ZOOMISO VERSION 2

ZOOMISO V2 USER MANUAL

Overview

Thank you for downloading ZoomISO v2, a macOS program for exporting the participants in a Zoom Meeting or Webinar as isolated video and audio outputs in a variety of popular formats. ZoomISO also contains an OSC engine, allowing the app to be remote controlled by devices like a StreamDeck to provide a wide variety of AV routing workflows for the Zoom ecosystem.

In this Document

We have listed several categories of information that should prove useful

- **Installation, Accounts, and Licensing** guides you through the initial setup process
- **User Interface Guide** examines the GUI to provide familiarity with the application
- **OSC for Remote Routing** provides information that you can use to remotely operate ZoomISO from other software and hardware

Please also review these additional documents related to our *ZoomOSC* technology

- **ZoomOSC Command Syntax (API)** where you can find information on all of the commands and outputs of the ZoomOSC application
- **ZoomOSC Quick Start Guide** which contains helpful information for those just getting started with ZoomOSC for the first time
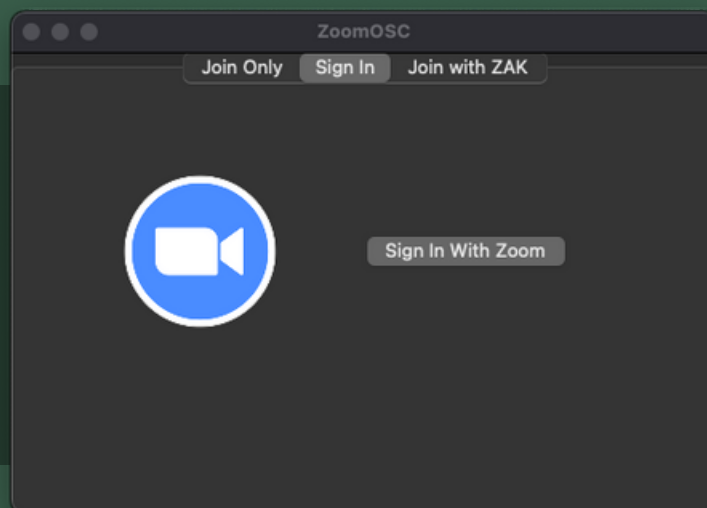
INSTALLATION AND ACCOUNTS

Sign in with Zoom - Adding the App to your Zoom Account

ZoomISO v2 introduces a new, online sign-in option called "Sign in with Zoom," which allows you to use your Zoom account to log into ZoomISO. Signing in allows ZoomISO to start and join meetings on behalf of the signed in account.

To add ZoomISO to your account and complete sign in, use the following steps:
1. Launch ZoomISO
2. Click the "Sign In" tab on this window:

INSTALLATION AND ACCOUNTS

3. Click on the "Sign in with Zoom" button

4. You will now be presented with a Zoom website to log into your Zoom account

- During this step, you can optionally select the option to "Stay signed in" for faster access in the future

5. If this is the first time you have logged into ZoomISO, you will be prompted to add ZoomISO to your Zoom account. Click Allow.

6. If the above steps are successful, you will be logged into ZoomISO

- On macOS, The pop up window will automatically close, and a few seconds later, you will advance to the logged in UI screen of ZoomISO
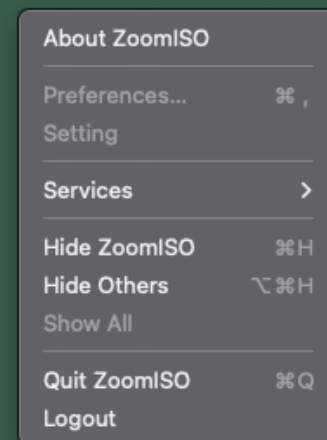
Are you a business/enterprise end-user?

