

SPCF-AB-12W-80-EN54

EN54 A&B Ceiling Loudspeaker

Installation Guide





- 12W 100V Loudspeaker
- Size 8" (200mm)
- Dual 6W A & B Internal loudspeakers
- Quick Mount
- Shock-resistant Housing
- High Efficiency
- Excellent Sound Quality
- Fully Certified to EN54-24

The SPCF-AB-12W-80-EN54 is a 12W 100V flush mount ceiling loudspeaker, which is fitted internally with two independent loudspeaker chassis and 100V transformers, providing excellent sound quality with speech and background music, and which is certified to EN54-24.

The two independent internal loudspeakers enable one of these loudspeakers to be connected to both the A and B loudspeaker lines in a Voice Alarm system, and to provide full independent A&B operation at low cost. In the case of a failure of either loudspeaker or loudspeaker line then the dual redundant operation will enable the loudspeaker to continue operating, simply with a reduction in the audio SPL of 3dB. The loudspeaker's 100V transformers provide three power adjustment tappings of 2 x 6W, 2 x 3W, and 2 x 1.5W.

The SPCF-AB-12W-80-EN54 has a powder coated metal chassis and grille, with the high quality finish giving good long-term protection and resistance to corrosion. The loudspeaker is supplied with a rear fire dome, and its enclosure is ingress protection rated to IP21C. As standard the loudspeaker is coloured to match RAL9010 'Pure White'. Alternately, the loudspeakers can be supplied in any four-digit RAL or NCS colour, as a special order.

Spring clamps provide quick and easy ceiling mounting, with a possible ceiling thickness of 10mm to 45mm. An inner ring attachment prevents the grille from falling. The 100V loudspeaker line cabling is connected to a two-pin ceramic block (maximum cable cross section is 8mm²), using rubber grommets. For additional reliability, a thermal fuse is fitted and the loudspeaker chassis is damp-resistant.

Please note that although thin ceilings can be used as a mounting surface, it should be ensured that the ceiling thickness and strength are appropriate to the weight (3.43 kg) of the loudspeaker, and to the thickness and weight of the 100V line cable.

Enhanced Acoustic Simulator for Engineers (EASE) data for this loudspeaker is available on request.



Certified to EN54-24:2008. Certificate No. 1438-CPR-0557 Measurements according to DIN IEC 268-5 RoHS compliant (2011/65/EU)

This product must be disposed of in accordance with the WEEE directive.

Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings. Type A Rated voice voltage: 100V Rated voice/noise power: 2 x 6W

Failure to use the equipment in the manner described in the product literature will invalidate the warranty.

Made for:

Application Solutions (Safety and Security) Limited Unit 17 - Cliffe Industrial Estate Lewes - East Sussex - BN8 6JL - UK Tel: +44(0)1273 405411 Fax: +44(0)1273 405415 www.asl-control.co.uk Copyright $\textcircled{\sc opt}$ 2018 Application Solutions (Safety and Security) Limited All rights reserved.

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Installation

- 1. Check that the ceiling thickness is between 10mm and 45mm, with a thickness and strength which is appropriate to the weight (3.43 kg) of the loudspeaker.
- The 100V audio power cable should have a maximum cable cross section of 8mm², or a maximum cable cross section of 2 x 2mm² when daisy-chain wiring is used.
- 3. Make a ceiling cut-out of 243 mm diameter.
- 4. Separate the loudspeaker ring, fire dome, and loudspeaker grille and chassis assemblies.
- 5. Place the outer loudspeaker ring up into the ceiling cut out.
- 6. Reach through the loudspeaker ring, and release the spring clips to fix the loudspeaker ring in place. The spring clips should be released one at a time by pulling them back and to one side, away from their restraining hooks. The springs will clamp the loudspeaker ring into place in the ceiling. Be careful not to injure your hands, as the mounting springs are very strong.
- 7. Pull the audio power cable or cables down through the loudspeaker ring opening.
- Take the fire dome. Lift the fire dome's three spring clips from their spring slots, and turn the springs to one side.
- 9. Push the audio power cabling through the rubber grommets in the rear of the fire dome.
- 10. Place the fire dome up into the loudspeaker ring. Note that the notches in the edge of the fire dome need to be aligned with the pop rivets in the ring, in order to be able to put the fire dome in position.

- 11. Hold the fire dome in position, and turn each of the three spring clips back to their original position in the spring slots. These three clips will now hold the fire dome in position in the loudspeaker ring.
- Bring the loudspeaker grille assembly up to the ceiling, and connect the audio power cabling to the ceramic terminal block.
- 13. Mount the grille assembly into the loudspeaker ring. This is done by aligning the grille's three mounting slots with the three pop rivets in the loudspeaker ring. Push the grille into place, while turning it clockwise to engage the grille support notches. A hooked fixing tool is provided in order to facilitate turning the grille. Ensure that the hook is not placed more than 5mm from the outer ring, or else the loudspeaker cone may be damaged.



Service and Warranty

This product carries a full warranty. For full details of warranty and service agreements, please contact the organisation which supplied the product to you.

Exclusions

The warranty does NOT cover:

- 1. Customer misuse, including incorrect installation.
- 2. Abnormal environmental operating conditions.
- 3. Damage incurred by accident, fire, lightning or other hazard.
- 4. Modification to the unit or inexpert / attempted repair.
- 5. Any other damage (other than manufacturing defects).
- 6. Improper packing or transit / courier damage.
- 7. Over voltage audio power supply used.
- 8. No fault found.

Application Solutions (Safety and Security) Limited shall not be liable for any indirect, special or consequential loss or damage (including without limitation any loss of profits) arising from the use of this product or for any breach of this warranty.

In the interest of continual product development, Application Solutions (Safety and Security) Limited reserves the right to make changes to product specification without notice or liability.

