

## d&b DS100/DS100M Firmware V3.0x.xx, Release notes

A firmware update of the DS100/DS100M is performed using the d&b R1 V3 Remote control software and requires an Ethernet connection to R1.

Make sure the network does not get interrupted during the update procedure. The update procedure will take three to four minutes.

To do this, start R1, navigate to the Service view, select the Firmware tab and download the latest version.

### Changes of V3.02.01 against previous V3.00.04

Only use this version or higher when working with Create.Control.

This firmware requires R1 3.42.2 or higher.

- Optimization of OCA/AES70 network traffic to obtain smoother movements of sound objects.
- Improvement of license tab usability in Web-remote.

#### Bug fixes:

- Further incorrectly applied predelay values in En-Space fixed.
- Continuous re-initialization of the DS100 by R1 depending on special settings fixed.

07/2025

### Changes of V3.00.04 against previous V3.00.02

- From now on, the warning in R1 that the device is downscaled to 64x64 channels on the original DS100 when you switch to a sampling rate of 96kHz is only shown once after switching the sampling rate in the Dante® Controller.

#### Bug fixes:

- Matrix output "Noise" generator only working for the first 16 channels fixed.
- Issue with missing "En-Space room" name in En-Space control fixed.

04/2025

### Changes of V3.00.02 against previous V3.00.01

#### Bug fixes:

- Issue with switching Device scenes fixed.

03/2025

### Changes of V3.00.01 against previous V2.04.03

**Note:** This update requires R1 version V3.40 or higher. Although the DS100(M) with firmware 3.00.00 or higher will show up in older versions of R1, initialization of the device will fail without notice. The failing initialization will result in audible issues.

- After updating DS100(M) to firmware version 3.0.0 or higher, a conflict regarding the number of inputs will pop up when using the device with existing projects. To overcome this error, go offline in R1, open the project in ArrayCalc V12.0.0 or higher, navigate to the Devices tab, select the DS100 and set the I/O size to '128 x 64'. After selecting the new I/O size, save the project and open it again in R1 V3.40.0 or higher.

**Note:** A downgrade from this firmware version to a firmware below V3.00.00 **is not supported**. If you have a license with product codes 101, "DS100 Signal Engine 64x64", or 102, "DS100 Signal Engine 64x24", this will disable your device and will require a d&b service repair.

- Support of different matrix sizes based on new licensing scheme added. Input count of existing devices is expanded to 128 inputs without additional cost. Supported size variants are
  - 64 x 24
  - 64 x 64
  - 128 x 64 (on the original DS100 only @ 48 kHz).  
This is the original variant all existing users have.
- Maximum number of supported function groups increased from 16 to 32.
- Upload of Custom room file improved.
- DS100M only: Milan presentation time offset of < 1 ms now fully supported.
- DS100M only: Updated entity model.

#### Bug fixes:

- Incorrect En-Space predelay calculations for Delay Line Embedded and Outfill Embedded function groups fixed.
- Issue fixed where in some cases incorrect predelay values were applied to En-Space due to unintentionally received object position data for a not En-Scene enabled input.

03/2025

#### Changes of V2.04.03 against previous V2.04.02

##### Bug fixes:

- Issue that could lead to audio drop outs under heavy processing load after changing the sample rate fixed. Issue only occurring in V2.04.02.

06/2024

#### Changes of V2.04.02 against previous V2.02.01

**Note:** This update can only be applied to DS100 devices with firmware version V2.00.05 or higher.

- Support of DS100M Signal Engine.
- Increased longevity of SSD hardware component through improved write access.

04/2024

### Changes of V2.02.01 against previous V2.00.29

**Note:** This update can only be applied to DS100 devices with firmware version V2.00.05 or higher.

- En-Space custom rooms option for individually recorded room responses added. En-Space room measurements are a paid d&b service.
- Reduced update package size. This results in a faster update process via R1.
- Improved En-Space room switching times.
- Further improved OSC message handling when sending a large number of parameters all at once.

#### Bug fixes:

- Issue with short volume jumps when switching between En-Space rooms fixed.

12/2023

### Changes of V2.00.29 against previous V2.00.26

**Note:** This update can only be applied to DS100 devices with firmware version V2.00.05 or higher.

#### Bug fixes:

- Improvement of the DS100 object positioning handling fixing issues with data loss and latency when controlled by OSC.
- Further network issue fixed. In some occasions, this could have led to the DS100 network interface not properly initializing with manual IP configurations.
- Issue with sporadic audio processing communication errors causing audio drop outs fixed.

