

Cautions



ELECTRICAL HAZARD: Disconnect power from equipment prior to making any internal adjustments. Service should only be performed by qualified personnel.

FRAGILE: Inspect the equipment prior to installation. Do not install the equipment if damage is apparent. Do not attempt to disassemble this equipment. If damaged, return to the supplier.

ELECTROSTATIC HAZARD: This is sensitive electronic equipment. Apply safe ant-static practices when handling this equipment.

CIRCUIT LIMITATIONS: The maximum number of devices connected to a single alarm zone is limited by the control and indicating equipment, and may be limited by local regulations.

Introduction

641 addressable audio/visual alarm devices are multi-tonal alarms, suitable for connection to 2-wire addressable fire detection and alarm systems. Four distinct alarm tones can be selected during installation.

641 alarm devices are loop-powered. Activation is initiated either by a dedicated initiation message from the control and indicating equipment, or optionally when the control and indicating equipment enters the Alarm Condition. Up to 32 devices can be connected to each alarm zone loop.

These instructions provide trained installation personnel with details to install and commission 641 audio/visual alarm devices for optimum performance.

Preparation

Before commencing installation, ensure all equipment and tools to mount and connect the equipment are available, such as drills, mounting screws, cables and ladders.

Installation

Backbox

1. Remove the audio/visual alarm device from the backbox using a small screw driver to disable to latch, then twisting the device counter-clockwise (see Fig. 1).

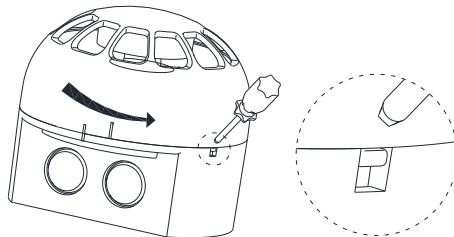


Fig. 1: Disconnect audio/visual alarm device from the backbox

2. Mount the backbox directly onto a flat surface using fixing screws that are suitable to securely fix the backbox to the surface.

Note: Weather-proof models 641-002, 641-004 and 641-006 may be mounted outside.

Wiring

The terminals accept (0.4 ~ 2.5) mm² conductors.

Note: Wiring for waterproof models (641-004, 641-005, and 641-006) should be multi-strand conductors to improve the flexibility of the conductors.

1. Feed the addressable loop conductors through the knockouts on the side or rear of the backbox.
2. Strip the conductor insulation to expose 5 mm of the conductor.
3. Connect the conductors to the terminal connector (see Fig. 2).

WARNING: Take care to ensure the insulation does not get clamped by the terminal contact.

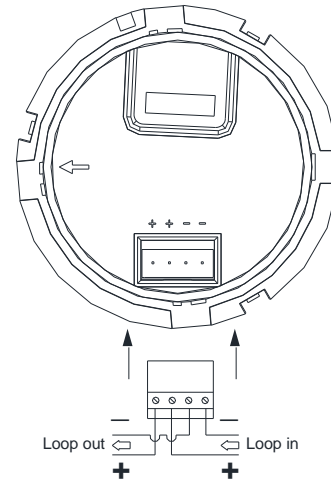


Fig. 2: Terminal loop wiring connections

Audio/Visual Device

Notes:

1. DIP switches 1 ~ 5 are used to set the device address.
 2. DIP switch 6 is not used.
 3. DIP switches 7 and 8 are used to select the audio alarm output signal.
1. Select the device address and set the address as shown in Table 1 by setting the DIP switches located on the underside of the body.
 2. For audio output models, select the audio output signal as shown in Table 2 by setting the DIP switches 7 and 8 located on the underside of the body.
Note: Cut off the power first, whenever the DIP switch need to be adjusted.
 3. Align the device alignment mark with the short alignment mark in the backbox, as shown in Fig. 3.
 4. Mate the body onto the backbox and rotate it clockwise to secure it. The long alignment marks should be aligned.

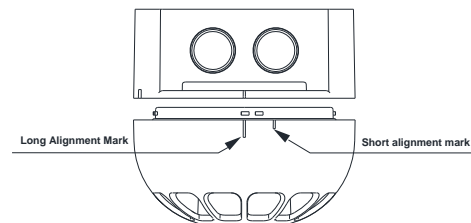


Fig. 3: Fitting the audio/visual alarm device to the backbox

Commissioning

Audio/Visual Alarm Device

1. Ensure all releasing devices and extinguisher systems are disabled during the commissioning period.
2. Configure the control and indicating equipment to send an initiation message to the device during the Alarm condition.
3. Activate an Alarm condition at the control and indicating equipment.
4. Check that the audio/visual alarm device operates.
5. Reset the control and indicating equipment.
6. Check that the audio/visual alarm device stops operating.

Final Conditions

Ensure all the alarm signal services, releasing devices and extinguisher systems disabled for the commissioning are returned to their previous condition.

References

Document	Description
31-0074	641 addressable audio/visual alarm datasheet



Table 1: DIP switch address settings

Sounder Address Settings								
ON →		1	2	1 2	3	1 3	2 3	1 2 3
	94	95	96	97	98	99	100	101
ON →	4	1 4	2 4	1 2 4	3 4	1 3 4	2 3 4	1 2 3 4
	102	103	104	105	106	107	108	109
ON →	5	1 5	2 5	1 2 5	3 5	1 3 5	2 3 5	1 2 3 5
	110	111	112	113	114	115	116	117
ON →	4 5	1 4 5	2 4 5	1 2 4 5	3 4 5	1 3 4 5	2 3 4 5	1 2 3 4 5
	118	119	120	121	122	123	124	125

Table 2: DIP switch audio output signal setting

Audio Output Signal	Switch 7	Switch 8
United Kingdom Frequency: Alternating 800 / 970 Hz Period: 500 ms each tone	Off	Off
Germany (DIN 33 404) Frequency: Ramp (1200 ~ 500) Hz Period: 1 s	Off	On
France (NFS 32-001) Frequency: Alternating 554 / 440 Hz Period: 100 ms (554 Hz) / 400 ms (440 Hz)	On	Off
General Frequency: Alternating 2400 / 2850 Hz Period: 250 ms on, each tone	On	On

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