



# D9485 DAVIC QPSK Bridge Release Note

This release note provides release information for D9485 1.2.22 release software.

## Release Details

This following table lists component version numbers and other details for this release.

Release Package Name:	Rel_4P_1_2_22-G
Overlay File System:	1.1.102
Ramdisk:	1.1.43
Kernel:	1.1.10
Bootloader:	1.1.7
Bootloader Environment:	1.1.5
Flattened Device Tree:	1.1.10
Primary Microcontroller:	0.9.3
3AN Boot FPGA:	1.0.7
Spartan6 Demodulator FPGA:	0.2.28
Virtex5 Primary FPGA:	1.34.3
Chopstick Modulator UPX:	MV_CHP_80000003_20121019-00112320.0007

## Document Version:

This is the first draft release of this document.

## **Site Requirements**

This section includes information on site requirements for running D9485 software release 1.2.22. Please read this entire section before you begin an upgrade.

## **System Release Compatibility and Prerequisites**

This software can be installed on a network that is running *System Release 4.2 Service Pack 4* and later.

For a complete configuration listing, or to upgrade your system, contact Cisco Services for assistance. Follow the menu options to speak with a service engineer.

## **Hardware Requirements**

The 1.2.22 release works with all D9485 DAVIC QPSK Bridges that are presently deployed.

## **QPSK Software Installation**

Refer to the *Model D9485 DAVIC QPSK Bridges Installation and Operation Guide* (part number OL-30211) for instructions on installing the QPSK software.

## Fixed Defects

Number	Summary
CSCuw02973	On the QPSK CLI, the "Last attempt value" is always the same when trying to perform an upgrade. Expected Results - Current date/time Observed Results - Always displays Jan 1st, 2013 at about 00:00:28
CSCuy05241	Add a new feature for sending reprovision messages to STBs that were signed-on but are no longer responding, possibly having dropped off due to a high noise incident. This feature is configurable and disabled by default.
CSCuy05248	The D9485 should wait until the STB does not increase its power level after being requested to, and check it against the max power the system has ever seen from that STB instead of the Max DHCT Power value configured by the DNCS.
CSCuy05254	Change the logic for handling STBs that are detected as being outside the power thresholds. Currently, if a STB stopped responding to power adjustments, it is allowed to remain connected as long as the D9485 can hear it. However, it appears that the D9485's dynamic range allows it to hear a STB at 4-5 dBmV lower than the legacy QPSK product. This allows any higher-powered STBs to overpower the much lower-powered ones and make them appear to have dropped off. The new logic should force STBs that wander too far outside of the acceptable power range to sign off and re-sign back on. This power termination mode, and the associated power thresholds, should be configurable via the web interface.
CSCuy05258	Change the logic for when a STB is sent its very first power correction so that it is always half of the target window range, even if the STB does not need that much correction.
CSCuy05266	A STB should be allowed to sign on if it can get its power within the acceptable power range, even if it cannot get to the target power range.
CSCuy05269	Prevent STBs from wandering in the acceptable power range, instead force them into the target range.
CSCuy05276	Add protection against a potential overflow of an 8-bit field in the PETE message that the STB processes when it adjusts its power level.
CSCuy05283	Prevent the D9485's STB database from storing entries for STBs that have not been active for a long time. This could lead to erroneous statistics for "Available STBs" that have actually been physically removed from the population.
CSCuy05297	Spread out STB idle messages. Over time, STB Idle messages are starting to group together and are being sent out really close to each other in the same time slot. This makes them a lot more susceptible to RF Noise or a higher-powered STB drowning out lower-powered STBs.
CSCuy05302	Add support for alarms that will indicate when a demodulator has fallen below 50% signed on STBs of the total available STBs.
CSCuy05307	Update the version of OpenSSL running on the D9485 to version 1.0.1p to address multiple security vulnerabilities.
CSCuy05311	Add the ability to configure power termination thresholds to the web and shell menu.

## Known Issues

No known issues exist in this release

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