

# TASCAM SB-16D

## Ethernet protocol specifications

Ver. 1.01

July 2023

TEAC Corporation

**Contents**

<b>1. CAUTION</b> .....	3
<b>2. Overview</b> .....	4
<b>3. Specifications</b> .....	4
<b>3.1 Interface</b> .....	4
<b>3.2 Login procedure</b> .....	4
<b>3.3 Command Format Overview</b> .....	5
<b>4. Command list</b> .....	12
<b>5. Command details</b> .....	23
<b>5.1 Input</b> .....	23
<b>5.2 Output</b> .....	25
<b>5.3 GPI</b> .....	26
<b>5.4 System</b> .....	29
<b>5.5 Network</b> .....	34
<b>5.6 Priority</b> .....	36
<b>5.7 Dante information</b> .....	37
<b>5.8 Dante network</b> .....	39
<b>5.9 Meter</b> .....	42
<b>5.10 Preset</b> .....	43
<b>6. Appendix</b> .....	46
<b>6.1 Behavior during identificatio</b> .....	46
<b>6.2 Reference levels</b> .....	46
<b>6.3 Setting parameters related to networks</b> .....	47
<b>6.4 Meter value list</b> .....	48
<b>6.5 Notes about control privileges</b> .....	49
<b>7. Update history</b> .....	51

## 1. CAUTION

TEAC Corporation (hereafter, "TEAC") permits the use of the protocol described in this specification document with the prerequisite that the customer (hereinafter "YOU") consents to the following protocol use agreement terms.

If you do not consent to the following conditions in the protocol use agreement, you may not use this protocol and should return this document to TEAC. Moreover, be aware that violations of any of the following items in the protocol use agreement consists of infringement on the rights of TEAC, and YOUR right of use of the protocols shall be forfeited and YOU are subject to damage claims.

### Protocol use agreement

1. This Agreement comes into effect from the time YOU start use of this protocol.
2. TEAC grants a nonexclusive and nontransferable "usage" right to YOU for the purpose to develop compatible devices (including software) with the covered TASCAM products.
3. The disclosure of this document to YOU does not imply that YOU have acquired any rights, titles, licenses or interests in this protocol other than what is specified in this use agreement. YOU shall recognize that as a written work belonging to TEAC, this document is protected based on the applicable copyright laws of the signatory nations of the Universal Copyright Convention, including the Copyright Act of Japan, and the Berne Convention for the Protection of Literary and Artistic Works. Without exception, the intellectual property in this protocol belongs to TEAC or a source that provides it to TEAC.
4. (1) YOU shall not make copies of this specifications document.  
(2) YOU shall not transfer this specifications document to a third party without obtaining the prior permission from TEAC.  
(3) Since confidential information belonging to TEAC may be contained in this specifications document, YOU shall not disclose any of them to a third party without obtaining prior permission from TEAC.
5. This specifications document and the protocols herein are provided on as-is basis. They are provided without any kind express or warranty, express or implied, including but not limited to of fitness for a particular purpose, non-infringement and/or freedom from errors.
6. TEAC shall have NO obligations to answer to YOUR inquiries on this specifications document or protocols.
7. TEAC SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES (INCLUDING UNAVAILABILITY OF THE USE, BUSINESS LOSSES OR CHANCES, BUSINESS INTERRUPTION, LOSS OF BUSINESS DATA, OR OTHER FINANCIAL DAMAGES) ARISING FROM OR IN CONNECTION WITH THE USE OF THIS SPECIFICATIONS DOCUMENT OR THE PROTOCOLS. This shall be applicable, without prejudice to any rights or obligations of TEAC hereinabove, even if TEAC has any knowledge of the potential damages in advance.
8. This Agreement shall be governed by and construed under the laws of Japan, Any disputes arising out of or in connection with this Agreement shall be subject to the exclusive jurisdiction of the Tokyo District Court in the first instance.

End of Use Agreement

## 2. Overview

An SB-16D unit can be controlled from a computer or other connected device using the ETHERNET connector on the unit. In this document, the SB-16D is the controlled device. Moreover, the connected device controlling the unit is the external controller.

## 3. Specifications

### 3.1 Interface

Transmission system:	Full-duplex
Transmission protocol:	TCP/IP
Port number:	54726 (fixed)
Gigabit Ethernet standard	1000BASE-T (IEEE 802.3ab)
Connector	etherCON Cat5e compatible connector*
Cable:	Category 5e or faster STP cable

\*etherCON is a registered trademark of Neutrik AG.

### 3.2 Login procedure

After connecting by TCP/IP, logging in following the procedures below is necessary to enable protocol interactions with the controlled device (SB-16D).

1. Connect by TCP/IP.

For the IP address, enter that of the controlled device (SB-16D).

The port number is "54726" (fixed).

2. Send a "CR+LF" command complete code.(Carriage return (CR: 0x0D) + line feed (LF: 0x0A))

The unit will reply with, "Enter Password".

3. Next send the password + "CR+LF" to log in.

\*No password is set for the controlled device (SB-16D) when it is shipped new from the factory.

\* If no password has been set, send "CR+LF" only.

4. If the login succeeds, the unit will reply with, "Login Successful".

This completes enabling protocol interactions with the unit.

### ATTENTION

- If no protocol exchange occurs for three minutes when connected, a timeout will occur and the connection will be ended. To prevent timeouts from occurring, retrieve the device name, for example, regularly (at intervals of less than three minutes).

### 3.3 Command Format Overview

#### 1) Fundamental command specifications

Character use	Use ASCII characters. Use UTF-8 for certain commands, including setting names.
Delimiter	Half-width (standard) space (␣: 0x20)
Command start code	None
Command end code	Carriage return (CR: 0x0D) + line feed (LF: 0x0A)
Maximum data length	1024 bytes (including LF/CR)

#### 2) Command format

Command Type	Delimiter	Parameter 1	Delimiter	Parameter 2	...	Parameter N	Delimiter	CR	LF
--------------	-----------	-------------	-----------	-------------	-----	-------------	-----------	----	----

• The delimiter for the final parameter can be omitted.␣▲

#### 3) Command format details

Item	Contents		
Command Type	SET	Setting command	External controller → Controlled device (SB-16D)
	GET	Retrieval command	External controller → Controlled device (SB-16D)
	NOTIFY	Notification command	External controller ← Controlled device (SB-16D)
	METER	Meter data notification command	External controller ← Controlled device (SB-16D)
Parameter	When the command type is SET, set Key: Value. When the command type is GET, set Key. When the command type is NOTIFY/METER, set Key: Value. • Using delimiters, multiple parameter settings can be made. For example: SET ␣Parameter1␣Parameter2␣... • See the Command list below for details about Key/Value.		

#### 4) Command type

##### ● SET command

Use this to change a setting value for a controlled device (SB-16D). When the external controller sends a SET command and the controlled device (SB-16D) receives it, the result will be sent to the external controller.

Detailed command examples

Example 1: Muting input channel 1

SET ANLGIN/1/MUTE: ON

When the external controller sends a SET command and the controlled device (SB-16D) receives it, the result will be sent to the external controller.

Setting made properly                   OK SET  
Setting not made properly           OK SET ANLGIN/1/MUTE: ERRX  
  
(X depends on the parameter.)

- If the setting value was changed, the result will be transmitted to the external controller as a NOTIFY command.

NOTIFY ANLGIN/1/MUTE: ON

Example 2: Muting input channels 1/2/3

SET ANLGIN/1/MUTE: ON ANLGIN/2/MUTE: ON ANLGIN/3/MUTE: ON

According to the result, one of the following responses will be sent from the controlled device (SB-16D) to the external controller.

Setting made properly                   OK SET  
Setting not made properly           OK SET ANLGIN/3/MUTE: ERRX  
  
(The parameter that could not be set will result in an error.)

- If the setting value was changed, the result will be transmitted to the external controller as a NOTIFY command.

NOTIFY ANLGIN/1/MUTE: ON ANLGIN/2/MUTE: ON ANLGIN/3/MUTE: ON

### ● GET command

Use this to retrieve a setting value from a controlled device (SB-16D). When the external controller sends a GET command and the controlled device (SB-16D) receives it, the result will be sent to the external controller.

Detailed command examples

Example 1: Retrieving the input channel 1 mute setting

GET ANLGIN/1/MUTE

According to the result, one of the following responses will be sent from the controlled device (SB-16D) to the external controller.

Retrieval succeeded properly                   OK GET ANLGIN/1/MUTE: OFF  
Retrieval did not succeed properly   OK GET ANLGIN/1/MUTE: ERRX  
  
(X depends on the parameter.)

