

## WFS OSC

default receive port: UDP 8051 / TCP 8052  
default send port: UDP 8050

get: sends back once the requested value(s)  
stream : streams continuously the requested value(s)

## CONFIG

```
/wfs/config/stageWidth [f] 0~50 m
/wfs/config/stageDepth [f] 0~50 m
/wfs/config/stageHeight [f] 0~50 m
/wfs/config/stageDimensions [f] [f] [f] 0~50 m
/wfs/config/originWidth [f] -50~50 m
/wfs/config/originDepth [f] -50~50 m
/wfs/config/originHeight [f] -50~50 m
/wfs/config/originPosition [f] [f] [f] -50~50 m
/wfs/config/flipX [0/1]
/wfs/config/flipY [0/1]
/wfs/config/flipZ [0/1]
/wfs/config/flipXYZ [0/1] [0/1] [0/1]
/wfs/config/speedOfSound [f] 325~367 m/s
/wfs/config/temperature [f] -10~60 °C
/wfs/config/HaasEffect [f] 0~20 ms
/wfs/config/globalLatency [f] 0~20 ms
/wfs/config/masterLevel [f] -90~0 dB
/wfs/config/OSCHost [i i i i] (configures the destination IP where to send OSC
from WFS system)
/wfs/config/OSCHost/confirmHost
/wfs/config/OSCport [i] (configures the destination port where to send OSC from
WFS system)
/wfs/config/OSCport/confirmPort
/wfs/config/lemurSM [i i] (lemur#: 0: single/1: multi)
/wfs/config/lemurSM [i i i i i i i i] (0: single/1: multi)
```

```
/wfs/config/get/all
/wfs/config/get/stageWidth
/wfs/config/get/stageDepth
/wfs/config/get/stageHeight
/wfs/config/get/stageDimensions
/wfs/config/get/originWidth
/wfs/config/get/originDepth
/wfs/config/get/originHeight
/wfs/config/get/originPosition
/wfs/config/get/flipX
/wfs/config/get/flipY
/wfs/config/get/flipZ
/wfs/config/get/flipXYZ
/wfs/config/get/speedOfSound
/wfs/config/get/temperature
/wfs/config/get/HaasEffect
/wfs/config/get/globalLatency
```

```
/wfs/config/get/masterLevel
/wfs/config/get/lemurSM
```

## TRACKING

```
/wfs/tracking/trackingMode [i] (0: OFF/1: OSC/2: PSN)
/wfs/tracking/trackingActive [0/1]
/wfs/tracking/trackingSmoothing [i] 0~100 %
/wfs/tracking/trackingOffsetX [f] -50~50 m
/wfs/tracking/trackingOffsetY [f] -50~50 m
/wfs/tracking/trackingOffsetZ [f] -50~50 m
/wfs/tracking/trackingScaleX [f] -50~50
/wfs/tracking/trackingScaleY [f] -50~50
/wfs/tracking/trackingScaleZ [f] -50~50
/wfs/tracking/positionXYZ [i f f f (f)] Tag ID, X Y Z values (optional quality
factor of measurement)
```

```
/wfs/tracking/get/all
/wfs/tracking/get/trackingMode
/wfs/tracking/get/trackingActive
/wfs/tracking/get/trackingSmoothing
/wfs/tracking/get/trackingOffsetX
/wfs/tracking/get/trackingOffsetY
/wfs/tracking/get/trackingOffsetZ
/wfs/tracking/get/trackingScaleX
/wfs/tracking/get/trackingScaleY
/wfs/tracking/get/trackingScaleZ
```

## NAMES

```
/wfs/names/input/label [i] [string]
/wfs/names/input/reset [i]
/wfs/names/output/label [i] [string]
/wfs/names/output/reset [i]
/wfs/names/reverb/label [i] [string]
/wfs/names/reverb/reset [i]
```

```
/wfs/names/input/get all
/wfs/names/input/get [i]
/wfs/names/output/get all
/wfs/names/output/get [i]
/wfs/names/reverb/get all
/wfs/names/reverb/get [i]
```

## SNAPSHOTS

```
/wfs/saveLoad/snapshot/store [string: date_time]
/wfs/saveLoad/snapshot/recall [string: date_time]
```

## OUTPUTS

/wfs/selectIO/output [i]

