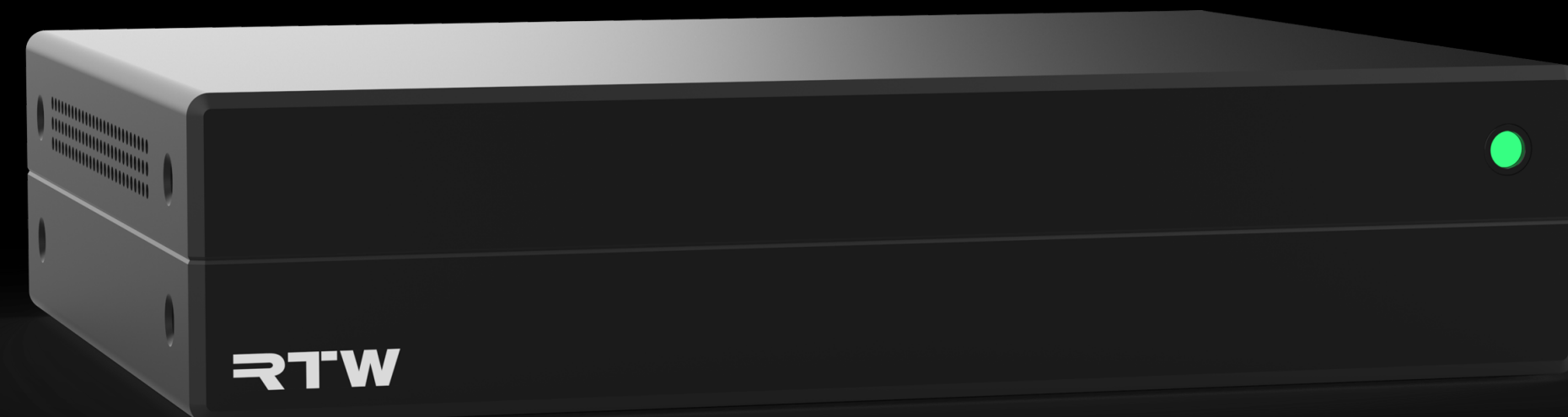


TMxCore

Immersive. Dialog Intelligent. Compliant



Background What is it?

- RTW's latest high-end, **high-performance** broadcast and pro audio metering platform
- **AI-assisted** tools for advanced dialog intelligibility analysis
- **Immersive** audio metering for 5.1 surround and 7.1.4 formats - and beyond
- Fully **compliant** suite of loudness and metering instruments
- Network display: view your meters in any browser, **anywhere**
- **DisplayPort** output for direct connection to any monitor - up to 4K: 3840 × 2160
- **Network**-ready with RAVENNA®, AES67, ST 2110, Dante®, and traditional I/O options
- Designed for **modern workflows**



RTW

RTW
EYES ON YOUR AUDIO

Audio Over IP / Traditional Digital or Analog I/O

USB for touchscreen, mouse/keyboard, harddrive



LAN connection for network display, control, OSC

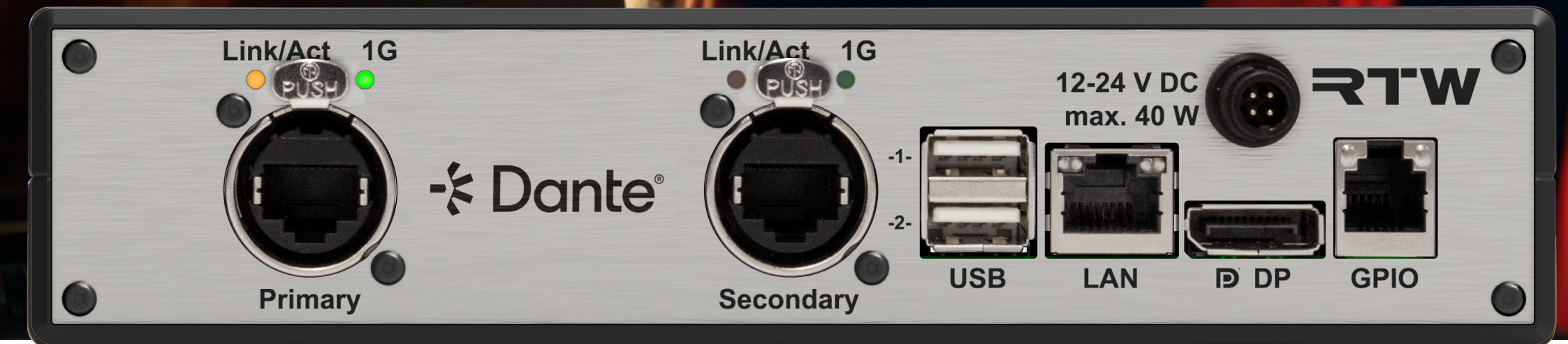
DisplayPort for external display (4K: 3840 × 2160)

GPIO for external control

Features

I/O: Four Options

- USB, GPIO, LAN Control, DisplayPort
- RAVENNA ST2110/AES67 NMOS
32 Channels
- DANTE
32 channels
- AES16
16 channels sub-D 25
- AES8 + Analog8
16 channels sub-D 25



A person is seen from behind, sitting at a large, complex audio mixing console in a dimly lit recording studio. The person's hair is dark and curly. The studio is dark, with a single spotlight illuminating the person's head and shoulders. In the background, there are several racks of audio equipment and a window with red curtains. The overall atmosphere is professional and focused.

Instruments

The most comprehensive metering engine ever from RTW

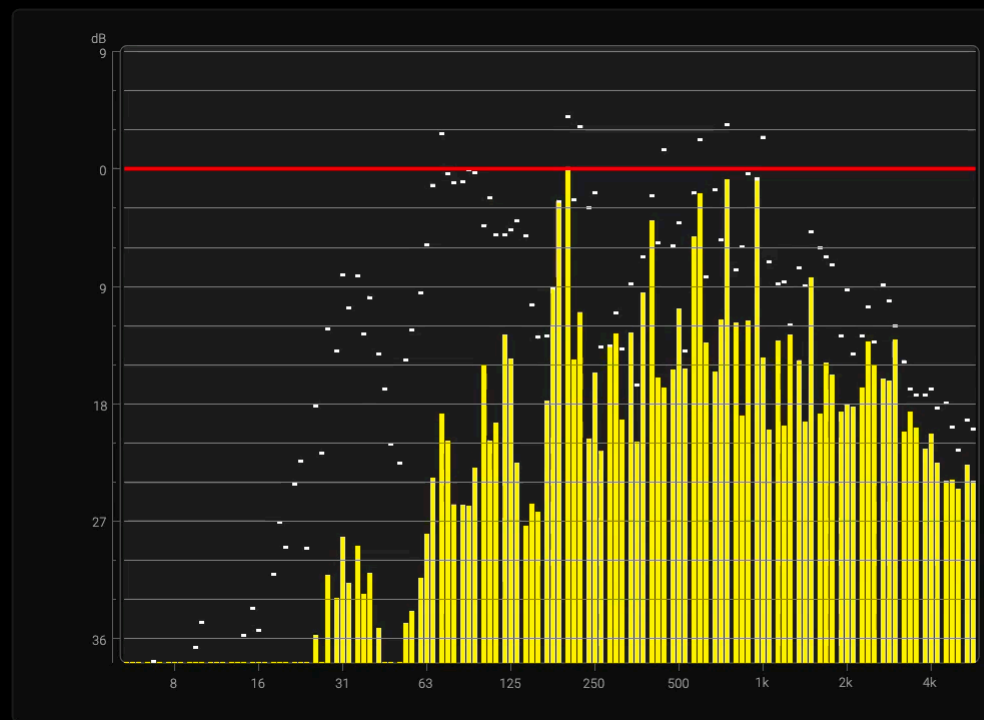
A person with curly hair is seen from the side, looking at a mixing console in a recording studio. The scene is dimly lit with a spotlight on the person's head and a red light source in the background.

TMxCore

Features

The instruments you know

- Reliable, Classic
- Built on the trusted TouchMontior TM7/TM9
- Levels, frequency, loudness compliance, phase issue detection