You may need to contact your IT department to allow ZoomISO to be added to your Zoom account, depending on how the organization is configured. IT can add ZoomISO to your organization at

https://marketplace.zoom.us/apps/UqVYnn3dR1KfBz2q_ju-Gw

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Troubleshooting Login

- The account you are logging in with should be your Zoom account. No special/new account is required for ZoomISO

- It is required that ZoomISO be installed via the official installer in order for Sign in with Zoom to work properly. ZoomISO is not a portable application.

- If you accidentally click "Stay Signed In" there are a few options to "forget" the account
  - You can either click Sign Out at the top right of the pop up window during the authorization process, or you can click "Logout" under the ZoomISO macOS top menu bar

About ZoomISO	
Preferences...	⌘ ,
Setting	
Services	>
Hide ZoomISO	⌘H
Hide Others	⌥⌘H
Show All	
Quit ZoomISO	⌘Q
Logout	

Removing ZoomISO from your Zoom Account

Should you decide you no longer need your Zoom Account attached to ZoomISO:
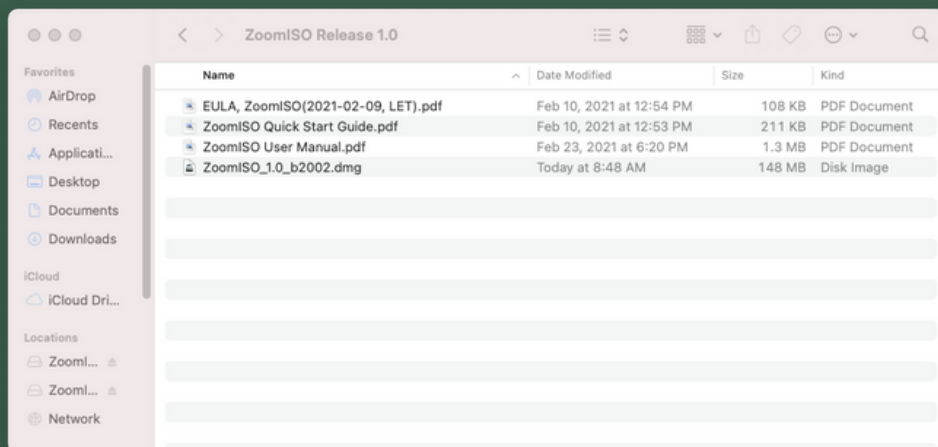
- Login to your Zoom Account and navigate to the Zoom App Marketplace.
- Click Manage >> Added Apps or search for the "ZoomISO" app.
- Click the "ZoomISO" app.
- Click "Remove".

INSTALLATION AND ACCOUNTS

For macOS Monterey

Installation

ZoomISO is installed via a .dmg file on macOS. Download the official installer from www.liminalet.com/zoomiso-downloads.

Drag and drop the ZoomISO app icon into the applications folder.

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ZoomISO Lite vs ZoomISO Pro

|	ZoomISO Lite $29/mo	ZoomISO Pro $45/mo
Zoom Raw Data Access	✓	✓
Apple Silicon Acceleration	✓	✓
Maximum Outputs	4	Unlimited*
Zoom High Bandwidth Mode**	✓	✓
ZoomOSC Included	Essentials	Pro
NDI Support	✓	✓
Metal Syphon Support	✓	✓
Physical Display / DisplayLink Support	✓	✓
Output Modes (Participant, Active Speaker, Spotlight Index)	✓	✓
Screenshare Output Mode	✓	✓
Video Loss Modes	✓	✓
In-App Video Previews	✓	✓
Customizable Output Names	✓	✓
Participant Management Interface	✓	✓
Embedded NDI ISO Audio	✓	✓
Save, Load, Merge Configurations	✓	✓
../outputISO OSC Command	✓	✓
Support for Zoom's ZoomISO Bitfocus Companion Module	✓	✓
BlackMagic Desktop Video SDI Support		✓
Advanced Audio Interface (Dante Virtual Soundcard, Loopback, etc)		✓
../audioISO OSC Command		✓

USER INTERFACE GUIDE

Outputs Tab

In this view, video exports are created via an "output focused" workflow.

The number of video feeds, the protocol/device to render them to, and the resolution/frame-rate to create render them at are managed on this page.

