TN140 - LOUDSPEAKER RS232: MODELS INTRODUCED SINCE 2022

TECH NOTE

Please note: This document is applicable only to Meridian loudspeakers or subwoofers introduced since the beginning of 2022. It applies to the following:

- DSP8000 XE
- DSP8000 Performance Pack
- DSP9
- DSP730 2026 Edition – identified by serial numbers starting with "3" or higher
- DSP750 2026 Edition - identified by serial numbers starting with "4" or higher
- DSW15 Subwoofer System

Details of RS232 commands for products introduced prior to 2026 above can be found on Meridian TechNote **TN50 - Loudspeaker RS232: Models introduced before 2022.**

INTRODUCTION

RS232 is one of several interfaces carried by the Meridian SpeakerLink RJ45 / Cat5 connection. The Meridian Distributor 1, Distributor 3 and AC12 make this interface available on a standard RS232 connector.

DSP730 and DSP750 loudspeakers have an alternative RS232 connection on their front-panel. Refer to the relevant user guide for these models for further details.

PRODUCT FIRMWARE

The firmware on some Meridian loudspeakers has been updated since those products were introduced. Some of the information contained in this document may apply only to products running the latest appropriate firmware.

Refer to the product's user guide for how to check what version of firmware it is currently running. The latest firmware for products which have had their firmware updated since they were launched can be downloaded from the Dealer Resources section of the Meridian website. This means that if no firmware for a particular product is available from the website, no newer firmware is available for it and it does not require updating.

PORT SETTINGS

9600 Baud, 8 data bits, 1 stop bit, no parity, no flow control

COMMAND FORMAT

RS232 commands consist of ASCII characters which are case sensitive. All commands must be sent with the prefix **`valueSet`**

Note: spaces within the command string are ignored, so they can be used or omitted.

Some commands require parameters, so these are followed by additional characters. All commands are terminated with a carriage return.

Example: To set the volume number to 45 requires the prefix **`valueSet`** followed by the command code **`VN`** and the parameter **`45`**. Hence the command string is **`valueSet VN 45`**

This will provoke the loudspeaker to change its volume accordingly and to respond with **`Volume 45`**

CONTROL COMMANDS

These commands are used for everyday control of one or more loudspeakers which are connected together via Meridian comms e.g. control from a third-party control system connected to the master loudspeaker.

As mentioned above, all command strings should be sent with the prefix **`valueSet`**

Source selection

Code	Parameters	Meaning	Function	Example Response
CD	None, sb*	Source select	Select source 0	CD 50
RD	None, sb*	Source select	Select source 1	Radio 50
NT	None, sb*	Source select	Select source 2	Net 50
TV	None, sb*	Source select	Select source 3	TV 50
TA	None, sb*	Source select	Select source 4	Tape 50
SA	None, sb*	Source select	Select source 5	Sat 50
DC	None, sb*	Source select	Select source 6	Disc 50
CB	None, sb*	Source select	Select source 7	Cable 50
DV	None, sb*	Source select	Select source 8	DVD 50
PV	None, sb*	Source select	Select source 9	PVR 50
US	None, sb*	Source select	Select source 10	USB 50
GA	None, sb*	Source select	Select source 11	Game 50
ON	None	Turn on speaker	Come out of standby	CD 50
SO	None	Cycle source	Select next source	Radio 50
SB	None	Standby	Standby	.

* When in standby, a source selection command may be followed by sb (e.g. CDsb). This allows a connected Distributor 1 or Distributor 3 to change source, while the speakers remain in standby.

Volume control

Code	Parameters	Meaning	Function	Example Response
VP	None	Volume Plus	Increase volume	Volume 51
VM	None	Volume Minus	Decrease volume	Volume 49
VN	##	Volume number	Go to volume number	Volume 55
MU	None	Mute	Toggle mute	Mute 50 / CD 50
DM	None	Demute	Demute	CD 50
MV	None	Mute	Mute	Mute 50

Source control commands

These commands allow control of a Meridian source connected to the Master loudspeaker. No response is given on RS232.

Code	Meaning / Function
MP	Menu up
MM	Menu down
ML	Menu left
MR	Menu right
mp	Function + menu up
mm	Function + menu down
ml	Function + menu left
mr	Function + menu right
N0 – N9	Number keys
PL	Play
ST	Stop
PS	Pause
RP	Repeat
NE	Next
PR	Previous
FF	Fast forward
FB	Fast back
SR	Store
CL	Clear

Audio menus

Code	Parameters	Meaning	Function	Example Response
TN	±##.#	Treble number	Go to Treble number	Treble: +6.0dB
BN	±##.#	Bass number	Go to Bass number	Bass: +5.0dB
LN	±##	Left number	Go to Image Focus number	Image Focus: Left 3
RN	±##	Right number	Go to Image Focus number	Image Focus: Right 6
F+	±#	Image Focus Plus number	Go to Image Focus Plus number	Image Focus Plus: -1
P+	None	Phase +	Phase positive	Phase: +ve
P-	None	Phase -	Phase negative	Phase: -ve
AE	PR, (print) RS, (reset) ST(store) [Prints if not specified]	Audio menu	Audio menu control. Print, Reset, Store	* See below for full responses

* Audio Menu AE code responses:

```
valueSet AE PR:
Treble: +6.0dB, Bass: +5.0dB, Image Focus: Right 6, Image Focus Plus: -1, Phase: -ve,

valueSet AE RS:
Audio Menu Settings: Reset to Defaults

valueSet AE ST:
Audio Menu Settings: Stored
```

CONFIGURATION

These commands affect *only the connected loudspeaker*. They configure features of the speaker that would otherwise by inaccessible without a SpeakerLink capable controller. The settings made are non-volatile (i.e. they remain when the loudspeaker is powered-down). These settings can override commands from a SpeakerLink controller, so they should be used with caution. To restore SpeakerLink control, it is necessary to reset the setting on the speaker by sending the relevant command with the "SL" parameter included.

