

# Discovery Audio Visual Bases Installation Guide

Part No.	Product Name
58002-300	Discovery Base Sounder
58006-300	Discovery Base Sounder - Black
58002-350	Discovery Base Sounder VID (White Flash)
58002-351	Discovery Base Sounder VID (Red Flash)
58006-350	Discovery Base Sounder VID - Black (White Flash)
58006-351	Discovery Base Sounder VID - Black (Red Flash)

Discovery Audio Visual (AV) bases are compatible with XP95<sup>®</sup>/ Discovery<sup>®</sup> and CoreProtocol<sup>®</sup>. They are certified for use with the XPERT 8 Base part numbers SA5000-200 and SA5000-204 - sold separately.

Accessories	
Part No.	Product Name
SA5000-200	XPERT 8 Base
SA5000-204	XPERT 8 Base (Black)
45681-292	White Cap
45681-293	Red Cap
45681-296	Black Cap
45682-800	XPERT Universal Address Card
45682-860	XPERT Universal Address Card (Black)
SA7800-870	Apollo Test Set (for commissioning and soft addressing)

#### **Sounder Installation**

For wiring, follow instructions on XPERT 8 Base installation guide - 39215-005. XP95/Discovery systems - A XPERT Universal address card is required for the XPERT 8 base and the AV base (if a detector is fitted).

- 1. Follow the options described in the **Addressing** instructions.
- 2. Align the AV base with the XPERT 8 base and rotate clockwise until fully home\*.
- 3. The AV base can be locked to the to the XPERT 8 base using the 1.5mm grub screw.
- 4. Fit the detector or a Cap.

\*TIP - If installing at high level using an installation pole. Fit and lock the detector or cap to the AV base before attaching to the XPERT 8 base.

The installation must conform to applicable local codes of installation.



## Addressing

### XP95/Discovery System:

Detector Fitted	AV Base Address	Detector Address	
XP95/Discovery/Soteria	XPERT Universal Address Card (1 to 126)	XPERT Universal Address Card (1 to 126)	
None	XPERT Universal Address Card (1 to 126)	N/A	

#### CoreProtocol System (Hard Addressing):

Detector Fitted	AV Base Address	Detector Address	
Soteria	XPERT Universal Address Card (1 to 126)	XPERT Universal Address Card (1 to 126)	
XP95/Discovery	XPERT Universal Address Card (1 to 126)	XPERT Universal Address Card (1 to 126)	
None	XPERT Universal Address Card (1 to 126)	N/A	

The address of the device is set using a XPERT Universal Address card (part no. 45682-800 or 45682-860 (Black)) fitted to the base.

#### Servicing and Maintenance

This equipment contains no user serviceable parts. The outer housing can be cleaned using a clean dry cloth.

#### Commissioning

It is important that the device is fully tested after installation. Many fault conditions are the result of system wiring errors. Check all connections to the unit.

An Apollo Test Set (part no. SA7800-870) can be used to aid with commissioning.

#### Setup and Test Modes (Sounder and Sounder Visual Indicators Only)

The Setup and Test mode features allow the AV Bases to be tested or the volume adjusted locally with the use of a magnet.

Please refer to the Control and Indicating Equipment (CIE) instructions on how to enable the Setup and Test features.

When Setup or Test mode has been activated in the control CIE, a blue LED on the Discovery Base Sounder/(VID)AV base flashes to indicate the device is in Setup Mode or Test Mode. This is also the location to apply a magnet to control the AV Base.

#### Setup Mode:

 Enable Setup Mode for the sounder volume through the engineering menu on the CIE. The blue setup and test LED on the device will flash once per second to confirm that the Discovery AV Base Sounder/VID is in Setup Mode.

The green polling LED function is turned off and repurposed as a confirmation LED.

- 2. Place the magnetic wand close to the blue flashing LED and when the green confirmation LED flashes once, immediately remove the wand and the sounder will turn ON (if it was OFF) or OFF (if it was ON).
- 3. Place the magnetic wand close to the flashing blue LED and keep it there. The volume will increase at a rate of 1 level per second and the green confirmation LED will flash to indicate the change.
- 4. When the maximum volume level is reached, the green confirmation LED will stop flashing. Remove the wand from the blue flashing LED for at least one second before repeating Step 3).
- 5. When the correct volume level is obtained, remove the wand for at least one second then place the magnet close to the blue flashing LED until the green confirmation LED flashes once.
- 6. Follow the CIE manufacturer's instructions to save this volume setting.