09/2023

### Changes of V2.00.26 against previous V2.00.05

**Note:** This update can only be applied to DS100 devices with firmware version V2.00.05 or higher.

#### Bug fixes:

- Issues with the mDNS host name configuration of the DS100 fixed. This could have led to R1 not recognizing the presence of a DS100 in case there was more than one DS100 in the same network.
- Issue with the device sometimes not fully booting after a power cut fixed.

07/2023

## Changes of V2.00.05 against previous V1.16.03

This is a major update to the DS100, which updates the complete operating system.

**Note:** Since the new version updates the complete operating system of the device, this update is irreversible. That means, once the device is in version V2.xx.xx, it can not be downgraded to a version below V2.xx.xx. From this point on, only versions with a version number higher than V2.00.05 can be installed on your device.

Please make sure that your device is not turned off during the update process.

- Before installing, please check your serial number and audio network interface information.

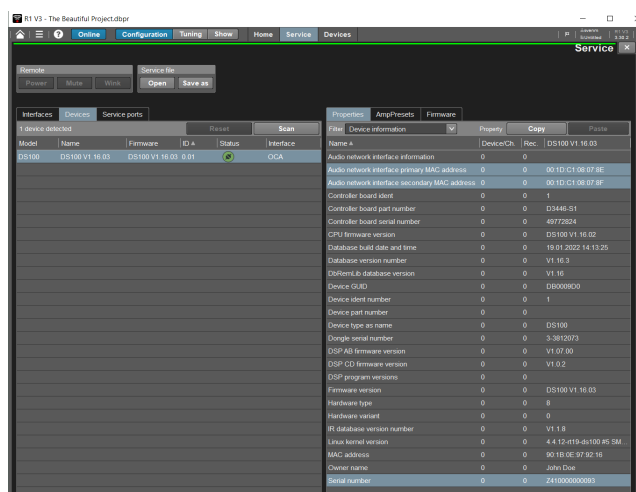
To do this, go to R1...

Service view ⇒ Devices ⇒ Properties ⇒ Device information

and check whether the fields marked in the screenshot contain data as shown in the following screenshot.

If this is not the case, please contact the Service department of d&b audiotechnik in Backang at [service@dbaudio.com](mailto:service@dbaudio.com).

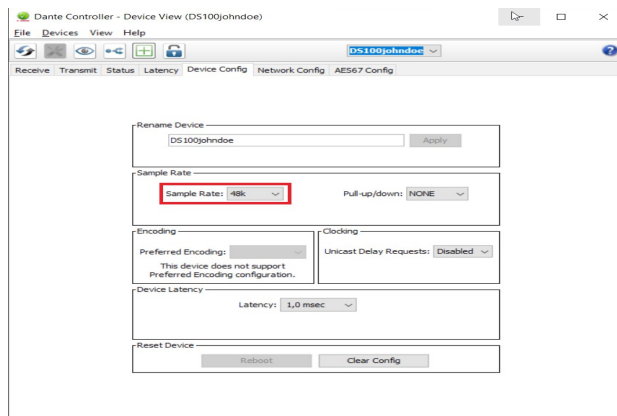
They need to update this information on your device, otherwise the update will not proceed and your device will remain in its previously installed version.



- The device will perform several restarts to install the operating system and update the BIOS. Restarts will be accompanied by the device beeping during the update process. This is a normal operation.
- The update will take up to 10 minutes to complete.

## Features:

- Support of 48 kHz and 96 kHz Dante® sample rates.
  - You can switch the sample rate on the Dante® Controller (see the following screenshot). Sample rate changes require a reboot of the device, which will be performed automatically without user interaction.



- New SNMP MIB compliant with all other SNMP enabled d&b products. (Available for download at [www.dbaudio.com](http://www.dbaudio.com)).

#### Bug fixes:

- Issues with an empty BIOS battery causing the device to be inoperable fixed. A warning will be shown in R1 if the BIOS battery needs to be replaced.
- OSC issue with handling parameter ranges fixed. For further details, see the d&b DS100 OSC documentation.

03/2023

#### Changes of V1.16.03 against previous V1.16.00

- Support of device redundancy added.

#### Bug fixes:

- Issues with loudspeaker position and orientation handling fixed.
- Issue with Scene checksums resulting in Scenes falsely flagged as unequal after device restart fixed.
- Wrong level handling for embedded function groups occurring in projects with more than one main speaker group fixed.

02/2022

#### Changes of V1.16.00 against previous V1.14.00

- Improved OSC interface to handle float values on integer types correctly.
- Speaker positions can now be read via OSC. Improved source position handling to fix rare random loss of x and y values transmitted asynchronously.