Code	Parameters	Meaning	Function	Example Response
FQ	FR (free) WA (wall) SH (shelf) CO (corner) SL (set via SpeakerLink)	Free-Q	Set Free-Q value	Free-Q: Wall
SW	OFF (off) 1 (crossover 1) 2 (crossover 2) WI (wideband) SL (set via SpeakerLink)	Sub-Woofer	Set Sub-Woofer filter value	Sub Filter: SpeakerLink
FA	OFF ON SL (set via SpeakerLink)	FFA	Set Full Frequency Alignment value	FFA: Off
PB	OFF ON SL (set via SpeakerLink)	Perfect Balance	Set Perfect Balance value	Perfect Balance: On
IE	OFF (off) MIN (minimum) MED (medium) MAX (maximum) SL (set via SpeakerLink)	Image Elevation	Set Image Elevation value	Image Elev.: Med
Cm	OFF, ON	Centre Mode	Set Centre Mode value	Centre Mode: On
FE	OFF, ON	Image Focus Enable	Set Image Focus Enabled value	Image Focus Enable: Yes
NV	PR(print) RS(reset) [Prints if not specified]	Non-Volatile Speaker Settings menu	Non-Volatile Settings control	* See below for full responses

* Non-Volatile Settings NV code responses:

```
valueSet NV PR:
Free-Q: Wall, Sub Filter: SpeakerLink, FFA: Off, Perfect Balance: On, Image Elev.:
Med, Centre Mode: On, Image Focus Enable: Yes,

valueSet NV RS:
Non-Volatile Settings: Reset to Defaults
```

Configuration

Code	Parameters	Meaning	Function	Example Response
AR	OFF (off) PRI (primary) SEC (secondary)	High Powered Array	Set High Powered Array value	High Powered Array: Primary
SV	LV (last valid) 25-87	Start Volume	Set startup volume value	Start Volume: 65
SS	CD, RD, NT, TV, TA, SA, DC, CB, DV, PV, US, GA	Start Source	Set startup source value	Start Source: Radio
PW	SB (standby) ON (on)	Power Up Mode	Set auto start power up mode.	Power Up: On
CT	AUTO (automatic) CON (controller) NCON (not controller)	IR controller state	Set IR controller state	Controller State: Controller
CA	1A - 8A	Comms Address	Set system comms address	System Address: 3A
CS	PR (print) RS(reset) [Prints if not specified]	Configuration Settings menu	Configuration Settings control	* See below for full responses

* Configuration Settings CS code responses:

```
valueSet CS PR:
High Powered Array: Primary, Start Volume: 65, Start Source: Radio, Power Up: On,
Controller State: Controller, System Address: 3A,

valueSet CS RS:
Setup Config Settings: Reset to Defaults
```

Utility / diagnostic

Code	Parameters	Meaning	Function	Example Response
SP	PR (print) Prints if not specified	Source Print	Prints source settings	* See below for full response
DI	OFF, ON	Display	Set LED off or on	Front panel LED is set off or on
RS	None	Factory Reset	Perform factory reset and reboot	%BYE

* Source Settings SP code response:
valueset SP PR:

CD Settings
Source Input: SpeakerLink, Legend: CD, Validity Valid: Valid, Q-Sync: On, Comms Type: 1C (Meridian CD), Comms Address: 1A,

Radio Settings
Source Input: SpeakerLink, Legend: Radio, Validity Valid: Valid, Q-Sync: On, Comms Type: 2C (Meridian Radio), Comms Address: 1A,

Net Settings
Source Input: SpeakerLink, Legend: Net, Validity Valid: Valid, Q-Sync: On, Comms Type: 4C (Meridian Streamer), Comms Address: 1A,

TV Settings
Source Input: SpeakerLink, Legend: TV, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

Tape Settings
Source Input: SpeakerLink, Legend: Tape, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

Sat Settings
Source Input: SpeakerLink, Legend: Sat, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

Disc Settings
Source Input: SpeakerLink, Legend: Disc, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

Cable Settings
Source Input: SpeakerLink, Legend: Cable, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

DVD Settings
Source Input: SpeakerLink, Legend: DVD, Validity Valid: Valid, Q-Sync: On, Comms Type: 3C (Meridian DVD), Comms Address: 1A,

PVR Settings
Source Input: SpeakerLink, Legend: PVR, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

USB Settings
Source Input: SpeakerLink, Legend: USB, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,

Game Settings
Source Input: SpeakerLink, Legend: Game, Validity Valid: Valid, Q-Sync: On, Comms Type: NC (Non-Meridian), Comms Address: 1A,