



Introduction

The following guide outlines the TCP Protocol including commands that are available for all Dante Connect Series and Network Connect Series models. There are more advanced commands available which are not listed. Please email techsupport@leaprofessional.com for assistance with advanced API integration.

Nomenclature

element - an item in the amplifier than can be controlled and/or monitored

control - term applied to an element that can be controlled and monitored, i.e. read/write

sensor - term applied to an element that can be monitored only (i.e. read-only)

object - a logical grouping of elements (see websocket API doc)

Supported commands (case-insensitive)

GET <object/element> - get an element's value (control or sensor); normal response = element's value

SET <object/element> <value> - set an element's value (controls only); normal response = OK

SUBSCRIBE <object/element>- sign up for notifications of changes to an element's value (control or sensor); normal response = element's value

UNSUBSCRIBE <object/element> - cancel a subscription; normal response = OK

Details

- a) uses TCP port 4321
- b) Any LEA Connect Firmware version 1.1.0.X and higher supports TCP Communication. Firmware versions prior to this only support websocket protocol.
- b) commands and responses are newline (i.e. '\n', 0x0a) delimited <-- THIS IS IMPORTANT! All messages end with '\n'
- c) all commands generate response messages
- d) subscriptions generate additional, asynchronous messages (of course, subscriptions require a persistent connection)
- e) illegal commands generate error messages (i.e. response beginning with 'error')
- f) out-of-range numeric values will be clamped (i.e. no error response; this is the same behavior as websocket API)
- g) string/enum values containing spaces must be enclosed in double-quotes



Example commands with responses

- a) To get Dante On Ramp Channel 1 setting:

Command: get /amp/channels/1/inputSelector/danteOnRamp\n

Amp Response: /amp/channels/1/inputSelector/danteOnRamp "Post Crossover"\n

- b) Set channel 1 primary input fader level to -3.0dB:

Command: set /amp/channels/1/inputSelector/primaryFader -3.0\n

Amp Response: OK\n

- c) Subscribe to channel 1 input level:

Command: subscribe /amp/channels/1/levels/level_db\n

Amp Response: /amp/channels/1/levels/level_db -52.78131103515625\n

- d) Unsubscribe to channel 1 input level:

Command: unsubscribe /amp/channels/1/levels/level_db\n

Amp Response: OK\n

- e) If a command is sent that the amplifier does not recognize:

Command Sent: set /amp/channels/1/inputSelector/danteOnRamp "Post Toasties"\n

Amp Response: error: unsupported value: Post Toasties (/amp/channels/1/inputSelector/danteOnRamp)\n

- f) If a command is sent that is not in the proper syntax/format:

Command: get something-that-doesn't-exist\n

Amp Response: error: cannot parse - 'get something-that-doesn't-exist'\n

- g) If you forget to put \n at the end of your command:

Command: message that's missing delimiter

Amp Response: (no response)

Security

All TCP communication to and from the LEA Connect Series Amplifier is on port 4321. The amplifier will only send and receive API commands for the amplifier's control and monitoring.

Example Sessions

Subscribe /amp/channels/1/levels/level_db

/amp/channels/1/levels/level_db -52.78131103515625

/amp/channels/1/levels/level_db -53.08610916137695

/amp/channels/1/levels/level_db -52.2020378112793

/amp/channels/1/levels/level_db -52.78131103515625

/amp/channels/1/levels/level_db -51.658992767333984

/amp/channels/1/levels/level_db -52.2020378112793



/amp/channels/1/levels/level_db -51.92626953125
/amp/channels/1/levels/level_db -51.658992767333984
/amp/channels/1/levels/level_db -51.92626953125
/amp/channels/1/levels/level_db -53.40199279785156
/amp/channels/1/levels/level_db -52.2020378112793
/amp/channels/1/levels/level_db -52.486846923828125
/amp/channels/1/levels/level_db -51.92626953125
/amp/channels/1/levels/level_db -52.486846923828125
/amp/channels/1/levels/level_db -53.08610916137695
/amp/channels/1/levels/level_db -52.2020378112793
/amp/channels/1/levels/level_db -53.08610916137695
/amp/channels/1/levels/level_db -51.658992767333984
/amp/channels/1/levels/level_db -52.78131103515625
/amp/channels/1/levels/level_db -53.08610916137695

Subscribe /amp/channels/1/levels/level_db

/amp/channels/2/levels/level_db -53.40199279785156
/amp/channels/1/levels/level_db -52.78131103515625
/amp/channels/2/levels/level_db -54.794715881347656
/amp/channels/1/levels/level_db -51.92626953125
/amp/channels/2/levels/level_db -53.72980499267578
/amp/channels/1/levels/level_db -52.78131103515625
/amp/channels/2/levels/level_db -54.425048828125
/amp/channels/2/levels/level_db -54.794715881347656
/amp/channels/1/levels/level_db -51.39969253540039
/amp/channels/2/levels/level_db -53.72980499267578
/amp/channels/1/levels/level_db -51.658992767333984
/amp/channels/1/levels/level_db -52.2020378112793
/amp/channels/2/levels/level_db -54.070472717285156
/amp/channels/1/levels/level_db -53.08610916137695
/amp/channels/2/levels/level_db -55.180816650390625
/amp/channels/1/levels/level_db -52.2020378112793
/amp/channels/2/levels/level_db -54.425048828125
/amp/channels/1/levels/level_db -52.78131103515625
/amp/channels/2/levels/level_db -54.794715881347656
/amp/channels/1/levels/level_db -52.486846923828125
/amp/channels/2/levels/level_db -54.425048828125
/amp/channels/1/levels/level_db -52.78131103515625
/amp/channels/2/levels/level_db -54.794715881347656
/amp/channels/1/levels/level_db -52.486846923828125
/amp/channels/2/levels/level_db -54.425048828125
/amp/channels/1/levels/level_db -51.92626953125
/amp/channels/2/levels/level_db -54.070472717285156



OPEN API – TCP Protocol

Rev 5. 09-21-2021

```
/amp/channels/1/levels/level_db -52.2020378112793  
/amp/channels/2/levels/level_db -54.425048828125  
/amp/channels/1/levels/level_db -52.486846923828125  
/amp/channels/1/levels/level_db -53.08610916137695  
/amp/channels/2/levels/level_db -55.180816650390625  
/amp/channels/1/levels/level_db -51.92626953125
```

unsubscribe /amp/channels/1/levels/level_db

```
/amp/channels/1/levels/level_db -52.78131103515625  
/amp/channels/1/levels/level_db -52.2020378112793  
/amp/channels/2/levels/level_db -54.070472717285156  
OK  
/amp/channels/2/levels/level_db -54.794715881347656  
/amp/channels/2/levels/level_db -54.070472717285156  
/amp/channels/2/levels/level_db -54.794715881347656  
/amp/channels/2/levels/level_db -53.72980499267578  
/amp/channels/2/levels/level_db -55.180816650390625  
/amp/channels/2/levels/level_db -54.070472717285156
```

unsubscribe /amp/channels/2/levels/level_db

```
/amp/channels/2/levels/level_db -55.58488464355469  
OK  
subscribe /amp/channels/1/inputSelector/danteOnRamp  
/amp/channels/1/inputSelector/danteOnRamp "Analog Input"  
set /amp/channels/1/inputSelector/danteOnRamp "Post Crossover"  
OK  
/amp/channels/1/inputSelector/danteOnRamp "Post Crossover"  
get /amp/channels/1/inputSelector/danteOnRamp  
/amp/channels/1/inputSelector/danteOnRamp "Post Crossover"  
get /amp/channels/2/inputSelector/danteOnRamp  
/amp/channels/2/inputSelector/danteOnRamp "Analog Input"  
set /amp/channels/1/inputSelector/danteOnRamp "Post Toasties"  
error: unsupported value: Post Toasties (/amp/channels/1/inputSelector/danteOnRamp)  
set /amp/channels/1/inputSelector/primaryFader -80.0  
OK  
/amp/channels/1/inputSelector/primaryFader -80.0
```



OPEN API – TCP Protocol

Rev 5. 09-21-2021

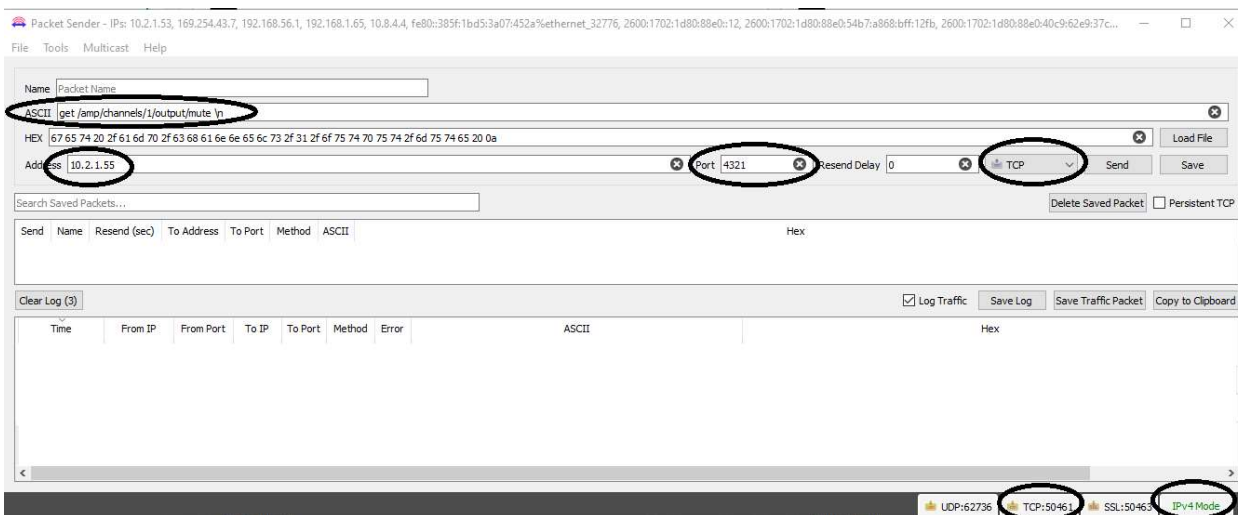
Examples with Packet Sender

Packet Sender is a free open source cross-platform application that is widely used to send and receive TCP messages on a specified port. A free download is available at <http://www.packetsender.com>.

Below are some screen shots to help you use packet sender successfully and several examples.

Packet Sender Setup

- In the bottom right corner, make sure it is in IPv4 Mode (not IPv6 Mode)
- In the bottom right corner, make sure TCP is enabled
- Enter the Port number "4321"
- On the same line select TCP from the dropdown list, should be TCP by default
- Enter the IP address of the amplifier to receive the message
- Enter the ASCII message
 - get/set/subscribe/unsubscribe
 - url of the element
 - value if method is set
 - All messages must be terminated with a new line "\n"
- Press "Send" button when finished





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Example: Get Ch1 Mute

Command: get /amp/channels/1/output/mute\n

Packet Sender - IPs: 10.2.1.53, 169.254.43.7, 192.168.56.1, 192.168.1.65, 10.8.4.4, fe80::385f:1bd5:3a07:452a%ethernet_32776, 2600:1702:1d80:88e0:12, 2600:1702:1d80:88e0:54b7:a868:bff:12fb, 2600:1702:1d80:88e0:40c9:62e9:37c...

Name: Packet Name

ASCII: get /amp/channels/1/output/mute\n

HEX: 67 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 6d 75 74 65 0a

Address: 10.2.1.55 Port: 4321 Resend Delay: 0 TCP Send Save

Search Saved Packets...

Send	Name	Resend (sec)	To Address	To Port	Method	ASCII	Hex		
08:18:37.991			10.2.1.55	4321	You	50263	TCP		
08:18:37.890			10.2.1.55	4321	You	50263	TCP	/amp/channels/1/output/mute false\n	2F 61 6D 70 2F 63 68 61 6E 6E 65 6C 73 2F 31 2F 6F 75 74 70 75 74 2F 6D 75 74 65 0A
08:18:37.885			You	50263	10.2.1.55	4321	TCP	get /amp/channels/1/output/mute\n	67 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 6d 75 74 65 0a

Clear Log (3) Log Traffic Save Log Save Traffic Packet Copy to Clipboard

UDP:64445 TCP:49809 SSL:49810 IPv4 Mode

Example: Set Ch1 Mute

Command: set /amp/channels/1/output/mute true\n

Packet Sender - IPs: 10.2.1.53, 169.254.43.7, 192.168.56.1, 192.168.1.65, 10.8.4.4, fe80::385f:1bd5:3a07:452a%ethernet_32776, 2600:1702:1d80:88e0:12, 2600:1702:1d80:88e0:54b7:a868:bff:12fb, 2600:1702:1d80:88e0:40c9:62e9:37c...

Name: Packet Name

ASCII: set /amp/channels/1/output/mute true\n

HEX: 73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 6d 75 74 65 0a

Address: 10.2.1.55 Port: 4321 Resend Delay: 0 TCP Send Save

Search Saved Packets...

Send	Name	Resend (sec)	To Address	To Port	Method	ASCII	Hex		
08:20:46.299			10.2.1.55	4321	You	50308	TCP		
08:20:46.100			10.2.1.55	4321	You	50308	TCP	OK\n	4F 4B 0A
08:20:46.095			You	50308	10.2.1.55	4321	TCP	set /amp/channels/1/output/mute true\n	73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 6d 75 74 65 0a

Clear Log (3) Log Traffic Save Log Save Traffic Packet Copy to Clipboard

UDP:64445 TCP:49809 SSL:49810 IPv4 Mode



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Example: Set Ch2 output Fader to -42.0dB

Command: set /amp/channels/1/output/fader -42.0\n

Packet Sender - IPs: 10.2.1.53, 169.254.43.7, 192.168.56.1, 192.168.1.65, 10.8.4.4, fe80::385f:1bd5:3a07:452a%ethernet_32776, 2600:1702:1d80:88e0:12, 2600:1702:1d80:88e0:54b7:a868:bff:12fb, 2600:1702:1d80:88e0:40c9:62e9:37c...

File Tools Multicast Help

Name Packet Name

ASCII set /amp/channels/1/output/fader -42.0\n

HEX 73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 66 61 64 65 72 20 2d 34 32 2e 30 0a

Address 10.2.1.55 Port 4321 Resend Delay 0 TCP Send Save

Search Saved Packets... Delete Saved Packet Persistent TCP

Send	Name	Resend (sec)	To Address	To Port	Method	ASCII	Hex
08:21:58.156	10.2.1.55	4321	You	50322	TCP		
08:21:57.959	10.2.1.55	4321	You	50322	TCP	OK\n	4F 4B 0A
08:21:57.953	You	50322	10.2.1.55	4321	TCP	set /amp/channels/1/output/fader -42.0\n	73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 66 61 64 65 72 20 2d 34 ...

Clear Log (3) Log Traffic Save Log Save Traffic Packet Copy to Clipboard

Time	From IP	From Port	To IP	To Port	Method	Error	ASCII	Hex
08:21:58.156	10.2.1.55	4321	You	50322	TCP			
08:21:57.959	10.2.1.55	4321	You	50322	TCP	OK\n		4F 4B 0A
08:21:57.953	You	50322	10.2.1.55	4321	TCP		set /amp/channels/1/output/fader -42.0\n	73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 31 2f 6f 75 74 70 75 74 2f 66 61 64 65 72 20 2d 34 ...

UDP:64445 TCP:49809 SSL:49810 IPv4 Mode

Example: Set Ch3 Input Selector to Analog 1

Command: set /amp/channels/3/inputSelector/primary "Analog 1"\n

Packet Sender - IPs: 10.2.1.53, 169.254.43.7, 192.168.56.1, 192.168.1.65, 10.8.4.4, fe80::385f:1bd5:3a07:452a%ethernet_32776, 2600:1702:1d80:88e0:12, 2600:1702:1d80:88e0:54b7:a868:bff:12fb, 2600:1702:1d80:88e0:40c9:62e9:37c...

File Tools Multicast Help

Name Packet Name

ASCII set /amp/channels/3/inputSelector/primary "Analog 1"\n

HEX 73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 33 2f 69 6e 70 75 74 53 65 6c 65 63 74 6f 72 2f 70 72 69 6d 61 72 79 20 22 41 6e 61 6c 6f 67 20 31 22 0a

Address 10.2.1.55 Port 4321 Resend Delay 0 TCP Send Save

Search Saved Packets... Delete Saved Packet Persistent TCP

Send	Name	Resend (sec)	To Address	To Port	Method	ASCII	Hex
08:24:18.044	10.2.1.55	4321	You	50367	TCP		
08:24:17.861	10.2.1.55	4321	You	50367	TCP	OK\n	4F 4B 0A
08:24:17.855	You	50367	10.2.1.55	4321	TCP	set /amp/channels/3/inputSelector/primary "Analog 1"\n	73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 33 2f 69 6e 70 75 74 53 65 6c 65 63 74 6f 72 2f 70 ...

Clear Log (3) Log Traffic Save Log Save Traffic Packet Copy to Clipboard

Time	From IP	From Port	To IP	To Port	Method	Error	ASCII	Hex
08:24:18.044	10.2.1.55	4321	You	50367	TCP			
08:24:17.861	10.2.1.55	4321	You	50367	TCP	OK\n		4F 4B 0A
08:24:17.855	You	50367	10.2.1.55	4321	TCP		set /amp/channels/3/inputSelector/primary "Analog 1"\n	73 65 74 20 2f 61 6d 70 2f 63 68 61 6e 6e 65 6c 73 2f 33 2f 69 6e 70 75 74 53 65 6c 65 63 74 6f 72 2f 70 ...

UDP:64445 TCP:49809 SSL:49810 IPv4 Mode



Supported objects/elements (case-sensitive)

Object URL Scheme

Below is a list of available base object URL destinations

"x" is the desired channel number

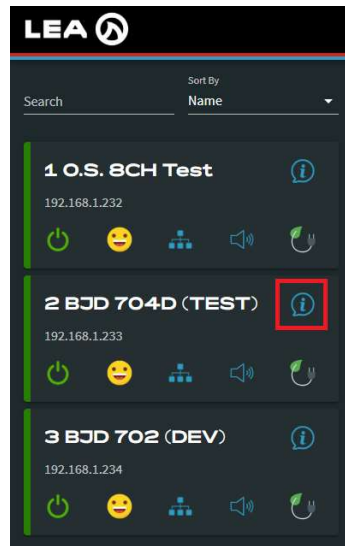
"#" is the desired input number

"*" is the desired filter number

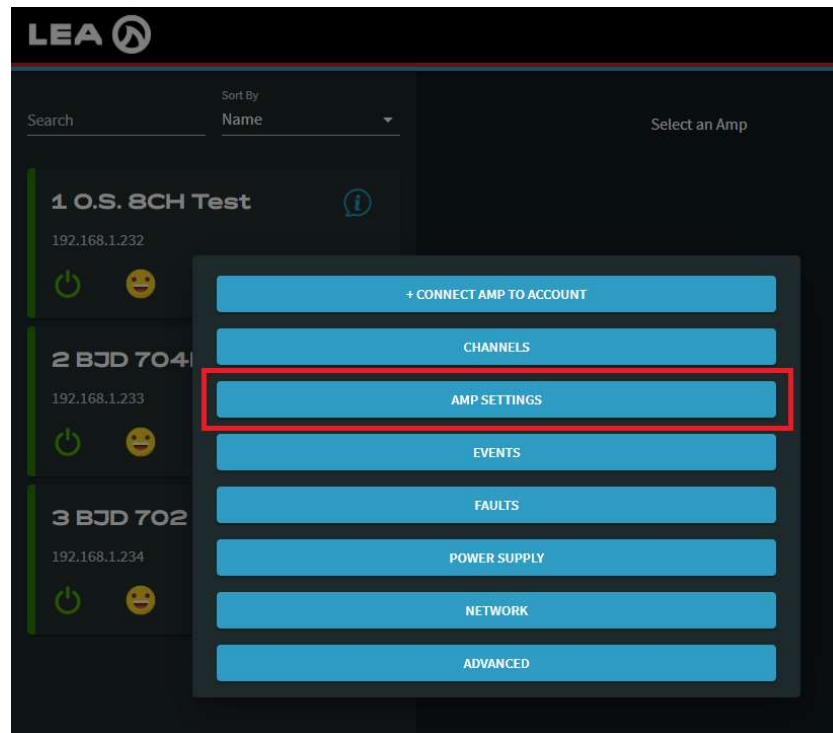
/amp/deviceInfo/
/amp/powerSupply/
/amp/autoStandby/
/amp/signalGenerator/
/amp/inputs/analog/#/
/amp/channels/x/inputSelector/
/amp/channels/x/crossover/
/amp/channels/x/outputEqFilters/*/
/amp/channels/x/rmsLimiter/
/amp/channels/x/peakLimiter/
/amp/channels/x/output/
/amp/channels/x/levels/
/amp/channels/x/loadMonitor/

Amplifier Device Info

Click on the amplifier info button



Click on Amp Settings to view the relevant page for this API section





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Device Name

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/deviceName

Values: any text up to 64 characters

Example: get /amp/deviceInfo/deviceName\n

- Response: /amp/deviceInfo/deviceName "2 BJD 704D (TEST)"\n
- The command asked for the amplifiers device name and got the response 2 BJD 704D (TEST)

The screenshot displays the LEA control interface. On the left, a list of devices is shown, each with a status icon, name, and IP address. The second device, '2 BJD 704D (TEST)' with IP 192.168.1.233, is highlighted with a blue border. On the right, a 'Settings' panel is visible, containing various configuration fields. The 'Device Name' field is highlighted with a red border and contains the text '2 BJD 704D (TEST)'. Other settings include Venue Name (LEA Office), Model ID (Connect Series Model 704D), Asset Tag Number (BJD-704D-0001), Installer Name (Bradley Drummond), Installer Contact Info (1-800-123-4567 email@email.com), Date of Installation (February 16, 2020), Rack Name (Desk 1), and Rack Position (RU 1).

Device Name	IP Address
1 O.S. 8CH Test	192.168.1.232
2 BJD 704D (TEST)	192.168.1.233
3 BJD 702 (DEV)	192.168.1.234

Settings	
Device Name	2 BJD 704D (TEST)
Venue Name	LEA Office
Model ID	Connect Series Model 704D
Asset Tag Number	BJD-704D-0001
Installer Name	Bradley Drummond
Installer Contact Info	1-800-123-4567 email@email.com
Date of Installation	February 16, 2020
Rack Name	Desk 1
Rack Position	RU 1



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Venue Name

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/venueName

Values: any text up to 64 characters

Example: get /amp/deviceInfo/venueName\n

- Response: /amp/deviceInfo/venueName "LEA Office"\n
- The command asked for the amplifiers device name and got the response LEA Office

The screenshot displays the LEA control interface. On the left, there is a list of three devices: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). Each device entry includes status icons (power, smiley face, network, speaker, and leaf) and an information icon. On the right, the 'Settings' panel is visible, containing fields for Device Name, Venue Name, Model ID, Asset Tag Number, Installer Name, Installer Contact Info, Date of Installation, Rack Name, and Rack Position. The 'Venue Name' field is highlighted with a red rectangular border and contains the text 'LEA Office'.

Device Name	Venue Name	Model ID	Asset Tag Number	Installer Name	Installer Contact Info	Date of Installation	Rack Name	Rack Position
2 BJD 704D (TEST)	LEA Office	Connect Series Model 704D	BJD-704D-0001	Bradley Drummond	1-800-123-4567 email@email.com	February 16, 2020	Desk 1	RU 1



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Model ID

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/modelID

Values: Amplifier Model

Example: get /amp/deviceInfo/modelID\n

- Response: /amp/deviceInfo/modelID "Connect Series Model 704D"\n
- The command asked for the amplifiers model ID and got the response Connect Series Model 704D

The screenshot displays the LEA web interface. On the left, a list of devices is shown, each with a status bar containing icons for power, smiley face, network, speaker, and leaf. The second device, '2 BJD 704D (TEST)', is highlighted with a blue border. On the right, a 'Settings' panel is visible, containing fields for Device Name, Venue Name, Model ID, Asset Tag Number, Installer Name, Installer Contact Info, Date of Installation, Rack Name, and Rack Position. The 'Model ID' field is highlighted with a red border and contains the text 'Connect Series Model 704D'.

Device Name	Venue Name	Model ID	Asset Tag Number	Installer Name	Installer Contact Info	Date of Installation	Rack Name	Rack Position
2 BJD 704D (TEST)	LEA Office	Connect Series Model 704D	BJD-704D-0001	Bradley Drummond	1-800-123-4567 email@email.com	February 16, 2020	Desk 1	RU 1



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Asset Tag Number

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/assetTagNumber

Values: any text up to 64 characters

Example: get /amp/deviceInfo/assetTagNumber\n

- Response: /amp/deviceInfo/assetTagNumber "BJD-704D-0001"\n
- The command asked for the amplifiers asset tag number and got the response BJD-704D-0001

The screenshot displays the LEA web interface. On the left, a list of devices is shown with columns for 'Search' and 'Sort By Name'. The second device, '2 BJD 704D (TEST)', is highlighted with a blue border. On the right, the 'Settings' panel is visible, showing various fields for device configuration. The 'Asset Tag Number' field is highlighted with a red box and contains the value 'BJD-704D-0001'. Other settings include Device Name (2 BJD 704D (TEST)), Venue Name (LEA Office), Model ID (Connect Series Model 704D), Installer Name (Bradley Drummond), Installer Contact Info (1-800-123-4567 email@email.com), Date of Installation (February 16, 2020), Rack Name (Desk 1), and Rack Position (RU 1).



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Installer Name

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/installerName

Values: any text up to 64 characters

Example: get /amp/deviceInfo/installerName\n

- Response: /amp/deviceInfo/installerName "Bradley Drummond"\n
- The command asked for the amplifiers installer name and got the response Bradley Drummond

The screenshot displays the LEA web interface. On the left, a list of devices is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' device is selected. On the right, the 'Settings' panel for this device is visible. The 'Installer Name' field is highlighted with a red box and contains the text 'Bradley Drummond'. Other settings include Device Name '2 BJD 704D (TEST)', Venue Name 'LEA Office', Model ID 'Connect Series Model 704D', Asset Tag Number 'BJD-704D-0001', Installer Contact Info '1-800-123-4567 email@email.com', Date of Installation 'February 16, 2020', Rack Name 'Desk 1', and Rack Position 'RU 1'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Installer Contact Info

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/installerContactInfo

Values: any text up to 64 characters

Example: get /amp/deviceInfo/installerContactInfo\n

- Response: /amp/deviceInfo/installerContactInfo "1-800-123-4567 email@email.com"\n
- The command asked for the amplifier's installer contact info and got the response 1-800-123-4567 email@email.com

The screenshot displays the LEA web interface. On the left, a list of devices is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' device is selected. On the right, the 'Settings' panel for this device is visible. The 'Installer Contact Info' field is highlighted with a red box, showing the value '1-800-123-4567 email@email.com'. Other settings include Device Name '2 BJD 704D (TEST)', Venue Name 'LEA Office', Model ID 'Connect Series Model 704D', Asset Tag Number 'BJD-704D-0001', Installer Name 'Bradley Drummond', Date of Installation 'February 16, 2020', Rack Name 'Desk 1', and Rack Position 'RU 1'.

Device Name	Venue Name	Model ID	Asset Tag Number	Installer Name	Installer Contact Info	Date of Installation	Rack Name	Rack Position
2 BJD 704D (TEST)	LEA Office	Connect Series Model 704D	BJD-704D-0001	Bradley Drummond	1-800-123-4567 email@email.com	February 16, 2020	Desk 1	RU 1



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Date of Installation

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/dateOfInstallation

Values: any text up to 64 characters

Example: get /amp/deviceInfo/dateOfInstallation\n

- Response: /amp/deviceInfo/dateOfInstallation "2020-02-16T20:47:00.000Z"\n
- The command asked for the amplifiers asset tag number and got the response February 16, 2020 time 20:47:00.000

The screenshot shows the LEA web interface with a dark theme. On the left, there is a list of three devices: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. Each device entry includes an IP address (192.168.1.232, 192.168.1.233, and 192.168.1.234 respectively) and a set of five status icons. The second device, '2 BJD 704D (TEST)', is highlighted with a blue border. On the right, the 'Settings' panel is visible, showing various configuration fields. The 'Date of Installation' field is highlighted with a red rectangular box and contains the text 'February 16, 2020'. Other settings include Device Name (2 BJD 704D (TEST)), Venue Name (LEA Office), Model ID (Connect Series Model 704D), Asset Tag Number (BJD-704D-0001), Installer Name (Bradley Drummond), Installer Contact Info (1-800-123-4567 email@email.com), Rack Name (Desk 1), and Rack Position (RU 1).



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Rack Name

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/rackName

Values: any text up to 64 characters

Example: set /amp/deviceInfo/rackName "Rack 1"\n

- Response: OK \n
- The command successfully set the amplifiers rack name to Rack 1

The screenshot displays the LEA control interface. On the left, a list of devices is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' device is highlighted with a blue border. On the right, the 'Settings' panel is visible, showing various configuration fields. The 'Rack Name' field is highlighted with a red border and contains the text 'Desk 1'.

Device Name	Venue Name	Model ID	Asset Tag Number	Installer Name	Installer Contact Info	Date of Installation	Rack Name	Rack Position
2 BJD 704D (TEST)	LEA Office	Connect Series Model 704D	BJD-704D-0001	Bradley Drummond	1-800-123-4567 email@email.com	February 16, 2020	Desk 1	RU 1



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Rack Position

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/deviceInfo/rackPosition

Values: any text up to 64 characters

Example: get /amp/deviceInfo/rackPosition\n

- Response: /amp/deviceInfo/rackPosition "RU 1"\n
- The command asked for the amplifiers rack position and got the response RU 1

The screenshot displays the LEA control interface. On the left, a list of devices is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' device is highlighted with a blue border. On the right, the 'Settings' panel for this device is visible, showing fields for Device Name, Venue Name, Model ID, Asset Tag Number, Installer Name, Installer Contact Info, Date of Installation, Rack Name, and Rack Position. The 'Rack Position' field is highlighted with a red border and contains the value 'RU 1'.

Device Name	Venue Name	Model ID	Asset Tag Number	Installer Name	Installer Contact Info	Date of Installation	Rack Name	Rack Position
2 BJD 704D (TEST)	LEA Office	Connect Series Model 704D	BJD-704D-0001	Bradley Drummond	1-800-123-4567 email@email.com	February 16, 2020	Desk 1	RU 1

Serial Number

Type: SENSOR

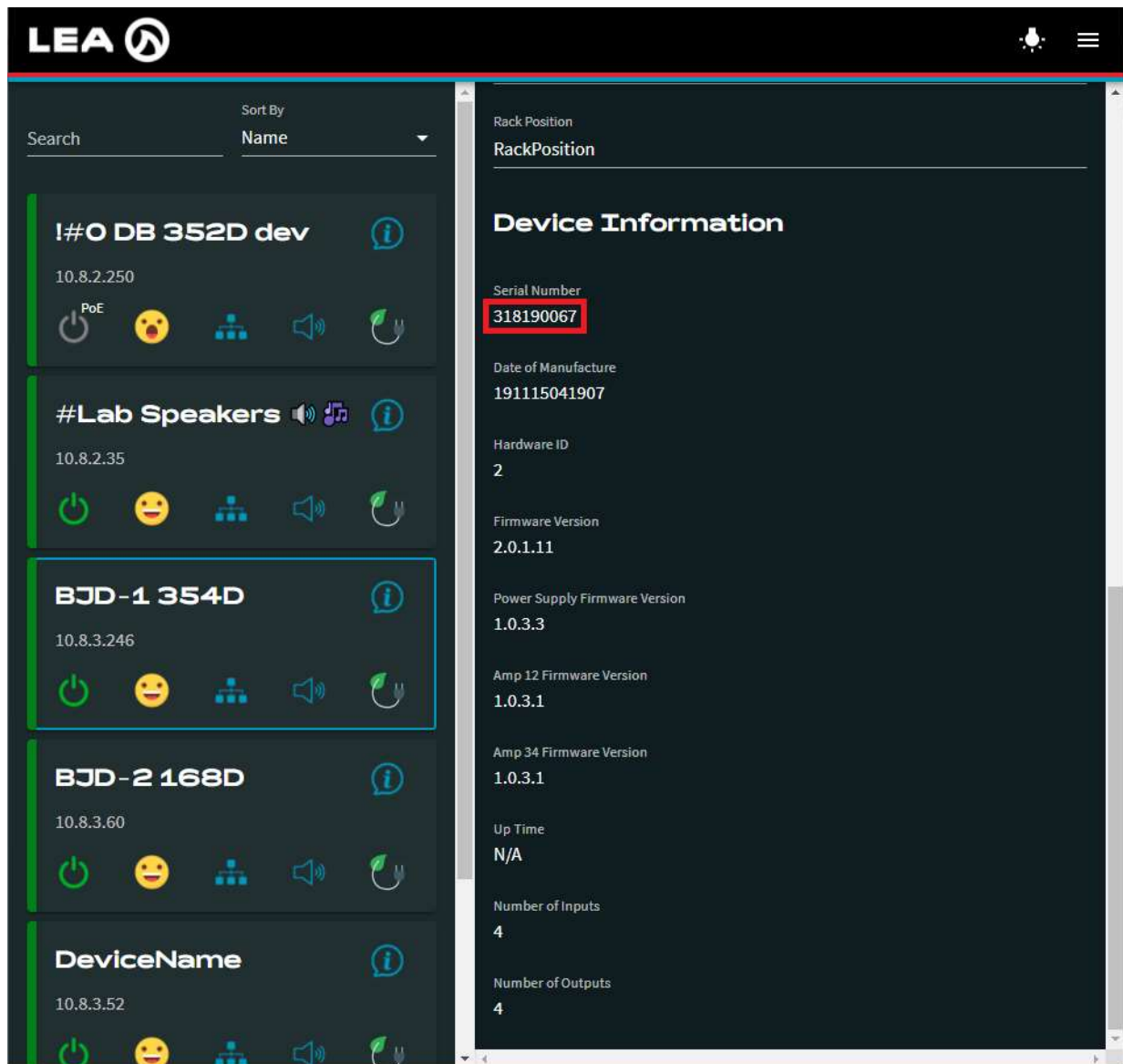
Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/serialNumber

Values: any text up to 64 characters

Example: get /amp/deviceInfo/serialNumber\n

- Response: /amp/deviceInfo/serialNumber "31890067"\n
- The command asked for the amplifiers serial number and got the response 31890067



The screenshot displays the LEA web interface. On the left, a list of devices is shown, with 'BJD-1 354D' selected. The right panel displays the 'Device Information' for this device. The 'Serial Number' is highlighted with a red box and shows the value '318190067'.

Device Name	Serial Number	Date of Manufacture	Hardware ID	Firmware Version	Power Supply Firmware Version	Amp 12 Firmware Version	Amp 34 Firmware Version	Up Time	Number of Inputs	Number of Outputs
BJD-1 354D	318190067	191115041907	2	2.0.1.11	1.0.3.3	1.0.3.1	1.0.3.1	N/A	4	4

Date of Manufacture

Type: SENSOR

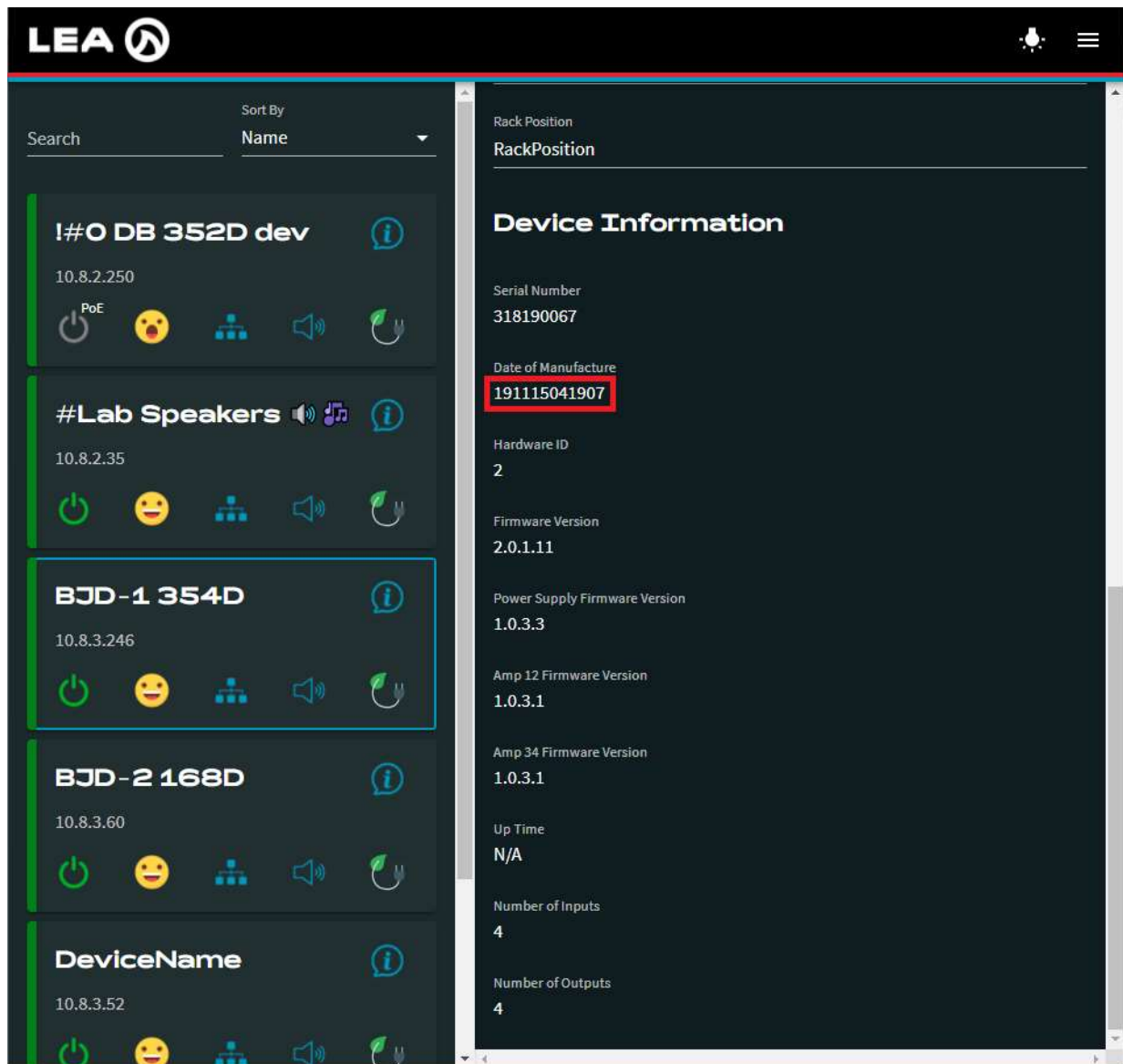
Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/dateOfMfg

Values: any text up to 64 characters

Example: get /amp/deviceInfo/ dateOfMfg \n

- Response: /amp/deviceInfo/ dateOfMfg "191115041907"\n
- The command asked for the amplifiers serial number and got the response 191115041907



The screenshot displays the LEA web interface. On the left, a list of devices is shown, including 'I#0 DB 352D dev', '#Lab Speakers', 'BJD-1 354D', 'BJD-2 168D', and 'DeviceName'. The 'BJD-1 354D' device is highlighted with a blue border. On the right, the 'Device Information' panel for 'BJD-1 354D' is displayed, showing various attributes:

Attribute	Value
Rack Position	RackPosition
Serial Number	318190067
Date of Manufacture	191115041907
Hardware ID	2
Firmware Version	2.0.1.11
Power Supply Firmware Version	1.0.3.3
Amp 12 Firmware Version	1.0.3.1
Amp 34 Firmware Version	1.0.3.1
Up Time	N/A
Number of Inputs	4
Number of Outputs	4



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Hardware ID

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/hardwareID

Values: any text up to 64 characters

Example: get /amp/deviceInfo/hardwareID\n

- Response: /amp/deviceInfo/hardwareID "2"\n
- The command asked for the amplifiers serial number and got the response 2

The screenshot displays the LEA web interface. On the left, a list of devices is shown, including 'I#O DB 352D dev', '#Lab Speakers', 'BJD-1 354D', 'BJD-2 168D', and 'DeviceName'. The 'BJD-1 354D' device is highlighted with a blue border. On the right, the 'Device Information' panel for 'BJD-1 354D' is shown. The 'Hardware ID' field is highlighted with a red box and contains the value '2'. Other fields include 'Serial Number' (318190067), 'Date of Manufacture' (191115041907), 'Firmware Version' (2.0.1.11), 'Power Supply Firmware Version' (1.0.3.3), 'Amp 12 Firmware Version' (1.0.3.1), 'Amp 34 Firmware Version' (1.0.3.1), 'Up Time' (N/A), 'Number of Inputs' (4), and 'Number of Outputs' (4).