Reset

9 dB

Ref +

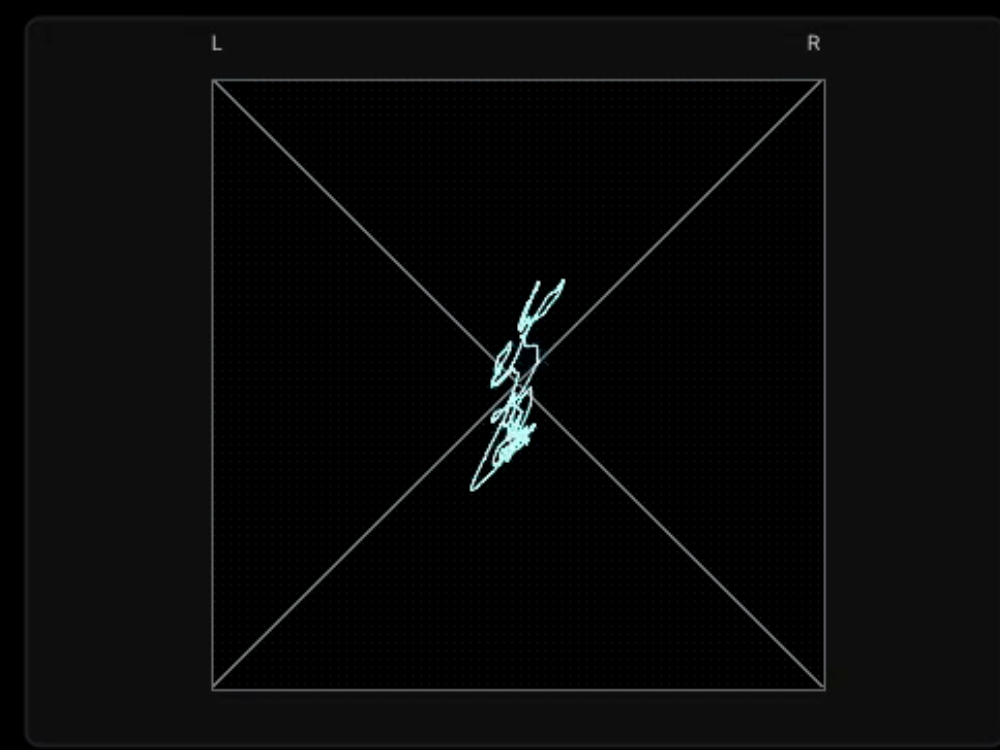
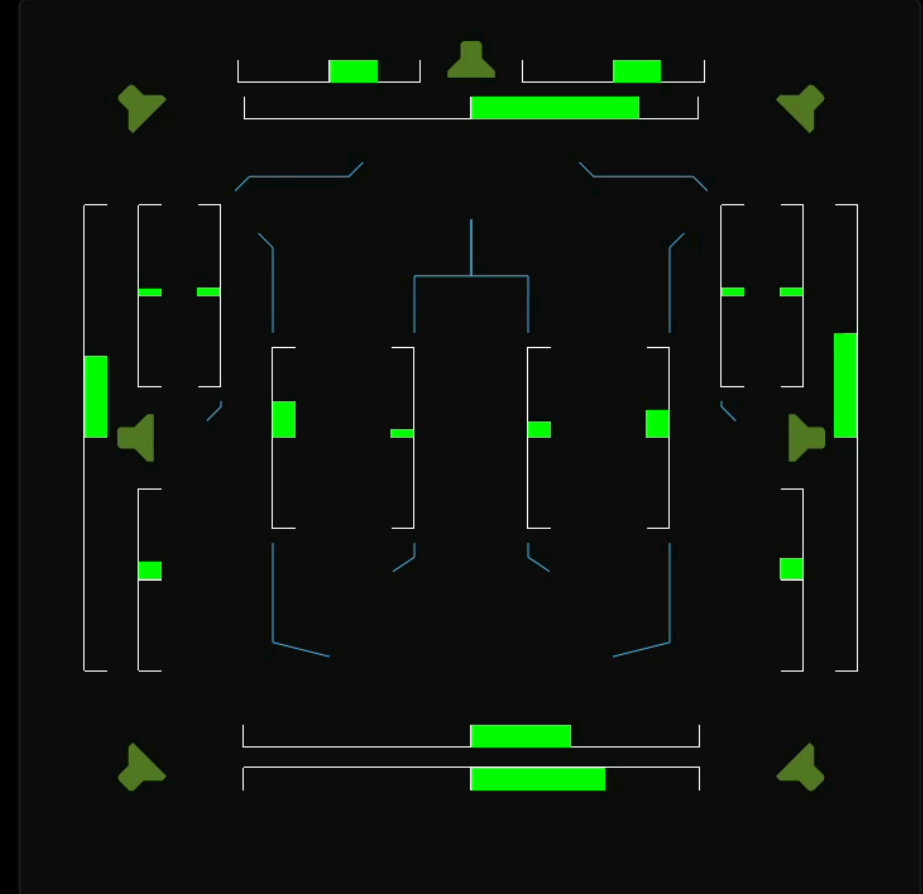
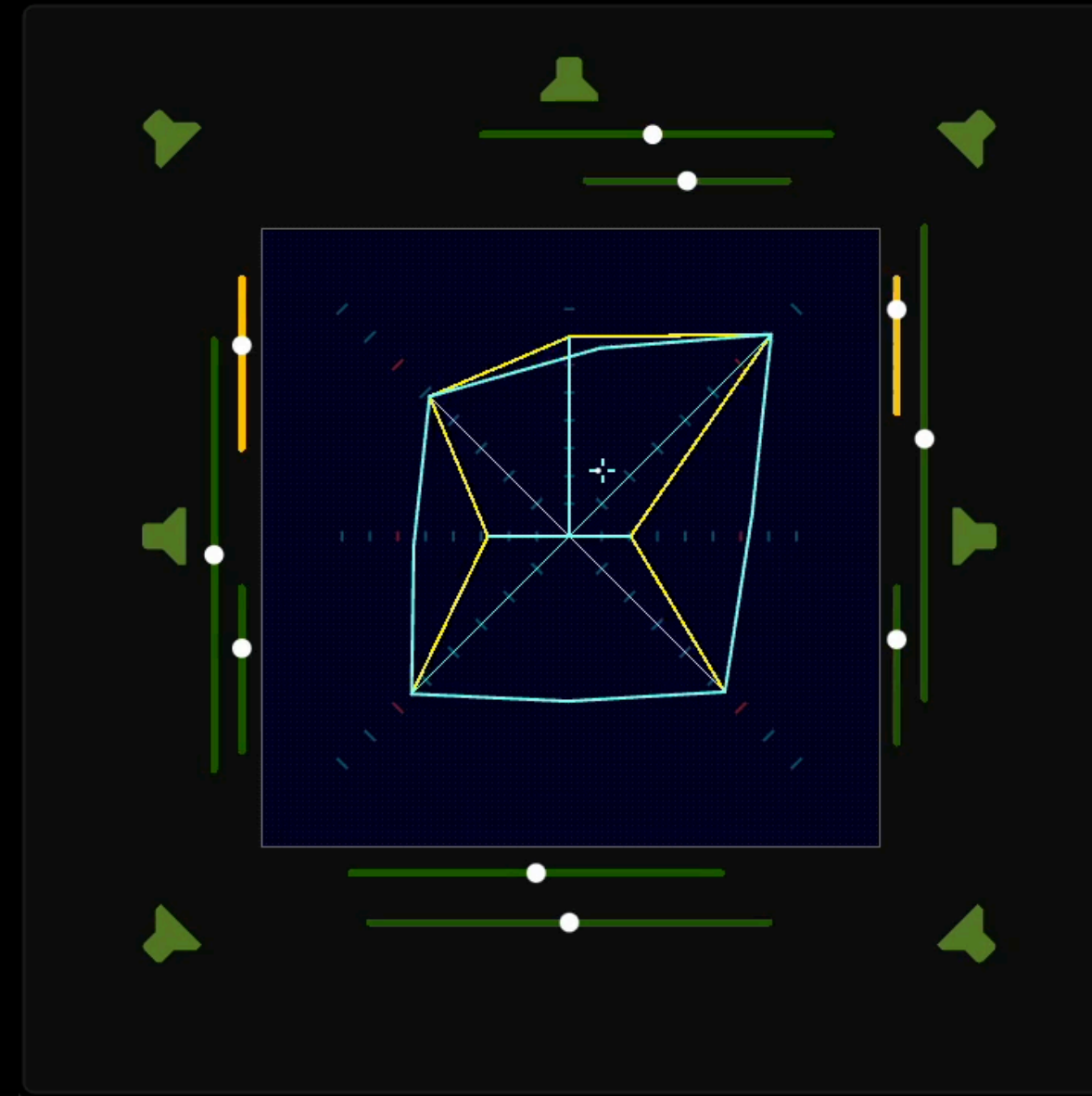
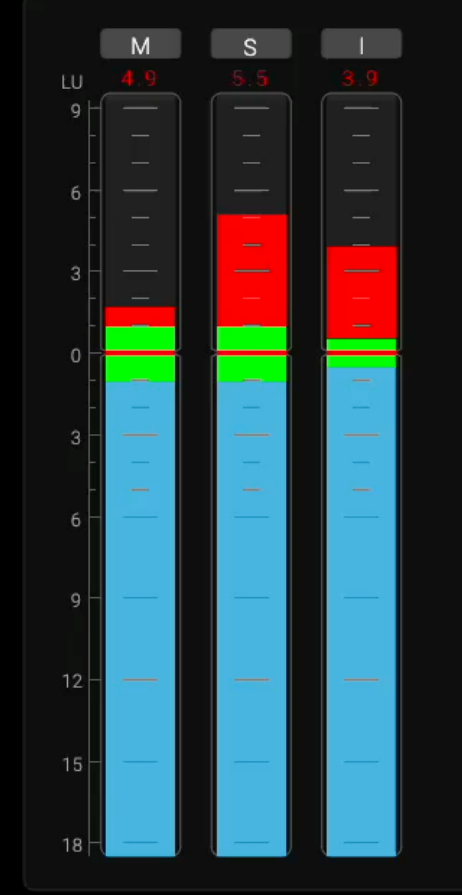
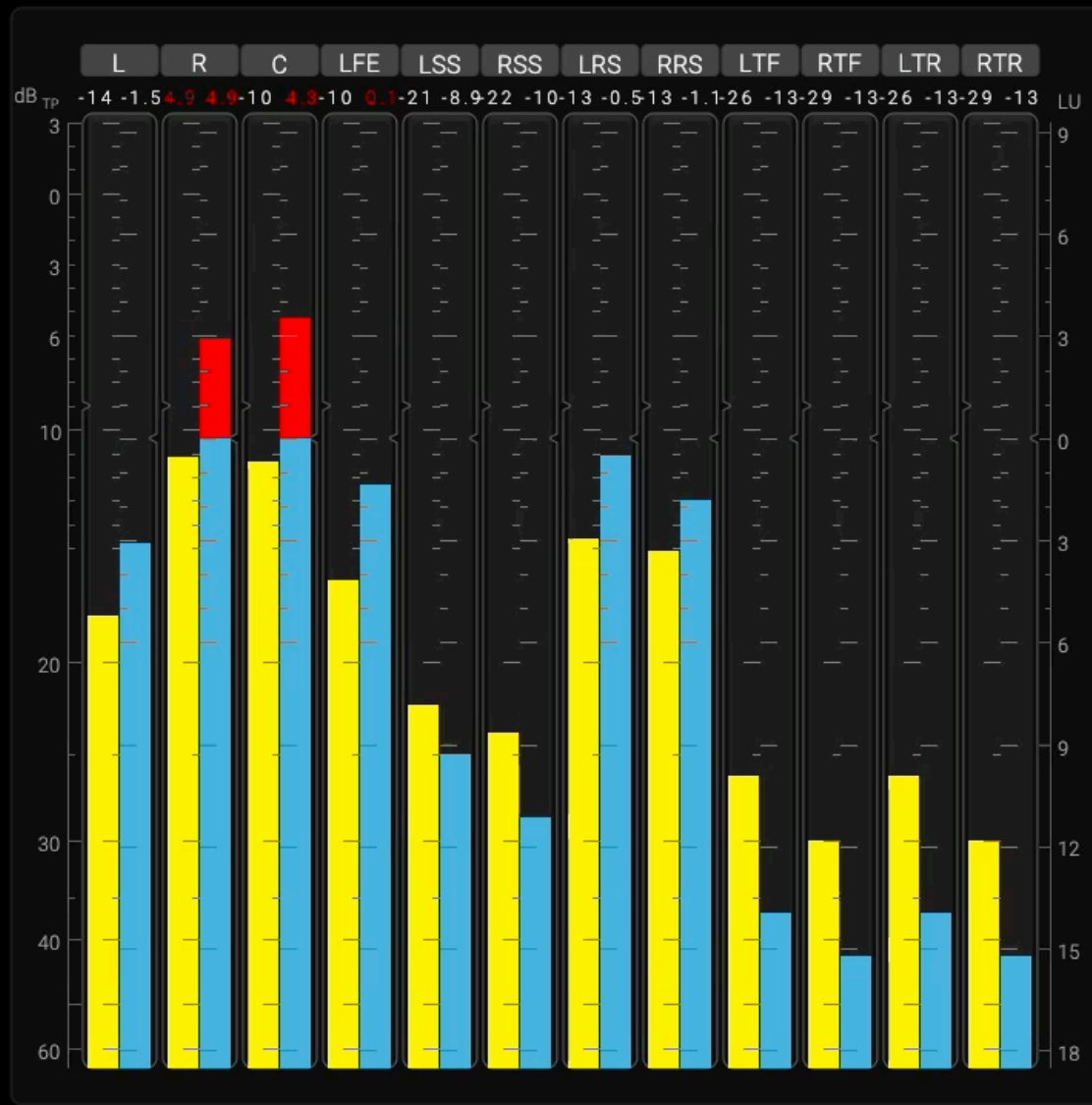
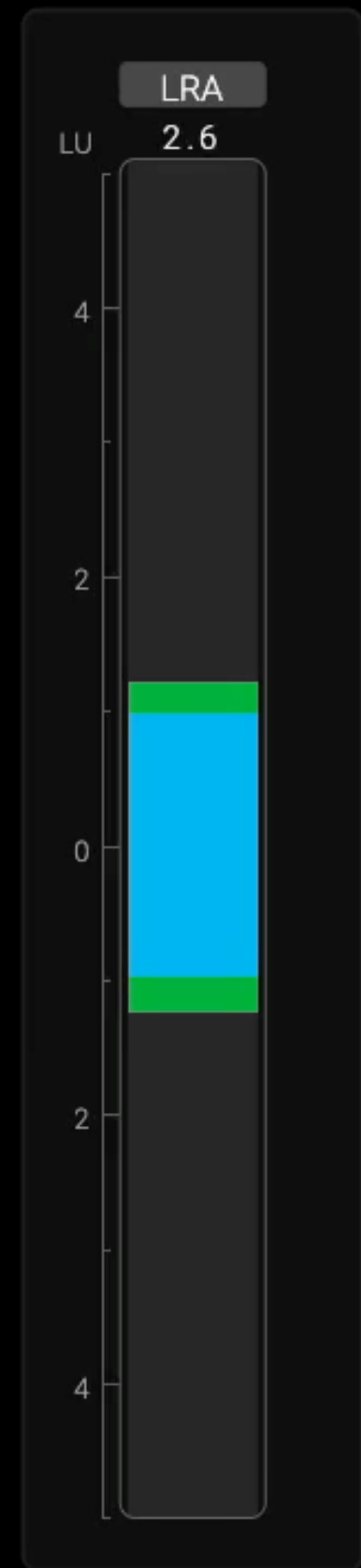
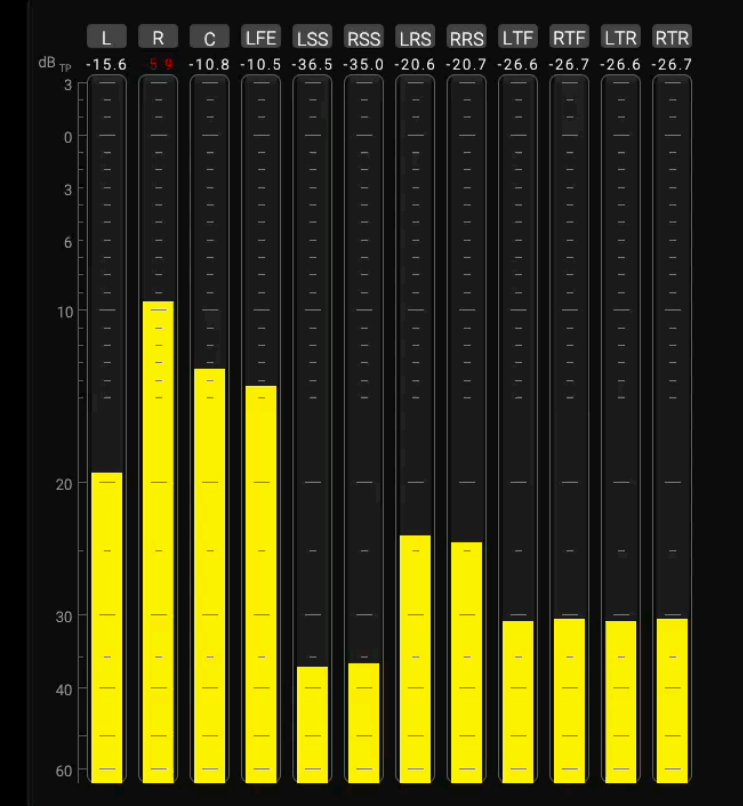
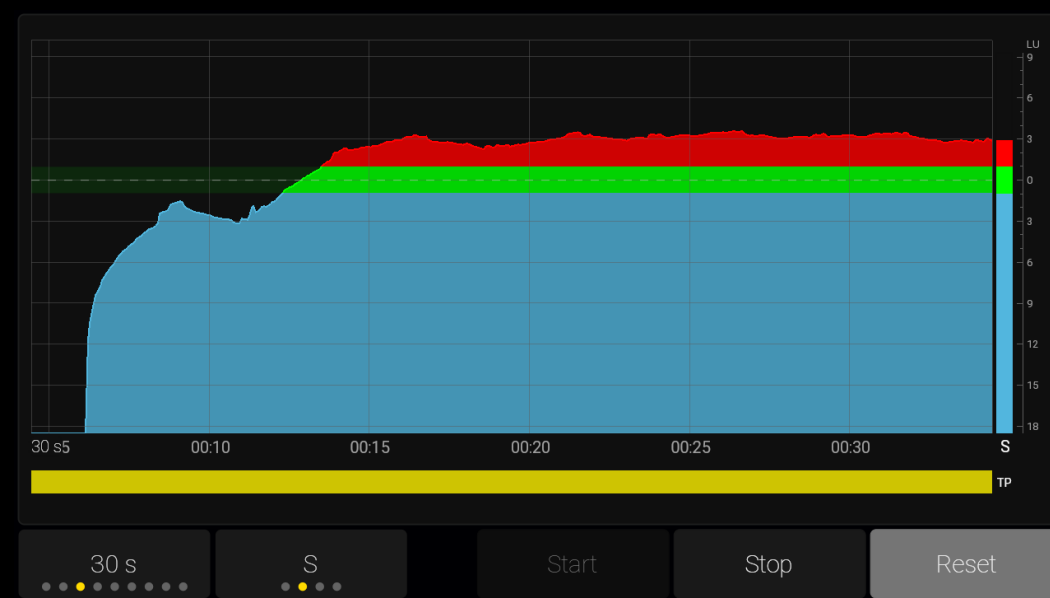
Ref -