After the output quantity is set, the rows of the middle table allow for the routing of specific users to specific outputs via a series of dropdowns.
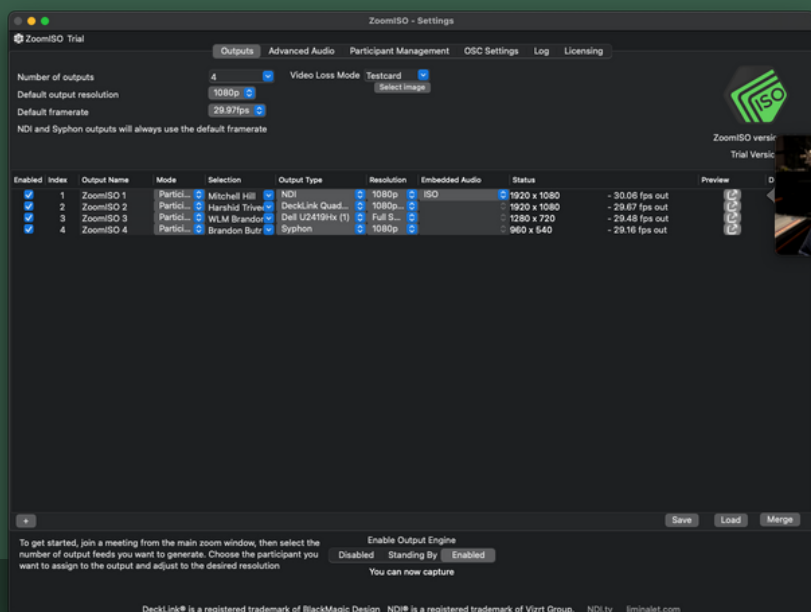
System Resource Utilization

If CPU usage exceeds 85%, or network requests from the Zoom Cloud exceed 100mb/s when using ZoomISO Pro, resolution and frame rate may be significantly reduced.

Output Engine

The Output Engine manages the capture of participant data and the state of the outputs. When DISABLED, the outputs will not be present to the operating system or network. When STANDING BY, the outputs will be published, but their contents will be set to the Video Loss Mode, which determines what media to assign to outputs in the event that participant data becomes unavailable. When ENABLED, the outputs will contain participant data. It is required to be host, co-host, or have local recording permission in order to enable the output engine. **Before you can start the Output Engine, Cloud Recording must be disabled, Meeting Archiving must be disabled, and local recording must be allowed at the Zoom account level.** When the engine is enabled, all participants will receive a "Recording Started" notification. Pausing or disabling the engine will stop the recording. No participant media is being recorded to a file during this process. It may take 20 seconds per output for the target resolution to be reached.

USER INTERFACE GUIDE

Participant Management Tab

While the Outputs tab is optimized for setting up ZoomISO, the Participant Management tab is a built-in user interface for using the app during a show. It contains a searchable and filterable list that uses realtime data from Zoom to help you find the users that you want to work with, and it offers a matrix of checkboxes that allow you to assign participants to video outputs.

While the same user can be assigned to multiple outputs, a single output can only have one user assigned to it (there can be multiple checkboxes per row, but only one per column). You can search the participant list with the box in the top right, or you can apply a series of filters to further narrow the search results based on video state, audio state, hand state, panelist/attendee, (co)host vs participant, and online status.

USER INTERFACE GUIDE

Advanced Audio Tab - ZoomISO Pro

The Lite version of ZoomISO can only use embedded audio, which is instead configured on the outputs page vs the Advanced Audio page, which allows any multichannel audio device on the system to receive participant audio, including Dante Virtual Soundcard and Loopback.

In Advanced Audio, you can select an Audio Device from a dropdown list. You can also specify a default attenuation. After selecting a device, you will see one row for each channel on the selected device, where you can configure the source properties and selection methods on a channel-by-channel basis. You can monitor the channels with the built-in meters. Be sure to enable the outputs engine!

