

## AV SERIES OF LOOP POWERED SOUNDERS AND SOUNDER-BEACONS INSTALLATION AND COMMISSIONING INSTRUCTIONS

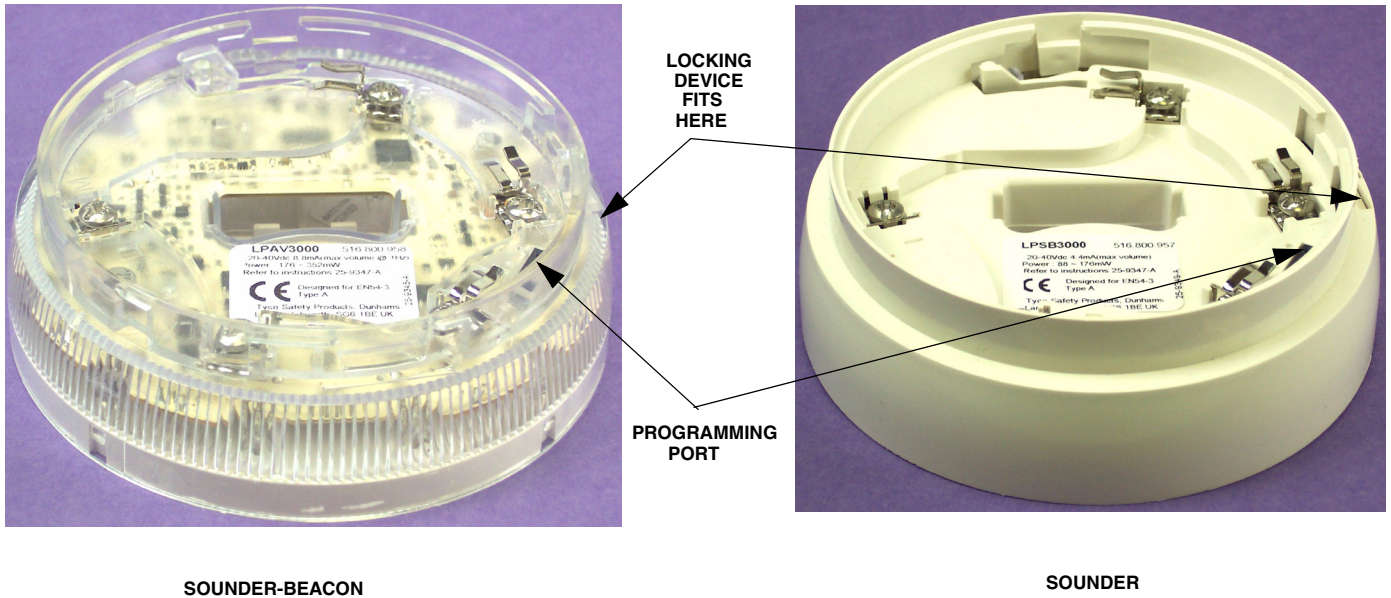


Fig. 1

### 1. TECHNICAL SPECIFICATION

- System Compatibility:** Use only with ZX/MX Fire Alarm Controllers
- Environment:** Models for indoor use only
- Temperature:**
- Operating: -20°C to +70°C
  - Storage: -25°C to +70°C
- Humidity:** Up to 95% (non-condensing)
- Dimensions:**
- Height: 36.5mm
  - Diameter: 115mm

- Weight:**
- Sounder only: 160g
  - Sounder/Beacon: 190g

**Mounting Requirements:** Surface mount

The flat surface mounting flange is supplied with the base. The DAB3-4 mounting flange must be ordered separately.

The mounting flanges have to four drill positions for mounting holes at 50mm, 60mm, 70mm and 80mm.

The sounder/ sounder beacon body clips onto the mounting flange.

#### Electrical Characteristics:

- Addressable Loop Voltage:** 20 - 40Vdc
- DC Loop Loading**
- Quiescent: 350µA
  - Alarm: See Tables 1 & 2

	Low/ Mid Low	Mid High/High	
Sound Output	60/70	80/90	dB
Sounder Only	2.6	4.4	mA
Sounder and Beacon 0.5Hz	5.7	7.5	mA
Sounder and Beacon 1Hz	6.8	8.6	mA

**Table. 1 LPSB3000 and LPAV3000 Current Draw**

#### EMC:

The base complies with the following:  
Product family standard EN50130-4 in respect of  
Conducted Disturbances, Radiated Immunity,  
Electrostatic Discharge, Fast Transients and Slow High  
Energy  
EN61000-6-3 for Emissions

# 800 SERIES

17A-03-AV

2 11/08

## 2. INTRODUCTION

The AV Series of Loop Powered Addressable Sounder/Sounder-Beacons are designed to be driven from an MX/ZX controller via the addressable loop.

Tone, volume and flash rates are set in Consys.