Field	Value
Rack Position	RackPosition
Serial Number	318190067
Date of Manufacture	191115041907
Hardware ID	2
Firmware Version	2.0.1.11
Power Supply Firmware Version	1.0.3.3
Amp 12 Firmware Version	1.0.3.1
Amp 34 Firmware Version	1.0.3.1
Up Time	N/A
Number of Inputs	4
Number of Outputs	4

Firmware Version

Type: SENSOR

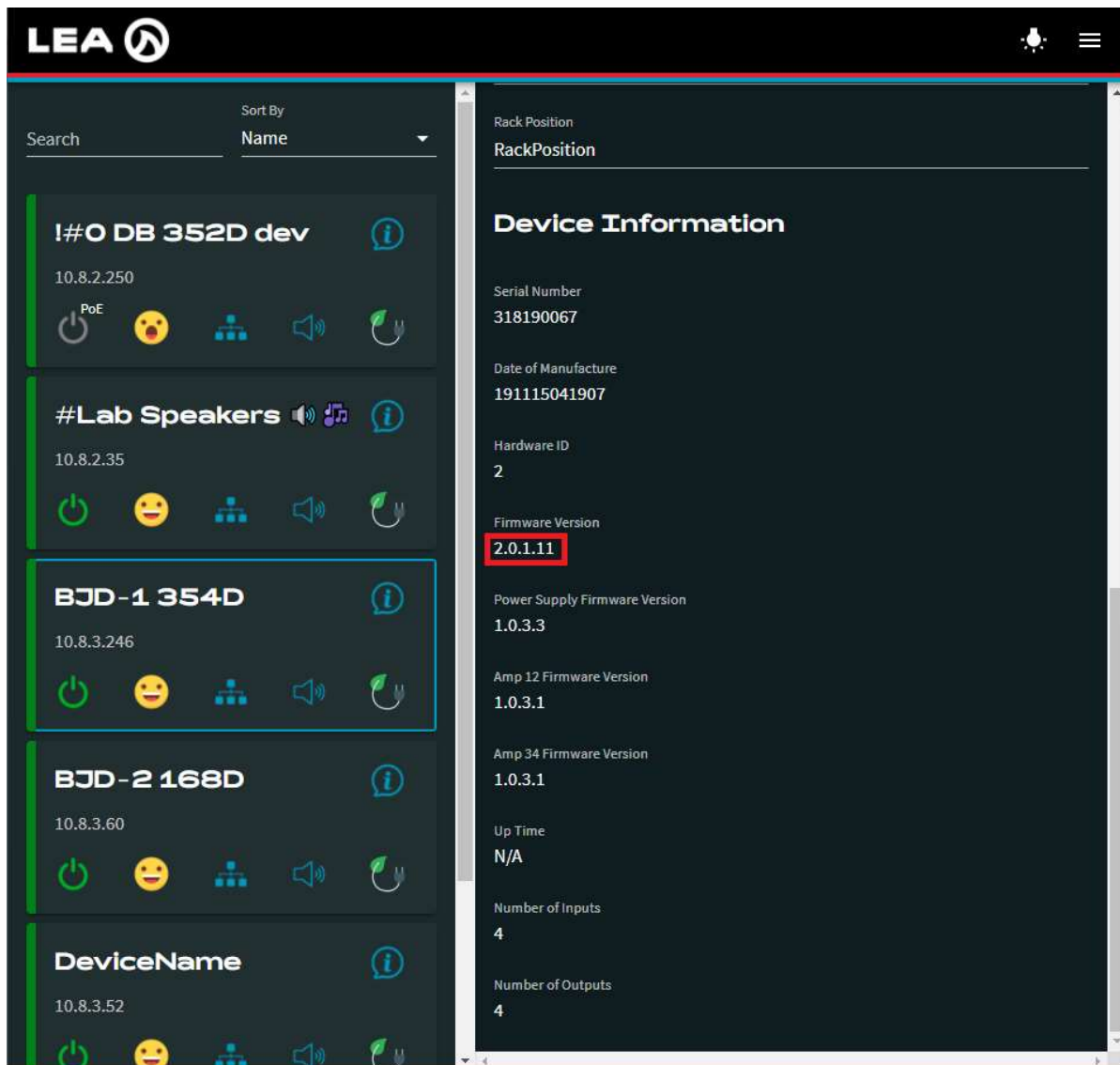
Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/firmwareVersion

Values: any text up to 64 characters

Example: get /amp/deviceInfo/firmwareVersion\n

- Response: /amp/deviceInfo/ firmwareVersion "2.0.1.11"\n
- The command asked for the amplifiers serial number and got the response 2.0.1.11



The screenshot displays the LEA web interface. On the left, a list of devices is shown, including 'I#O DB 352D dev', '#Lab Speakers', 'BJD-1 354D', 'BJD-2 168D', and 'DeviceName'. The 'BJD-1 354D' device is highlighted with a blue border. On the right, the 'Device Information' panel for 'BJD-1 354D' is displayed, showing various attributes:

- Rack Position: RackPosition
- Serial Number: 318190067
- Date of Manufacture: 191115041907
- Hardware ID: 2
- Firmware Version: **2.0.1.11** (highlighted with a red box)
- Power Supply Firmware Version: 1.0.3.3
- Amp 12 Firmware Version: 1.0.3.1
- Amp 34 Firmware Version: 1.0.3.1
- Up Time: N/A
- Number of Inputs: 4
- Number of Outputs: 4



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Power Supply Firmware Version

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/powerSupplyfirmwareVersion

Values: any text up to 64 characters

Example: get /amp/deviceInfo/powerSupplyfirmwareVersion\n

- Response: /amp/deviceInfo/powerSupplyfirmwareVersion "1.0.3.3"\n
- The command asked for the amplifiers serial number and got the response 1.0.3.3

The screenshot displays the LEA web interface. On the left, a list of devices is shown, with 'BJD-1 354D' selected. The right panel shows the 'Device Information' for this device. The 'Power Supply Firmware Version' is highlighted with a red box, showing the value '1.0.3.3'.

Device Name	Serial Number	Date of Manufacture	Hardware ID	Firmware Version	Power Supply Firmware Version	Amp 12 Firmware Version	Amp 34 Firmware Version	Up Time	Number of Inputs	Number of Outputs
BJD-1 354D	318190067	191115041907	2	2.0.1.11	1.0.3.3	1.0.3.1	1.0.3.1	N/A	4	4



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Amp 12 Firmware Version

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/amp12firmwareVersion

Values: any text up to 64 characters

Example: get /amp/deviceInfo/amp12firmwareVersion\n

- Response: /amp/deviceInfo/amp12firmwareVersion "1.0.3.1"\n
- The command asked for the amplifiers serial number and got the response 1.0.3.1

The screenshot displays the LEA web interface. On the left, a list of devices is shown with their names and IP addresses. The device 'BJD-1 354D' is highlighted. On the right, the 'Device Information' panel for 'BJD-1 354D' is displayed, showing various firmware versions. The 'Amp 12 Firmware Version' is highlighted with a red box and shows the value '1.0.3.1'.

Device Name	IP Address
!#O DB 352D dev	10.8.2.250
#Lab Speakers	10.8.2.35
BJD-1 354D	10.8.3.246
BJD-2 168D	10.8.3.60
DeviceName	10.8.3.52

Field	Value
Serial Number	318190067
Date of Manufacture	191115041907
Hardware ID	2
Firmware Version	2.0.1.11
Power Supply Firmware Version	1.0.3.3
Amp 12 Firmware Version	1.0.3.1
Amp 34 Firmware Version	1.0.3.1
Up Time	N/A
Number of Inputs	4
Number of Outputs	4



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Amp 34 Firmware Version

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/amp12firmwareVersion

Values: any text up to 64 characters

Example: get /amp/deviceInfo/amp34firmwareVersion\n

- Response: /amp/deviceInfo/amp34firmwareVersion "1.0.3.1"\n
- The command asked for the amplifiers serial number and got the response 1.0.3.1

The screenshot displays the LEA web interface. On the left, a list of devices is shown, with 'BJD-1 354D' selected. The right panel displays the 'Device Information' for this device. The 'Amp 34 Firmware Version' is highlighted with a red box, showing the value '1.0.3.1'.

Device Name	IP Address	Serial Number	Date of Manufacture	Hardware ID	Firmware Version	Power Supply Firmware Version	Amp 12 Firmware Version	Amp 34 Firmware Version	Up Time	Number of Inputs	Number of Outputs
!#O DB 352D dev	10.8.2.250	318190067	191115041907	2	2.0.1.11	1.0.3.3	1.0.3.1	1.0.3.1	N/A	4	4
#Lab Speakers	10.8.2.35										
BJD-1 354D	10.8.3.246							1.0.3.1			
BJD-2 168D	10.8.3.60										
DeviceName	10.8.3.52										



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Up Time

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/upTime

Values: any text up to 64 characters

Example: get /amp/deviceInfo/upTime\n

- Response: /amp/deviceInfo/upTime "N/A"\n
- The command asked for the amplifiers serial number and got the response N/A

The screenshot displays the LEA web interface. On the left, a list of devices is shown, with 'BJD-1 354D' selected. The right panel shows the 'Device Information' for this device. The 'Up Time' field is highlighted with a red box and shows 'N/A'.

Field	Value
Rack Position	RackPosition
Serial Number	318190067
Date of Manufacture	191115041907
Hardware ID	2
Firmware Version	2.0.1.11
Power Supply Firmware Version	1.0.3.3
Amp 12 Firmware Version	1.0.3.1
Amp 34 Firmware Version	1.0.3.1
Up Time	N/A
Number of Inputs	4
Number of Outputs	4



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Number of Inputs

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/numInputs

Values: any text up to 64 characters

Example: get /amp/deviceInfo/numInputs\n

- Response: /amp/deviceInfo/numInputs 4.0\n
- The command asked for the amplifiers serial number and got the response 4

The screenshot displays the LEA web interface. On the left, a list of devices is shown, with 'BJD-1 354D' highlighted. The right panel shows the 'Device Information' for this device. The 'Number of Inputs' is highlighted with a red box and shows the value '4'.

Field	Value
Rack Position	RackPosition
Serial Number	318190067
Date of Manufacture	191115041907
Hardware ID	2
Firmware Version	2.0.1.11
Power Supply Firmware Version	1.0.3.3
Amp 12 Firmware Version	1.0.3.1
Amp 34 Firmware Version	1.0.3.1
Up Time	N/A
Number of Inputs	4
Number of Outputs	4

Number of Outputs

Type: SENSOR

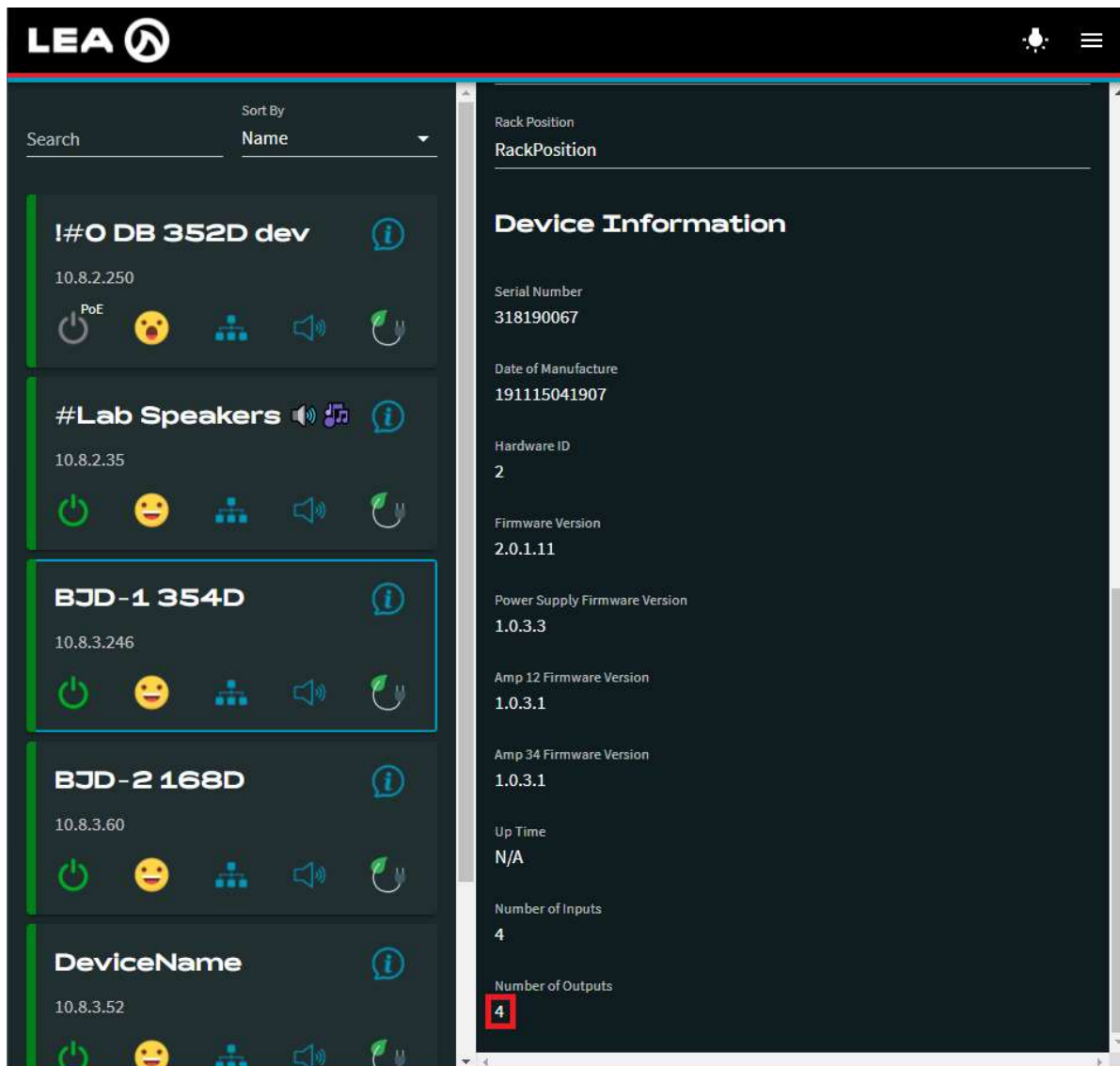
Commands: get, subscribe, unsubscribe

URL: /amp/deviceInfo/numOutputs

Values: any text up to 64 characters

Example: get /amp/deviceInfo/numOutputs\n

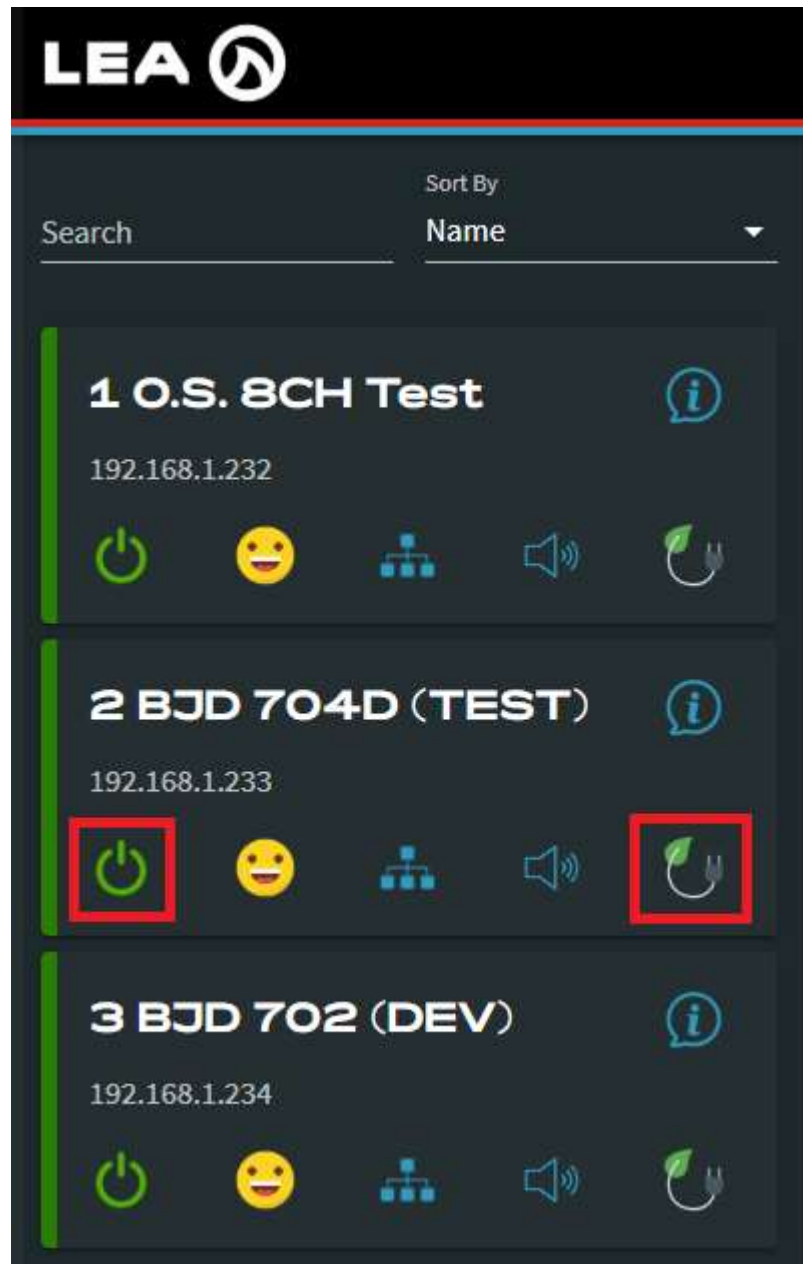
- Response: /amp/deviceInfo/numOutputs 4.0\n
- The command asked for the amplifiers serial number and got the response 4



The screenshot displays the LEA web interface. On the left, a list of devices is shown, including 'I#O DB 352D dev', '#Lab Speakers', 'BJD-1 354D', 'BJD-2 168D', and 'DeviceName'. The 'BJD-1 354D' device is highlighted with a blue border. On the right, the 'Device Information' panel for 'BJD-1 354D' is visible, showing various details such as Serial Number (318190067), Date of Manufacture (191115041907), Hardware ID (2), Firmware Version (2.0.1.11), Power Supply Firmware Version (1.0.3.3), Amp 12 Firmware Version (1.0.3.1), Amp 34 Firmware Version (1.0.3.1), Up Time (N/A), Number of Inputs (4), and Number of Outputs (4). The 'Number of Outputs' value is highlighted with a red box.

Amplifier Power Supply

Click on the power supply or green power menu buttons to view the relevant pages for this API section





OPEN API – TCP Protocol

Rev 5. 09-21-2021

AC Line Voltage RMS

Type: SENSOR

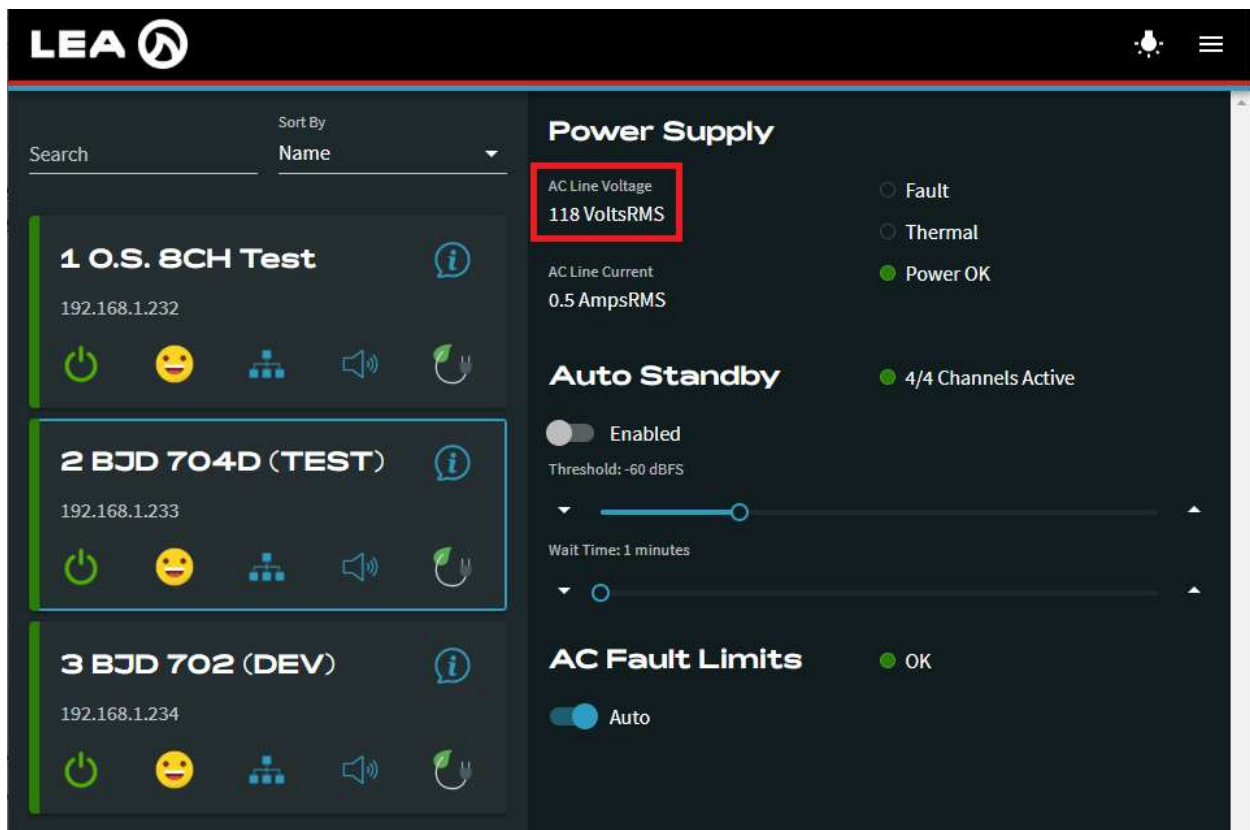
Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/acLineVoltage

Values: 0.0 through 300.0 volts

Example: get /amp/powerSupply/acLineVoltage\n

- Response: /amp/powerSupply/acLineVoltage 118.0\n
- The command asked for the amplifier AC Line Voltage RMS and got the response 118.0 V





OPEN API – TCP Protocol

Rev 5. 09-21-2021

AC Line Current RMS

Type: SENSOR

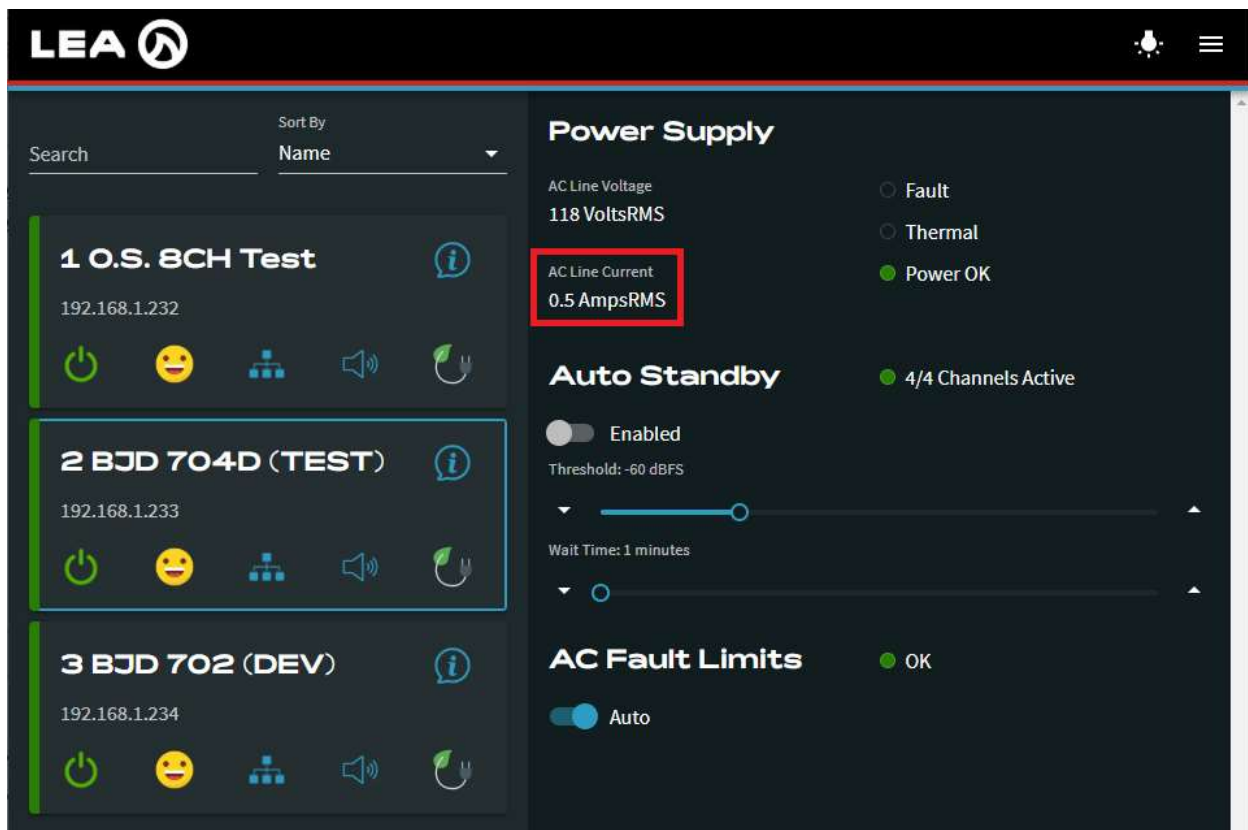
Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/acLineCurrent

Values: 0.0 through 100.0 amps

Example: get /amp/powerSupply/acLineCurrent\n

- Response: /amp/powerSupply/acLineCurrent 0.5\n
- The command asked for the amplifier AC Line Current RMS and got the response 0.5 amps





OPEN API – TCP Protocol

Rev 5. 09-21-2021

AC Line Power Draw

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/acLineWatts

Values: 0.0 through 5000.0

Example: get /amp/powerSupply/acLineWatts\n

- Response: /amp/powerSupply/acLineWatts 0.5\n
- The command asked for the amplifier AC Line Power Usage and got the response 0.5 amps

The screenshot displays the LEA web interface. On the left, there is a list of three test configurations: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). Each configuration has a set of control icons. On the right, the 'Realtime Power Usage' section is highlighted with a red box, showing '61 Watts'. Below this, the 'Auto Standby' section shows a toggle switch set to 'Enabled', a threshold of '-60 dBFS', and a wait time of '1 minutes'. The 'Estimated Power Usage When in Auto Standby' is '25.0 Watts'. The 'Power over Ethernet' section shows 'PoE Status' and 'Estimated Power Usage When in Standby with PoE' as '2.5 Watts'.

Power Supply Fault Status

Type: SENSOR

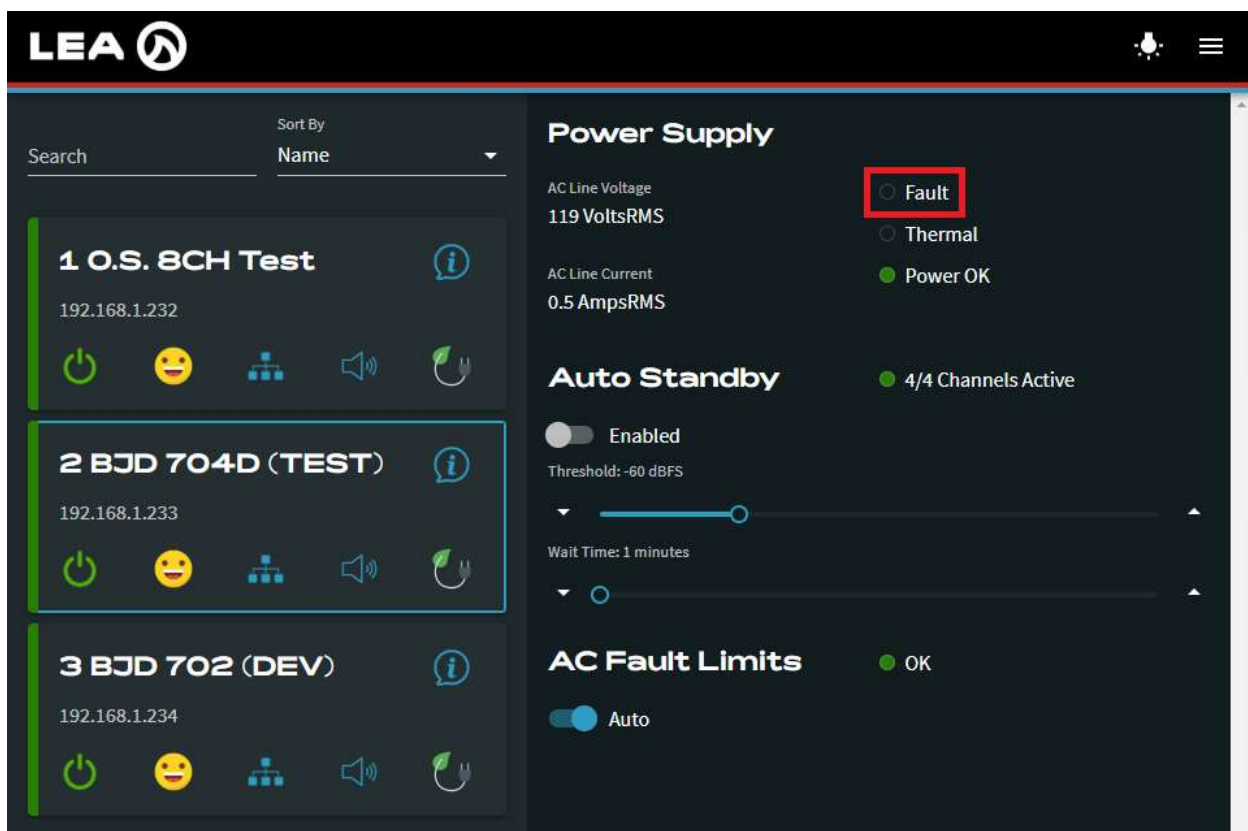
Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/fault

Values: "true", "false"

Example: get /amp/powerSupply/fault\n

- Response: /amp/powerSupply/acLineWatts false\n
- The command asked for the power supply fault status and got the response False, meaning there no power supply fault



Power Supply Thermal Protection Status

Type: SENSOR

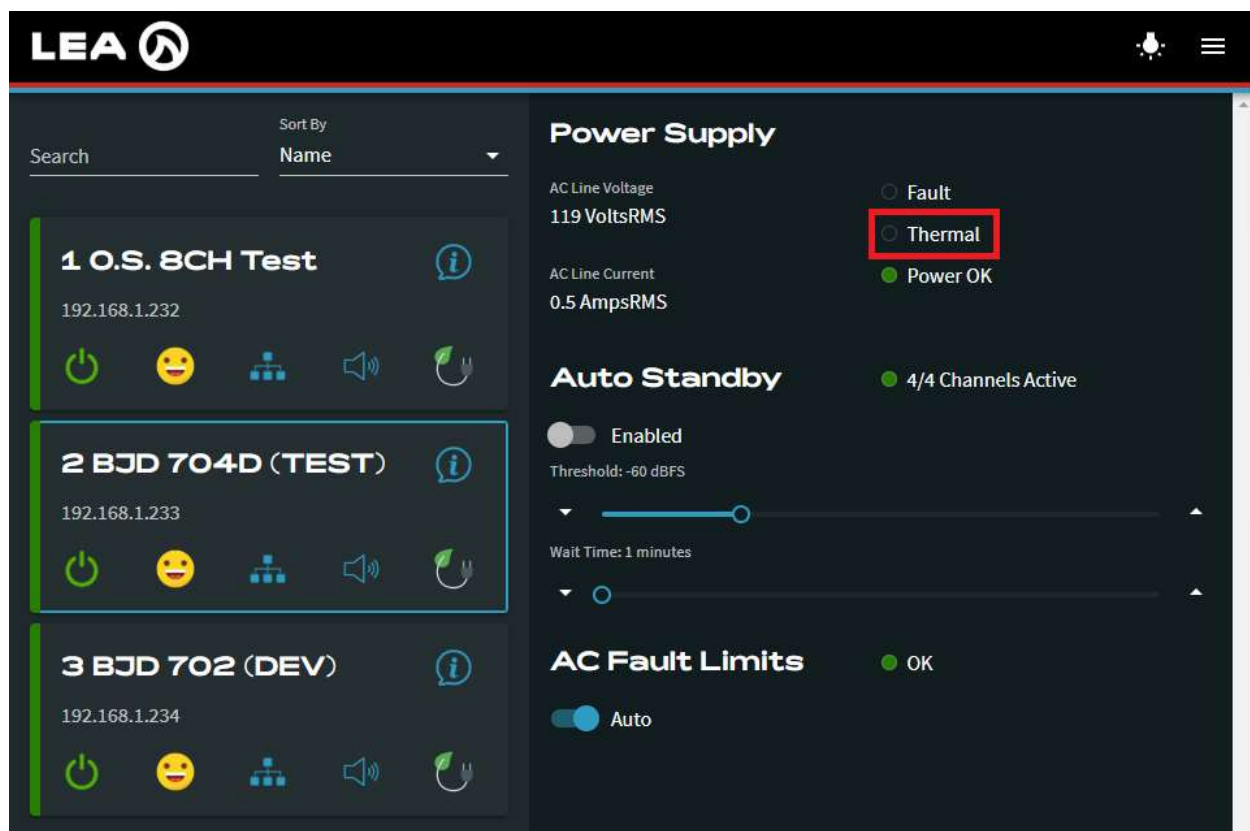
Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/thermal

Values: "true", "false"

Example: get /amp/powerSupply/thermal\n

- Response: /amp/powerSupply/thermal false\n
- The command asked for the power supply thermal protection status and got the response False, meaning there no thermal protection active and the amplifier is operating at a safe temperature





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Power Supply Power OK Status

Type: SENSOR

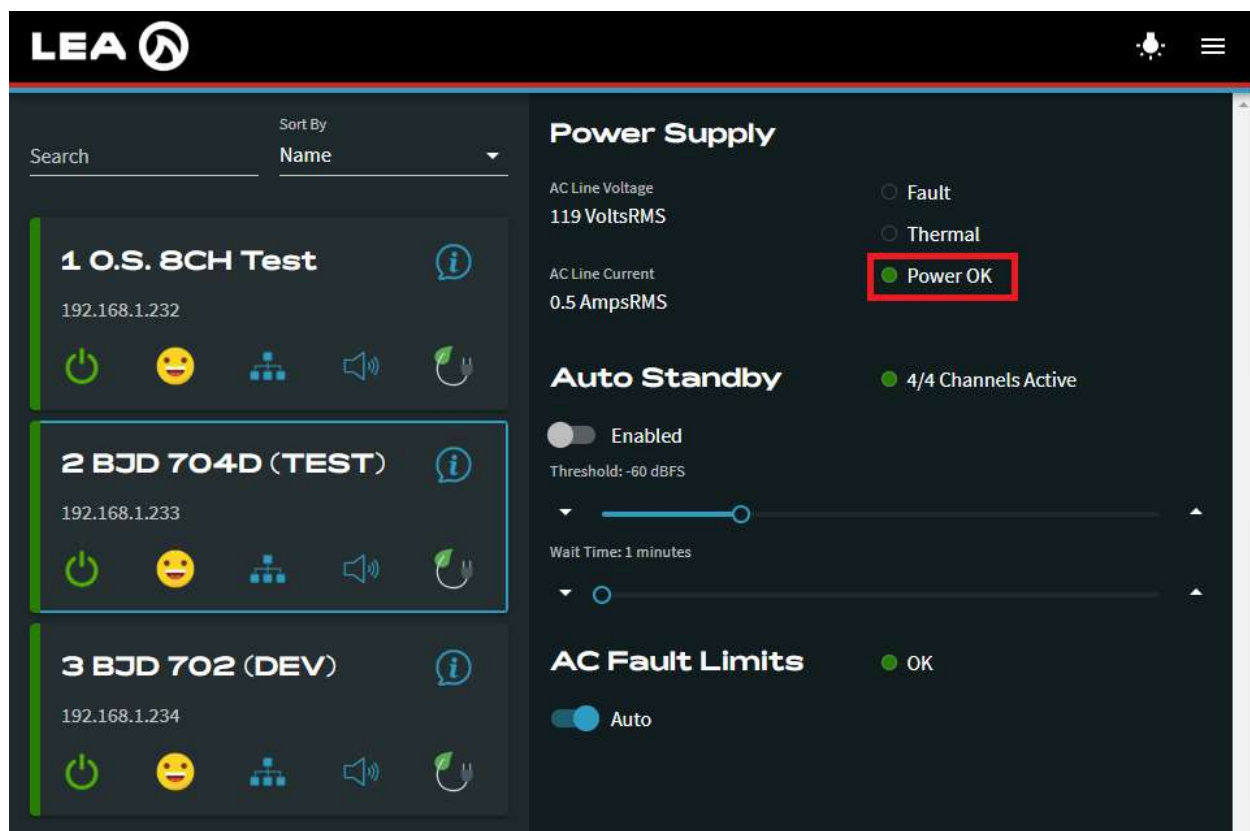
Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/powerOk

Values: "true", "false"

Example: get /amp/powerSupply/powerOk\n

- Response: /amp/powerSupply/powerOk true\n
- The command asked for the power supply power ok status and got the response True, meaning that the power is Ok





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Power Supply AC Line Voltage Ok

Type: SENSOR

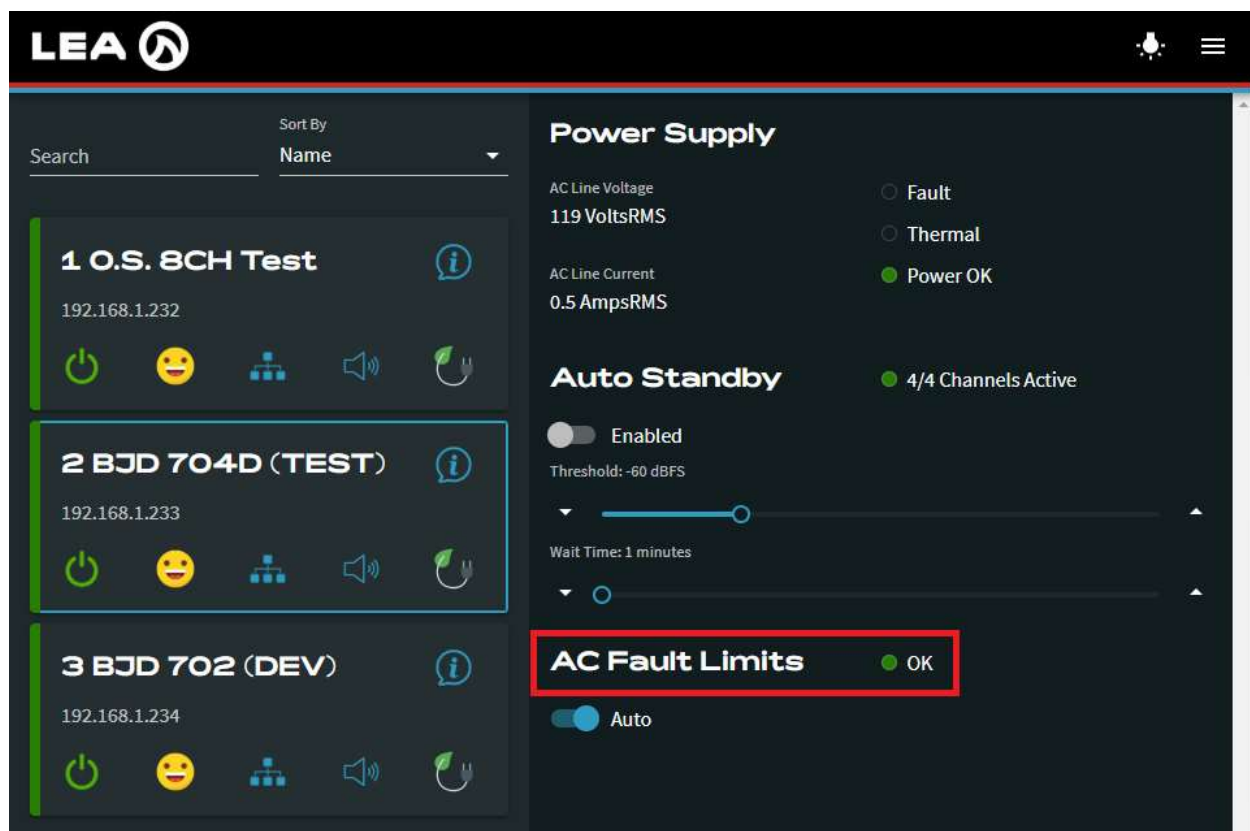
Commands: get, subscribe, unsubscribe

URL: /amp/powerSupply/lineWarning

Values: "true", "false"

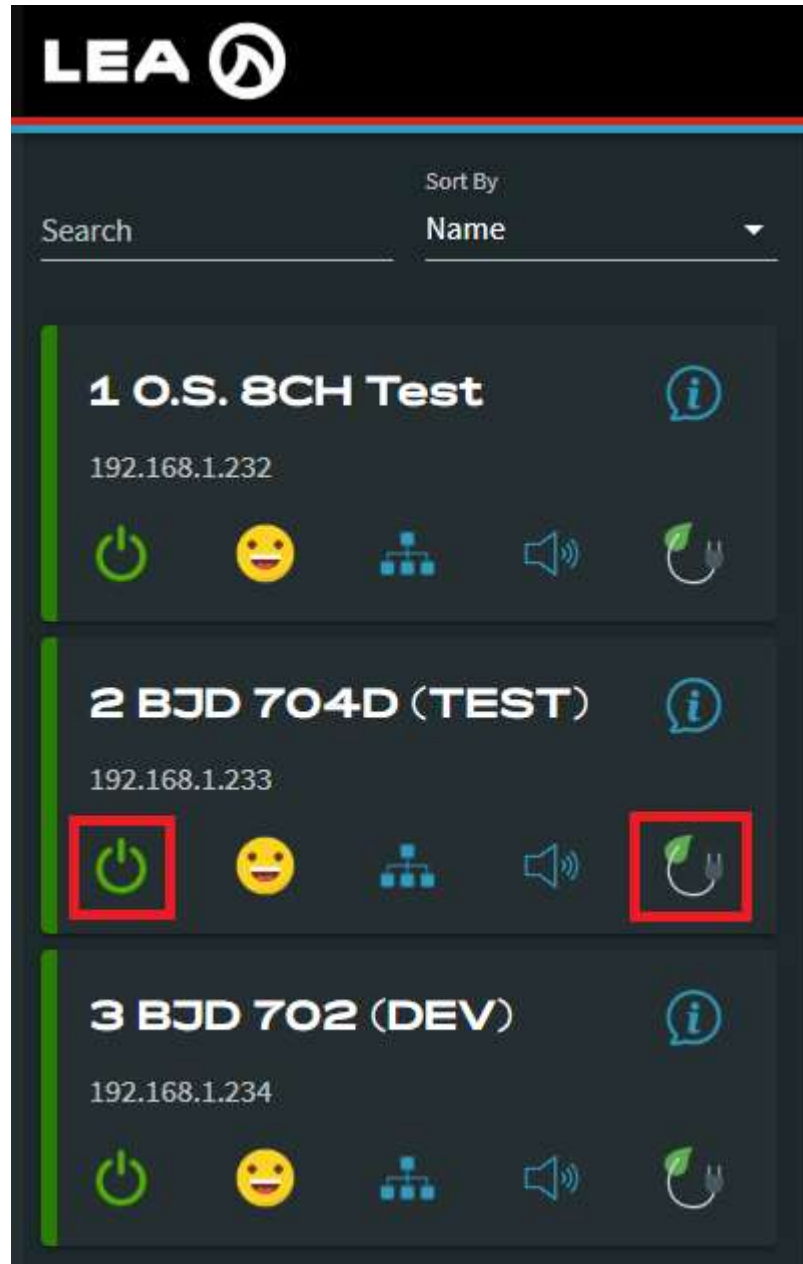
Example: get /amp/powerSupply/lineWarning\n

- Response: /amp/powerSupply/lineWarning true\n
- The command asked for the power supply AC line voltage ok status and got the response True, meaning that it is Ok



Auto Standby

Click on the power supply or green power menu buttons to view the relevant pages for this API section