Hold

PH Reset

LF

All



M 3.7 LU

S 3.2 LU

I 3.4 LU

LRA 0.7 LU

TP_{max} -5.2 dBTP

I_{time} 00:00:04

Features

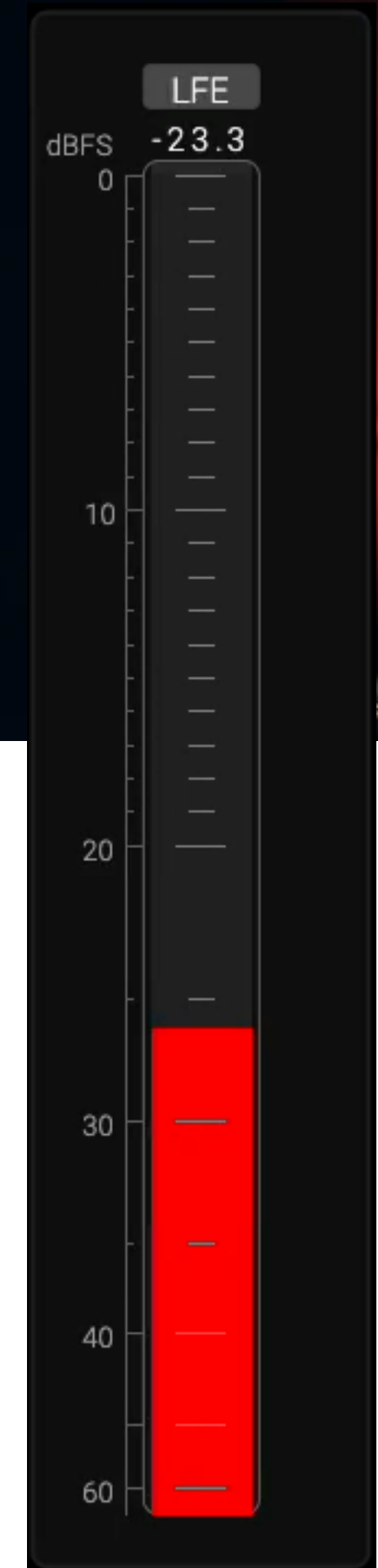
Immersive Metering

- Surround and Immersive formats. 5.1, 7.1.4 Atmos - and beyond
- Commonly used by broadcasters around the world
- Spatial Balance, Relationship between multiple speakers, detect phase issues
- Correlation problems with LFE channels