/wfs/output/#/latency [f] -100~100 ms  
/wfs/output/#/attenuation [f] -92~0 dB  
/wfs/output/#/positionX [f] -50~50 m  
/wfs/output/#/positionY [f] -50~50 m  
/wfs/output/#/positionZ [f] -50~50 m  
/wfs/output/#/positionXYZ [f] [f] [f] -50~50 m  
/wfs/output/#/orientation [i] -180~180 °  
/wfs/output/#/angleOn [i] 1~180 °  
/wfs/output/#/angleOff [i] 0~179 °  
/wfs/output/#/pitch [i] -90~90 °  
/wfs/output/#/HFDamping [f] -6~0 dB/m  
/wfs/output/#/group [i] 0: off / 1~5 / 6: reverb feeds  
/wfs/output/#/apply2group [0/1]  
/wfs/output/#/minilLatencyEnable [0/1]  
/wfs/output/#/liveSourceEnable [0/1]  
/wfs/output/#/distanceAttenuationPercent [i] 0~200 %  
/wfs/output/#/Hparallax [f] 0~50 m  
/wfs/output/#/Vparallax [f] -50~50 m (>0 speaker below listener / <0 speaker above listener)  
/wfs/output/#/filter [i] (0:off 1:Lo-cut 200Hz 2:Lo-cut 60Hz 3: Lo-pass 100Hz)  
/wfs/output/#/eq [i] [f] [f] [f] x6 for each 6 bands of mode, freq in Hz, gain in dB, Q or slope > 24 parameters  
/wfs/output/#/eq/band [i] [i] [f] [f] band#, mode, 20~20000 Hz, -24~24 dB, 0.1~30 (Q or slope)  
/wfs/output/#/eq/mode [i] [i] band#, mode (0:off 1:low cut 2:high cut 3:low shelf 4:high shelf 5:peak/notch 6:all-pass)  
/wfs/output/#/eq/freq [i] [f] band#, 20~20000 Hz  
/wfs/output/#/eq/gain [i] [f] band#, -24~24 dB  
/wfs/output/#/eq/Q [i] [f] band#, 0.1~30 (Q or slope)  
/wfs/output/#/eq/slope [i] [f] band#, 0.1~30 (Q or slope)

/wfs/output/#/get/all  
/wfs/output/#/get/latency  
/wfs/output/#/get/attenuation  
/wfs/output/#/get/positionX  
/wfs/output/#/get/positionY  
/wfs/output/#/get/positionZ  
/wfs/output/#/get/positionXYZ  
/wfs/output/#/get/orientation  
/wfs/output/#/get/angleOn  
/wfs/output/#/get/angleOff  
/wfs/output/#/get/pitch  
/wfs/output/#/get/HFDamping  
/wfs/output/#/get/group  
/wfs/output/#/get/apply2group  
/wfs/output/#/get/minilLatencyEnable  
/wfs/output/#/get/liveSourceEnable  
/wfs/output/#/get/distanceAttenuationPercent  
/wfs/output/#/get/Hparallax  
/wfs/output/#/get/Vparallax

/wfs/output/#/get/filter  
/wfs/output/#/get/eq

## REVERBS

/wfs/reverbFeed/#/latency [f] -100~100 ms  
/wfs/reverbFeed/#/attenuation [f] -92~0 dB  
/wfs/reverbFeed/#/positionX [f] -50~50 m  
/wfs/reverbFeed/#/positionY [f] -50~50 m  
/wfs/reverbFeed/#/positionZ [f] -50~50 m  
/wfs/reverbFeed/#/positionXYZ [f] [f] [f] -50~50 m  
/wfs/reverbFeed/#/orientation [i] -180~180 °  
/wfs/reverbFeed/#/angleOn [i] 1~180 °  
/wfs/reverbFeed/#/angleOff [i] 0~179 °  
/wfs/reverbFeed/#/pitch [i] -90~90 °  
/wfs/reverbFeed/#/HFDamping [f] -6~0 dB/m  
/wfs/reverbFeed/#/minilLatencyEnable [0/1]  
/wfs/reverbFeed/#/distanceAttenuationPercent [i] 0~200 %

/wfs/reverbFeed/#/get/all  
/wfs/reverbFeed/#/get/latency  
/wfs/reverbFeed/#/get/attenuation  
/wfs/reverbFeed/#/get/positionX  
/wfs/reverbFeed/#/get/positionY  
/wfs/reverbFeed/#/get/positionZ  
/wfs/reverbFeed/#/get/positionXYZ  
/wfs/reverbFeed/#/get/orientation  
/wfs/reverbFeed/#/get/angleOn  
/wfs/reverbFeed/#/get/angleOff  
/wfs/reverbFeed/#/get/pitch  
/wfs/reverbFeed/#/get/HFDamping  
/wfs/reverbFeed/#/get/minilLatencyEnable  
/wfs/reverbFeed/#/get/distanceAttenuationPercent

