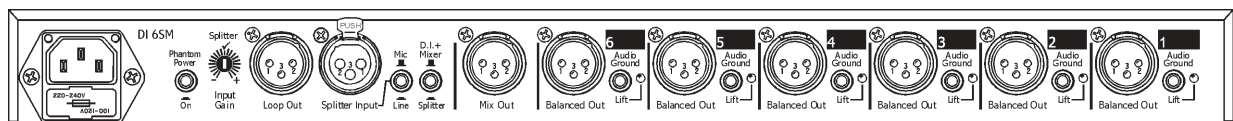
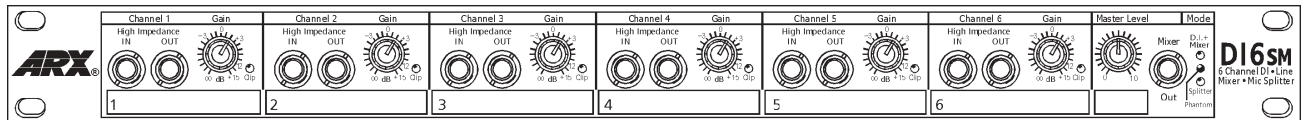


# DI-6SM



## SIX CHANNEL ACTIVE DIRECT BOX, LINE MIXER, AND MICROPHONE/LINE SPLITTER



### The DI6SM - a Unique Pro Audio problem solver

DVDs, CDs, Tape/cassette decks, audio for video, drum machines, synthesizers, bass guitars, computer audio; at some stage all these need linking up to Balanced inputs, whether the application is Live sound, Studio or Broadcast.

To solve these problems, we've developed the DI-6SM:

- Six active D.I. (Direct Injection) boxes,
- plus a 6 into 1 Line Mixer,
- plus a 1 to 6 Microphone/ Line Splitter

### A Pro Audio Toolbox

This unique and flexible audio toolbox allows Six independent unbalanced audio sources to easily and quietly interface with Balanced pro audio systems, either to individual channels or summed down to one Master output.

But that's not all. By pressing a single switch on the rear panel the DI-6SM will change from being Direct Boxes and a Mixer to being a 6 way Splitter (distribution amplifier). Now it will split an incoming Microphone or Line signal to 6 individual outputs or zones. On the front panel, each channel has two IN/OUT jacks, a level control from infinity (off) through 0dB to +15dB gain, and a Clip indicator LED.

The Master section has a Master volume control, Balanced Mix Out jack, and status LEDs indicating whether the unit is in DI or Splitter mode, plus a Phantom Power LED.

In addition, as on all ARX single rack unit equipment, each channel has a numbered marker panel ('scribble strip') you can write on for easy confirmation of channel assigns.

### Balanced Outputs - and a Microphone Input!

On the rear, each channel has an XLR Balanced output, with associated Ground lift switch and status LED, to isolate the chassis and electronic grounds.

The Master section has a Balanced XLR output carrying a Mix of the six channels. There is also a Balanced XLR input with a switch to put the unit in either DI or Splitter mode. This input can be switched to either a Line Input or a Microphone Input with associated Gain control and Phantom Power switch. Next to the Balanced XLR Input there is a Balanced XLR Microphone Loop Output to continue the Mic or Line signal to other equipment if required.

All this in a compact 1RU package!

### Universal AC Power

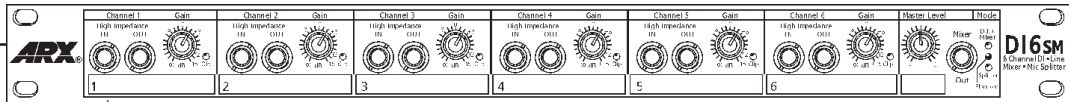
AC power range is a universal 100 to 120V or 220 to 240V AC, and is connected to the unit via a removable power lead and standard 3 pin IEC connector, with built-in fuse and voltage change switch.

With so many handy functions, plus a true **'user friendly'** layout, it's no wonder the DI-6SM is known as **'The total Audio Patching System in 1 RU!'**

### Features

- ➔ Six Direct boxes, Splitter and Line Mixer in one unit
- ➔ Multi mode unit: Six in, Six out; Six in, One out; One in, Six out
- ➔ Switchable Splitter / Microphone Input with Gain Control
- ➔ Phantom Power
- ➔ Extra Mix Output on front panel
- ➔ Microphone Loop Output to continue signal to other equipment
- ➔ Individual Output Ground lift switches
- ➔ Up to +15dB Gain available per channel
- ➔ Balanced XLR Outputs; High Impedance Jack Inputs and Outputs
- ➔ Flawless performance in any audio environment

