

### Installation Instructions

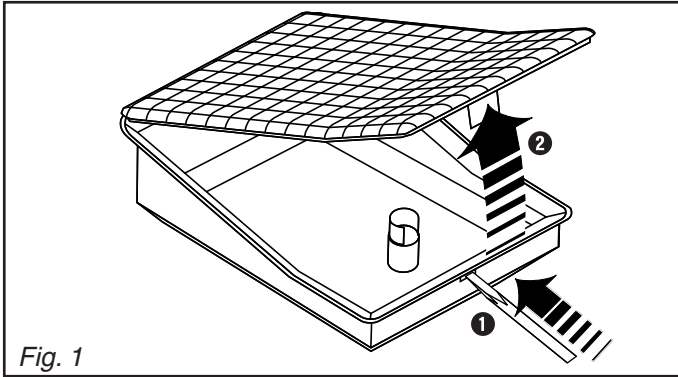


Fig. 1

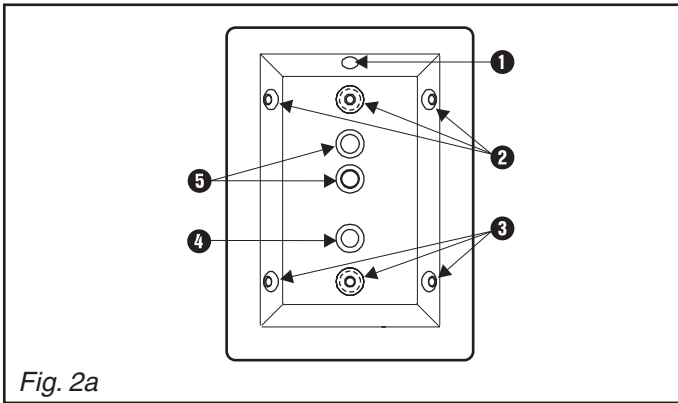


Fig. 2a

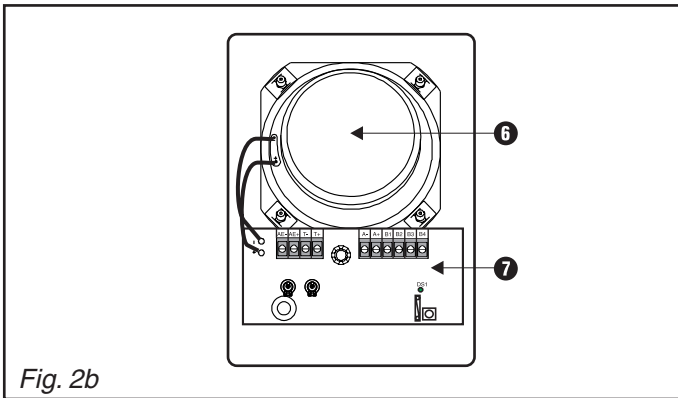


Fig. 2b

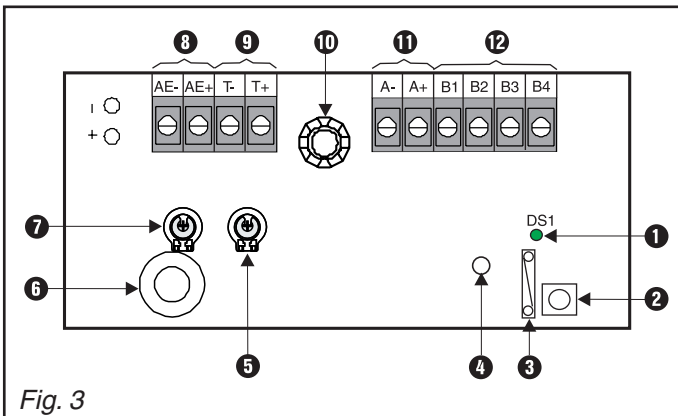


Fig. 3

### 1. Product description

The WAC 12 is used to verify audio alarms. It is fitted with a speaker and microphone. It can be controlled through the E-Bus, with the audio signal connected to the central control unit via an audio module (e.g. WMA 11). The WAC 12 also serves as a master for the unaddressable WAC 11 and WAS 11.

