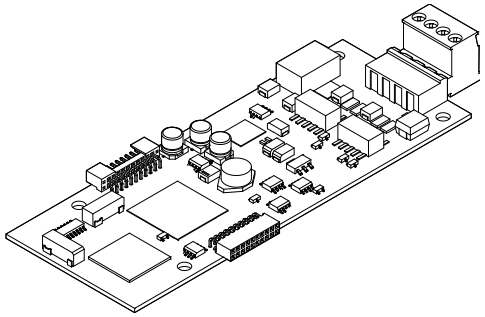
ACHS Audio Channel Selector Card Installation Sheet



Description

The ACHS Audio Channel Selector Card converts digital audio from an EAEC card into an analog preamp signal. A VM-1 control panel supports up to three ACHS cards.

Installation

WARNING: Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

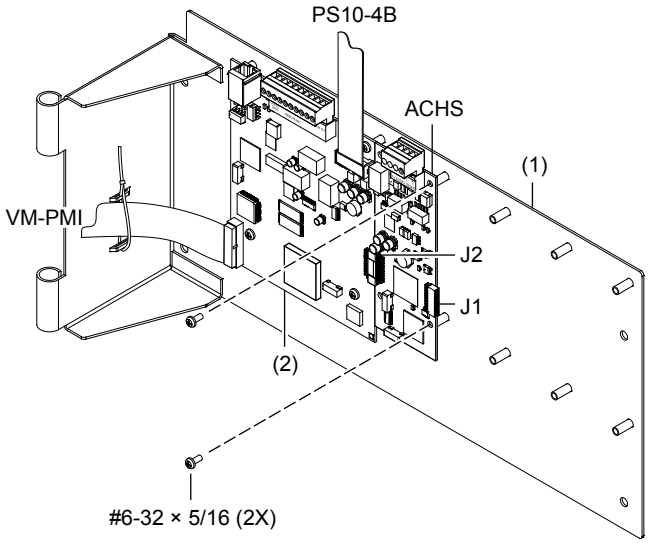
Caution: Circuit boards are sensitive to electrostatic discharge (ESD). To avoid damage, follow ESD handling procedures.

Note: If the system includes a VM-MFK telephone controller, it must be installed immediately to the right of the EAEC. The ACHS card is installed to the right of the telephone controller.

To install an ACHS card:

1. Swing open the audio enclosure to access the audio mounting bracket.
2. Insert J2 into the mounted audio controller. Compatible controllers are listed below. Figure 1 shows the EAEC.
   - EAEC card: Connector J5
   - AMK-RN interface card: Connector J2
   - VM-MFK telephone controller card: Connector J1
3. Secure the ACHS card using the screws provided.
4. If you are installing another ACHS card, insert J2 on the next card into J1 on the previously installed card, and then secure it using the hardware provided.

Figure 1: Connecting the ACHS to an audio controller card



(1) Audio mounting bracket (2) Audio controller card

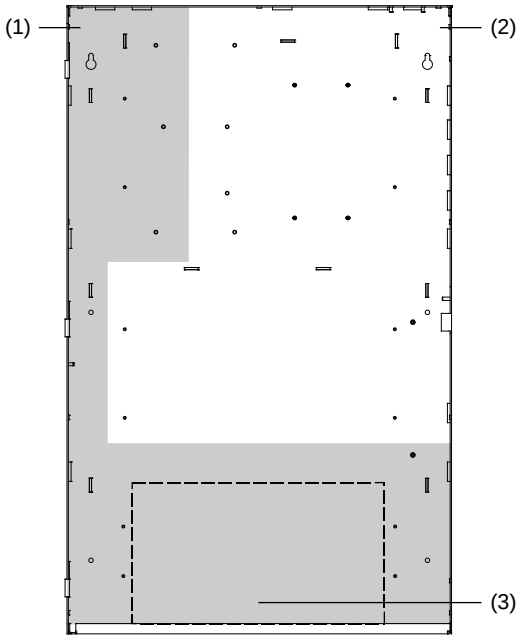
Wiring

Connect ACHS field wiring as shown in Figure 3 and Figure 4. See Figure 5 for locations and descriptions of the audio riser, connectors, and LEDs on the ACHS.