Auto Standby Enable

Type: CONTROL

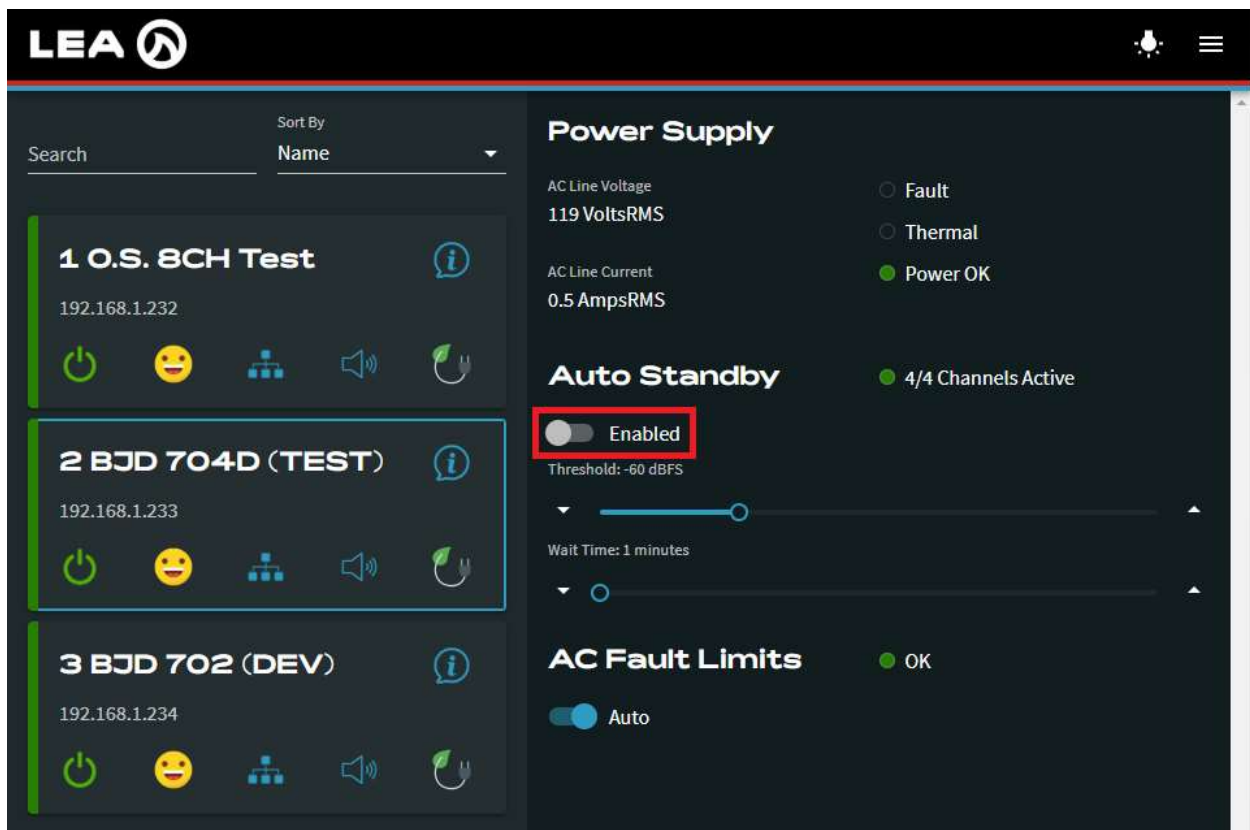
Commands: get, set, subscribe, unsubscribe

URL: /amp/autoStandby/enable

Values: "true", "false"

Example: set /amp/autoStandby/enable "true"\n

- Response: OK\n
- The command set the auto standby setting to enabled





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Auto Standby Threshold

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/autoStandby/threshold

Values: -80.0 through 0.0

Example: set /amp/autoStandby/threshold -60.0\n

- Response: OK\n
- The command set the auto standby threshold to -60.0 dBFS

The screenshot displays the LEA control interface. On the left, a list of three test channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). Each channel has a set of control icons. The '2 BJD 704D (TEST)' channel is highlighted with a blue border. On the right, the 'Power Supply' section shows 'AC Line Voltage' at 119 VoltsRMS and 'AC Line Current' at 0.5 AmpsRMS, with status indicators for Fault, Thermal, and Power OK. The 'Auto Standby' section shows '4/4 Channels Active' and a toggle for 'Enabled'. A red box highlights the 'Threshold: -60 dBFS' slider, which is currently set to -60 dBFS. Below the slider, the 'Wait Time' is set to 1 minute. The 'AC Fault Limits' section shows a status of 'OK' and a toggle for 'Auto'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Auto Standby Wait Time

Type: CONTROL

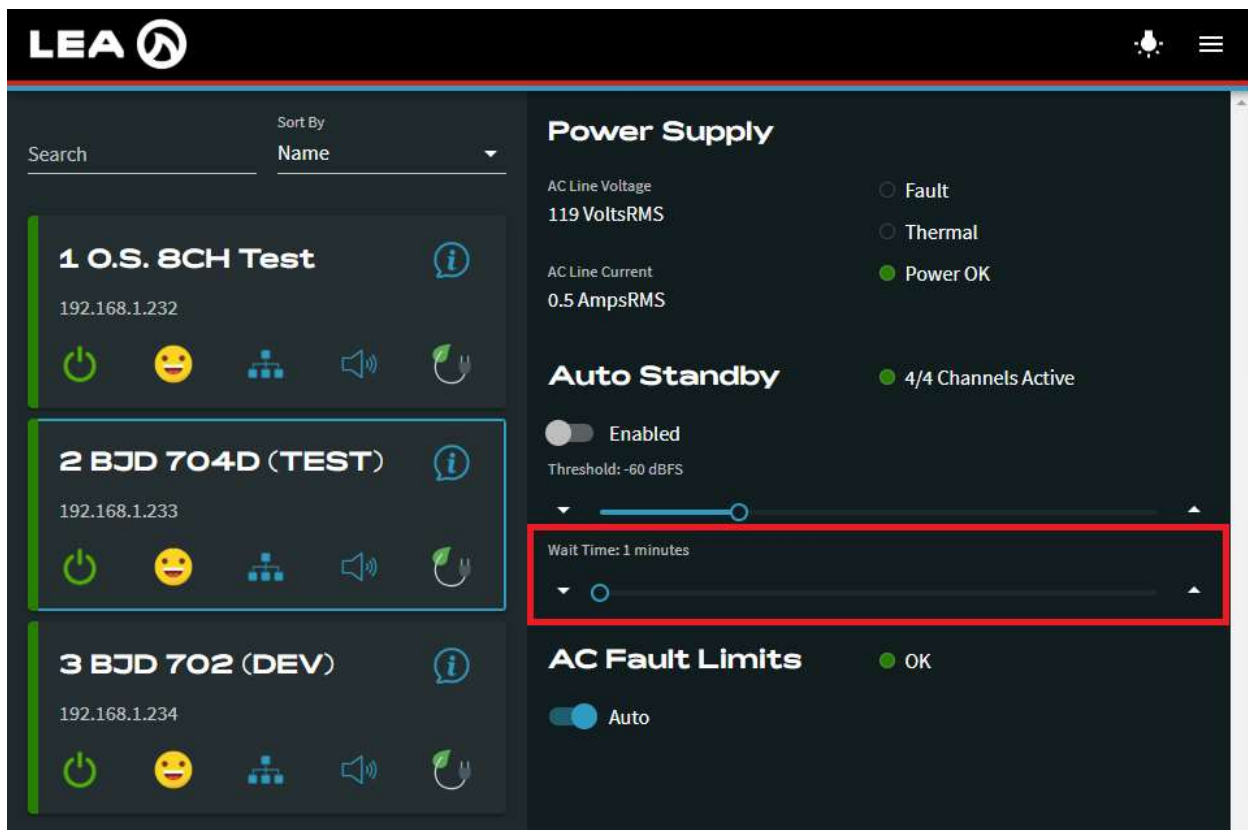
Commands: get, set, subscribe, unsubscribe

URL: /amp/autoStandby/timeToWait

Values: 1 through 240

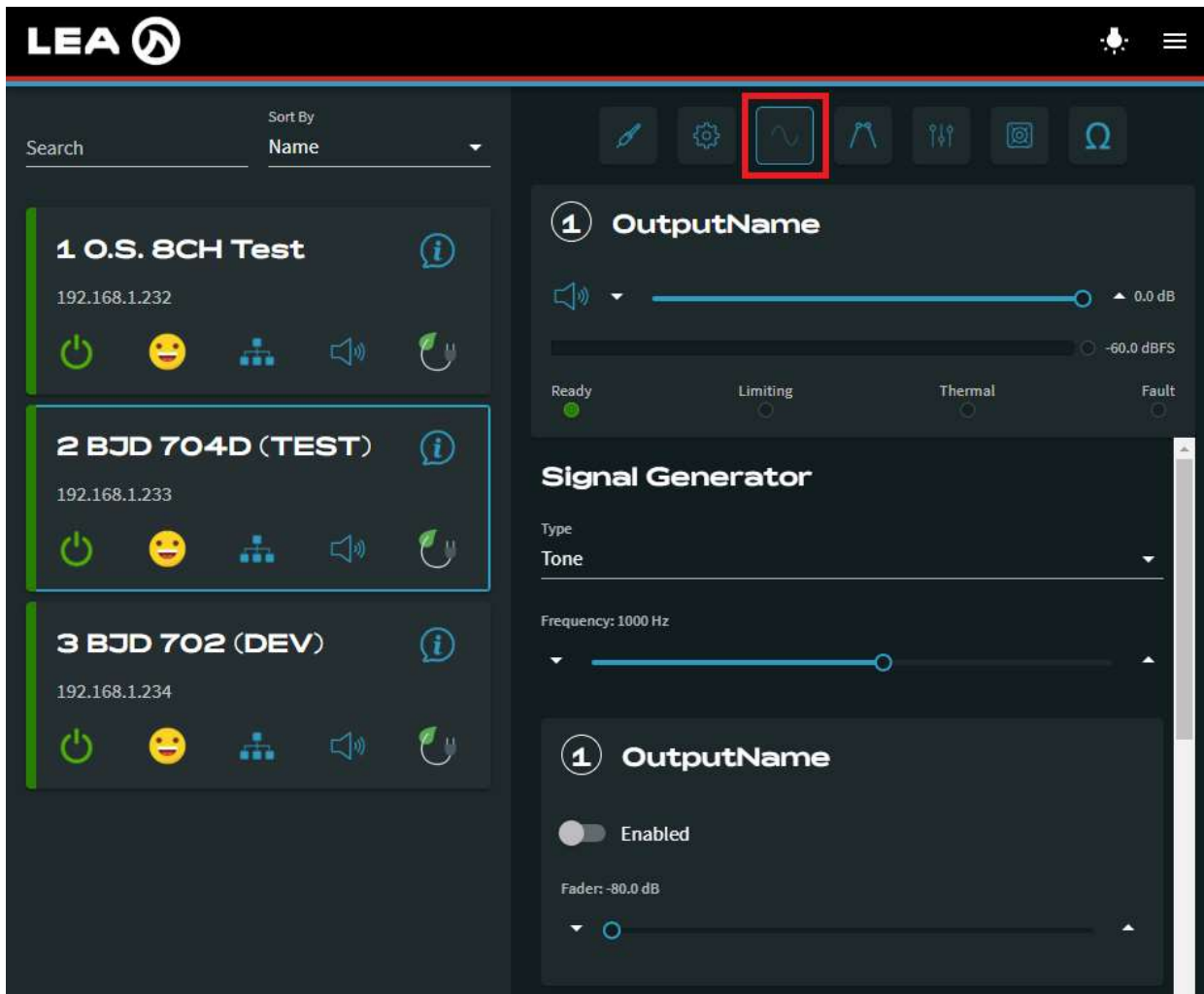
Example: set /amp/autoStandby/timeToWait 1\n

- Response: OK\n
- The command set the auto standby wait time to 1 minute



Signal Generator

Click on this button to navigate to the signal generator page relevant to this API section



The screenshot displays the LEA OPEN API web interface. On the left sidebar, there is a list of tests: "1 O.S. 8CH Test", "2 BJD 704D (TEST)", and "3 BJD 702 (DEV)". The "2 BJD 704D (TEST)" entry is highlighted with a blue border. The top navigation bar features several icons, with the signal generator icon (a square with a sine wave) highlighted by a red box. The main panel on the right is titled "Signal Generator" and contains the following controls:

- OutputName**: A section with a volume slider ranging from -60.0 dBFS to 0.0 dB. Below the slider are four status indicators: Ready (green dot), Limiting (grey dot), Thermal (grey dot), and Fault (grey dot).
- Signal Generator**: A section with a dropdown menu set to "Tone" and a frequency slider set to 1000 Hz.
- OutputName**: A section with a toggle switch labeled "Enabled" and a fader slider set to -80.0 dB.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Signal Generator Type

Type: CONTROL

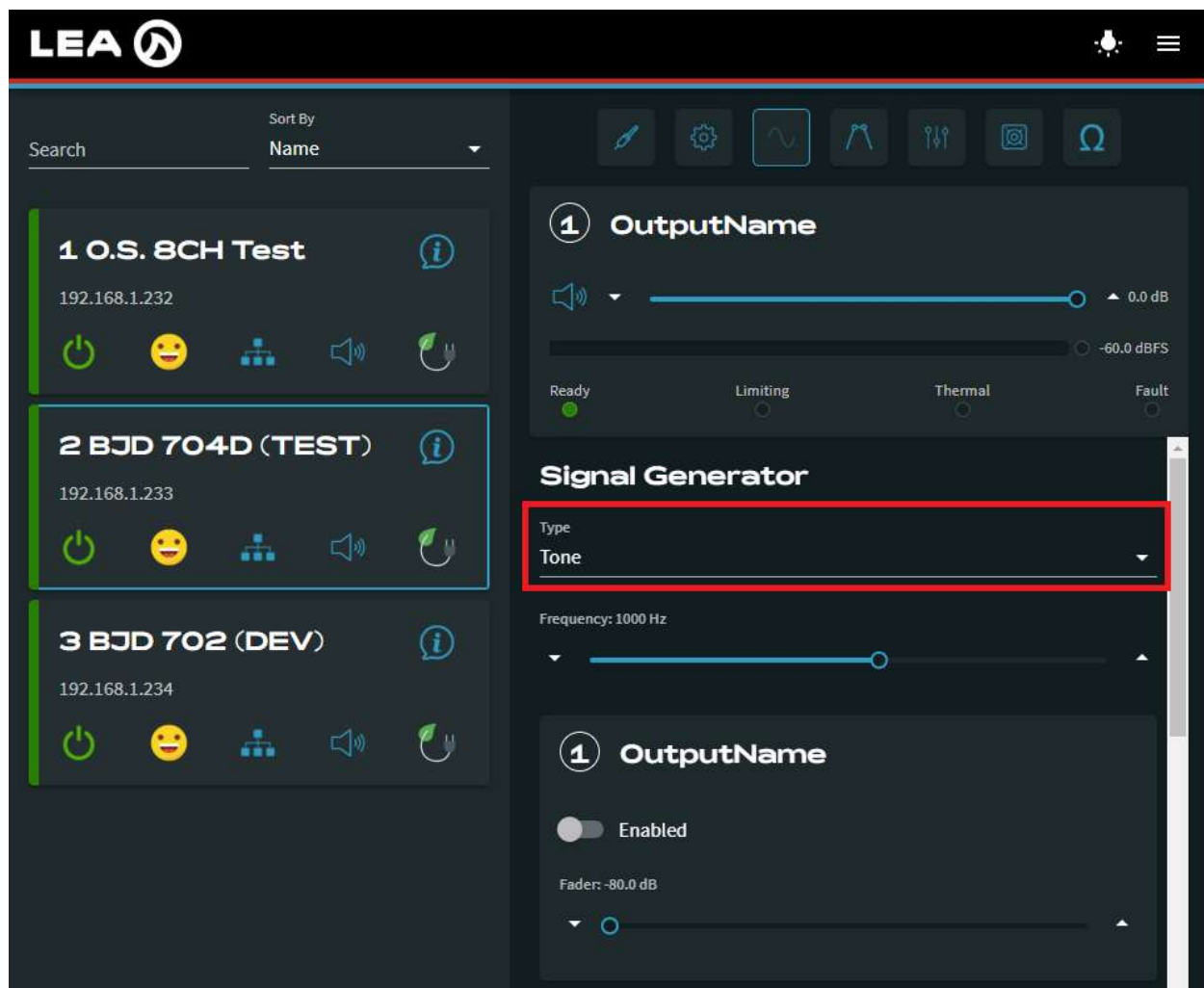
Commands: get, set, subscribe, unsubscribe

URL: /amp/signalGenerator/type

Values: "Pink Noise", "White Noise", "Tone"

Example: set /amp/signalGenerator/type "Tone"\n

- Response: OK\n
- The command set the signal generator type to sine wave tone





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Signal Generator Tone Frequency

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/signalGenerator/frequency

Values: 20 through 20000

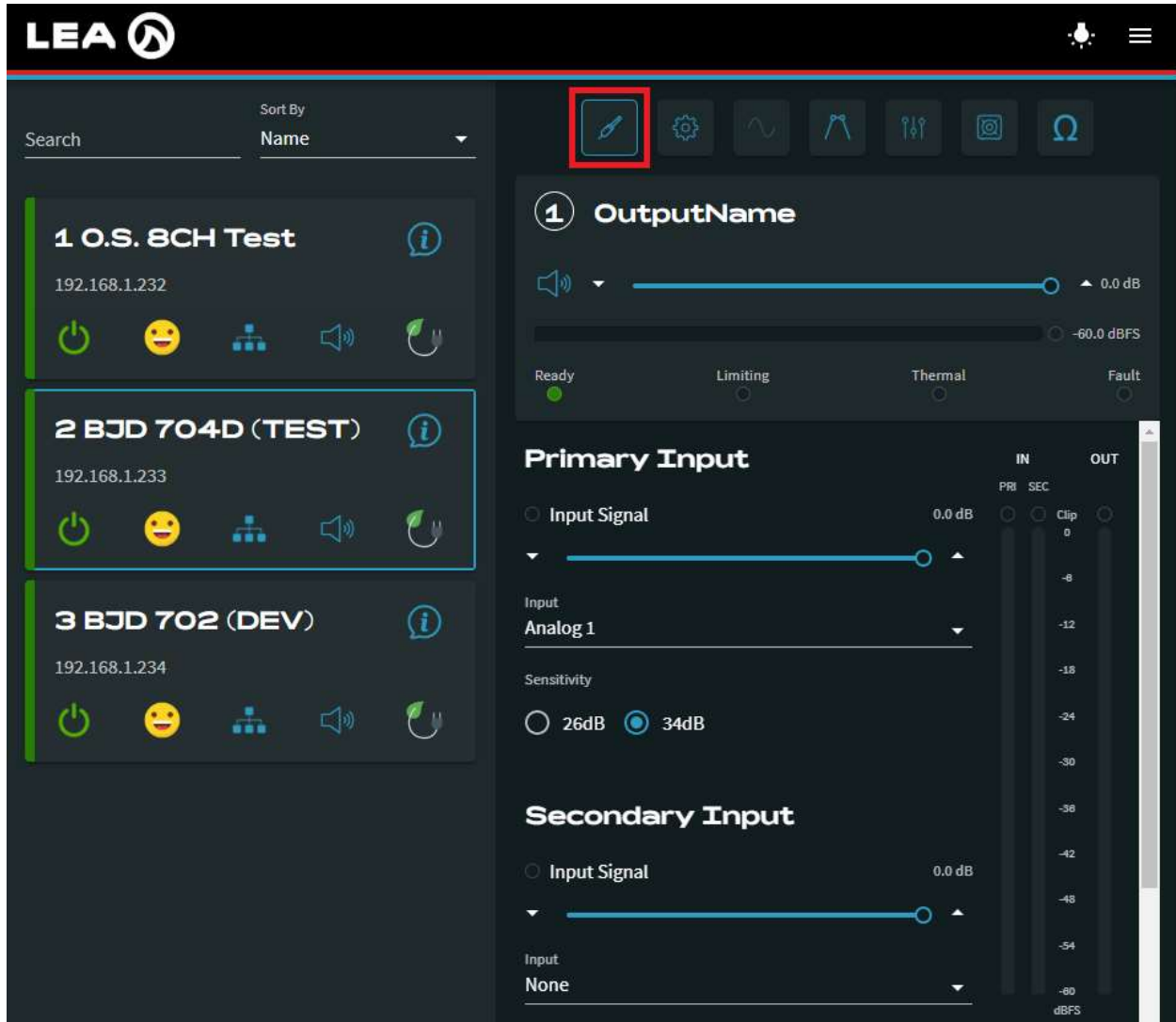
Example: set /amp/signalGenerator/frequency 1000\n

- Response: OK\n
- The command set the signal generator sine wave tone frequency to 1000 Hz

The screenshot displays the LEA control interface. On the left, a list of three test configurations is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). Each configuration has a set of control icons. The right panel shows the 'Signal Generator' settings. The 'Type' is set to 'Tone'. The 'Frequency' is set to 1000 Hz, which is highlighted with a red box. Below the frequency, there is a section for 'OutputName' with a toggle switch set to 'Enabled' and a 'Fader' set to -80.0 dB. The top of the interface features the LEA logo, a search bar, and a 'Sort By Name' dropdown. A row of icons for various functions is located below the search bar.

Amplifier Analog Inputs

Click on this button to navigate to the Input section of the DSP relevant to this API section



The screenshot displays the LEA web interface for configuring amplifier analog inputs. The interface is divided into three main sections:

- Left Sidebar:** Contains a list of tests:
 - 1 O.S. 8CH Test** (IP: 192.168.1.232)
 - 2 BJD 704D (TEST)** (IP: 192.168.1.233) - This test is highlighted with a blue border.
 - 3 BJD 702 (DEV)** (IP: 192.168.1.234)
- Top Navigation Bar:** Features a pencil icon (highlighted with a red box) for editing, along with other icons for settings, waveform, and other functions.
- Main Content Area:**
 - OutputName:** A section for configuring the output name, including a volume slider and status indicators (Ready, Limiting, Thermal, Fault).
 - Primary Input:** A section for configuring the primary input, including a dropdown menu for 'Input Signal' (set to 'Analog 1'), a sensitivity slider (set to 34dB), and a table of input/output levels (IN PRI, IN SEC, OUT). The table shows levels ranging from 0.0 dB to -60 dBFS.
 - Secondary Input:** A section for configuring the secondary input, including a dropdown menu for 'Input Signal' (set to 'None') and a sensitivity slider.

Analog Input Sensitivity

Type: CONTROL

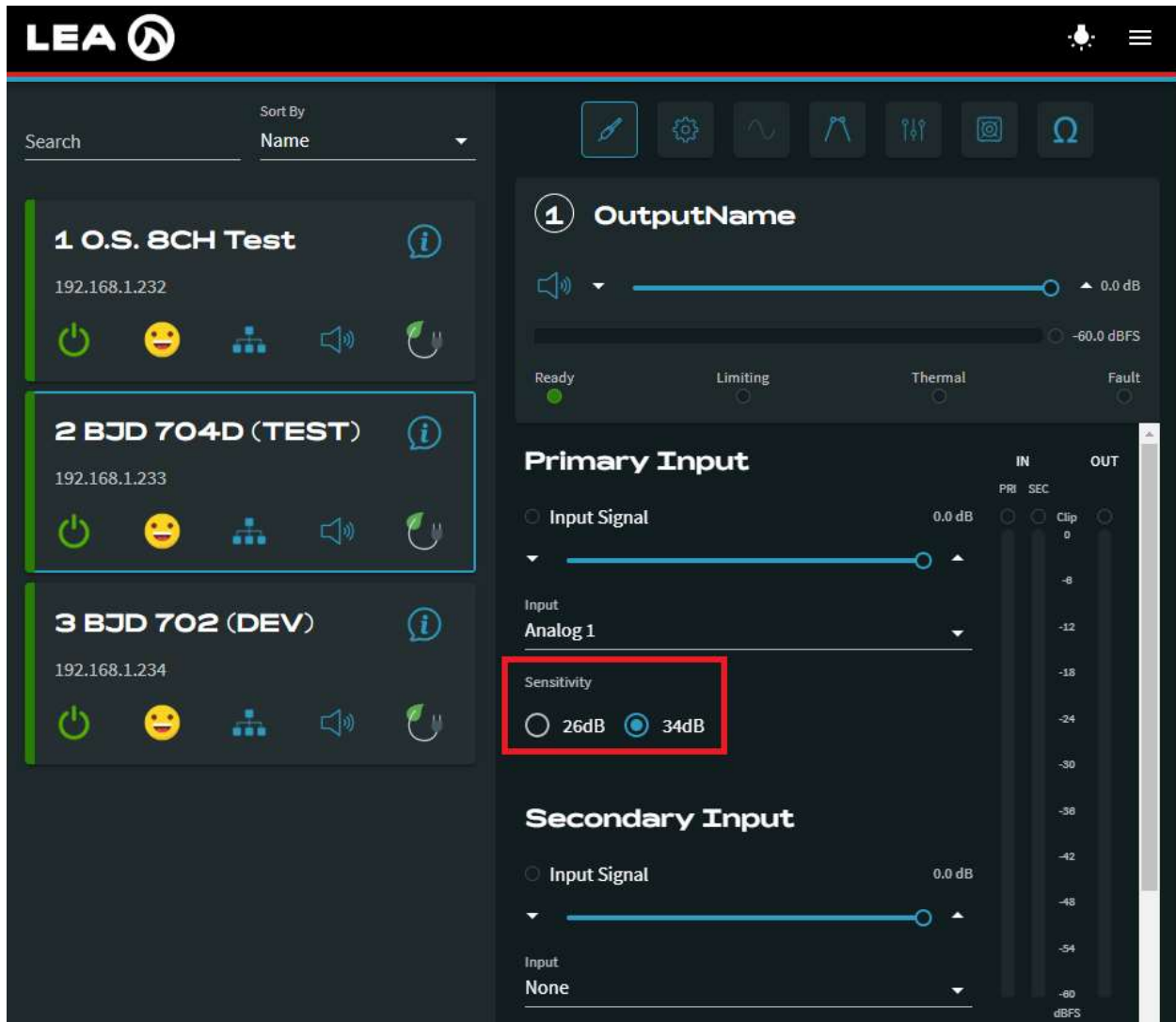
Commands: get, set, subscribe, unsubscribe

URL: /amp/inputs/analog/#/sensitivity

Values: "26dB", "34dB"

Example: set /amp/inputs/analog/1/sensitivity "34dB"\n

- Response: OK\n
- The command set the sensitivity of the Analog 1 input to 34dB



The screenshot displays the LEA control interface. On the left, a list of test equipment is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' entry is highlighted with a red box. On the right, the 'OutputName' section shows a volume slider set to 0.0 dB. Below this, the 'Primary Input' section is visible, showing 'Input Signal' set to 0.0 dB and 'Input' set to 'Analog 1'. The 'Sensitivity' section is highlighted with a red box, showing two radio buttons: '26dB' and '34dB', with '34dB' selected. The 'Secondary Input' section is also visible, showing 'Input Signal' set to 0.0 dB and 'Input' set to 'None'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Primary Input Source

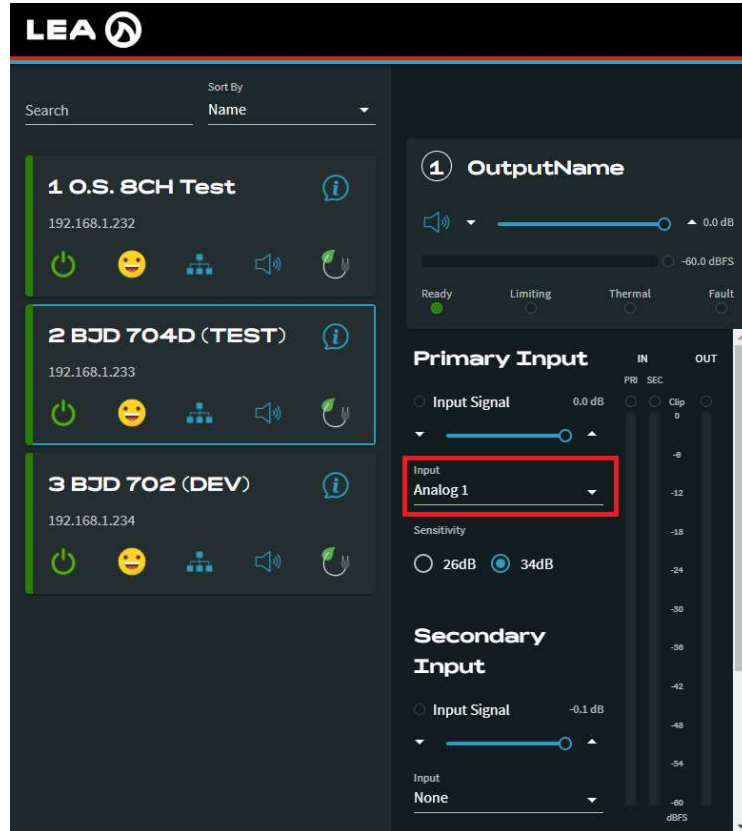
Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/primary

Values:

"Analog 1"
"Analog 2"
"Analog 1+2"
"Analog 3"
"Analog 4"
"Analog 3+4"
"Analog 5"
"Analog 6"
"Analog 5+6"
"Analog 7"
"Analog 8"
"Analog 7+8"
"Dante 1"
"Dante 2"
"Dante 1+2"
"Dante 3"
"Dante 4"
"Dante 3+4"
"Dante 5"
"Dante 6"
"Dante 5+6"
"Dante 7"
"Dante 8"
"Dante 7+8"



Example: set /amp/channels/1/inputSelector/primary "Analog 2"\n

- This will set the primary input source on Channel 1 to "Analog 2"

For the Network Connect Series, only Analog inputs are available, and only the number of channels that are on the amplifier, for example a 354 would not have Analog 5-8 available.

For the Dante Connect Series analog inputs are only available for the number of inputs on the amplifier, however all 8 Dante inputs are available on all Dante models.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Primary Gain Attenuation Fader

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/primaryFader

Values: Gain attenuation values between -80 and 0

Example: set /amp/channels/2/inputSelector/primaryFader -10.0\n

- This will set the Primary Input Level on Channel 2 to -10.0dB

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (192.168.1.232), '2 BJD 704D (TEST)' (192.168.1.233), and '3 BJD 702 (DEV)' (192.168.1.234). Each channel has a set of control icons. The right panel shows the configuration for 'OutputName' with a volume slider set to 0.0 dB. Below this, the 'Primary Input' section is highlighted with a red box, showing 'Input Signal' at 0.0 dB and a slider. The 'Secondary Input' section shows 'Input Signal' at -0.1 dB. On the far right, a vertical scale shows input levels from -60 dBFS to 0 dB.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Primary Input Meter

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/primaryLevel

Values: -80 through 0 dBFS

Example: subscribe /amp/channels/1/inputSelector/primaryLevel\n

- This will subscribe to the primary input meter level for channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown with a search bar and a 'Sort By Name' dropdown. The channels are:

- 1 O.S. 8CH Test (192.168.1.232)
- 2 BJD 704D (TEST) (192.168.1.233)
- 3 BJD 702 (DEV) (192.168.1.234)

Each channel has a set of status icons (power, smiley face, network, speaker, and a leaf/plug icon). The '2 BJD 704D (TEST)' channel is highlighted with a blue border.

On the right, the 'OutputName' section shows a volume slider set to 0.0 dB, with a range from -60.0 dBFS to 0.0 dB. Below this are status indicators for Ready (green), Limiting, Thermal, and Fault.

The 'Primary Input' section shows the 'Input Signal' set to 0.0 dB. The 'Input' is set to 'Analog 1'. The 'Sensitivity' is set to 34dB (selected over 26dB). A red box highlights the 'IN' section, which includes a 'PRI' (Primary) and 'SEC' (Secondary) input selector. The 'OUT' section shows a 'Clip' indicator and a scale from 0 to -80 dBFS.

The 'Secondary Input' section shows the 'Input Signal' set to -0.1 dB and the 'Input' set to 'None'.

Primary Input Signal Present

Type: SENSOR

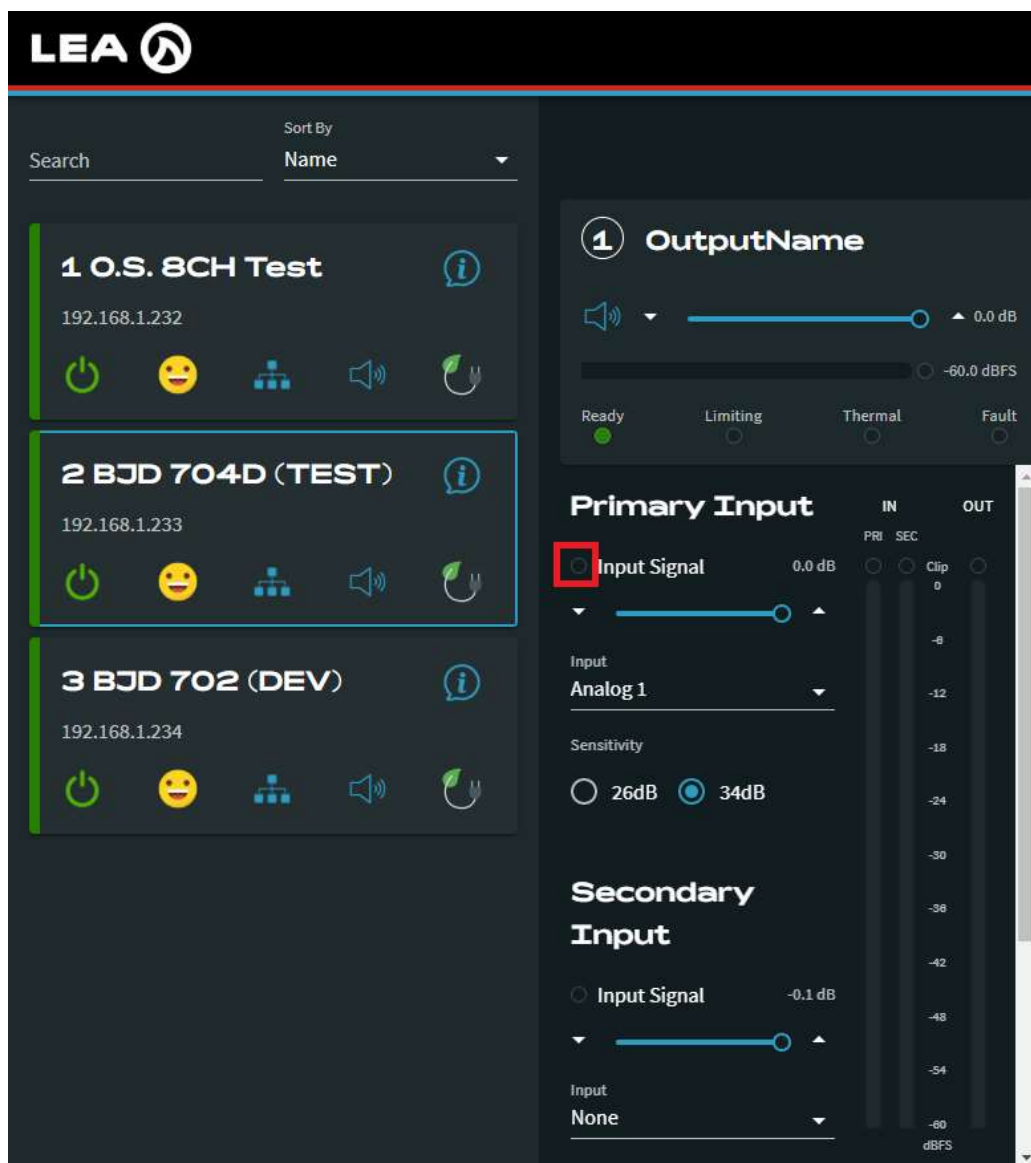
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/primarySignalDetect

Values: "true", "false"

Example: get /amp/channels/1/inputSelector/primarySignalDetect\n

- Response: /amp/channels/1/inputSelector/primarySignalDetect true\n
- This command asked to get the primary input signal presence state on Channel 1 and the response back was "true" meaning that signal is present



The screenshot displays the LEA control interface. On the left, a list of channels is shown:

- 1 O.S. 8CH Test** (192.168.1.232)
- 2 BJD 704D (TEST)** (192.168.1.233) - This channel is highlighted with a blue border.
- 3 BJD 702 (DEV)** (192.168.1.234)

Each channel entry includes a power icon, a smiley face icon, a network icon, a speaker icon, and a leaf icon. On the right, the settings for the selected channel (2 BJD 704D (TEST)) are shown:

- OutputName**: A slider set to 0.0 dB, with a range from -60.0 dBFS to 0.0 dB.
- Primary Input**: A dropdown menu set to "Input Signal". A red box highlights the "Input Signal" option. Below it, a slider is set to 0.0 dB.
- Input**: A dropdown menu set to "Analog 1".
- Sensitivity**: Two radio buttons, "26dB" and "34dB", with "34dB" selected.
- Secondary Input**: A dropdown menu set to "None".
- IN**: A vertical slider set to 0.0 dB, with a range from -60 dBFS to 0 dB.
- OUT**: A vertical slider set to 0.0 dB, with a range from -60 dBFS to 0 dB.

Primary Input Signal Clip Indicator

Type: SENSOR

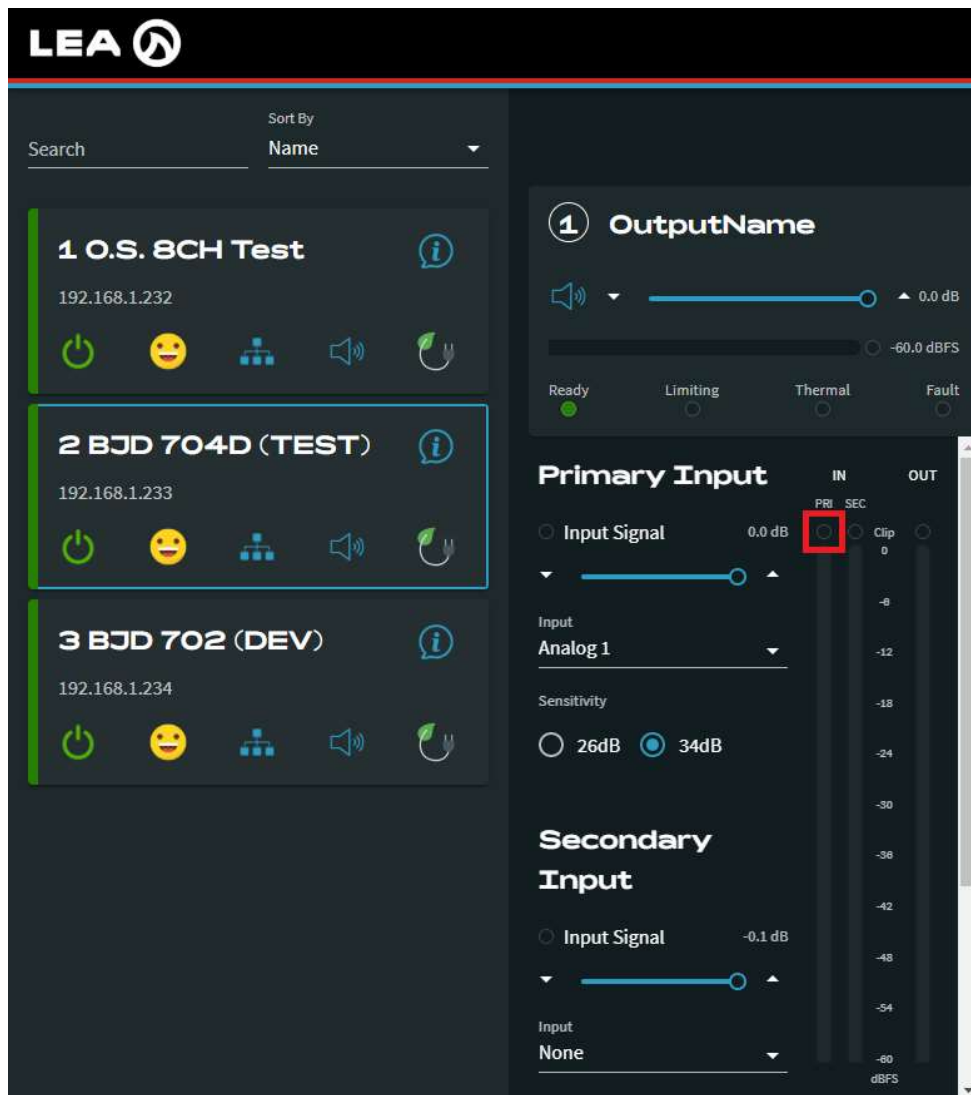
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/primaryClip

Values: "true", "false"

Example: subscribe /amp/channels/1/inputSelector/primaryClip\n

- Response: /amp/channels/1/inputSelector/primaryClip false\n
- This command asked to subscribe to primary input signal clip indication state on Channel 1 and the response back was "false" meaning that signal is not clipped, but as this is a subscription and any changes here will continue to be reported



The screenshot displays the LEA API interface. On the left, a list of channels is shown: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. Each channel has a status bar with icons for power, smiley face, network, speaker, and refresh. The '2 BJD 704D (TEST)' channel is highlighted with a blue border. On the right, the settings for the selected channel are shown. The 'OutputName' section has a volume slider set to 0.0 dB. Below it, the 'Primary Input' section shows the 'Input Signal' at 0.0 dB, with a red box highlighting the 'Clip' indicator. The 'Secondary Input' section shows the 'Input Signal' at -0.1 dB. The 'Input' dropdown is set to 'Analog 1' for the primary and 'None' for the secondary. The 'Sensitivity' is set to 34dB. The 'IN' and 'OUT' signal levels are shown on a scale from -60 dBFS to 0 dB.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Secondary Input Source

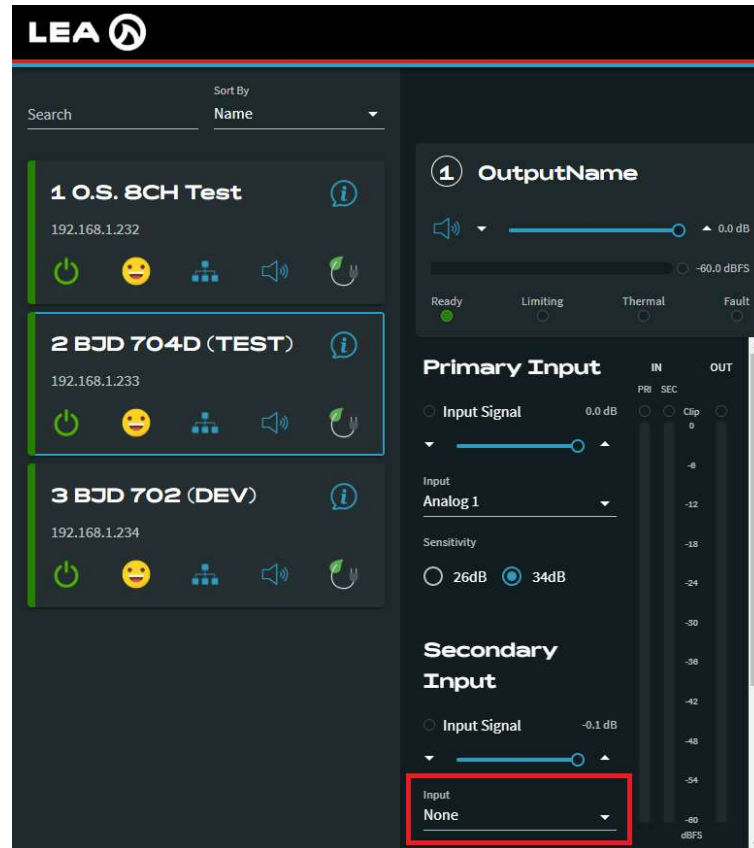
Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/secondary

Values:

"Analog 1"
"Analog 2"
"Analog 1+2"
"Analog 3"
"Analog 4"
"Analog 3+4"
"Analog 5"
"Analog 6"
"Analog 5+6"
"Analog 7"
"Analog 8"
"Analog 7+8"
"Dante 1"
"Dante 2"
"Dante 1+2"
"Dante 3"
"Dante 4"
"Dante 3+4"
"Dante 5"
"Dante 6"
"Dante 5+6"
"Dante 7"
"Dante 8"
"Dante 7+8"
"None"



Example: set /amp/channels/1/inputSelector/secondary "Analog 2"\n

- This will set the secondary input source on Channel 1 to "Analog 2"

For the Network Connect Series, only Analog inputs are available, and only the number of channels that are on the amplifier, for example a 354 would not have Analog 5-8 available.