Example 2: Retrieving input channel 1/2/3 settings

GET ANLGIN/1/MUTE ANLGIN/2/MUTE ANLGIN/3/MUTE

According to the result, one of the following responses will be sent from the controlled device (SB-16D) to the external controller.

Retrieval succeeded properly  
OK GET ANLGIN/1/MUTE: OFF ANLGIN/2/MUTE: OFF ANLGIN/3/MUTE: OFF

Retrieval succeeded properly

```
OK SET ANLGIN/1/MUTE:OFF ANLGIN/2/MUTE:OFF ANLGIN/3/MUTE:ERRX
```

(The parameter that could not be set will result in an error.)

- **NOTIFY command**

When a setting has been changed on a controlled device (SB-16D), it sends this to the external controller.

Detailed command examples

Example 1: When the input channel 1 mute setting has been changed (OFF→ON)

```
NOTIFY ANLGIN/1/MUTE:ON
```

Example 2: When multiple settings have been changed

```
NOTIFY ANLGIN/1/MUTE:ON ANLGIN/2/MUTE:ON ANLGIN/3/MUTE:ON
```

- **METER command**

When a setting is made to acquire meter data, the controlled device (SB-16D) sends this to the external controller. (See the following command sequence example for details.)

Meter data acquisition setting example

1. Set the interval and total time for meter data acquisition (unit: milliseconds).

```
SET METER/TOTAL:10000 METER/INTERVAL:100
```

2. Turn the setting ON for the meter data you want to acquire.

```
SET ANLGIN/1/METER/SEND:ON
```

In this case, the controlled device (SB-16D) will send meter data to the external controller every 100 milliseconds for 10 seconds (see below).

```
METER ANLGIN/1/METER/SEND:XXXXXXXX (XXXXXXXX: meter data value)
```

## 5) CID parameter (CID:XXXXXXXX) overview

A CID (Command ID) can be set in the parameters in order to identify which SET/GET command prompted the response. If a CID is set, the controlled device (SB-16D) will include it as is in the command when responding to the remote controller.

Example 1

```
SET CID:12345678 ANLGIN/1/MUTE:ON
```

```
→ OK SET CID:123456789
```

Example 2

```
GET CID:12345678 ANLGIN/1/MUTE
```

→ OK GET CID: 12345678 ANLGIN/1/MUTE: ON

## 6) Command errors

If the command type sent to the controlled device (SB-16D) cannot be recognized, it will return the command to the remote controller with “NG” (no good) added to the beginning.

Example 1

```
PUT ANLGIN/1/MUTE: ON
→ NG PUT ANLGIN/1/MUTE: ON
```

Due to a command parameter sent to the controlled device (SB-16D), a command is sent from it to the remote controller with “ERRX” (see below for X) added.

Example 1: When key was invalid (ERR1)

```
GET ANLGIN/1/MUTEE
→ GET ANLGIN/1/MUTEE: ERR1
```

Example 2: When Value was invalid (ERR2)

```
SET ANLGIN/1/GAIN: 0
→ SET ANLGIN/1/GAIN: ERR2
```

## 7) Maximum command length

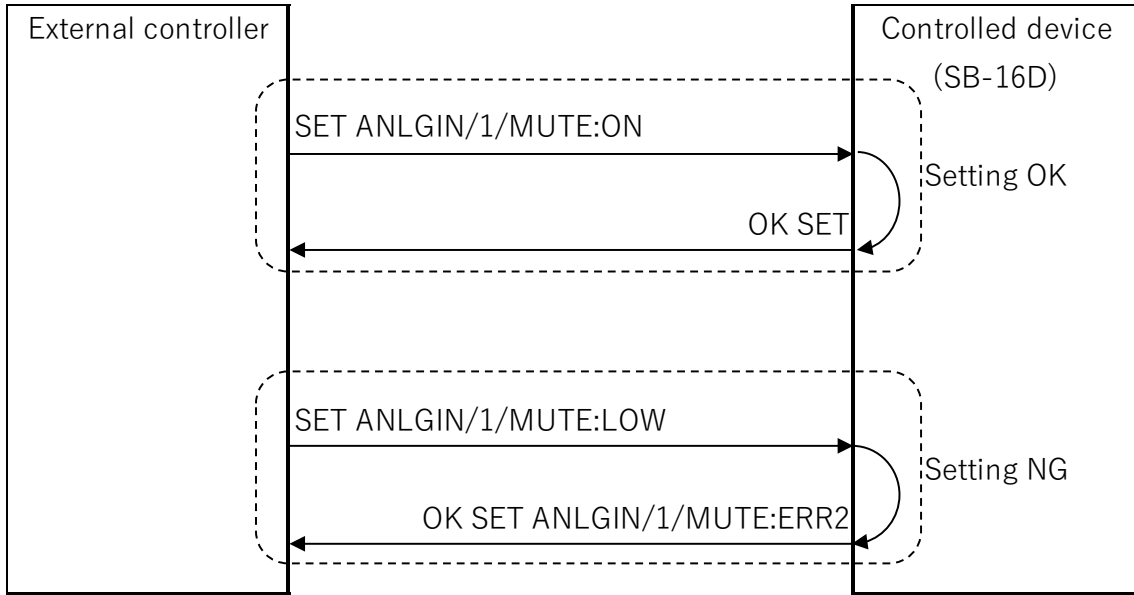
The maximum length of a command that can be sent and received is 1024 bytes. Be careful not to let commands sent to the controlled device (SB-16D) exceed 1024 bytes (including LF/CR). If a command sent from the controlled device (SB-16D) in response to a GET command, for example, would exceed 1024 bytes, it will be divided into parts with suitable sizes and be sent from the controlled device (SB-16D) to the external controller.

## 8) Command sequence examples

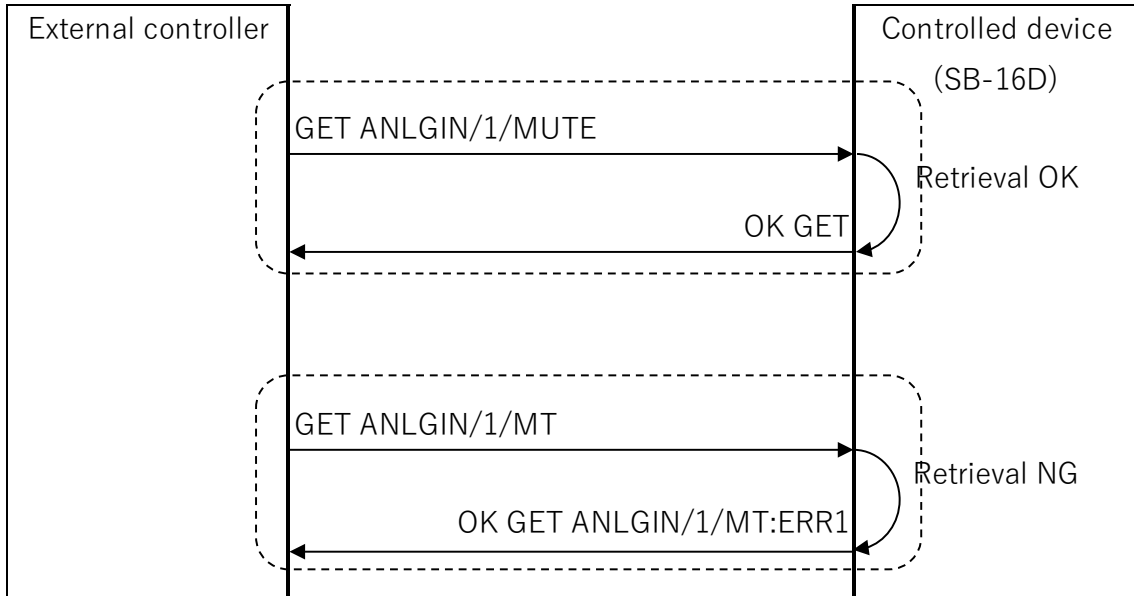
When the command type is SET/GET, make the external controller wait after a command is sent to the controlled device until the controlled device (SB-16D) sends a response before sending the next SET/GET command.