/wfs/reverbReturn/#/latency [f] -100~100 ms  
/wfs/reverbReturn/#/attenuation [f] -92~0 dB  
/wfs/reverbReturn/#/curvature [0/1]  
/wfs/reverbReturn/#/positionX [f] -50~50 m  
/wfs/reverbReturn/#/positionY [f] -50~50 m  
/wfs/reverbReturn/#/positionZ [f] -50~50 m  
/wfs/reverbReturn/#/positionXYZ [f] [f] [f] -50~50 m  
/wfs/reverbReturn/#/heightFactor [i] 0~100 %  
/wfs/reverbReturn/#/distanceAttenuation [f] -6~0 dB/m  
/wfs/reverbReturn/#/directivity [i] 2~360 °  
/wfs/reverbReturn/#/rotation [i] -180~180 °  
/wfs/reverbReturn/#/tilt [i] -90~90 °  
/wfs/reverbReturn/#/HFshelf [f] -24~0 dB  
/wfs/reverbReturn/#/mutes [i\_list]

/wfs/reverbReturn/#/muteMacro [i]  
1: mute all, 2: unmute all,  
3: invert,  
4: odd channels, 5: even channels,

6: first half, 7: second half,  
8: mute output group 1, 9: mute output group 1,  
10: mute output group 2, 11: mute output group 2,  
12: mute output group 3, 13: mute output group 3,  
14: mute output group 4, 15: mute output group 4,  
16: mute output group 5, 17: mute output group 5

/wfs/reverbReturn/#/get/all  
/wfs/reverbReturn/#/get/latency  
/wfs/reverbReturn/#/get/attenuation  
/wfs/reverbReturn/#/get/curvature  
/wfs/reverbReturn/#/get/positionX  
/wfs/reverbReturn/#/get/positionY  
/wfs/reverbReturn/#/get/positionZ  
/wfs/reverbReturn/#/get/positionXYZ  
/wfs/reverbReturn/#/get/heightFactor  
/wfs/reverbReturn/#/get/distanceAttenuation  
/wfs/reverbReturn/#/get/directivity  
/wfs/reverbReturn/#/get/rotation  
/wfs/reverbReturn/#/get/tilt  
/wfs/reverbReturn/#/get/HFshelf  
/wfs/reverbReturn/#/get/mutes

#### INPUTS

/wfs/selectIO/input [i]

/wfs/input/#/latency [f (f)] -100~100 ms / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/attenuation [f (f)] -92~0 dB / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/curvature [0/1]  
/wfs/input/#/control [i] 0 matrix, 1 manual, 2-11 Lemur 1-0  
/wfs/input/#/positionX [f] -50~50 m or inc/dec [f]  
/wfs/input/#/positionY [f] -50~50 m or inc/dec [f]  
/wfs/input/#/positionZ [f] -50~50 m or inc/dec [f]  
/wfs/input/#/positionXYZ [f] [f] [f] -50~50 m  
/wfs/input/#/positionXY [f] [f] -50~50 m  
/wfs/input/#/positionXZ [f] [f] -50~50 m  
/wfs/input/#/positionYZ [f] [f] -50~50 m  
/wfs/input/#/constraintX [0/1]  
/wfs/input/#/constraintY [0/1]  
/wfs/input/#/constraintZ [0/1]  
/wfs/input/#/constraintXYZ [0/1] [0/1] [0/1]  
/wfs/input/#/flipX [0/1]  
/wfs/input/#/flipY [0/1]  
/wfs/input/#/flipZ [0/1]  
/wfs/input/#/flipXYZ [0/1] [0/1] [0/1]  
/wfs/input/#/tracking\_active [0/1]  
/wfs/input/#/tracking\_ID [i] 0~29  
/wfs/input/#/tracking\_activeAlt [0/1]  
/wfs/input/#/tracking\_IDalt [i] 0~29