USER INTERFACE GUIDE

Log Tab

This view contains all outputs of the ZoomISO Program. There are 5 levels of filtration access through the Logging Level selection menu: None, Errors, Warnings, Info, and Verbose. Reducing the logging level may improve performance at scale.
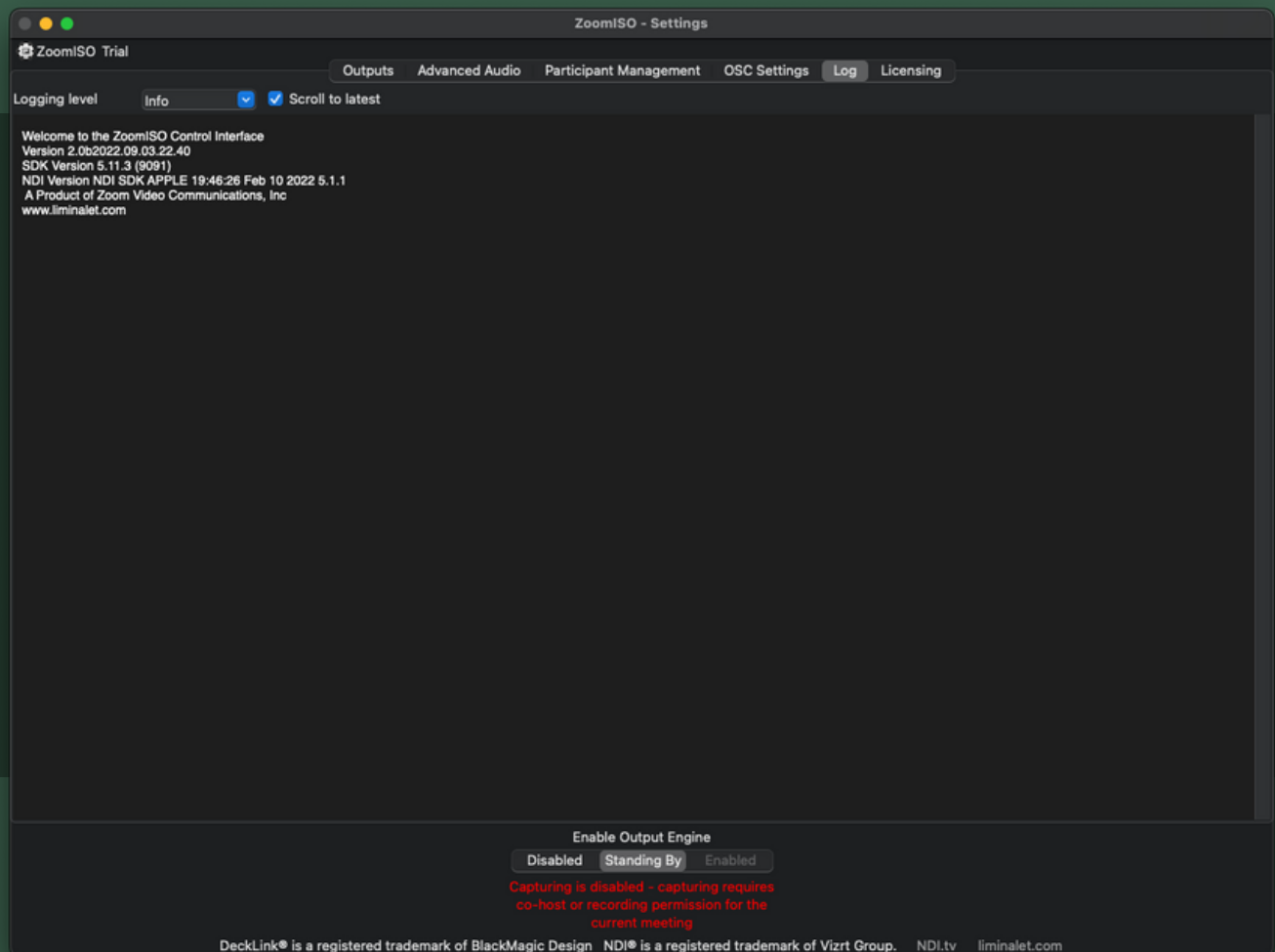
USER INTERFACE GUIDE