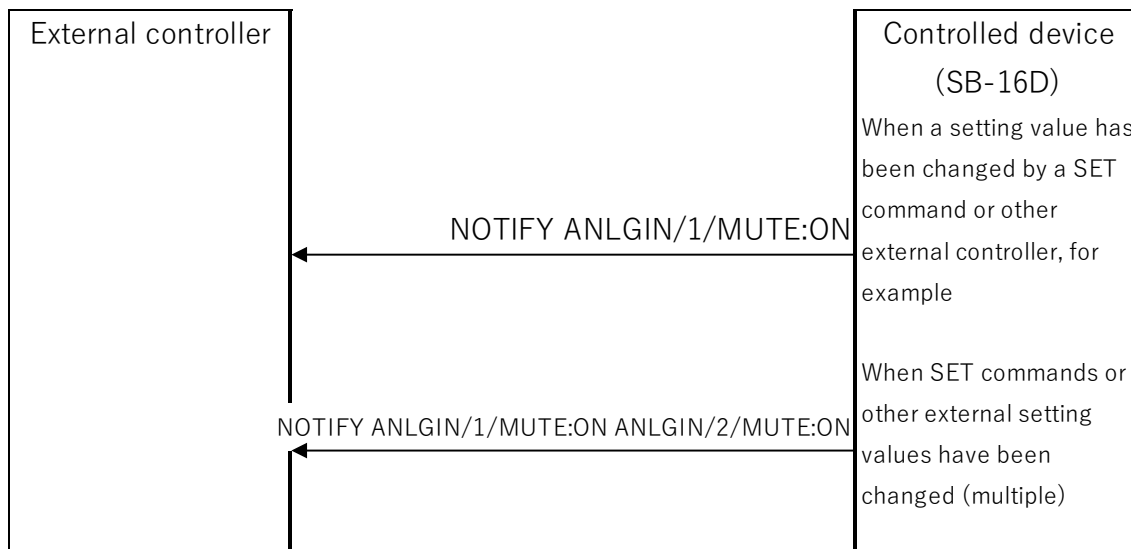
● **SET command**



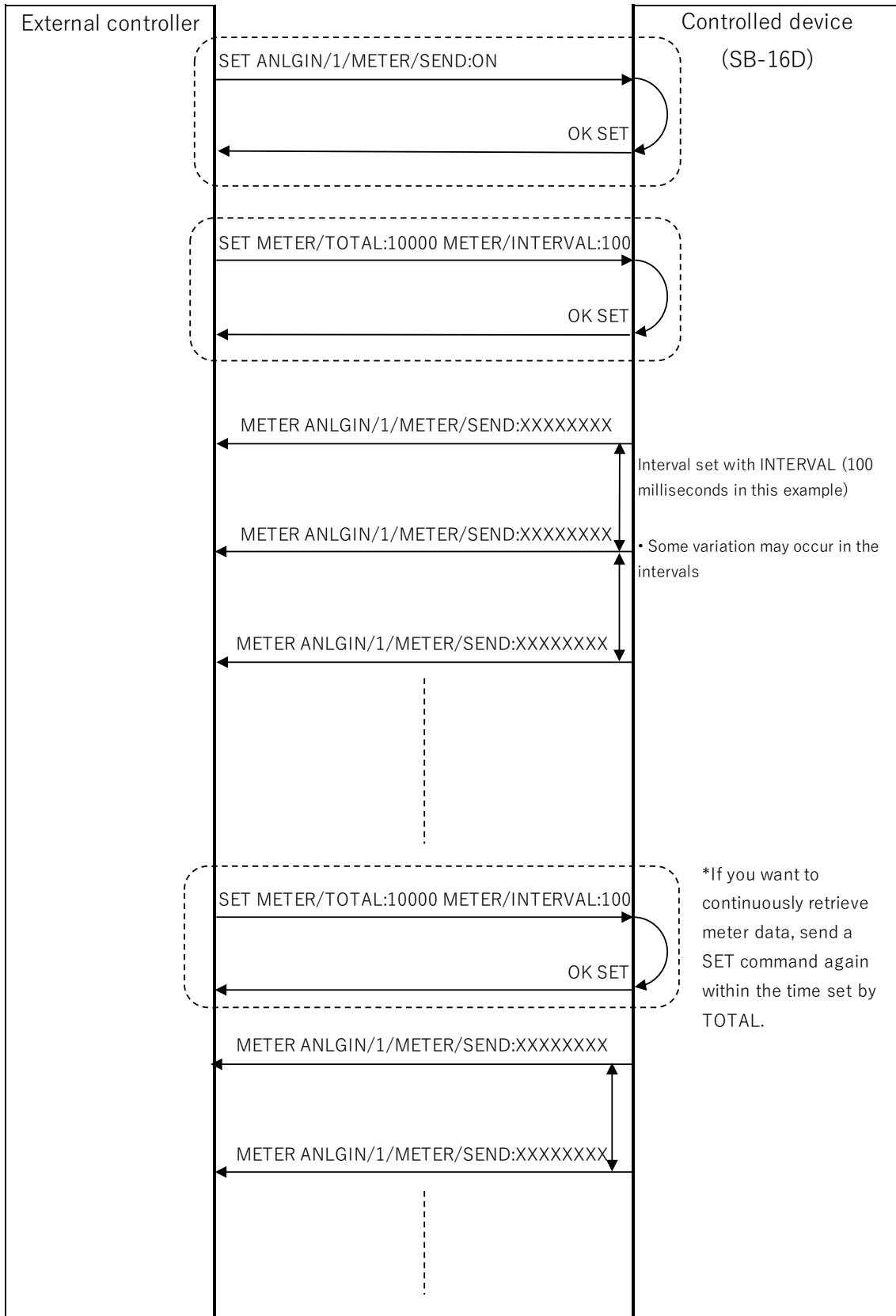
● **GET command**



● NOTIFY command



● **METER command**



#### 4. Command list

Category	parameter			Command Type			Description
	Key	:	Value	SET	GET	NOTIFY	
Common	CID	:	XXXXXXXX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Unique ID set by the host
	NOTIFY	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NOTIFY command notification on/off setting
Input	ANLGIN/X/NAME	:	"Input1"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog input name UTF-8 format text inside "". 96-byte maximum
	ANLGIN/X/MUTE	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog input mute setting
	ANLGIN/X/PHANT	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog input phantom setting
	ANLGIN/X/PAD	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog input pad setting
	ANLGIN/X/GAIN	:	12-66(1step)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog input gain setting
	ANLGIN/X/METER/SEND	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog input METER command output setting
	DANTEIN/X/NAME	:	"DanteIn1"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Dante Channel Label(Receiver)
	DANTEIN/X/DROUTING/DEVICENAME	:	"SB-16D-00001"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Source Device Name for Dante In Routing
DANTEIN/X/DROUTING/CHNAME	:	"01"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Source Channel Name for Dante In Routing	
	DANTEIN/X/DROUTING/ENABLE	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Use DANTEIN/X/DROUTING/DEVICENAME and DANTEIN/X/DROUTING/CHNAME to activate routing. Select OFF to deactivate routing.
Output	ANLGOUT/X/MUTE	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog Output MUTE setting
	DANTEOUT/X/NAME	:	"DanteOut1"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Dante Channel label(Transmitter)

TASCAM SB-16D Ethernet protocol specifications

Category	parameter			Command Type			Description
	Key	:	Value	SET	GET	NOTIFY	
GPI	GPI/SWITCH/X/MUTE/Y/	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X: GPI Input Port number (1-8) Y: Analog Channel (IN1-IN16, OUT1-OUT16) Up to 16 Y can be set simultaneously for each port.
	GPI/SWITCH/X/MODE	:	TOGGLE HOLD_ON HOLD_OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GPI Input Port operation mode setting. TOGGLE: Each time the connector is closed, MUTE is switched ON/OFF. HOLD_ON: MUTE is ON while the connector is closed. HOLD_OFF: MUTE is OFF while the connector is closed.
	GPI/SWITCH/X/STATUS	:	OFF/ON	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OFF: Open ON: Close
	GPI/SWITCH/X/FUNCTION	:	LOCAL/EXTEND	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LOCAL: Mute signal in/Mute status out EXTEND: Sonicview extension port
	GPI/LED/X/MUTE/Y/	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X: GPI Output Port number (1-8) Y: Analog Channel (IN1-IN16, OUT1-OUT16) Up to 16 Y can be set simultaneously for each port.
	GPI/LED/X/MODE	:	MUTE_ON/ MUTE_OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	GPI Output Port operation mode setting. MUTE_ON: The connector is closed while MUTE is ON.

