d&b OSC Protocol document for DS100

Specification No.: DOC05325 Version: 1.3.9

d&b audiotechnik

History	Change	Date of Change	Responsibility of
1.0.0	Initial release	28.11.2017	martinr
1.1.0	Device clear added	17.01.2018	martinr
1.2.2	En-Space parameter Predelay factor and Rear level added	29.01.2019	martinr
1.2.3	Descriptions corrected	22.03.2019	martinr
1.2.4	Replaced misleading [] by (), fixed wrong matrixoutput/gain	14.06.2019	martinr
1.2.5	Added commands for scenes	10.02.2020	martinr
1.2.6	Updated commands for scenes	24.02.2020	christianl
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1.3.1	Updated OSC example to match OSC notation	11.10.2020	christianl
1.3.2	Updated Sound object spread step size	19.11.2020	martinr
1.3.3	Added commands for Sound object to Function group	21.01.2021	martinr
1.3.4	Speaker position and Function group added (DS100 V1.16.00), editorial changes	04.10.2021	martinr
1.3.5	Coordinate mappings settings added	11.01.2022	martinr
1.3.6	Sampling frequency, OSC Address Pattern (DS100 V2.00.01), examples	23.11.2022	martinr
1.3.7	Descriptions corrected	10.01.2023	christianl
1.3.8	Custom rooms added (DS100 V2.02.01)	02.11.2023	martinr
1.3.9	DS100(M) support of matrix sizes and 32 Function groups (DS100 V3.00.01)	18.03.2025	martinr/holgerh

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2 Conventions

2.1 License dependent matrix I/O sizes

Depending on the running (active) license on DS100 and/or DS100M machines the following matrix in- and output (in x out) assignments at the given sampling rates applies:

DS100: 64 x 24 @ 48 kHz or 96 kHz
64 x 64 @ 48 kHz or 96 kHz
128 x 64 @ 48 kHz

DS100M: 64 x 24 @ 48 kHz or 96 kHz
64 x 64 @ 48 kHz or 96 kHz
128 x 64 @ 48 kHz or 96 kHz

Throughout this specification sheet, possible **`entries`** in the "OSC Address Pattern" for "Matrix input" are noted as **`[iii]`** and for "Matrix output" are noted as **`[oo]`** as place holder for numeric values of up to 3 digits.

3 Description

In addition to the AES70/OCA protocol, the DS100 supports the possibility to control a set of the relevant functionalities using the OSC protocol (OSC 1.0 specification[1]). This allows control of the DS100 from devices or software that can send OSC messages.

The DS100 uses the UDP transport layer. The DS100 uses Port 50010 to listen for (receive) incoming messages, Port 50011 is used to send replies.

OSC is advertised via DNS-SD as **_osc._udp**

1 This document quotes major parts of the OSC 1.0 specification, supplemented by dedicated d&b example codes.

3.1 General OSC path definition

```
<OSC path> : =   /dbaudio1                  // d&b identifier
                 /module                    // part of the signal path
                 /name                      // name
                 /number                    // in the matrix this is the input [blank if not needed]
                 /number                    // in the matrix this is the output [blank if not needed]
                 value(s)
```

Example of setting a value (write):

```
/dbaudio1/matrixnode/enable/22/33 ,i 1
```

This command sets the Enable function at the crosspoint of input 22 and output 33 in the matrix to ON.

Example of retrieving a value (read):

```
/dbaudio1/matrixnode/enable/21/31 [without any value]
```

This command retrieves the state of the Enable function at the crosspoint of input 21 and output 31 in the matrix.

The response of the DS100 will be as follows:

```
/dbaudio1/matrixnode/enable/21/31 ,i 1
```

This response indicates that the Enable function at the crosspoint of input 21 and output 31 in the matrix is currently ON.