Notes

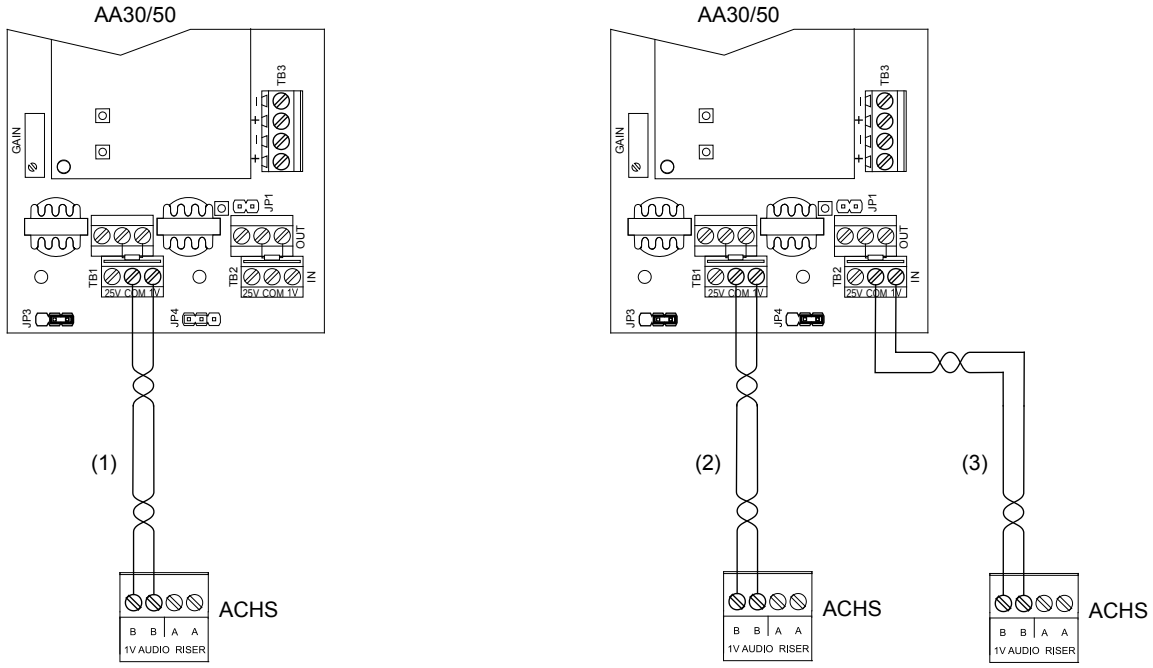
- All wiring is supervised and power-limited.
- Maintain 0.25 in. (6 mm) separation between power-limited and nonpower-limited wiring at all times. Keep nonpower-limited wiring in the shaded area shown in Figure 2. Secure the wiring to the cabinet using nylon cable ties.
- Shielding is required when an audio riser and telephone riser share the same conduit.
- Terminate Class B audio risers with a 15 kΩ EOLR. Do not install an EOLR if the riser is wired Class A.