/wfs/input/#/heightFactor [i (f)] 0~100 % / optional transfer time in seconds or inc/dec [i]  
/wfs/input/#/maxSpeed [f (f)] 0~20 m/s (0: off) / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/attenuationlaw [0/1] 0 log (dB/m), 1 1/X (ratio)  
/wfs/input/#/distanceAttenuation [f (f)] -6~0 dB/m / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/distanceRatio [f (f)] 0.1~10 x0.282cm reference / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/commonAtten [i] 0~100 %  
/wfs/input/#/directivity [i (f)] 2~360 ° / optional transfer time in seconds or inc/dec [i]  
/wfs/input/#/rotation [i (f)] -180~180 ° / optional transfer time in seconds or inc/dec [i]  
/wfs/input/#/tilt [i (f)] -90~90 ° / optional transfer time in seconds or inc/dec [i]  
/wfs/input/#/HFshelf [f (f)] -24~0 dB / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/levelMap [i:levelMapActive] [i: flipX] [i: flipY] [i:levelActive] [i:heightActive] [i:heightMode] [i:HFdampingActive] [f:HFdamping]  
/wfs/input/#/liveSource [i f f i] active ; radius ; attenuation ; shape  
/wfs/input/#/liveSourceActive [1/0]  
/wfs/input/#/liveSourceRadius [f (f)] 0~50 m / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/liveSourceShape [i] 0:Linear, 1:Log, 2:Square x<sup>2</sup>, 3:Sine  
/wfs/input/#/liveSourceAttenuation [f (f)] -24~0 dB / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/liveSourcePeakThreshold [f (f)] -48~0 dB / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/liveSourcePeakRatio [f (f)] 1~10 compression ratio / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/liveSourceSlowThreshold [f (f)] -48~0 dB / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/liveSourceSlowRatio [f (f)] 1~10 compression ratio / optional transfer time in seconds or inc/dec [f]  
/wfs/input/#/mapLoad\_level open Level map dialog to load image  
/wfs/input/#/mapActive\_level [0/1]  
/wfs/input/#/mapClear\_level clear Level map image  
/wfs/input/#/mapFile\_level [file path] load Level map image file  
/wfs/input/#/mapFlipX\_level [0/1] flip Level map image horizontally  
/wfs/input/#/mapFlipY\_level [0/1] flip Level map image vertically  
/wfs/input/#/mapInvert\_level [0/1] invert Level map image  
/wfs/input/#/mapActive\_height [0/1]  
/wfs/input/#/mapLoad\_height open Height map dialog to load image  
/wfs/input/#/mapClear\_height clear Height map image  
/wfs/input/#/mapFile\_height [file path] load Height map image file  
/wfs/input/#/mapFlipX\_height [0/1] flip Height map image horizontally  
/wfs/input/#/mapFlipY\_height [0/1] flip Height map image vertically  
/wfs/input/#/mapInvert\_height [0/1] invert Height map image  
/wfs/input/#/mapMode\_height [0/1] Height map mode (0: 0~stage height/1:-stage height ~ +stage height)  
/wfs/input/#/mapActive\_HShelf [0/1]  
/wfs/input/#/mapLoad\_HShelf open HF shelf map dialog to load image  
/wfs/input/#/mapClear\_HShelf clear HF shelf map image

```
/wfs/input/#/mapFile_HSshelf [file path] load HF shelf map image file
/wfs/input/#/mapFlipX_HSshelf [0/1] flip HF shelf map image horizontally
/wfs/input/#/mapFlipY_HSshelf [0/1] flip HF shelf map image vertically
/wfs/input/#/mapInvert_HSshelf [0/1] invert HF shelf map image
/wfs/input/#/mapAttenuation_HSshelf [f] maximum attenuation for HF shelf -12~0
dB
/wfs/input/#/FRactive [1/0]
/wfs/input/#/FRattenuation [f] -60~0 dB
/wfs/input/#/FRlowCutActive [1/0]
/wfs/input/#/FRlowCutFreq [i] 20~20000 Hz
/wfs/input/#/FRhighShelfActive [1/0]
/wfs/input/#/FRhighShelfFreq [i] 20~20000 Hz
/wfs/input/#/FRhighShelfGain [f] -24~0 dB
/wfs/input/#/FRhighShelfSlope [f] 0.1~0.9
/wfs/input/#/FRdispertion [i] %
/wfs/input/#/mutes [i_list]
/wfs/input/#/delays [f_list] ms
/wfs/input/#/levels [f_list] dB
/wfs/input/#/HFDampings [f_list] dB

/wfs/input/#/muteMacro [i]
1: mute all, 2: unmute all,
3: invert,
4: odd channels, 5: even channels,
6: first half, 7: second half,
8: mute output group 1, 9: mute output group 1,
10: mute output group 2, 11: mute output group 2,
12: mute output group 3, 13: mute output group 3,
14: mute output group 4, 15: mute output group 4,
16: mute output group 5, 17: mute output group 5 ,
18: mute output group 6 (reverb feeds), 19: mute output group 6 (reverb feeds)

/wfs/input/#/get/all
/wfs/input/#/get/latency
/wfs/input/#/get/attenuation
/wfs/input/#/get/curvature
/wfs/input/#/get/control
/wfs/input/#/get/positionX
/wfs/input/#/get/positionY
/wfs/input/#/get/positionZ
/wfs/input/#/get/positionXYZ
/wfs/input/#/get/positionXY
/wfs/input/#/get/positionXZ
/wfs/input/#/get/positionYZ
/wfs/input/#/get/constraintX
/wfs/input/#/get/constraintY
/wfs/input/#/get/constraintZ
/wfs/input/#/get/constraintXYZ
/wfs/input/#/get/flipX
/wfs/input/#/get/flipY
/wfs/input/#/get/flipZ
/wfs/input/#/get/flipXYZ
/wfs/input/#/get/tracking_active
/wfs/input/#/get/tracking_ID
```

```
/wfs/input/#/get/tracking_activeAlt
/wfs/input/#/get/tracking_IDalt
/wfs/input/#/get/heightFactor
/wfs/input/#/get/maxSpeed
/wfs/input/#/get/attenuationlaw
/wfs/input/#/get/distanceAttenuation
/wfs/input/#/get/distanceRatio
/wfs/input/#/get/commonAtten
/wfs/input/#/get/directivity
/wfs/input/#/get/rotation
/wfs/input/#/get/tilt
/wfs/input/#/get/HFshelf
/wfs/input/#/get/liveSource
/wfs/input/#/get/mapActive_level
/wfs/input/#/get/mapFile_level
/wfs/input/#/get/mapFlipX_level
/wfs/input/#/get/mapFlipY_level
/wfs/input/#/get/mapInvert_level
/wfs/input/#/get/mapActive_hight
/wfs/input/#/get/mapFile_height
/wfs/input/#/get/mapFlipX_height
/wfs/input/#/get/mapFlipY_height
/wfs/input/#/get/mapInvert_height
/wfs/input/#/get/mapMode_height
/wfs/input/#/get/mapActive_HSshelf
/wfs/input/#/get/mapFile_HSshelf
/wfs/input/#/get/mapFlipX_HSshelf
/wfs/input/#/get/mapFlipY_HSshelf
/wfs/input/#/get/mapInvert_HSshelf
/wfs/input/#/get/mapAttenuation_HSshelf
/wfs/input/#/get/FRactive
/wfs/input/#/get/FRattenuation
/wfs/input/#/get/FRlowCutActive
/wfs/input/#/get/FRlowCutFreq
/wfs/input/#/get/FRhighShelfActive
/wfs/input/#/get/FRhighShelfFreq
/wfs/input/#/get/FRhighShelfGain
/wfs/input/#/get/FRhighShelfSlope
/wfs/input/#/get/FRdispertion
/wfs/input/#/get/mutes
/wfs/input/#/get/delays
/wfs/input/#/get/levels
/wfs/input/#/get/HFDampings

/wfs/input/#/stream/all [0/1]
/wfs/input/#/stream/latency [0/1]
/wfs/input/#/stream/attenuation [0/1]
/wfs/input/#/stream/curvature [0/1]
/wfs/input/#/stream/control [0/1]
/wfs/input/#/stream/positionX [0/1]
/wfs/input/#/stream/positionY [0/1]
/wfs/input/#/stream/positionZ [0/1]
/wfs/input/#/stream/positionXYZ [0/1]
/wfs/input/#/stream/positionXY [0/1]
```

