NIELSEN AUDIO AUDIENCE MEASUREMENT

Multi-Channel Encoding Monitor (MCEM)

WHAT IS IT?

The Nielsen Audio Multi-Channel Encoding Monitor is the latest version of the PPM encoding monitor. Radio stations use this device to monitor the status of their PPM Critical Band Encoding Technology (CBET) codes.

The new monitor includes a web interface that provides details about the station's current encoding status. It also includes insights about encoding performance with new minute level encodability and detectability graphs and reports.

The Multi-Channel Encoding Monitor is a rack-mountable dedicated-purpose device that can monitor up to four independent Nielsen Audio encoded stations.

HOW DOES IT WORK?

The Multi-Channel Encoding Monitor monitors up to four audio streams for the presence of CBET watermarks (PPM Codes).

In addition to simply monitoring for the presence of code, the Multi-Channel Encoding Monitor reports the Code Strength (Detectability) and Code Frequency (Encodability). It displays the information in graphical form on a Web-based interface and the data can be downloaded in csv format for further analysis.

The Multi-Channel Encoding Monitor offers multiple options to alert users of potential encoding errors such as incorrect code, no code, or double encoding including front panel LEDs, Alarm Relays, and SNMP alerting.

DEPLOYMENT

Starting in mid-2016

KEY BENEFITS

- Deep insights in to PPM encoding performance through minute level graphs

- CBET Monitoring of up to (4) independent stations in 1RU Device

- Multiple forms of encoding error alerts

SPECIFICATIONS

Platform:
    1RU Linux-based server platform with custom audio input board
    Audio Input levels: -10-+19 dBu
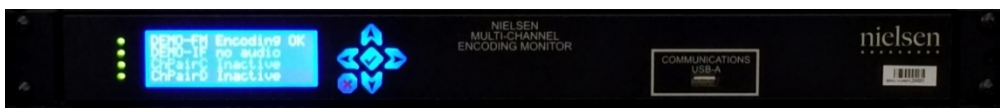
Dimensions:
    1 RU

Maximum ambient temperature :
    35°C (95°F)

Safety:
    UL60950-1/CSA C22.2 No. 60950-1, Information Technology Equipment - Safety - Part 1: General Requirements

    IEC60950-1, Information Technology Equipment-Safety-Part 1: General Requirements

    EN60950-1, Information Technology Equipment-Safety-General requirements

Feature Summary

- Eight XLR/quarter-inch tip-sleeve combo jacks supporting monitoring of monophonic (mono, or single-channel), stereophonic (stereo, or dual-channel) or surround (three-channel) audio signals. The number of signals an individual unit can monitor varies depending on their types.

- LCD display provides textual detail about encoding and operational status.

- LEDs provides a visual display of encoding and operational status.

- Cellular interface to support connectivity exclusively to Nielsen Audio for remote monitoring and update of the unit. The unit supports outgoing calls only.

- Ethernet interface for connectivity to a network using a secure protocol. This supports using a web client interface for control, status monitoring, and log file download. This port may optionally be configured for connectivity to Nielsen .

- Monitoring system support using SNMP Version 2C with read-only attributes and traps for alarms.

- NTP client to synchronize the internal clock with a time source in the Nielsen backend system when remote connectivity is enabled. The monitor uses this to confirm accurate timestamp of encoded material.

- Two type 'A' USB ports on the rear panel that can be used to support streaming encoding and system status information in real-time to a third-party monitoring device. One type 'A' USB port on the front panel which can be used for firmware and configuration updates as well as downloading encrypted log files using a USB mass storage device.

- A set of relays that may be connected to a third-party device to facilitate remote monitoring of alarm conditions. These relays will trigger during an alarm condition of the system or one or more of the physical input channels.
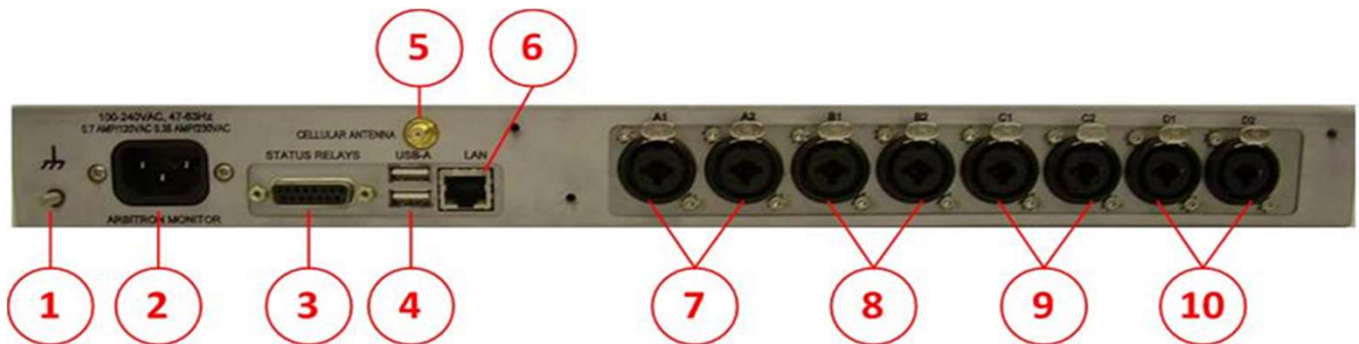
1. Electrical ground post.

2. International Electrotechnical Commission (IEC) 320 input power socket

3. DA-15 female socket, used as an interface for remote status monitoring (pin out and relay diagrams in section 3.3 of the Encoding Monitor Equipment Manual)

4. Two USB 2.0 Host Ports Type 'A' for real-time serial status output

5. SubMiniature version A (SMA) cellular antenna jack

6. RJ-45 Ethernet jack with integrated transmission/reception link status LED indicators.

7-10. Combined female balanced XLR jacks with pushbutton release/unbalanced quarter-inch tip-sleeve phono jacks (combo jacks), to accept input for channels A1 and A2 through D1 and D2

For more information contact your Nielsen representative or visit www.nielsen.com.

PPM ratings are based on audience estimates and are the opinion of Nielsen and should not be relied on for precise accuracy or precise representativeness of a demographic or radio market.