TASCAM SB-16D Ethernet protocol specifications

							MUTE_OFF: The connector is closed while MUTE is OFF.
	GPI/LED/X/STATUS	:	OFF/ON	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OFF: Open ON: Close
	GPI/LED/X/FUNCTION	:	LOCAL/EXTEND	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LOCAL: Mute signal in/Mute status out EXTEND: Sonicview extension port
	GPI/CONTROL/FUNCTION	:	LOCAL/ EXTEND/ INDIVIDUAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	For ALL GPIO settings

TASCAM SB-16D Ethernet protocol specifications

Category	parameter			Command Type			Description
	Key	:	Value	SET	GET	NOTIFY	
System	DEVICE/NAME	:	"SB-16D"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Model name
	DEVICE/DANTENAME	:	"SB-16D-XXXXX"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Dante Device Name
	DEVICE/LOGINNAME	:	"SV-xxxxxx"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Name of device logged into SB-16D
	DEVICE/VER/SYSTEM	:	V1.00B0010	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	System Firmware Version/Build Number
	DEVICE/VER/PROTOCOL	:	V1.00B0010	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Protocol Version/Build Number
	DEVICE/VER/FPGA	:	0024	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FPGA Build Number
	DEVICE/SERIAL	:		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hardware serial number
	DEVICE/SAMPLE	:	48000/96000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Device sampling frequency
	DEVICE/RESET	:	FACT/BOOT/ KEEP_NONE/ KEEP_DANTE/ KEEP_NETWORK/ KEEP_ALL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This resets the device. FACT : After setting values are initialized, the hardware will restart BOOT : The hardware will restart KEEP_NONE : Setting values (excluding ID) and Dante will be initialized KEEP_DANTE : Setting values (excluding ID) will be initialized KEEP_NETWORK : Setting values (excluding ID and network settings) and Dante will be initialized KEEP_ALL : Setting values (excluding ID and network settings) and Dante will be initialized

TASCAM SB-16D Ethernet protocol specifications

	DEVICE/REBOOT	:	KEEP_NONE/ KEEP_DANTE/ KEEP_NETWORK/ KEEP_ALL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The device will be restarted.</p> <p>KEEP_NONE : Setting values (excluding ID) and Dante will be initialized, and the hardware will be restarted</p> <p>KEEP_DANTE : Setting values (excluding ID) will be initialized, and the hardware will be restarted</p> <p>KEEP_NETWORK : Setting values (excluding ID and network settings) and Dante will be initialized, and the hardware will be restarted</p> <p>KEEP_ALL : Setting values (excluding ID and network settings) will be initialized, and the hardware will be restarted</p> <p>Note: Use DEVICE/RESET: BOOT to reboot without initializing</p>
	DEVICE/IDENTIFY	:	EXE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IDENTIFY command
	DEVICE/REFLEVEL/DIGITAL	:	20/18/16/14/9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Digital reference level setting
	DEVICE/REFLEVEL/ANALOG	:	6/4/0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Analog reference level setting
	DEVICE/UNITID	:	0 - 255	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ID setting
	DEVICE/HEADROOM	:	20/18/16/14/9/ REFLEVEL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Meter headroom setting
	BATTERY/VOLT/MIN	:	0~27.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Stopping voltage setting
	BATTERY/VOLT/ALERT	:	0~27.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Alert voltage setting
	BATTERY/VOLT/CURRENT	:	0~30.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Current voltage



TASCAM SB-16D Ethernet protocol specifications

	BATTERY/ALERT/STATUS	:	OFF/ON	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Notification will occur if BATTERY/VOLT/CURRENT becomes lower than BATTERY/VOLT/ALERT. OFF: Normal, ON: Low Battery
	BATTERY/ALERT/PERMIT	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BATTERY/ALERT/STATUS notification setting. OFF: Notification will not occur. ON: Notification will occur.
	LED/BRIGHT	:	0 - 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LED brightness

TASCAM SB-16D Ethernet protocol specifications

Category	parameter			Command Type			Description
	Key	:	Value	SET	GET	NOTIFY	
Network	NETWORK/PASS	:	"SB-16D"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Network password (none set by default)
	NETWORK/DHCP/ENABLE	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DHCP ON/OFF
	NETWORK/DHCP/IP	:	192.168.100.100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	IP Address when DHCP is ON
	NETWORK/DHCP/SUB	:	255.255.255.000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Subnet Mask when DHCP is ON
	NETWORK/DHCP/GATE	:	000.000.000.000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Default Gateway when DHCP is ON
	NETWORK/IP	:	192.168.100.100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	IP Address when DHCP is OFF
	NETWORK/SUB	:	255.255.255.000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Subnet Mask when DHCP is OFF
	NETWORK/GATE	:	000.000.000.000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Default Gateway when DHCP is OFF
	NETWORK/MAC	:	00022EXXXXXXX	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MAC address
Priority	PRIORITY/ID	:	"SV-xxxxxx"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Dante Device Name of device that has control privileges
	PRIORITY/ID_REQUEST	:	"SV-xxxxxx"	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The device that has control privileges will be notified when control privileges are requested from a different device.
	PRIORITY/SWITCH	:	OK/NG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	After the device that has control privileges receives the PRIORITY/ID_REQUEST, set this to OK to approve or to NG to deny.
	PRIORITY/NETWORK/IP/PRI	:	192.168.100.100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IP address of the device that has control privileges

TASCAM SB-16D Ethernet protocol specifications

Category	parameter			Command Type			Description
	Key	:	Value	SET	GET	NOTIFY	
Dante	DANTE/INFO/MANUFACTURE	:	"TEAC Corporation"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Manufacturer name
	DANTE/INFO/MODELNAME	:	"SB-16D"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	model name
	DANTE/INFO/PROVER	:	0.0.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	product version
	DANTE/INFO/SOFTVER	:	1.0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	software version
	DANTE/INFO/FIRMVER	:	1.0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	firmware version
	DANTE/INFO/DANTEMODEL	:	"Brooklyn II "	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Dante model
	DANTE/INFO/DANTEFIRM	:	4.2.6.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Dante firmware version
	DANTE/INFO/HARDWARE	:	4.0.4.8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	hardware version
	DANTE/INFO/ROM	:	1.3.81	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	rom version
	DANTE/NETWORK/APPLY	:	EXE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	After the DANTE/NETWORK value is changed, sending EXE applies it.
	DANTE/NETWORK/SWITCH	:	REDUNDANT/ SWITCHED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Redundancy setting
	DANTE/NETWORK/DHCP/PRI	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DHCP ON/OFF (Primary)
	DANTE/NETWORK/DHCP/SEC	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DHCP ON/OFF (Secondary)
	DANTE/NETWORK/CURR/IP/PRI	:	192.168.100.100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Current IP Address (Primary)
	DANTE/NETWORK/CURR/IP/SEC	:	192.168.100.100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Current IP Address (Secondary)
	DANTE/NETWORK/CURR/SUB/PRI	:	255.255.255.000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Current Subnet Mask (Primary)
	DANTE/NETWORK/CURR/SUB/SEC	:	255.255.255.000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Current Subnet Mask (Secondary)

TASCAM SB-16D Ethernet protocol specifications

	DANTE/NETWORK/STATIC/IP/PRI	:	192.168.100.100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	IP Address when DHCP is OFF (Primary)
	DANTE/NETWORK/STATIC/IP/SEC	:	192.168.100.100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	IP Address when DHCP is OFF (Secondary)
	DANTE/NETWORK/STATIC/SUB/PRI	:	255.255.255.000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Subnet Mask when DHCP is OFF (Primary)
	DANTE/NETWORK/STATIC/SUB/SEC	:	255.255.255.000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Subnet Mask when DHCP is OFF (Secondary)
	DANTE/NETWORK/MAC/PRI	:	00022EXXXXXXX	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MAC address (Primary)
	DANTE/NETWORK/MAC/SEC	:	00022EXXXXXXX	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MAC address (Primary)

TASCAM SB-16D Ethernet protocol specifications

Category	parameter			Command Type			Description
	Key	:	Value	SET	GET	NOTIFY	
Meter	METER/INTERVAL	:	min:100, step:1ms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Meter data notification interval
	METER/TOTAL	:	off:0, step:1ms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Meter data total notification time
Preset	PRESET/CUR	:	1 - 10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Current preset number
	PRESET/LOAD	:	1 - 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Load specified preset
	PRESET/SAVE	:	1 - 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Save the current setting values to the specified preset
	PRESET/CMP	:	SAME/DIFF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Compare PRESET/CUR with the current setting values.
	PRESET/NAME	:	"XXXXXXXX"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Edit the name of the PRESET/CUR preset.
	PRESET/X/NAME	:	"Preset1"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Name of preset at specified number
	PRESET/X/LOCK	:	OFF/ON	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This disables editing.
	PRESET/X/COPY	:	1 - 10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copy the content of preset X to the preset specified by the value.
	PRESET/X/CLEAR	:	EXE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Clear the specified preset.
	PRESET/X/CLEARED	:	TRUE/FALSE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Return whether or not the specified preset is already saved.
	PRESET/IMPORTMODE	:	KEEP_NONE/ KEEP_NAME/ KEEP_NETWORK/ KEEP_ALL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Recall safe function KEEP_NONE: Apply all changes KEEP_DANTE: Apply all except Dante settings KEEP_NETWORK: Apply all except Network settings

TASCAM SB-16D Ethernet protocol specifications

							KEEP_ALL: Apply all except Dante and Network settings
--	--	--	--	--	--	--	-------------------------------------------------------

## 5. Command details

### 5.1 Input

- Analog input channel name

Use this to set the analog input channel name.