For the Dante Connect Series analog inputs are only available for the number of inputs on the amplifier, however all 8 Dante inputs are available on all Dante models.

Secondary Gain Attenuation Fader

Type: CONTROL

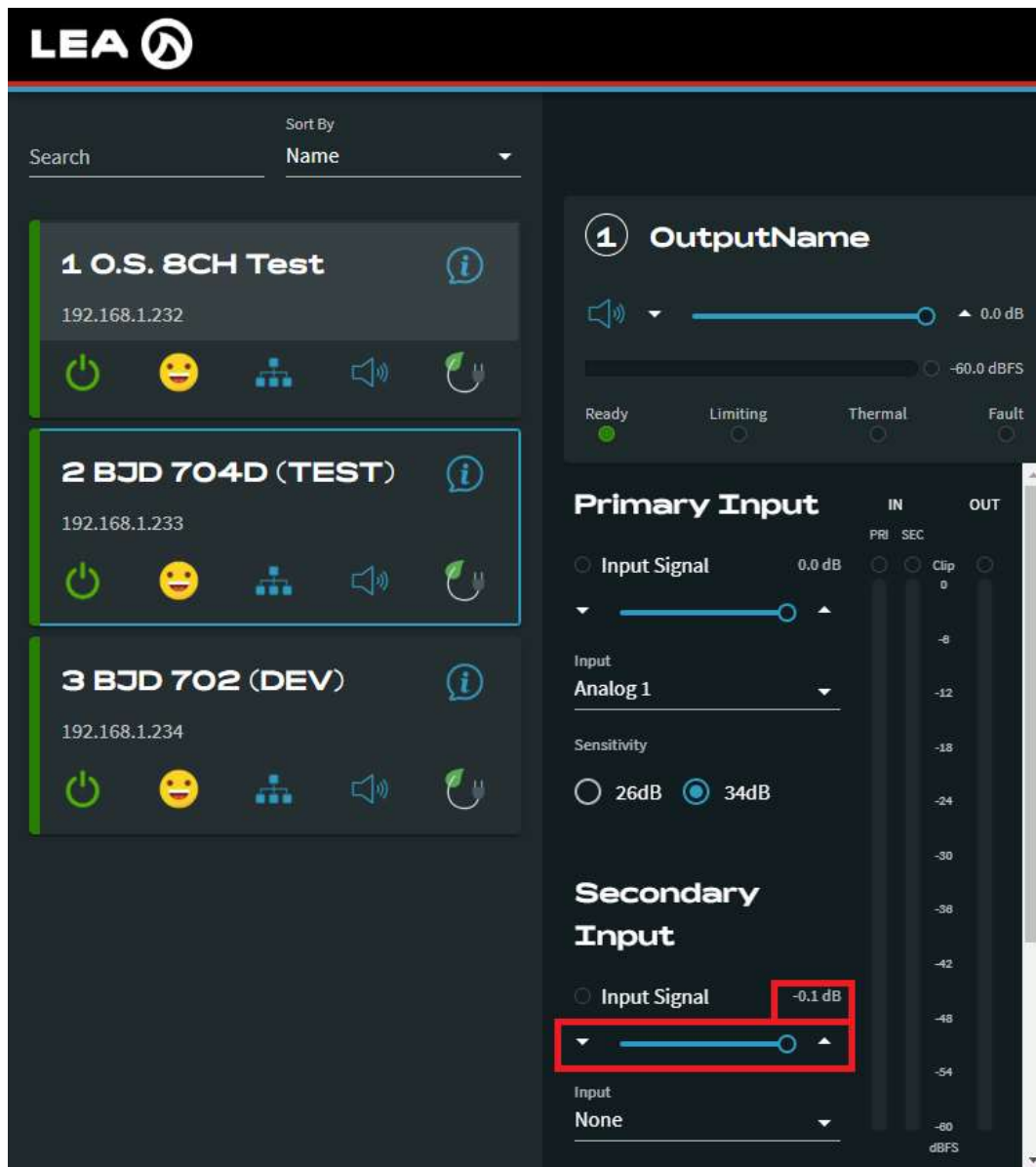
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/secondaryFader

Values: Gain attenuation values between -80 and 0

Example: get /amp/channels/2/inputSelector/secondaryFader\n

- Response: /amp/channels/2/inputSelector/secondaryFader -10.0\n
- This command asked for the secondary fader level on channel 2 and got -10dB as the response



The screenshot displays the LEA control interface. On the left, a list of channels is shown:

- 1 O.S. 8CH Test** (192.168.1.232)
- 2 BJD 704D (TEST)** (192.168.1.233)
- 3 BJD 702 (DEV)** (192.168.1.234)

Each channel has a set of icons for power, status, network, audio, and refresh. The right panel shows the detailed settings for the selected channel (Channel 2). It includes an **OutputName** section with a volume slider set to 0.0 dB. Below this is the **Primary Input** section, which shows the input signal level at 0.0 dB and a sensitivity selector set to 34dB. The **Secondary Input** section is highlighted with a red box, showing the input signal level at -0.1 dB and a volume slider. The bottom right of the interface features a vertical scale for dBFS, ranging from 0 to -60.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Secondary Input Meter

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/secondaryLevel

Values: -80 through 0 dBFS

Example: subscribe /amp/channels/1/inputSelector/secondaryLevel\n

- This will subscribe to the secondary input meter level for channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (192.168.1.232), '2 BJD 704D (TEST)' (192.168.1.233), and '3 BJD 702 (DEV)' (192.168.1.234). The '2 BJD 704D (TEST)' channel is highlighted with a red box. On the right, the 'OutputName' section shows a volume slider set to 0.0 dB. Below this, the 'Primary Input' section shows 'Input Signal' at 0.0 dB and 'Input Analog 1'. The 'Secondary Input' section shows 'Input Signal' at -0.1 dB and 'Input None'. A red box highlights the 'Secondary Input' section, specifically the 'Input Signal' and 'Input' dropdowns.

Secondary Input Signal Present

Type: SENSOR

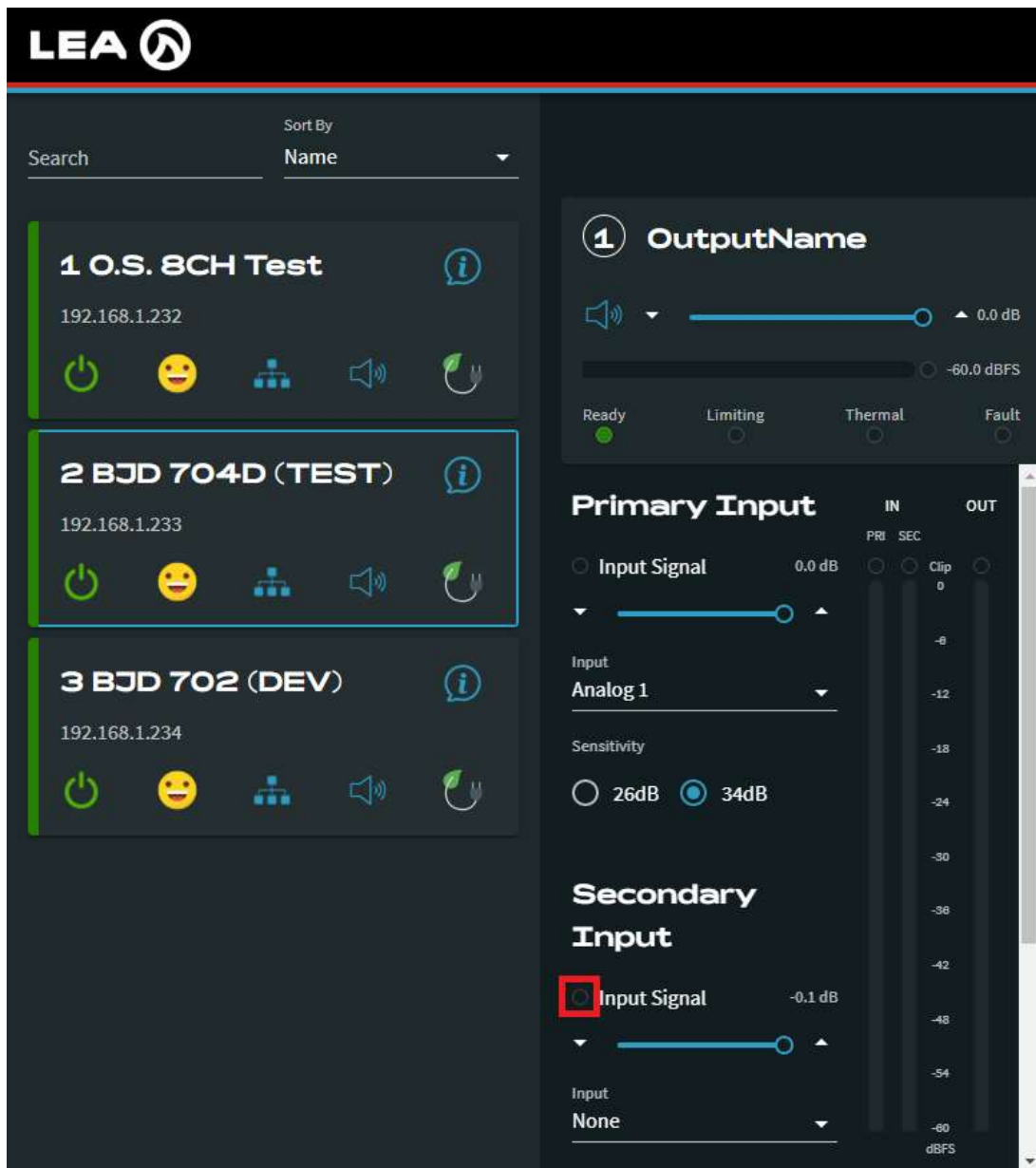
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/secondarySignalDetect

Values: "true", "false"

Example: get /amp/channels/1/inputSelector/secondarySignalDetect\n

- Response: /amp/channels/1/inputSelector/secondarySignalDetect true\n
- This command asked to get the secondary input signal presence state on Channel 1 and the response back was "true" meaning that signal is present



The screenshot displays the LEA control interface. On the left, a list of channels is shown, with '2 BJD 704D (TEST)' highlighted. The right panel shows the configuration for 'OutputName' and 'Primary Input'. The 'Primary Input' section shows 'Input Signal' at 0.0 dB. The 'Secondary Input' section shows 'Input Signal' at -0.1 dB, which is highlighted with a red box. The interface also includes a search bar, sort options, and various status indicators like 'Ready', 'Limiting', 'Thermal', and 'Fault'.

Secondary Input Signal Clip Indicator

Type: SENSOR

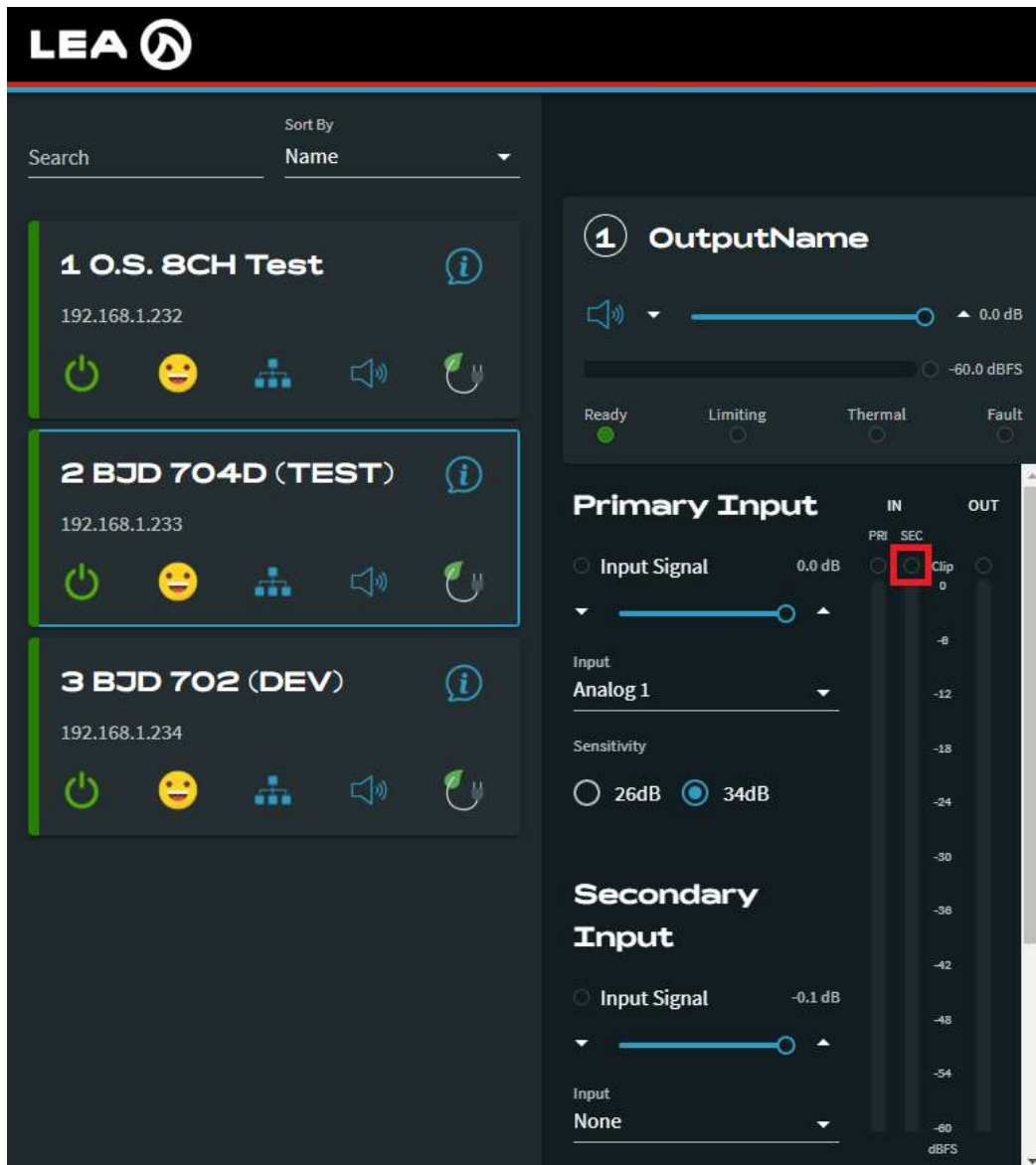
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/secondaryClip

Values: "true", "false"

Example: subscribe /amp/channels/1/inputSelector/secondaryClip\n

- Response: /amp/channels/1/inputSelector/secondaryClip false\n
- This command asked to subscribe to secondary input signal clip indication state on Channel 1 and the response back was "false" meaning that signal is not clipped, but as this is a subscription any changes here will continue to be reported



The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The '2 BJD 704D (TEST)' channel is selected and highlighted with a red box. On the right, the settings for the selected channel are displayed. The 'OutputName' is '1'. The 'Primary Input' is 'Analog 1' with a sensitivity of '34dB'. The 'Secondary Input' is 'None'. The 'Input Signal' for the primary input is '0.0 dB'. The 'Secondary Input' signal is '-0.1 dB'. The 'Clip' indicator is shown as a red box with a white 'X' over it, indicating a clipped signal. The 'IN' and 'OUT' levels are shown on a scale from -60 dBFS to 0 dB.

Input Signal Present

Type: SENSOR

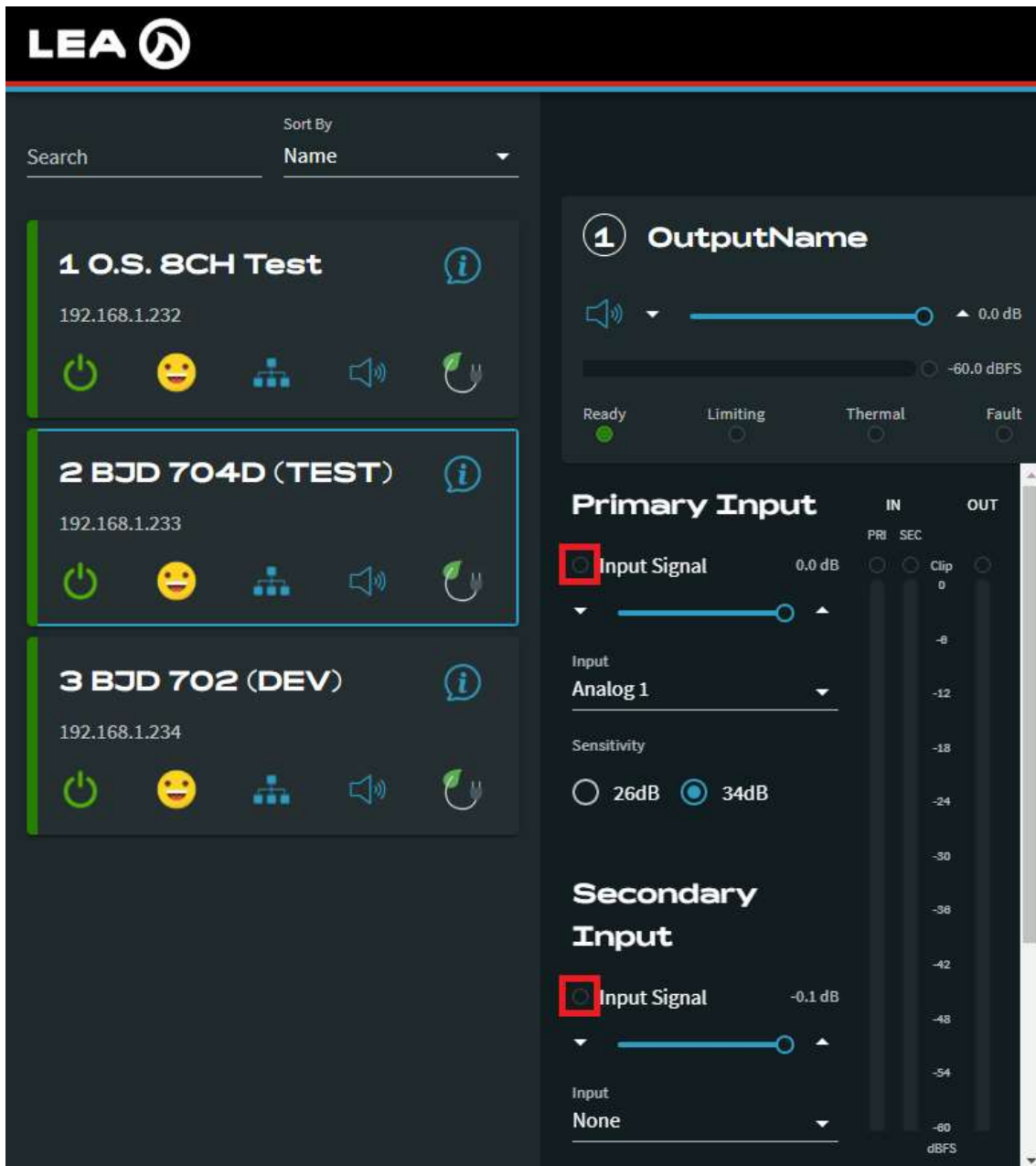
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/signalDetect

Values: "true", "false"

Example: get /amp/channels/1/inputSelector/signalDetect\n

- Response: /amp/channels/1/inputSelector/signalDetect true\n
- This command asked to get the input signal presence state on Channel 1 and the response back was "true" meaning that signal is present (this is an aggregate of both primary and secondary inputs)



The screenshot displays the LEA control interface. On the left, a list of channels is shown, with '2 BJD 704D (TEST)' highlighted. The right panel shows the settings for the selected channel. The 'OutputName' is '1'. The 'Primary Input' section shows 'Input Signal' selected, with a level of 0.0 dB. The 'Secondary Input' section shows 'Input Signal' selected, with a level of -0.1 dB. The 'Input' dropdown for the primary input is set to 'Analog 1', and for the secondary input, it is set to 'None'. The 'Sensitivity' for the primary input is set to 34dB. The 'Ready' status is indicated by a green dot.

Input Signal Clip Indicator

Type: SENSOR

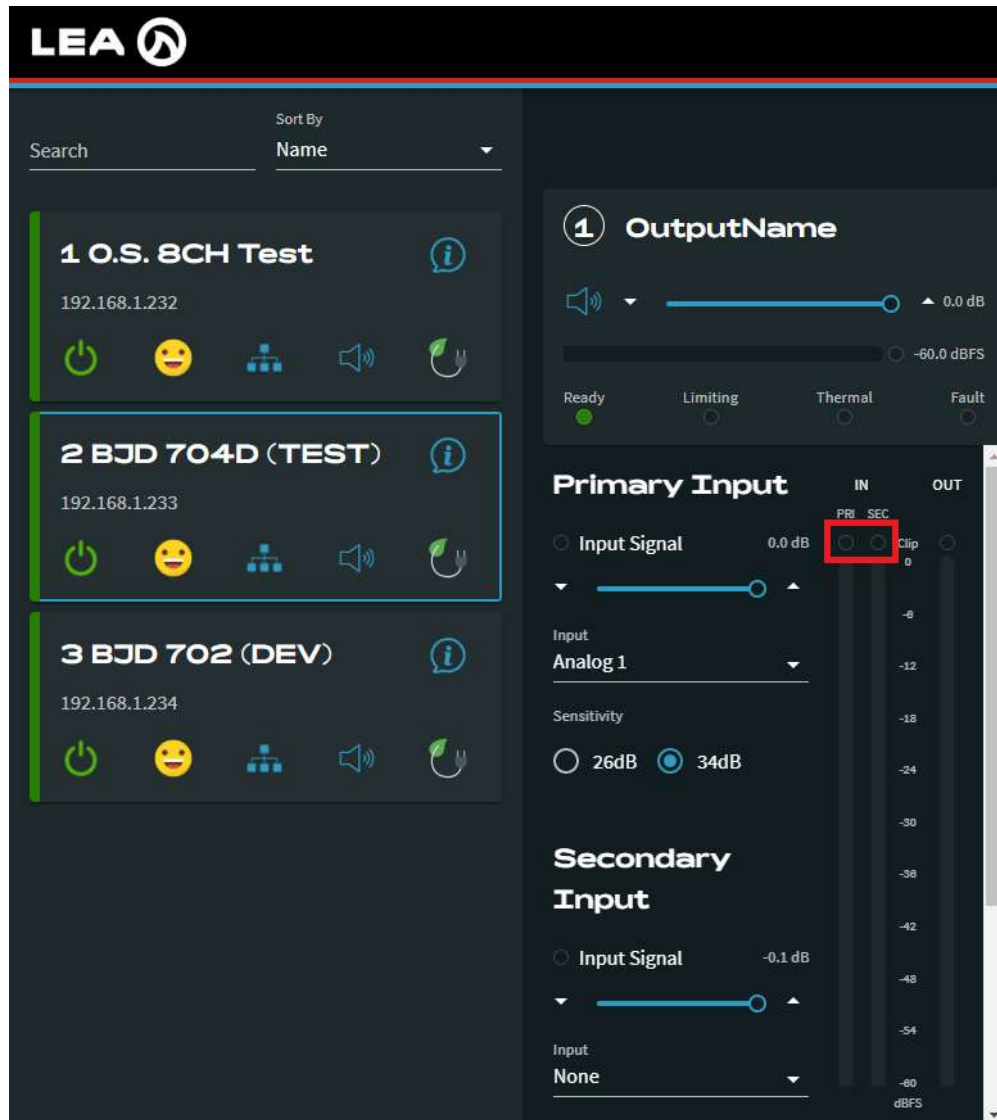
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/clip

Values: "true", "false"

Example: subscribe /amp/channels/1/inputSelector/clip\n

- Response: /amp/channels/1/inputSelector/clip false\n
- This command asked to subscribe to input signal clip indication on Channel 1 and the response back was "false" meaning that signal is not clipped, but as this is a subscription and any changes here will continue to be reported (this is an aggregate of both primary and secondary inputs)



The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (192.168.1.232), '2 BJD 704D (TEST)' (192.168.1.233), and '3 BJD 702 (DEV)' (192.168.1.234). The '2 BJD 704D (TEST)' channel is highlighted with a red box. On the right, the settings for the selected channel are shown. The 'OutputName' is set to '1'. The 'Primary Input' is set to 'Analog 1' with a sensitivity of '34dB'. The 'Secondary Input' is set to 'None'. The 'Input Signal' level for the primary input is '0.0 dB'. The 'Clip' indicator is shown as a red box with a green checkmark, indicating that the signal is not clipped. The 'IN' and 'OUT' levels are also displayed on the right side of the interface.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Input Signal Priority Override Mode

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/mode

Values: "Override", "Backup"

Example: set /amp/channels/1/inputSelector/mode "Override"\n

- The command set the priority override mode on channel 1 to "Override"
- "Override" is Auto Override Primary Input
- "Backup" is Signal Sensing Override

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' channel is selected. The main panel shows the settings for this channel, including 'OutputName', 'Primary Input', and 'Secondary Input'. The 'Override Mode' section is highlighted with a red box, showing two options: 'Auto Override Primary Input' (selected) and 'Signal Sensing Override'. Below this, a note explains the override modes: 'Auto Override Primary Input - Any signal on the Secondary Input signal will override the Primary Input Signal.' and 'Signal Sensing Override - If Primary Input signal is lost or drops to a low level, Secondary Input signal takes over.'

Primary Input Signal Override Threshold

Type: CONTROL

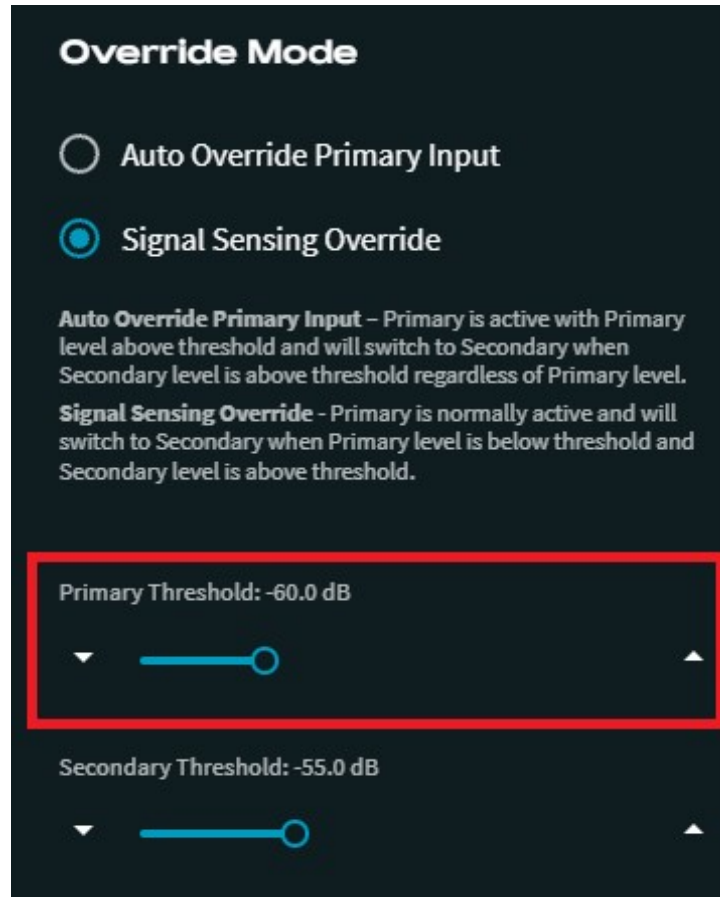
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/primaryThreshold

Values: -80 through 0

Example: set /amp/channels/1/inputSelector/primaryThreshold -60\n

- This command set the secondary override threshold to -60dB



Override Mode


☐ Auto Override Primary Input

☒ Signal Sensing Override


Auto Override Primary Input – Primary is active with Primary level above threshold and will switch to Secondary when Secondary level is above threshold regardless of Primary level.

Signal Sensing Override – Primary is normally active and will switch to Secondary when Primary level is below threshold and Secondary level is above threshold.

Primary Threshold: -60.0 dB

▼  ▲

Secondary Threshold: -55.0 dB

▼  ▲

Secondary Input Signal Override Threshold

Type: CONTROL

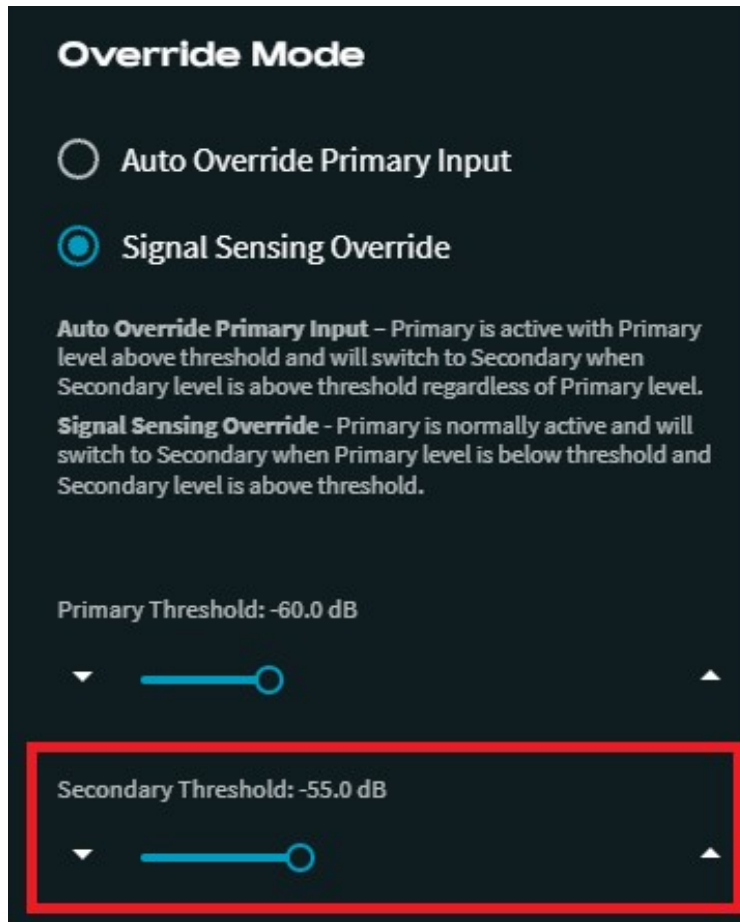
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/secondaryThreshold

Values: -80 through 0

Example: set /amp/channels/1/inputSelector/secondaryThreshold -55\n

- This command set the secondary override threshold to -55dB



Override Mode

☐ Auto Override Primary Input

☒ Signal Sensing Override

Auto Override Primary Input – Primary is active with Primary level above threshold and will switch to Secondary when Secondary level is above threshold regardless of Primary level.

Signal Sensing Override - Primary is normally active and will switch to Secondary when Primary level is below threshold and Secondary level is above threshold.

Primary Threshold: -60.0 dB

Secondary Threshold: -55.0 dB

Signal Generator Channel Enable

Type: CONTROL

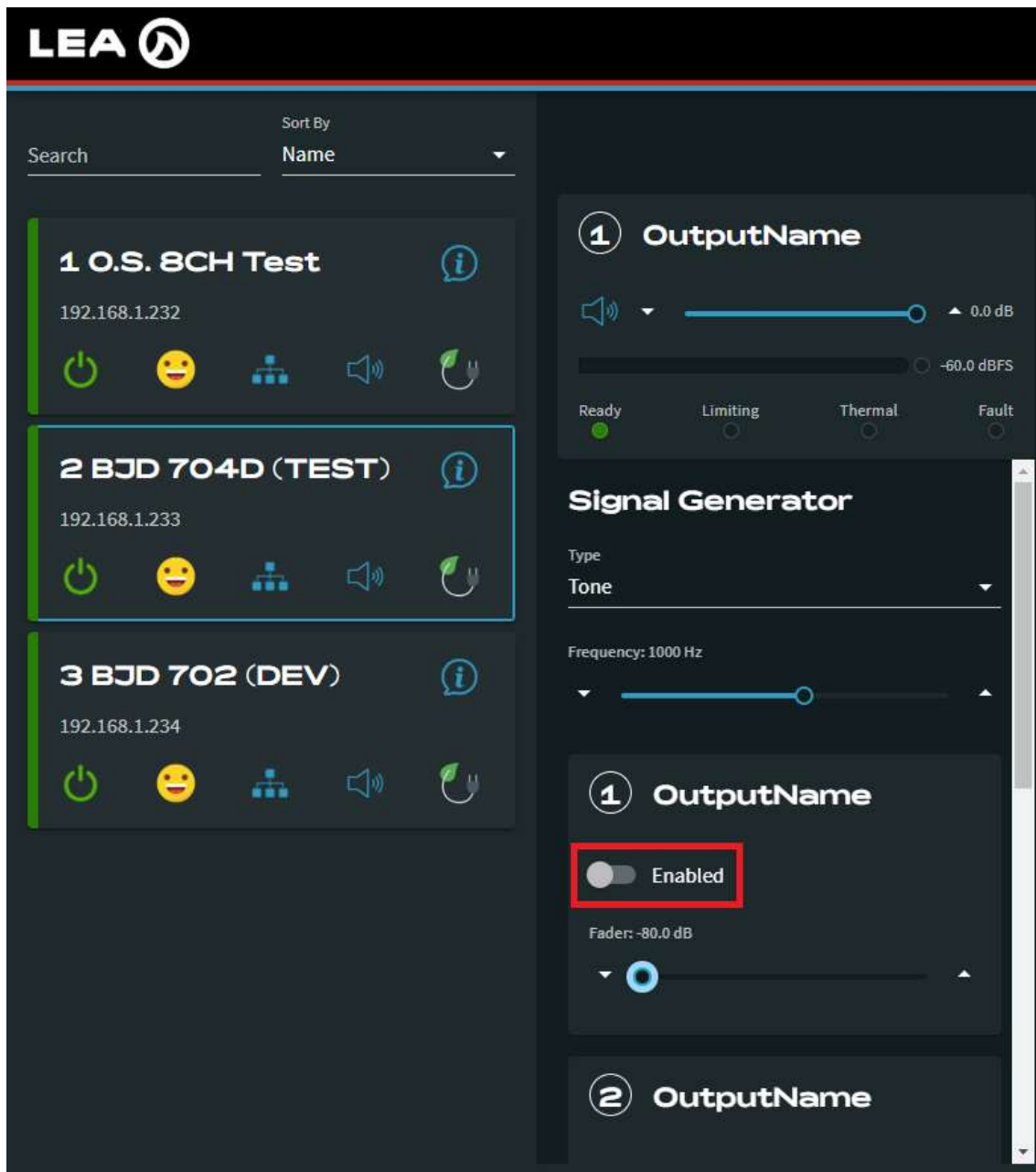
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/signalGeneratorEnable

Values: "true", "false"

Example: set /amp/channels/1/inputSelector/signalGeneratorEnable "true"\n

- This command enabled the signal generator on Channel 1



The screenshot displays the LEA control interface. On the left, a list of channels is shown, with Channel 2 'BJD 704D (TEST)' highlighted. The right panel shows the 'Signal Generator' settings for the selected channel. The 'OutputName' is set to '1', and the 'Enabled' toggle switch is turned on, highlighted with a red box. The 'Frequency' is set to 1000 Hz, and the 'Fader' is set to -80.0 dB.

Signal Generator Channel Fader

Type: CONTROL

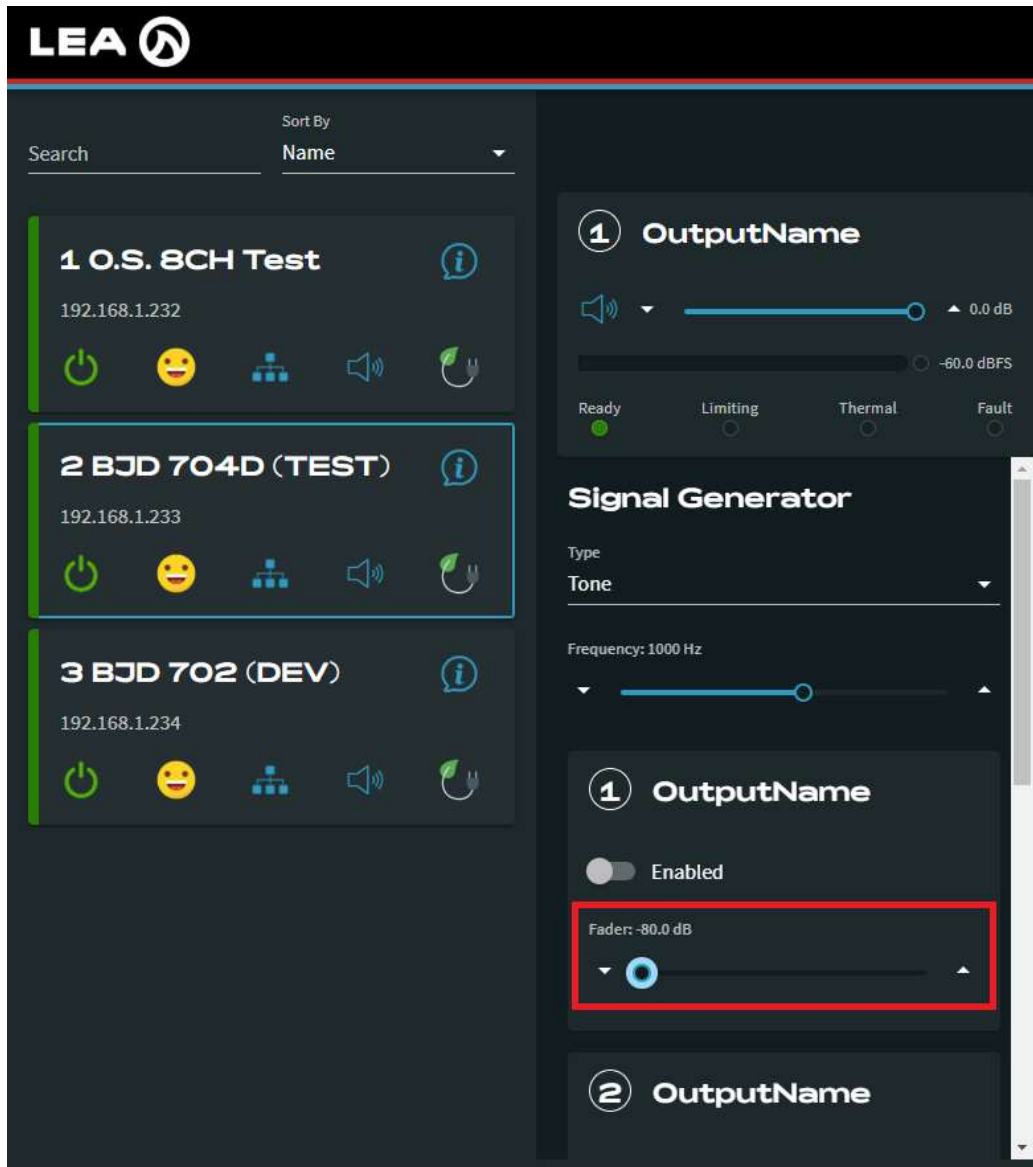
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/signalGeneratorFader

Values: -80 through 0 dB

Example: set /amp/channels/1/inputSelector/signalGeneratorFader -20.0\n

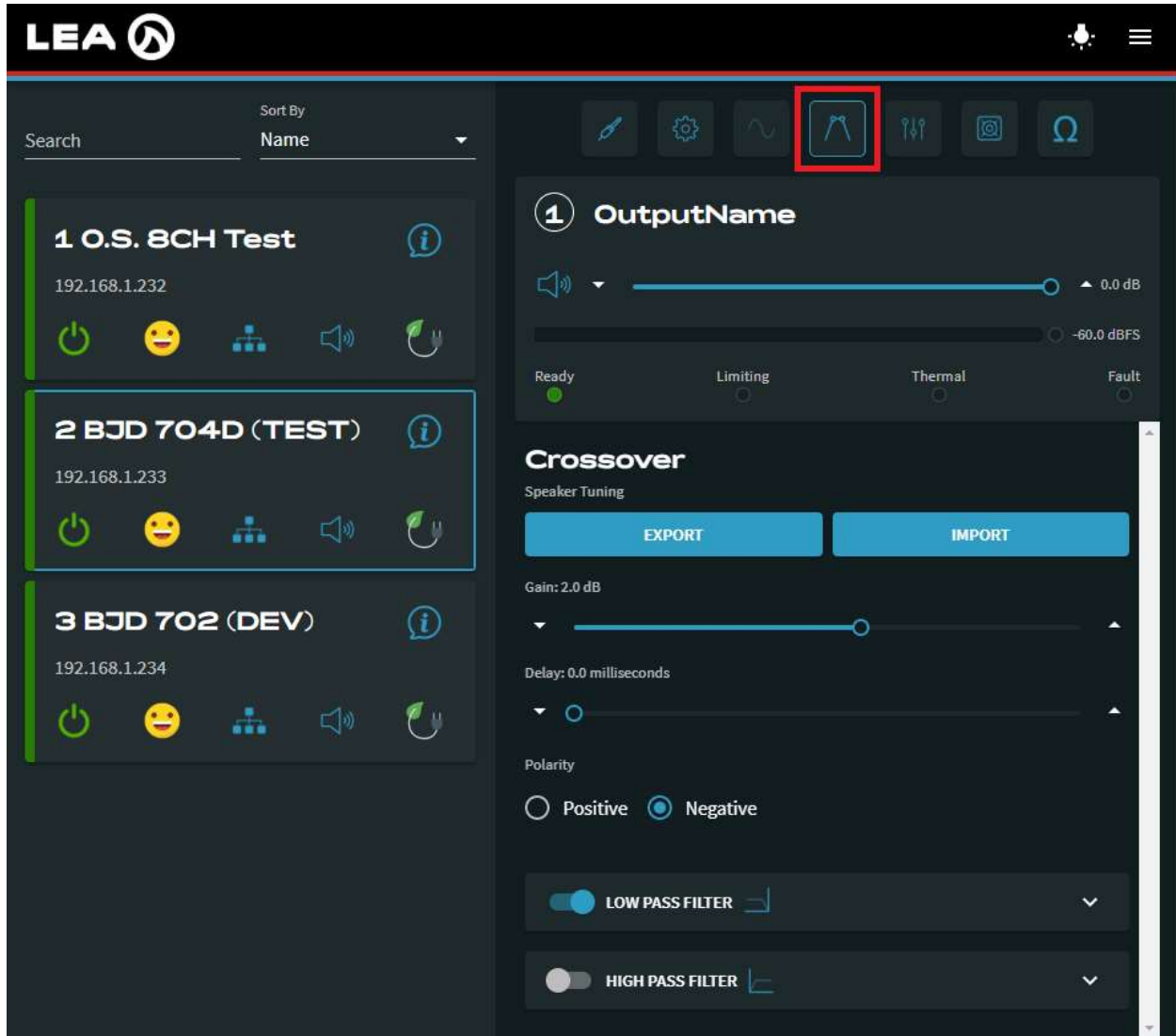
- This command set the signal generator fader to -20 dB on Channel 1



The screenshot displays the LEA control interface. On the left, a list of channels is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '2 BJD 704D (TEST)' channel is highlighted. On the right, the 'Signal Generator' settings are visible. The 'OutputName' section shows a volume slider set to 0.0 dB. Below this, the 'Signal Generator' section includes a 'Type' dropdown set to 'Tone' and a 'Frequency' slider set to 1000 Hz. The 'Fader' section is highlighted with a red box, showing a slider set to -80.0 dB. The 'Enabled' toggle is also visible.

