

EAC-4C
Four-Channel Evacuation-to-Alert Converter

Section: Conventional Initiating Devices

GENERAL

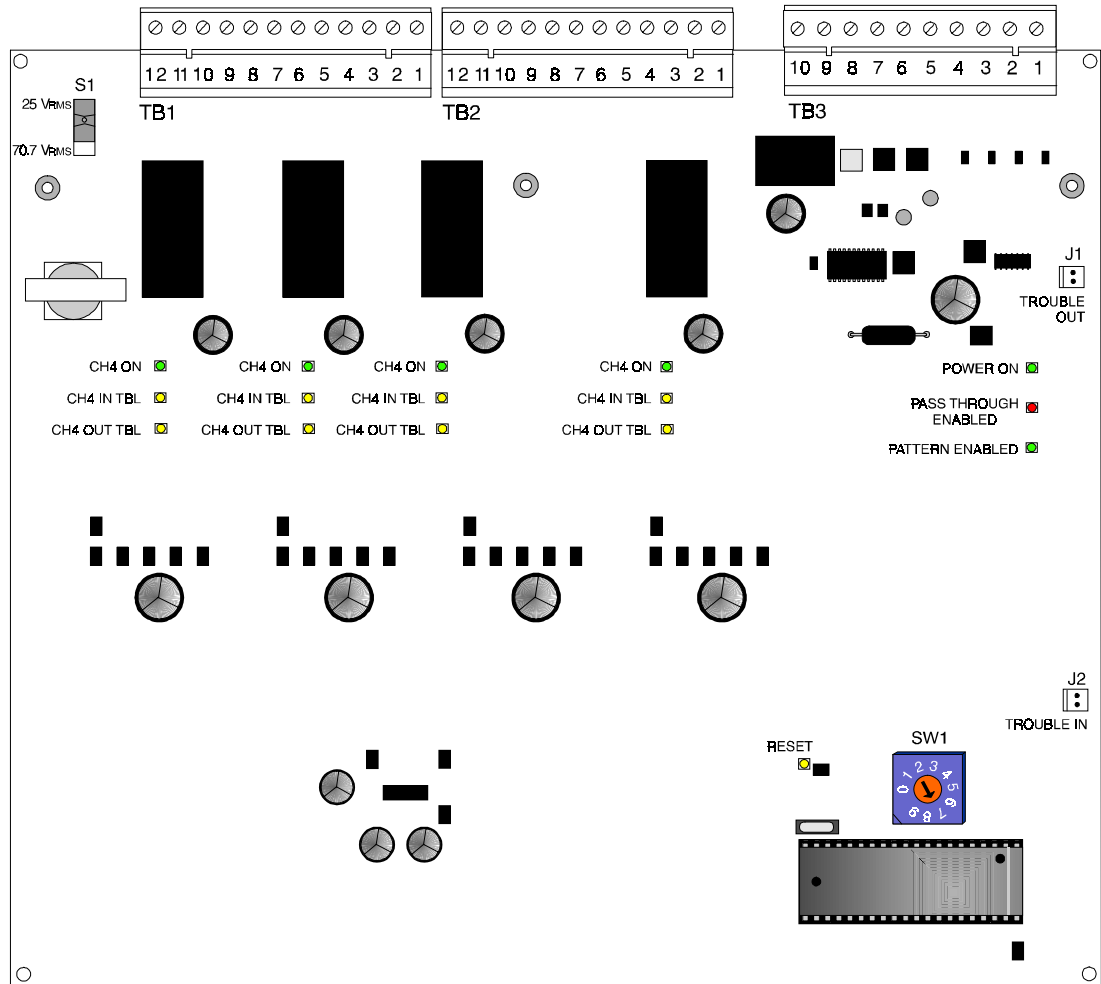
The EAC-4C Four-Channel Evacuation-to-Alert Converter converts the amplified steady or slow-whoop evacuation tone of an AMG, or steady tone of an ATG, into a user-defined alert or evacuation signal, eliminating the need for extra audio amplifiers in a two-stage audio-activation environment. The EAC-4C provides a pass-through input which allows the *entire* evacuation signal (voice or tone) to pass through.



CS118/CS733

FEATURES

- Four outputs.
 - Plug-in socket relays for easy replacement.
 - Pass-through input.
 - Temporal, ULC Alert Standard, and pulse tone options.
 - Adjustable rotary switch.
 - Trouble relay and Form-C trouble outputs.
 - Four AC/DC supervised output circuits.
- Per channel: one relay closed; one input trouble; and one output trouble status LED.
 - Power on LED.
 - Pattern enabled LED.
 - Pass-through LED.
 - Mounts in either a CHS-4L or CHS-2 chassis.