OSC Settings Tab

OSC Network Settings

- Transmission IP (IP where ZoomOSC will send messages to)
- Transmission Port (port where ZoomOSC will send messages to)
- Receiving Port (port where ZoomOSC will listen for messages)
- OSC Output Rate (delay to introduce to OSC outputs for compatibility with slower programs)
- OSC Header allows you to customize the output prefix
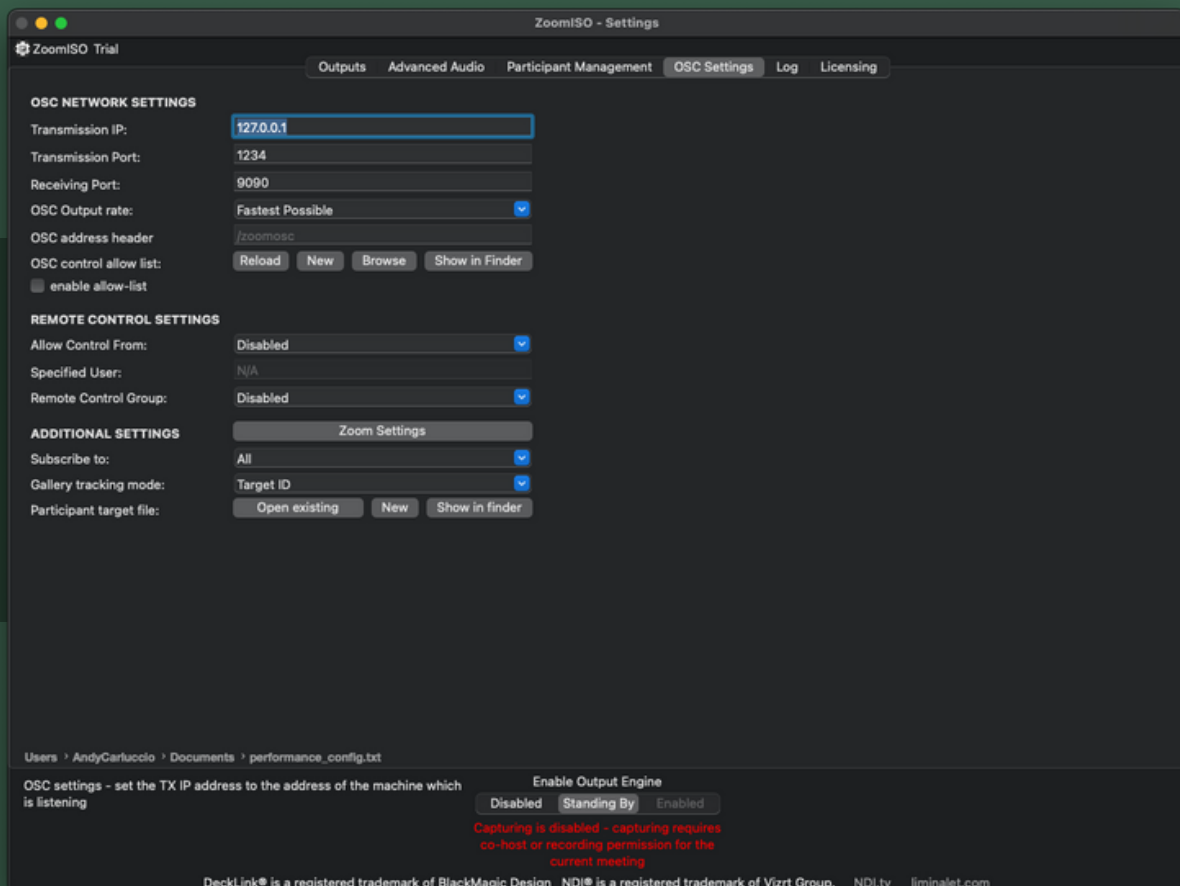
USER INTERFACE GUIDE