Amplifier Channels Crossover

Click on this button to navigate to the Crossover section of the DSP relevant to this API section



The screenshot displays the LEA API web interface. The left sidebar contains a search bar and a list of test channels. The main panel shows the 'OutputName' section with a volume slider and the 'Crossover' section with various settings like Gain, Delay, and Polarity. A red box highlights the crossover icon in the top navigation bar.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Crossover Gain

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/bandGainAndDelay/gain

Values: -15.0 through 15.0

Example: set /amp/channels/1/crossover/bandGainAndDelay/gain 3.0\n

- This command set the crossover gain on channel 1 to 3.0 dB

The screenshot displays the LEA control interface. On the left, a list of channels is shown: 1 O.S. 8CH Test, 2 BJD 704D (TEST), and 3 BJD 702 (DEV). Channel 2 is selected. The right panel shows the 'OutputName' section with a volume slider set to 0.0 dB. Below this is the 'Crossover' section, which includes 'Speaker Tuning' buttons (EXPORT, IMPORT), a 'Gain' slider set to 3.0 dB (highlighted with a red box), a 'Delay' slider set to 10.0 milliseconds, and 'Polarity' options (Positive, Negative). At the bottom, there are sections for 'LOW PASS FILTER' and 'HIGH PASS FILTER'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Crossover Delay

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/bandGainAndDelay/delay

Values: 0.0 through 100.0

Example: set /amp/channels/1/crossover/bandGainAndDelay/delay 10.0\n

- This command set the crossover delay on channel 1 to 10.0 ms

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. Channel 2 is selected. The right panel shows the 'OutputName' section with a volume slider set to 0.0 dB. Below this is the 'Crossover' section, which includes 'Speaker Tuning' buttons (EXPORT, IMPORT), a 'Gain: 3.0 dB' slider, and a 'Delay: 10.0 milliseconds' slider. The delay slider is highlighted with a red box. At the bottom, there are 'Polarity' options (Positive, Negative) and filter settings for 'LOW PASS FILTER' and 'HIGH PASS FILTER'.

Crossover Polarity

Type: CONTROL

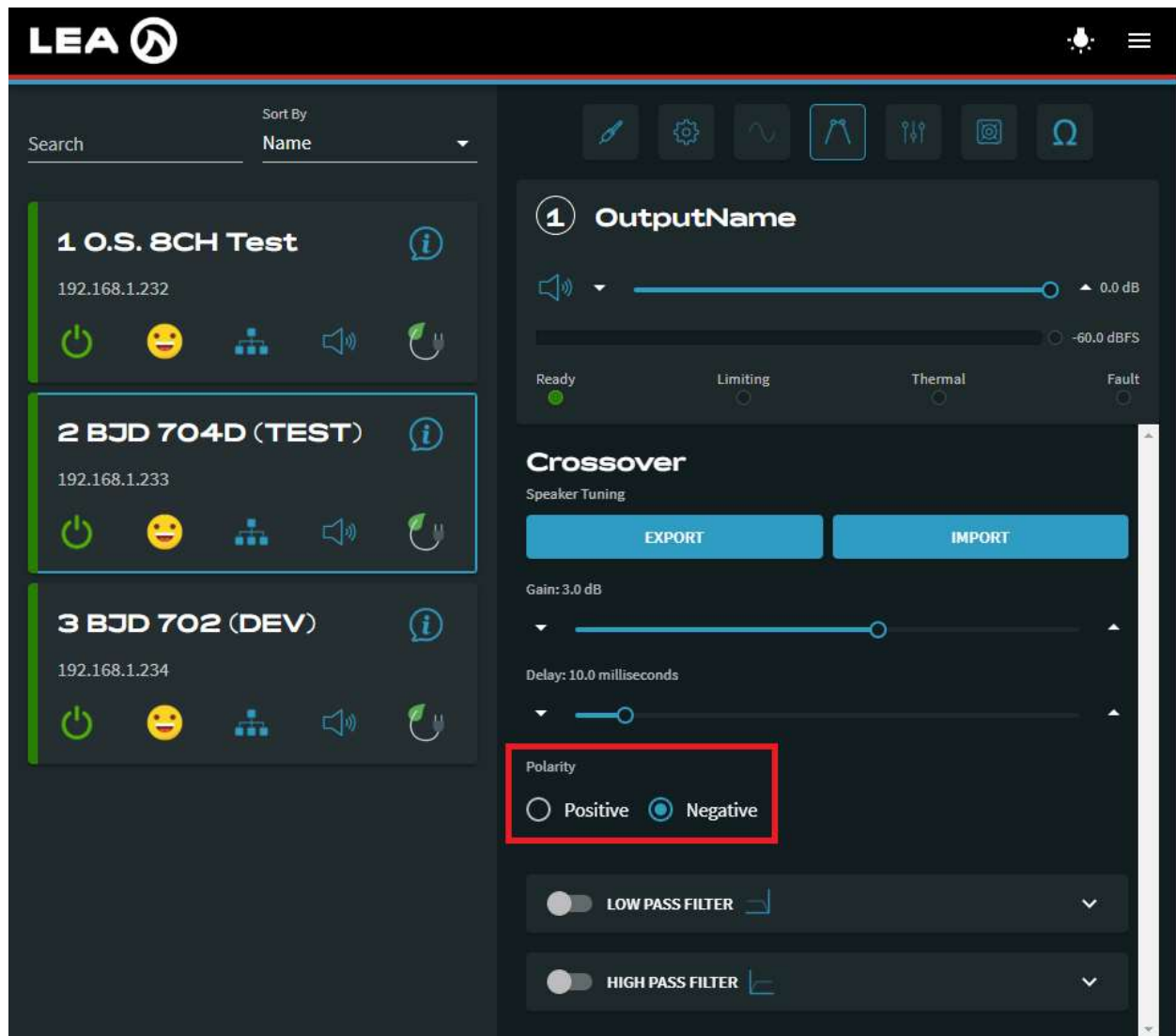
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/bandGainAndDelay/invert

Values: "true", "false"

Example: set /amp/channels/1/crossover/bandGainAndDelay/invert "true"\n

- This command set the crossover polarity to negative on channel 1





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Crossover Low Pass Filter Enable

Type: CONTROL

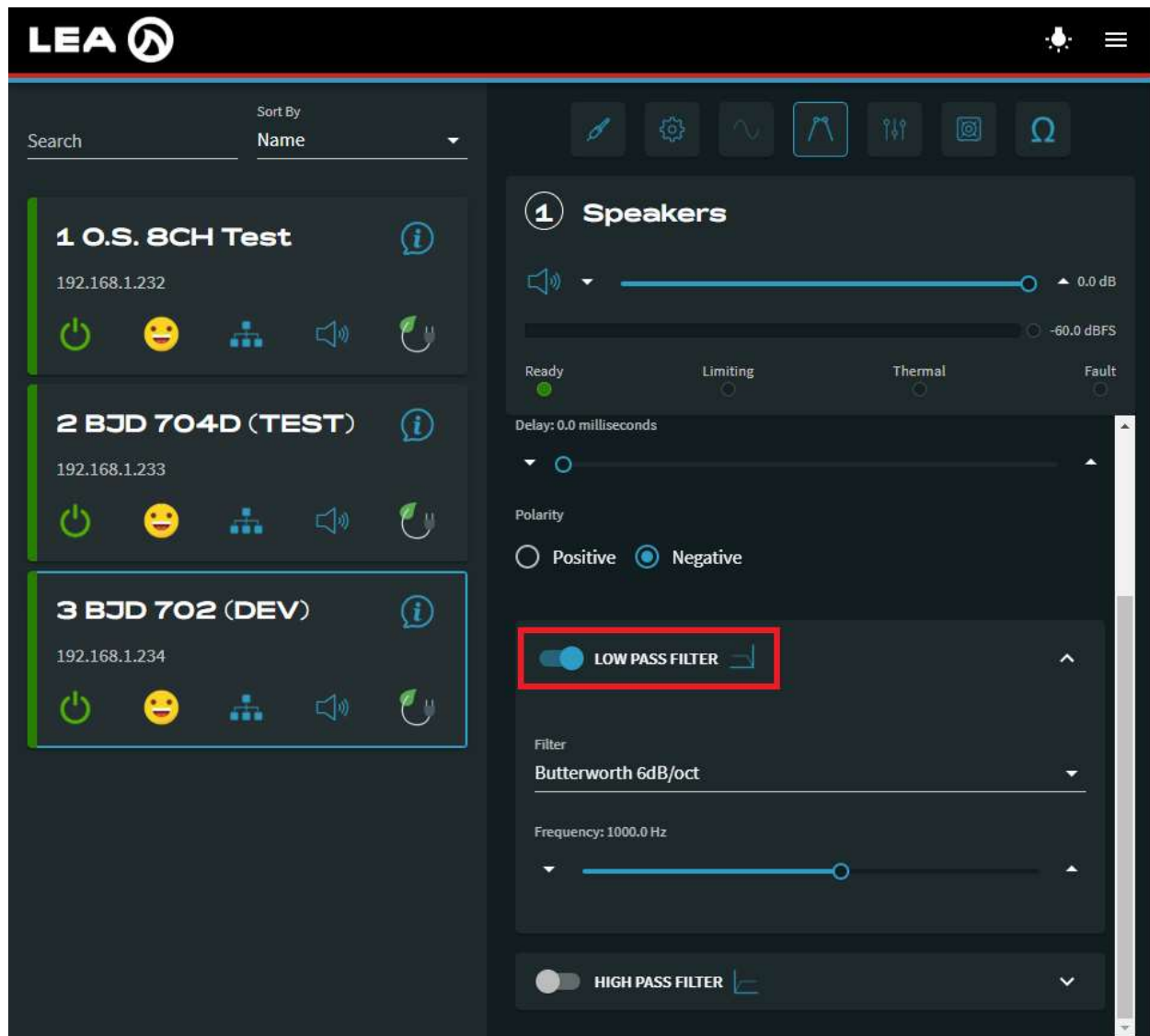
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/lowPassFilter/enable

Values: "true", "false"

Example: set /amp/channels/1/crossover/lowPassFilter/enable "true"\n

- This command enabled the Low Pass Filter on channel 1





Crossover Low Pass Filter Type

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/lowPassFilter/type

Values:

"Butterworth 6dB/oct"

"Butterworth 12dB/oct"

"Butterworth 18dB/oct"

"Butterworth 24dB/oct"

"Butterworth 48dB/oct"

"Linkwitz-Riley 24dB/oct"

"Linkwitz-Riley 48dB/oct"

"Bessel 6dB/oct"

"Bessel 12dB/oct"

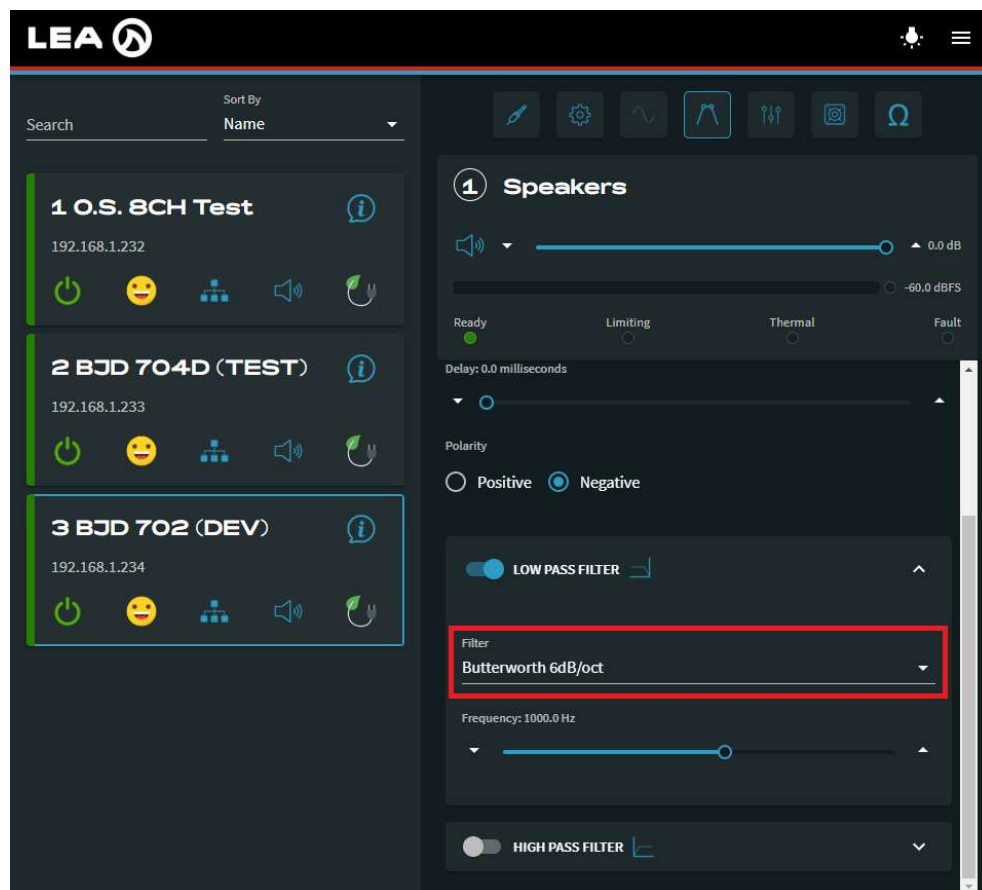
"Bessel 18dB/oct"

"Bessel 24dB/oct"

"Bessel 48dB/oct"

Example: set /amp/channels/1/crossover/lowPassFilter/type "Butterworth 6dB/oct"\n

- This command set the Low Pass Filter type to Butterworth 6dB/oct on channel 1





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Crossover Low Pass Filter Frequency

Type: CONTROL

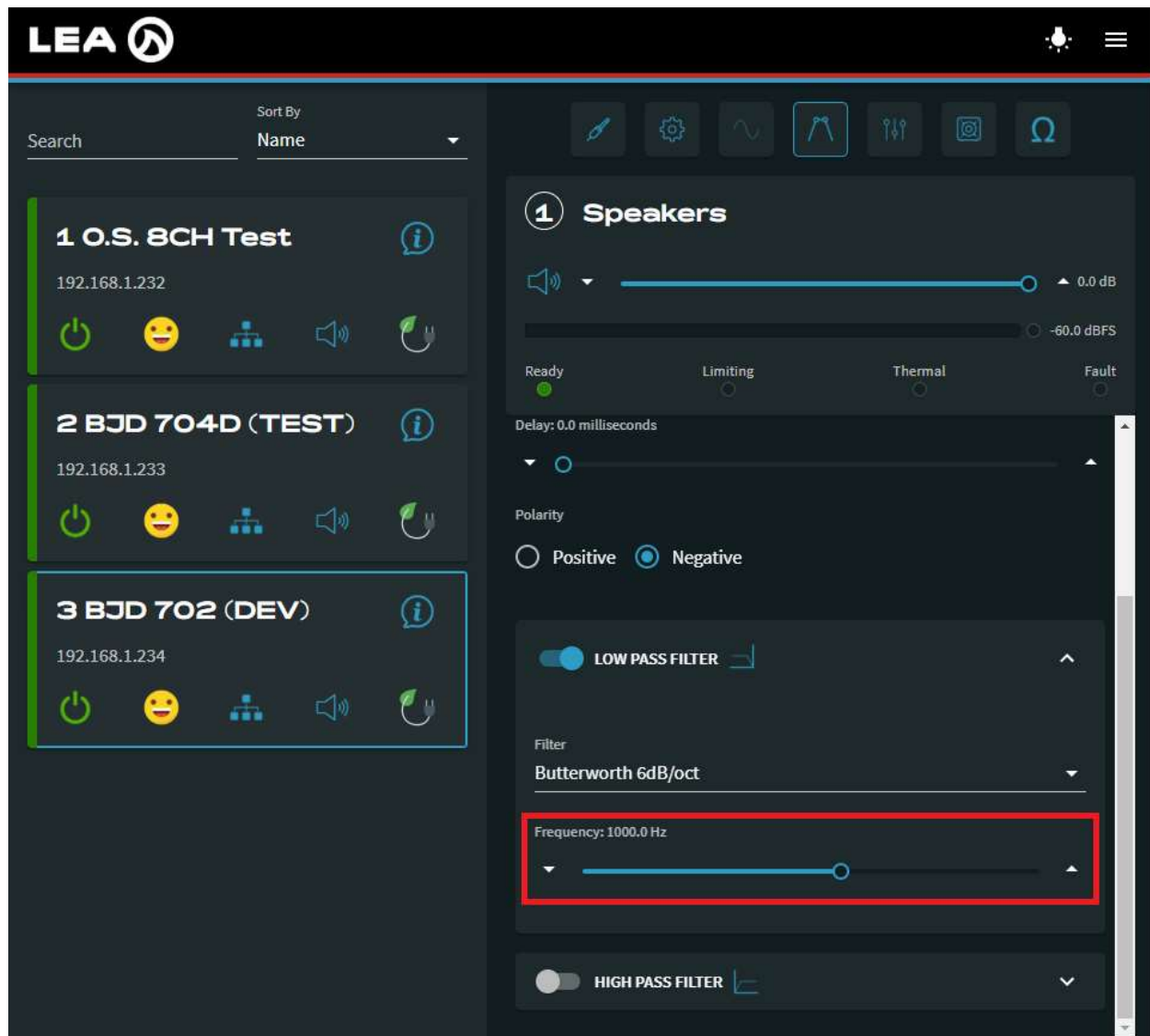
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/lowPassFilter/frequency

Values: 20 through 20000

Example: set /amp/channels/1/crossover/lowPassFilter/frequency 1000\n

- This command set the Low Pass Filter Frequency on channel 1 to 1000 Hz





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Crossover High Pass Filter Enable

Type: CONTROL

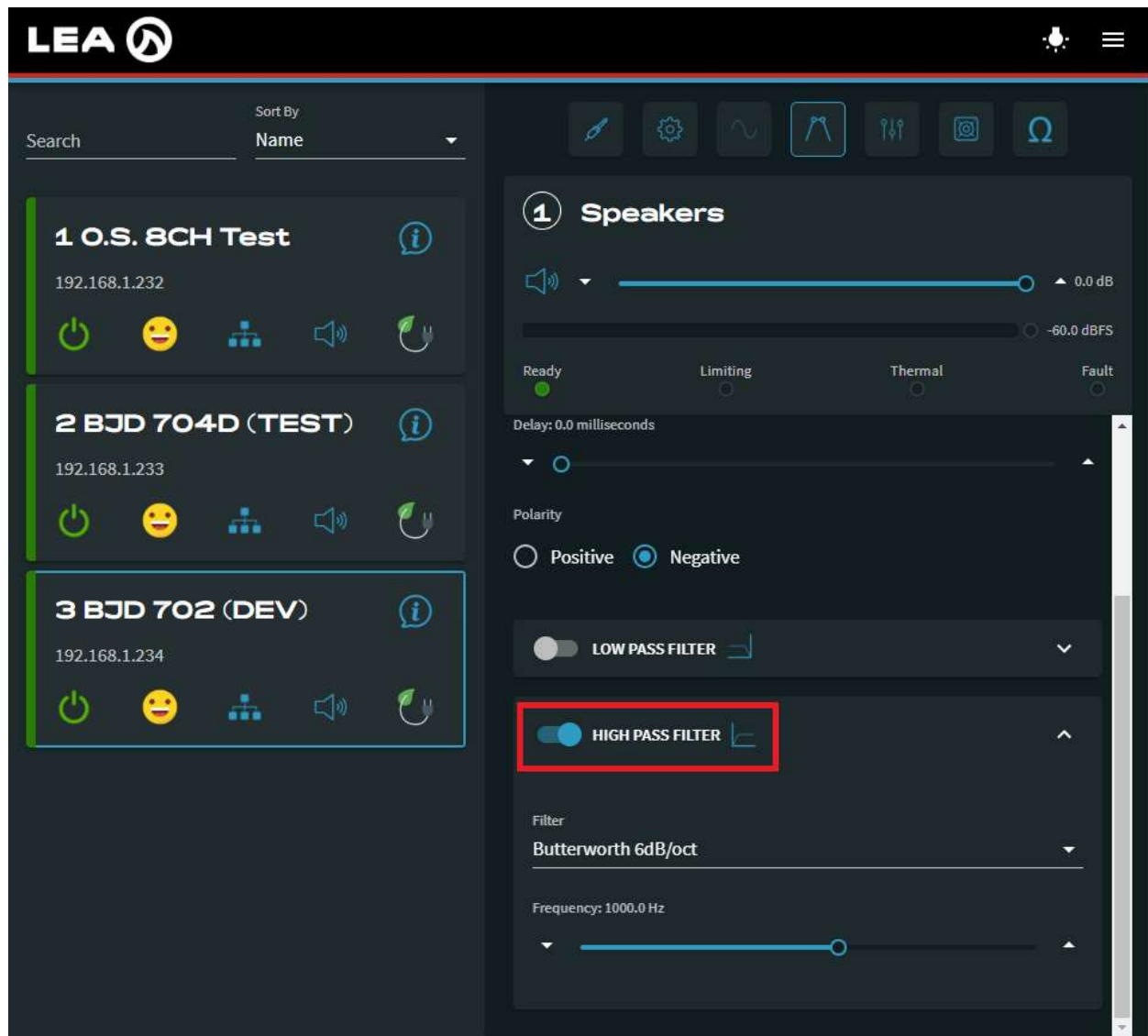
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/highPassFilter/enable

Values: "true", "false"

Example: set /amp/channels/1/crossover/highPassFilter/enable "true"\n

- This command enabled the High Pass Filter on channel 1





Crossover High Pass Filter Type

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/crossover/highPassFilter/type

Values:

"Butterworth 6dB/oct"

"Butterworth 12dB/oct"

"Butterworth 18dB/oct"

"Butterworth 24dB/oct"

"Butterworth 48dB/oct"

"Linkwitz-Riley 24dB/oct"

"Linkwitz-Riley 48dB/oct"

"Bessel 6dB/oct"

"Bessel 12dB/oct"

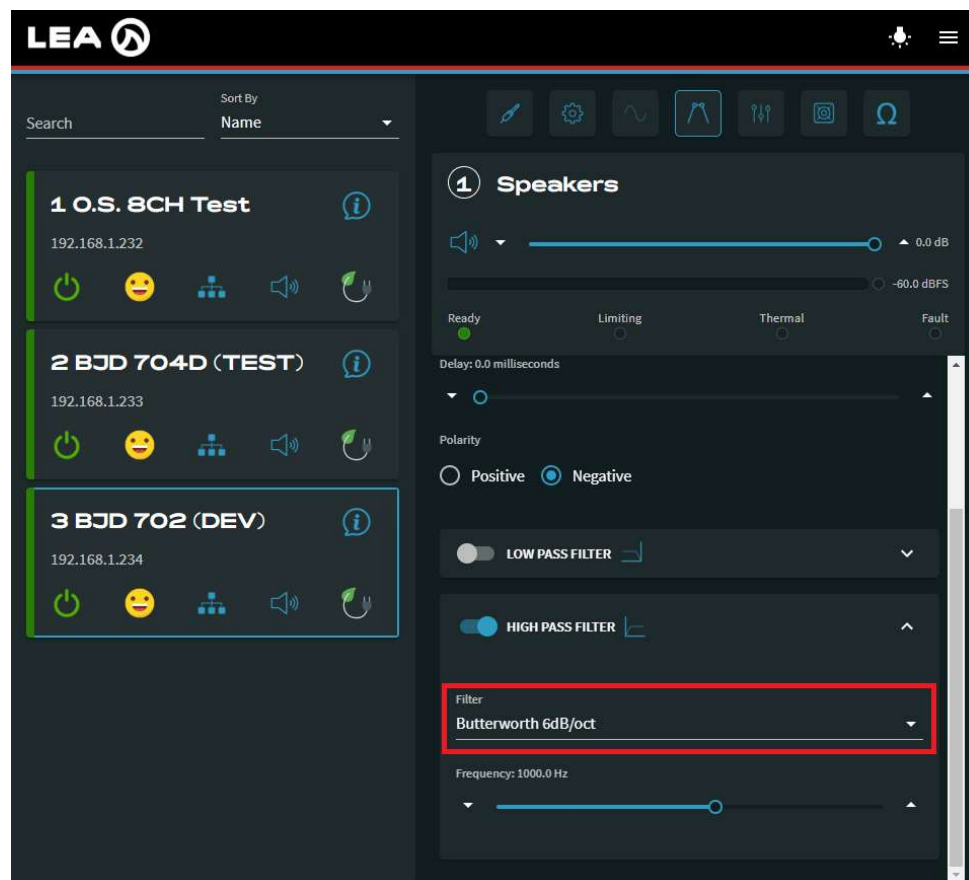
"Bessel 18dB/oct"

"Bessel 24dB/oct"

"Bessel 48dB/oct"

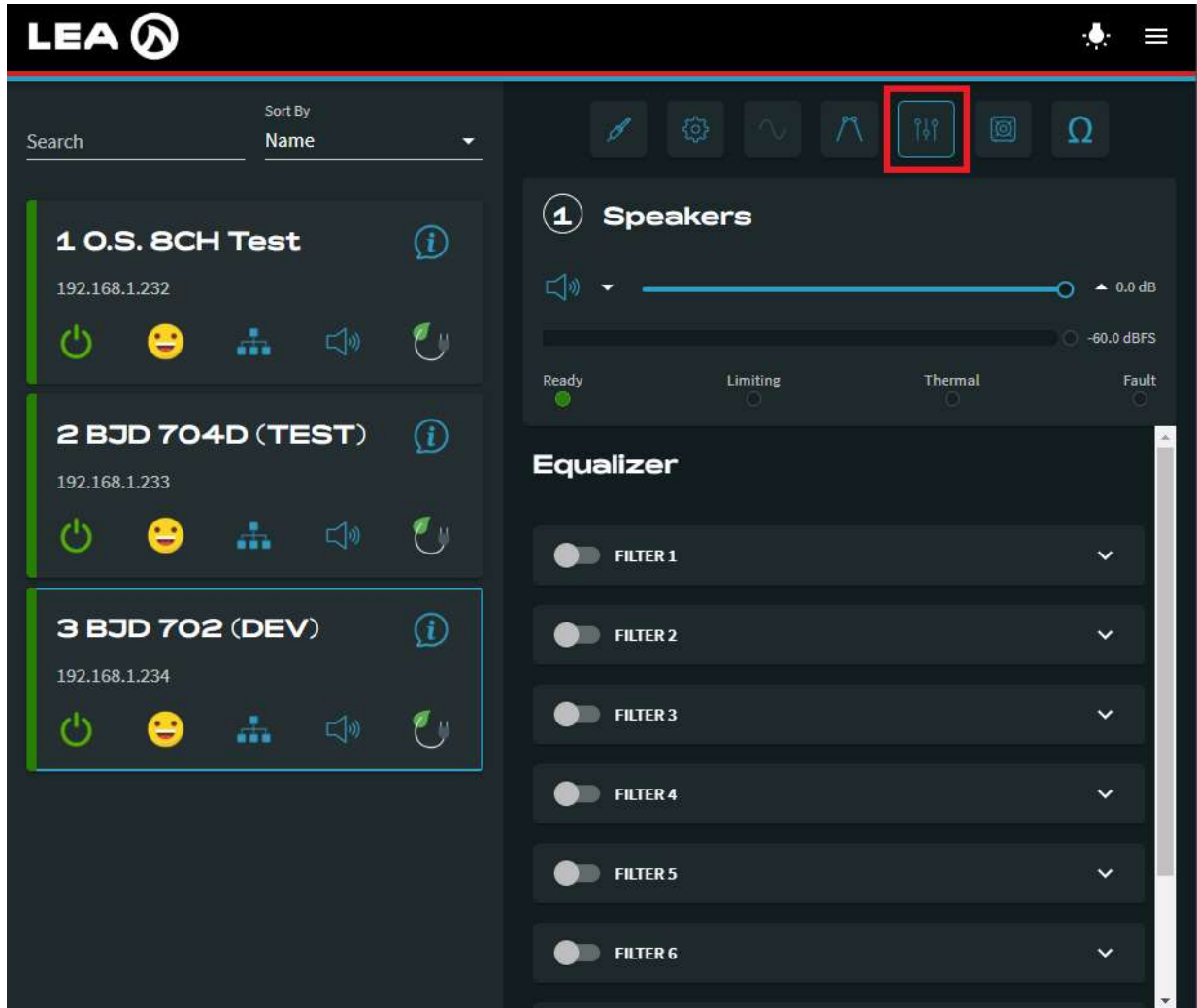
Example: set /amp/channels/1/crossover/lowPassFilter/type "Butterworth 6dB/oct"\n

- This command set the Low Pass Filter type to Butterworth 6dB/oct on channel 1



Amplifier Channels Output EQ

Click on this button to navigate to the EQ section of the DSP relevant to this API section



The screenshot displays the LEA web interface for the OPEN API – TCP Protocol. The interface is divided into two main sections. The left section lists three test channels: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. Each channel has a status bar with icons for power, smiley face, network, speaker, and plug. The third channel is highlighted with a blue border. The right section shows the 'Speakers' section with a volume slider set to 0.0 dB, and an 'Equalizer' section with six filters, each with a toggle switch and a dropdown menu. A red box highlights the EQ icon in the top navigation bar.

Output EQ Filter Enable

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

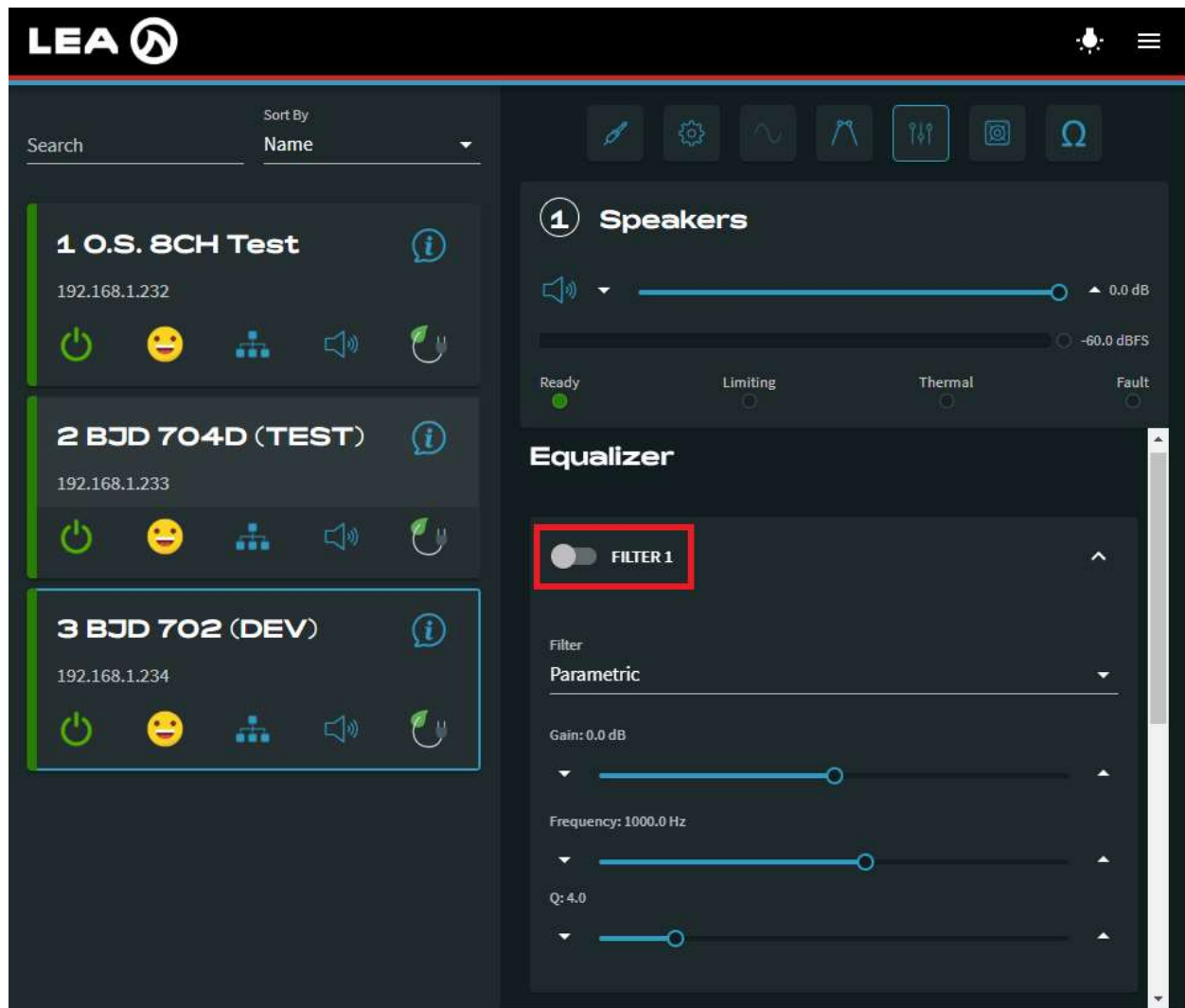
URL: /amp/channels/x/outputEqFilters/*/enable

- x is the desired channel number and * is the desired filter number

Values: "true", "false"

Example: set /amp/channels/1/outputEqFilters/1/enable "true"\n

- This command enabled the EQ Filter 1 on Channel 1



Output EQ Filter Type

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/outputEqFilters/*/type

- x is the desired channel number and * is the desired filter number

Values:

"Parametric"

"LP Shelf 6dB/oct"

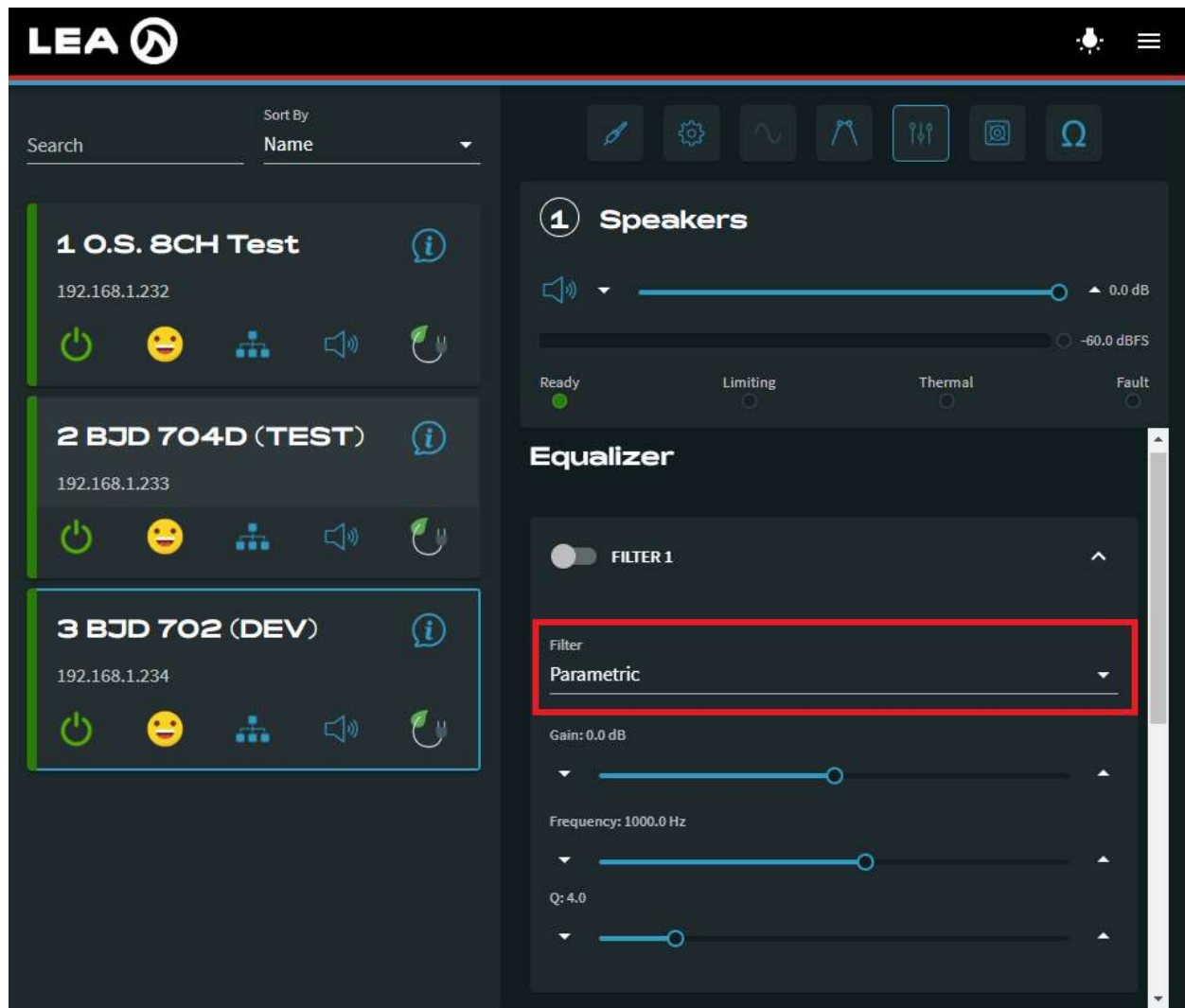
"HP Shelf 6dB/oct"

"LP Shelf 12dB/oct"

"HP Shelf 12dB/oct"

Example: set /amp/channels/1/outputEqFilters/1/type "Parametric"\n

- This command set the filter type on EQ Filter 1 on Channel 1 to Parametric





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output EQ Filter Gain

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

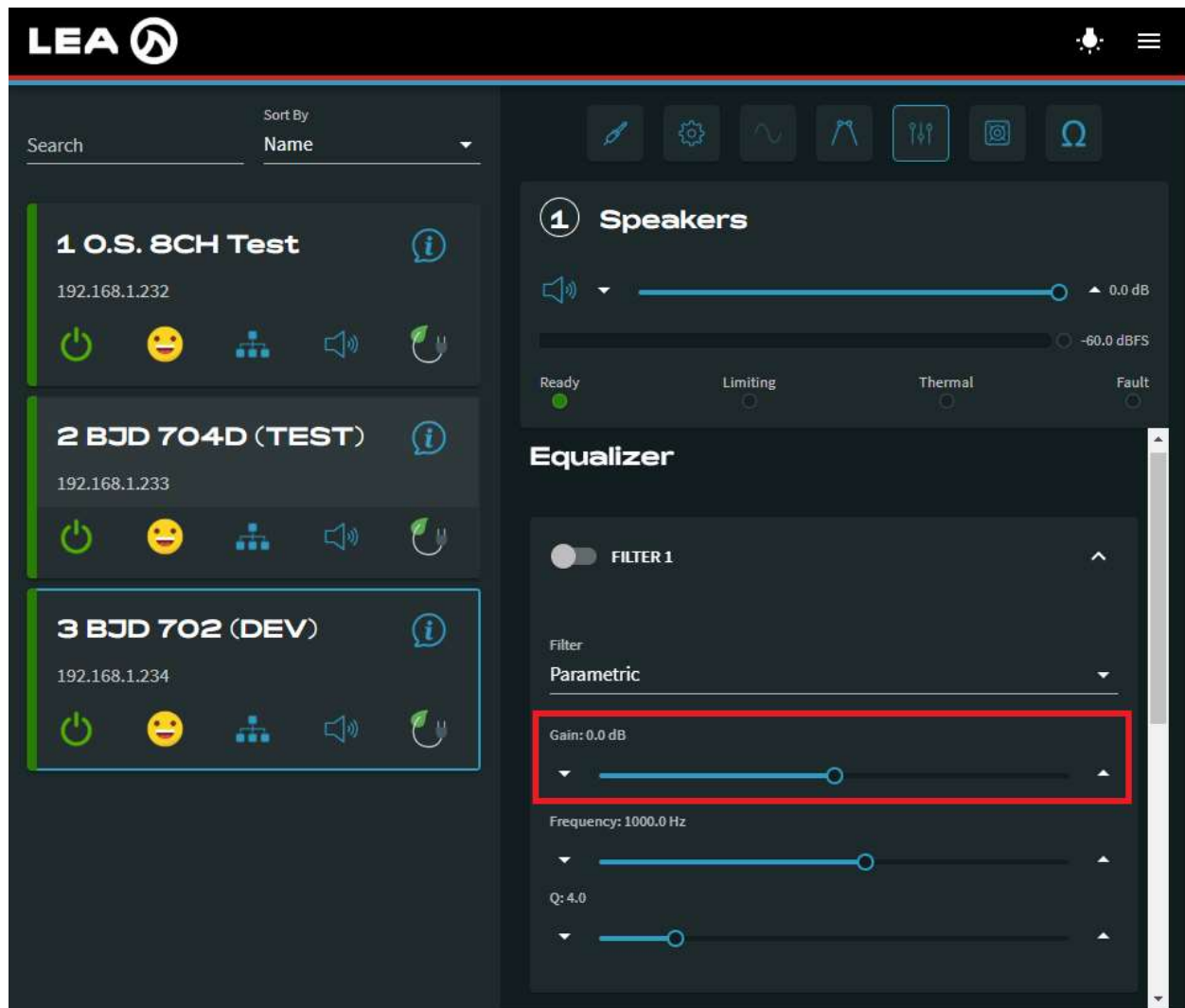
URL: /amp/channels/x/outputEqFilters/*/gain