Command type: SET, GET, NOTIFY

Key	ANLGIN/{ia}/NAME	{ia}: analog input channel number (1 – 16)
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Analog input channel mute

Use this to set analog input channel muting.

Command type: SET, GET, NOTIFY

Key	ANLGIN/{ia}/MUTE	{ia}: analog input channel number (1 – 16)
Value	OFF	Mute: off
	ON	Mute: on

- Analog input channel phantom

Use this to set the analog input phantom power.

Command type: SET, GET, NOTIFY

Key	ANLGIN/{ia}/PHANT	{ia}: analog input channel number (1 – 16)
Value	OFF	Phantom power off
	ON	Phantom power on

- Analog input channel pad

Use this to set the analog input channel pad.

Command type: SET, GET, NOTIFY

Key	ANLGIN/{ia}/PAD	{ia}: analog input channel number (1 – 16)
Value	OFF	PAD off
	ON	PAD on

- Analog input channel gain

Use this to set the analog input channel gain.

Command type: SET, GET, NOTIFY

Key	ANLGIN/{ia}/GAIN	{ia}: analog input channel number (1 – 16)
Value	12 ~ 66	dB in 1dB increments

- Analog input to Dante output meter level

Use this to set the value of the METER command output from the analog input channel to the Dante output channel.

Command type: SET, GET, NOTIFY

Key	ANLGIN/{ia}/METER/SEND	{ia}: analog input channel number (1 – 16)
Value	OFF	METER commands are not issued.
	ON	METER commands are issued.

- Dante input channel name

Use this to set the Dante input channel name.

Command type: SET, GET, NOTIFY

Key	DANTEIN/{id}/NAME	{id}: Dante input channel number (1 – 16)
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Source device name for Dante input routing

Use this to set the device name for Dante routing.

Command type: SET, GET, NOTIFY

Key	DANTEIN/{id}/DROUTING/DEVICENAME	{id}: Dante input channel number (1 – 16)
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Source channel name for Dante input routing

Use this to set the channel name for Dante routing.

Command type: SET, GET, NOTIFY

Key	DANTEIN/{id}/DROUTING/ CHNAME	{id}: Dante input channel number (1 – 16)
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	



- Dante input routing execution

Use DANTEIN/X/DROUTING/DEVICENAME and DANTEIN/X/DROUTING/CHNAME to activate routing.

Command type: SET, GET, NOTIFY

Key	DANTEIN/{id}/DROUTING/ENABLE	{id}: Dante input channel number (1 – 16)
Value	OFF	Disable routing.
	ON	Enable routing.

## 5.2 Output

- Analog output channel mute

Use this to set analog output channel muting.

Command type: SET, GET, NOTIFY

Key	ANLGOUT/{oa}/MUTE	{oa}: analog output channel number (1 – 16)
Value	OFF	MUTE off
	ON	MUTE on

- Dante output channel name

Use this to set the Dante output channel name.

Command type: SET, GET, NOTIFY

Key	DANTEOUT/{od}/NAME	{od}: Dante output channel number (1 – 16)
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

### 5.3 GPI

- GPI Input Mute assign

Use this to set mute assignment settings for GPI input connectors.

Up to 16 assignments can be made for a single input connector.

Command type: SET, GET, NOTIFY

Key	GPI/SWITCH/{sw}/MUTE/{y}	{sw}: Input connector number (1 – 8) {y}: assignment number (IN1 – IN16, OUT1 – OUT16)
Value	OFF	Assign off
	ON	Assign on

- GPI Input mode

This sets the GPI input connector operation mode.

Command type: SET, GET, NOTIFY

Key	GPI/SWITCH/{sw}/ MODE	{sw}: Input connector number (1 – 8)
Value	TOGGLE	Each time the connector is closed, MUTE is switched ON/OFF.
	HOLD_ON	MUTE is ON while the connector is closed.
	HOLD_OFF	MUTE is OFF while the connector is closed.

- GPI Input status

Acquire the open/closed status of the GPI input connector.

Command type: GET, NOTIFY

Key	GPI/SWITCH/{sw}/ STATUS	{sw}: Input connector number (1 – 8)
Value	OFF	Open
	ON	Close

- GPI Input function

Use this to set the GPI input connector function.

Command type: SET, GET, NOTIFY

Key	GPI/SWITCH/{sw}/ FUNCTION	{sw}: Input connector number (1 – 8)
Value	LOCAL	Mute signal in/Mute status out
	EXTEND	Sonicview extension port

- GPI Output Mute assign

Use this to set mute assignment settings for GPI output connectors.

Up to 16 assignments can be made for a single output connector.

Command type: SET, GET, NOTIFY

Key	GPI/LED/{sw}/MUTE/{y}	{sw}: Output connector number (1 – 8) {y}: Assignment number (IN1 – IN16, OUT1 – OUT16)
Value	OFF	Assign off
	ON	Assign on

- GPI Output mode

This sets the GPI output connector operation mode.

Command type: SET, GET, NOTIFY

Key	GPI/LED/{sw}/MODE	{sw}: Output connector number (1 – 8)
Value	HOLD_ON	Close when MUTE is ON.
	HOLD_OFF	Close when MUTE is OFF.

- GPI Output status

Acquire the open/closed status of the GPI output connector.

Command type: GET, NOTIFY

Key	GPI/LED/{sw}/ STATUS	{sw}: Output connector number (1 – 8)
Value	OFF	Open
	ON	Close

- GPI Output function

Use this to set the GPI output connector function.

Command type: SET, GET, NOTIFY

Key	GPI/LED/{sw}/ FUNCTION	{sw}: Output connector number (1 – 8)
Value	LOCAL	Mute signal in/Mute status out
	EXTEND	Sonicview extension port

- GPI all function

This sets the overall GPI connector operation mode.

Command type: SET, GET, NOTIFY

Key	GPI/CONTROL/FUNCTION	
Value	LOCAL	Set all connectors to LOCAL.
	EXTEND	Set all connectors to EXTENSION.
	INDIVIDUAL	Set each connector separately.

## 5.4 System

- Device name

This acquires the model name of the controlled device (SB-16D).

Command type: GET

Key	DEVICE/NAME	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Dante device name

This sets the Dante device name of the controlled device (SB-16D).

Command type: SET, GET, NOTIFY

Key	DEVICE/DANTENAME	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Login name

This sets the Dante device name for login to the controlled device (SB-16D).

Command type: SET

Key	DEVICE/LOGINNAME	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- System version

This acquires the system version number of the controlled device (SB-16D).

Command type: GET

Key	DEVICE/VER/SYSTEM	
Value	V{ver}B{build}	{ver}: version number (Ex. 1.01) {build}: build number (Ex. 0082)

- Protocol version

This acquires the protocol version number of the controlled device (SB-16D).

Command type: GET

Key	DEVICE/VER/ PROTOCOL	
Value	V{ver}B{build}	{ver}: version number (Ex. 1.01) {build}: build number (Ex. 0082)

- FPGA version

This acquires the FPGA version number of the controlled device (SB-16D)

Command type: GET

Key	DEVICE/VER/FPGA	
Value	{build}	{build}: build number (Ex. 0082)

- Serial number

This acquires the serial number of the controlled device (SB-16D).

Command type: GET

Key	DEVICE/VER/SYSTEM	
Value	8 characters (English alphabet/numbers)	

- Sampling rate

This sets the sampling rate for the controlled device (SB-16D).

Command type: SET, GET, NOTIFY

Key	DEVICE/SAMPLE	
Value	48000	[Hz]
	96000	[Hz]

- Reset

Use this to reset the controlled device (SB-16D).

