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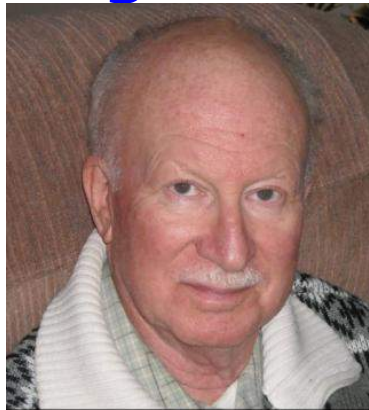
Broadcasters' Desktop Resource

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... edited by Barry Mishkind – the Eclectic Engineer

TECH TIP

A Relay Expander Helps Run Multi-Station Digital EAS Operations



By Dave Mandelbaum

[January 2014] Consolidation has brought a number of economies to broadcasters. But it also creates some special situations where the usual tools just do not quite cover every need. Fortunately, folks like Dave Mandelbaum respond with new products to meet the need.

One of the more important requirements for stations is to get the alert tones and audio from EAS tests and alerts on the air.

In some station clusters, where multiple stations are sharing one Sage Endec, it has been hard to find a reliable, cost-effective way to interface switching their digital-audio programming or Ethernet equipment with the Endec. None of the existing hardware solutions has permitted control of more than one station's digital audio stream, essentially requiring either a separate EAS box for each station or a home-brew interface of some sort.

One solution for the problem is the new DME model Multi-Station Relay Expander. This unit

expands the number of stations controlled from a single Endec from one to up to a total of four. There are two relays for each station assignment, and they may be programmed to operate individually if desired.

MSRE

The DM Engineering Multi-Station Relay Expander units (MSRE & MSRE-RM) are micro-processor-based, six form "C" relay output accessories for the Sage-Endec EAS encoder-decoder.

High quality bifurcated gold over silver nickel contact sealed relays are used.

The MSRE series is compatible with both the original Sage-Endec SE1822 and the new digital 3644. The Endecs have embedded programming that allows three additional stations, in addition to the station controlled within the Endec itself, to be controlled using a Multi Station Relay device such as the MSRE.



The MSRE comes either as a table top unit or mounted in a 1 RU rack-panel.

All digital commands are supplied by the Endec, and the MSRE interprets these commands to select the appropriate relays for control of the external switching or routing devices. Units are available either in a one rack-unit panel configuration (MSRE_RM) or as a table top unit (MSRE).

Front panel LED indicators are provided for “Power” and “Station” left and right relay activation during an EAS event, and a recessed front panel “Test” switch is also provided for aiding in the system setup and testing.

The outputs are connected using large 5 mm Eurostyle screw-type pluggable connectors for wiring ease and connection reliability.



Power is supplied from an included 9V DC 500 mA power module. A 7-foot data cable for connection to a Sage-Endec COM port is included.

You can find [more information online here](#).

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