

Complete, Clear, Captivating Audio for any Station

# AERO.mobile Audio/Loudness Manager



# AERO.mobile<sup>™</sup> is rich audio clarity for Mobile DTV. Part of convincing an audience that Mobile DTV is an exciting option means providing them with an enjoyable experience. Viewers are listening. AERO.mobile is designed to ensure viewers not only hear and understand content, but are surprised by the clarity.



# AERO.mobile provides several tools to help condition audio for transmission:

- Dual Mobilizer cores for up to two programs
- Input downmixer supports 5.1 and stereo
- Dual multiband processing cores
- Six factory presets for standard and sports
- Automatic, metadata or GPI control
- AES and HD/SD-SDI I/O is standard
- Fully upgradable future-ready platform

AERO.*mobile*<sup>™</sup> Audio/Loudness Manager

AERO. Mobile AUdio/Loudness

Mobile DTV must overcome physical constraints – small speakers and environmental issues such as background noise. In addition, program audio can range from mono to 5.1 channels and faint to screaming loud. These factors combine to impair intelligibility, make viewing tedious and cause viewers to give up.

Traditional audio processing alone cannot enable diverse audio content to be reproduced effectively from mobile and handheld devices. In fact, it can make the situation worse. Simple wideband techniques don't do enough, and multiband systems soften important audio cues if overused – both negatively impact intelligibility.

Linear Acoustic Mobilizer <sup>™</sup> technology was developed based on extensive research into normal and impaired hearing in both quiet and noisy environments. By using technology from the renowned CrowdControl <sup>™</sup> algorithm to isolate dialog elements and combining new multiband techniques designed to preserve critical audio cues, program intelligibility is enhanced without the need for heavy handed processing. Mobilizer also provides pre-conditioning for the low bit rate HE AAC Mobile DTV audio encoder to maximize its performance at even the lowest rates.

Importantly, Mobilizer technology has been carefully designed and tuned to support and enhance systems like Dolby<sup>®</sup> Mobile which are being introduced for use within mobile receiving devices.

> AERO.*mobile*™ Audio/Loudness Mar

> > CODEC

METADATA

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CODEC

METADATA

Adjust

The rugged IRU AERO.mobile is intended to be installed directly before the mobile audio encoder in either the AES or SDI paths. Bypass relays are provided to ensure continuous service in the unlikely event of failure.

0 REF

SDI

FAULT

A bright LED display, rotary encoder, and four control keys provide straightforward menu navigation and function adjustment. Dual, redundant, auto-ranging power supplies are available to allow for trouble- free operation worldwide.

The AERO.mobile is backed by the world-class support expertise of Linear Acoustic, participants in the Mobile DTV standard.Assistance in designing, adjusting, or troubleshooting your Mobile DTV audio system is always just a phone call away.

# **AERO**.mobile Specifications:

#### **Program Configurations**

- 5.1 Downmix plus Alternate channel (5.1 + 2), no Mobilizer
- 5.1 Downmix with Mobilizer plus Alternate channel (5.1 + 2)
- Dual stereo (2 + 2) with dual Mobilizer

#### **Audio Processing**

Linear Acoustic Mobilizer technology plus AEROMAX® processing

#### Sample Rate/Resolution

48kHz, 24-bit

Latency

15msec fixed

# **AES Inputs and Outputs**

All connectors are 75-Ohm BNC female; Four main inputs with 75- Ohm internal termination; Four main outputs; 48kHz DARS reference input/passive loop out; Signal levels per SMPTE 276M/AES-3ID-2001

### SDI I/O

Auto-sensing HD/SD-SDI (SMPTE 292M/259M) inputs, up to 1080i/60/59.94/50Hz, access to all 16 audio channels plus VANC metadata per SMPTE 2020M methods A and B.

Metadata Input (Serial) SMPTE 207M (RS485/RS422) connection per SMPTE RDD-6

# Parallel GPI/O Control Port

9-pin female D connector, 0-5V TTL levels

#### Front Panel Controls and Indicators

Rotary encoder and control keys plus bright dot matrix LED display

Power Requirements Dual, redundant 100-264 VAC, 50/60Hz, auto-sensing, 35W maximum

Dimensions and Weight One rack unit- 1.75"H x 19"W x 12.5"D (44 x 483 x 318 mm) Net weight: 6 lbs (2.72 kg);

Shipping Weight and Dimensions 22"W x 17"D x 7"H (559 x 432 x 178 mm) Net weight: 13 lbs., (5.90 kg), approximate

## Environmental

Convection cooled. Operating: 0 to 50 degrees C, non-operating -20 to 70 degrees C.

# Regulatory

North America: Tested to comply with the limits for a class A digital device pursuant to Part 15 of the FCC rules (CFR). Power supplies are UL tested and approved.

Europe: Tested to comply with the requirements of harmonised Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC as indicated by the affixed CE marking; RoHS and WEEE compliant.

#### Warranty

Standard Telos Alliance 5-year warranty.

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