

1. A NATIONWIDE EMERGENCY ALERT SYSTEM (EAS) TEST

FEMA, in coordination with the Federal Communications Commission (FCC) and the National Oceanic and Atmospheric Administration (NOAA), will conduct the first nationwide Emergency Alert System (EAS) Test on Wednesday, November 9, at 2:00 p.m. Eastern.

For EAN and EAT national alerts, the audio and text files are not generated or sent, since EAN/EAT alert audio is live and of undetermined duration. Any Emergency Action Notification (EAN) message must be broadcast without delay and these messages will last an indeterminate length of time. Therefore you need the ability to transmit the digital data and the voice messages that follow for as long a period of time as required.

The EAN still has two components: A text file is generated and most devices will FTP this to the device over IP. The audio component has to be fed discretely due to the undetermined length.



NOTE: DVS-168 Digital E.A.S. Protocol IP based EAS implementations, where an audio wav file is sent to the Evertz keyer will not suffice for this National EAN test. Analog or digital audio from the EAS device must be used to connect audio to the Evertz keyer.

The text part of EAN will still pass on non-VO-wired setups. Trilithic devices additionally require you to check a configuration box to “include text file with an EAN.”

2. EAS CRAWL

The Evertz Logo Inserter, Media Keyer, or character generator unit must support the +E option and be pre-programmed to recognize EAS communication on the specific serial com port being used. (The text part of EAN will still pass on IP based DVS-168 setups. Check with your EAS vendor for setup specifics.)

All EAS enabled Evertz Keyers support EAS over serial.

Many of the Evertz keyers, including the 9725 series, 3025EMC series, QMG 7825DSK series and 7725DSK series also support EAS crawls over TCP/IP (using DVS-168). Devices such as the Trilithic’s EASy Plus and DASDEC support DVS-168 and already interface to the Evertz products.

All EAS crawl properties such as V position, are configured from the local setup panel or via VistaLINK®.

3. VOICEOVER AUDIO

For all EAS or EAN alerts, there is an audio component to the alert. For the media keyers that provide audio processing support, the audio components are typically handled by using the voiceover features. For the keyers and logo inserters without audio processing, other methods can be used for audio. Please refer to the pertinent EAS sections in your Evertz Keyer Operation Manual for setup information.

- If you are using AES audio output from the EAS device, you can connect directly to Evertz keyers supporting discrete AES inputs.
- If you are using analog audio output from the EAS device, an audio A to D converter must be used to connect AES audio to the Evertz keyer.
- For modular Evertz keyers, or 'LG' keyers with no AES inputs, you will additionally need to embed the AES audio upstream into one of the SDI audio groups to be used as the EAS voiceover source.

4. CONFIGURING VOICE OVER AUDIO

Voiceover audio for EAS/EAS is configured on Evertz Keyers by pointing a web browser to the IP address of the keyer and selecting the Audio Setup Link, or via VistaLINK® software.

The voiceover is triggered via external GPI from the EAS device and is configured from the local setup panel on the Evertz keyer, or via VistaLINK®.