OSC Settings Tab (Continued)

Remote Control Settings

(For Endpoints using ZoomOSC Pro Keys)

- Remote Control Group (remote users ZoomOSC can control)
- Allow Control From (who can control ZoomOSC remotely)
  - Optional field for the username will appear if Specific User is selected
- Custom OSC Control (who can pass through genuine OSC)
  - Optional field for the username will appear if Specific User is selected

USER INTERFACE GUIDE

OSC Settings Tab (Continued)

Additional Settings

- Zoom Settings
  - Opens the Zoom Settings Menu (helpful for confirming receiving resolutions).
- Subscribe to group
  - Determine who ZoomOSC sends OSC status updates about
- Gallery Tracking Mode
  - Preference on how Gallery Order is reported
- Participant Target File Browser
  - Browser to set load and save location for target_list.txt
- Enable Breakout Command
  - Temporary toggle between breakout UI and OSC commands
- Force Gallery View
  - After receiving a spotlight command, the client will return to Gallery View to continue the OSC gallery tracking

INSTALLATION AND ACCOUNTS

Licensing Tab

How ZoomISO Licenses Work

ZoomISO is licensed in two versions, Lite and Pro. See the earlier comparison table for details. ZoomISO can also run in Trial Mode, which has all ZoomISO Pro features available, but will display a NO LICENSE card for 2 seconds every 60 seconds. When this card is on screen, audio outputs will also be muted.
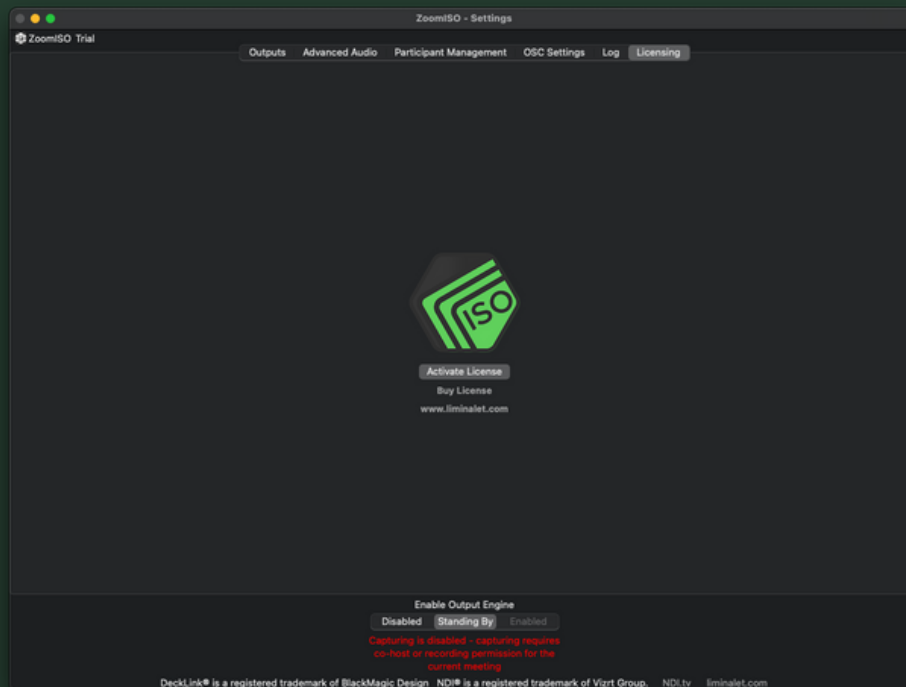
Upon request, a web portal can be created to manage activations of ZoomISO and ZoomOSC Pro online.

Contact info@liminalet.com for support on setting up your management portal.

OSC FOR REMOTE ROUTING

The ../outputISO and ../audioISO Commands

ZoomISO has special OSC user actions that are not available in ZoomOSC Pro. For example, ../outputISO and ../audioISO. These take two arguments: the target and the ID of the output/channel to route them to. ZoomISO supports the same target types as ZoomOSC: ../targetID, ../userName, ../galIndex, ../galleryPosition, ../me, and ../zoomID. If these are unfamiliar, review the ZoomOSC documentation.

