











Audio Visual Indicator Mk2

The Audio Visual Indicator (AVI) is an illuminated warning sign that produces distinct audible and visual indication. It is designed for use with fire alarm or gaseous fire extinguishing systems, or in other applications where clear audio-visual warning is required. When activated, the AVI's internal LEDs illuminate the faceplate lettering and the internal loudspeaker produces audible warning signals.

Features

- ISO 8201 Evacuate tone
- AS 2220 Alert and Evacuate tones
- General purpose "RH3" tone
- Stepped Alert tone to reduce discomfort when an alarm is initiated
- Optional synchronisation between units
- Very low current consumption
- Bright, even illumination
- Red or yellow LED versions (LED colour determines lettering colour)
- Field configurable
- 2-wire or 3-wire operation

- High text visibility when activated, low when LEDs are off
- Range of standard faceplates available
- Separate top and bottom sections for 2 stage or alternate warnings
- Two part unit with snap-on cover is easy to install
- Ceiling or wall mounting
- Designed to comply with AS 1603.11

Configuration Options

Illumination of the top and bottom sign sections and selection of the tones to be used is field programmable using internal links. This way, the AVI can readily display either two-stage or alternate warnings. Up to four lines of text may be accommodated on the faceplate, although use of two or three lines is standard. In addition, the tone volume can be reduced 10dB by adjusting a link. For situations with low ambient light, the sign illumination can be reduced by snipping out a resistor in each LED Board driver. This also reduces current consumption. Expansion options include an LED board kit to convert a red 2-line unit to 3-line and a back-box kit to expand a red 2-line unit to ceiling mounted, double sided format.

Specifications

Mechanical

Dimension

Weight

Mounting Wall - Ø6 mm x 4 holes 280 (W) x 160 (H) mm

Ceiling - Ø6 mm x 2 holes 140 mm 316 mm (W) x 206 mm (H) x 85 mm (D) 2kg - less faceplate, 0.25kg faceplate

Housing Material 1.2 mm Mild Steel

Housing Finish Baked epoxy powdercoat, Cream Wrinkle BFF998CW

Faceplate Material Polycarbonate with 32 mm high (min) lettering

Electrical

Supply Voltage 19.2 to 28.8 Volts dc

Operating Current 60 mA average (2 lines & "loud" volume) 120 mA average (4 lines & "loud" volume)

Peak Operating Current Less than 2 x average current

Supervision Current $2\mu A \text{ max. } 25^{\circ}\text{C}$, $5\mu A \text{ max. } 50^{\circ}\text{C}$ at < 6Vdc

Audio

Sound Level 90 dBA nominal "loud" at 1 metre on axis

80 dBA nominal "quiet" at 1 metre on axis

Visual

Luminance 300 cd/m² nominal "full"

100 cd/m² nominal "dim" (resistor snipped)

Flash Rate 1Hz nominal, synchronised to tone

Environmental

Operating Temperature 0 °C to 50 °C Storage Temperature 0 °C to 70 °C

Relative Humidity Up to 95% (non-condensing)

Part Numbers

AVI (no faceplates)

FP0853 AVI MK2, 2 LINE, RED, 24V FP0854 AVI MK2, 3 LINE, YEL, 24V

Expansion Kits

To add extra red LED Board(s), for extra text line(s)

KTO292 AVI Mk2, Red LED Board plus Mounting Hardware To expand FP0853 to a ceiling mounted, double sided, 2 line red warning sign

KT0293 AVI Mk2, Red Double Sided Expansion Kit

Faceplate Options

Part numbers as below or to special order. All faceplate text is in block capitals

Clear Text on Black Background

FA2300 Fire Alarm, Evacuate Area, 2 line Red FA2301 Fire Alarm, Do Not Enter, 2 line Red

FA2302 Do Not Enter, CO2 Gas Discharged, 3 line Red
FA2303 Do Not Enter, FM-200 Gas Discharged, 3 line Red
FA2304 Do Not Enter, INERGEN Gas Discharged, 3 line Red

FA2310 Warning, Fire Door Closing, 3 line Red

Black Text on Clear Background

FA2306 CO2 System Inoperative, 3 line Yellow FA2307 FM-200 System Inoperative, 3 line Yellow FA2308 INERGEN System Inoperative, 3 line Yellow

Installation

Installation is quick and easy. Attach the AVI backplate to a wall or ceiling in the desired position and wire to the controlling device (eg. fire alarm system). The circuit may use polarity reversal supervision or load supervision and may be two-wire or three-wire (to switch two-stage or alternate warning). Common positive or common negative circuit configurations can be used. The AVI automatically identifies the wiring configuration and interprets the signals accordingly. Common negative wiring enables multiple AVIs to be controlled and supervised from ancillary outputs of fire indicator panels such as F3200. The number of AVIs that may be connected on a supervised two-wire circuit is limited by the current that the fire alarm system output can source. Following mounting and wiring, the required faceplate is fitted to the cover and the cover is simply snapped into place over the backplate. An option for a 2-line red AVI adds a second box and LEDs, mounted back-to-back with the master unit, so that illuminated 2-line text is visible from both sides (2 faceplates are required).

Synchronisation

Synchronisation is sometimes necessary to achieve alarm signal clarity where multiple AVI units are operated in common or adjacent areas. The synchronisation feature allows all AVI units on the same cable to flash together and produce synchronised Alert and Evacuate tones. This is activated by connecting together the "Sync" terminals (an additional wire is required between units).