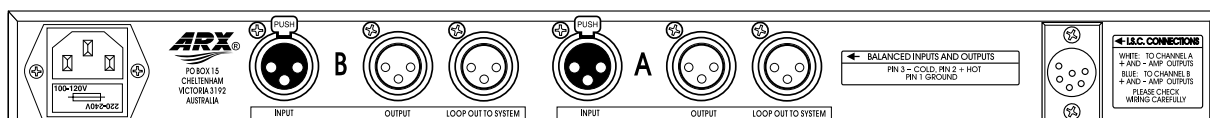
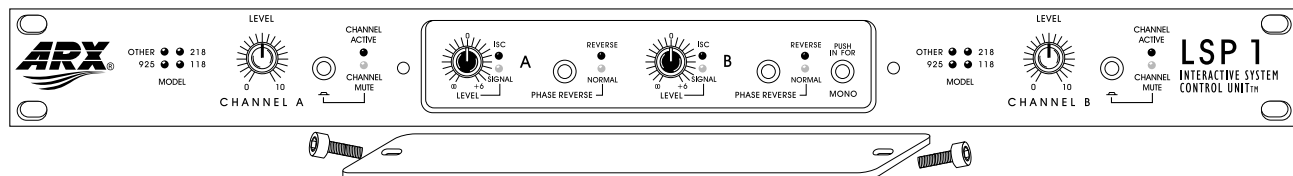


CONCERT SERIES



LSP-1 DUAL CHANNEL LOW FREQUENCY SPEAKER PROCESSOR WITH ISC (INTERACTIVE SYSTEM CONTROL)



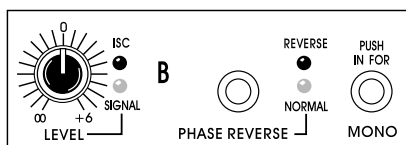
About The LSP-1

The dual channel ARX LSP-1 ISC speaker processor controls all the operating parameters of the ARX Concert Series 925 and 218 speaker systems.

It is generally accepted throughout the pro audio industry that a well designed, dedicated speaker processor or control unit is the best way to get reliable, repeatable performance from speaker systems with the minimum of time consuming pre-show setup and adjustment.

ARX has been building processor controlled speaker systems for over 15 years now, and the second generation LSP-1 is a unique dual channel Low Frequency speaker processor that supplies Low Frequency level control, EQ trim, phase reverse switching, sub crossover, and fail safe ISC™ speaker protection, neatly fitted into a one rack unit package.

ISC™ (Interactive System Control) is our innovative speaker protection circuitry. Extra leads run from the amplifier outputs back into the LSP-1, so it can constantly monitor the amount of power the amplifier is delivering to the speakers.



Channel B Sub Panel detail

The LSP-1 is supplied with factory calibrated plug-in cards fitted for either the 925 or 218 series, and so it knows the speaker's exact Safe Operating Area (SOA). If it senses that a peak in amplifier power is about to exceed this SOA, it automatically triggers the system protection circuits to hold the level momentarily at the loudest safe setting until the power peak has passed.

The rear panel has Balanced XLR inputs and outputs as standard, plus extra multipin ISC connections to the system power amps. There is a switch on the front Sub panel for systems requiring a Mono LF output.

The LSP-1 is placed last in the system chain before the power amps, usually in the amp rack. Once it has been connected up correctly, it needs no readjusting. Just set it and forget it - the LSP-1 looks after the rest!

The LSP-1 and other speakers

The LSP-1 has plug in cards that determine its operating parameters, depending on the ARX Concert Series speaker that the LSP-1 has been set up and calibrated for.

Cards can also, on request, be supplied calibrated to other manufacturer's similarly configured systems.

Contact ARX to find out what speaker parameters are required to set up a custom plug-in card.

Features

- Dual Channel, Low frequency Speaker processor
- System parameters controlled by Plug-in cards
- Low frequency and summed mono controls
- ISC™ Speaker protection with 2 stage LED indicators
- Relay switched protection
- Intuitive user friendly interface
- Balanced XLR Inputs and Outputs
- Fast and easy setup
- Flawless performance in any audio environment
- Security cover available

LSP1 Specifications

Input Impedance

20Kohms Electronically balanced

Maximum Input Level
+20dB

Input Level Control
∞ – 0dB (no gain)

CMRR
>50dB @ 1KHz

Output Impedance
(low & loop output)
300 ohms Balanced
150 ohms Unbalanced

Maximum Output Level
+22dB

Low Output Level Control
∞ – +6dB (gain)