A sample OSC command might be:

/zoom/userName/outputISO "Andy Carluccio" 2

This command would place a participant with Zoom username Andy Carluccio to output number 2, if it exists.

/zoom/userName/audioISO "Jonathan Kokotajlo" 4

This command would place a participant with Zoom username Jonathan Kokotajlo to channel number 2 of the selected audio device in Advanced Audio, if it exists.

ALL OSC COMMANDS

ROUTING COMMAND

Route Participant to Output Routes participant video to specified output, if it exists **PLEASE NOTE: OutputIDs begin with 1**	**../outputISO {int outputID}**
Route Participant to Audio Channel Routes a participant to the specified audio channel of the active audio device in Advanced Audio	**../audioISO {int channelID}**

ENGINE CONTROLS

Stop ISO Engine Sets the engine state to Disabled	**/zoom/stopISOEngine**
Set ISO Engine to Standby Sets the engine state to Standing By	**/zoom/standbyISOEngine**
Start ISO Engine Sets the engine state to Enabled	**/zoom/startISOEngine**

OUTPUT SETTINGS CONTROLS

Set the number of Outputs Sets the number of video outputs	**/zoom/setOutputCount {int count}**
Enable an Output Enable an output for live video receive and export	**/zoom/enableOutput {int output_index |OR| string output_name}**
Disable an Output Unsubscribe output from live video and set to Video Loss Mode	**/zoom/disableOutput {int output_index |OR| string output_name}**
Set Output Mode Set the Mode parameter for an output	**/zoom/setOutputMode {int output_index |OR| string output_name, string exact_name_of_output_mode}**
Set Output Name Change the name of an output	**/zoom/setOutputName{int output_index |OR| string output_name, string new_output_name}**
Set Video Loss Mode Select the video loss mode by name	**/zoom/setVideoLossMode {string loss_mode_name}** **(names are Black, Freeze, Transparent, Image, Testcard)**
Add Output Add an output	**/zoom/addOutput**
Delete Output Delete an output	**/zoom/deleteOutput {int output_index |OR| string output_name}**
Set Audio Mode Set the Mode parameter of an audio output	**/zoom/setAudioMode {int output_index |OR| string output_name}**

ALL OTHER OSC COMMANDS

DATA ACCESSORS

Request state of Engine Send a request for the state of the engine	**/zoom/getEngineState**
Request Audio Levels Request a series of packets describing the level of each audio channel	**/zoom/getAudioLevels**
Request Output Routing Request a series of packets describing the configuration of each video output	**/zoom/getOutputRouting**
Request Audio Routing Request a series of packets describing the configuration of each audio output	**/zoom/getAudioRouting**

RETURN INFORMATION AND CALLBACKS

Engine State Returns 0 (disabled), 1 (standing by), or 2 (enabled)	**/zoomosc/engineState {int 0 | 1 | 2}**
Audio Levels A series of packets displaying the audio level for each output	**/zoomosc/audioLevels {int channel_index, int level (0 to 255)}**
Output Routing A series of packets describing the configuration of each video output	**/zoomosc/outputRouting {int num_outputs, int this_output_num, int enabled, string output_name, string mode, string selection, string resolution, string embedded_audio_info, string status}**
Audio Routing A series of packets describing the configuration of each audio output	**/zoomosc/audioRouting {string audio_device_name, int num_channels, int this_channel, string mode, int gain_reduction, string selection, int audio_level}**

RESOURCES

SIGN UP FOR LIMINAL'S **NEWSLETTER** TO STAY UP TO DATE ON UPDATES AND NEW RELEASES

SUBSCRIBE TO LIMINAL ON **YOUTUBE** FOR TRAININGS AND TUTORIALS

EMAIL **INFO@LIMINALET.COM** FOR SUPPORT FOR ZOOMISO AND ALL LIMINAL APPS