Features

New: LFE Bleed

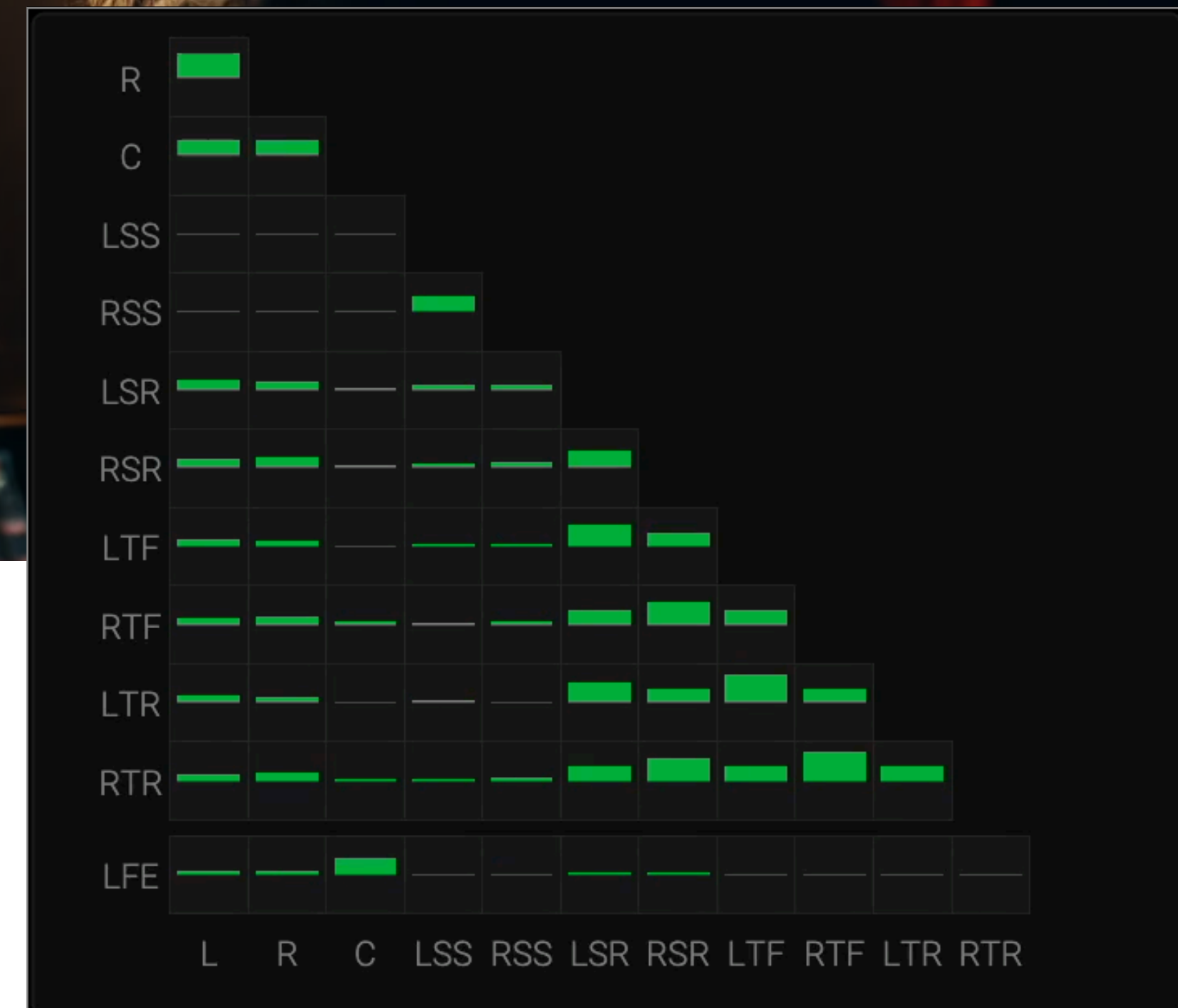
- Avoid high frequency content in your LFE Channel
 - Monitors energy above a defined threshold (120 Hz by default) with a compact dBFS bargraph, highlighting any leakage into the LFE channel(s).
 - Recommends limiting the LFE frequency range to maintain compatibility and avoid distribution problems.
 - Ensures that unwanted high-frequency content is not present in the LFE channel(s), preventing playback issues across encoders and binaural formats.



Features

New: The Matrix Correlator

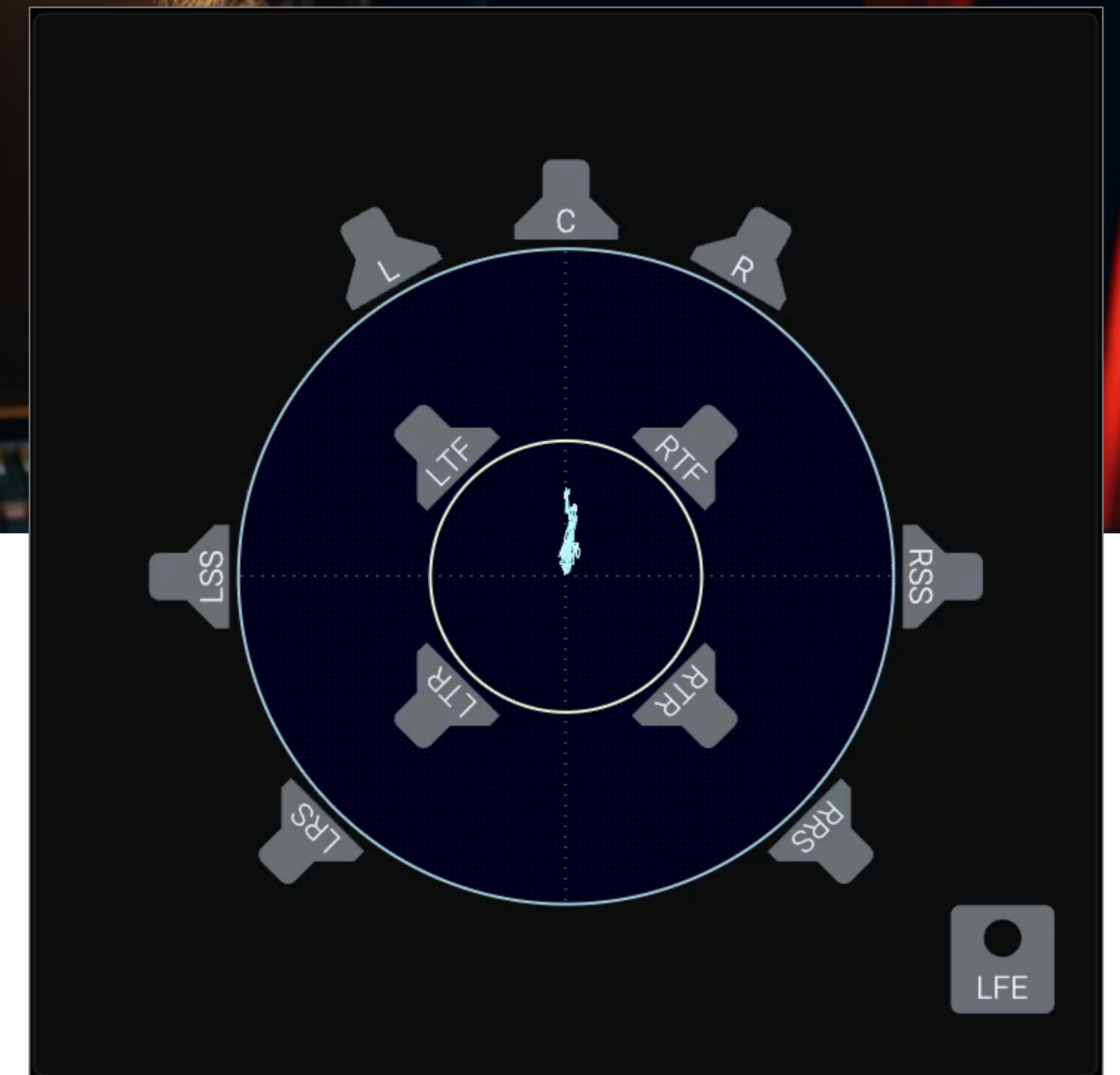
- Detect phase issues in a complex channel setup
 - Displays detailed phase relationships between all channels, from simple stereo up to complex 30.2 formats
 - Provides a comprehensive overview of inter-channel correlations for precise monitoring
 - Enables fast detection of phase conflicts within a mix, ensuring accuracy and consistency across formats



Features

New: The Polar Scope

- Watch **spatial coherence**, channel delay mismatches
 - Extends the principle of the classic stereo **vectorscope** to surround and immersive formats, visualizing inter-channel correlations as geometric patterns.
 - Represents each loudspeaker as a vector in a spatially aware coordinate system, providing real-time insight into **spatial image** width, depth, and energy distribution.
 - Reveals issues such as channel delay mismatches, phase conflicts, or front/rear imbalances, while confirming overall spatial coherence of the mix.



A person is seen from the back, sitting in a dark control room. They are looking at a large mixing console with several monitors displaying audio waveforms. The room is dimly lit, with a spotlight on the person's head and a red light source on the right.

Dialog Intelligibility

Hottest topic in Broadcast

Features


Dialog Intelligibility

- The most critical challenge in dialog sound today
- Severe issues reported by end listeners
- Multiple, often conflicting, approaches to measuring the problem
- Gathering insights and recommendations for the Loudness Blog
- Driving efforts toward a unified industry standard

Features

Dialog Intelligibility: Loudness Based Approach

Norway



NRK

Standard	EBU R128
Integrated (I)	-23 LUFS*
Max. Loudness Range	18 LU (1)(2)
True Peak (TPmax)	-3 dBTP (3)

Reference: **NRK Technical Standards**

* For live content, a tolerance of ± 1 LU is allowed.