/wfs/input/#/stream/positionXZ [0/1]  
/wfs/input/#/stream/positionYZ [0/1]  
/wfs/input/#/stream/constraintX [0/1]  
/wfs/input/#/stream/constraintY [0/1]  
/wfs/input/#/stream/constraintZ [0/1]  
/wfs/input/#/stream/constraintXYZ [0/1]  
/wfs/input/#/stream/flipX [0/1]  
/wfs/input/#/stream/flipY [0/1]  
/wfs/input/#/stream/flipZ [0/1]  
/wfs/input/#/stream/flipXYZ [0/1]  
/wfs/input/#/stream/tracking\_active [0/1]  
/wfs/input/#/stream/tracking\_ID [0/1]  
/wfs/input/#/stream/tracking\_activeAlt [0/1]  
/wfs/input/#/stream/tracking\_IDalt [0/1]  
/wfs/input/#/stream/heightFactor [0/1]  
/wfs/input/#/stream/maxSpeed [0/1]  
/wfs/input/#/stream/attenuationlaw [0/1]  
/wfs/input/#/stream/distanceAttenuation [0/1]  
/wfs/input/#/stream/distanceRatio [0/1]  
/wfs/input/#/stream/commonAtten [0/1]  
/wfs/input/#/stream/directivity [0/1]  
/wfs/input/#/stream/rotation [0/1]  
/wfs/input/#/stream/tilt [0/1]  
/wfs/input/#/stream/HFshelf [0/1]  
/wfs/input/#/stream/liveSource [0/1]  
/wfs/input/#/stream/mapActive\_level [0/1]  
/wfs/input/#/stream/mapFile\_level [0/1]  
/wfs/input/#/stream/mapFlipX\_level [0/1]  
/wfs/input/#/stream/mapFlipY\_level [0/1]  
/wfs/input/#/stream/mapInvert\_level [0/1]  
/wfs/input/#/stream/mapActive\_height [0/1]  
/wfs/input/#/stream/mapFile\_height [0/1]  
/wfs/input/#/stream/mapFlipX\_height [0/1]  
/wfs/input/#/stream/mapFlipY\_height [0/1]  
/wfs/input/#/stream/mapInvert\_height [0/1]  
/wfs/input/#/stream/mapMode\_height [0/1]  
/wfs/input/#/stream/mapActive\_HSshelf [0/1]  
/wfs/input/#/stream/mapFile\_HSshelf [0/1]  
/wfs/input/#/stream/mapFlipX\_HSshelf [0/1]  
/wfs/input/#/stream/mapFlipY\_HSshelf [0/1]  
/wfs/input/#/stream/mapInvert\_HSshelf [0/1]  
/wfs/input/#/stream/mapAttenuation\_HSshelf [0/1]  
/wfs/input/#/stream/FRactive [0/1]  
/wfs/input/#/stream/FRattenuation [0/1]  
/wfs/input/#/stream/FRlowCutActive [0/1]  
/wfs/input/#/stream/FRlowCutFreq [0/1]  
/wfs/input/#/stream/FRhighShelfActive [0/1]  
/wfs/input/#/stream/FRhighShelfFreq [0/1]  
/wfs/input/#/stream/FRhighShelfGain [0/1]  
/wfs/input/#/stream/FRhighShelfSlope [0/1]  
/wfs/input/#/stream/FRdispersion [0/1]  
/wfs/input/#/stream/mutes [0/1]  
/wfs/input/#/stream/delays [0/1]  
/wfs/input/#/stream/levels [0/1]

