

PHANTOM

**REACTOR**

C U S T O M

**API LIST OF COMMANDS**

## 1. Description of transport layer

Http server permanently accessible via POST/GET requests

JSON is used for data transfer formatting

UTF-8 is used for encoding

**\*\*URL format\*\***

``http://<IP-Address>/cisettings/opcode`` (note that full opcode list can be found in part 2)

Ex. Reading the serial number

GET request @ ``http://<IP-Address>/cisettings/serialnumber``

Result

```
```json
{
  «data»: {
    «serialnumber»: «K24A00025ZE1V»
  }
}
```
```

Ex. Setting the volume

POST request @ ``http://<IP-Address>/cisettings/volume``

POST DATA

```
```json
{
  «volume»: 27
}
```
```

## 2. List of available commands and associated product behaviour

Warning: All commands are not available yet.

Here is the list of commands that are not available yet:

- basslevel
- treblelevel
- tonecontrolmode
- balancelevel
- icmode
- subsonicmode
- nightmode
- nightlevel
- delay
- eqmode
- EQ[n]

| Opcode          | Parameters   | Description  | Factory Value  | Async. Notification ? |
|-----------------|--------------|--|--|-----------------------|
| apiversion      | UTF-8 string | Version of the control Api supported by this product<br><br><b>Read-only parameter</b>                               | /  | /                     |
| serialnumber    | UTF-8 string | Prints the product serial number<br><br><b>Read-only parameter</b>   | /  | /                     |
| hardwareversion | UTF-8 string | Prints the product hardware version<br><br><b>Read-only parameter</b>  | /  | /                     |
| softwareversion | UTF-8 string | Prints the product software version<br><br><b>Read-only parameter</b>  | /  | /                     |
| friendlyname    | UTF-8 string | ex: "Devialet Reactor Room 17"<br><br><b>Read/Write parameter</b>  | Includes the mac address of control/config Ethernet port | /                     |
| internalstate   | UTF-8 string | Prints the product current state:<br>- "OK"<br>or<br>- "NOK"<br><br>"OK" means no issue ; product is perfectly fine. | /  | Y                     |

|                    |                     |   |              |   |
|--------------------|---------------------|---|--------------|---|
|                    |                     | <p>"NOK" means something wrong is happening. In such case , tells which problem with an error code in string following the "NOK" word (ex. OVER_TEMPERATURE)</p> <p>List of error codes to be defined. For debug purpose only</p> <p><b>Read-only parameter</b></p> |              |   |
| temperature        | UTF-8 string        | <p>Prints a selection of internal temperatures for monitoring purpose only</p> <p><b>Read-only parameter</b></p>  | /            | / |
| power              | OFF or 0<br>ON or 1 | <p>0 = turn the product off (to standby state)<br/>1 = turn the product on (to "running" state)</p> <p><b>Write-only parameter</b></p>  | /            | / |
| powerstate         | UTF-8 string        | <p>0 = "standby"<br/>1 = "starting"<br/>2 = "running"<br/>3 = "stopping"</p> <p><b>Read-only parameter</b></p>  | /            | Y |
| startupsource      | x = source_name     | <p>source x selected as the next startup source</p> <p><b>Read/Write parameter</b></p>  | analog input | / |
| currentsourcestate | UTF-8 string        | <p>Indicates the status of the current source</p> <p>0 = "Unlocked"<br/>or<br/>1 = "Locked"</p> <p>AES/EBU input = DIR status<br/>Analog = always locked<br/>Dante = Dante status TBC</p> <p><b>Read-only parameter</b></p>   | /            | Y |
| currentstreamtype  | UTF-8 string        | <p>Indicates the type of the current incoming stream type</p> <p>0 = "PCM"<br/>1 = "NOTPCM" (ex. Dolby/DTS...)</p> <p>AES/EBU input = DIR status<br/>Analog = always PCM<br/>Dante = TBC</p> <p><b>Read-only parameter</b></p>                                      | /            | Y |