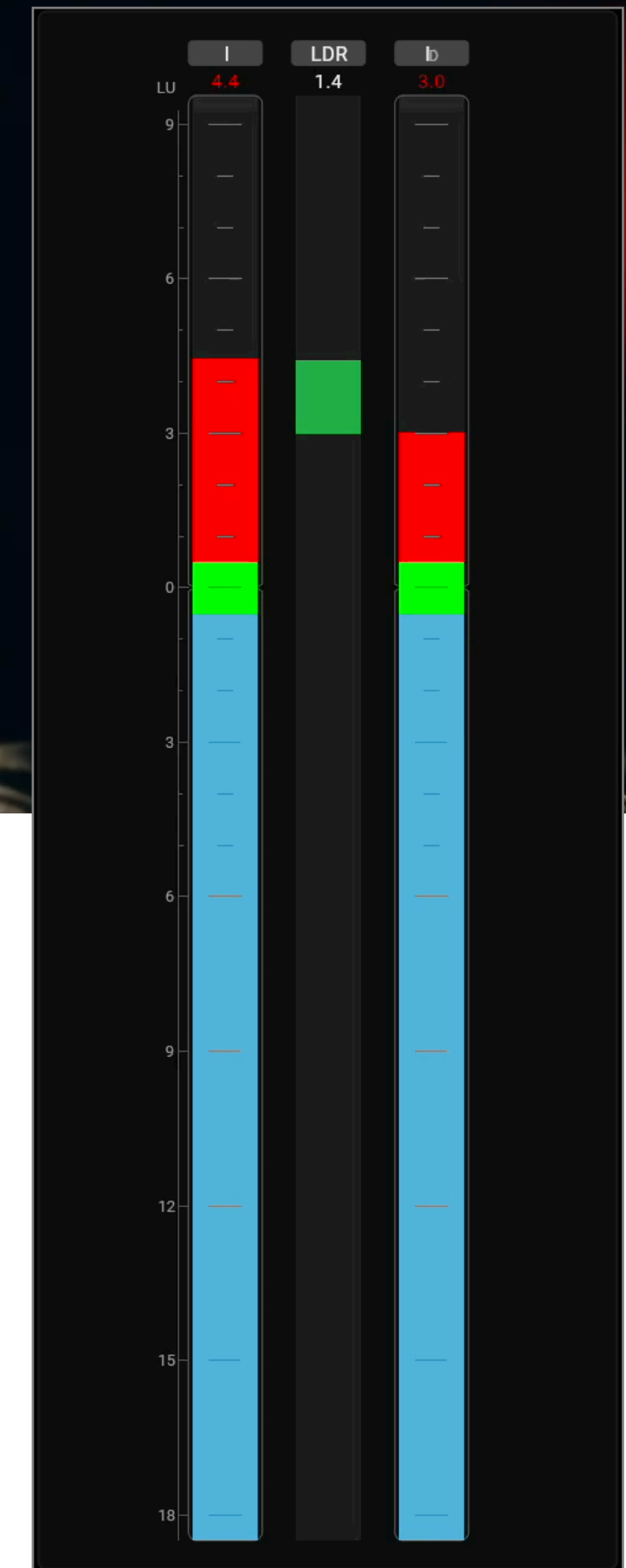
Please note:
(1) LRA: Programmes should aim for an LRA of no more than 18 LU
(2) LRA Speech: Speech content in factual programmes should aim for an LRA of no more than 6 LU. A minimum separation of 4 LU between dialogue and background is recommended.
(3) TPMax: -3 dBTP Recommended. Programmes are deemed to have failed QC if level exceeds -1 dBTP.

- Dolby Dialog Intelligence: Dialog Gated Loudness Measurement (Netflix)
- LDR: Loudness-to-Dialog Ratio. Specified in EBU R128 Supplement 4.
- BDR: Background-to-Dialog Ratio. Ratio between the dialog and background audio. NRK (Norway), BBC, ARD, W3C and others.

Features

New: The Ratio Instrument

- Keep an Eye on the Dialog Ratio
 - Displays the **ratio** between two measurements, enabling precise evaluation of ratio and consistency.
 - Supports key use cases such as Loudness-to-Dialog Ratio (**LDR**) and Background-to-Dialog Ratio (**BDR**) within a single source.
 - Compares loudness across different sources or renderings (e.g., pre/post processing, immersive vs stereo), revealing the impact of processing and format changes

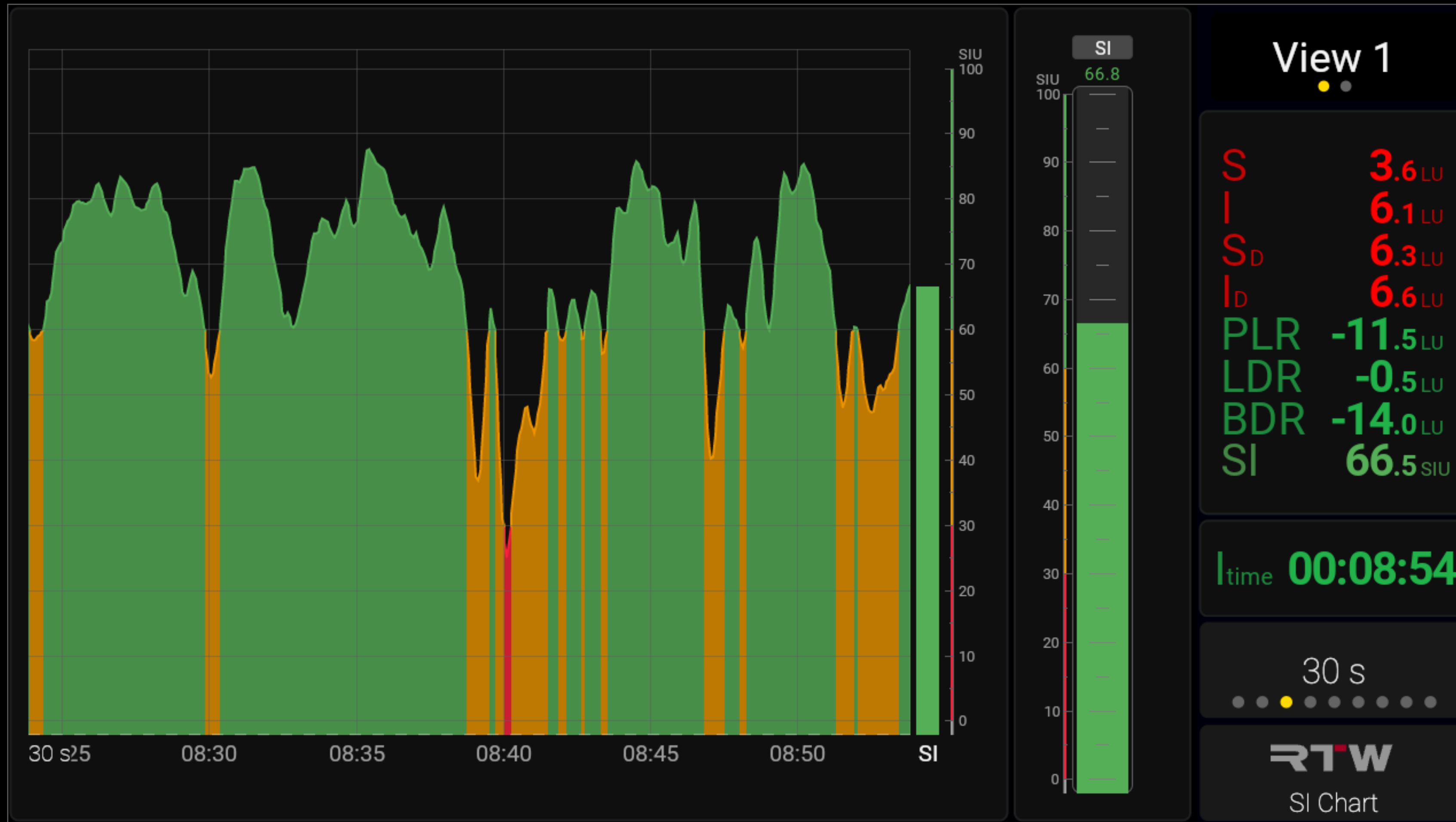


Features

The Dialog Intelligibility Instrument

- Eyes on Dialog Intelligibility
 - Provides AI-driven, **objective** measurement of dialogue clarity, developed in cooperation with **Fraunhofer IDMT** and based on over nine years of research.
 - Delivers real-time visual feedback that helps engineers balance dialogue, effects, music, and background noise with confidence.
 - Available as a **license** option for TMxCore, giving broadcasters and audio professionals a proven solution for consistent dialog intelligibility across formats.

NEW



Features

Action Instrument & OSC

- Support for Open Sound Control
 - Create customizable buttons with user-defined size, position, and color.
 - Trigger actions via Open Sound Control (OSC over TCP/UDP) or HTTP.
 - Two-way OSC: TMxCore also reacts to incoming commands such as preset recall, loudness control, reference level, and mic gain.
 - Actions is integrated in current buttons (Mute, Dim, etc.), too

