SOYUZ
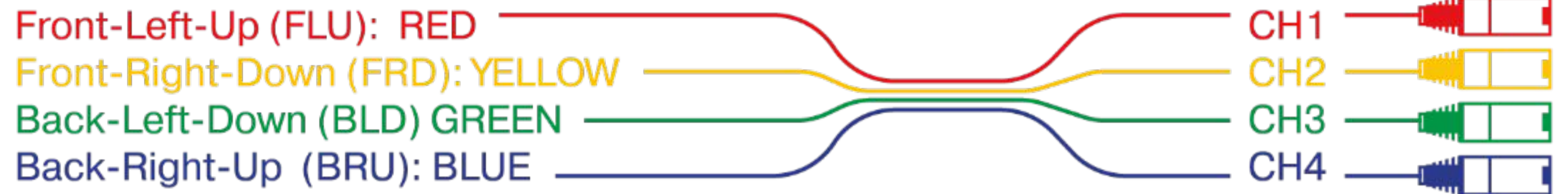## HANDMADE MICROPHONES

013 Ambisonic
USERS GUIDE

BRU

FLU

FRD

BLD

Register Your Mic To Receive Your Download Code

Cable Color Guide

Your microphone features four capsules, each corresponding to a specific direction for capturing sound. To ensure you connect each capsule correctly, we've color-coded the connections:

Front-Left-Up (FLU): RED — CH1

Front-Right-Down (FRD): YELLOW — CH2

Back-Left-Down (BLD) GREEN — CH3

Back-Right-Up (BRU): BLUE — CH4

PREAMP LEVEL MATCHING

Use four identical preamps and ensure that all four channels are set to equal gain. This is crucial to capture an accurate sound field and prevents any discrepancies in your recording

Directional Indicator

On the microphone, you'll find a directional indicator, marked by a dot. This dot should be oriented towards the main focus of your recording space or considered the 'north star' for your setup. Here's why it's important:

- Orientation: The indicator helps you position the microphone correctly in relation to your sound source, ensuring optimal capture.

- Post-Processing Reference: This orientation serves as a crucial reference during post-processing, helping to accurately recreate the sound field.

Documenting the Environment

To help visualize your sound field during post-production, we recommend taking note of your microphone's exact placement and position

Example: Photograph your setup and/or add notes of the microphone's orientation and directional indicator in your session's track notes for future reference

Transcoder *First* in Plug-In Chain ⬤◯

The Soyuz 013 Ambisonic Transcoder plug-in converts the signals from raw audio (what is known as A-Format) to a usable Ambisonic B-Format format.

By default, the most common and optimal settings are selected. Make sure the orientation matches the mics position at the time of recording.

- **QUALITY MODE**

  Recommended default setting. The transcoding process is calibrated specifically to the 013A capsule. Use this mode while mixing and for rendering to get the greatest quality and immersion in your sound

- **MONITOR MODE**

  A zero-latency, low CPU transcoding method. You should use this mode for real-time monitoring while recording or working with live sound - not for rendering, mixing, or bouncing down

- **AMBIX** Standart Format (Recommended)
- **FUMA** is available if needed.

Orientation ⓘ

In the Transcoder plugin, you'll find settings for the microphone's orientation.

- *It's vital to match the setting with the microphone's actual physical orientation*

Standard upright position.

The indicator points towards the ground.

Upside-down placement.

Decoder

Last in Plug-In Chain ◯ ⬤

The 013 Ambisonic Decoder is a tool designed to manipulate, transform, and decode Ambisonic (B-format) signals captured using the Soyuz 013 Ambisonic microphone.

The decoder provides an easy-to-use solution for working with and creatively manipulating your Ambisonic audio, without the need for extensive tweaking or settings.

Rotation

Rotation shifts the signal around the spatial field.You can think of it as moving the sound/room around your head. Rotation can happen in the Y YAW(left/right), X PITCH(up/down), and Z ROLL (diagonally) axes. When playing audio you'll see a visualization of where the sound is in the field that you can experiment with.