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118

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APPLICATIONS

The AM2020/AFP1010 Voice Alarm Multiplex

Each EAC-4C may be connected to up to four audio amplifiers used in an AM2020/AFP1010 Voice Alarm Multiplex. Audio amplifiers must be connected to the same audio message generator (AMG). Each AMG can support up to 50 audio amplifiers.

The Voice Alarm System 5000 and AFP-300/400 Voice Alarm System

Each EAC-4C may also be connected to up to four audio amplifiers used in the Voice Alarm System 5000 or AFP-300/400 Voice Alarm System. Audio amplifiers are connected to an AMG. Each AMG can support up to 50 audio amplifiers.

CONNECTING TO AUDIO AMPLIFIERS

The EAC-4C converter may be connected to up to four audio amplifiers (AA-30, AA-100, or AA-120). The same low-level audio input source must be connected to all audio amplifiers feeding the EAC-4C. The audio amplifier high-level output connects to the high-level audio input channels on the EAC-4C. The on-board microcontroller samples the audio input on Channel One and determines the mode of operation based on the position of the rotary switch. Audio input must always be connected to all channels for the EAC-4C to operate correctly. A minimum of two amplifiers is

required when using more than one audio outputs. One of the audio amplifiers must be dedicated to Channel One input.

INSTALLATION

Power – The EAC-4C requires 24 VDC regulated power. Power is connected at TB3 terminal 5 and 6 from the main power supply (MPS-24A or MPS-24B).

Mounting – The EAC-4C can be mounted in either the CHS-4L chassis assembly or in the CHS-2 chassis. The EAC-4C may be mounted in the CHS-4L chassis using the provided hardware (standoffs and screws). When installed in this configuration, the EAC-4C takes two of the four available bays in the CHS-4L. The remaining two locations may be used for mounting additional equipment such as the AVPS-24 Audio Visual power supply, AA-30 audio amplifier, or audio message/tone generator. Alternatively, the EAC-4C mounts to the CHS-2 chassis, which is positioned in the bottom corner of the cabinet.

POWER REQUIREMENTS

Standby: 60 mA. **Alarm:** 160 mA.

ROTARY SWITCH POSITIONS

The functional operation of the EAC-4C is based primarily on the position of the rotary switch. The table below describes available options.

| ROTARY SWITCH POSITION | EAC-4C INPUT SIGNAL SOURCE DESCRIPTION | EAC-4C OUTPUT SIGNAL DESCRIPTION | USE | OUTPUT CHANNELS |
|------------------------|--|--|---|----------------------|
| 0 | <i>DO NOT USE</i> | <i>Not applicable.</i> | <i>Not applicable.</i> | 1-4 ON continuously. |
| 1 (Pattern) | Amplified Steady Tone | 0.5 sec. ON, 2.5 sec. OFF (20 ppm) | Alert Signal | 1, 2, 3, and 4 |
| 2 (Pattern) | Amplified Steady Tone | 0.5 sec. ON, 0.25 sec. OFF (120 ppm) | Non-Standard Evacuation Signal | 1, 2, 3, and 4 |
| 3 (Pattern) | Amplified Steady Tone | 0.5 sec. ON, 0.5 sec. OFF, 0.5 sec. ON, 0.5 sec. OFF, 0.5 sec. ON, 1.5 sec. OFF, (15 cycles per minute) | Standard Temporal Pattern Evacuation Signal | 1, 2, 3, and 4 |
| 4 (Pattern) | Amplified Steady Tone | 1.75 sec. ON, 4 sec. OFF (10.4 ppm) | ULC-Recommended Alert Signal | 1, 2, 3, and 4 |
| 5 (Pattern) | Amplified AMG Slow Whoop | 0.5 sec. ON, 0.5 sec. OFF, 0.5 sec. ON, 0.5 sec. OFF, 0.5 sec. ON, 1.5 sec. OFF, (15 cycles per minute) | Standard Temporal Pattern Evacuation Signal | 1, 2, 3, and 4 |
| 6 | Amplified AMG Slow Whoop | 0.5 sec. ON, 0.5 sec. OFF, 0.5 sec. ON, 0.5 sec. OFF, 0.5 sec. ON, 1.5 sec. OFF, (15 cycles per minute) | Standard Temporal Pattern Evacuation Signal | 1 and 3 |
| | | 0.5 sec. ON, 3.5 sec. OFF (15 ppm) | Alert Signal | 2 and 4 |
| 7 | Amplified AMG Slow Whoop | 0.5 sec. ON, 3.5 sec. OFF (15 ppm) | Alert Signal | 1, 2, 3, and 4 |
| 8 | <i>Not presently used.</i> | <i>Not applicable.</i> | <i>Not applicable.</i> | 1-4 ON continuously. |
| 9 | <i>Not presently used.</i> | <i>Not applicable.</i> | <i>Not applicable.</i> | 1-4 ON continuously. |