Recall Scene 1

Reset All

Dim Lights

Features Wall Clock

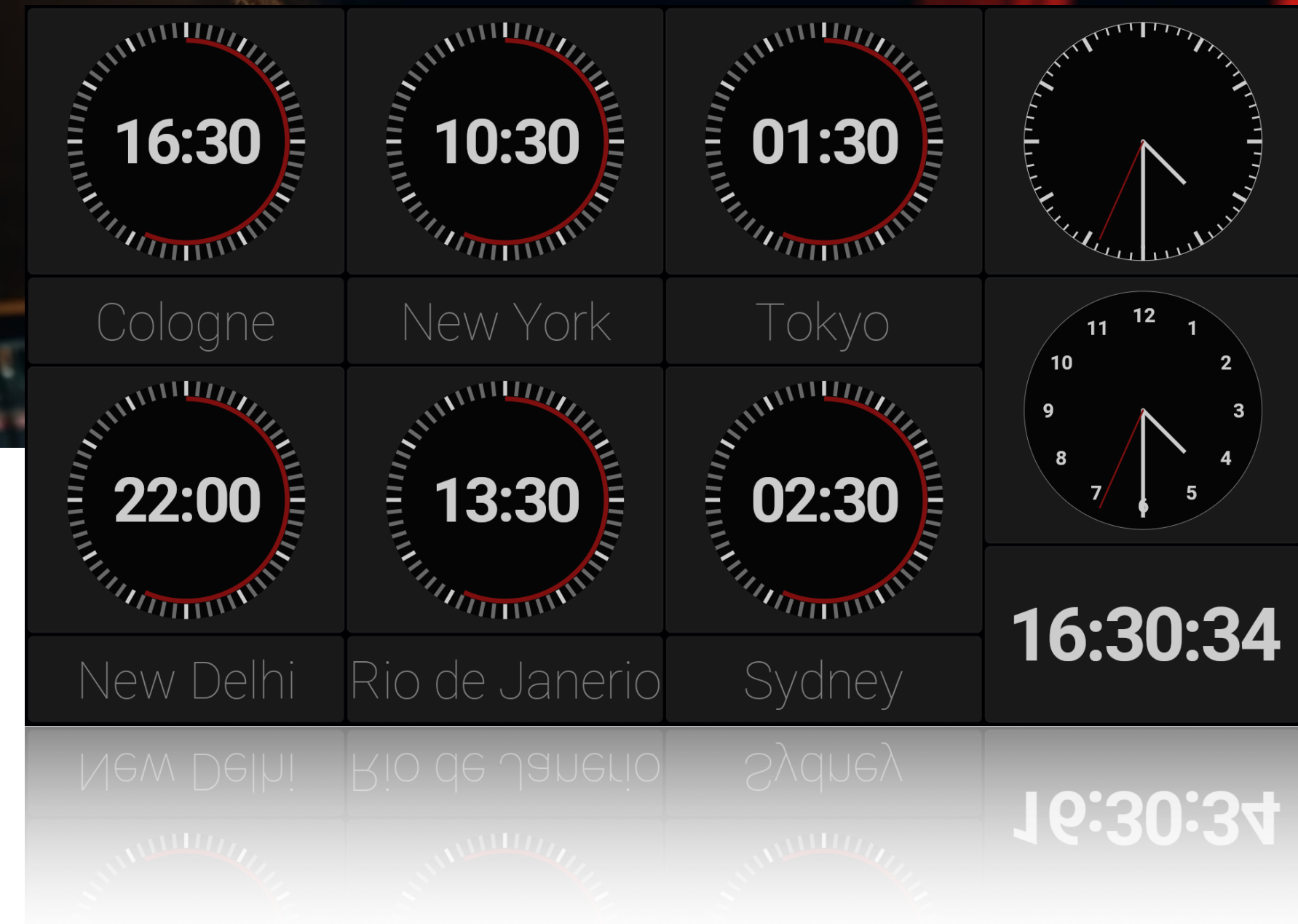
- **Eyes on the Clock**

Provides an always-on wall-clock reference in a broadcaster-friendly design

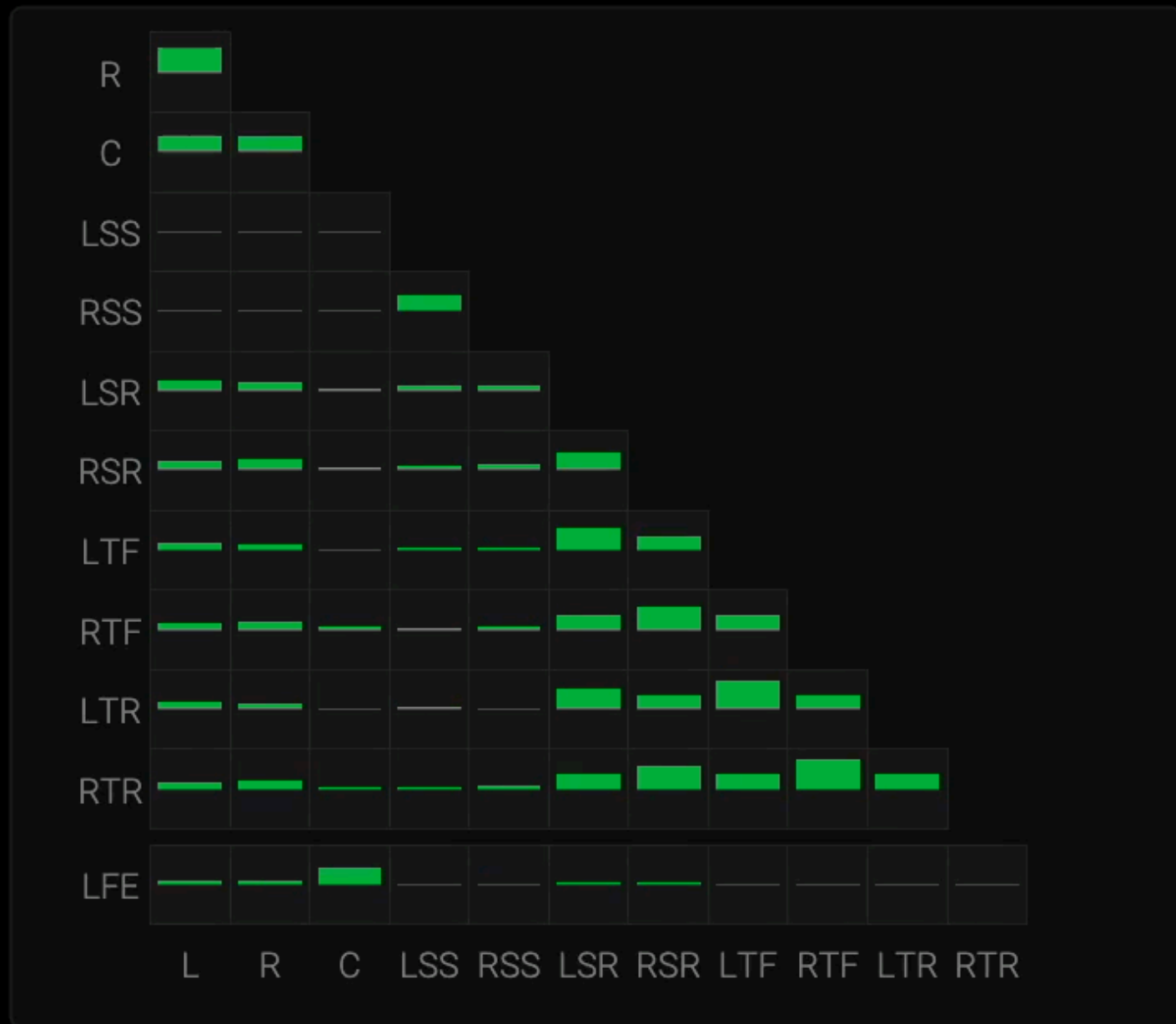
Offers four styles: digital, analog modern (no numbers), analog classic (with numbers), and broadcast focus with a red seconds ring

Support for Offset (Time Zones)

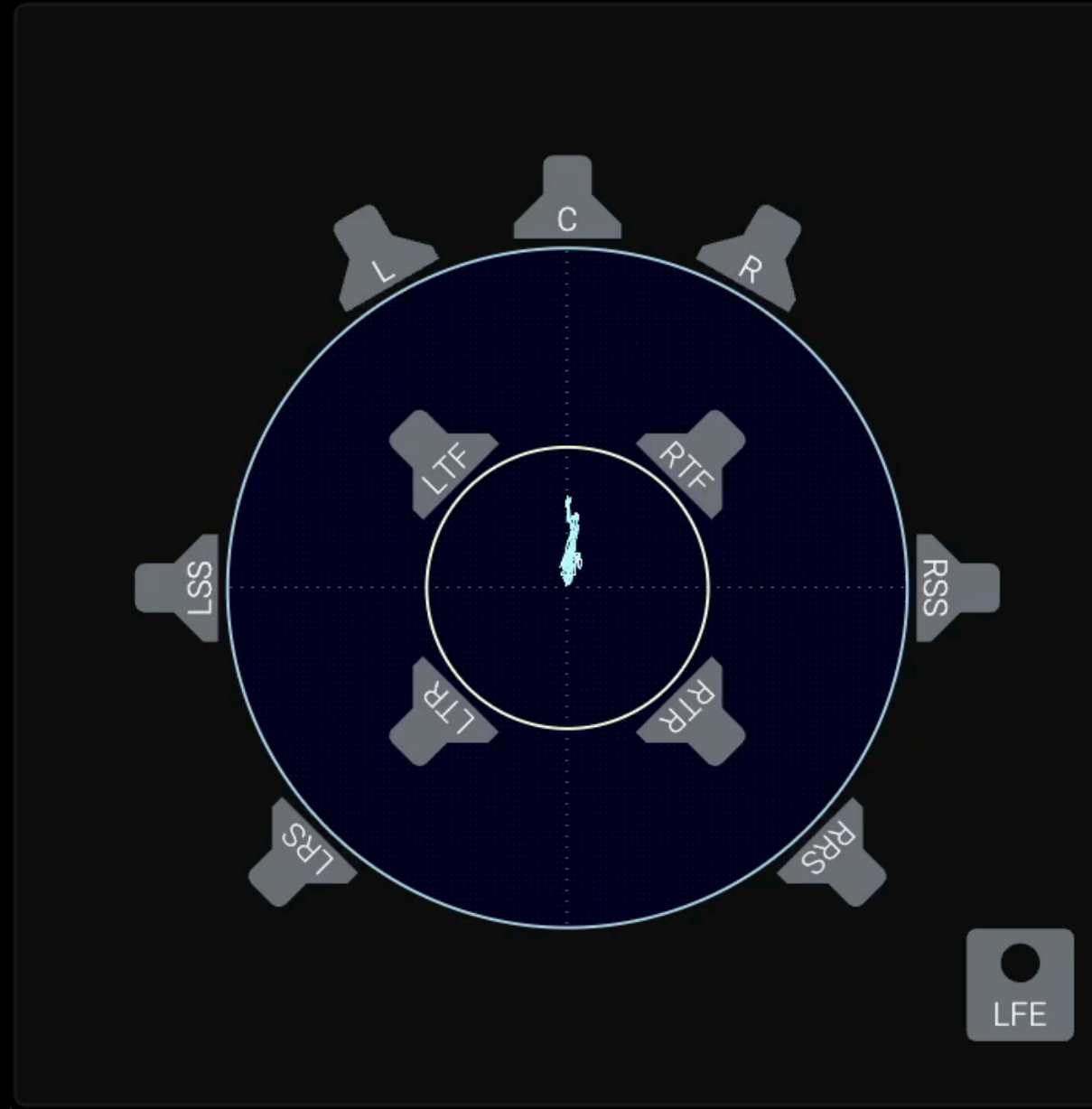
Ensures maximum readability and flexibility, integrating accurate time display directly into the monitoring workflow