## 3. FEATURES

The sounder has four volume settings 'High' (90dB ±3), 'Mid High' (80 ±3dB), 'Mid Low' (70 ±3dB) or 'Low' (60dB ±3).

The beacon has two flash rates 'Slow Flash' (1/2Hz) or 'Fast Flash' (1Hz).

The AV Series have a built-in line isolator.

## 4. CABLING

Cables are to be selected in accordance with Publication 17A-02-D and the requirements of the current issue of BS5839. Cabling should be connected as shown in Fig. 4 ensuring correct polarity.

## 5. WIRING NOTES

The following notes apply:

- All wiring must conform to the current edition of IEE Wiring Regulations and BS 5839 Part 1.
- All wiring must be free of earths.

## 6. MOUNTING

### 6.1 INSTALLATION TO A FLAT SURFACE USING TYPE 'A' MOUNTING FLANGE

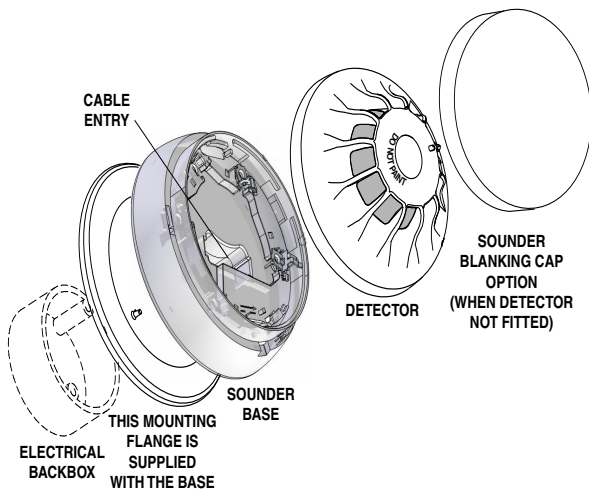


Fig. 2 Fitting to a Flat Surface

To install an AV base, proceed as follows:

- Feed the addressable loop wiring through the mounting flange cable entry.
- Secure the mounting flange to a flat surface.
- Feed the addressable loop wiring through the AV base cable entry, then clip the sounder base to the mounting flange.
- Wire the AV base as shown in Fig. 7 ensuring correct polarity.
- Fit the locking device (supplied) to the base, pressing it in until it is fully seated. See Fig. 4.
- Fit the address flag to the detector. Fit the detector to the sounder base, (the address flag will be transferred to the sounder base).

### INSTALLATION TO A FLAT SURFACE USING DAB3-4 MOUNTING FLANGE

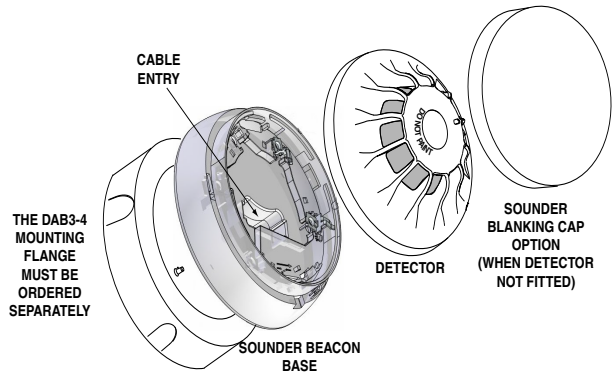
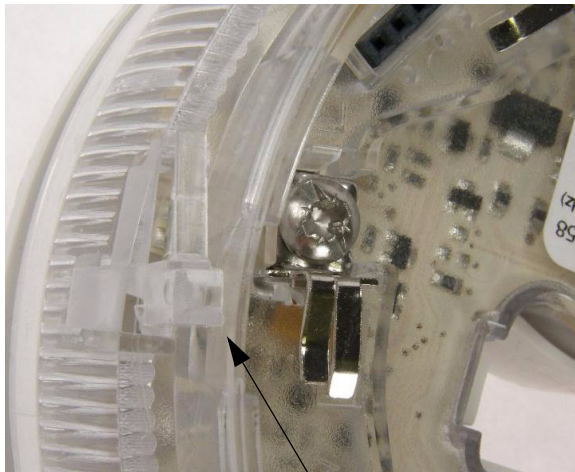


Fig. 3 Fitting Using Conduit

To install an AV base, proceed as follows:

- Remove the required number of conduit knockouts.
- Fit the conduit, feed the cables through the conduit and the cable entry hole of the mounting flange.
- Fit the mounting flange to the conduit and secure with suitable screws.
- Clip the AV base to the mounting flange.
- Wire the AV base as shown in Fig. 7 ensuring correct polarity.
- Fit the locking device (supplied) to the base, pressing it in until it is fully seated. See Fig. 4.
- Fit the address flag to the detector. Fit the detector to the sounder base, (the address flag will be transferred to the sounder base).