10/2021

#### Changes of V1.14.00 against previous V1.12.01

- En-Scene sound object routing added. The level of each object can be adjusted for each function group.
- Two new function group modes added, "Delay line embedded" and "Outfill embedded", both tailored for use with 360 configurations.
- En-Space reverberation is now enabled on Delay lines.
- Improved mapping and delay alignment of En-Space boundary responses.

- Advanced power button functions for device reset and network settings added, also preventing accidental power off.
- Backup and restore function added to the DS100 web interface.

02/2021

#### **Changes of V1.12.01 against previous V1.10.02**

- DS100 'Scenes' functions added. A local scene memory managed by R1. Scenes can be recalled by R1 or OSC.
- Spread factor per function group enabled. Objects spreads will be multiplied with this value for the respective function group.
- Temperature input added to adjust propagation delays to the actual speed of sound.
- Two new En-Space rooms added: "Theater - small" and "Cathedral".

03/2020

#### **Changes of V1.10.02 against previous V1.08.01**

- Improved En-Space convolver mapping avoiding correlating responses of neighboring loudspeakers.
- Automatic initialization of En-Space predelay to match the selected room with the actual loudspeaker positions.

10/2019

#### **Changes of V1.08.01 against previous V1.06.01**

- New En-Space room parameters 'Predelay factor' and 'Rear level' support added. (Requires R1 V3.6.1 or higher).

#### **Bug fixes:**

- SNMP error on trailing .0 fixed.

01/2019

#### **Changes of V1.06.01 against previous V1.04.01**

- New En-Space room added: "Modern - medium 2"
- En-Space support of outputs in SUB Array, SUBs Group, Outfill and Mono Out function groups added.
- Log file collection download for service purposes on web interface added.

#### **Bug fixes:**

- High output level on device start fixed.
- Truncated En-Space IRs fixed.  
**Note:** As a consequence of this fix, the perceived reverb volume may be slightly higher.
- Output delay not taken into account for En-Space fixed.

**Note:** This DS100 firmware version was validated using Dante firmware version 4.0.7.2. For proper operation, please update the Dante firmware correspondingly.

10/2018

### Changes of V1.04.01 against previous V1.04.00

- Improvements to the En-Space input delay calculation.

#### Bug fixes:

- "Audio communication error" after boot sequence fixed.
- En-Space zone gain distribution recalculated with no Early reflections area defined in ArrayCalc fixed.

**Note:** Please manually reboot the DS100 after performing the firmware update. **Note:** This DS100 firmware version was validated using Dante firmware version 4.0.7.2. For proper operation please update the Dante firmware correspondingly.

### Changes of Dante version 4.0.7.2 against previous version 3.10.0.6:

- Support of Dante Domain Manager
- Support of static IP addressing

07/2018

### Changes of V1.04.00 against previous V1.02.06

- En-Space algorithm for Delay modes Tight and Full improved.
- En-Space algorithm for Delay mode Full improved.

04/2018

### Changes of V1.02.06 against previous V1.02.02

#### Bug fixes:

- Issue with manual Link-Local IP addresses fixed. It is no longer possible to set manual IP addresses outside the private network IP range. The permitted manual IP ranges are:
  - 10.0.0.0 - 10.255.255.255
  - 172.16.0.0 - 172.31.255.255
  - 192.168.0.0 - 192.168.255.255
- Issue with function group delays fixed.
- En-Space individual output gain and mute settings not working properly fixed.
- En-Space individual output pre-delays not correctly set fixed.

03/2018

### Changes of V1.02.02 against previous V1.02.01

#### Bug fixes:

- Fix for OSC En-Space positioning message.

02/2018

### Changes of V1.02.01 against previous V1.00.06

- Pink noise generator for routing and System check added.
- Reproduction of fast moving sound objects improved.

- Matrix channel and crosspoint Mute functions now smoother.
- Several minor improvements.

02/2018

### **Changes of V1.00.06 against previous V1.00.03**

#### **Bug fixes:**

- Crash fixed when sending OSC positions for x and y separately.
- Minor optimizations.

12/2017

### **V1.00.0**

First release of DS100 firmware enabling En-Scene, En-Space and manual matrix operation of DS100.

- Matrix input, output and crosspoint processing.
- En-Scene processing for different Function groups and Delay modes.
- En-Space convolver engine and zone mixer.
- En-Space room library V1.0.0 with six sampled concert halls.
- d&b OSC control protocol V1.0.

12/2017