3.2 OSC Address Pattern (wildcards, ranges)

'?' in the OSC Address Pattern matches any single character.
Example:

```
/dbaudio1/matrixinput/mute/4? [no value]
```

This command will read the mute value of inputs 40–49. The response will be as follows:

```
/dbaudio1/matrixinput/mute/40 i, 0

...
/dbaudio1/matrixinput/mute/49 i, 0
```

'*' in the OSC Address Pattern matches any sequence of zero or more characters
Example of retrieving many values (read):

```
/dbaudio1/matrixoutput/mute/* [no value]
```

The command will read the mute values of all matrix outputs. When all matrix output mutes are OFF (unmuted), the response will be as follows:

```
/dbaudio1/matrixoutput/mute/1 ,i 0

...
/dbaudio1/matrixoutput/mute/64 ,i 0
```

A string of characters in square brackets (e.g., '**[abcd]**') in the OSC Address Pattern matches any character in the string. Inside square brackets, the minus sign (–) and exclamation point (!) have special meanings:

- Two characters separated by a minus sign indicate the range of characters between the given two in ASCII collating sequence. (A minus sign at the end of the string has no special meaning.)
- An exclamation point at the beginning of a bracketed string negates the sense of the list, meaning that the list matches any character not in the list. (An exclamation point anywhere besides the first character after the open bracket has no special meaning.)

Example of setting multiple values (write):

```
/dbaudio1/matrixoutput/mute/2[4-9] ,i 1
```

This command will set the mute function for outputs 24–29 to ON (muted).

Note:
The contents of [abcd] apply on a character basis. In the example above, writing [26–74] will NOT mute outputs 26 to 74 but outputs 2, 6–7 and 4.

A comma-separated list of strings enclosed in curly brackets (e.g. "**{in,out}**") in the OSC Address Pattern matches any of the strings in the list.

Example:

```
/dbaudio1/matrixinput/mute/{9,10,64}
```

This command requests the mute state of channels 9, 10 and 64.

Example of setting many value (write):

```
/dbaudio1/matrix{in,out}put/mute/* ,i 1
```

This command will set the mute function for any input and output to ON (muted).

4 OSC definitions

4.1 General settings

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description/Comment
/dbaudio1	/settings	/devicename	, s	r/w	0	15	Will be overwritten by R1 project

Example:
/dbaudio1/settings/MyDS100

This will set the device name to "MyDS100". When connected to R1, this will be overwritten by R1.

4.2 Error

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/error	/gnrlerr	, i	r	0	1	Error flag

Example:
/dbaudio1/error/gnrlerr

When there is no error, the response will be
/dbaudio1/error/gnrlerr 0

When there is a general error, the response will be
/dbaudio1/error/gnrlerr 1

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/error	/errortext	, s	r	0	31	Error string

4.3 Status

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/status	/statustext	, s	r	0	31	Status string

Identifier	Module	Name	Value /Type	Read/ Write	Min	Max	Description
/dbaudio1	/status	/audionetworksamplestatus	, i	r	0	7	Return values are 4 (48 kHz), 6 (96 kHz) or 1 (Sync?) for not supported sample rates

Example:
/dbaudio1/status/audionetworksamplestatus

When the audio network sampling rate is 48 kHz, the response will be
/dbaudio1/status/audionetworksamplestatus 4

When the audio network sampling rate is 96 kHz, the response will be
/dbaudio1/status/audionetworksamplestatus 6

When the audio network sampling rate is not in sync, the response will be
/dbaudio1/status/audionetworksamplestatus 1

4.4 Matrix input[Input]

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/mute	/(1-[iii])	, i	r/w	0	1	Mute off=0 / on =1

Example:
/dbaudio1/matrixinput/mute/37 1

Matrix input 37 is muted.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/gain	/(1-[iii])	, f	r/w	–120.0	24.0	

Example:
/dbaudio1/matrixinput/gain/42 –13.7

The gain of matrix input 42 is set to –13.7 dB.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/delay	/(1-[iii])	, f	r/w	0.0	500.0	

Example:
/dbaudio1/matrixinput/delay/42 11

The delay of matrix input 42 is set to 11 ms.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/delayenable	/(1-[iii])	, i	r/w	0	1	Off=0 / on =1

Example:
/dbaudio1/matrixinput/delayenable/42 1

The delay of matrix input 42 is enabled.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/eqenable	/(1-[iii])	, i	r/w	0	1	Off=0 / on =1

Example:
/dbaudio1/matrixinput/eqenable/42 1

The EQ of matrix input 42 is enabled.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/polarity	/(1-[iii])	, i	r/w	0	1	Off=0 / on =1

Example:
/dbaudio1/matrixinput/polarity/42 1

The polarity of matrix input 42 is reversed.