/wfs/input/#/stream/HFdampings [0/1]  
  
/wfs/input/#/curveX -50~50 m  
/wfs/input/#/curveY -50~50 m  
/wfs/input/#/curveZ -50~50 m  
/wfs/input/#/curveRelative [0/1] 0 absolute/1 relative  
/wfs/input/#/curveCurve [f] -1.0<= <0.0 curve downstage / =0.0 straight / 0.0<  
<=1.0 curve upstage  
/wfs/input/#/curveTime [f] s  
/wfs/input/#/curveSmooth [f] 0.0~1.0 0.0 constant speed / 1.0 smooth  
acceleration and deceleration  
/wfs/input/#/curveEnd [0/1] 0 stay at final position / 1 return to original  
position  
/wfs/input/#/curveXYZ [f] [f] [f] [i] [f] [f] [f] [i] position X, Y, Z,  
relative/absolute, curve, time, smooth, end position  
/wfs/input/#/curveGo  
/wfs/input/#/curveStop  
/wfs/input/#/curvePause [0/1]  
/wfs/input/#/curveTrigger [0/1] 0: single / 1: triggered  
/wfs/input/#/curveAbove [f] -92~0 dB  
/wfs/input/#/curveResetBelow [f] -92~0 dB  
/wfs/input/#/curveJump [f] 0~92 dB  
  
/wfs/input/#/LFOactive [0/1]  
/wfs/input/#/LFOperiod [f] 0.1~100 s  
/wfs/input/#/LFOphase [i] -180~180 °  
/wfs/input/#/LFOgyrophone [-1/0/1] [0 off/1 clockwise/-1 anti-clockwise]  
/wfs/input/#/LFOrateX [f] 0.1~10  
/wfs/input/#/LFOphaseX [i] -180~180 °  
/wfs/input/#/LFOshapeX [i] \*  
/wfs/input/#/LFOamplitudeX [f] 0~100 m  
/wfs/input/#/LFOrateY [f] 0.1~10  
/wfs/input/#/LFOphaseY [i] -180~180 °  
/wfs/input/#/LFOshapeY [i] \*  
/wfs/input/#/LFOamplitudeY [f] 0~100 m  
/wfs/input/#/LFOrateZ [f] 0.1~10  
/wfs/input/#/LFOphaseZ [i] -180~180 °  
/wfs/input/#/LFOshapeZ [i] \*  
/wfs/input/#/LFOamplitudeZ [f] 0~100 m  
/wfs/input/#/lfo/active [0/1]  
/wfs/input/#/lfo/gyrophone [0 off/1 clockwise/-1 anti-clockwise] (deprecated)  
/wfs/input/#/lfo/lfo [f: period in seconds] [i: phase 0~360 °]  
/wfs/input/#/lfo/x [i: 0~360° phase for X] [i: shape\* for X] [f: amplitude for  
X]  
/wfs/input/#/lfo/y [i: 0~360° phase for Y] [i: shape\* for Y] [f: amplitude for  
Y]  
/wfs/input/#/lfo/z [i: 0~360° phase for Z] [i: shape\* for Z] [f: amplitude for  
Z]  
/wfs/input/#/lfo/shapeXYZ [i] [i] [i] (shapes\* for X Y Z)  
/wfs/input/#/lfo/amplitudeXYZ [f] [f] [f] 0~100 m  
/wfs/input/#/lfo/amplitudeXY [f] [f] 0~100 m  
/wfs/input/#/lfo/amplitudeXZ [f] [f] 0~100 m  
/wfs/input/#/lfo/amplitudeYZ [f] [f] 0~100 m  
/wfs/input/#/lfo/xyz [i] [i] [i] [i] [i] [i] [f] [f] [f] (0~360° phases for X Y

