

# EM420E1

## Elevator Message Annunciator

### General Descriptions

The EM420E1 is a message annunciator specifically designed for elevator applications. By monitoring the control signals from the elevator's controller, the EM420E1 makes different announcements such as the floor number, the moving direction, opening/closing door, and certain warning/emergency messages. Some type of announcements may have higher priority than others. For example, emergency messages may have the highest priority among all announcements.

The EM420E1 incorporates a VM420E1 voice module and a VM120 interface board in a rugged metal enclosure. The VM120 is responsible for interfacing with the elevator's controller, converting the control codes and prioritizing the announcements. The VM420E1 is responsible for making the announcements. Hardware connections are made through industrial type terminal blocks located on the front panel of the enclosure.

### Technical Specifications

#### Control Signal Definition

Decimal or binary control input, conforming to the new micro-controller standards for elevators.

#### Input Protection

Triggered by DC voltages, the input interface is isolated via built-in opto-couplers.

#### Interface Connector

18-position industrial type terminal blocks on 5mm centers.

#### Output Power

Max. 2W, use a 4 ~ 8 Ohm speaker.

#### Supply Voltage

12VDC or 24VDC

#### Operating Temperature

-5°C ~ +50°C

#### Physical Dimensions

267mm x 172mm x 42mm

### Terminal Block Definitions

From left to right:

- #1 = COMMON
- #2 ~ #5 = Special Message Code Input
- #6 ~ #13 = Floor Announcement Code Input
- #14 = Strobe Input
- #15 ~ #16 = Speaker Output
- #17 = Power Supply Input
- #18 = Power Supply Ground

### Message Code Table (Example)

INA	INB	INC	IND	Message
0	0	0	0	(none)
1	0	0	0	Going up.
0	1	0	0	Going down.
1	1	0	0	Arriving basement.
0	0	1	0	Arriving 1st floor.
1	0	1	0	Arriving 2nd floor.
0	1	1	0	Arriving 3rd floor.
1	1	1	0	Arriving 4th floor.
0	0	0	1	Arriving 5th floor.
1	0	0	1	Arriving 6th floor.
0	1	0	1	Arriving 7th floor.
1	1	0	1	Arriving 8th floor.
0	0	1	1	Closing door.
1	0	1	1	Overload, the last person please step out.
0	1	1	1	Out of order, please call the service dept.
1	1	1	1	Fire, fire, please use stairways to exit.