- x is the desired channel number and * is the desired filter number

Values: -15.0 through 15.0

Example: set /amp/channels/1/outputEqFilters/1/gain 3.0\n

- This command set the gain on EQ Filter 1 on Channel 1 to 3.0 dB



Output EQ Filter Frequency

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

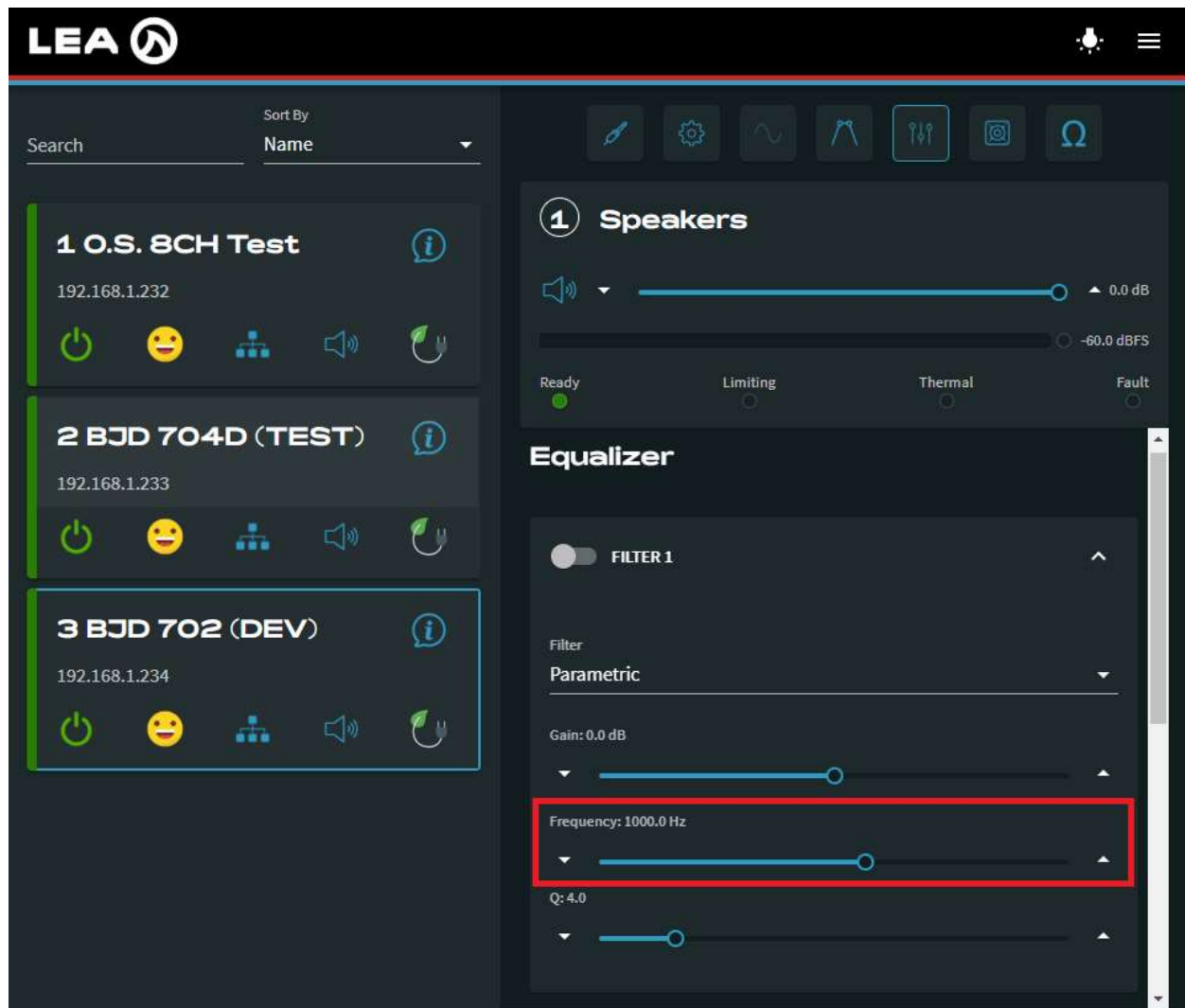
URL: /amp/channels/x/outputEqFilters/*/frequency

- x is the desired channel number and * is the desired filter number

Values: 20 through 20000

Example: set /amp/channels/1/outputEqFilters/1/frequency 1000\n

- This command set the frequency on EQ Filter 1 on Channel 1 to 1000 Hz



Output EQ Filter Q

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

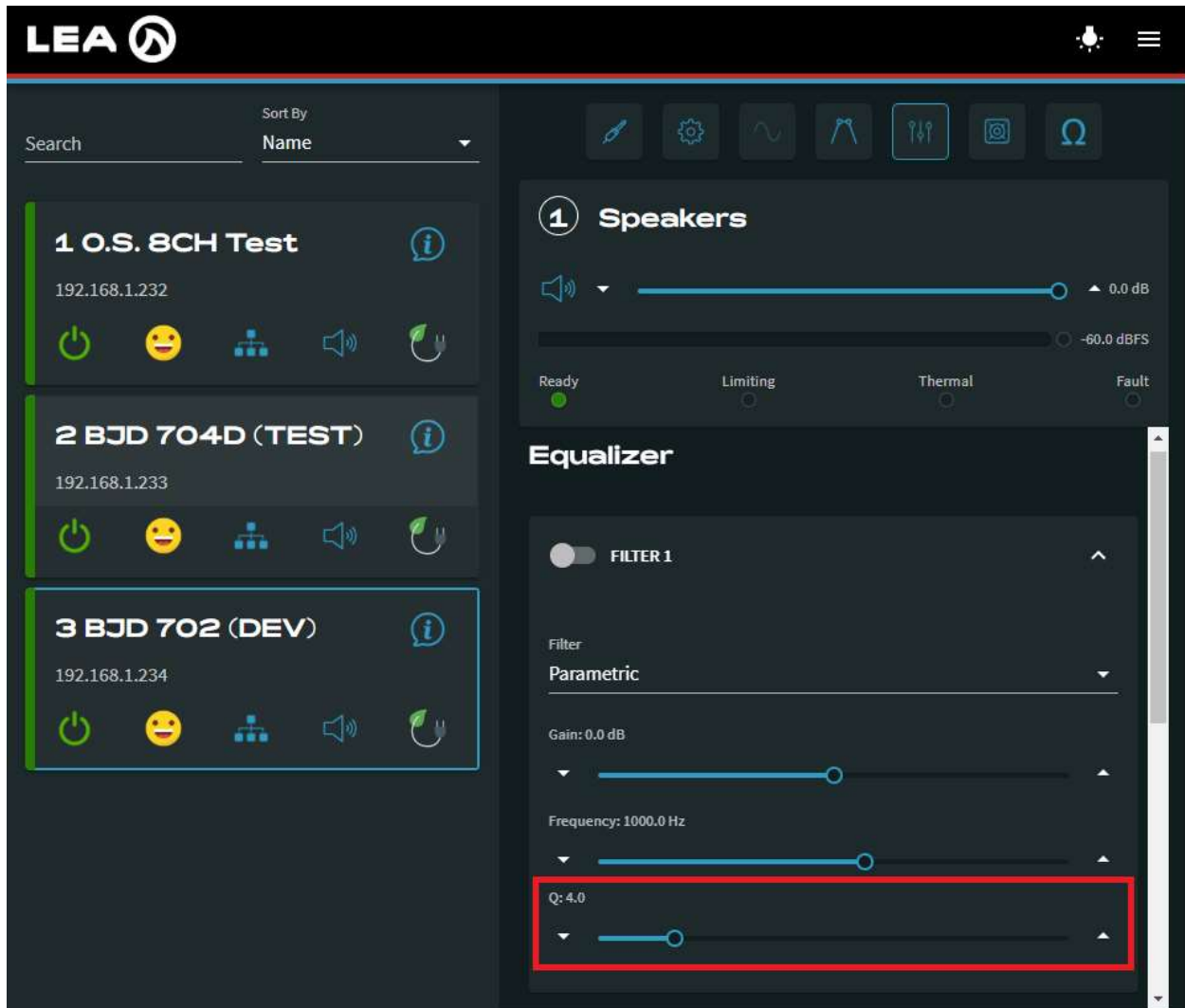
URL: /amp/channels/x/outputEqFilters/*/q

- x is the desired channel number and * is the desired filter number

Values: 0.1 through 24.0

Example: set /amp/channels/1/outputEqFilters/1/q 4.0\n

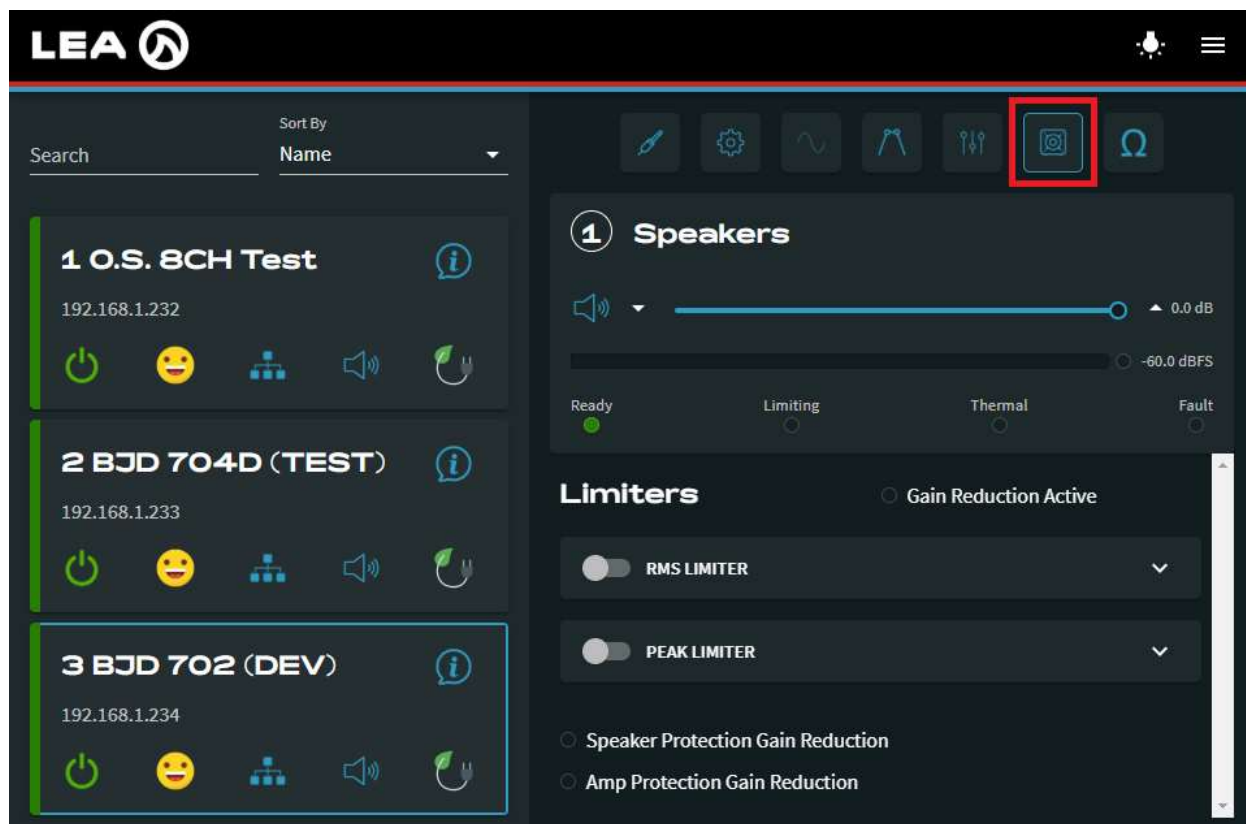
- This command set the Q on EQ Filter 1 on Channel 1 to 4.0



The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The third channel is selected. On the right, the 'Speakers' section shows a volume slider set to 0.0 dB. Below this, the 'Equalizer' section is visible, with 'FILTER 1' selected. The filter type is 'Parametric', and the gain is set to 0.0 dB. The frequency is set to 1000.0 Hz. The Q factor is set to 4.0, which is highlighted by a red box.

Amplifier Channels RMS Limiter and Peak Limiter

Click on this button to navigate to the Limiter section of the DSP relevant to this API section



The screenshot displays the LEA OPEN API web interface. On the left, a sidebar lists three test configurations: "1 O.S. 8CH Test" (IP: 192.168.1.232), "2 BJD 704D (TEST)" (IP: 192.168.1.233), and "3 BJD 702 (DEV)" (IP: 192.168.1.234). The third configuration is highlighted with a blue border. The main panel shows the "Speakers" section with a volume slider set to 0.0 dB and a status bar indicating "Ready". Below this, the "Limiters" section is active, showing "Gain Reduction Active" and two limiters: "RMS LIMITER" and "PEAK LIMITER", both with toggle switches. At the bottom, there are options for "Speaker Protection Gain Reduction" and "Amp Protection Gain Reduction". A red box highlights the "Limiters" icon in the top navigation bar.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

RMS Limiter Enable

Type: CONTROL

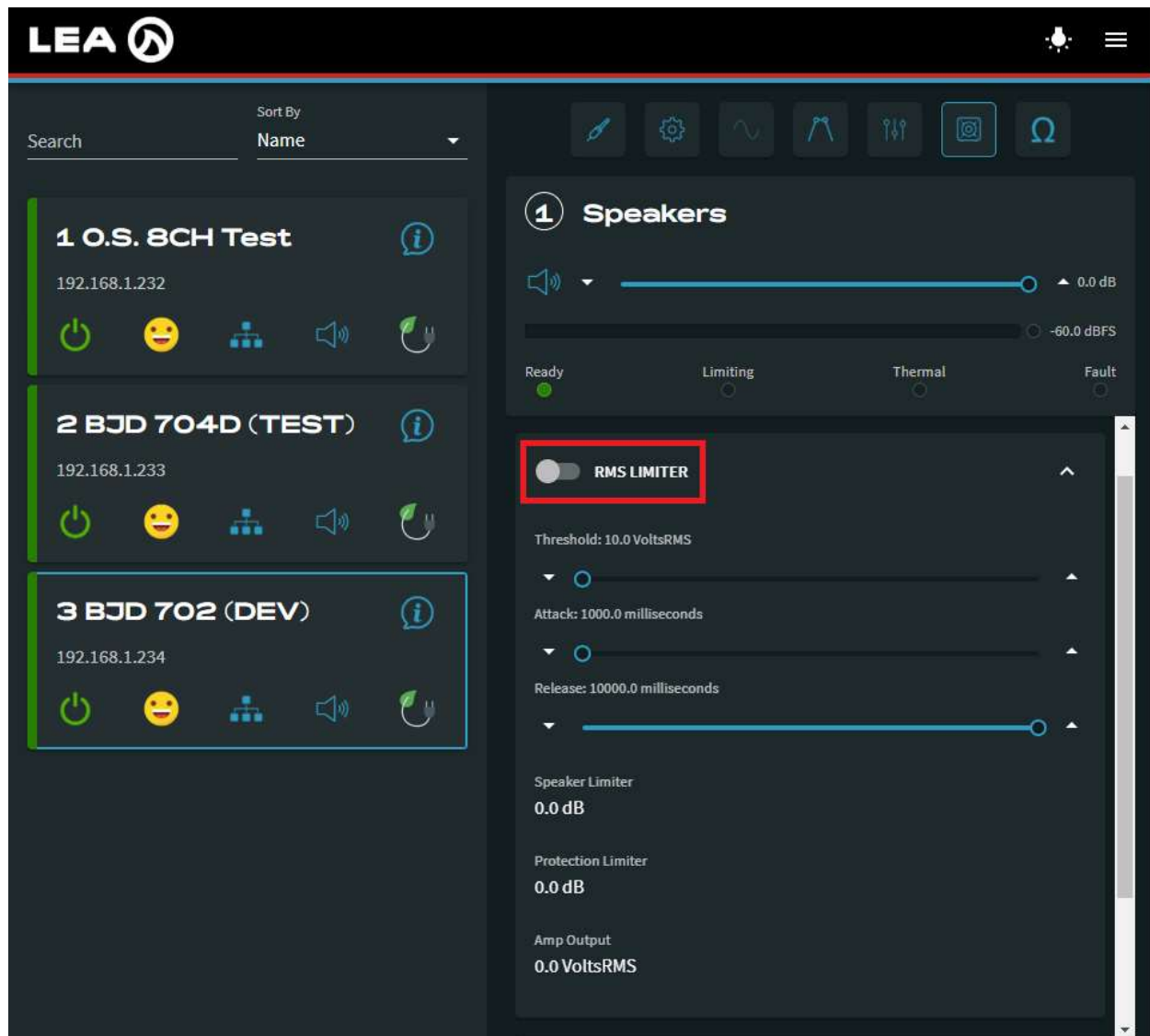
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/rmsLimiter/enable

Values: "true", "false"

Example: set /amp/channels/1/rmsLimiter/enable "false"\n

- This command disabled the RMS Limiter on channel 1



RMS Limiter Threshold

Type: CONTROL

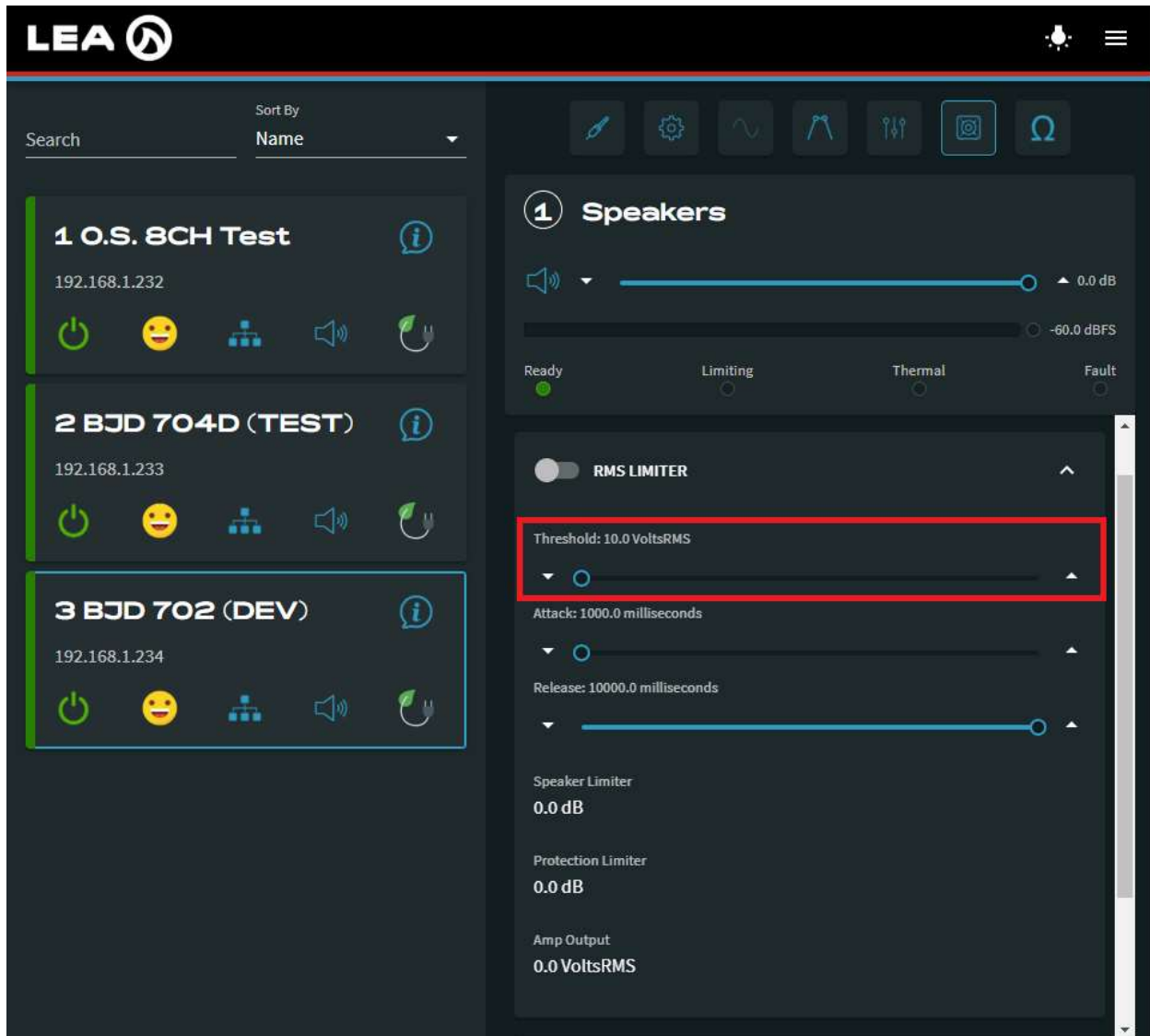
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/rmsLimiter/threshold

Values: 10.0 through 140.0

Example: set /amp/channels/1/rmsLimiter/threshold 70.0\n

- This command set the RMS Limiter threshold to 70.0 V on channel 1



The screenshot displays the LEA control interface. On the left, a list of channels is shown: 1 O.S. 8CH Test, 2 BJD 704D (TEST), and 3 BJD 702 (DEV). The right panel shows the 'Speakers' configuration for Channel 1. The 'RMS LIMITER' section is highlighted with a red box, showing a threshold of 10.0 VoltsRMS. Other settings visible include Attack: 1000.0 milliseconds, Release: 10000.0 milliseconds, Speaker Limiter: 0.0 dB, Protection Limiter: 0.0 dB, and Amp Output: 0.0 VoltsRMS.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

RMS Limiter Attack

Type: CONTROL

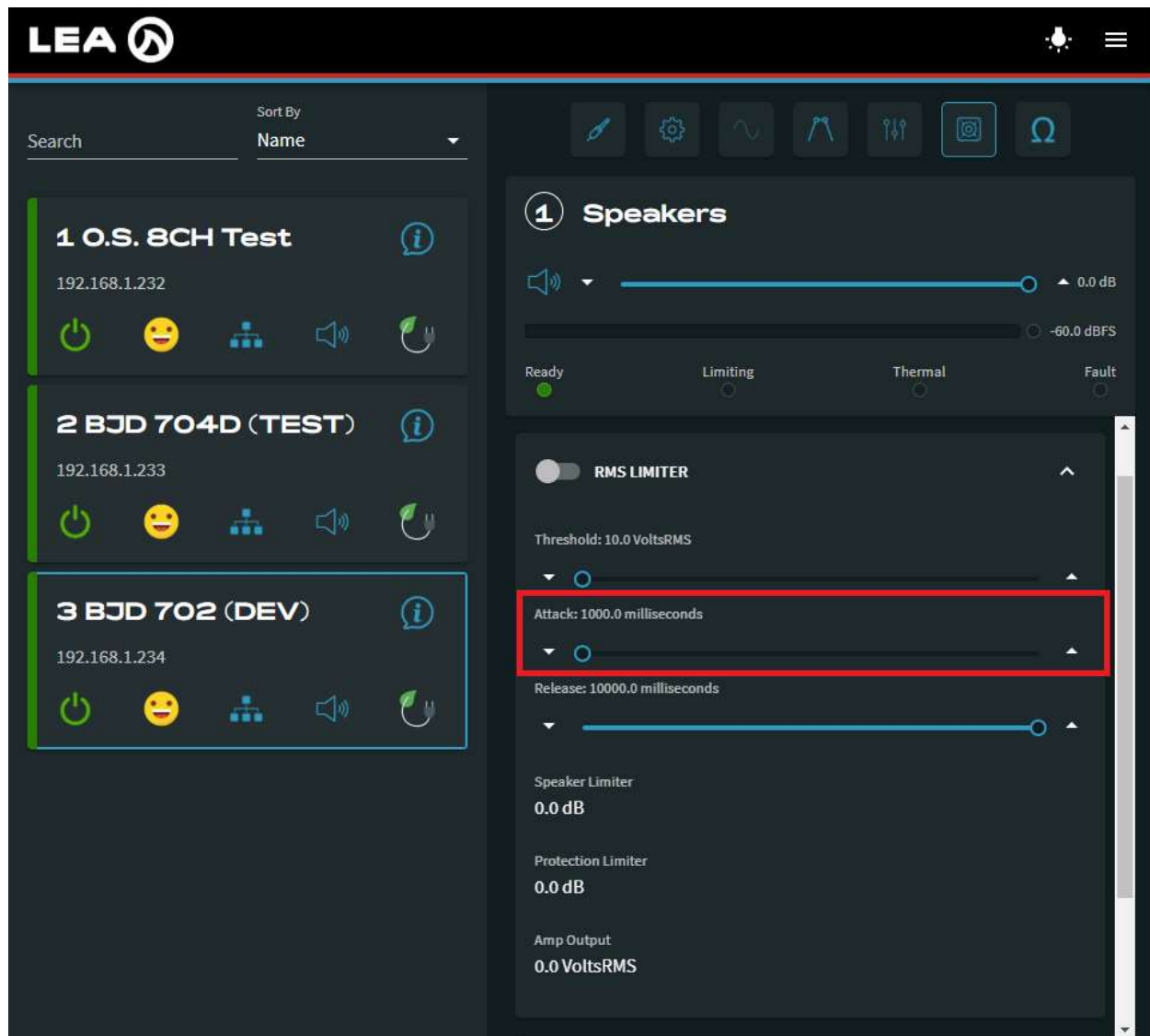
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/rmsLimiter/attackTime

Values: 1000.0 through 10000.0

Example: set /amp/channels/1/rmsLimiter/attackTime 1000.0\n

- This command set the RMS Limiter attack time to 1000.0 ms on channel 1





OPEN API – TCP Protocol

Rev 5. 09-21-2021

RMS Limiter Release

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/rmsLimiter/releaseTime

Values: 1000.0 through 10000.0

Example: set /amp/channels/1/rmsLimiter/releaseTime 10000.0\n

- This command set the RMS Limiter release time to 10000.0 ms on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The third channel, '3 BJD 702 (DEV)', is selected and highlighted with a blue border. On the right, the 'Speakers' control panel is visible. It includes a volume slider set to 0.0 dB, a status indicator showing 'Ready', and a section for the 'RMS LIMITER'. The 'RMS LIMITER' is currently disabled (greyed out). Below this, the 'Threshold' is set to 10.0 VoltsRMS, 'Attack' is 1000.0 milliseconds, and 'Release' is 10000.0 milliseconds. The 'Release' setting is highlighted with a red rectangle. At the bottom, the 'Speaker Limiter' is set to 0.0 dB, the 'Protection Limiter' is set to 0.0 dB, and the 'Amp Output' is 0.0 VoltsRMS.

RMS Limiter Speaker Limiter Reduction

Type: SENSOR

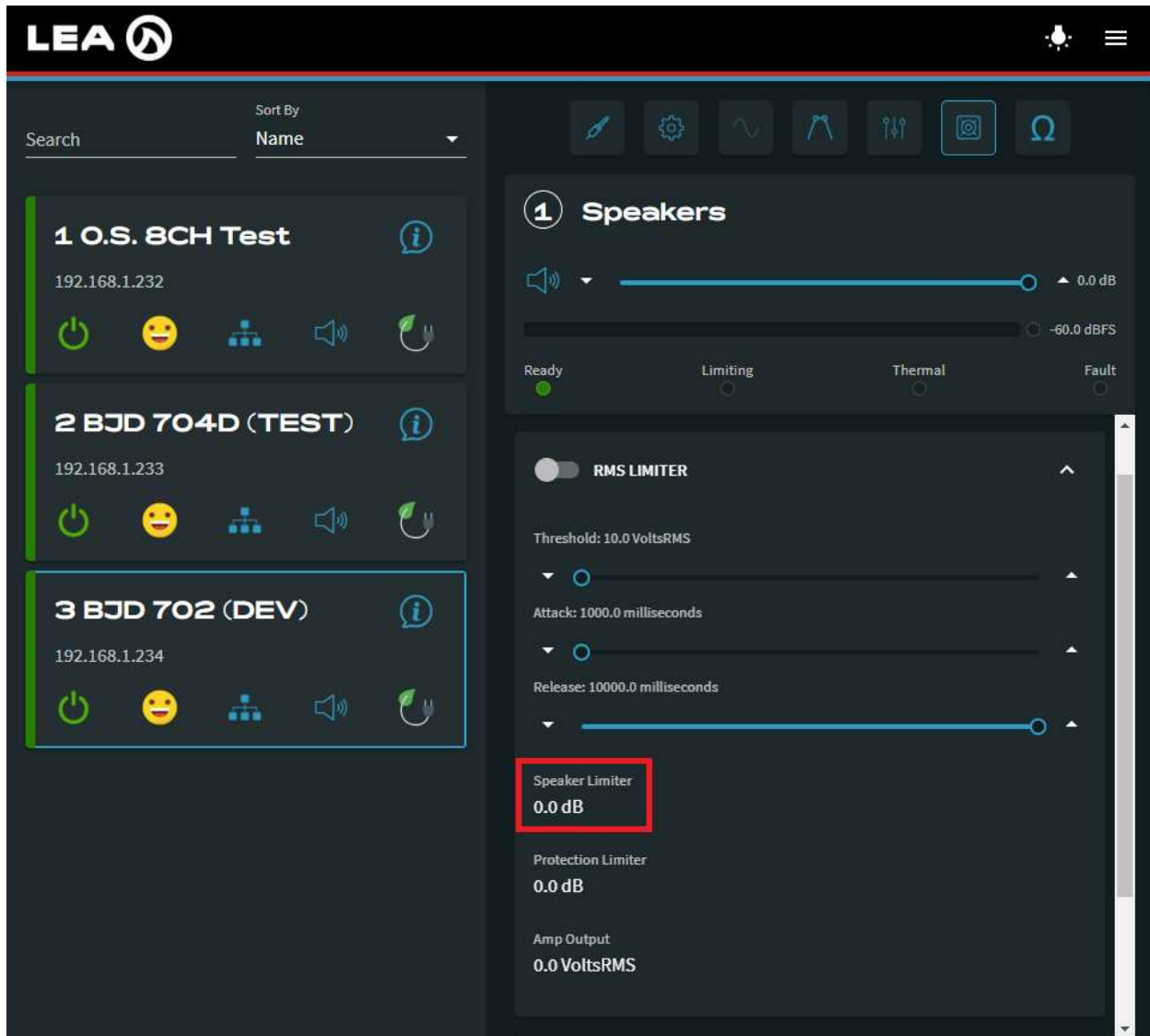
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/rmsLimiter/gainReduction

Values: -80.0 through 0.0

Example: subscribe /amp/channels/1/rmsLimiter/gainReduction\n

- This command subscribed to the RMS Limiter speaker limiter reduction sensor
- This is the active gain reduction from the user defined limiters



The screenshot displays the LEA control interface. On the left sidebar, three devices are listed: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The '3 BJD 702 (DEV)' device is selected and highlighted with a blue border. The main panel on the right shows the 'Speakers' section for this device. It includes a volume slider set to 0.0 dB, a status indicator showing 'Ready', and a section for the 'RMS LIMITER'. The 'RMS LIMITER' section has a toggle switch that is currently off. Below the toggle, the following settings are visible: Threshold: 10.0 VoltsRMS, Attack: 1000.0 milliseconds, Release: 10000.0 milliseconds, and a 'Speaker Limiter' value of 0.0 dB, which is highlighted with a red rectangular box. Other values shown include 'Protection Limiter' at 0.0 dB and 'Amp Output' at 0.0 VoltsRMS.

RMS Limiter Protection Limiter Reduction

Type: SENSOR

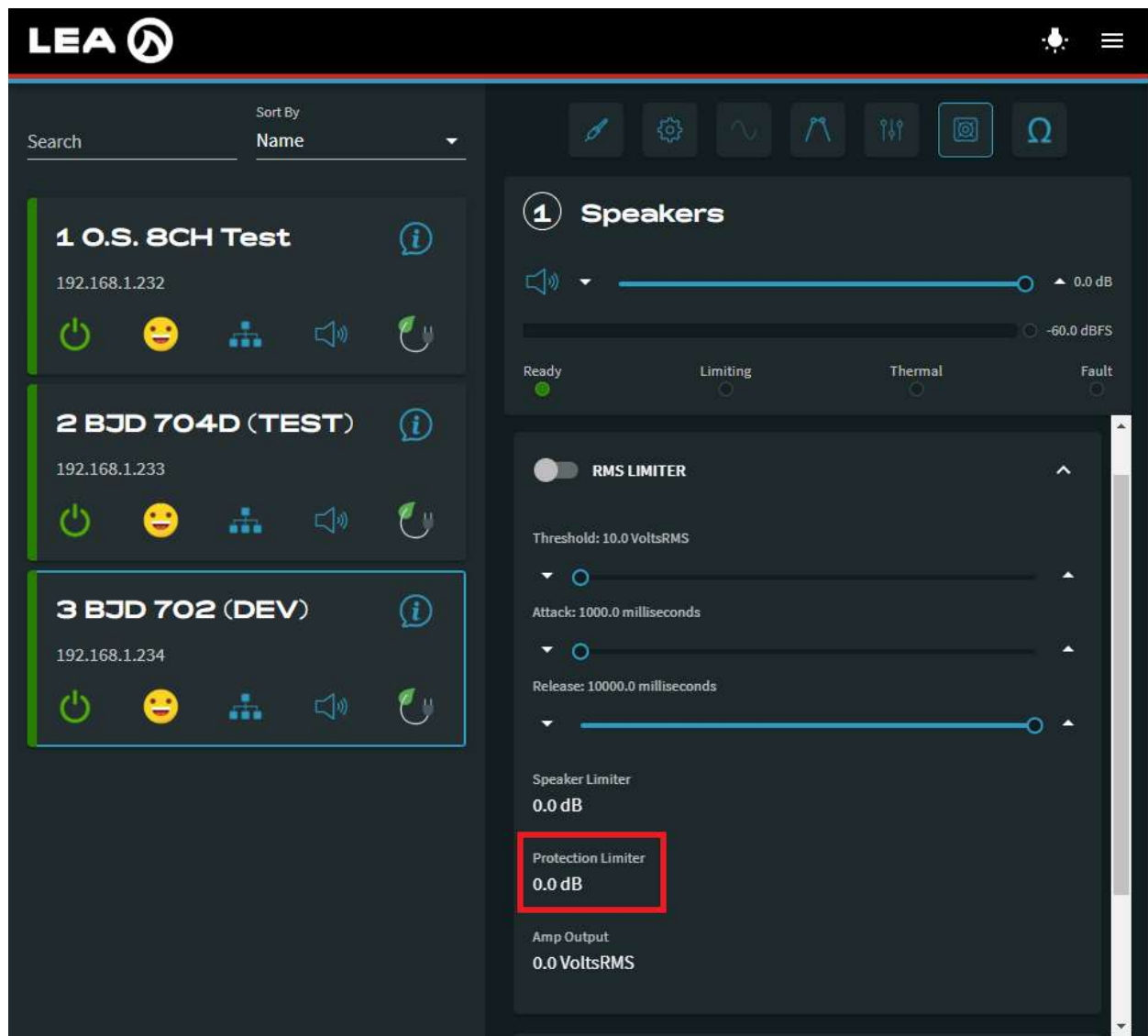
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/rmsLimiter/totalGainReduction

Values: -80.0 through 0.0

Example: subscribe /amp/channels/1/rmsLimiter/totalGainReduction\n

- This command subscribed to the RMS Limiter protection limiter reduction sensor
- This is the total active gain reduction applied to the amplifier from both the user defined limiters and internal amplifier protection limiters



The screenshot displays the LEA control interface. On the left, there is a list of three channels: "1 O.S. 8CH Test", "2 BJD 704D (TEST)", and "3 BJD 702 (DEV)". Each channel has a status bar with icons for power, smiley face, network, speaker, and leaf. The "3 BJD 702 (DEV)" channel is highlighted with a red border. On the right, the "Speakers" section is active, showing a volume slider set to 0.0 dB. Below the slider, there are four status indicators: Ready (green dot), Limiting (orange dot), Thermal (orange dot), and Fault (orange dot). The "RMS LIMITER" section is expanded, showing a threshold of 10.0 VoltsRMS, an attack time of 1000.0 milliseconds, and a release time of 10000.0 milliseconds. The "Speaker Limiter" is set to 0.0 dB, and the "Protection Limiter" is also set to 0.0 dB, which is highlighted with a red box. The "Amp Output" is shown as 0.0 VoltsRMS.

Peak Limiter Enable

Type: CONTROL

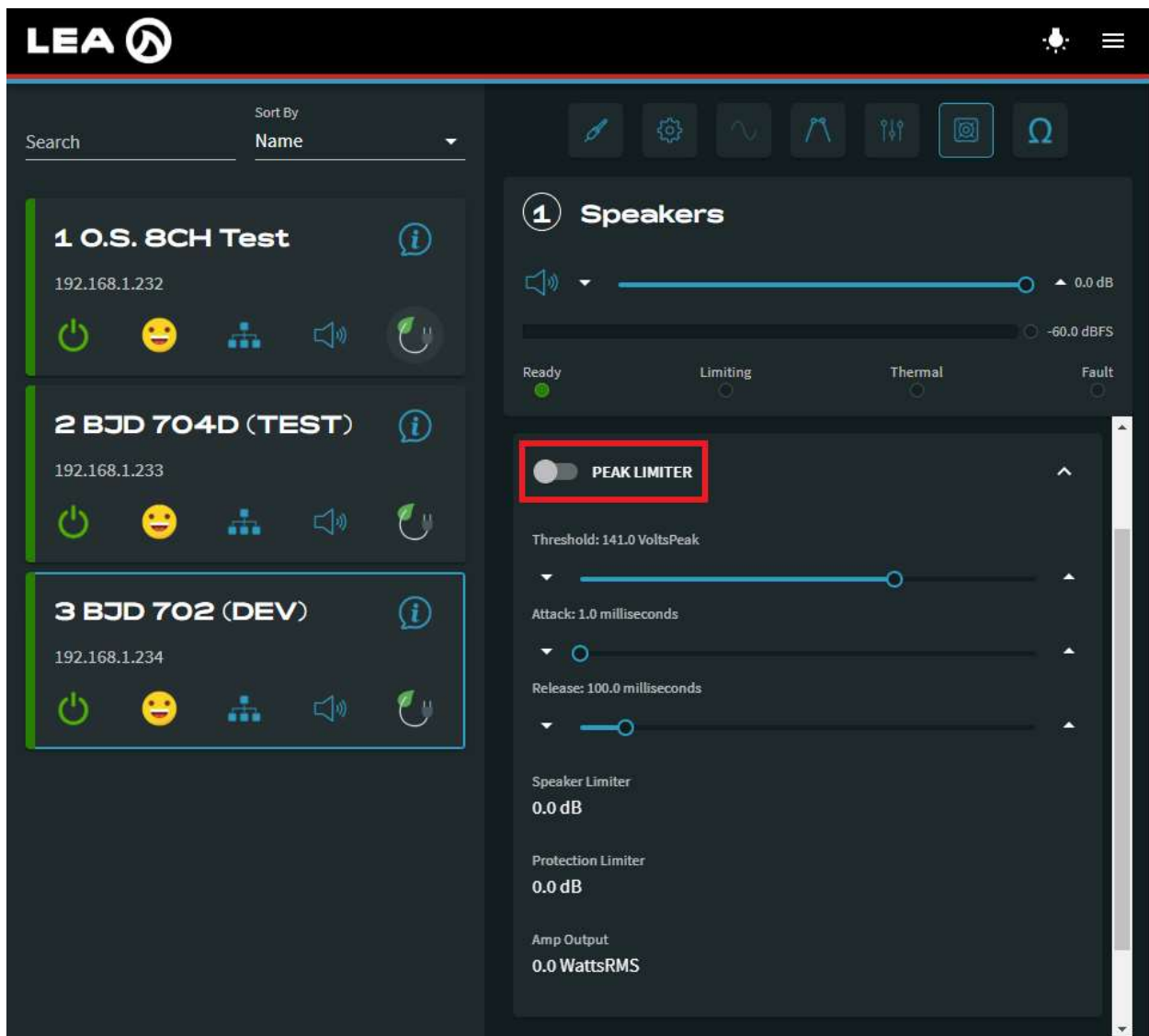
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/peakLimiter/enable

Values: "true", "false"

Example: set /amp/channels/1/peakLimiter/enable "false"\n

- This command disabled the Peak Limiter on channel 1



Peak Limiter Threshold

Type: CONTROL

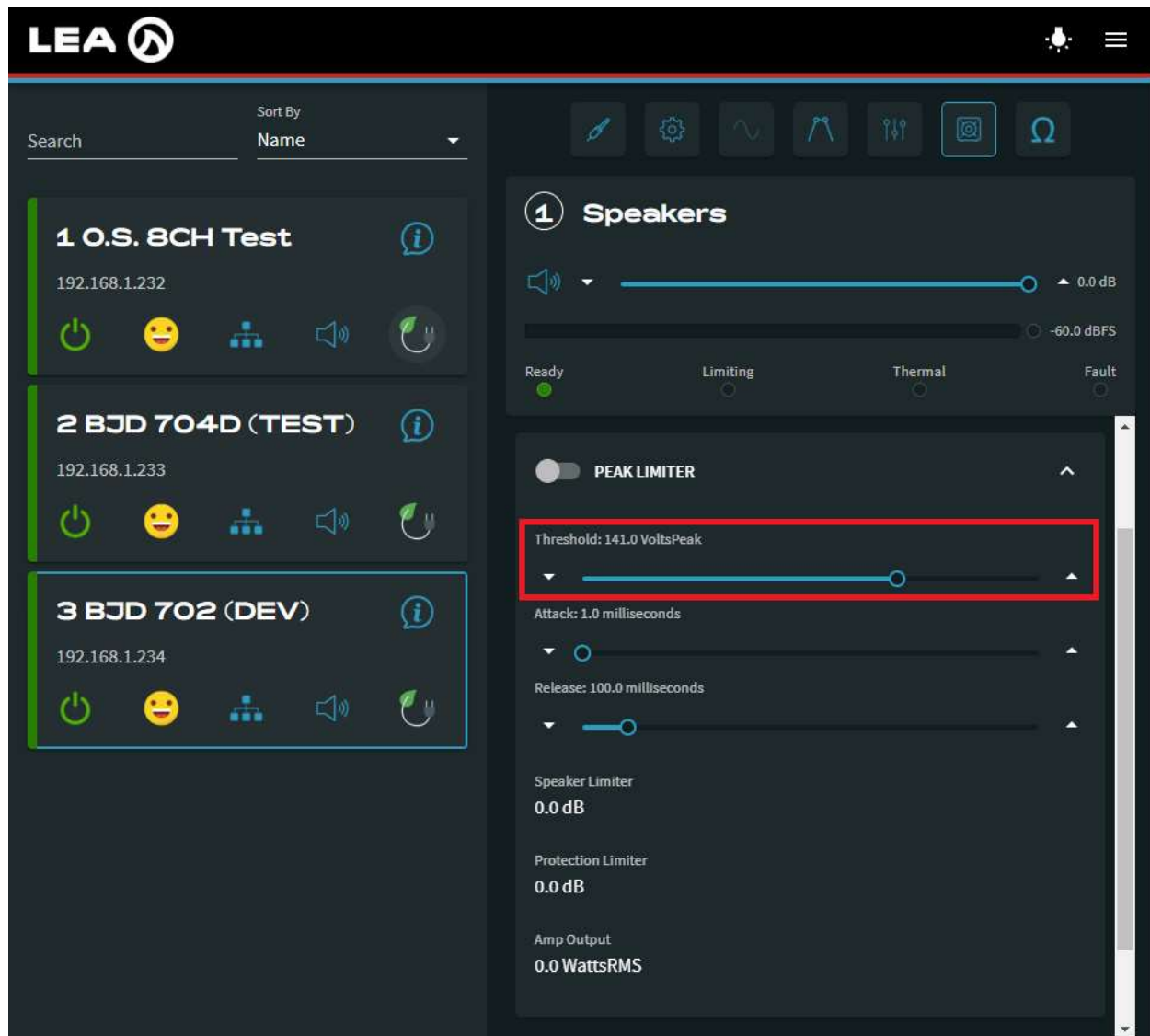
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/peakLimiter/threshold

Values: 14.0 through 198.0

Example: set /amp/channels/1/peakLimiter/threshold 141.0\n

- This command set the Peak Limiter threshold to 141.0 V on channel 1





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Peak Limiter Attack

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/peakLimiter/attackTime

Values: 1.0 through 1000.0

Example: set /amp/channels/1/peakLimiter/attackTime 10.0\n

- This command set the Peak Limiter attack time to 10.0 ms on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (192.168.1.232), '2 BJD 704D (TEST)' (192.168.1.233), and '3 BJD 702 (DEV)' (192.168.1.234). The third channel is highlighted with a blue border. On the right, the 'Speakers' control panel is visible. It includes a volume slider set to 0.0 dB, a status indicator showing 'Ready', and a 'PEAK LIMITER' section. The 'PEAK LIMITER' section has a toggle switch that is currently off. Below the toggle, the 'Threshold' is set to 141.0 VoltsPeak. The 'Attack' time is set to 1.0 milliseconds, and the 'Release' time is set to 100.0 milliseconds. The 'Attack' and 'Release' settings are highlighted with a red rectangle. At the bottom, the 'Speaker Limiter' is set to 0.0 dB, the 'Protection Limiter' is set to 0.0 dB, and the 'Amp Output' is set to 0.0 WattsRMS.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Peak Limiter Release

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/peakLimiter/releaseTime

Values: 1.0 through 1000.0

Example: set /amp/channels/1/peakLimiter/releaseTime 128.0\n

- This command set the Peak Limiter release time to 128.0 ms on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The third channel, '3 BJD 702 (DEV)', is selected and highlighted with a blue border. On the right, the 'Speakers' control panel is visible. It includes a volume slider set to 0.0 dB, a status indicator showing 'Ready', and a 'PEAK LIMITER' section. The 'PEAK LIMITER' section has a toggle switch that is currently off. Below the toggle, the 'Release' time is set to 100.0 milliseconds, which is highlighted with a red rectangular box. Other settings visible include 'Threshold: 141.0 VoltsPeak', 'Attack: 1.0 milliseconds', 'Speaker Limiter: 0.0 dB', 'Protection Limiter: 0.0 dB', and 'Amp Output: 0.0 WattsRMS'.

