



Iridium 9555

Software Release Note

IRDM-1023-SRN-002 v5.1

HT19002



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1 Introduction

This document details the use of the Iridium 9555 firmware upgrade tool and lists the feature changes contained within the version HT19002 release.

2 Upgrade Tool OS Compatibility

The upgrade tool that accompanies this release has been tested with Microsoft Windows 10. The instructions that follow in this document assume the use of this version of Microsoft Windows.

3 Upgrade Warnings

3.1 Phonebook

All non-volatile user information in the handset will be erased when upgrading an Iridium 9555 handset from software versions earlier than release candidate HT14004. This includes for example the phonebook entries and lifetime use counters.

This section is not applicable to handsets that have already been upgraded to HT15002 or later and performed the datastore reformat as described below.

After the upgrade from HT14004 or earlier is complete the user must reformat the datastore file system to make it compatible with HT19002. To do this, the user must navigate to the idle screen and enter the short code `*#323#<green>`. The handset will then reboot.

If a user tries to access the phonebook without performing the steps presented above they will be presented with an error stating "My Phonebook failed to initialize. Contact service center." The datastore file system must be reformatted using the instructions above.

3.2 Inability to Downgrade

It is not possible to downgrade to a software version prior to HT15002 once an upgrade to HT15002 or later is performed.

4 Performing the Upgrade

The following steps should be used to upgrade an Iridium 9555 handset from version HT11001 or later.

4.1 Typical Upgrade

- Run the upgrade installer application
 - The application is named "Iridium 9555 Software Upgrade <version> Installer.exe"
 - This will place the upgrade tool and USB drivers into the C:\Program Files\Iridium\9555 directory
- Prior to performing the upgrade complete the following:
 - Disable Bluetooth on the PC running the upgrade
 - Remove the SIM card from the handset and install the handset battery
 - Turn the handset on
 - Ensure that the battery is fully charged or a charger is connected to the handset



- Connect the handset to the PC using a USB cable
 - If the handset is being connected to this PC for the first time, or to a USB port that has not been used before, the driver will be installed automatically. If this is the case, wait for Windows to show the "New Hardware Installed" notification before proceeding.
 - If Windows is unable to automatically locate the USB driver, it can be found at C:\Program Files\Iridium\9555\USB\VCOMPORT
- Run the Iridium 9555 Software Upgrade tool
 - A shortcut to this application should be available in the Start Menu in the Iridium 9555 Software Upgrade folder
 - The target of the shortcut is C:\Program Files\Iridium\9555\Upgrade_Tool\ Iridium 9555 Software Upgrade <version>.exe
- Follow instructions presented by the upgrade tool user interface.
 - During the upgrade process the handset will display various information on the screen, including "Upgrading..."
 - At times the handset screen may go completely blank
 - Do not disconnect the handset or press any keys while the upgrade is in progress
 - At times the handset may display "Inconsistent firmware. Please run upgrade tool."
 - The upgrade process may take 20 minutes or more to complete

4.2 Troubleshooting USB Drivers

If the PC being used to drive the upgrade process has been used previously to update Iridium 9555 handsets there is a possibility that it may have an incompatible DFU driver already installed.

This condition may present itself with the following observables; when running the Iridium Software Upgrade Tool the upgrade will stop when the handset switches to DFU mode. The handset will report "Upgrade in progress". The upgrade tool will report "Error – cannot locate handset." Viewing the handset in the device manager will show that the driver appears to be installed appropriately.

To recover from this condition follow the procedure below.

- Reinstall the USB drivers
 - Having run the upgrade tool and gotten to the error condition reported in the previous section, do not remove the USB connection between the PC and the handset
 - Exit the Iridium 9555 Software Upgrade Tool
 - Launch "Device Manager" in Windows by clicking the Start menu and searching for the same name in "Search programs and files"
 - Expand "Universal Serial Bus controllers" if not already expanded
 - Right-click on "Iridium 9555 Handset in DFU Mode" and select Properties
 - If not logged in as an administrator, select "Change settings" on the General tab and enter the administrator credentials
 - On the Driver tab, select "Uninstall"
 - In the "Confirm Device Uninstall" window that appears, click the checkbox beside "Delete the driver software for this device." and click OK
 - Disconnect the USB cable between the handset and the PC, wait 5 seconds for the PC to recognize the disconnection, and then reconnect the cable



- When the PC recognizes the handset it will show up in the Device Manager in “Other devices”
- Right-click on “Iridium 9555 Handset” and select Properties
- If not logged in as an administrator, select “Change settings” on the General tab and enter the administrator credentials
- On the General tab, select “Update Driver...”
- Select “Browse my computer for driver software”
- Search for driver software in this location: “C:\Program Files\Iridium\9555\USB\DFU” and select “Next”
- Windows will report that it has successfully updated your driver software for Iridium 9555 Handset in DFU Mode
- Click Close
- Attempt the upgrade process as detailed in section 4.1, Typical Upgrade

5 Hardware Compatibility

This software release has been tested to be compatible with the following hardware models;

HARDWARE MODELS			
IRID0115E	IRIDN0115C		
IRID0115V			

Iridium may produce and distribute hardware models loaded with software version HT19002 that are not indicated on this list at its sole discretion and without notice.

6 Change List

6.1 HT19002

DESCRIPTION
Leveraged enhancements offered by the Iridium NEXT constellation to improve network connectivity and improve reception of transceiver ring notifications from the core network.
Resolved an issue wherein when the user attempted to enter the SMS menu when the outbox on the SIM was full the handset would reboot.
Fixed an issue preventing display of predictive help content.
Corrected an issue preventing display of firmware version in French.
Updated Iridium branding content in Upgrade Tool.



6.2 HT18001

DESCRIPTION
Initial production release for the Iridium 9555N.
Addressed an issue where channel assignments were inadvertently being discarded in some situations thereby improving overall handset performance.
Modified battery charging algorithm to ensure compliance with battery specifications.
Modified transceiver behavior to comply with the European Union Radio Equipment Directive in failure conditions.

6.3 HT17001

DESCRIPTION
Improved accuracy of reporting when SMS storage on the SIM has reached capacity.
Updated startup splash screen to display a NEXT constellation satellite.
Improved handset upgrade: added support for Windows 10; required drivers are now installed automatically; and the upgrade itself is faster in some situations.
Added functionality to allow short codes to be stored in the phonebook, used from the phonebook, and dialed directly.
Improved the translations for some non-English menu languages and added Kurdish (Sorani) as a new language option.
Improved responsiveness to power button press to turn the handset off.
Improved reporting of signal strength on the user interface and the AT interface.
Fixed an issue where a remote DTMF button press could unmute a local handset.
Use of SBD services is now permitted when no SIM card is present in the handset.



6.4 HT15002

DESCRIPTION
Calls to the emergency services number "000" are now permitted when no SIM card is present in the handset.
Added necessary conversions for display of time on user interface in Iridium network era 2 and other era detection and transition improvements.
Corrected an issue that would arise when the handset was transmitting and receiving SMS messages at the same time.