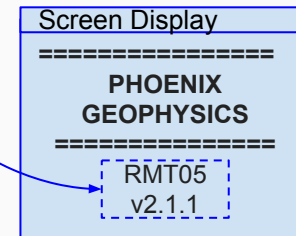   - After power off unplug the battery from the receiver

①

②

③ **Turn on the receiver**
Starting | Ready

④ **Start upgrading**
In progress

⑤ **Upgrading**
Is complete

⑥ **Turn off the receiver**
Closing | Off

ⓘ GPS is not required during the upgrade

1. The receiver will create an **upgrade.log** file and a **receiver_backup.serial_number** file in the upgrade SD card if necessary.

> ** **Do Not Delete** any of these files created by the receiver until the upgrade process is verified to be complete*

2. Remove the Upgrade card, and insert a regular recording SD card (>=64 GB).

3. Connect the battery and turn on the receiver and verify that the upgrade process was completed and review the OS version

① 📄 **Upgrade.log**

②

③ **Turn on the receiver**

	Starting	Acquiring GPS	Ready

SD

Screen Display

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  PHOENIX
 GEOPHYSICS
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    RMT05
    v2.1.1
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Troubleshooting

Problem:

1. SD card not detected in receiver due to format/SD hardware issues. SD led will be blinking RED and screen will display NO SD card error message
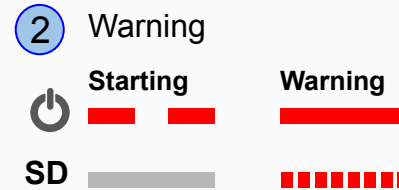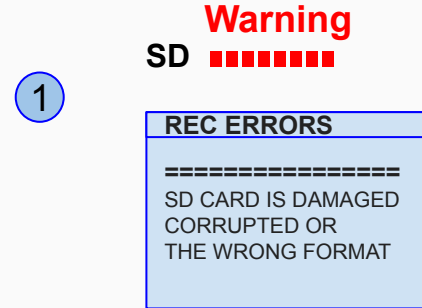
  Solution:
- Make sure the SD card is of the proper recommended type
- For more information see Troubleshooting manual

Problem:

2. When the upgrade files **osImage and upgrade** are not detected or doesn't have the proper format then receiver will ignore those files

  Solution:
- Make sure that the files **osImage** and **upgrade** are downloaded and copied to the SD card properly with no extensions, and that the card being used for the upgrade is formatted as FAT32

Warning

SD ■■■■■■■■

①

REC ERRORS

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SD CARD IS DAMAGED
CORRUPTED OR
THE WRONG FORMAT

② Warning

Starting　　　　**Warning**

SD

Troubleshooting

Problem:

3. Both LEDs blinking fast in purple color. This could indicates that the **upgrade** file is not proper or the receiver is not supported by this upgrade file

Solution:
- Turn off the receiver
- Review the upgrade.log file in the SD card *(if necessary download and copy the files to the SD card again)*

Problem:

4. Power LED is blinking fast RED after receiver was powered on

Solution:
- Check the upgrade card for file with similar format receiver_backup.serial_number.
  For example
  - If the receiver serial number is 10111, the file name will be receiver_backup.10111.
  - If the file is available, then perform the OS upgrade procedure again, using the same osUpgrade card
- If no files were present on the SD card contact Phoenix support.

③ Both button blinking purple color

Shutdown

⏻ ■■■■■■■

SD ■■■■■■■

④ Power LED blinking fast Red

Shutdown

⏻ ▮▮▮▮▮▮▮

SD ▬▬▬▬

Technical Support Contact

*Please check out the **FAQs***
https://phoenixgeophysics.freshdesk.com/
Or email us at: *support@phoenix-geophysics.com*