Input Refer to: 2.1 License dependent matrix I/O sizes

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/channelname	/(1-[iii])	, s	r/w	0	31	Will be overwritten by R1

Example:
/dbaudio1/matrixinput/channelname/1 MyInput

This will set the channel name for input 1 to "MyInput". When connected to R1, this will be overwritten by R1.

Identifier	Module	Name	Input	Value /Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/levelmeterpremute	/(1-[iii])	, f	r	-120.0	0.0	

Example:
/dbaudio1/matrixinput/levelmeterpremute/42

When the pre-mute input level for channel 42 is -23.0 dB, the response will be
/dbaudio1/matrixinput/levelmeterpremute/42 -23.0

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/levelmeterpostmute	/(1-[iii])	, f	r	-120.0	0.0	

Example:
/dbaudio1/matrixinput/levelmeterpostmute/42

When the post-mute input level for channel 42 is -11.0 dB, the response will be
/dbaudio1/matrixinput/levelmeterpostmute/42 -11.0

4.5 Matrix node

The matrix crosspoint is disabled when the respective node is used for positioning.

Identifier	Module	Name	Input	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixnode	/enable	/(1-[iii])	/(1-[oo])	, i	r/w	0	1	Enable the matrix crosspoint

Example:
/dbaudio1/matrixnode/enable/42/11 1

The matrix node input 42 to output 11 is enabled.

Identifier	Module	Name	Input	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixnode	/gain	/(1-[iii])	/(1-[oo])	, f	r/w	-120.0	10.0	

Example:
/dbaudio1/matrixnode/gain/42/11 -12.4

The gain for the matrix node input 42 to output 11 is set to -12.4 dB.

Identifier	Module	Name	Input	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixnode	/delayenable	/(1-[iii])	/(1-[oo])	, i	r/w	0	1	Enable the delay

Example:
/dbaudio1/matrixnode/delayenable/42/11 1

The delay for the matrix node input 42 to output 11 is enabled.

Identifier	Module	Name	Input	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixnode	/delay	/(1-[iii])	/(1-[oo])	, f	r/w	0.0	500.0	

Example:
/dbaudio1/matrixnode/delay/42/11 23

The delay for the matrix node input 42 to output 11 is set to 23 ms.

4.6 Matrix output[Output]

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/mute	/(1-[oo])	, i	r/w	0	1	Mute off=0 / on =1

Example:
/dbaudio1/matrixoutput/mute/37 1

Matrix output 37 is muted.

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/gain	/(1-[oo])	, f	r/w	-120.0	24.0	

Example:
/dbaudio1/matrixoutput/gain/42 -13.7

The gain of matrix output 42 is set to -13.7 dB.

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/delay	/(1-[oo])	, f	r/w	0.0	500.0	

Example:
/dbaudio1/matrixoutput/delay/42 11

The delay of matrix output 42 is set to 11 ms.

Output Refer to: 2.1 License dependent matrix I/O sizes

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/delayenable	/(1-[oo])	, i	r/w	0	1	Off = 0 / on =1

Example:
/dbaudio1/matrixoutput/delayenable/42 1

The delay of matrix output 42 is enabled.

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/eqenable	/(1-[oo])	, i	r/w	0	1	Off = 0 / on =1

Example:
/dbaudio1/matrixoutput/eqenable/42 1

The EQ of matrix output 42 is enabled.

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/polarity	/(1-[oo])	, i	r/w	0	1	Off = 0 / on =1

Example:
/dbaudio1/matrixoutput/polarity/42 1

The polarity of matrix output 42 is reversed.

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/channelname	/(1-[oo])	, s	r/w	0	31	Will be overwritten by R1

Example:
/dbaudio1/matrixoutput/channelname/1 MyOutput

This will set the channel name for output 1 to "MyOutput". When connected to R1, this will be overwritten by R1.