Command type: SET

Key	DEVICE/RESET	
Value	FACT	After setting values are initialized, the hardware will restart
	BOOT	The hardware will restart
	KEEP_NONE	Setting values (excluding ID) and Dante will be initialized
	KEEP_DANTE	Setting values (excluding ID) and Dante will be initialized
	KEEP_NETWORK	Setting values (excluding ID and network settings) and Dante will be initialized
	KEEP_ALL	Setting values (excluding ID and network settings) will be initialized

- Reboot

The controlled device (SB-16D) will be restarted.

Command type: SET

Key	DEVICE/ REBOOT	
Value	KEEP_NONE	After setting values (excluding ID) and Dante are initialized, it will restart
	KEEP_DANTE	After setting values (excluding ID) are initialized, it will restart
	KEEP_NETWORK	After setting values (excluding ID and network settings) and Dante are initialized, it will restart
	KEEP_ALL	After setting values (excluding ID and network settings) are initialized, it will restart

- Identify

This identifies the controlled device (SB-16D). SET again to end.

Command type: SET

Key	DEVICE/IDENTIFY	
Value	EXE	

- Digital reference level

This sets the reference level at the digital stage.

Command type: SET, GET, NOTIFY

Key	DEVICE/REFLEVEL/DIGITAL	
Value	20	-20 [dBFS]
	18	-18 [dBFS]
	16	-16 [dBFS]
	14	-14 [dBFS]
	9	-9 [dBFS]

- Analog reference level

This sets the reference level at the analog stage.

Command type: SET, GET, NOTIFY

Key	DEVICE/REFLEVEL/ANALOG	
Value	6	+6 [dBu]
	4	+4 [dBu]
	0	0[dBu]

- ID

This sets the ID.

Command type: SET, GET, NOTIFY

Key	DEVICE/UNITID	
Value	0 ~ 255	1 step

- Headroom

This sets the headroom used when showing meters.

Command type: SET, GET, NOTIFY

Key	DEVICE/HEADROOM	
Value	20	-20 [dBFS]
	18	-18 [dBFS]
	16	-16 [dBFS]
	14	-14 [dBFS]
	9	-9 [dBFS]
	REFLEVEL	This conforms to DEVICE/REFLEVEL/DIGITAL

- Stop voltage

This sets the stop voltage when operating with DC power supply.

Command type: SET, GET, NOTIFY

Key	BATTERY/VOLT/MIN	
Value	0.0 - 27.0	[V] 0.1V step



- Alert voltage

This sets the alert voltage when operating with DC power supply.

Command type: SET, GET, NOTIFY

Key	BATTERY/VOLT/ALERT	
Value	0.0 - 27.0	[V] 0.1V step

- Current voltage

This acquires the voltage of the connected DC power supply.

Command type: GET, NOTIFY

Key	BATTERY/VOLT/CURRENT	
Value	0.0 - 30.0	[V] 0.1V step

- Alert status

This checks whether the voltage of the connected DC power supply is below the alert voltage.

Command type: GET, NOTIFY

Key	BATTERY/ALERT/STATUS	
Value	OFF	It is above the alert voltage.
	ON	It is below the alert voltage.

- Alert permission

This sets whether notification is provided about BATTERY/ALERT/STATUS.

Command type: SET, GET, NOTIFY

Key	BATTERY/ALERT/PERMIT	
Value	OFF	Notification will not occur.
	ON	Notification will occur.

- LED brightness

This sets the LED brightness of the controlled device (SB-16D).

Command type: SET, GET, NOTIFY

Key	LED/BRIGHT	
Value	0 (unlit) – 3	1 step

## 5.5 Network

- Network password

This sets the password used to connect to the controlled device (SB-16D) from the network.

Command type: SET, GET, NOTIFY

Key	NETWORK/PASS	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Network DHCP enable

This turns the DHCP function on/off.

Command type: SET, GET, NOTIFY

Key	NETWORK/DHCP/ENABLE	
Value	OFF	DHCP off
	ON	DHCP on

- Network DHCP IP address

This acquires the IP address set by DHCP.

Command type: GET, NOTIFY

Key	NETWORK/IP	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10

- Network DHCP subnet address

This acquires the subnet address set by DHCP.

Command type: GET, NOTIFY

Key	NETWORK/DHCP/SUB	
Value	xxx.xxx.xxx.xxx	Ex. 255.255.255.0

- Network DHCP default gateway IP address

This acquires the default gateway address set by DHCP.

Command type: GET, NOTIFY

Key	NETWORK/DHCP/GATE	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.1

- Network IP address

When DHCP is off, use this to set the IP address.

Command type: SET, GET, NOTIFY

Key	NETWORK/IP	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10

- Network subnet address

When DHCP is off, use this to set the subnet address.

Command type: SET, GET, NOTIFY

Key	NETWORK/SUB	
Value	xxx.xxx.xxx.xxx	Ex. 255.255.255.0

- Network default gateway address

When DHCP is off, use this to set the default gateway address.

Command type: SET, GET, NOTIFY

Key	NETWORK/GATE	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.1

- Network MAC address

Use this to acquire the MAC address of the controlled device (SB-16D).

Command type: GET

Key	NETWORK/MAC	
Value	xxxxxxxxxxxx	Ex. 00022E821710

## 5.6 Priority

- Device name having priority

This acquires the name of the device that has control privileges.

This acquires the name of the device that has control privileges.

Command type: SET, GET, NOTIFY

Key	PRIORITY/ID	
Value	UTF-8 character string of 32 bytes or less inside quotation marks ("(0x22))	

- Priority request

If control privileges for a controlled device (SB-16D) are requested from a different external controller, the device that has control privileges will be notified that control has been requested.

Command type: NOTIFY

Key	PRIORITY/ID_REQUEST	
Value	UTF-8 character string of 32 bytes or less inside quotation marks ("(0x22))	

- Priority response

After the device that has control privileges receives the PRIORITY/ID\_REQUEST, set this to OK to transfer control privileges or to NG to deny.

Command type: SET, GET, NOTIFY

Key	PRIORITY/SWITCH	
Value	OK	Transfer control privileges.
	NG	Deny transfer of control privileges.

- Primary IP address of device having priority

This acquires the IP address of the device that has control privileges.

Note: If both Primary and Secondary are enabled and the Primary IP address is valid, that valid IP address will be acquired.

Command type: GET

Key	PRIORITY/NETWORK/IP/PRI	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10

## 5.7 Dante information

- Manufacturer name

This acquires the name of the manufacturer.

Command type: GET

Key	DANTE/INFO/MANUFACTURE	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Model name

This acquires the model name of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/MODELNAME	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Program version

This acquires the program version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/PROVER	
Value	X.X.X	Ex. 1.0.0

- Software version

This acquires the software version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/SOFTVER	
Value	X.X.X	Ex. 1.0.0

- Firmware version

This acquires the firmware version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/FIRMVER	
Value	X.X.X	Ex. 1.0.0

- Dante model

This acquires the firmware version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/DANTEMODEL	
Value	UTF-8 character string of 31 bytes or less inside quotation marks ("(0x22))	

- Dante firmware version

This acquires the Dante firmware version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/ DANTEFIRM	
Value	X.X.X.X	Ex. 1.0.0.0

- Dante hardware version

This acquires the Dante hardware version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/HARDWARE	
Value	X.X.X.X	Ex. 1.0.0.0

- Dante ROM version

This acquires the Dante ROM version number of the controlled device (SB-16D).

Command type: GET

Key	DANTE/INFO/ROM	
Value	X.X.X	Ex. 1.0.0

## 5.8 Dante network

- Apply execution

SET is necessary at the end in order to change parameters related to the Dante Network of the controlled device (SB-16D)

Command type: SET

Key	DANTE/NETWORK/ APPLY	
Value	EXE	

- Redundant

This sets redundancy for the Dante network.

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/SWITCH	
Value	REDUNDANT	Redundant mode
	SWITCHED	Switched mode

- Dante primary network DHCP enable

This turns on/off the DHCP function for the Dante network (primary).

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/DHCP/PRI	
Value	OFF	DHCP off
	ON	DHCP on

- Dante secondary network DHCP enable

This turns on/off the DHCP function for the Dante network (secondary).

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/DHCP/SEC	
Value	OFF	DHCP off
	ON	DHCP on

- Current Dante network (primary) IP address

This acquires the IP address of the current Dante network (primary).

Command type: GET, NOTIFY

Key	DANTE/NETWORK/CURR/IP/PRI	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10

- Current Dante network (secondary) IP address

This acquires the IP address of the current Dante network (secondary).

Command type: GET, NOTIFY

Key	DANTE/NETWORK/CURR/IP/SEC	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10

- Current Dante network (primary) subnet address

This acquires the subnet address of the current Dante network (primary).