### 2. Supply package

The WAC 12 UK package contains the following

- One WAC 12
- One WLC 12 UK language kit complete with:
  - Installation instructions.

### 3. Mounting instructions

The WAC 12 is designed for mounting in dry indoor rooms. To ensure good acoustics, note the following points.

- Mount 2 to 2.5 m above floor level.
- Maintain adequate distance from noise sources (ventilation openings, fans etc.).
- Direct towards the centre of the space to be monitored.
- Do not mount on vibrating surfaces.
- The maximum length of the audio connection between the WAC 12 and central control unit is 200 m.

#### 3.1 Opening the housing (Fig.1)

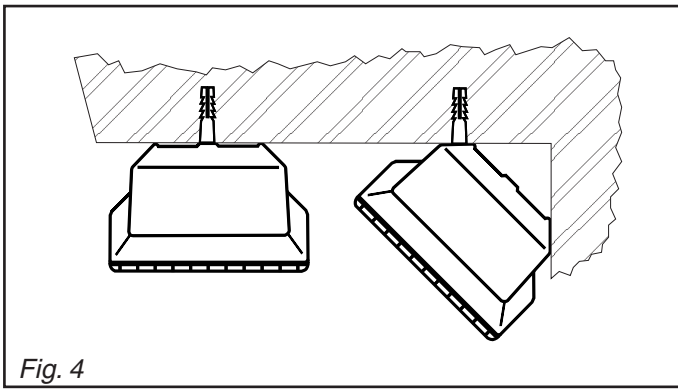
- 1 - Using screwdriver ①, press locking tab to release.
- 2 - Lift off cover ②.

#### 3.2 Product overview (Fig. 2)

- Knockouts ①, ⑤ for cable inlet.
- Knockouts ②, ③ for attachment of housing.
- Knockout ④ back tamper contact.
- Speaker ⑥.
- WMC 12 circuit board ⑦.

#### 3.3 WMC 12 circuit board (Fig. 3)

- E-Bus connection ⑫.
- Audio connection ⑪ to central control unit.
- Audio connection ⑧ to WAC 11 or WAS 11.
- Tamper input ⑨ for WAC 11 or WAS 11.
- LED ①, flashes when E-Bus is o.k.
- LED ④, flashes to outside during monitoring (microphone active).
- Address button ②.
- Switch ③ for "microphone active" LED.
- Tamper switch ⑩.
- Microphone ⑥.
- Potentiometer ⑤ for speaker volume.
- Potentiometer ⑦ for microphone sensitivity.



### 3.4 Mounting (Fig. 4)

- The housing can be mounted flat or at 45°.
- Always use two attaching points which are one above the other, including for corner mounting.

## 4. Wiring

### 4.1 E-Bus (Fig. 5a)

The use of type 24 AWG 7x0,2 mm dia. cable is recommended. The E-Bus cable shall not be more than 500 m long. The WAC 12 must be connected to the central control unit via the E-Bus (B1-, B2, B3, B4+). It can be routed parallel to other accessories.

### 4.2 Tamper (Fig. 5a)

The tamper inputs T- and T+ must be short-circuited if not wired to a WAC 11 or WAS 11.

### 4.3 Audio (Fig. 5b)

To avoid side-tone, a twisted core pair at least 0.6 mm in dia. must be used. The audio connection to the central control unit must not be more than 200 m long. The audio output depends on the cable length and core cross-section. The audio connection (A- and A+) of the WAC 12 must be connected to the audio input (A- and A+) of the central control unit (e.g. WMA 11).

#### 4.3.1. WAC 11 and WAS 11 (Fig. 5c)

The audio outputs (A- and A+) of the WAC 11 and WAS 11 are connected to the audio inputs (AE- and AE+) of the WAC 12. The tamper outputs (T,T) of the WAC 11 and WAS 11 are connected in series to the tamper inputs (T- and T+) of the WAC 12. Where several WAC 11 are used, all WAC 11 must be connected directly to the WAC 12 to obtain optimum performance (Fig. 5d).

