

# Release Notes



## **AMM768** **Audio Multi-Channel Monitor** **071-2172-00**

This document applies to firmware version 1.2X  
and above.

**[www.tektronix.com](http://www.tektronix.com)**



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# Release Notes

This document describes the key features of the AMM768 Audio Multi-Channel Monitor, as well as known problems and behaviors.

## Key Product Features

**User Interface** The user interface offers some of the following features:

**XGA Resolution Display with FlexVu.** The FlexVu interface allows the simultaneous display of four different display tiles for signal monitoring. It also gives you the flexibility to change from the four-display tile to a single display tile. All instruments are equipped with a high-resolution XGA display.

**Presets.** All instruments allow you to save up to 20 instrument presets of configuration settings. To aid access, the presets are organized into 4 groups, with 5 presets per group. To aid identification, you can assign user-defined labels to the presets.

**SDI Input Option** This option facilitates coordinated monitoring of embedded audio signals with the corresponding video, provides audio de-embedding for eight AES/EBU channels, and provides a picture display with closed caption capability.

**Audio Session Display** This display shows the cumulative results of the current audio monitoring session, including digital error conditions, highest true peak, and the number of clips, mutes, over-levels, silences and loudness levels. User-specified threshold values determine over-level and silence conditions, and the duration of the threshold before an alarm is triggered.

**Status Displays** The three status displays provide the following monitoring and analysis capabilities:

**AES Channel Status.** This display presents the AES channel status packet content from the selected channel pair. The data can be presented in binary, XMSN (transmission order) binary, hexadecimal, or text (interpreted) format. The binary and hexadecimal formats provide decoding for user-selectable subsets of the bitstream for detailed analysis of the audio data.

**Dolby Status.** This display presents metadata from Dolby Digital and Dolby E streams. Dolby metadata is divided into two main categories: professional parameters and consumer parameters.

**Alarm Status.** This display shows a comprehensive, color-coded report of audio conditions, format alarms, and digital and frame synchronization errors.

### **Bars, Phase, and Surround Displays**

The audio monitor provides various level and ballistics information in the following audio displays:

**Bars Display.** This display allows you to monitor up to eight channels simultaneously and includes peak and test level indicators, a phase correlation meter, a meter ballistics readout, and in-bar warning messages.

**Phase Display.** This display includes bars, a phase correlation meter, and a Lissajous display for any pair of channels.

**Surround Display.** This display includes bars and shows audio levels, total sound volume, phantom source locations, and dominant sound position.

### **Audio Analysis**

With the appropriate options installed, the modular architecture of the instrument supports monitoring of analog and digital signals (embedded and de-embedded), including AES/EBU, Dolby Digital, and Dolby E, all in one platform. Some of these audio features are described here:

**Headphone Port.** All instruments include a front-panel headphone port that enables you to quickly verify sound quality. Touch-screen controls let you quickly check the stereo pairs shown on the audio bar display.

**Dolby Audio (option).** Dolby options provide extensive support for monitoring Dolby audio content, including auto-sensing of Dolby formats, showing decoded Dolby metadata, and decoding Dolby content and automatically configuring the appropriate audio level and phase displays.

**Dolby Digital (option).** Instruments with option DD (Dolby Digital) monitor and decode Dolby Digital audio, and monitor analog and digital de-embedded audio in AES/EBU formats.

**Dolby E (option).** Instruments with option DDE (Dolby E) monitor and decode Dolby E and Dolby Digital audio, as well as monitor analog and digital de-embedded audio in AES/EBU formats.

**USB Port** All instruments include a front-panel USB 1.1 port for storing and recalling instrument presets. You can share presets between different AMM768 instruments.

## Problems and Behaviors

The following problems and behaviors are organized by the affected operating modes or displays in the instrument:

**Alarms** The following apply to the Alarm operating mode:

**SDI Presence and SDI Lock Alarms.** Many alarms depend on the presence of a signal or input. When that signal or input is missing, the secondary alarms may be misreported as OK.

**Alarm Status Display.** When the unit is powered up with no inputs, many alarms in the status display are incorrectly reported as OK. To prevent this occurrence, ensure that a valid input is connected to the instrument at power up.

**Program Loudness Threshold.** The Program loudness alarm threshold is only supported for Dolby inputs. Although you can configure the alarm threshold for analog program loudness in the analog settings menu, these thresholds do not trigger alarms.

**Audio** The following apply to the Audio operating mode:

**Follows Video Setting for Audio Source** To configure the “audio follows video” mode, Follows Video must be selected in the AUDIO IN menu; otherwise, the configurations in settings for this mode will not be retained.

**Sample Rate Readout in Audio Session Display.** When you switch between audio inputs, the Audio Session Display may show a sample rate greater than zero for an unlocked audio input. In particular, switching between Dolby and AES audio inputs can produce this effect.

**AES Channel Status** The following apply to the AES Channel Status display:

**Data Format Interpretation.** If the channel status data format (professional or consumer) within the selected pair is different for left and right, interpretations in text mode are provided only for the left channel. The binary and hex modes work properly.

**Status Display Fields.** Without valid inputs, the channel status display incorrectly shows multiple highlighted fields. To prevent this occurrence, ensure that a valid input is connected to the instrument at power up.

**Network** The following topics apply to operating the instrument over a network:

**Saving Presets from the Remote User Interface.** You cannot save presets from the remote Web interface. When you attempt to do so, the preset label will change, but the preset contents will remain empty.

**Multi-display Menus.** When you select a multi-display menu using the remote Web interface (such as Status or Main), the local instrument display will not change until you select one of the choices in the multi-display menu.

**Incorrect Initial SNMP displayMode OID Value When in Four-Tile Mode.** When the instrument is first powered up and is set to display four tiles, if you then initiate a “get” command on displayModeTable or on individual OIDs, the instrument returns the value(s) from tile 1 (top left) as the value(s) for all four tiles. To fix this problem, use front panel controls or SNMP commands to change the display modes shown in tiles 2-4. The instrument will then return the correct values for all four tiles when you initiate a “get” command.

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**NOTE.** *After you change the display modes in tiles 2-4, you can change them back to their original display modes. The workaround only requires that the display modes in tiles 2-4 be changed at least once to correct this problem.*

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**Analog Setting Values** In the analog settings menu for some analog meter types, the levels and scaling are displayed in dBr although the displayed values are in dBu.

**Diagnostic** The following applies to Diagnostic operating modes:

**Serial EEPROM Diagnostic.** On rare occasions, the Main Board Serial EEPROM Diagnostics Test can generate a false Fail indication. If this diagnostic test fails but the instrument is able to display the diagnostic log, then perform the diagnostic test again to clear the failure condition.

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