#### Test Mode:

(Volume adjustment is not possible in Test Mode)

 Enable Test Mode for the Discovery AV base through the engineering menu on the CIE. The blue setup and test LED on the Discovery AV base will flash once per second to confirm that the sounder is in Test Mode.

The green polling LED function is turned off and repurposed as a confirmation LED.

- Place the magnetic wand close to the blue flashing LED. When the green confirmation LED flashes ONCE, immediately remove the wand and the sounder will turn ON (if it was OFF) or OFF (if it was ON).
- 3. For a VID, the visual output will flash at least once when the magnetic wand is placed over the Setup/Test LED.
- 4. To turn the AV base OFF, follow Step 2.
- 5. Follow the CIE manufacturer's instructions to record the test result.

# **Technical Information**

All data is supplied subject to change without notice. Specifications are typical at 24V, 25°C and 50% RH unless otherwise stated.

Device Type	Sounder	Sounder VID
Line Voltage	17 - 35 V (24 V Nominal)	
Protocol Voltage	5 - 13 V (9 V Nominal)	
Quiescent Current	0.7 mA	
Power-up Surge Current	0.7 mA	
Activated Current	See Current Consumption table below	
VID Flash Rate	-	0.5Hz (Default) 1Hz (Optional)
Operating Temperature Range	-20°C to 70°C	
Humidity	0% - 95% RH (no condensation or icing)	
IP Rating* Approved as per EN54-3	IP21C	
IP Rating* Manufacturer's Declared Rating	IP34 (below ceiling level - applies only when a Detector or Cap is fitted)	

# \* NOTE: The Grub screw must be engaged to ensure the IP ratings are achieved.

For additional technical information please refer to the following documents which are available from www.apollo-flre.co.uk:

# PP2203 - Sound Pressure Levels

## **Current Consumption (Activated)**

Volume Setting	Sounder On Current (mA)	VID On Current (mA)	Sounder and VID On Current (mA)	Typical Sounder SPL (dB(A))
1	1.6		3.3	50
2	2.1	1	3.9	65
3	2.5	]	4.3	70
4	3	2.4	5.1	75
5	3.6		5.5	80
6	4.3	]	6.2	83
7	6.85		8.65	87

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Analogue Values		LED Status Indicator		
Analogue Value	nalogue Value Status		Setup or Test Mode Activated	
0 - 7	Fault	Continuous Yellow	In Isolation	
17	Sounder Volume 1	Flashing Yellow	Fault	
18	Sounder Volume 2 Flashing Green		Device Polled / Confirmation LED	
19	Sounder Volume 3	Fault Finding		
20	Sounder Volume 4	Problem	Possible Case	
21	Sounder Volume 5	No response or missing	Incorrect address setting Incorrect loop wiring (polarity reversed)	
22	Sounder Volume 6		CIE has incorrect cause and effect program-	
23	Sounder Volume 7	Failure to operate	ming	