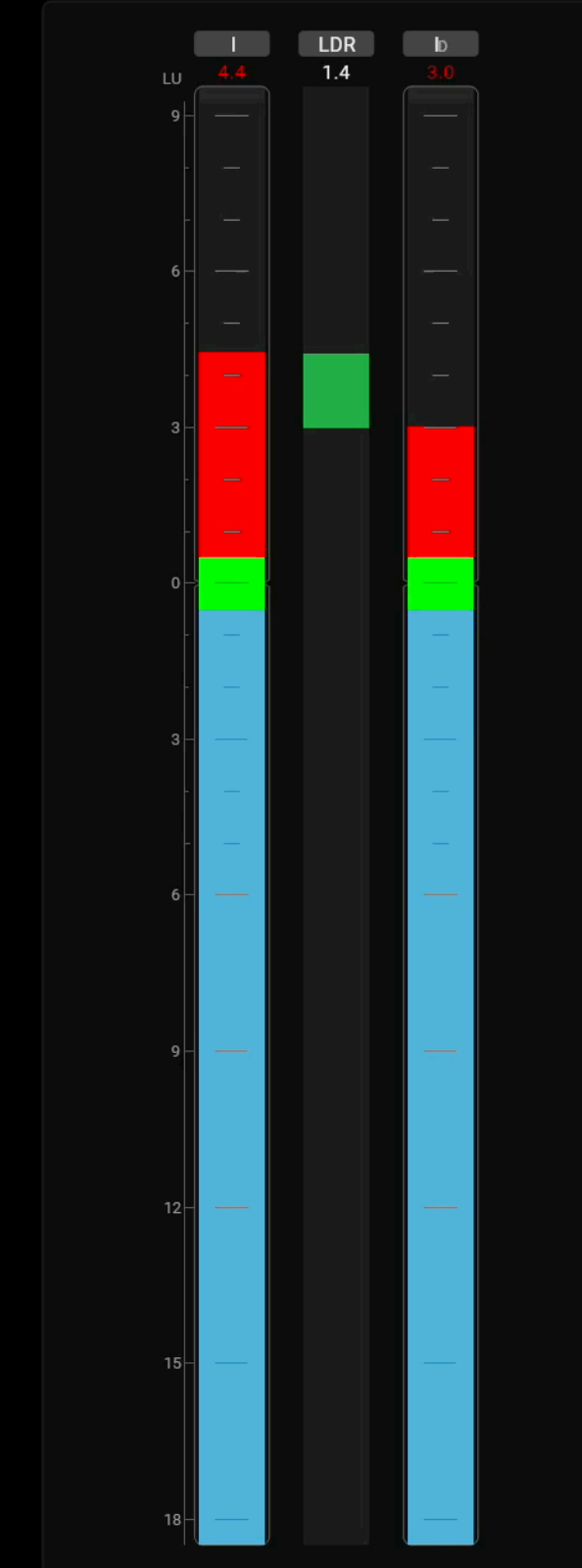
NEW



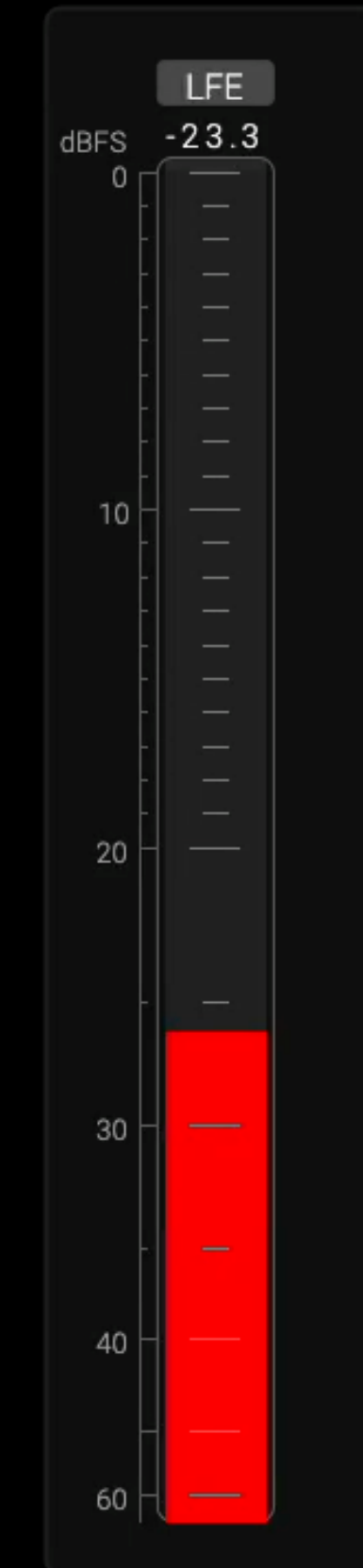
Matrix Correlator



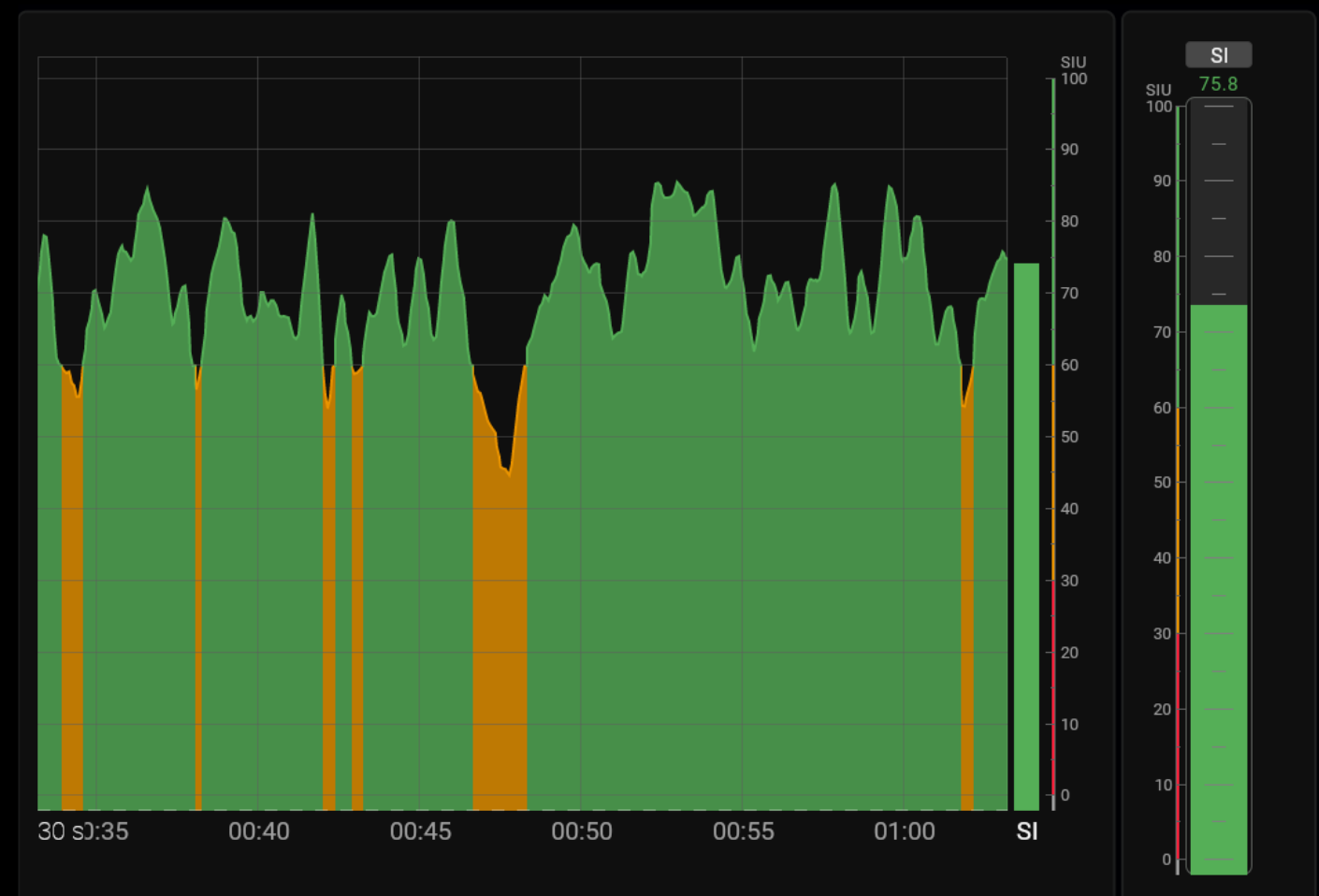
Polar Scope



Ratio



LFE Bleed



Dialog Intelligibility

View 1

S	2.6 LU
I	1.7 LU
S _D	-- LU
I _b	-- LU
PLR	-5.3 LU
LDR	-- LU
BDR	-- LU

time 00:00:25

30 s

RTW
SI Chart

20:37:36

20:37

Clock

Recall Scene 1

Reset All

Dim Lights

Action: OSC

Features Network Display



- Eyes on your Audio from Everywhere
 - View real-time audio measurements anywhere on the local network using a standard web browser, without extra hardware
 - “Local network” = any location on the planet with a VPN connection
 - Monitor flexibly from control rooms, production suites, or multiple workstations
 - Expand with additional licenses, each adding a new metering instance (screen) to your setup
 - Latency: 1 frame (20ms) plus network latency