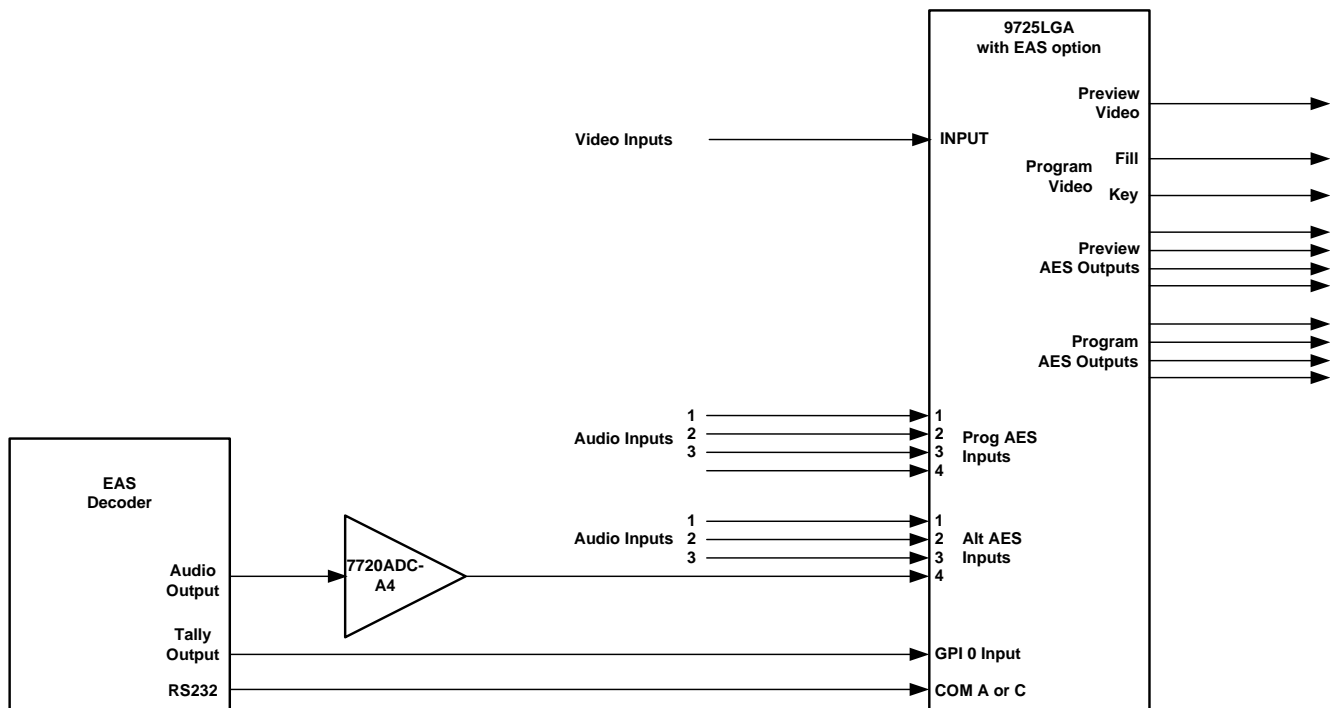


Figure 4-1: EAS Decoder Connection

5. EAS DEVICES

There are many devices in the market space that provide EAS/CAP alerts. Sections 5.1 to 5.4 describe interaction with some of the more common devices and the Evertz products for the EAN/EAT messages.

5.1. TRILITHIC

From the Trilithic end, the analog or digital audio outputs must be used to connect as AES audio to the keyer. If you are using analog audio output from the Trilithic an audio ADC must be used. If the Trilithic has a XLR expansion, then this will output digital audio as mentioned by Trilithic and they will not need an ADC. The audio voiceover on the keyer is triggered via GPI from the Trilithic. The text message component can be via IP or serial.

5.2. DASDEC

For digital operation the DASDEC II must be equipped with an optional AES audio output or the DASDEC II Analog audio needs to be encoded into AES digital audio with an A to D converter. The GPI EAS Audio output of the DASDEC II is used as an input to trigger voice-over activation on the Evertz unit. The Evertz units handle all switching between normal program video/audio to EAS play-out. The DASDEC II offers manual alert forwarding notification with GPI output relay indication of pending alerts. This allows EAS to be forwarded when appropriate, either manually by an operator or by automation. The text message component can be via IP or serial.

5.3. SAGE

For the Sage Digital ENDEC (3644) as well as the original Sage EAS ENDEC (1822), the default filter settings for EAN will work correctly and your station will relay the EAN. It is possible to modify your settings so that the ENDEC will NOT relay the EAN. The Sage white paper, linked in section 7, describes how to verify that your ENDEC still has its default EAN settings.

5.4. TFT

The TFT unit relays the EAS text message to the keyer via serial connection.

The TFT port must be configured to output the type of data that the 9725LG Series Keyer unit is expecting. Please refer to your Evertz operations manual to connect and configure the serial link, audio and GPI controls.

6. MINIMUM REQUIRED FIRMWARE ON EVERTZ KEYERS

HD9725LGA: 2.19 B 1121 - Available on the Evertz Website

HD9725LGA-ND Namedropper: - 2.19 B 1121 or 2.19 b 1169 (Targeted for NBC)

HD9725LGA -L4 Lidia: - 2.19 b 1121 Available on the Evertz Website

QMG: 2.19 B 1121 (General Release)

7725DSK-LG -HD: 2.01 B 3799 (Available on the Evertz Website)

7725DSK-LG (SD only): 2.0 b 826 (Available on the Evertz Website)

7825DSK2-LG-HD: 2.01 B 3789 (Available on the Evertz Website)

3025EMC: > R1.3 b166

7. LINKS TO EAS VENDORS/WHITE PAPERS

DASDEC

http://www.digitalalerts.com/pdf/wpdas-119_3_0.pdf

SAGE

http://www.sagealertingsystems.com/SB_002.pdf

TRILITHIC

<http://eas.trilithic.com/general/110911-ean.html>

TFT

<http://www.tftinc.com/contact.html>

8. EVERTZ TECHNICAL CUSTOMER SUPPORT

For further information, please contact:

Evertz Microsystems Ltd.

Office Hours: 8:30am - 6:30pm EST

Service Line: +1 905 335 7570

Email: service@evertz.com

<http://www.evertz.com/support/>