LOCKING DEVICE

**Fig. 4 Fitting Locking Device**

## 7. ADDRESS PROGRAMMING

The AV devices have a default factory set address of 255, this must be set to the loop address of the device using the 801AP MX Service Tool. The sounder is programmed with the address prior to being installed by using the internal programming port (see Figs 1 and 6).

### IMPORTANT NOTE

*When connecting AV Bases to early versions of the 801AP MX Service Tool, there is a delay of 10 seconds until communication is possible. Early versions of the 801AP MX Service Tool can be distinguished from the more recent versions by the missing C-Tick mark on the product identification label on the underside of the tool, see Fig. 5.*



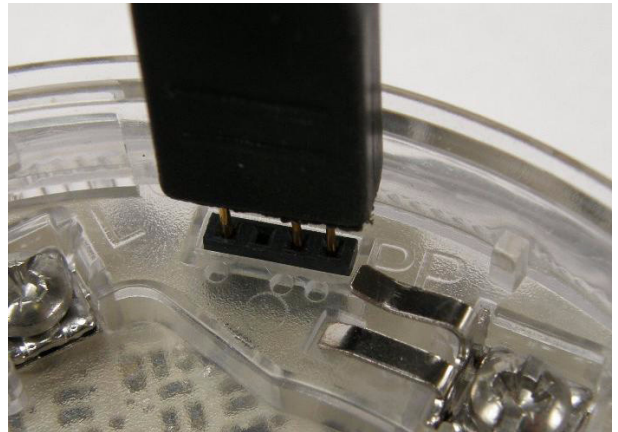
C-TICK MARK

**Fig. 5**

The AV Sounder-Beacons use 2 consecutive addresses on the MX addressable loop, starting from the chosen programmed address number. These addresses are automatically generated when a AV Sounder-Beacon is selected in MX Consys.

The address configuration is as follows:

Address	Type
n	Sounder Device
n+1	Beacon Device



**Fig. 6 801AP Service Tool Programming Lead and AV Base Programming Port Interface**

## 8. ORDERING INFORMATION

LPSB3000 Sounder only Loop Powered Addressable Base:	516.800.957
LPAV3000 Loop Powered Addressable Sounder/Beacon Base:	516.800.958
DAB3-4 Mounting Flange Type 'B' Conduit:	516.800.959
MKII Sounder Cap:	557.001.040.A/Y

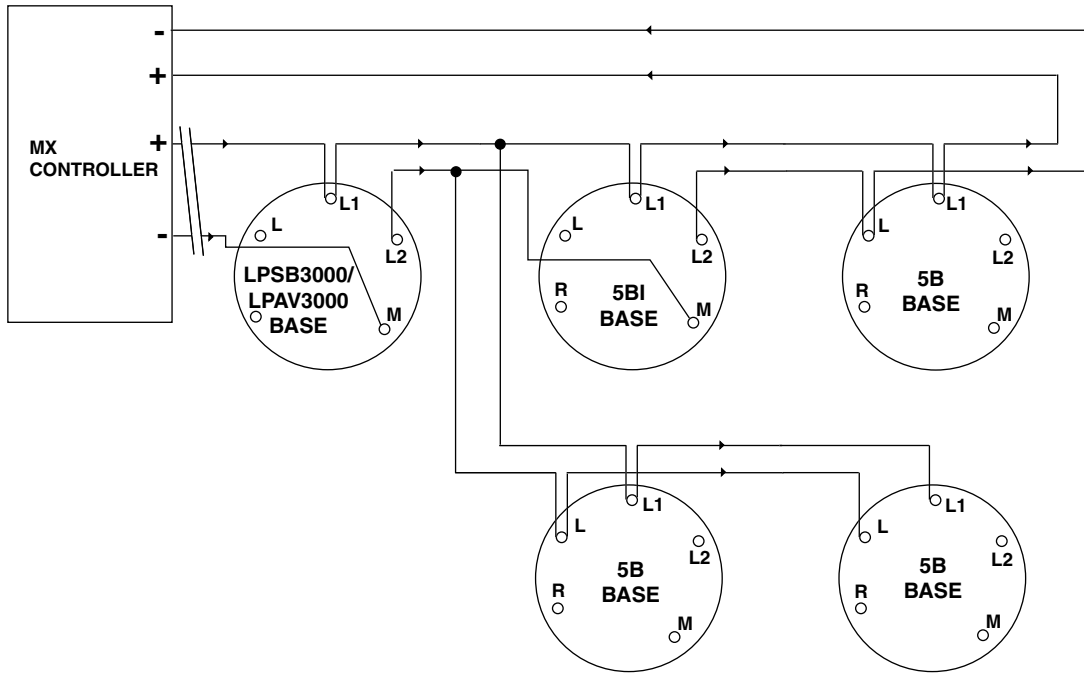


Fig. 7 AV - Simplified Wiring Diagram

JM/pl

20<sup>th</sup> November 2008