

• Outreach Plates: Audio Input Extension System

A range of wall, ceiling and desk mountable single gang audio input plates specifically designed to increase the audio input capability of any audio system. A total of six plates are available - one to suit virtually every conceivable variant of audio input connector - and each featuring a built-in mixer, pre-amp, input level control and balancing output.

Up to ten plates of any mix can be daisy-chained to one balanced line level input with cable lengths in excess of 100m easily achievable using standard two-pair audio cable (i.e. Belden 8723) with no recognisable degradation of audio signal quality.

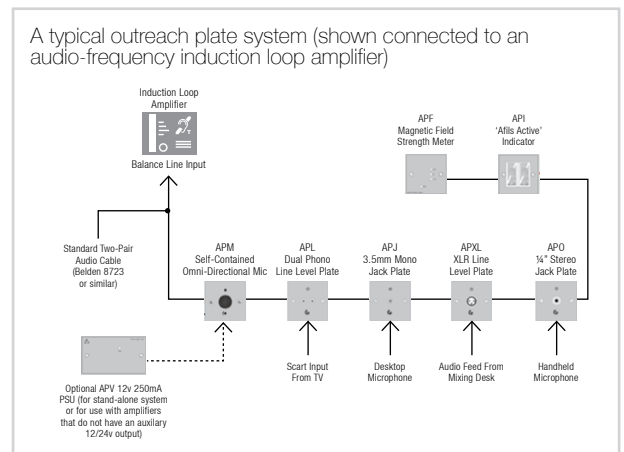
All plates are surface mountable on 25mm single-gang back boxes and can be installed at the most convenient point on an installation, thus overcoming the need for long and potentially hazardous microphone/audio leads.

The system is ideal for conference centres, schools, leisure complexes, etc., where the need to have separate and spatially distributed audio inputs is a must.

An external DC power supply (Part No. APV) is available for stand-alone systems or for use with audio equipment that does not have a 12/24v auxiliary output.

Features:

- Can be connected to the balanced line level input of any audio system
- Fully cascadable – up to ten outreach plates can be daisy-chained to one balanced line level input
- Plates can be located at any convenient point on an installation
- Standard two-pair audio cable is ideal for most applications
- Network lengths of 100m easily achievable with no degradation of sound quality
- Built-in pre-amp, mixer and level controls included on all variants
- Overcomes the need for excessively long microphone and audio leads
- 12 ~ 32v DC operation
- +6dB overload capability
- Surface mountable on 25mm UK single gang back boxes
- Effectively acts as a multi-point distributed mixer with individual level controls
- Optional wall-mounting 'AFILS ACTIVE' and magnetic field strength indicators available for use with audio-frequency induction loop systems



Power Requirements:

Supply volts	12 ~ 32v
Supply current	12 ~ 15mA

Common Specifications:

Common outreach plate characteristics between balanced line in and balanced line out

Input - balanced/unbalanced line	1v (0dB)
Output - balanced line	1v (0dB) + 6dB (overload)
Frequency response	40Hz ~ 20kHz
Input impedance	>10KΩ
Output impedance	<100Ω
Insertion loss/gain	< ± 0.05dB
Insertion signal to noise ratio	>95dB
Insertion THD + noise	<0.01%

Individual Outreach Plate Specifications:

Model:	APJ Plate	APL Plate	APQ Plate
Input signal level	-50dBv (5mv mic)	-12dBv ~ +6dBv	-50dBv (5mv mic)
Gain	55dB	+6dB	55dB
Level control	0 ~ -46dB	-30dBv to +6dB	0 ~ -46dB
Input impedance	500Ω	>10KΩ	500Ω balance
Phantom volts	0, 8v (link select)	n/a	0, 8v (link select)
Signal to noise ratio	>75dB	>92dB	>75dB
THD + noise	<0.02%	<0.1%	<0.02%

Model:	APXM Plate	APXL Plate	APM Plate
Input signal level	-50dBv (5mv mic)	-12dBv to +6dBv	n/a
Gain	55dB	+6dB	55dB
Level control	0 ~ -46dB	-30dBv ~ +6dB	0 ~ -46dB
Input impedance	500Ω balanced	>10KΩ	n/a
Phantom volts	0, 8v (link select)	n/a	n/a
Signal to noise ratio	>75dB	>92dB	>75dB
THD + noise	<0.02%	<0.1%	<0.02%

• System Overview

The system normally has two inputs per outreach plate - a balanced line level input from the previous outreach plate and its own adjustable input. These inputs are mixed in a way that ensures the input from the previous stage is virtually unaffected whilst generating a composite signal for the output in the form of a balanced line level signal.

As very low levels of insertion loss and signal-to-noise ratios can be guaranteed and the inherent interference advantage of having balanced and floating line level inputs and outputs, very long lengths of interconnecting cable may be used without significantly degrading the signal.

This, coupled with the system's cascability, allows the designer to effectively 'tailor make' a distributed multiple input mixer that is compatible with virtually any audio system.

The Outreach Plate range:

Up to ten of the following outreach plates (any mix) can be daisy-chained to an audio system's balanced line level input:

• APJ: 3.5mm Jack Outreach Plate

Accepts balanced or unbalanced microphones with 3.5mm mono jack plugs. Includes an onboard mic-to-line level converter, high gain pre-amplifier and 8v phantom power.

• APL: Dual Phono Line Level Outreach Plate

Accepts two line-level signals (usually from a stereo source such as a TV, CD, MP3 or DVD). Includes an on-board dual phono to mono converter. An ALS SCART to dual phono lead is also available to facilitate the connection of TVs, VCRs, etc., to the APL.

• APQ: 1/4" Jack Outreach Plate

Accepts balanced or unbalanced microphones with 1/4" jack plugs. Includes an on-board mic-to-line level converter, high gain pre-amplifier and 8v phantom power.

• APXM: XLR Microphone Level Outreach Plate

Accepts balanced or unbalanced microphones with standard 3 pin female XLR connectors. Includes an on-board mic-to-line level converter, high gain pre-amplifier and 8v phantom power.

• APXL: XLR Line Level Outreach Plate

Accepts standard 3 pin female XLR feeds from audio equipment such as stage or church mixing desks, etc.

• APM: Omni-Directional Plated Mic Outreach Plate

A self-contained omni-directional electret microphone complete with on-board mic-to-line level converter. Ideal for mounting in ceilings, walls or desks, the unit offers excellent coverage (typically up to 25m² when located at a ceiling height of 2.5 ~ 3 m).

Ancillary Devices:

Should the Outreach network be connected to an induction loop system, any of the following ancillary devices can be added:

• API: 'AFILS Active' Outreach Plate

Includes two ultra-bright LEDs in a translucent diffuser overprinted with the induction loop 'ear' symbol. The LEDs illuminate when the outreach network is powered to indicate that an AFILS system is installed. Current consumption is 30mA max.

• APF: Field Strength Meter Outreach Plate

Indicates the magnetic field strength generated by an induction loop system via three LEDs, labelled +6dB, 0dB and -6dB. The LEDs illuminate as appropriate whenever a signal is present and can be easily set up to indicate the magnetic field strength in the room centre.