Figure 2: Power-limited and nonpower-limited wiring



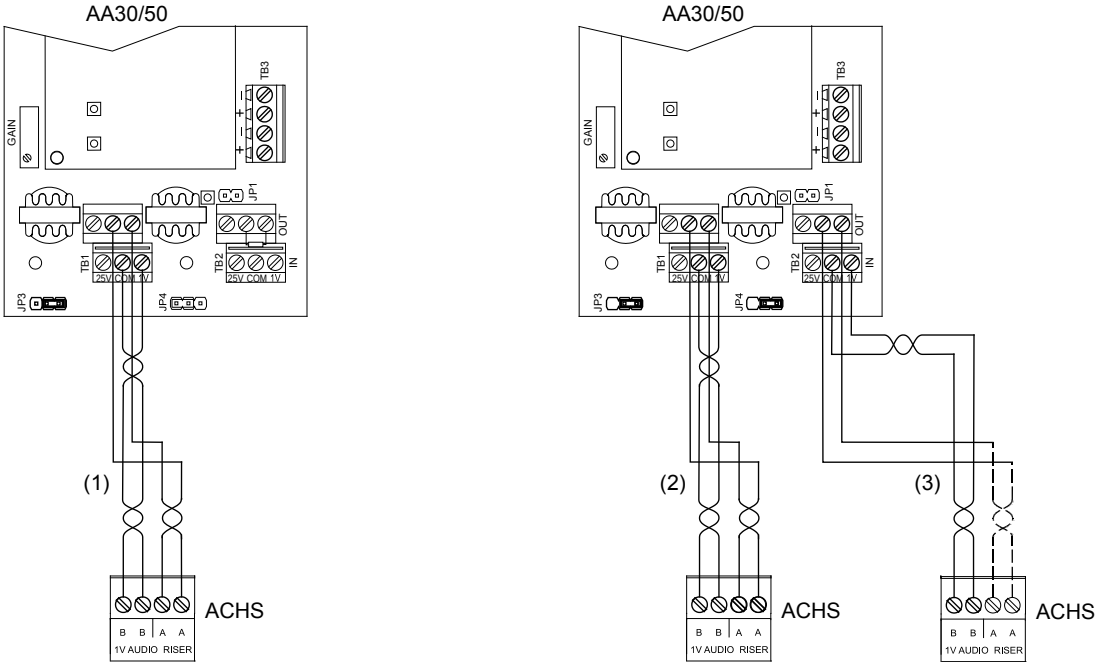
(1) Nonpower-limited wiring area
(2) Power-limited wiring area
(3) Battery area

Figure 3: Class B wiring



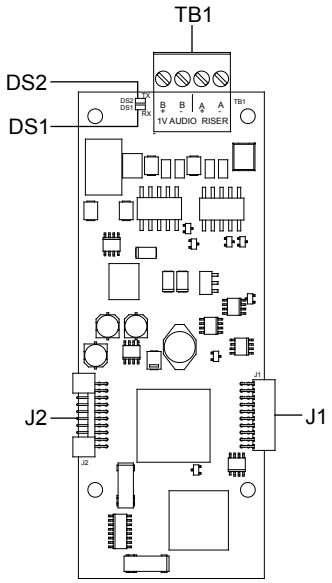
(1) Channel 1 audio in
(2) Channel 1 audio in, Alert
(3) Channel 2 audio in, EVAC

Figure 4: Class A wiring



(1) Channel 1 audio in
(2) Channel 1 audio in, Alert
(3) Channel 2 audio in, EVAC

Figure 5: ACHS connector and LED descriptions



TB1 Audio riser terminal
DS1 RX LED - indicates receive activity
DS2 TX LED - indicates transmit activity
J1 ACHS to ACHS connector
J2 Audio controller connector

Specifications

Voltage	24 VDC
Current	
Standby	47 mA
Alarm	64 mA
Circuit	
Designation	Class B (Style Y) or Class A (Style Z)
Output	1 VRMS analog signal
Resistance	100 Ω max.
Capacitance	0.2 µF
EOL resistor	15 kΩ
Wire size	12 to 18 AWG (1.0 to 4.0 mm²), twisted pair [1]
Amplifier capacity	Fifteen AA30/50 amplifiers in parallel per ACHS
Compatible controllers	EAEC, AMK-RN, VM-MFK
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

[1] Shielded twisted pair when the audio riser and a telephone riser share the same conduit

Regulatory information

Environmental class	UL: Indoor dry

Contact information

For contact information, see www.kiddelifesafety.com.

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