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/levelmeterpremute	/(1-[oo])	, f	r	-120.0	0.0	

Example:
/dbaudio1/matrixoutput/levelmeterpremute/42

When the pre-mute output level for channel 42 is -23.0 dB, the response will be
/dbaudio1/matrixoutput/levelmeterpremute/42/ -23.0

Identifier	Module	Name	Output	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixoutput	/levelmeterpostmute	/(1-[oo])	, f	r	-120.0	0.0	

Example:
/dbaudio1/matrixoutput/levelmeterpostmute/42

When the post-mute output level for channel 42 is -11.0 dB, the response will be
/dbaudio1/matrixoutput/levelmeterpostmute/42/ -11.0

4.7 En-Scene positioning (only available when option is enabled)

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/source_spread	/(1-[iii])	, f	r/w	0.0	1.0	Sound object spread (step 0.01 ; default 0.5)

Example:
/dbaudio1/positioning/source_spread/42 0.6

This will set the source spread for sound object 42 to 0.6.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/source_delaymode	/(1-[iii])	, i	r/w	0	2	Sound object delay mode (0 = off, 1 = tight, 2 = full)

Example:
/dbaudio1/positioning/source_delaymode/42 1

This will set the source delay mode for sound object 42 to tight.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/source_position	/(1-[iii])	, f f f	r/w			Sound object position absolute to the project origin x, y, z (values in meters)

Example:
/dbaudio1/positioning/source_position/42 -3.5 4.2 0

This will set the source position for sound object 42 to x = -3.5 m, y=4.2 m and z=0 m.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/source_position_xy	/(1-[iii])	, f f	r/w			Sound object position absolute to the project origin x, y (values in meters)

Example:
/dbaudio1/positioning/source_position_xy/42 -3.5 4.2

This will set the source position for sound object 42 to x = -3.5 m and y=4.2 m.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/source_position_x	/(1-[iii])	, f	r/w			Sound object position absolute to the project origin x (values in meters)

Example:
/dbaudio1/positioning/source_position_x/42 -3.5

This will set the sound objects source position of input 42 to x = –3.5 m.

Identifier	Module	Name	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/source_position_y	/(1-[iii])	, f	r/w			Sound object position absolute to the project origin y (values in meters)

Example:
/dbaudio1/positioning/source_position_y/42 4.2

This will set the sound objects source position of input 42 to y = 4.2 m.

Identifier	Module	Name	Mapping	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/coordinatemapping	/source_position	/(1- 4)	/(1-[iii])	, f f f	r/w			Sound object position relative to the area x, y, z (values such as user defined scaling)

Example:
/dbaudio1/coordinatemapping/source_position/1/42 0.5 0.2 0

This will set the source position for sound object 42 relative to the coordinate mapping area 1 to x = 0.5, y = 0.2 and z = 0.

Identifier	Module	Name	Mapping	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/coordinatemapping	/source_position_xy	/(1- 4)	/(1-[iii])	, f f	r/w			Sound object position relative to the area x, y (values such as user defined scaling), no height

Example:
/dbaudio1/coordinatemapping/source_position_xy/1/42 0.5 0.2

This will set the source position for sound object 42 relative to the coordinate mapping area 1 to x = 0.5 and y = 0.2.

Identifier	Module	Name	Map-ping	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/coordinatemapping	/source_position_x	/(1- 4)	/(1-[iii])	, f	r/w			Sound object position relative to the area x (values such as user defined scaling)

Example:
/dbaudio1/coordinatemapping/source_position_x/1/42 0.5

This will set the source position for sound object 42 relative to the coordinate mapping area 1 to x = 0.5.

Identifier	Module	Name	Map-ping	Input	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/coordinatemapping	/source_position_y	/(1- 4)	/(1-[iii])	, f	r/w			Sound object position relative to the area y (values such as user defined scaling)

Example:
/dbaudio1/coordinatemapping/source_position_y/1/42 0.2

This will set the source position for sound object 42 relative to the coordinate mapping area 1 to y = 0.2.

4.8 En-Space room settings (only available when option is enabled)

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description/Comment
/dbaudio1	/matrixsettings	/reverbroomid	, i	r/w	0	103	Room selector

Example:
/dbaudio1/matrixsettings/reverbroomid 5

This will set the En-Space room to room number 5
0 = off
1 = Modern – small / Blaibach Concert Hall
2 = Classic – small / Schubert-Saal, Vienna Concert Hall
3 = Modern – medium / Angelika-Kauffmann-Saal, Schwarzenberg Congress Center
4 = Classic – medium / Mozart-Saal, Vienna Concert Hall
5 = Modern – large / KKL Luzern
6 = Classic – large / Großer Saal, Vienna Concert Hall
7 = Modern – medium / Bing Concert Hall, Stanford
8 = Theatre – small / Alighieri Theatre, Ravenna
9 = Cathedral / San Vitale, Ravenna
101 = Custom room 1 / can only be selected if there is a room uploaded to the DS100
102 = Custom room 2 / can only be selected if there is a room uploaded to the DS100
103 = Custom room 3 / can only be selected if there is a room uploaded to the DS100

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description/Comment
/dbaudio1	/matrixsettings	/reverbpredelayfactor	, f	r/w	0.2	2.0	Predelay factor

Example:
/dbaudio1/matrixsettings/reverbpredelayfactor 1.3

This will set the En-Space Reverb predelay factor to 1.3.

