Upgrade Receiver Firmware
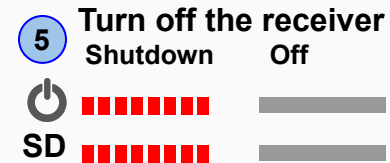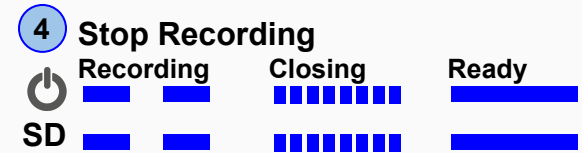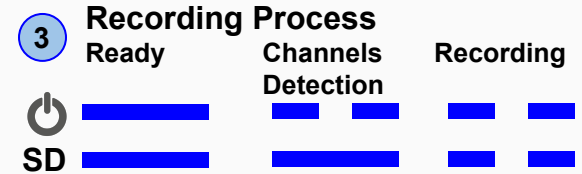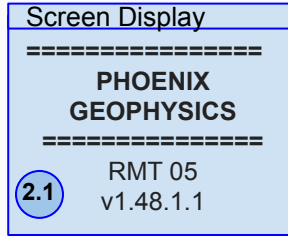
Version: 200910   ID: DAA23

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Before beginning

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 the **SD Card**

2. Turn on the **receiver**
   2.1. Review the OS version

3. Quick recording data 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

Screen Display
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**PHOENIX
GEOPHYSICS**
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RMT 05
v1.48.1.1

2 Turn on the receiver

Starting	Acquiring GPS	Ready

3 Recording Process

Ready	Channels Detection	Recording

4 Stop Recording

Recording	Closing	Ready

5 Turn off the receiver

Shutdown	Off

2

Upgrading the Receiver Firmware

1. Download **"osImage"** and **"upgrade"** files from http://empower.phoenix-geophysics.com/releases/LATEST/Receiver%20Firmware/
   - Chrome/ Edge / IE, save the file name as "upgrade" *Don't save file name with any extension (.tar)*
   - Using Firefox, the file will keep the filename as "upgrade"

2. Put both files on a 32GB or smaller SD card (must be FAT32 formatted)

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)

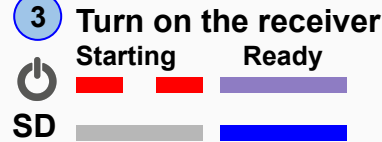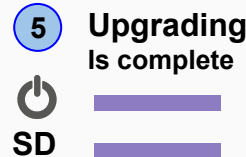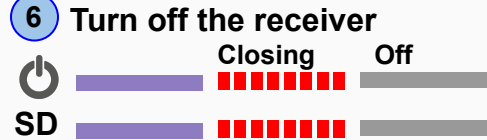6. Push and hold power button for >5 seconds to power off the receiver

③ **Turn on the receiver**
Starting   Ready

④ **Start upgrading**
In progress

⑤ **Upgrading**
Is complete

⑥ **Turn off the receiver**
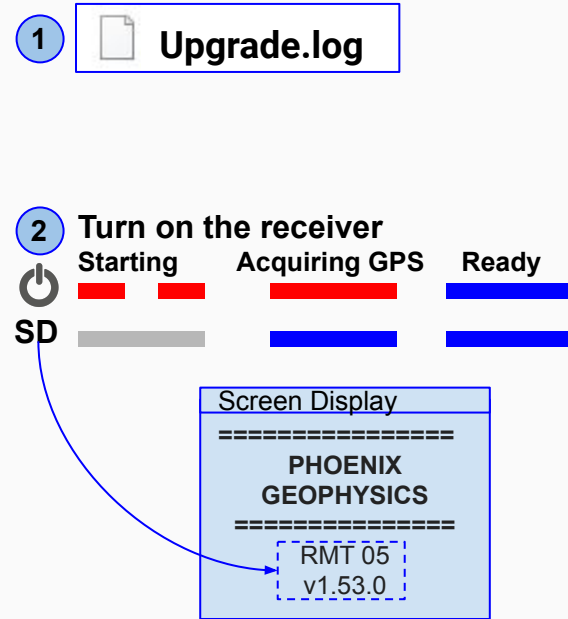Closing   Off
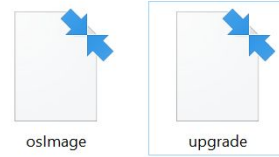
GPS is not required during the upgrade

After 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. Turn on the receiver and verify that the upgrade process was completed and review the OS version

① 📄 **Upgrade.log**

② **Turn on the receiver**

| Starting | Acquiring GPS | Ready |

Screen Display
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PHOENIX GEOPHYSICS
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RMT 05
v1.53.0

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

① **Warning**

SD ▪▪▪▪▪▪▪▪

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 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 in SD card contact Phoenix support.

3 Both button blinking purple color

Shutdown

⏻ ▪▪▪▪▪▪▪▪

SD ▪▪▪▪▪▪▪▪

4 Power LED blinking fast Red

Shutdown

⏻ ▮▮▮▮▮▮▮▮

SD ▬▬▬

Technical Support Contact

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