Peak Limiter Speaker Limiter Reduction

Type: SENSOR

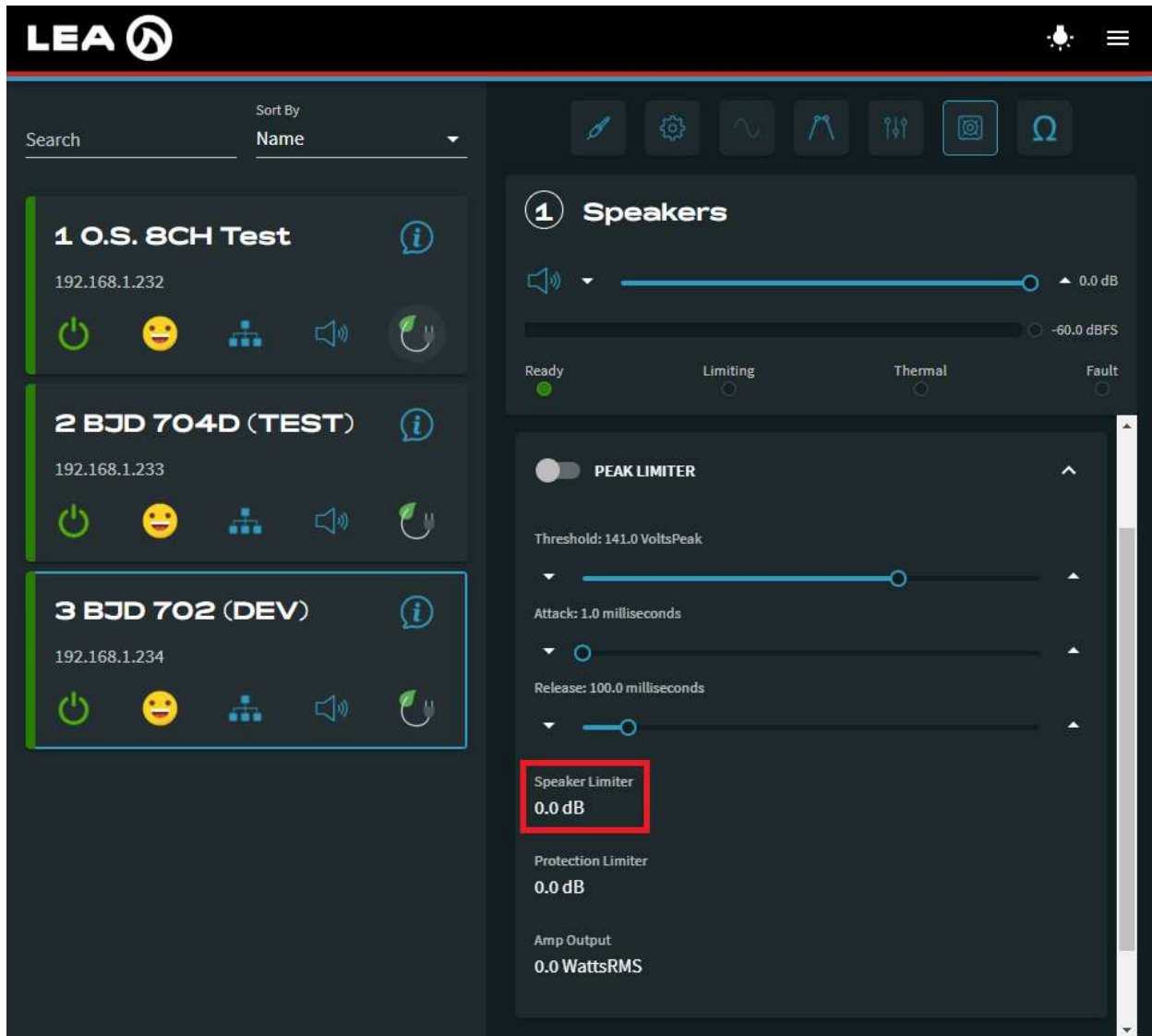
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/peakLimiter/gainReduction

Values: -80.0 through 0.0

Example: subscribe /amp/channels/1/peakLimiter/gainReduction\n

- This command subscribed to the Peak Limiter speaker limiter reduction sensor
- This is the active gain reduction from the user defined limiters



The screenshot displays the LEA control interface. On the left, a list of channels is shown, with '3 BJD 702 (DEV)' selected. The right panel shows the settings for this channel. The '1 Speakers' section is visible, showing a volume slider at 0.0 dB. Below this, the 'PEAK LIMITER' section is expanded, showing various settings: Threshold (141.0 VoltsPeak), Attack (1.0 milliseconds), Release (100.0 milliseconds), and a 'Speaker Limiter' value of 0.0 dB, which is highlighted with a red box. Other values shown include 'Protection Limiter' at 0.0 dB and 'Amp Output' at 0.0 WattsRMS.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Peak Limiter Protection Limiter Reduction

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/peakLimiter/totalGainReduction

Values: -80.0 through 0.0

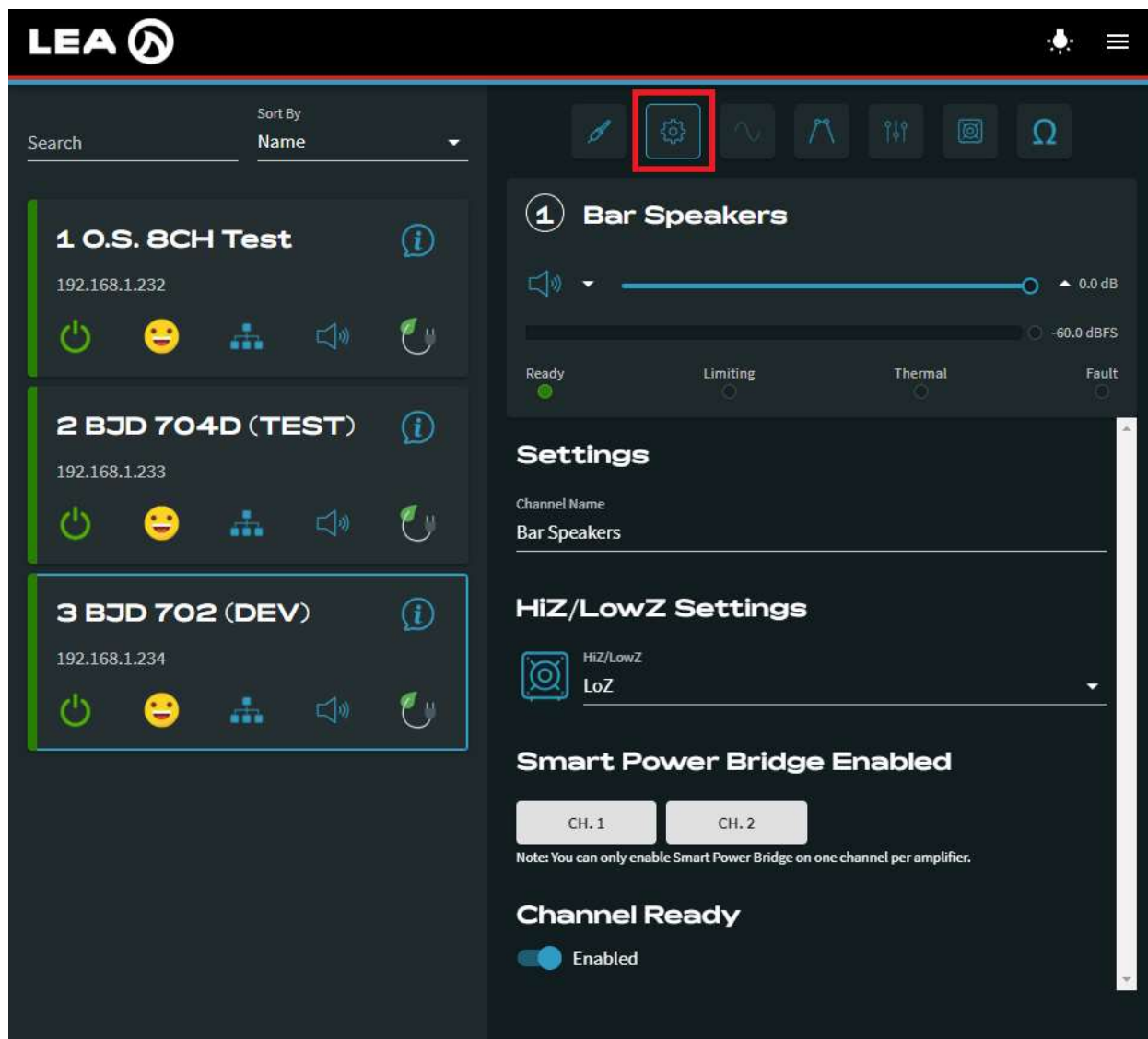
Example: subscribe /amp/channels/1/peakLimiter/totalGainReduction\n

- This command subscribed to the Peak Limiter protection limiter reduction sensor
- This is the total active gain reduction applied to the amplifier from both the user defined limiters and internal amplifier protection limiters

The screenshot displays the LEA control interface. On the left, a list of channels is shown: 1 O.S. 8CH Test, 2 BJD 704D (TEST), and 3 BJD 702 (DEV). The 3 BJD 702 (DEV) channel is selected and highlighted with a blue border. On the right, the settings for the selected channel are displayed. The 'Speakers' section shows a volume slider at 0.0 dB. Below this, the 'PEAK LIMITER' section is expanded, showing various settings: Threshold (141.0 VoltsPeak), Attack (1.0 milliseconds), Release (100.0 milliseconds), Speaker Limiter (0.0 dB), and Protection Limiter (0.0 dB). The Protection Limiter value is highlighted with a red box. At the bottom, the Amp Output is shown as 0.0 WattsRMS.

Amplifier Channels Output

Click on this button to navigate to the General Channel Settings of the DSP relevant to this API section



The screenshot displays the LEA web interface for managing amplifier channels. The left sidebar lists three channels: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is selected. The main panel shows the settings for '1 Bar Speakers'. A red box highlights the gear icon in the top navigation bar. The settings for 'Bar Speakers' include a volume slider set to 0.0 dB, a status bar showing 'Ready' (green dot), 'Limiting' (grey dot), 'Thermal' (grey dot), and 'Fault' (grey dot). Below this, the 'Settings' section shows 'Channel Name' as 'Bar Speakers'. The 'HiZ/LowZ Settings' section shows 'HiZ/LowZ' as 'LoZ'. The 'Smart Power Bridge Enabled' section has two buttons, 'CH. 1' and 'CH. 2', both of which are disabled. A note states: 'Note: You can only enable Smart Power Bridge on one channel per amplifier.' The 'Channel Ready' section has a toggle switch set to 'Enabled'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Name

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/output/name

Values: any text up to 64 characters

Example: get /amp/channels/1/output/name\n

- Response: amp/channels/1/output/name "Bar Speakers"\n
- This command asked for the output channel name and got the response Bar Speakers

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is highlighted with a blue border. On the right, the settings for '1 Bar Speakers' are displayed. A red box highlights the 'Channel Name' field, which contains the text 'Bar Speakers'. Below this, the 'HiZ/LowZ Settings' section shows a dropdown menu with 'LoZ' selected. The 'Smart Power Bridge Enabled' section has two buttons, 'CH. 1' and 'CH. 2', and a note: 'Note: You can only enable Smart Power Bridge on one channel per amplifier.' The 'Channel Ready' section shows a toggle switch set to 'Enabled'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Ready Enable

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/output/enable

Values: "true", "false"

Example: set /amp/channels/1/output/enable "true"\n

- This command enabled the channel ready on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is highlighted with a red border. On the right, the settings for '1 Bar Speakers' are shown. The volume is set to 0.0 dB. Below the volume, there are four status indicators: 'Ready' (green dot), 'Limiting' (grey dot), 'Thermal' (grey dot), and 'Fault' (grey dot). The 'Settings' section shows 'Channel Name' as 'Bar Speakers'. The 'HiZ/LowZ Settings' section shows 'HiZ/LowZ' set to 'HiZ-100V' and 'Frequency' set to '70.0 Hz'. The 'Smart Power Bridge Enabled' section shows two buttons: 'CH. 1' and 'CH. 2'. A note below states: 'Note: You can only enable Smart Power Bridge on one channel per amplifier.' At the bottom, a red box highlights the 'Channel Ready' toggle, which is currently 'Enabled'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Mute

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/output/mute

Values: "true", "false"

Example: set /amp/channels/1/output/mute "false"\n

- This command un-muted the output on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is highlighted with a blue border. On the right, the settings for '1 Bar Speakers' are shown. A red box highlights the mute icon (a speaker with a diagonal line through it) next to a volume slider. Below the slider, there are status indicators for 'Ready' (green dot), 'Limiting' (grey circle), 'Thermal' (grey circle), and 'Fault' (grey circle). The 'Settings' section shows 'Channel Name' as 'Bar Speakers'. The 'HiZ/LowZ Settings' section shows 'HiZ/LowZ' and 'LoZ' options. The 'Smart Power Bridge Enabled' section has buttons for 'CH. 1' and 'CH. 2'. The 'Channel Ready' section has a toggle switch set to 'Enabled'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Gain Attenuation Fader

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/output/fader

Values: -80.0 through 0.0

Example: set /amp/channels/1/output/fader 0.0\n

- This command set the output gain attenuation to 0.0 dB on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (192.168.1.232), '2 BJD 704D (TEST)' (192.168.1.233), and '3 BJD 702 (DEV)' (192.168.1.234). The third channel is highlighted with a blue border. On the right, the settings for '1 Bar Speakers' are displayed. A red box highlights the 'Output Fader' slider, which is set to 0.0 dB. Below the slider, there are status indicators for 'Ready' (green dot), 'Limiting' (grey circle), 'Thermal' (grey circle), and 'Fault' (grey circle). The 'Settings' section shows 'Channel Name' as 'Bar Speakers'. The 'HiZ/LowZ Settings' section shows 'HiZ/LowZ' as 'LoZ'. The 'Smart Power Bridge Enabled' section shows 'CH. 1' and 'CH. 2' buttons, with a note: 'Note: You can only enable Smart Power Bridge on one channel per amplifier.' The 'Channel Ready' section shows a toggle switch set to 'Enabled'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Hi-Z Low-Z Mode

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/output/hiZLoZ

Values: "HiZ-70V", "HiZ-100V", "LoZ"

Example: set /amp/channels/1/output/hiZLoZ "HiZ-100V"\n

- This command set channel 1 to Hi-Z 100 V mode

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is highlighted with a blue border. On the right, the settings for 'Bar Speakers' are displayed. The 'HiZ/LowZ' dropdown menu is highlighted with a red box and is set to 'HiZ-100V'. Below this, the 'Frequency' is set to 70.0 Hz. The 'Smart Power Bridge' is enabled, and the 'Channel Ready' status is 'Enabled'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Hi-Z Mode High Pass Frequency

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/output/hiZHpFrequency

Values: 35 through 5000

Example: set /amp/channels/1/output/hiZHpFrequency 70\n

- This command set Hi-Z High Pass Filter to 70 Hz on channel 1

The screenshot displays the LEA control interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is highlighted with a red box. On the right, the settings for 'Bar Speakers' are displayed. The 'HiZ/LowZ Settings' section shows 'HiZ-100V' selected. Below this, the 'Frequency: 70.0 Hz' is set, which is also highlighted with a red box. The 'Smart Power Bridge Enabled' section shows 'CH. 1' and 'CH. 2' buttons, with a note: 'Note: You can only enable Smart Power Bridge on one channel per amplifier.' The 'Channel Ready' section shows a toggle switch set to 'Enabled'.

Output Channel Fault

Type: SENSOR

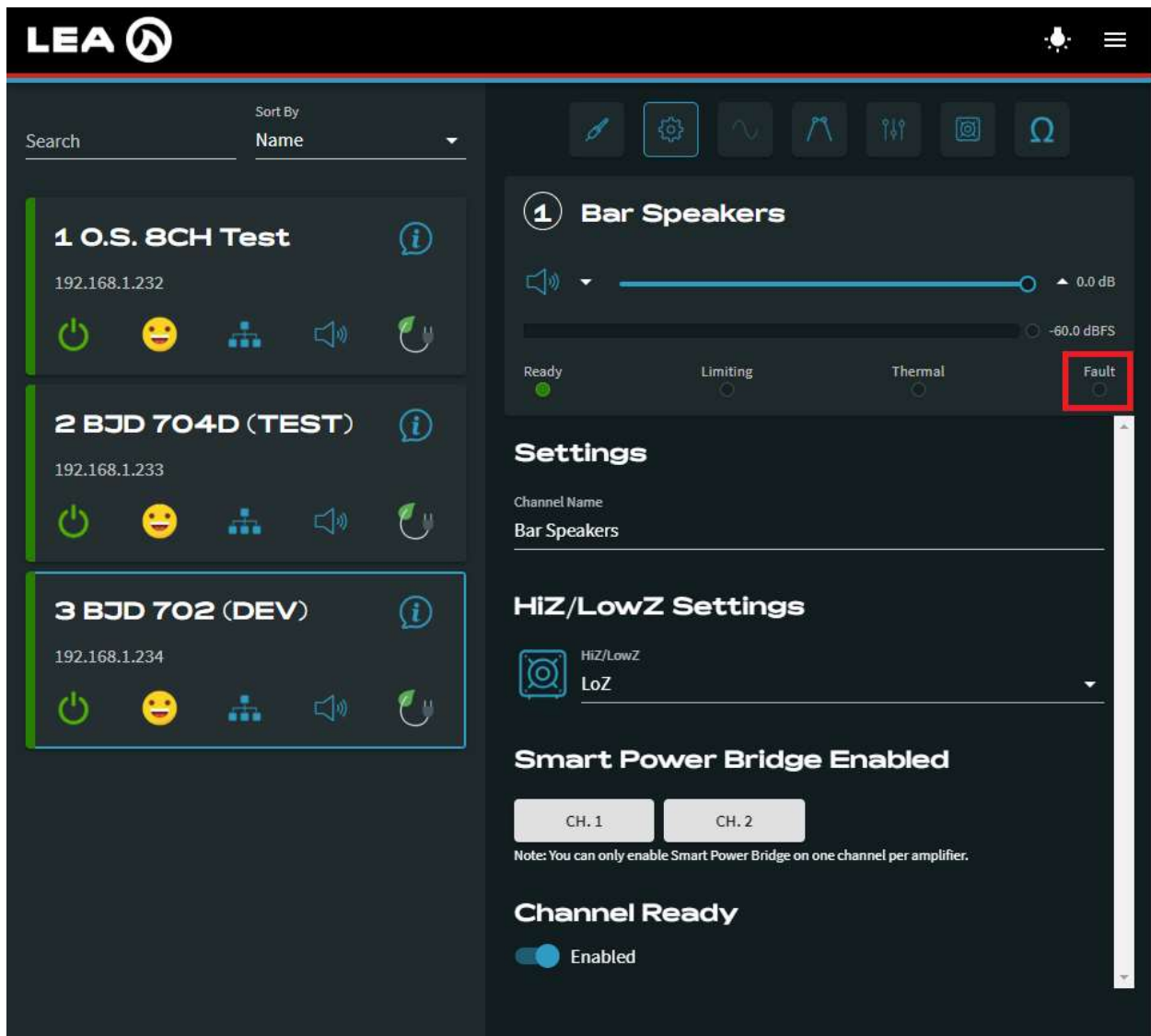
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/output/fault

Values: "true", "false"

Example: get /amp/channels/1/output/fault\n

- Response: /amp/channels/1/output/fault false\n
- This command asked for the fault status on channel 1 and got the response False, meaning there is no fault on the channel



The screenshot displays the LEA web interface. On the left, a sidebar lists three channels: "1 O.S. 8CH Test", "2 BJD 704D (TEST)", and "3 BJD 702 (DEV)". The third channel is highlighted with a blue border. The main panel shows the settings for "1 Bar Speakers". It includes a volume slider set to 0.0 dB, a status indicator for "Ready" (green dot), and a "Fault" status (red square with a white circle). Below the status indicators, there are sections for "Settings" (Channel Name: Bar Speakers), "HiZ/LowZ Settings" (HiZ/LowZ: LoZ), "Smart Power Bridge Enabled" (CH. 1 and CH. 2 buttons), and "Channel Ready" (Enabled toggle).

Output Channel Thermal Fault

Type: SENSOR

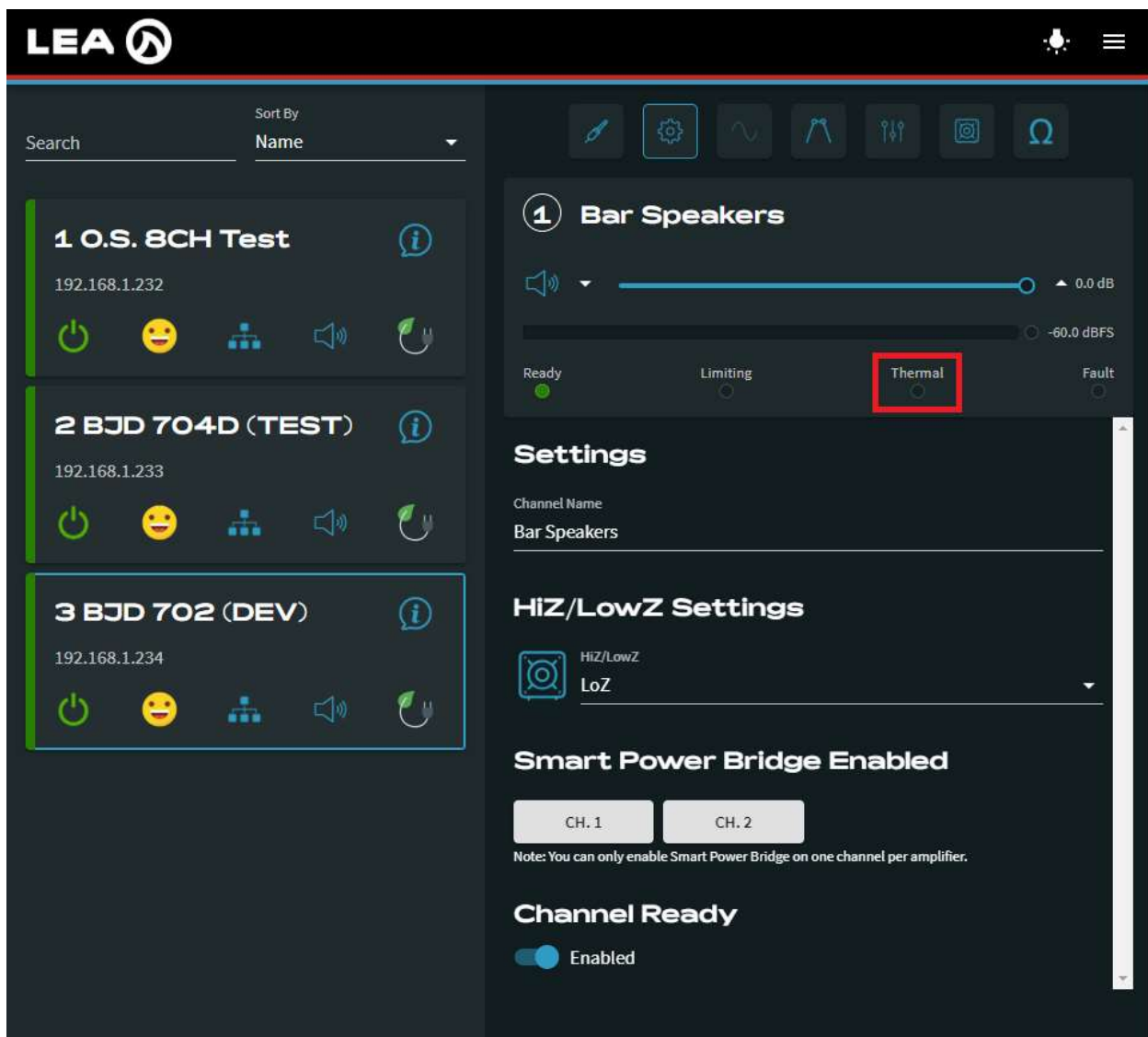
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/output/thermal

Values: "true", "false"

Example: get /amp/channels/1/output/thermal\n

- Response: /amp/channels/1/output/thermal false\n
- This command asked for the thermal fault status on channel 1 and got the response False, meaning there is no thermal fault on the channel





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Limiting

Type: SENSOR

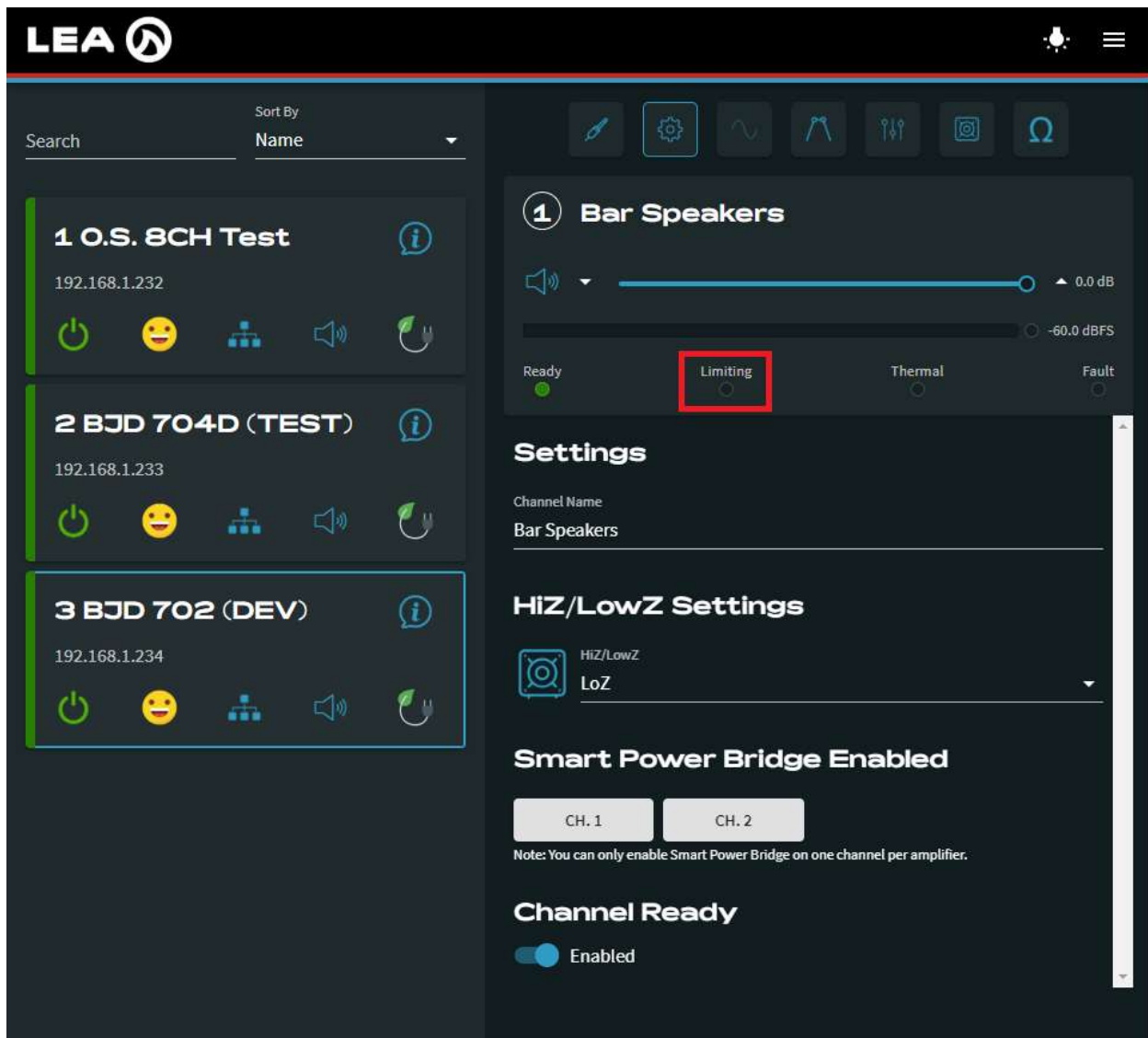
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/output/limiting

Values: "true", "false"

Example: get /amp/channels/1/output/limiting\n

- Response: /amp/channels/1/output/thermal false\n
- This command asked for the limiting status on channel 1 and got the response False, meaning there is no limiting active on the channel





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Clip

Type: SENSOR

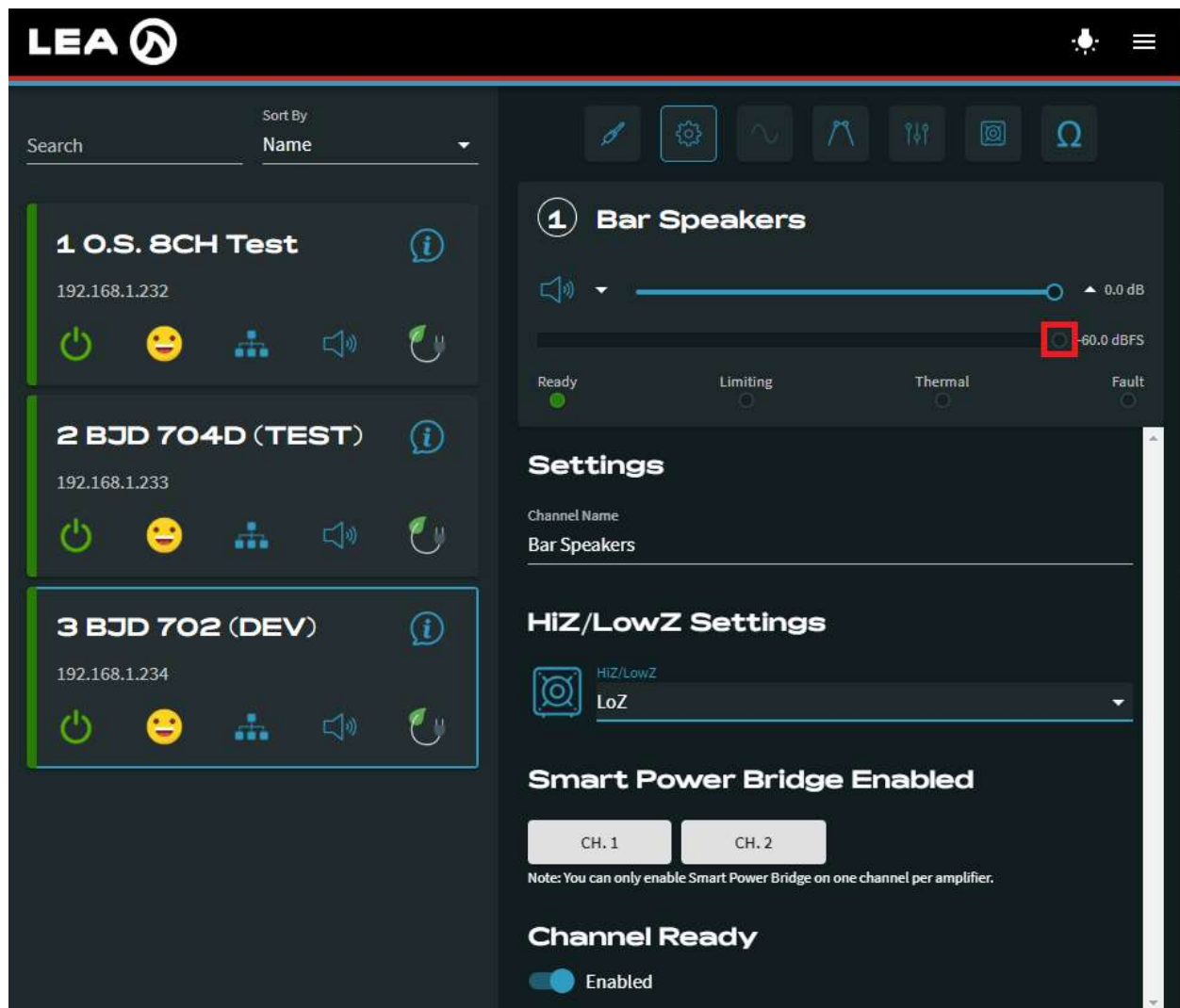
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/output/clip

Values: "true", "false"

Example: get /amp/channels/1/output/clip\n

- Response: /amp/channels/1/output/clip false\n
- This command asked for the output clip status on channel 1 and got the response False, meaning the output is not being clipped on the channel





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Signal Presence

Type: SENSOR

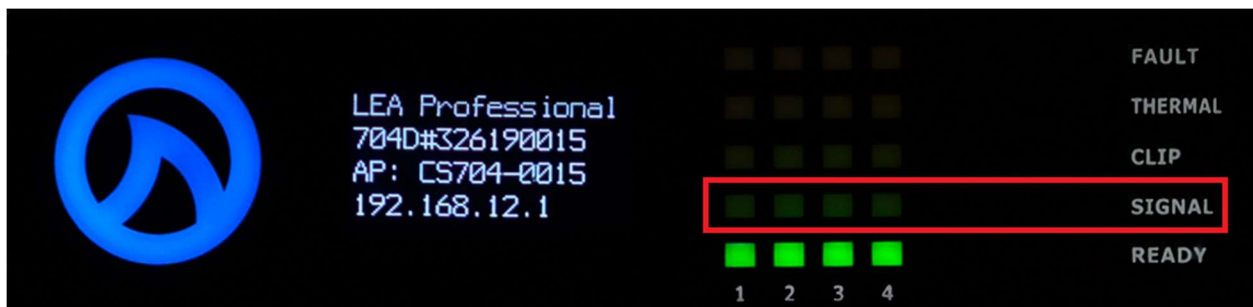
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/output/signalDetect

Values: "true", "false"

Example: get /amp/channels/1/output/signalDetect\n

- Response: /amp/channels/1/output/signalDetect false\n
- This command asked for the output signal presence status on channel 1 and got the response False, meaning there is not output signal on the channel





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Ready Indicator

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/output/ready

Values: "true", "false"

Example: get /amp/channels/1/output/ready\n

- Response: /amp/channels/1/output/ready true\n
- This command asked for the output ready status on channel 1 and got the response True, meaning the output channel is ready to pass audio

The screenshot displays the LEA web interface. On the left, a list of channels is shown: '1 O.S. 8CH Test' (IP 192.168.1.232), '2 BJD 704D (TEST)' (IP 192.168.1.233), and '3 BJD 702 (DEV)' (IP 192.168.1.234). The third channel is highlighted with a blue border. On the right, the settings for '1 Bar Speakers' are shown. A 'Ready' status indicator is highlighted with a red box, showing a green dot. Below this, the 'Settings' section includes 'Channel Name' (Bar Speakers), 'HiZ/LowZ Settings' (LoZ), and 'Smart Power Bridge Enabled' (CH. 1 and CH. 2 buttons). At the bottom, the 'Channel Ready' status is shown as 'Enabled' with a blue toggle switch.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Dante On Ramp

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/inputSelector/danteOnRamp

Values: "Analog Input", "Post Crossover", "Amp Output Monitor", "Amp Imon"

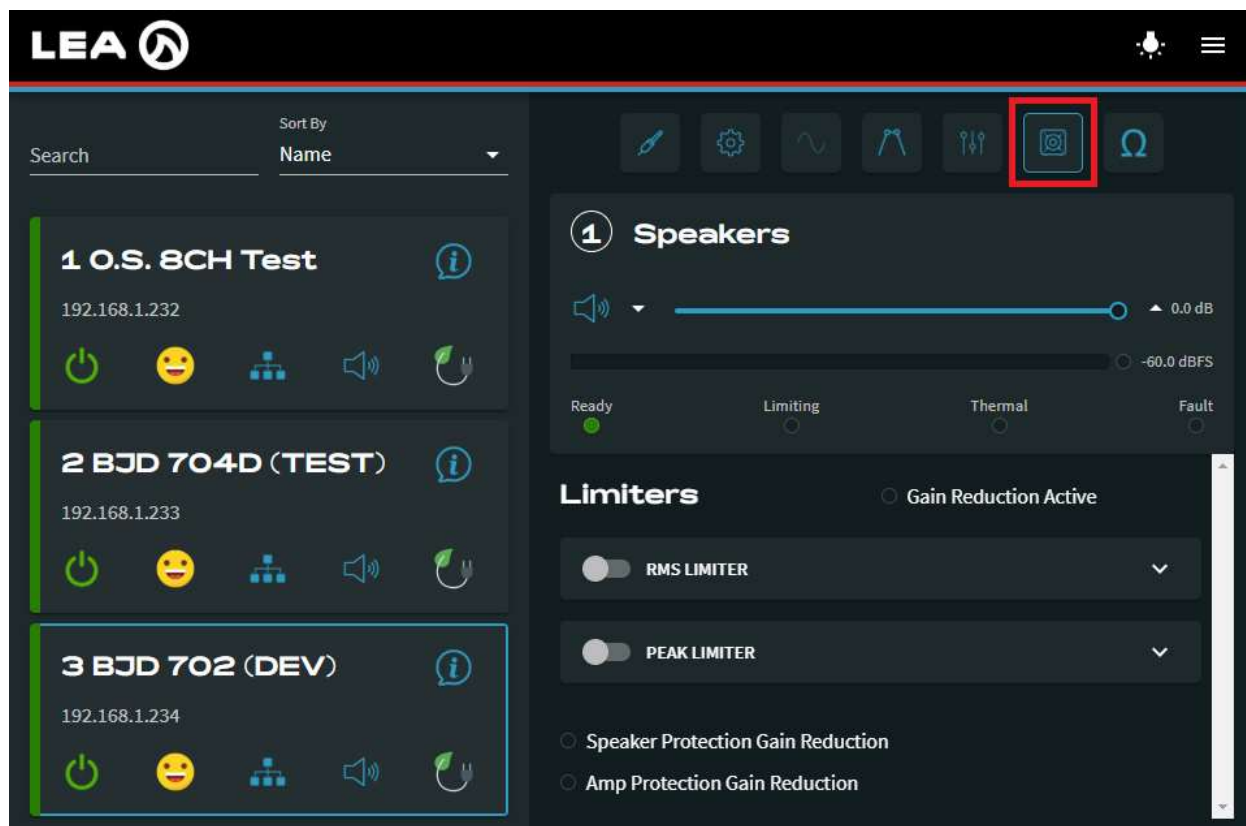
Example: set /amp/channels/1/inputSelector/danteOnRamp "Analog Input"\n

- Response: OK\n
- This will set the Dante On Ramp setting on Channel 1 to "Analog Input"

A screenshot of a control interface with a dark background. At the top, it says "HiZ/LowZ Settings". Below this is a dropdown menu currently showing "LoZ". Underneath is a section titled "Smart Power Bridge Enabled" with four buttons labeled "CH. 1", "CH. 2", "CH. 3", and "CH. 4". A note below these buttons states: "Note: You can only enable Smart Power Bridge on one channel per amplifier." Below that is a "Channel Ready" section with a toggle switch that is turned on, labeled "Enabled". The bottom section, titled "Dante On-Ramp", is highlighted with a red rectangular border. It contains a dropdown menu currently showing "Analog Input". At the very bottom, a small note reads: "Analog Input Sensitivity settings will affect the signals sent out in Dante On Ramp with 'Analog Input' selected."

Amplifier Channel Levels

Click on this button to navigate to the Limiter section of the DSP relevant to this API section



The screenshot displays the LEA software interface. On the left sidebar, there is a list of test configurations:

- 1 O.S. 8CH Test** (192.168.1.232)
- 2 BJD 704D (TEST)** (192.168.1.233)
- 3 BJD 702 (DEV)** (192.168.1.234)

Each configuration has a set of status icons (power, smiley face, network, speaker, and leaf). The third configuration, "3 BJD 702 (DEV)", is highlighted with a blue border.

The main panel on the right shows the "Speakers" section for the selected configuration. It includes a volume slider set to 0.0 dB, a range from -60.0 dBFS to 0.0 dB, and status indicators for Ready (green dot), Limiting, Thermal, and Fault.