Decoder Output

This Decodes the Ambisonic signal to various speaker array configurations. You can choose from stereo up to 9.1.6 (depending on your DAW's support). It includes azimuth and elevation controls for adjusting individual speaker positions, as well as a high-pass filter, gain control, and LFE routing option for each speaker array segment.
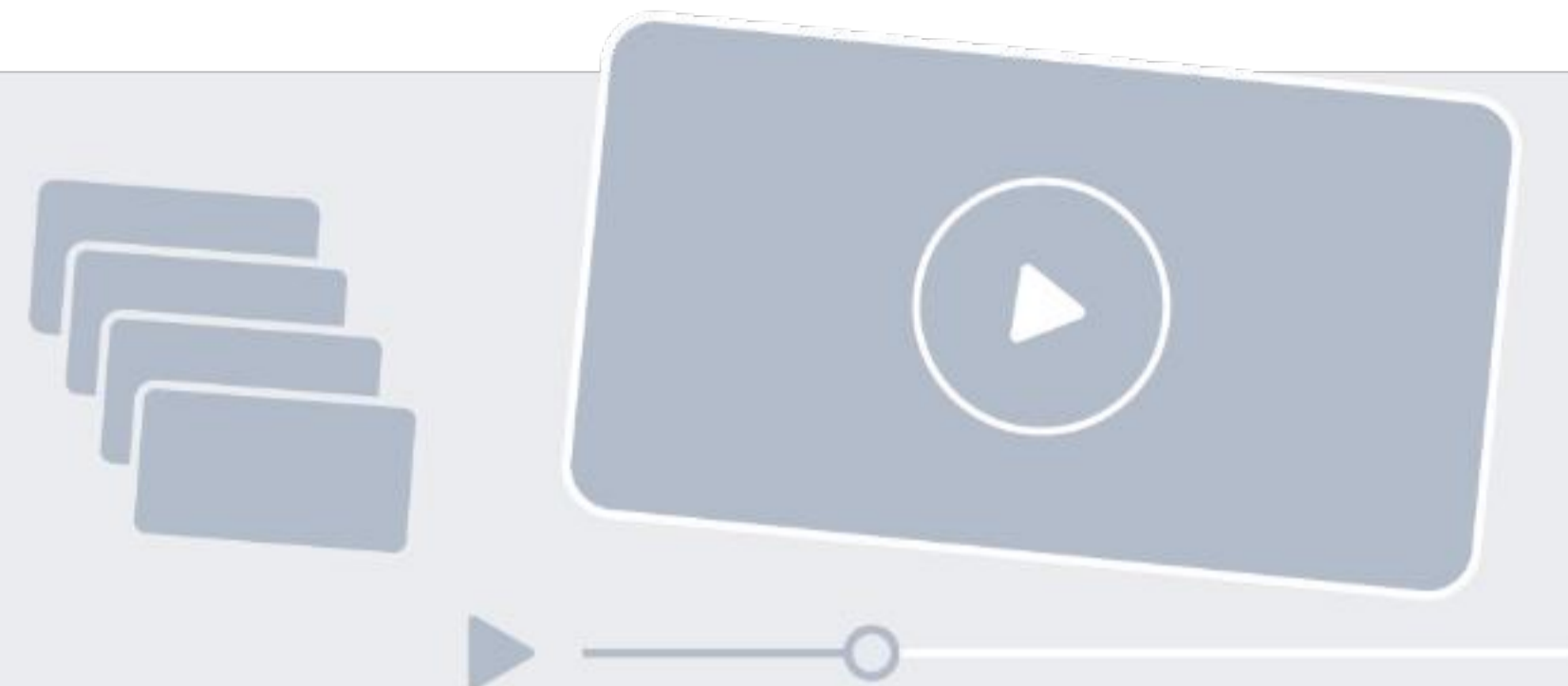
Dominance

The Dominance section is a way of moving the sound towards a particular direction (left/right front/back up/down). - think of it as a forced panning with more noticeable results.

Scan For your DAW Specific Ambisonic Setup Instructions

Covering Pro Tools Ultimate, Logic Pro X, Reaper, Cubase Pro, and more

IMPORTANT

Smart Troubleshooting

The Transcoder and Decoder plugins include a 'smart troubleshooting' algorithm that checks your signal chain and alerts you if there are any issues.

(ERR3) Your track doesn't have enough Output channels. Make sure you make it wider or "Decode" to less channels.

Compatibility

The plugins are designed to work seamlessly with the Soyuz 013 Ambisonic microphone.

The plugins come in VST3/AU/AAX formats and are compatible with any DAW that supports multichannel audio/instrument tracks.

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Happy recording!

If you have any questions or need further assistance, don't hesitate to reach out.

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