Command type: GET, NOTIFY

Key	DANTE/NETWORK/CURR/SUB/PRI	
Value	xxx.xxx.xxx.xxx	Ex. 255.255.255.0

- Current Dante network (secondary) subnet address

This acquires the subnet address of the current Dante network (secondary).

Command type: GET, NOTIFY

Key	DANTE/NETWORK/CURR/SUB/SEC	
Value	xxx.xxx.xxx.xxx	Ex. 255.255.255.0

- Static Dante network (primary) IP address

This sets the STATIC IP address of the Dante network (primary).

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/STATIC/IP/PRI	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10

- Static Dante network (secondary) IP address

This sets the STATIC IP address of the Dante network (secondary).

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/ STATIC/IP/SEC	
Value	xxx.xxx.xxx.xxx	Ex. 192.168.0.10



- Static Dante network (primary) subnet address

This sets the STATIC subnet address of the Dante network (primary).

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/ STATIC/SUB/PRI	
Value	xxx.xxx.xxx.xxx	Ex. 255.255.255.0

- Static Dante network (secondary) subnet address

This sets the STATIC subnet address of the Dante network (secondary).

Command type: SET, GET, NOTIFY

Key	DANTE/NETWORK/STATIC/SUB/SEC	
Value	xxx.xxx.xxx.xxx	Ex. 255.255.255.0

- Dante network (primary) MAC address

This acquires the MAC address of the Dante network (primary).

Command type: GET

Key	DANTE/NETWORK/MAC/PRI	
Value	Xxxxxxxxxxxx	Ex. 00022E821710

- Dante network (secondary) MAC address

This acquires the MAC address of the Dante network (secondary).

Command type: GET

Key	DANTE/NETWORK/MAC/SEC	
Value	xxxxxxxxxxxx	Ex. 00022E821710

## 5.9 Meter

- Meter interval

This sets the transmission interval for meter data. If this command is sent, the controlled device (SB-16D) will keep sending meter data for the time set with Meter total time. For details about data sent from the controlled device (SB-16D), see Appendix 6.4 Meter value list.

Command type: SET

Key	METER/INTERVAL	
Value	100 - TOTAL	[msec], 1msec step

- Meter total time

This sets the transmission time for meter data. If this command is sent, the controlled device (SB-16D) will keep sending meter data for the time set. For details about data sent from the controlled device (SB-16D), see Appendix 6.4 Meter value list.

Command type: SET

Key	METER/TOTAL	
Value	0(Off) – 86400000	[msec], 1msec step

### 5.10 Preset

- Current preset

This acquires the current preset number.

Command type: GET, NOTIFY

Key	PRESET/CUR	
Value	X	Preset number (1 – 10)

- Load preset

This applies the specified preset.

Command type: SET

Key	PRESET/LOAD	
Value	X	Preset number (1 – 10)

- Save preset

This saves the current settings to the specified preset.

Command type: SET

Key	PRESET/SAVE	
Value	X	Preset number (1 – 10)

- Compare current settings and presets

This compares the current setting values with the specified preset

Command type: GET

Key	PRESET/CMP	
Value	SAME	No differences
	DIFF	Differences present

- Preset name

This changes the name of the current preset.

Command type: SET, GET, NOTIFY

Key	PRESET/NAME	
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Preset name

This changes the name of the specified preset.

Command type: SET, GET, NOTIFY

Key	PRESET/{p}/NAME	{p}: Preset number (1 – 10)
Value	UTF-8 character string of 96 bytes or less inside quotation marks ("(0x22))	

- Lock preset

This prevents editing of the specified preset.

Command type: SET, GET, NOTIFY

Key	PRESET/{p}/ LOCK	{p}: Preset number (1 – 10)
Value	OFF	Unlocked
	ON	Locked

- Copy Preset

This copies an existing preset to the specified preset.

Command type: SET

Key	PRESET/{p}/COPY	{p}: Source preset number (1 – 10)
Value	X	Destination preset number (1 – 10)

- Delete preset

This deletes the specified preset.

Command type: SET

Key	PRESET/{p}/CLEAR	{p}: Preset number (1 – 10)
Value	EXE	

- Preset cleared

This checks whether setting values have been saved in the specified preset.

Command type: GET

Key	PRESET/{p}/CLEARED	{p}: Preset number (1 – 10)
Value	TRUE	Nothing has been saved.
	FALSE	Something has been saved.

- Recall safe

This sets the Recall Safe function.

Command type: SET, GET, NOTIFY

Key	PRESET/IMPORTMODE	
Value	KEEP_NONE	Apply all changes
	KEEP_NAME	Apply all except Dante settings
	KEEP_NETWORK	Apply all except Network settings
	KEEP_ALL	Apply all except Dante and Network settings

## 6. Appendix

### 6.1 Behavior during identification

Each time the command is sent, the controlled device (SB-16D) will turn on/off its identification indicator.

### 6.2 Reference levels

Depending on the Digital Reference Level setting, selection of the Analog Reference Level might not be possible. Refer to the table below for combinations.

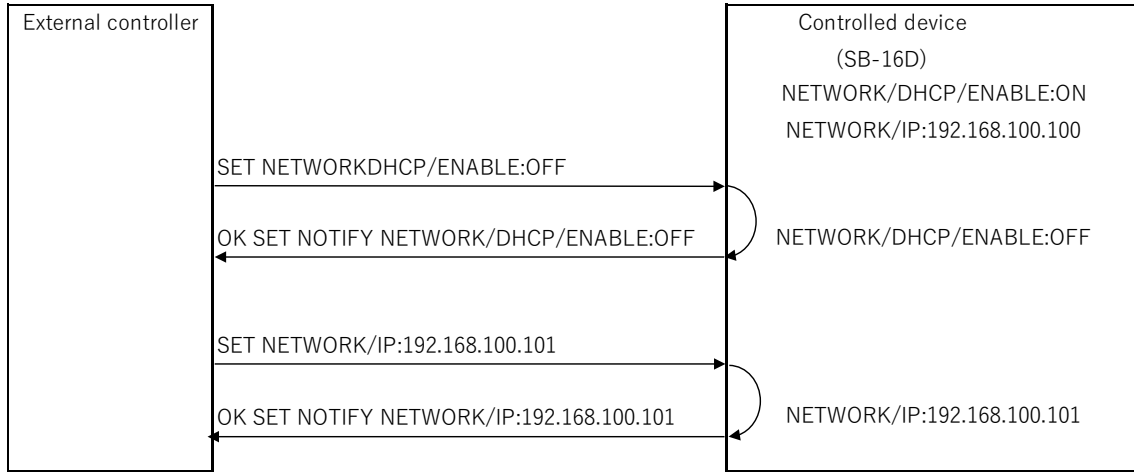
		Analog Reference Level		
		+6dBu	+4dBu	0dBu
Digital Reference Level	-9dBFS	○	×	×
	-14dBFS	×	○	×
	-16dBFS	×	○	×
	-18dBFS	×	○	○
	-20dBFS	×	○	○

○: Selectable, ×: Not selectable

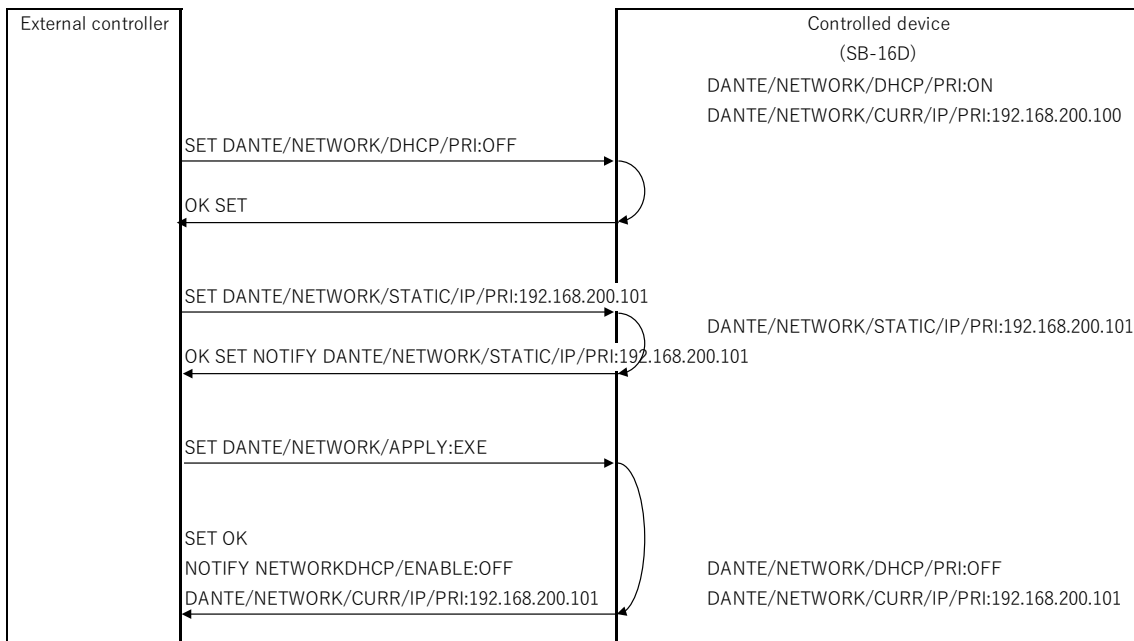
### 6.3 Setting parameters related to networks

Setting procedures are different for NETWORK and DANTE/NETWORK.

