# Afterburner II™

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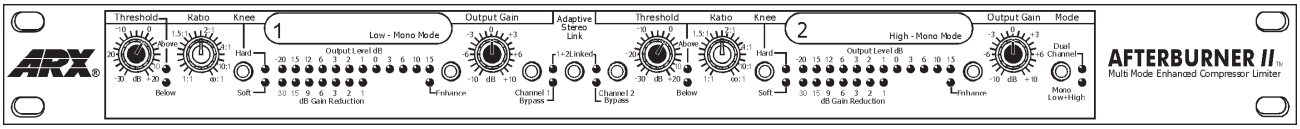
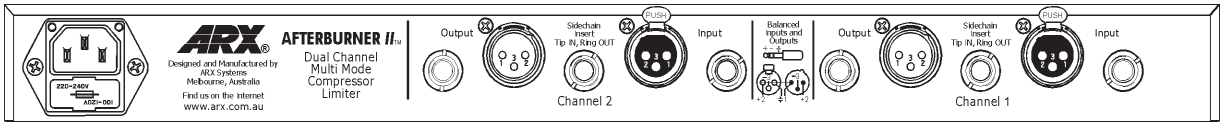
## DUAL CHANNEL/DUAL BAND MULTI MODE ENHANCED COMPRESSOR/LIMITER




Hand made in Australia

The **ARX AFTERBURNER™** is a unique Multi Mode compressor/limiter designed for use in any professional audio dynamics control application.

### Multi Mode

The Afterburner can be used in three different ways. In Two channel mode, it performs as two independent compressor/limiters, with 'industry standard' variable Threshold, Ratio and Output gain controls. In Stereo mode, our new switchable Adaptive Stereo Link circuitry provides increased imaging accuracy when linking both channels as a stereo pair.

A single front panel switch puts the Afterburner into its alternative Mono mode, setting it up as a Single channel, Dual Band compressor/limiter, with separate dynamics control of both Low and High frequencies, opening up a whole new range of gain control techniques.

### Enhance Switch

In any mode, the Afterburner features an 'Enhance' switch, which provides frequency restoration to preserve the spectral balance of the audio signal, compensating for the sagging Low and High frequency response of compressed program material. Think of it as a 'smart' loudness control.

New Above/Below Threshold LEDs enable at-a-glance compression confirmation, and the compression Threshold can be toggled between Hard and Soft knee.

Separate Level and Gain Reduction meters with easy to read 'Wide Scale' LED metering provides instant confirmation of Level and Compression status. There is also comprehensive LED indication of all operating functions and status in any mode.

### Balanced Inputs and Outputs

On the rear panel, each channel has true differential Balanced inputs and outputs, on both XLR and TRS jack connectors. As well, each channel has a TRS jack Sidechain access insert point, for applications such as De-essing (when used with an external equalizer such as the ARX Multi Q or EQ60).

Other features include a compressor bypass switch for each channel, and passive RFI filters on the inputs.

### 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.

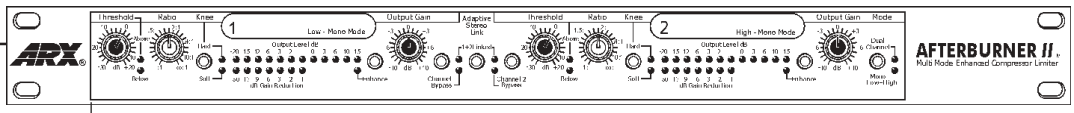
With its smooth operation, intuitive user friendly layout, high density precision circuitry, and extensive user-variable operating parameters, the unique ARX Afterburner is equally at home in Studio, Installation, Broadcast and Sound Reinforcement environments.

It delivers seamless, superb sounding compression of any signal, plus dynamics control effects that are unavailable with any other device.