Z ; shapes\* for X Y Z ; amplitudes for X Y Z)  
/wfs/input/#/lfo/lfoXYZ [f: main LFO period in seconds] [i: 0~360° main LFO  
phase] [i] [i] [i] [i] [i] [i] [f] [f] [f] (0~360° phases for X Y Z ; shapes\*  
for X Y Z ; amplitudes for X Y Z) [1/0 gyrophone]  
\* shape: 0 Off / 1 Sine / 2 Square / 3 Saw / 4 Triangle / 5 Keystone / 6 Log /  
7 Exponential / 8 Random

/wfs/input/#/get/LFOactive  
/wfs/input/#/get/LFOperiod  
/wfs/input/#/get/LFOphase  
/wfs/input/#/get/LFOgyrophone  
/wfs/input/#/get/LFOphaseX  
/wfs/input/#/get/LFOshapeX  
/wfs/input/#/get/LFOamplitudeX  
/wfs/input/#/get/LFOphaseY  
/wfs/input/#/get/LFOshapeY  
/wfs/input/#/get/LFOamplitudeY  
/wfs/input/#/get/LFOphaseZ  
/wfs/input/#/get/LFOshapeZ  
/wfs/input/#/get/LFOamplitudeZ  
/wfs/input/#/get/lfo/active  
/wfs/input/#/get/lfo/gyrophone  
/wfs/input/#/get/lfo/lfo  
/wfs/input/#/get/lfo/x  
/wfs/input/#/get/lfo/y  
/wfs/input/#/get/lfo/z  
/wfs/input/#/get/lfo/shapeXYZ  
/wfs/input/#/get/lfo/amplitudeXYZ  
/wfs/input/#/get/lfo/amplitudeXY  
/wfs/input/#/get/lfo/amplitudeXZ  
/wfs/input/#/get/lfo/amplitudeYZ  
/wfs/input/#/get/lfo/xyz  
/wfs/input/#/get/lfo/lfoXYZ

/wfs/input/#/stream/LFOactive [1/0]  
/wfs/input/#/stream/LFOperiod [1/0]  
/wfs/input/#/stream/LFOphase [1/0]  
/wfs/input/#/stream/LFOgyrophone [1/0]  
/wfs/input/#/stream/LFOphaseX [1/0]  
/wfs/input/#/stream/LFOshapeX [1/0]  
/wfs/input/#/stream/LFOamplitudeX [1/0]  
/wfs/input/#/stream/LFOphaseY [1/0]  
/wfs/input/#/stream/LFOshapeY [1/0]  
/wfs/input/#/stream/LFOamplitudeY [1/0]  
/wfs/input/#/stream/LFOphaseZ [1/0]  
/wfs/input/#/stream/LFOshapeZ [1/0]  
/wfs/input/#/stream/LFOamplitudeZ [1/0]  
/wfs/input/#/stream/lfo/active [1/0]  
/wfs/input/#/stream/lfo/gyrophone [1/0]  
/wfs/input/#/stream/lfo/lfo [1/0]  
/wfs/input/#/stream/lfo/x [1/0]  
/wfs/input/#/stream/lfo/y [1/0]  
/wfs/input/#/stream/lfo/z [1/0]  
/wfs/input/#/stream/lfo/shapeXYZ [1/0]

/wfs/input/#/stream/lfo/amplitudeXYZ [1/0]  
/wfs/input/#/stream/lfo/amplitudeXY [1/0]  
/wfs/input/#/stream/lfo/amplitudeXZ [1/0]  
/wfs/input/#/stream/lfo/amplitudeYZ [1/0]  
/wfs/input/#/stream/lfo/xyz [1/0]  
/wfs/input/#/stream/lfo/lfoXYZ [1/0]