NETWORK settings are applied immediately with a SET command. DANTE/NETWORK settings are not applied immediately even if individual parameters are SET. They are applied by using the SET command with DANTE/NETWORK/APPLY. Refer to the following sequence illustrations for details.



**NETWORK parameter setting process**



**DANTE/NETWORK parameter setting process**

#### 6.4 Meter value list

Note: If values for Data [dB] and Value other than those in the list are needed, they can be calculated using the formulas below.

Value	Data[dB]	Value	Data[dB]	Value	Data[dB]
0x0041	-60.0	0x9C0A	-4.3	0xC904	-2.1
0x0104	-48.0	0x9DD8	-4.2	0xCB58	-2.0
0x1026	-24.0	0x9FAC	-4.1	0xCDB3	-1.9
0x203A	-18.0	0xA185	-4.0	0xD014	-1.8
0x404D	-12.0	0xA364	-3.9	0xD27D	-1.7
0x804D	-6.0	0xA548	-3.8	0xD4ED	-1.6
0x81C9	-5.9	0xA732	-3.7	0xD764	-1.5
0x834A	-5.8	0xA922	-3.6	0xD9E3	-1.4
0x84CF	-5.7	0xAB17	-3.5	0xDC69	-1.3
0x8659	-5.6	0xAD13	-3.4	0xDEF6	-1.2
0x87E7	-5.5	0xAF14	-3.3	0xE18B	-1.1
0x897A	-5.4	0xB11B	-3.2	0xE428	-1.0
0x8B11	-5.3	0xB328	-3.1	0xE6CC	-0.9
0x8CAE	-5.2	0xB53B	-3.0	0xE978	-0.8
0x8E4F	-5.1	0xB754	-2.9	0xEC2C	-0.7
0x8FF5	-5.0	0xB973	-2.8	0xEEE8	-0.6
0x919F	-4.9	0xBB99	-2.7	0xF1AD	-0.5
0x934F	-4.8	0xBDC5	-2.6	0xF479	-0.4
0x9504	-4.7	0xBFF8	-2.5	0xF74E	-0.3
0x96BD	-4.6	0xC231	-2.4	0xFA2B	-0.2
0x987C	-4.5	0xC471	-2.3	0xFD10	-0.1
0x9A40	-4.4	0xC6B7	-2.2	0xFFFF	0.0

$$\text{Data[dB]} = 20 * \log_{10} (\text{Value (base 10)} / 0xFFFF)$$

$$\text{Value (base 10)} = (10 ^ {(\text{Data[dB]} / 20)}) * 0xFFFF$$



## 6.5 Notes about control privileges

When PRIORITY/ID is empty, all remote controllers that are logged in can control the device (Open Control). If Device name is SET for PRIORITY/ID, SET commands will no longer be able to be received from other remote controllers (control privilege acquisition).

If

SET PRIORITY/ID: "Device Name"

is transmitted when a different remote controller currently has control privileges, a

NOTIFY PRIORITY/ID\_REQUEST

will be issued to that device.

To transfer control privileges, send

SET PRIORITY/SWITCH: OK

from the remote controller that currently has the control privileges. Doing this will issue

NOTIFY PRIORITY/SWITCH: OK

to the remote controller that requested control privileges. After receiving this, send

SET DEVICE/LOGINNAME: "Device Name"

This enables the acquisition of control privileges.

To not transfer control privileges, send

SET PRIORITY/SWITCH: NG

from the remote controller that currently has the control privileges. Doing this will issue

NOTIFY PRIORITY/SWITCH: NG

to the remote controller that requested control privileges.

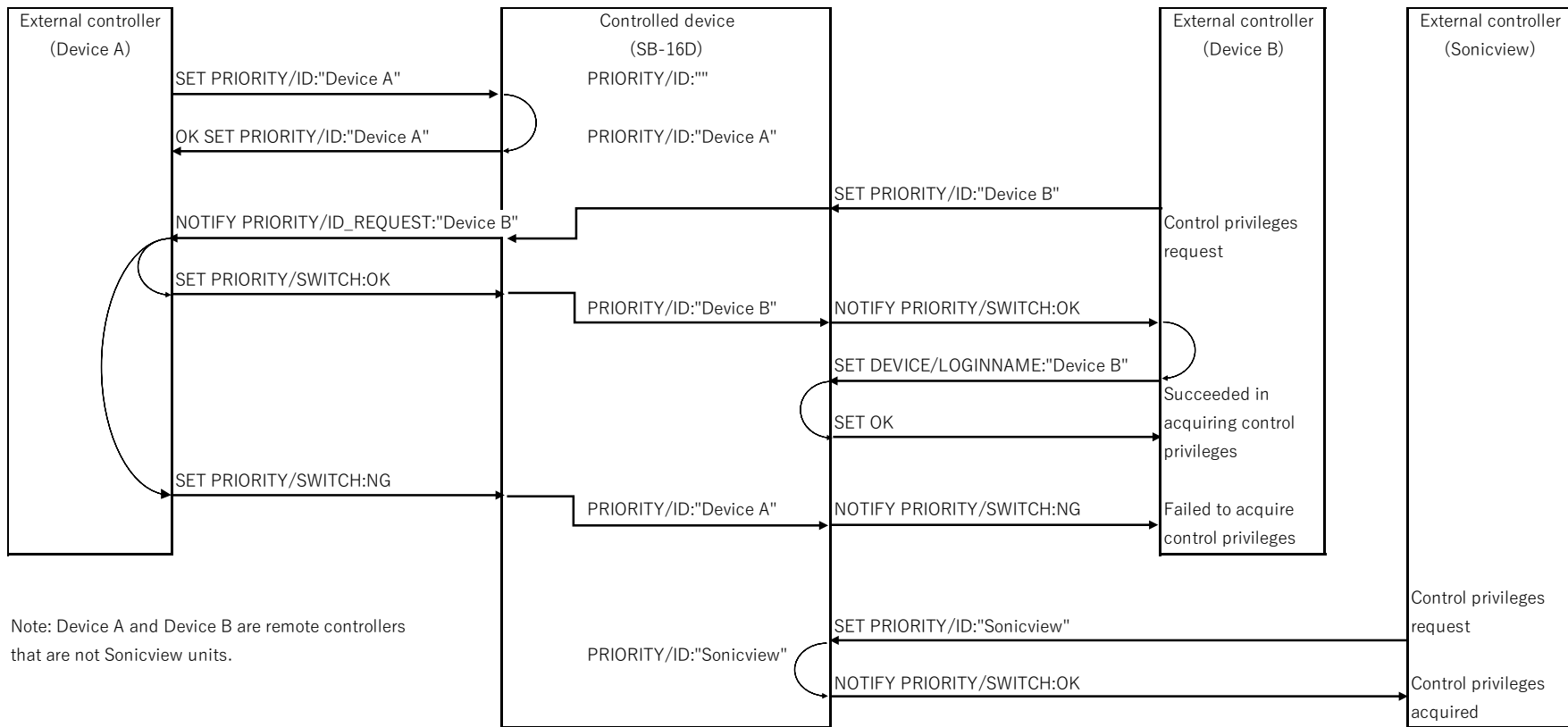
However, if a Sonicview requests control privileges when another type of remote controller has the control privileges,

NOTIFY PRIORITY/SWITCH: OK

will be issued to that device instead of

NOTIFY PRIORITY/ID\_REQUEST: "Sonicview"

Refer to the following sequence diagram for an overview of control transfer.



Note: Device A and Device B are remote controllers that are not Sonicview units.

7. Update history

DATE	Version	CONTENTS
2023/7/27	1.01	First edition published