## Tone Table

Temporal					
attern Profile	Primary Tone	Frequency	Temporal Pattern Profile	Secondary Tone	Frequency
	Apollo Evacuation Tone*	550Hz for 0.5s, 825Hz for 0.5s		Apollo Alert Tone*	1s off, 825Hz for 1s
	Alternating – (Hochiki & Fulleon)*	900Hz for 0.25s, 600Hz for 0.25s		Continuous (Hochiki & Fulleon)*	925Hz
111	Medium Sweep*	700Hz to 900Hz at 1Hz		Continuous*	970Hz
111	Fast Sweep	2500Hz -2850Hz at 9Hz		Continuous	2850Hz
$1 \land$	Dutch Slow Whoop (sweep)*	600Hz - 1300Hz for 3.5s, 0.5s off		Continuous*	825Hz
77	DIN Tone (sweep)*	1200Hz - 500Hz for 1s		Continuous*	825Hz
	Swedish Fire Tone*	660Hz, 150ms on, 150ms off		Swedish all clear signal - Continuous*	660Hz
	Australia (fast rise sweep)	3 x (500Hz - 1200Hz for 0.5s, 0.5s, 1s off)		Australia Alert Tone	420Hz, 0.625s on, 0.625s off
$\overline{1}$	New Zealand (slow rise sweep)	500Hz - 1200Hz for 3.75s, 0.25s off		New Zealand Alert Tone	420Hz, 0.625s on, 0.625s off
	US Temporal LF (ISO 8201)	3 x (970Hz, 0.5s on, 0.5s off), 1s off		Continuous*	970Hz
	US Temporal HF (ISO 8201)	3 x (2850Hz, 0.5s on, 0.5s off), 1s off		Continuous	2850Hz
	Simulated Bell – Continuous	827Hz for 16ms followed by 990Hz for 16ms		Simulated Bell - Intermittent	827Hz 1s off, 1s on
$\frown$	Emergency Warning Siren	600-1200Hz sweep for 4s, 1200Hz for 2s, 1200Hz – 600Hz sweep for 4s		Emergency Warning Siren All Clear	1200Hz continuous
	French Evacuation Tone	554Hz for 0.1s, 440Hz for 0.4s		Continuous*	970Hz
	Australia Evacuation Tone (AS7240-3)	3 x (520Hz 0.5s on, 0.5s off), 1s off		Australia Alert Tone (AS7240-3)	520Hz 0.5s on, 3.5s off
		Apollo Evacuation Tone*    Alternating - (Hochiki & Fulleon)*    Medium Sweep*    Medium Sweep*    Fast Sweep    Dutch Slow Whoop (sweep)*    Dutch Slow Whoop (sweep)*    DIN Tone (sweep)*    Main    Australia (fast rise sweep)    New Zealand (slow rise sweep)    New Zealand (slow rise sweep)    Simulated Bell - Continuous    Simulated Bell - Continuous    Emergency Warning Siren    French Evacuation Tone    Australia Evacuation Tone (AS7240-3)	Apollo Evacuation Tone*550Hz for 0.5s, 825Hz for 0.5sAlternating - (Hochiki & Fulleon)*900Hz for 0.25s, 600Hz for 0.25sMedium Sweep*700Hz to 900Hz at 1HzFast Sweep2500Hz -2850Hz at 9HzDutch Slow Whoop (sweep)*600Hz - 1300Hz for 3.5s, 0.5s offDIN Tone (sweep)*1200Hz - 500Hz for 1sSwedish Fire Tone*660Hz, 150ms on, 150ms offMexical (fast rise sweep)3 x (500Hz - 1200Hz for 3.75s, 0.25s offNew Zealand (slow rise sweep)500Hz - 1200Hz for 3.75s, 0.25s offNew Zealand (slow rise sweep)500Hz - 1200Hz for 3.75s, 0.25s offUS Temporal LF (ISO 8201)3 x (970Hz, 0.5s on, 0.5s off), 1s offSimulated Bell - Continuous827Hz for 16ms followed by 990Hz for 16msEmergency Warning Siren600-1200Hz sweep for 4s, 1200Hz sweep for 4s, 1300Hz sweep for 4s,<	Apollo Evacuation Tone*  550Hz for 0.5s, 825Hz for 0.5s     Alternating - (Hochiki & Fulleon)*  900Hz for 0.25s, 600Hz for 0.25s     Medium Sweep*  700Hz to 900Hz at 1Hz     Fast Sweep  2500Hz -2850Hz at 9Hz     Dutch Slow Whoop (sweep)*  600Hz -1300Hz for 3.5s, 0.5s off     DIN Tone (sweep)*  1200Hz - 500Hz for 1s     Swedish Fire Tone*  660Hz, 150ms on, 150ms off     Medium Sweep  660Hz, 150ms on, 150ms off     New Zealand (fast rise sweep)  3 x (500Hz - 1200Hz for 0.5s, 0.5s, 1s off)     New Zealand (slow rise sweep)  500Hz - 1200Hz for 3.75s, 0.25s off     US Temporal LF (So 8201)  3 x (970Hz, 0.5s on, 0.5s off), 1s off	Apollo Evacuation Tone*  S50Hz for 0.5s, 825Hz for 0.5s   Apollo Alert Tone*    Alternating - (Hochiki & Fulleon)*  900Hz for 0.25s, 600Hz for 0.25s   Apollo Alert Tone*    Medium Sweep*  700Hz to 900Hz at 1Hz  Continuous*  Continuous*    Image: Continuous of the structure of the structu

\*EN 54 Compliant