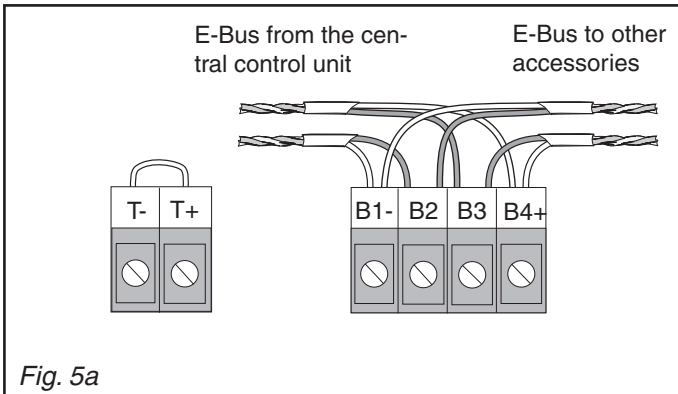


Fig. 5a

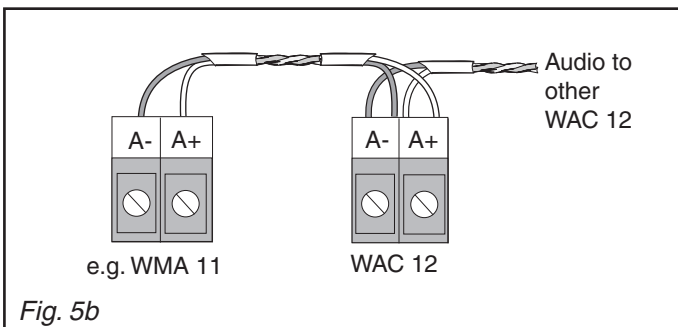


Fig. 5b

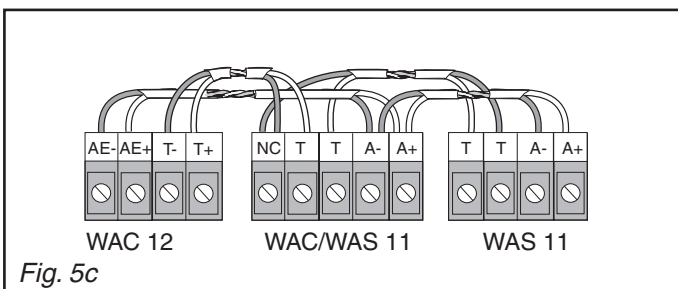


Fig. 5c

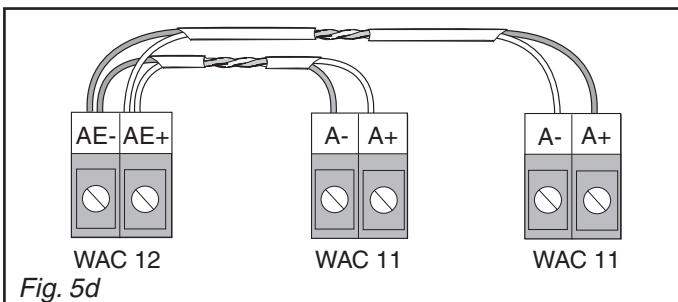


Fig. 5d

## 5. Start-up

### 5.1 Microphone sensitivity

The sensitivity of the microphone must be matched to the room and ambient noises (potentiometer 7, Fig. 3). Where sensitivity is reduced, the reception of quiet signals naturally reduces. The following ranges are normally obtained.

- Approx. 3.5 m with potentiometer on min.
- Approx. 6.5 m with potentiometer on mid position.
- Approx. 8.5 m with potentiometer on max.

### 5.2 Speaker

Set the required volume using potentiometer (6, Fig. 3).

### 5.3 LED „microphone active“

- Switch (5, Fig. 3) open: LED active.
- Switch (5, Fig. 3) closed: LED inactive.

## 6. Close housing

- 1 - Engage cover at the top in the openings in the base of the housing.
- 2 - Close the cover by pushing downwards until the locking tab engages.

## 7. Technical data

Supply	Through E-Bus
Power consumption, quiescent state	5 mA
Power consumption, "challenge" state	24 mA
Operating temperature	-10°C to +55°C
Housing material	ABS
Dimension in mm	H 145 x B 105 x T 70
Safety class	IP 30
Weight	230g