TMxCore

Features

Rack Mount Kit



RTW
EYES ON YOUR AUDIO

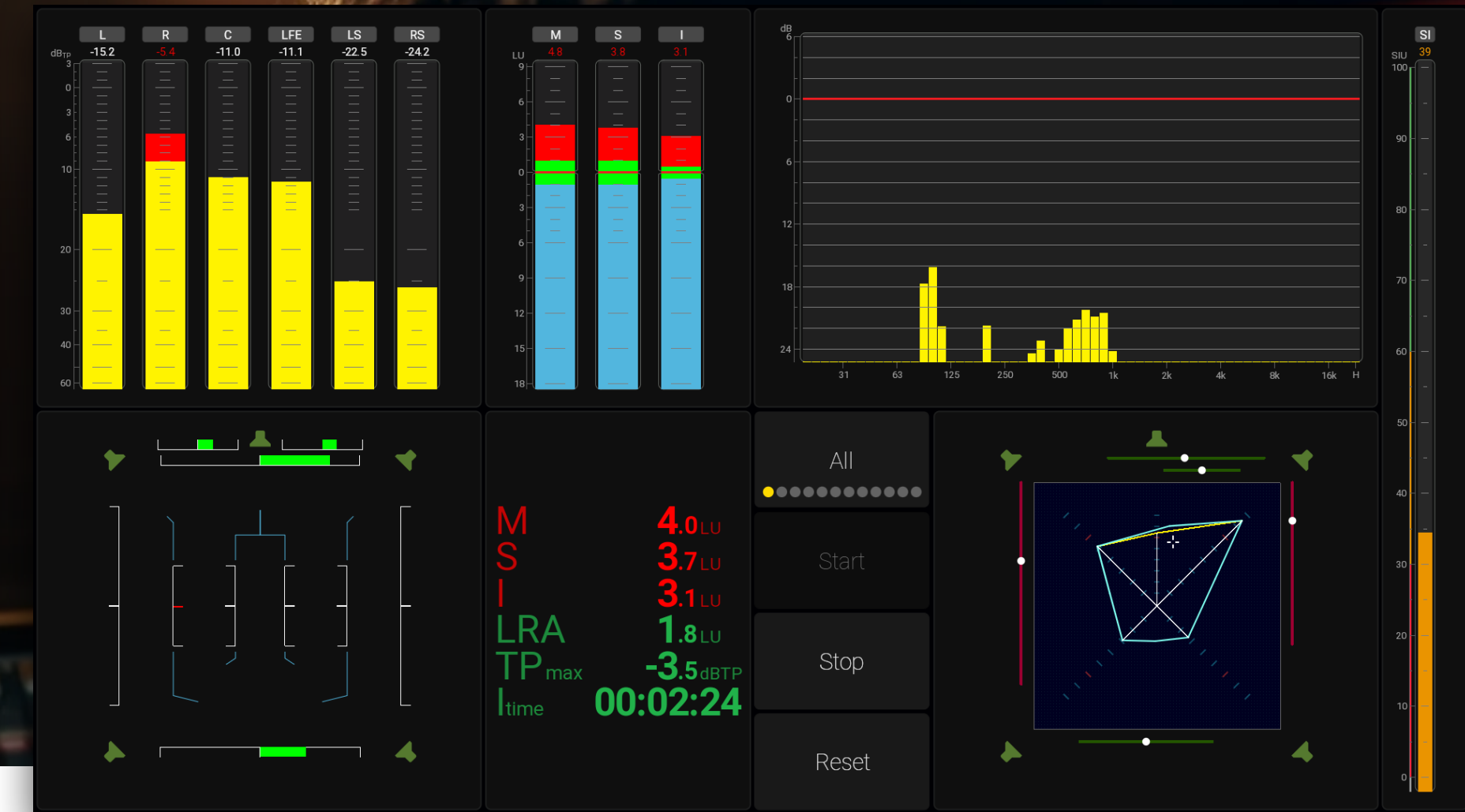
A person is seen from behind, sitting at a large mixing console in a recording studio. The room is dimly lit with warm, orange and red tones. The person's hair is dark and curly. The mixing console has many buttons and sliders. In the background, there are some shelves or racks of equipment.

Customers & Applications

Who will benefit from TMxCore?

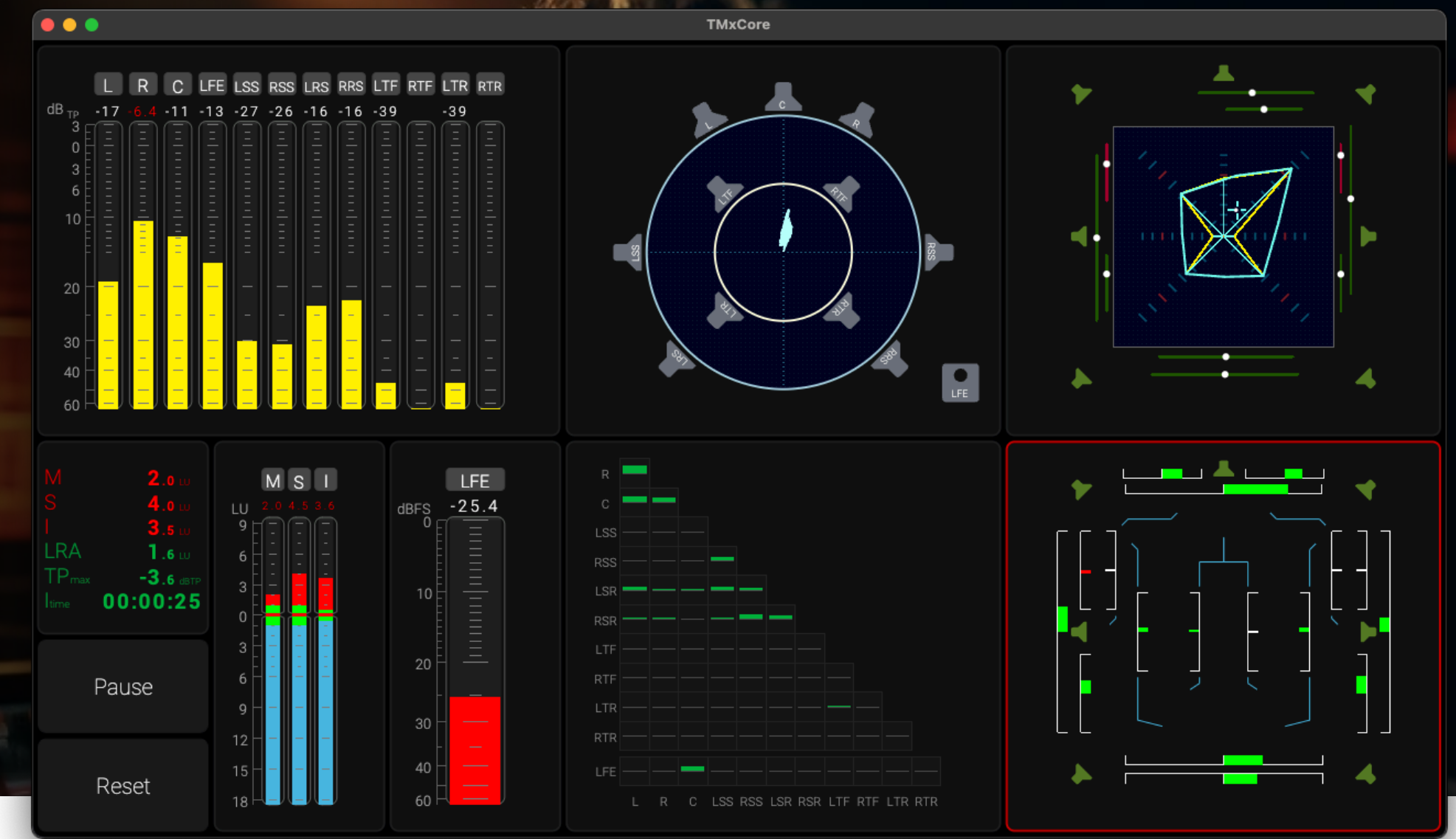
Applications

Broadcast: Live Sports, Music, News



- Versatile connectivity: Supports Ravenna, AES67, and ST2110 networks for seamless integration in modern broadcast environments.
- Comprehensive monitoring: Equipped with robust loudness tools to handle live broadcasts from sports and music to news.
- Trusted compliance: Ensures adherence to international loudness standards, delivering consistent, high-quality audio.

Applications Post Production and Cinema



- Immersive-ready: Advanced metering tools tailored for immersive audio and dialog intelligibility on Dante® audio networks.
- Standards compliance: Simplifies adherence to international loudness regulations such as EBU R128 and ATSC A/85 (CALM).
- Delivery assurance: Meets streaming platform requirements, including specifications from Netflix.

Applications Installed Sound

- **AoIP integration:** Designed for installations in stadiums, theaters, houses of worship, and event spaces.
- **Comprehensive toolkit:** Provides a full suite of metering instruments for professional audio monitoring.
- **Audience focus:** Empowers engineers to optimize performance and deliver an enhanced listening experience.

Applications

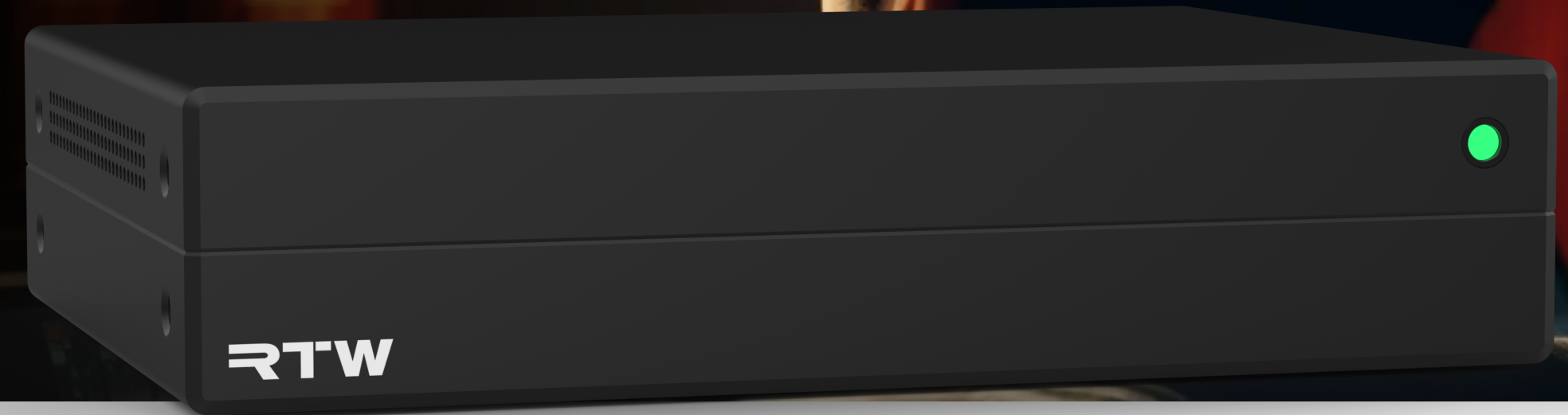
OEM: Broadcast Consoles



- Screenless flexibility: A compact, display-independent platform that integrates seamlessly while leaving full visual control to console manufacturers.
- Future-ready performance: Equipped with powerful CPU and RAM resources to handle loudness, dialog intelligibility, and immersive audio standards.
- Trusted integration: Standardized I/O, network connectivity, scalable licensing, and RTW's proven quality ensure reliability without compromise.

TMxCore

Market Licenses



- Super simple licensing structure
- Basic version contains what most need
- Three licenses: Immersive, Dialog Intelligibility, Extra Screen Displays
- Pricing equals that of a classic TM with relevant tools

Status Classic TouchMonitor TM7/TM9?

- Still Available
- All versions
- Including OEM Versions



TMxCore

Read More
Product Page



TMxCore Product Page

