Standard ALSA Control Names

This document describes standard names of mixer controls.

Standard Syntax

Syntax: [LOCATION] SOURCE [CHANNEL] [DIRECTION] FUNCTION

DIRECTION

<nothing>	both directions
Playback	one direction
Capture	one direction
Bypass Playback	one direction
Bypass Capture	one direction

FUNCTION

Switch	on/off switch
Volume	amplifier
Route	route control, hardware specific

CHANNEL

<nothing>	channel independent, or applies to all channels
Front	front left/right channels
Surround	rear left/right in 4.0/5.1 surround
CLFE	C/LFE channels
Center	center channel
LFE	LFE channel
Side	side left/right for 7.1 surround

LOCATION (Physical location of source)

Front	front position
Rear	rear position
Dock	on docking station
Internal	internal

SOURCE

Master	
Master Mono	
Hardware Master	
Speaker	internal speaker
Bass Speaker	internal LFE speaker
Headphone	
Line Out	
Beep	beep generator
Phone	
Phone Input	
Phone Output	
Synth	
FM	
Mic	
Headset Mic	mic part of combined headset jack - 4-pin headphone + mic
Headphone Mic	mic part of either/or - 3-pin headphone or mic
Line	input only, use "Line Out" for output
CD	
Video	

Zoom Video	
Aux	
PCM	
PCM Pan	
Loopback	
Analog Loopback	D/A -> A/D loopback
Digital Loopback	playback -> capture loopback - without analog path
Mono	
Mono Output	
Multi	
ADC	
Wave	
Music	
I2S	
IEC958	
HDMI	
SPDIF	output only
SPDIF In	
Digital In	
HDMI/DP	either HDMI or DisplayPort

Exceptions (deprecated)

[Analogue|Digital] Capture Source	
[Analogue|Digital] Capture Switch	aka input gain switch
[Analogue|Digital] Capture Volume	aka input gain volume
[Analogue|Digital] Playback Switch	aka output gain switch
[Analogue|Digital] Playback Volume	aka output gain volume
Tone Control - Switch	
Tone Control - Bass	
Tone Control - Treble	
3D Control - Switch	
3D Control - Center	
3D Control - Depth	
3D Control - Wide	
3D Control - Space	
3D Control - Level	
Mic Boost [(?dB)]	

PCM interface

Sample Clock Source	{ "Word", "Internal", "AutoSync" }
Clock Sync Status	{ "Lock", "Sync", "No Lock" }
External Rate	external capture rate
Capture Rate	capture rate taken from external source

IEC958 (S/PDIF) interface

IEC958 [...] [Playback|Capture] Switch	turn on/off the IEC958 interface
IEC958 [...] [Playback|Capture] Volume	digital volume control
IEC958 [...] [Playback|Capture] Default	default or global value - read/write
IEC958 [...] [Playback|Capture] Mask	consumer and professional mask
IEC958 [...] [Playback|Capture] Con Mask	consumer mask
IEC958 [...] [Playback|Capture] Pro Mask	professional mask
IEC958 [...] [Playback|Capture] PCM Stream	the settings assigned to a PCM stream
IEC958 Q-subcode [Playback|Capture] Default	Q-subcode bits
IEC958 Preamble [Playback|Capture] Default	burst preamble words (4*16bits)