## Specifications



Channels 1 - 6

**Input Impedance**  
2 MegOhm

**Input Headroom** + 21dB

**Output Level (Max)** + 26 dB

**Signal to Noise ratio @ Unity**  
-98 dB Unweighted  
-104 dB 'A' weighted

**Distortion @ Unity Gain**  
.003% THD, 0dB, 1KHz

**Dynamic Range** 124 dB

**Hi Z In/Out Connectors**  
Jack

**Balanced Output Connector**  
XLR

### Master Section

**Output Signal to Noise ratio**  
-90 dB Unweighted  
-96dB 'A' weighted  
Note: All inputs @ unity,  
Master @ unity

**Output Level (Max)** + 26 dB

**Output Impedance**  
600 ohms

**Distortion @ Unity Gain**  
.006% THD, 0dB, 1KHz

**Output Connectors**  
XLR, Jack

### Splitter Section

**Maximum Level** + 20dB

**Input Impedance**  
Mic: 5 KOhms, Balanced  
Line: 20 KOhms, Balanced

**Input Connector** XLR

**Frequency Response**  
20Hz—20KHz ±0.5dB

**Power Requirements**  
100/120 V AC  
220/240 V AC

**Weight**  
5 lbs/2.2 Kg

**Dimensions**  
19" W x 1 3/4" H x 6" D  
482 x 44 x 155mm

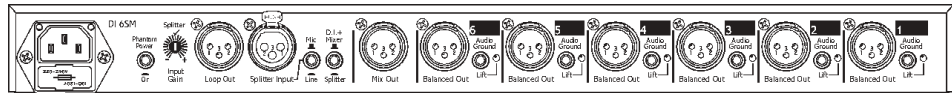


Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.



## Front Panel

- Hi Impedance jack Input/Output connectors
- Level control with up to +15dB of Gain available
- Clip LED indicator
- Marker panel for labelling DI assigns
- Master Level control
- Balanced jack Master Mix output
- DI/ Splitter/Phantom status LEDs



## Rear Panel

- Balanced XLR Outputs
- Individual Audio Ground Lift switches and status LEDs
- XLR Master Output
- DI/Splitter mode switch
- Mic or Line switch for Splitter Input
- Balanced XLR Splitter Input
- XLR Loop Output
- Gain Trim for Splitter Input
- Phantom Power switch
- AC input connector, with voltage switch and fuse.
- Removable IEC type power connector and integrated fuse. Replace with correct value only

ARX Systems are based in Melbourne, Australia, where all ARX Products are assembled and tested in our 'state-of-the-art' manufacturing facility

For over 20 years ARX has designed, manufactured and supported Audio Products for Professional users and applications worldwide

## Architectural Specifications

The signal processor shall be a six channel unit in a steel chassis six inches deep and one rack unit high. The unit shall be capable of operating in four modes: firstly, as Six active Direct boxes, secondly, as a 6:1 Line Mixer, thirdly, as a 1:6 Line Splitter, and fourth, as a 1:6 Microphone Splitter. It shall be capable of operating concurrently in the first two modes, and there shall be rear panel switches to facilitate the microphone or line splitter mode. There shall be also be a master level control, which operates in all modes.

Each channel shall have a High Impedance input and output jack, a level control from 00 through to +15dB, and an LED to indicate the onset of circuit overload. Each channel shall have a corresponding electronically balanced XLR output connector, with audio ground lift switch and status LED.

On channels 1 to 6, the Hi Z input connector shall have an Input impedance of 2 Meg Ohms, and the input headroom shall be + 21dB. The frequency response (all channels and masters) shall be 20 Hz to 20 KHz, ±0.4dB. The Output impedance shall be 600 ohms balanced, and the maximum Output level shall be +26dB, with a Signal to Noise ratio at unity of -104dB

'A' weighted (-98dB unweighted). THD shall be .003% @ 0dB, 1 KHz, and the unit shall have a dynamic range of 107dB.

The Master section shall have an Output Signal/Noise ratio of -96db 'A' weighted, with all inputs and master @ unity, an output level of +26dB, and THD of .006% at unity. The master section output connectors shall be both XLR and TRS jack.

The Splitter input shall be a balanced XLR connector situated on the rear panel, with a switch to enable this mode and status LEDs on the front panel. The maximum Line level to this input shall be +20dB, with an impedance of 20 K Ohms balanced. The Microphone level to this input shall be user variable from 20 to 60dB of Gain. In Splitter mode each of the balanced outputs shall be controlled by the front panel level controls.

Power shall be supplied via a removable mains cable, connecting to an IEC connector with an integral fuse and voltage change switch on the unit's rear panel.

The direct box/mixer/splitter shall be the ARX DI-6sm.

Specifications available on CD ROM.  
Latest updates available at:  
[www.arx.com.au/di6sm.htm](http://www.arx.com.au/di6sm.htm)



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