Below the speaker settings is the "Limiters" section, which includes a "Gain Reduction Active" toggle and two limiters:

- RMS LIMITER** (toggle on)
- PEAK LIMITER** (toggle on)

At the bottom of the limiters section, there are two options:

- ☐ Speaker Protection Gain Reduction
- ☐ Amp Protection Gain Reduction

A red box highlights a button in the top toolbar of the main panel, which is the icon for the Limiter section.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Meter Level dBFS

Type: SENSOR

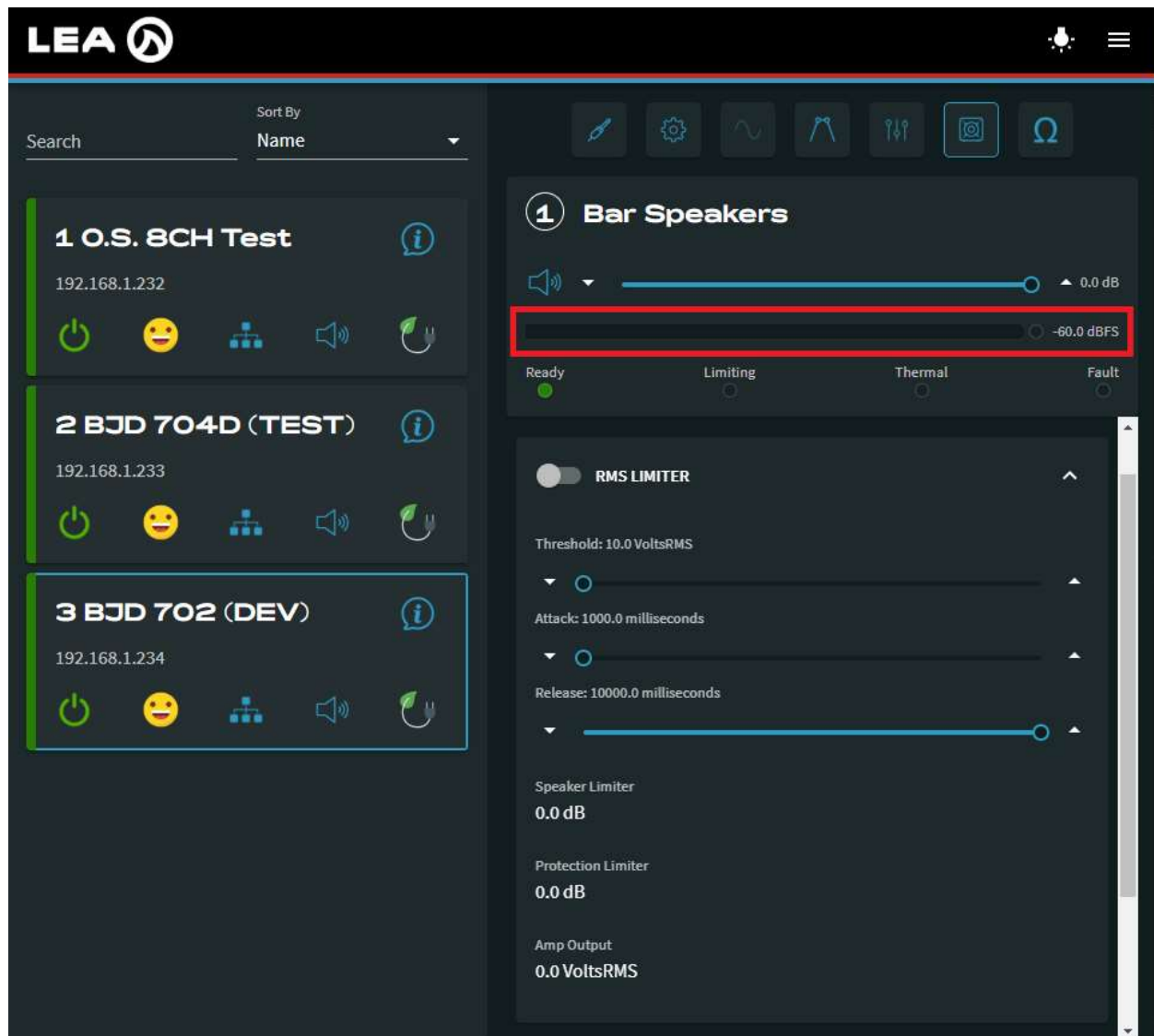
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/levels/level_db

Values: -60.0 through 0.0

Example: get /amp/channels/1/levels/level_db\n

- Response: /amp/channels/1/levels/level_db -31.5\n
 - This command asked for the output level dBFS on channel 1 and got the response -31.5 dBFS





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Level Volts RMS

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/levels/level_volts

Values: 0.0 through 200.0

Example: get /amp/channels/1/levels/level_volts\n

- Response: /amp/channels/1/levels/level_volts 24.5\n
 - This command asked for the output in volts RMS on channel 1 and got the response 24.5 V

The screenshot displays the LEA API web interface. On the left, a list of channels is shown, including '1 O.S. 8CH Test', '2 BJD 704D (TEST)', and '3 BJD 702 (DEV)'. The third channel is highlighted with a red box. On the right, the 'Speakers' section is visible, showing a volume slider and various status indicators. The 'RMS LIMITER' section is also present, with a red box highlighting the 'Amp Output' value of '0.0 VoltsRMS'.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Output Channel Level Watts RMS

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/levels/level_watts

Values: 0.0 through 10000.0

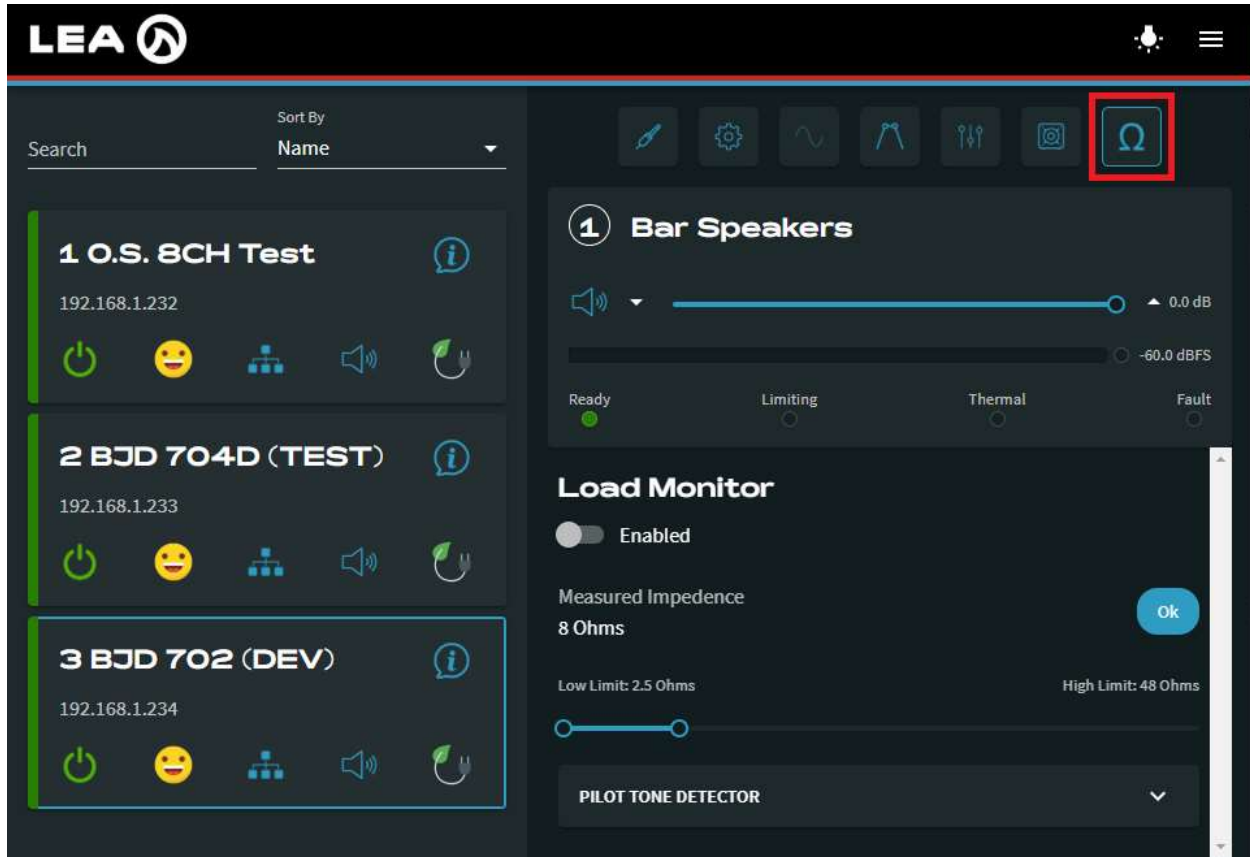
Example: get /amp/channels/1/levels/level_watts\n

- Response: /amp/channels/1/levels/level_watts 85.5\n
 - This command asked for the output in watts RMS on channel 1 and got the response 85.5 W

The screenshot displays the LEA control interface. On the left, there is a list of three channels: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). Each channel has a set of control icons. The third channel is highlighted with a red border. On the right, the 'Speakers' section is active, showing a volume slider at 0.0 dB and status indicators for Ready, Limiting, Thermal, and Fault. Below this, the 'PEAK LIMITER' section is expanded, showing settings for Threshold (141.0 VoltsPeak), Attack (1.0 milliseconds), and Release (100.0 milliseconds). At the bottom, the 'Amp Output' is displayed as 0.0 WattsRMS, which is highlighted with a red box.

Amplifier Channel Load Monitoring

Click on this button to navigate to the Load Monitoring section of the DSP relevant to this API section



The screenshot displays the LEA Open API web interface. The top navigation bar includes the LEA logo, a search bar, and a 'Sort By Name' dropdown. A red box highlights the Load Monitoring icon (a circle with an Omega symbol) in the top right navigation area. The main content area is divided into two columns. The left column lists three test configurations: '1 O.S. 8CH Test' (192.168.1.232), '2 BJD 704D (TEST)' (192.168.1.233), and '3 BJD 702 (DEV)' (192.168.1.234). The right column shows the '1 Bar Speakers' configuration with a volume slider set to 0.0 dB and a status bar indicating 'Ready', 'Limiting', 'Thermal', and 'Fault'. Below this is the 'Load Monitor' section, which is enabled and shows a measured impedance of 8 Ohms, with low and high limits of 2.5 Ohms and 48 Ohms respectively. A 'PILOT TONE DETECTOR' dropdown is also visible.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Load Monitor Enable

Type: CONTROL

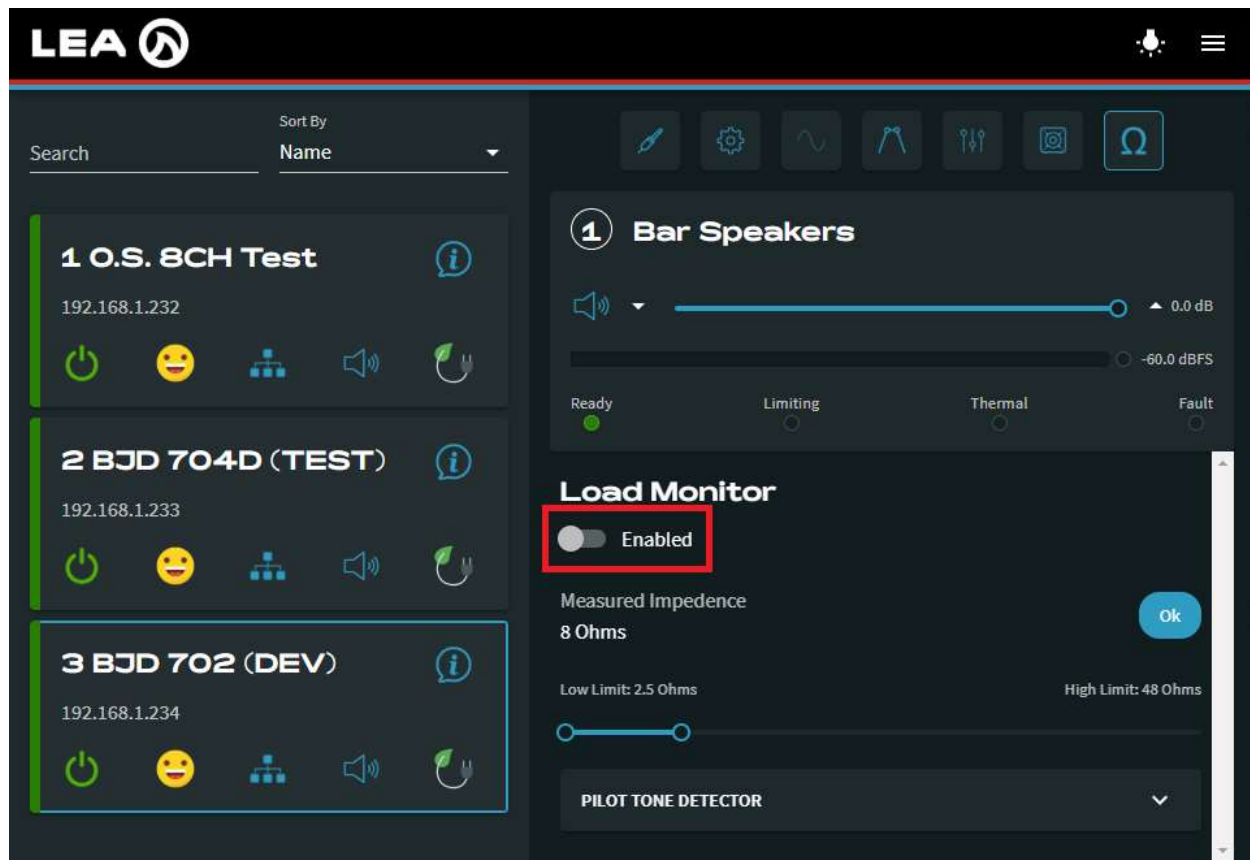
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/loadMonitor/enable

Values: "true", "false"

Example: set /amp/channels/1/loadMonitor/enable "false"\n

- This command disabled load monitoring on channel 1





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Load Monitor Measured Impedance

Type: SENSOR

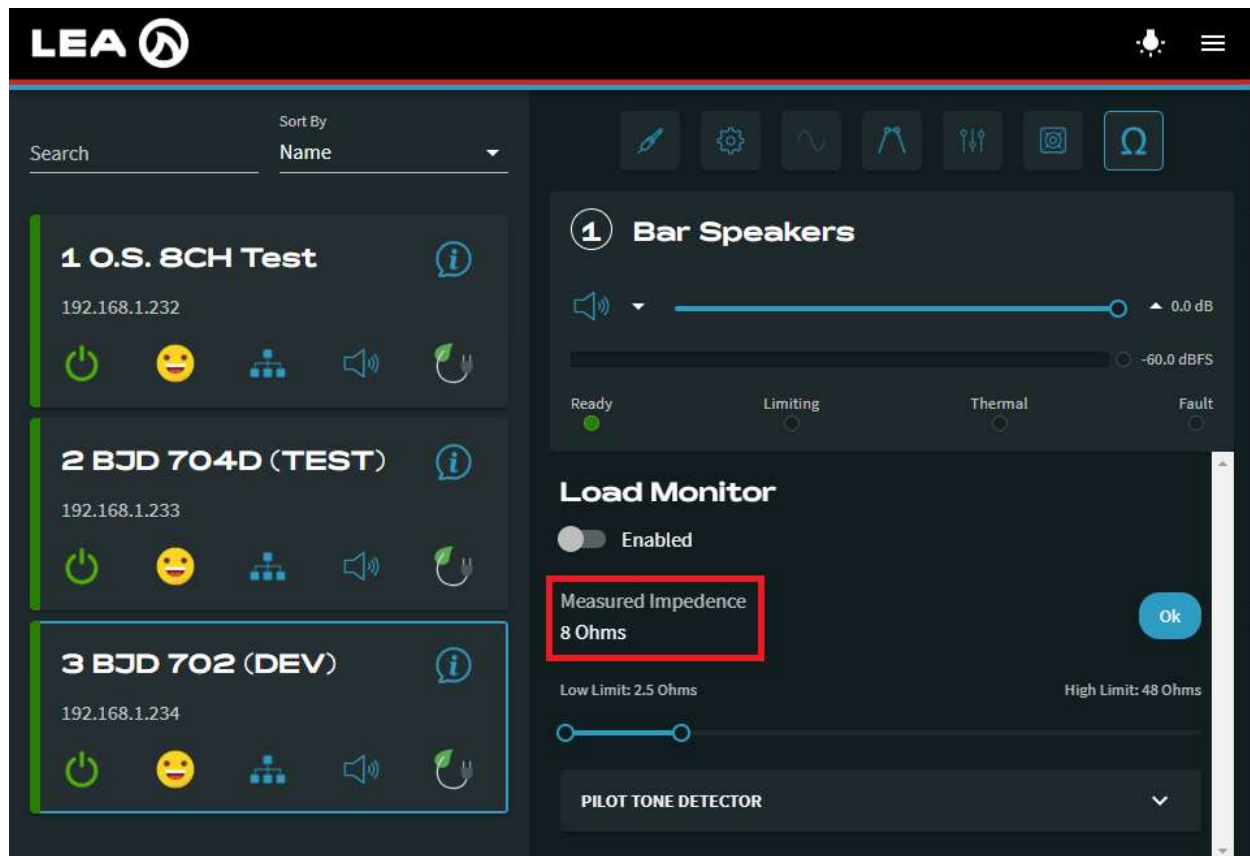
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/loadMonitor/measuredImpedance

Values: 0.0 through 250.0

Example: get /amp/channels/1/loadMonitor/measuredImpedance\n

- Response: /amp/channels/1/loadMonitor/measuredImpedance 8.2\n
- This command asked for the impedance measured on channel 1 and got the response 8.2 Ω





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Load Monitor High Limit

Type: CONTROL

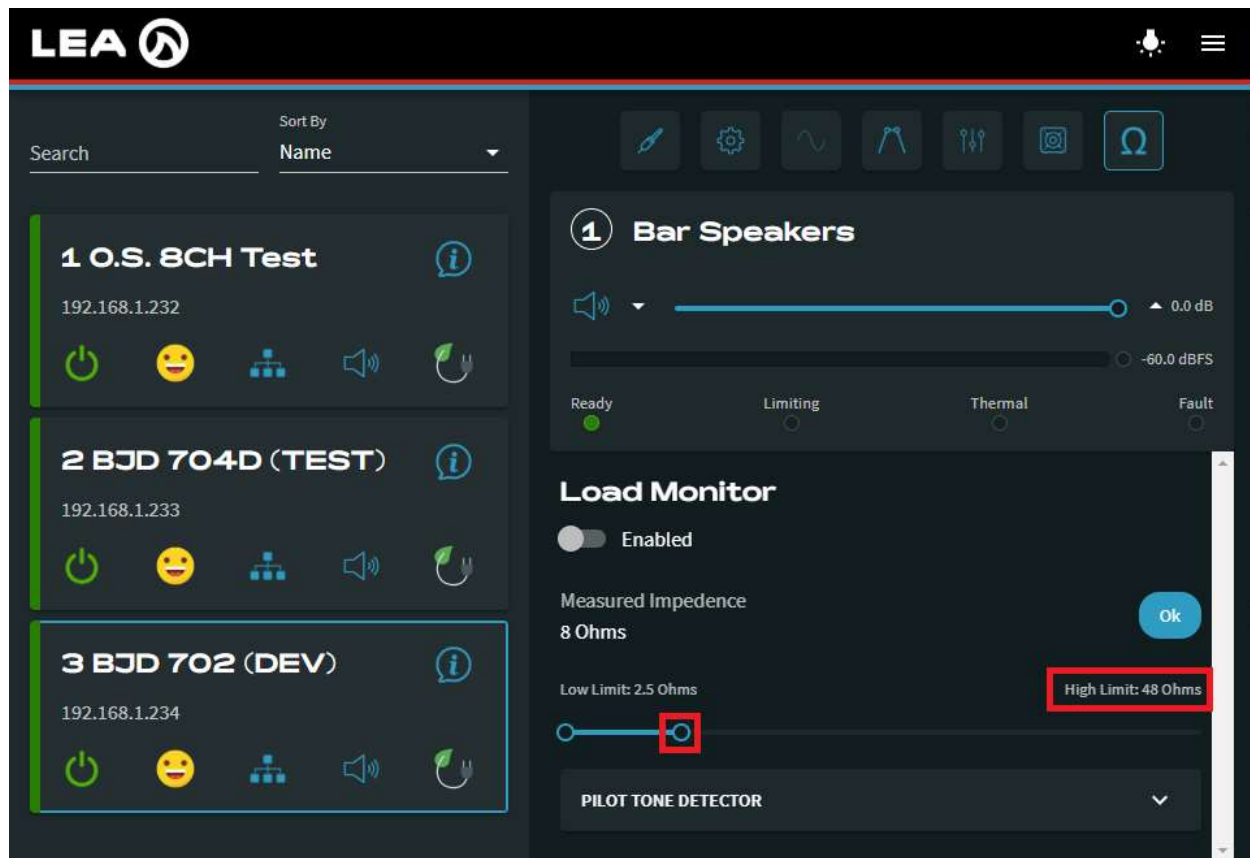
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/loadMonitor/highLimit

Values: 8.0 through 250.0

Example: set /amp/channels/1/loadMonitor/highLimit 48.0\n

- This command set the load monitor high limit on channel 1 to 48 Ω





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Load Monitor Low Limit

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/loadMonitor/lowLimit

Values: 1.0 through 250.0

Example: set /amp/channels/1/loadMonitor/lowLimit 2.5\n

- This command set the load monitor low limit on channel 1 to 2.5 Ω

The screenshot displays the LEA web interface. On the left, a sidebar lists three channels: '1 O.S. 8CH Test' (IP: 192.168.1.232), '2 BJD 704D (TEST)' (IP: 192.168.1.233), and '3 BJD 702 (DEV)' (IP: 192.168.1.234). The third channel is selected. The main panel shows the 'Bar Speakers' settings with a volume slider set to 0.0 dB. Below this, the 'Load Monitor' section is visible, featuring a toggle switch set to 'Enabled'. The 'Measured Impedance' is shown as 8 Ohms. A red box highlights the 'Low Limit: 2.5 Ohms' setting, which is adjustable via a slider. The 'High Limit' is set to 48 Ohms. An 'Ok' button is present next to the limits. At the bottom, there is a 'PILOT TONE DETECTOR' dropdown menu.



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Load Monitor Status

Type: SENSOR

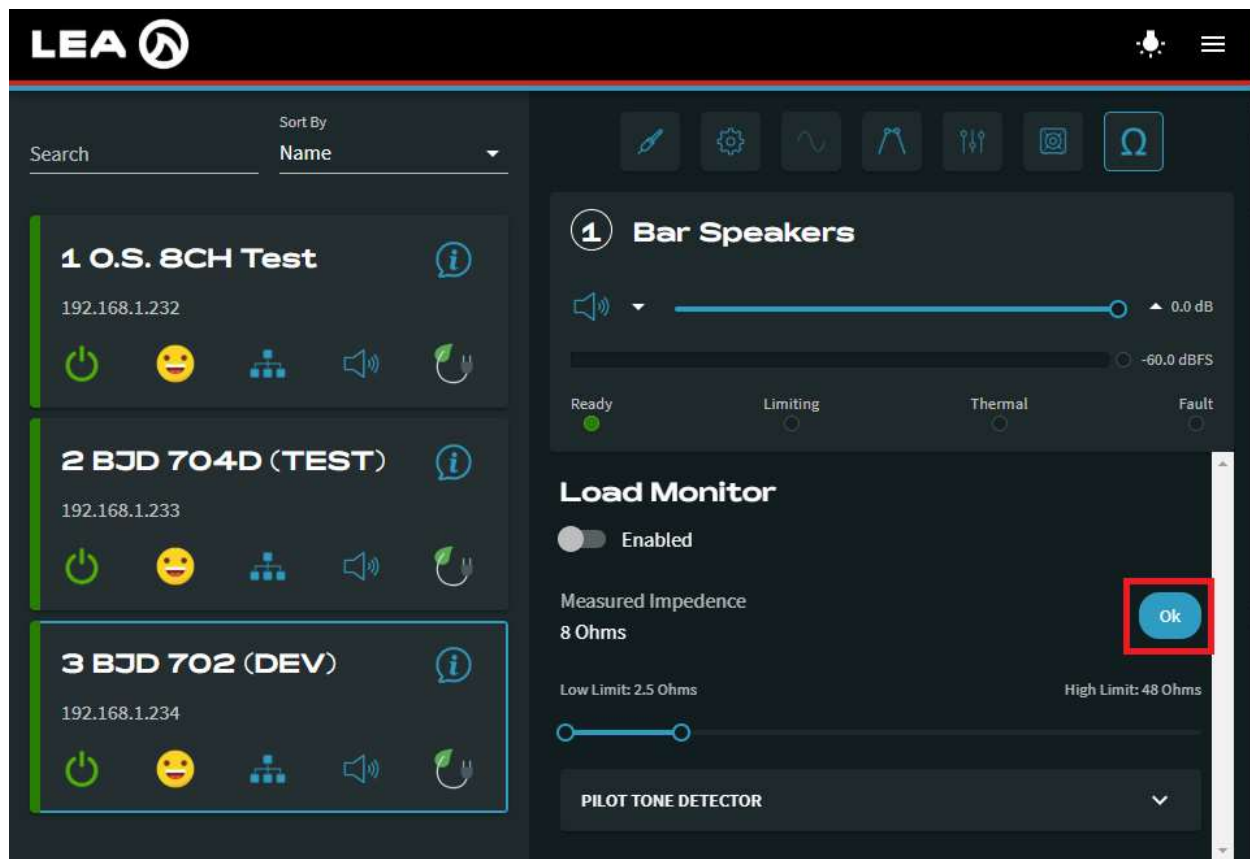
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/loadMonitor/status

Values: "Ok", "Short", "Open", "Low Signal"

Example: get /amp/channels/1/loadMonitor/status\n

- Response: /amp/channels/1/loadMonitor/status "Ok"\n
- This command asked for the load monitor status and got the response Ok meaning the measured impedance is in between the low and high limits



Pilot Tone Enable

Type: CONTROL

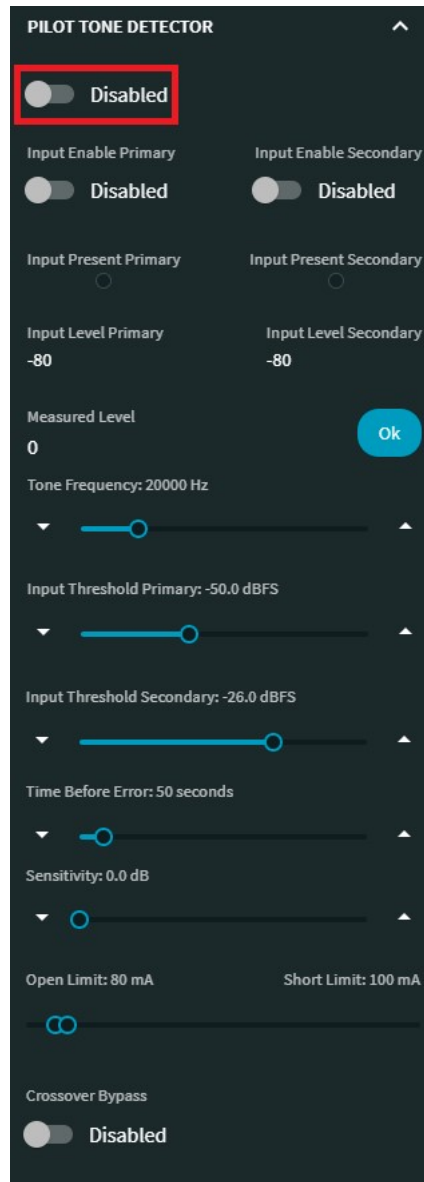
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/enable

Values: "true", "false"

Example: set /amp/channels/1/pilotToneDetector/enable true\n

- Response: OK\n
- This command set the Pilot Tone Enable to TRUE or enabled



PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary: ☐ Disabled

Input Enable Secondary: ☐ Disabled

Input Present Primary: ☐

Input Present Secondary: ☐

Input Level Primary: -80

Input Level Secondary: -80

Measured Level: 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA

Short Limit: 100 mA

Crossover Bypass: ☐ Disabled

Pilot Tone Input Enable Primary

Type: CONTROL

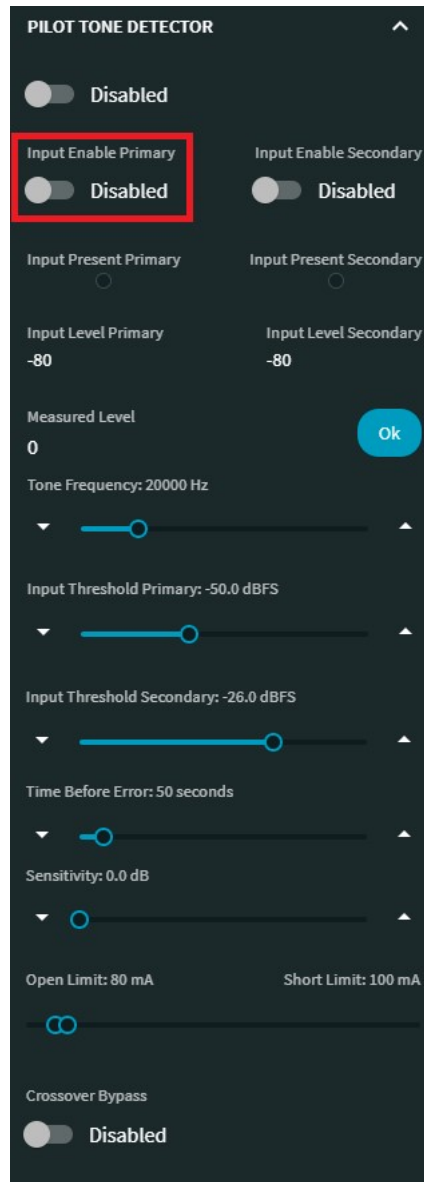
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputEnablePrimary

Values: "true", "false"

Example: set /amp/channels/1/pilotToneDetector/inputEnablePrimary true\n

- Response: OK\n
- This command set the Pilot Tone Input Enable Primary to TRUE or enabled



Pilot Tone Input Enable Secondary

Type: CONTROL

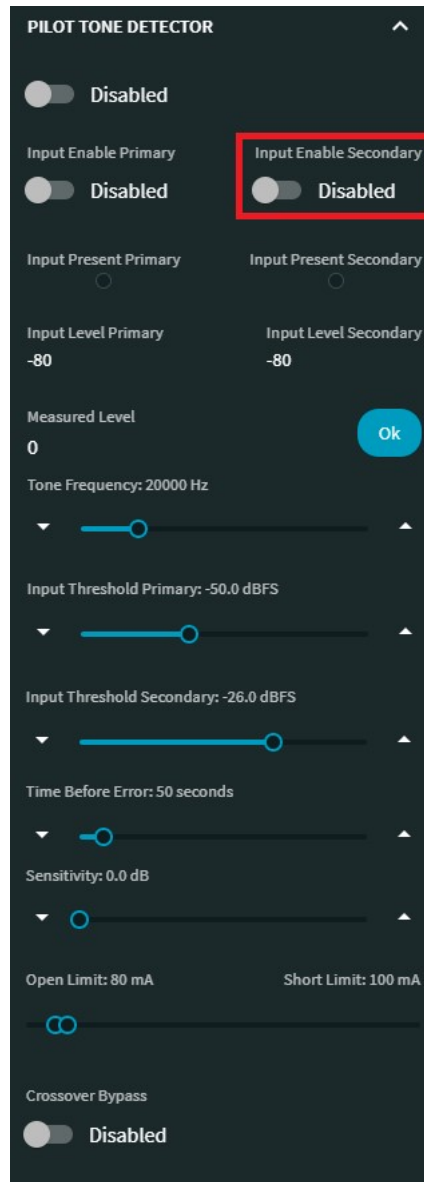
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputEnableSecondary

Values: "true", "false"

Example: set /amp/channels/1/pilotToneDetector/inputEnableSecondary true\n

- Response: OK\n
- This command set the Pilot Tone Input Enable Secondary to TRUE or enabled



PILOT TONE DETECTOR

Disabled

Input Enable Primary Disabled

Input Enable Secondary Disabled

Input Present Primary

Input Present Secondary

Input Level Primary -80

Input Level Secondary -80

Measured Level 0

Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA

Short Limit: 100 mA

Crossover Bypass Disabled

Pilot Tone Input Present Primary

Type: SENSOR

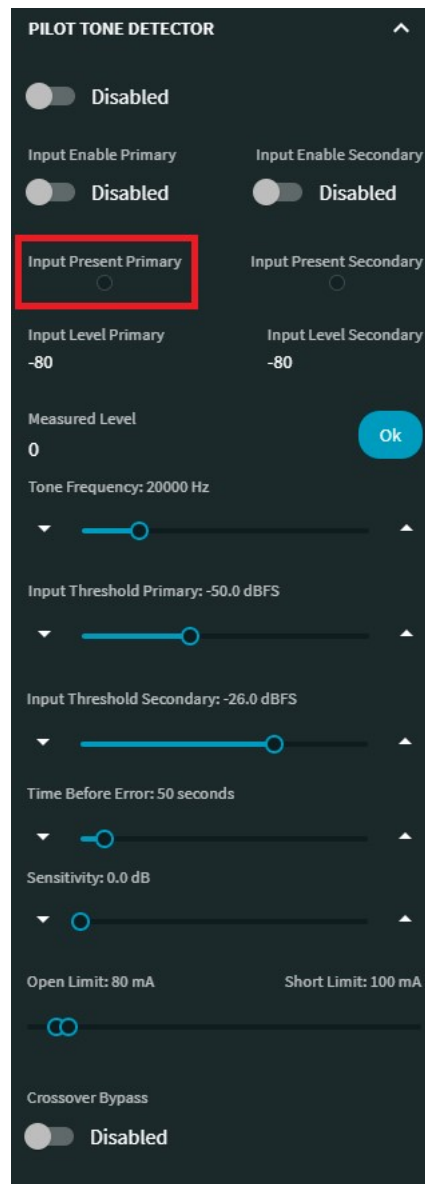
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputPresentPrimary

Values: "true", "false"

Example: get /amp/channels/1/pilotToneDetector/inputPresentPrimary\n

- Response: /amp/channels/1/pilotToneDetector/inputPresentPrimary false\n
- This command asked for the Pilot Tone Input Present Primary state and received FALSE



Pilot Tone Input Present Secondary

Type: SENSOR

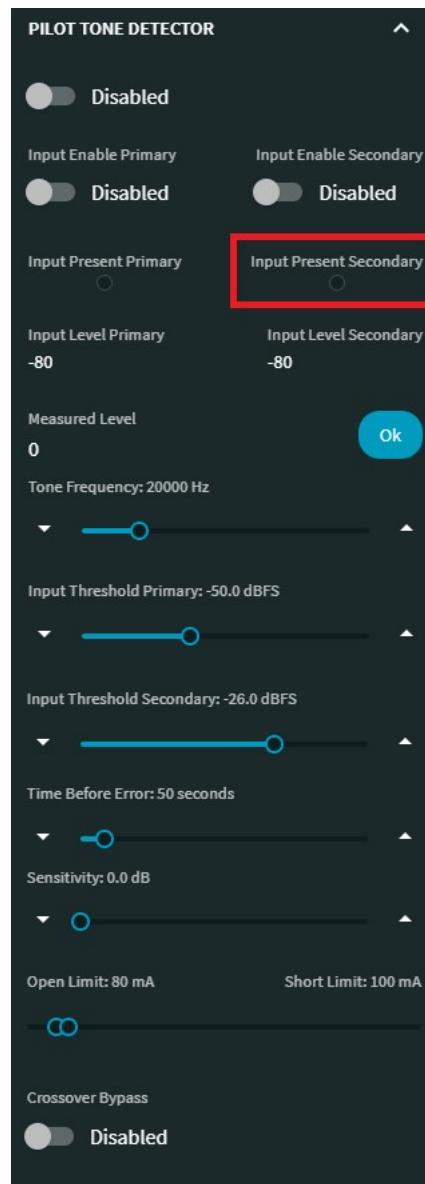
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputPresentSecondary

Values: "true", "false"

Example: get /amp/channels/1/pilotToneDetector/inputPresentSecondary\n

- Response: /amp/channels/1/pilotToneDetector/inputPresentSecondary false\n
- This command asked for the Pilot Tone Input Present Secondary state and received FALSE





OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Input Level Primary

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputLevelPrimary

Values: -80.0 through 0.0

Example: get /amp/channels/1/pilotToneDetector/inputLevelPrimary\n

- Response: /amp/channels/1/pilotToneDetector/inputLevelPrimary -33\n
- This command asked for the Pilot Tone Input Level Primary and received -33dB

PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled

Input Enable Secondary ☐ Disabled

Input Present Primary ☐

Input Present Secondary ☐

Input Level Primary -80

Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Input Level Secondary

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputLevelSecondary

Values: -80.0 through 0.0

Example: get /amp/channels/1/pilotToneDetector/inputLevelSecondary\n

- Response: /amp/channels/1/pilotToneDetector/inputLevelSecondary -38\n
- This command asked for the Pilot Tone Input Level Secondary and received -38dB



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Measured Level

Type: SENSOR

Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/measuredLevel

Values: 0 through 65535 mA ptd

Example: get /amp/channels/1/pilotToneDetector/measuredLevel\n

- Response: /amp/channels/1/pilotToneDetector/measuredLevel 35\n
- This command asked for the Pilot Tone Measured Level and received 35mA

Pilot Tone Status

Type: SENSOR

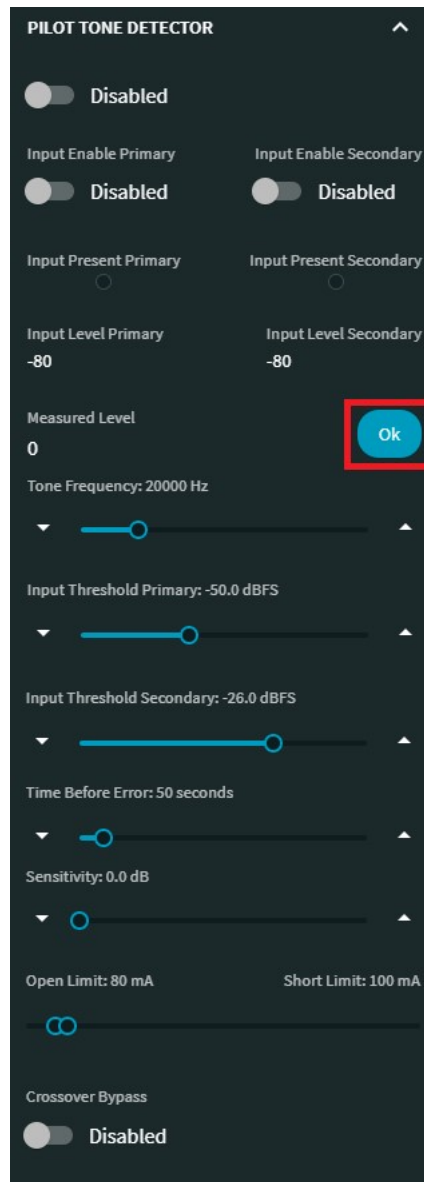
Commands: get, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/status

Values: "Ok", "Short", "Above Short Limit", "Below Open Limit", "Open", "Low Signal"

Example: get /amp/channels/1/pilotToneDetector/status\n

- Response: /amp/channels/1/pilotToneDetector/status "Ok"\n
- This command asked for the Pilot Tone Status and received OK as the response



PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled Input Enable Secondary ☐ Disabled

Input Present Primary ☐ Input Present Secondary ☐

Input Level Primary -80 Input Level Secondary -80

Measured Level 0 **Ok**

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Frequency

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/toneFrequency

Values: 19000 through 24000

Example: set /amp/channels/1/pilotToneDetector/toneFrequency 20000\n

- Response: OK\n
- This command set the Pilot Tone Frequency to 20000Hz

PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled Input Enable Secondary ☐ Disabled

Input Present Primary 0 Input Present Secondary 0

Input Level Primary -80 Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Input Threshold Primary

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputThresholdPrimary

Values: -80.0 through 0.0

Example: set /amp/channels/1/pilotToneDetector/inputThresholdPrimary -50\n

- Response: OK\n
- This command set the Pilot Tone Input Threshold Primary to -50dB



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Input Threshold Secondary

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/inputThresholdSecondary

Values: -80.0 through 0.0

Example: set /amp/channels/1/pilotToneDetector/inputThresholdSecondary -26\n

- Response: OK\n
- This command set the Pilot Tone Input Threshold Secondary to -26dB



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Time Before Error

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/ timeElapsedForError

Values: 1 through 600

Example: set /amp/channels/1/pilotToneDetector/ timeElapsedForError 50\n

- Response: OK\n
- This command set the Pilot Tone Time Elapsed for Error to 50 seconds

PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled Input Enable Secondary ☐ Disabled

Input Present Primary ☐ Input Present Secondary ☐

Input Level Primary -80 Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Sensitivity

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/sensitivity

Values: 0.0 through 12.0

Example: set /amp/channels/1/pilotToneDetector/sensitivity 0\n

- Response: OK\n
- This command set the Pilot Tone Sensitivity to 0dB

PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled Input Enable Secondary ☐ Disabled

Input Present Primary 0 Input Present Secondary 0

Input Level Primary -80 Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Open Limit

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/openLimit

Values: 25.0 through 700.0

Example: set /amp/channels/1/pilotToneDetector/openLimit 80\n

- Response: OK\n
- This command set the Pilot Tone Open Limit to 80mA

PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled

Input Enable Secondary ☐ Disabled

Input Present Primary ☐

Input Present Secondary ☐

Input Level Primary -80

Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA

Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Pilot Tone Short Limit

Type: CONTROL

Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/shortLimit

Values: 50.0 through 750.0

Example: set /amp/channels/1/pilotToneDetector/shortLimit 100\n

- Response: OK\n
- This command set the Pilot Tone Short Limit to 100mA

PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled

Input Enable Secondary ☐ Disabled

Input Present Primary ☐

Input Present Secondary ☐

Input Level Primary -80

Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA

Short Limit: 100 mA

Crossover Bypass ☐ Disabled

Pilot Tone Crossover Bypass

Type: CONTROL

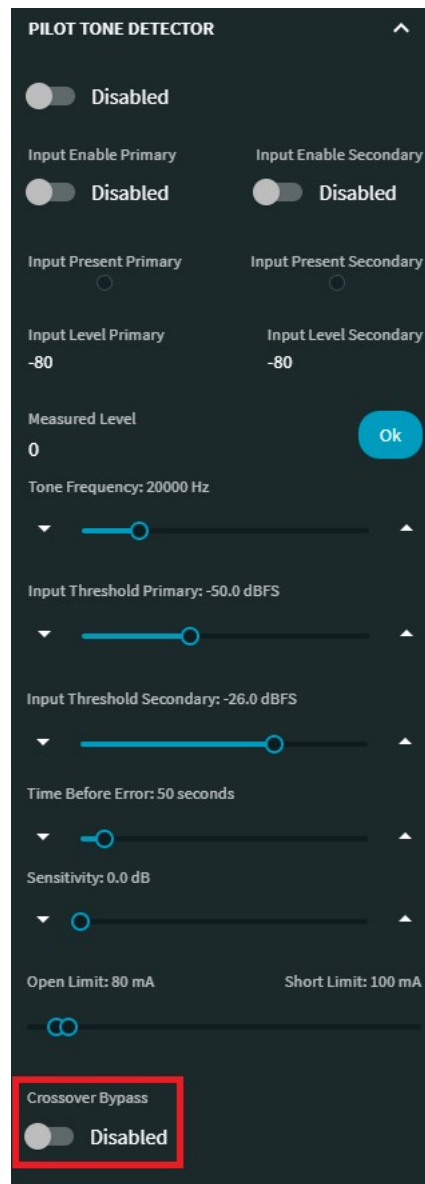
Commands: get, set, subscribe, unsubscribe

URL: /amp/channels/x/pilotToneDetector/CrossoverBypass

Values: "true", "false"

Example: set /amp/channels/1/pilotToneDetector/CrossoverBypass false\n

- Response: OK\n
- This command set the Pilot Tone Crossover Bypass to FALSE or DISABLED



PILOT TONE DETECTOR

☐ Disabled

Input Enable Primary ☐ Disabled

Input Enable Secondary ☐ Disabled

Input Present Primary ☐

Input Present Secondary ☐

Input Level Primary -80

Input Level Secondary -80

Measured Level 0 Ok

Tone Frequency: 20000 Hz

Input Threshold Primary: -50.0 dBFS

Input Threshold Secondary: -26.0 dBFS

Time Before Error: 50 seconds

Sensitivity: 0.0 dB

Open Limit: 80 mA

Short Limit: 100 mA

Crossover Bypass ☐ Disabled



OPEN API – TCP Protocol

Rev 5. 09-21-2021

Revision History

Rev	Date	Changed by	Description
0	4-17-2020	DB &WAP	Initial
1	5-11-2020	BJD	Addition of Available Commands
2	10-02-2020	BJD	Corrected some typos and added additional calls to Device Info
3	10-15-2020	BJD	Corrected some example responses that were incorrect
4	11-02-2020	BJD	Changed an example command to a more common example
5	09-21-2021	BJD	Updated for 2.0.2.X Firmware: Dante On Ramp, Pilot Tone, Priority Override Threshold
6	12-16-2021	BJD	Typo Correction