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description/Comment
/dbaudio1	/matrixsettings	/reverbrearlevel	, f	r/w	-24.0	24.0	Rear level in dB

Example:
/dbaudio1/matrixsettings/reverbrearlevel -1.1

This will set the En-Space Reverb rear level to -1.1 dB.

4.9 En-Space input (only available if option is enabled)

Identifier	Module	Name	Input	Value /Type	Read/ Write	Min	Max	Description
/dbaudio1	/matrixinput	/reverbsendgain	/(1-[iii])	, f	r/w	-120.0	24.0	Gain sent to En-Space

Example:
/dbaudio1/matrixinput/reverbsendgain/42 -1.1

This will set the En-Space Reverb send gain for matrix input 42 to -1.1 dB.

4.10 En-Space input matrix (only available when option is enabled)

Zone 1 is on the left (seen from the audience)
Zone 2 is in the center (seen from the audience)
Zone 3 is on the right (seen from the audience)
Zone 4 is the audience

Identifier	Module	Name	Input	Zone	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/reverbinput	/gain	/(1-[iii])	/(1-4)	, f	r/w	-120.0	24.0	

Example:
/dbaudio1/reverbinput/gain/42/2 -1.1

This will set the En-Space Reverb input gain for matrix input 42 to Zone 2 to -1.1 dB.

4.11 En-Space input processing (only available when option is enabled)

Zone 1 is on the left (seen from the audience)
Zone 2 is in the center (seen from the audience)
Zone 3 is on the right (seen from the audience)
Zone 4 is the audience

Identifier	Module	Name	Zone	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/reverbinputprocessing	/gain	/(1-4)	, f	r/w	-120.0	24.0	

Example:
/dbaudio1/reverbinputprocessing/gain/3 -3.3

This will set the Reverb input gain for Zone 3 to -3.3 dB.

Identifier	Module	Name	Zone	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/reverbinputprocessing	/levelmeter	/(1-4)	, f	r	-120.0	0.0	

Example:
/dbaudio1/reverbinputprocessing/levelmeter/1

When the Reverb input processing level for Zone 1 is -12.3 dB, the response will be
/dbaudio1/reverbinputprocessing/levelmeter/1 -12.3

Identifier	Module	Name	Zone	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/reverbinputprocessing	/eqenable	/(1-4)	, i	r/w	0	1	

Example:
/dbaudio1/reverbinputprocessing/eqenable/4 1

The Reverb input processing EQ for Zone 4 is enabled.

4.12 Device clear

Identifier	Module	Name	Value/ Type	Read/ Write	Description
/dbaudio1	/device	/clear	-	w	Resets the device to factory defaults, except the remote settings

Example:
/dbaudio1/device/clear

Resets the device to factory defaults, except the remote settings.

4.13 Scenes

OSC commands are used to recall scenes. Scenes have to be created using R1.

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/previous	-	w			

Example:
/dbaudio1/scene/previous

The previous scene will be recalled.

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/next	-	w			

Example:
/dbaudio1/scene/next

The next scene will be recalled.

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/recall	, i	w	0	999	Format “major”.

Example:
/dbaudio1/scene/recall 7

Scene 7.00 will be recalled.

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/recall	, i i	w	0 , 0	999 , 99	Format “major” , “minor”. Smallest index 0 , 1

Example:
/dbaudio1/scene/recall 777 95

Scene 777.95 will be recalled.

