

## Stapes DSP Control Protocol String Format for Audio Devices

### 1. **\*\*Volume Control and Query (1 decimal place retained)\*\***

- Set input volume: ``set:input#gain#0-3#1.6``
- Get input volume: ``get:input#gain#0-3` -> `get:input#gain#0-3#1.6#1.6#1.6#1.6``

### 2. **\*\*Output Volume Control and Query (1 decimal place retained)\*\***

- Set output volume: ``set:output#gain#0-3#1.6``
- Get output volume: ``get:output#gain#0-3` -> `get:output#gain#0-3#1.6#1.6#1.6#1.6``

### 3. **\*\*Phantom Power Control and Query\*\***

- Set input phantom power: ``set:input#phant#0-3#1``
- Get input phantom power: ``get:input#phant#0-3` -> `get:input#phant#0-3#1#1#1#1``

### 4. **\*\*Input Mute Control and Query\*\***

- Set input mute: ``set:input#mute#0-3#1``
- Get input mute: ``get:input#mute#0-3` -> `get:input#mute#0-3#1#1#1#1``

### 5. **\*\*Output Mute Control and Query\*\***

- Set output mute: ``set:output#mute#0-3#1``
- Get output mute: ``get:output#mute#0-3` -> `get:output#mute#0-3#1#1#1#1``

### 6. **\*\*Sensitivity Control and Query\*\***

- Set input sensitivity: ``set:input#sens#0-3#1``
- Get input sensitivity: ``get:input#sens#0-3` -> `get:input#sens#0-3#1#1#1#1``

### 7. **\*\*Matrix Control and Query\*\***

- One input controls multiple outputs: ``set:mixer#switch#0#0-3#1``
- Multiple inputs control one output: ``set:mixer#switch#0-3#0#1``
- Get matrix switch state: ``get:mixer#switch#0-3#0` -> `get:mixer#switch#0-3#0#1#0#1#1#1``

### 8. **\*\*Scene Call and Save\*\***

- Call scene: ``scene:toggle#3`` (PC displays as the 4th scene)
- Save scene: ``scene:save#3``

## 9. **\*\*Input Level Query\*\***

- Get input levels: `get:input#level#0-3` -> `get:input#level#0-3#-105.4#-102.5#-105.2#-104.8`

## 10. **\*\*Output Level Query\*\***

- Get output levels: `get:output#level#0-3` -> `get:output#level#0-3#-56.0#-40.8#-43.6#-46.4`

## 11. **\*\*System Mute Control and Query\*\***

- Set system mute: `set:sysctl#mute#1` (Enable system mute)  
- Get system mute state: `get:sysctl#mute` -> `get:sysctl#mute#1`

## 12. **\*\*Set and Get Input/Output Channel Names\*\***

- Set input channel names: `set:input#name#0-3#123`  
- Set output channel names: `set:output#name#0-3#456`  
- Get input channel names: `get:input#name#0-3` -> `get:input#name#0-3#123#123#123#123`  
- Get output channel names: `get:output#name#0-3` -> `get:output#name#0-3#456#456#456#456`

## 13. **\*\*Input/Output Phase Control and Query\*\***

- Set input phase: `set:input#phase#0-3#1`  
- Set output phase: `set:output#phase#0-3#1`  
- Get input phase: `get:input#phase#0-3` -> `get:input#phase#0-3#1#1#1#1`  
- Get output phase: `get:output#phase#0-3` -> `get:output#phase#0-3#1#1#1#1`

## 14. **\*\*Input/Output Step Control and Query\*\***

- Set input step: `set:input#step#0-3#1` (Increment by 1)  
- Set output step: `set:output#step#0-3#1`  
- Get input step (not stored in flash): `get:input#step#0-3`  
- Get output step (not stored in flash): `get:output#step#0-3`

## 15. **\*\*Input/Output Link Control and Query\*\***

- Set input link: `set:input#link#0-3#1`  
- Set output link: `set:output#link#0-3#1`  
- Get input link: `get:input#link#0-3` -> `get:input#link#0-3#1#1#1#1`  
- Get output link: `get:output#link#0-3` -> `get:output#link#0-3#1#1#1#1`

16. **\*\*Signal Generator Control and Query\*\***

- Set input signal type: `set:input#type#0-3#1`
- Get input signal type: `get:input#type#0-3` -> `get:input#type#0-3#1#1#1#1`

17. **\*\*Factory Reset Control\*\***

- Perform factory reset: `set:refactory`

18. **\*\*Scene Reset Control\*\***

- Reset scene: `set:rescene`

19. **\*\*Get/Set Scene Names\*\***

- Set scene names (PC supports UTF-8 encoding): `set:scene#name#0-3#pre1`
- Get scene names: `get:scene#name#0-3` -> `get:scene#name#0-3#pre1#pre1#pre1#pre1`