/wfs/input/#/jitter [f] 0~10 m amplitude in meters / 0:off

/wfs/input/#/get/jitter

/wfs/input/#/stream/jitter [1/0]

/wfs/input/#/offset [f] [f] [f] -50~50 m  
/wfs/input/#/offset/offsetXYZ [f] [f] [f] -50~50 m  
/wfs/input/#/offset/offsetXY [f] [f] -50~50 m  
/wfs/input/#/offset/offsetXZ [f] [f] -50~50 m  
/wfs/input/#/offset/offsetYZ [f] [f] -50~50 m  
/wfs/input/#/offsetX [f] -50~50 m  
/wfs/input/#/offsetY [f] -50~50 m  
/wfs/input/#/offsetZ [f] -50~50 m  
/wfs/input/#/offset/rotateXYZ [i] [i] [i] 0~360 °  
/wfs/input/#/offset/rotateXY [i] [i] 0~360 °  
/wfs/input/#/offset/rotateXZ [i] [i] 0~360 °  
/wfs/input/#/offset/rotateYZ [i] [i] 0~360 °  
/wfs/input/#/offsetRoll [i] 0~360 ° rotation in degrees around X axis  
/wfs/input/#/offsetPitch [i] 0~360 ° rotation in degrees around Y axis  
/wfs/input/#/offsetYaw [i] 0~360 ° rotation in degrees around Z axis  
/wfs/input/#/offset/scaleXYZ [f] [f] [f] -10~10  
/wfs/input/#/offset/scaleXY [f] [f] -10~10  
/wfs/input/#/offset/scaleXZ [f] [f] -10~10  
/wfs/input/#/offset/scaleYZ [f] [f] -10~10  
/wfs/input/#/offsetScaleX [f] -10~10 scale factor for X offset  
/wfs/input/#/offsetScaleY [f] -10~10 scale factor for Y offset  
/wfs/input/#/offsetScaleZ [f] -10~10 scale factor for Z offset

/wfs/input/#/get/offset  
/wfs/input/#/get/offset/offsetXYZ  
/wfs/input/#/get/offset/offsetXY  
/wfs/input/#/get/offset/offsetXZ  
/wfs/input/#/get/offset/offsetYZ  
/wfs/input/#/get/offsetX  
/wfs/input/#/get/offsetY  
/wfs/input/#/get/offsetZ  
/wfs/input/#/get/offset/rotateXYZ  
/wfs/input/#/get/offset/rotateXY  
/wfs/input/#/get/offset/rotateXZ  
/wfs/input/#/get/offset/rotateYZ  
/wfs/input/#/get/offsetRoll  
/wfs/input/#/get/offsetPitch  
/wfs/input/#/get/offsetYaw  
/wfs/input/#/get/offset/scaleXYZ  
/wfs/input/#/get/offset/scaleXY  
/wfs/input/#/get/offset/scaleXZ

/wfs/input/#/get/offset/scaleYZ  
/wfs/input/#/get/offsetScaleX  
/wfs/input/#/get/offsetScaleY  
/wfs/input/#/get/offsetScaleZ

/wfs/input/#/stream/offset [1/0]  
/wfs/input/#/stream/offset/offsetXYZ [1/0]  
/wfs/input/#/stream/offset/offsetXY [1/0]  
/wfs/input/#/stream/offset/offsetXZ [1/0]  
/wfs/input/#/stream/offset/offsetYZ [1/0]  
/wfs/input/#/stream/offsetX [1/0]  
/wfs/input/#/stream/offsetY [1/0]  
/wfs/input/#/stream/offsetZ [1/0]  
/wfs/input/#/stream/offset/rotateXYZ [1/0]  
/wfs/input/#/stream/offset/rotateXY [1/0]  
/wfs/input/#/stream/offset/rotateXZ [1/0]  
/wfs/input/#/stream/offset/rotateYZ [1/0]  
/wfs/input/#/stream/offsetRoll [1/0]  
/wfs/input/#/stream/offsetPitch [1/0]  
/wfs/input/#/stream/offsetYaw [1/0]  
/wfs/input/#/stream/offset/scaleXYZ [1/0]  
/wfs/input/#/stream/offset/scaleXY [1/0]  
/wfs/input/#/stream/offset/scaleXZ [1/0]  
/wfs/input/#/stream/offset/scaleYZ [1/0]  
/wfs/input/#/stream/offsetScaleX [1/0]  
/wfs/input/#/stream/offsetScaleY [1/0]  
/wfs/input/#/stream/offsetScaleZ [1/0]