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/sceneindex	, s	r	0	7	Format “major.minor”

Example:
/dbaudio1/scene/sceneindex

When the actually loaded scene is 777.95, the response will be
/dbaudio1/scene/sceneindex 777 95

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/scenename	, s	r			Max 31 characters

Example:
/dbaudio1/scene/scenename

When the name of the actually loaded scene is “MyScene”, the response will be
/dbaudio1/scene/scenename 'MyScene'

Identifier	Module	Name	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/scene	/scenecomment	, s	r			Max 127 characters

Example:
/dbaudio1/scene/scenecomment

When the current scene comment is "My first scene", the response will be
/dbaudio1/scene/scenecomment 'My first Scene'

4.14 En-Scene Sound object routing

Identifier	Module	Name	Function group	Sound object	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/soundobjectrouting	/mute	/(1-32)	/(1-[iii])	, i	r/w	0	1	Mutes the Sound object for this Function group

Example:
/dbaudio1/soundobjectrouting/mute/7/42 1

Sound object 42 will be muted in Function group 7.

Identifier	Module	Name	Function group	Sound object	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/soundobjectrouting	/gain	/(1-32)	/(1-[iii])	, f	r/w	-120.0	10.0	

Example:
/dbaudio1/soundobjectrouting/gain/7/42 -12.7

The gain of Sound object 42 to Function group 7 is set to -12.7 dB.

4.15 En-Scene Function group

Not all function groups support Spread factor and Delay. For more information, see TI 501.

Identifier	Module	Name	Function group	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/functiongroup	/name	/(1-32)	, i	r	0	15	Name of the Function group

Example:
/dbaudio1/functiongroup/name

When the name of Function group 4 is "360", the response will be
/dbaudio1/functiongroup/name/4 '360'

Identifier	Module	Name	Function group	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/functiongroup	/spreadfactor	/(1-32)	, f	r/w	0.5	2.0	Spread factor of a function group

Example:
/dbaudio1/functiongroup/spreadfactor/7 1.2

The spread factor of Function group 7 is set to 1.2.

Identifier	Module	Name	Function group	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/functiongroup	/delay	/(1-32)	, f	r/w	0.0	500.0	Delay of a function group

Example:
/dbaudio1/functiongroup/delay/2 121

The delay of Function group 2 is set to 121 ms.

4.16 En-Scene Speaker position

Identifier	Module	Name	Position	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/positioning	/speaker_position	/(1-[oo])	, f f f f f f	r			Speaker position relative to the project origin. Parameters are: X, Y, Z positions(in meter), horizontal & vertical aiming (in degrees), rotation (in degrees).

Example:
/dbaudio1/positioning/speaker_position/1

The response will be
/dbaudio1/positioning/speaker_position/1 0.8 –3.5 6.1 –25 0 0
This is the loudspeaker position of Loudspeaker 1 as it is defined within ArrayCalc and then loaded into the DS100 via R1.
Values are encoded in this order: X = 0.8 m, Y = –3.5 m, Z = 6.1 m, pan = –25°, tilt = 0°, spin = 0°.

4.17 En-Scene Coordinate mapping settings

Identifier	Module	Name	Mapping	Value/ Type	Read/ Write	Min	Max	Description
/dbaudio1	/coordinatemappingsettings	/p1_real	/(1- 4)	, f f f	r			P1 position of the coordinate mapping absolute to the project origin x, y, z (values in meters)
/dbaudio1	/coordinatemappingsettings	/p2_real	/(1- 4)	, f f f	r			P2 position of the coordinate mapping absolute to the project origin x, y, z (values in meters)
/dbaudio1	/coordinatemappingsettings	/p3_real	/(1- 4)	, f f f	r			P3 position of the coordinate mapping absolute to the project origin x, y, z (values in meters)
/dbaudio1	/coordinatemappingsettings	/p4_real	/(1- 4)	, f f f	r			P4 position of the coordinate mapping absolute to the project origin x, y, z (values in meters)
/dbaudio1	/coordinatemappingsettings	/p1_virtual	/(1- 4)	, f f f	r			Virtual x, y, z coordinate of point P1 of the coordinate mapping
/dbaudio1	/coordinatemappingsettings	/p3_virtual	/(1- 4)	, f f f	r			Virtual x, y, z coordinate of point P3 of the coordinate mapping
/dbaudio1	/coordinatemappingsettings	/flip	/(1- 4)	, i	r	0	1	Swaps coordinates order of OSC messages (0 = x, y and 1 = y, x)
/dbaudio1	/coordinatemappingsettings	/name	/(1- 4)	, s	r	0	31	Name of the coordinate mapping

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