## Features

- Switchable Mode - Dual Channel, Single band; or Single Channel, Dual Band (Low and High)
- Low and High frequency compression in Single Channel mode
- Adaptive Stereo Link circuit for accurate stereo imaging
- Hard or Soft knee option
- 'Enhance' switch restores spectral balance of compressed signal
- New Above/Below Threshold LEDs enable at-a-glance compression confirmation
- 'Wide Scale' LED metering
- Balanced XLR and Jack Inputs and Outputs
- Sidechain Insert points
- Flawless performance in any audio environment

## Specifications




**Input Impedance**
Balanced 20 Kohms
Unbalanced 10 Kohms
**Input Headroom**
+ 22 dB
**CMRR**
>60 dB, 20 Hz—20 KHz
**Output Impedance**
Balanced 300 ohms
Unbalanced 150 ohms
**Output Level (Max)**
+ 22 dB
**Frequency Response**
20Hz—20KHz ±0.2dB
**Signal to Noise ratio**
-93 dB Unweighted
-99 dB 'A' weighted
**Distortion**
.02% THD @ 0dB,1KHz
**Dynamic Range**
115 dB
**Attack and Release Times**
Program dependent
**Sidechain Insert Impedance**
10 Kohm
*Filter Section*
**Filter Type**
Phase corrected
6dB per octave
**Summed Filter Response**
±0.2dB through
crossover region
**Dividing Frequency**
250 Hz
*Enhance Section*
**Low Enhance**
50 Hz
**High Enhance**
10 KHz
**Power Requirements**
100/120 V AC
220/240 V AC
**Weight**
5 lbs/2.2 Kg
**Dimensions**
19"W x 1¾"H x 6"D
482 x 44 x 155mm
**Input Connector type**
XLR, Balanced Jack
**Output Connector type**
XLR, Balanced Jack
**Sidechain Insert Connector**
TRS Jack

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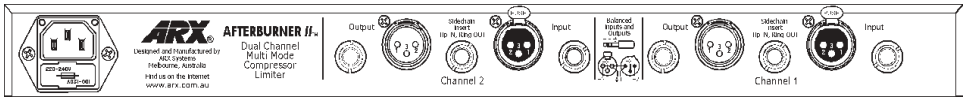
Our policy is one of continuous improvement, and therefore designs may change without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.

CE N1819

## Front Panel

- Compressor bypass IN/OUT switch
- Threshold, Ratio and Output Gain controls
- Above/Below Threshold LEDs
- Hard/Soft knee switch and LEDs
- 12 segment LED Output Level display
- Numbered marker panel for labelling compressor assigns
- 7 segment LED Gain Reduction display
- Enhance switch and status LED
- AdaptiveStereo link switch and status LED
- Dual/Single channel mode switch and status LEDs




## Rear Panel

- Balanced Inputs *and* Outputs, on both XLR and TRS jack connectors. In *Single* channel (Mono) mode, use Channel 1 Inputs and Outputs only
- Sidechain Insert TRS connector on each channel
- AC input connector, with voltage switch and fuse.

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 enhanced compressor/limiter shall be a dual channel unit in a steel chassis 6 inches (152mm) deep and one rack unit (44mm) high. There shall be a front panel switch to link the channels to track as a stereo pair. As well, there shall be a switch to put the unit into dual band mono mode; in this mode Channel 1 controls shall compress Low frequencies, and Channel 2 controls shall compress High frequencies. The filter shall be 6 dB per octave, phase corrected, with a dividing frequency of 250 Hz, and the unit shall have a summed filter response of ± 0.2dB through the crossover region.

Each channel shall have a 12 segment LED Output level display and a 7 segment LED Gain Reduction display, plus variable controls for Threshold, Ratio and Output Gain. There shall be a switch to toggle the compressor knee between Hard and Soft, with associated LEDs. A further 2 LEDs shall indicate Above or below Threshold status.

Attack and Release times shall be program dependent. Each channel shall also have a hardwire Bypass switch on the front panel, and a switch to control the Enhance circuit. This circuit shall operate in either mode, and shall provide Low frequency enhancement at 50 Hz, and High frequency enhancement at 10 KHz.

The unit shall have electronically Balanced inputs and outputs, on both TRS jack and XLR type connectors, with passive RFI filters and an Input impedance of 20 Kohms (10 Kohms unbalanced). The Input headroom shall be +22dB, with a CMRR of better than 60dB, and the frequency response shall be 20 Hz to 20 KHz, ± 0.2dB. The Output impedance shall be 300 ohms (150 unbalanced), and the maximum Output level shall be +22dB, with a Signal to Noise ratio of -99dB 'A' weighted (–93dB unweighted). The Sidechain Insert points shall be TRS jack connectors and have an impedance of 10 Kohms. T.H.D shall be 0.02% @ 0dB, 1 KHz, and the unit shall have a dynamic range of 115dB.

AC 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 compressor/limiter shall be the ARX Afterburner II.

Specifications available on CD ROM

Latest updates always available on the ARX website - www.arx.com.au/afterburner.htm

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