Signal to Noise Ratio
-98dB Loop output
-94dB Low output

Frequency Response
20Hz—20KHz summed

Dynamic Range
120dB Loop output
116dB Low output

Distortion (THD)
<.004%

Crossover Frequency
Dependent upon loudspeaker model

Crossover Filter Type
Linkwitz Riley 24dB per octave

High Pass Filter
Dependent upon loudspeaker model; Modified Butterworth type, 24dB per octave

ISC Returns
20K ohms Differential Input

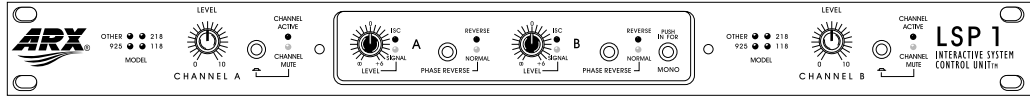
ISC Return Connector Type
Male 6 Pin Socket.
Pins 1 & 2 Ch A Low return
Pins 3 & 4 Ch B Low return

Input /Output Connector type
XLR

Power Requirements
100–120, 220–240 VAC
50-60 Hz, 5 VA

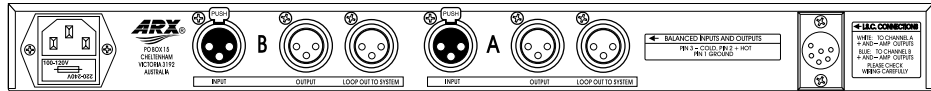
Weight
5 lbs/2.2 Kg

Dimensions
19"W x 13 1/4"H x 6"D
482 x 44 x 155mm



FRONT PANEL

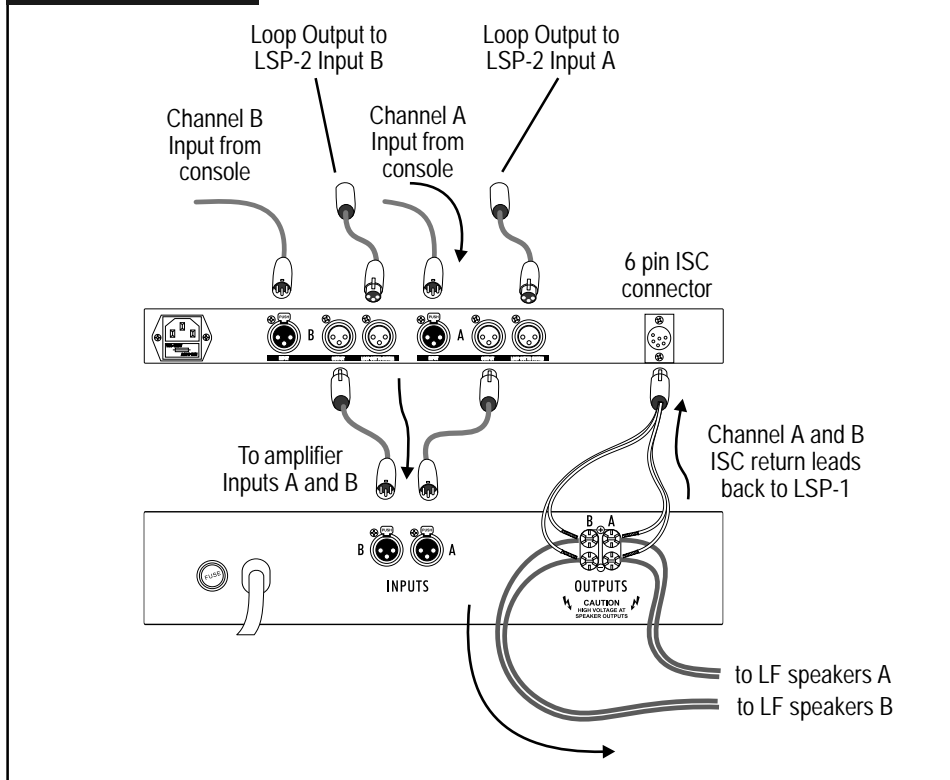
- Plug-In card ID LEDs
- Channel A and B overall level controls
- Channel A and B active/mute switches
- Channel A and B active/mute LEDs
- Recessed under security cover:
 - Channel A and B LF gain controls
 - Signal and ISC active LEDs
 - Phase Reverse switches and status LEDs



REAR PANEL

- Channel A and B Balanced XLR Input connectors
- Channel A and B Balanced XLR Output and Loop Out connectors
- 6 Pin Male ISC return connector
- AC input connector, with 100–120 and 220–240 voltage switch and fuse.

LSP-1 CONNECTIONS



Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.



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