

# Upgrade Receiver Firmware



Testing before an upgrade.....	2
Upgrading the Receiver Firmware .....	3
After the Upgrade .....	4
Troubleshooting .....	5
Technical Support Contact .....	7

# 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**

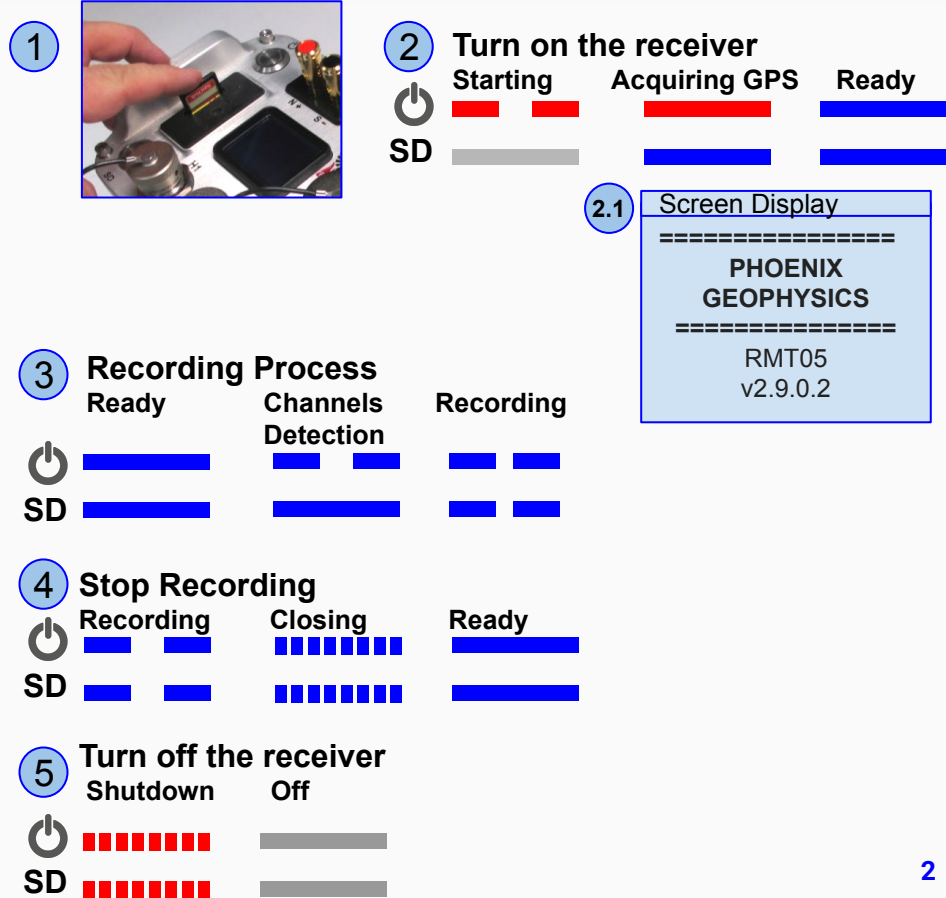
2.1. Review the OS version

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

4. Stop the recording

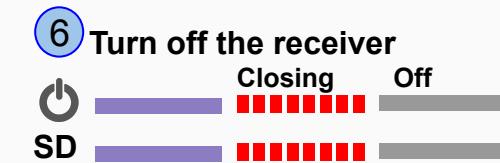
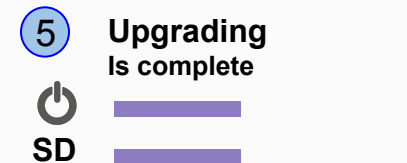
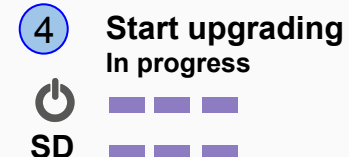
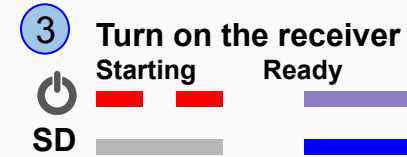
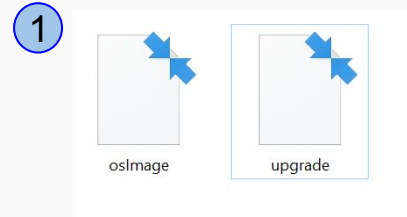
5. Turn off the receiver

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



# 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



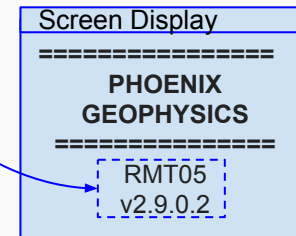
GPS is not required during the upgrade

# 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. 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



# 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:

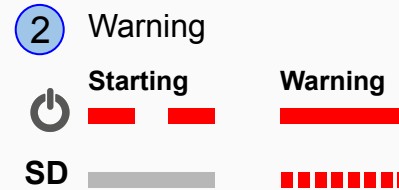
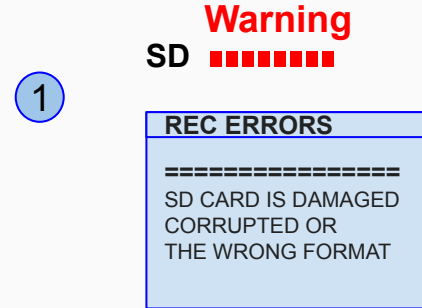
- Make sure the SD card is of the proper recommended type
- For more information see Troubleshooting manual

## 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



# Troubleshooting

## Problem:

- Both LEDs blinking fast in purple color. This could indicate 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:

- 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.

- Both button blinking purple color  
**Shutdown**



- Power LED blinking fast Red  
**Shutdown**





*Please check out the [FAQs](#)*

*<https://phoenixgeophysics.freshdesk.com/>*

*Or email us at: [support@phoenix-geophysics.com](mailto:support@phoenix-geophysics.com)*