|                    |  |  |                   |   |
|--------------------|--|--|-------------------|---|
| source             | UP or ++<br>DOWN or --<br>x = source   | Next source<br>Previous source<br>Direct access to x<br>x = AES/EBU<br>x = Analog<br>x = Dante<br><br><b>Read/Write parameter</b>  | startups<br>ource | Y |
| analogssensitivity | x (float)<br><br>If outside range,<br>apply default value<br><br>Rounded to<br>multiples of 0.5 in<br>the 0.5-10 range | x = value in volts rms for the<br>normalized input level of the<br>XLR connector in analog mode.<br>Range : 0.5Vrms min to 10Vrms<br>max. in 0.5Vrms steps<br><br><b>Read/Write parameter</b>  | 2.0               | / |
| ledmode            | OFF or 0<br>ON or 1<br>2 blinking slow<br>3 blinking fast  | 0 = LED is turned off<br>1 = LED is turned on<br>2 = LED blinks slowly [0.5Hz]<br>3 = LED blinks fast [2Hz]<br>Any other value = off<br><br><b>Read/Write parameter</b>  | 0                 | / |
| splmax             | x = 50 to y<br><br>x = integer value<br>(rounded if needed)<br><br>if x<50, x=50<br>if x>y, x=y                        | max dBspl achieved by the<br>product.<br><br><b>Read/Write parameter</b>   | y                 | / |
| mix                | L (left)<br>R (right)<br>M (mono)<br><br>Any other value :<br>silence  | Mix applied on incoming stream<br>L: Output = Left<br>R: Output = Right<br>M: Output = Mono Mix<br><br>Output = a.Lin + b.Rin<br><br>'L'=> a = 1.0 & b = 0.0<br>'R'=> a = 0.0 & b = 1.0<br>'M'=> a = b = 0.5<br><br>/!\ a = b = 0.0 for any other<br>value of Mix /!\<br><br><b>Read/Write parameter</b> | M                 | / |
| mutemode           | OFF or 0<br>ON or 1  | OFF = audio @ output<br>ON = no audio @ output<br><br><b>Read/Write parameter</b>  | OFF               | Y |
| volume             | UP or ++<br>DOWN or --<br>x = 0 to 100<br><br>x = integer value<br>(rounded if needed)<br><br>if x<0, x=0              | increase by 1<br>decrease by 1<br>change volume to x<br><br><b>Read/Write parameter</b>  | see<br>below      | Y |

|                 |  |  |     |   |
|-----------------|--|--|-----|---|
|                 | if x>100, x=100  |  |     |   |
| startupvolume   | x = 0 to 100<br><br>x = integer value<br>(rounded if needed)<br><br>if x<0, x=0<br>if x>100, x=100                                       | volume x applied immediately<br>at startup<br><br><b>Read/Write parameter</b>  | 30  | / |
| basslevel       | UP or ++<br>DOWN or --<br>x = -18 to +18<br><br>x = integer value<br>(rounded if needed)<br><br>if x<-18, x=-18<br>if x>+18, x=+18       | increase by 1<br>decrease by 1<br>change bass level to x dB<br><br><b>Read/Write parameter</b>                           | 0   | / |
| treblelevel     | UP or ++<br>DOWN or --<br>x = -18 to +18<br><br>x = integer value<br>(rounded if needed)<br><br>if x<-18, x=-18<br>if x>+18, x=+18       | increase by 1<br>decrease by 1<br>change treble level to x dB<br><br><b>Read/Write parameter</b>                         | 0   | / |
| tonecontrolmode | OFF or 0<br>ON or 1  | OFF = no tone control<br>ON = tone control engaged<br><br><b>Read/Write parameter</b>                                    | OFF | / |
| balancelevel    | UP or ++<br>DOWN or --<br>x = -100 to +100<br><br>x = integer value<br>(rounded if needed)<br><br>if x<-100, x=-100<br>if x>+100, x=+100 | increase balance to R by 1<br>increase balance to L by 1<br>change balance level to x<br><br><b>Read/Write parameter</b> | 0   | / |
| icmode          | OFF or 0<br>ON or 1  | Intelligent Cinema Mode<br>OFF = disabled<br>ON = engaged<br><br><b>Read/Write parameter</b>                             | 0   | / |
| subsonicmode    | OFF or 0<br>ON or 1  | Subsonic Filter to kill rumble<br>and unwanted DC (20Hz 1st<br>order HPF)<br><br><b>Read/Write parameter</b>             | 0   | / |
| nightmode       | OFF or 0<br>ON or 1  | OFF = Night mode disabled<br>ON = Night mode engaged<br><br><b>Read/Write parameter</b>                                  | 0   | / |

|                         |  |   |   |   |
|-------------------------|--|---|---|---|
| nightlevel              | x = 1 to 3   | Intensity of the night mode<br><b>Read/Write parameter</b>  | 1 | / |
| delay                   | x = 0 to 200<br><br>x = integer value<br>(rounded if needed)<br><br>if x<0, x=0<br>if x>200, x=200 | Delay applied to the incoming<br>signal in [ms]<br><b>Read/Write parameter</b>  | 0 | / |
| eqmode                  | OFF or 0<br>ON or 1  | OFF = EQ filters bypassed<br>ON = EQ filters enabled<br><b>Read/Write parameter</b>   | 0 | / |
| EQ[n]<br><br>n = 1 to 4 | F0 (float)<br>dBgain (float)<br>Q (float)  | Parameters in floating point<br>for setting up a peakingEQ<br>filter. Several filters<br>cascaded.<br><b>Read/Write parameter</b> | 0 | / |

**List of boot-persistent parameters (that do not change when a run=>standby=>run cycle is performed):**

- ApiVersion
- SerialNumber
- HardwareVersion
- FriendlyName
- SoftwareVersion
- StartupSource (and therefore Source)
- AnalogSensitivity
- SplMax
- Mix
- MuteMode
- StartupVolume (and therefore Volume)
- BassLevel
- TrebleLevel
- ToneControlMode
- BalanceLevel
- ICMODE
- SubsonicMode
- NightMode
- NightLevel
- Delay
- EQMode
- EQ[n]

**3. Macro commands**

getAll() will output all status simultaneously

getLean() will output the following status simultaneously :

- PowerState
- MuteMode
- Volume
- Source