

# AFW-1

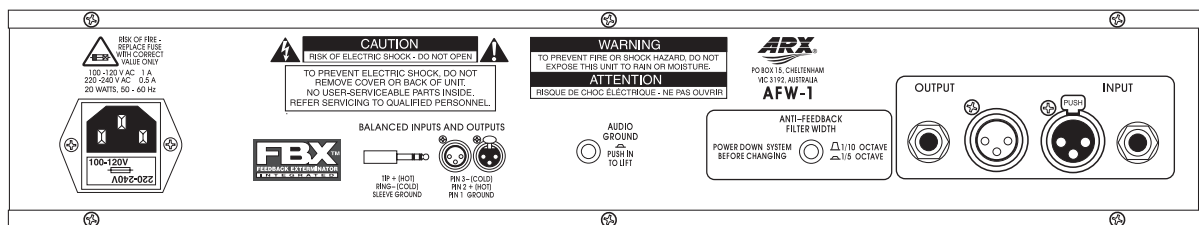
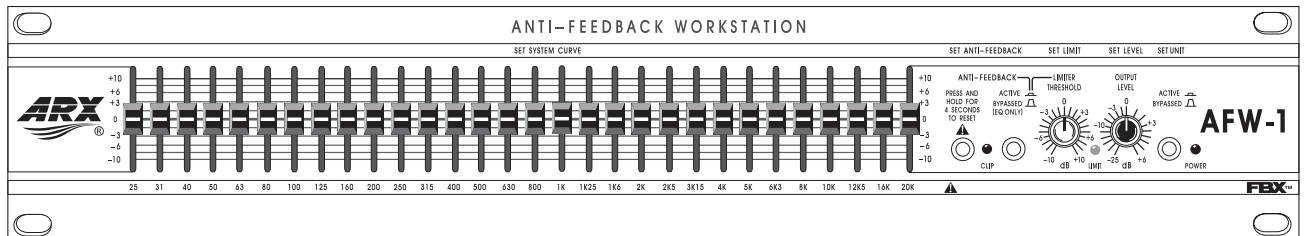
ANTI-FEEDBACK

WORKSTATION™

EQUALIZER, PEAK LIMITER, FBX FEEDBACK SUPPRESSION



<http://www.arx.com.au>



Tuning a live sound system, whether it's a concert or a conference or all points in between, is a complex procedure at the best of times! Simply stopping feedback is only a part of it - you still need to adjust the actual sound of the system in the room.

In the ideal world you'd have an equalizer to set the system curve, something to eliminate feedback, and something else to keep the system level under control.

So, we'd like to introduce you to the ARX contribution to the ideal world - the all-new ARX **AFW-1 Anti Feedback Workstation**.

A super accurate 30 band graphic equalizer, with up to  $\pm 10$ dB of cut and boost, a fast, smooth sounding peak limiter, plus onboard genuine FBX Feedback Exterminator circuitry.?

**Want total control over everything?** You've got it.

**Want automatic feedback locating and suppressing?** You've got that too.

**Want a safety valve that'll keep your system in one piece?** You've got that as well. All integrated into one 2 RU

package, all designed to work with each other, and with you.

Operation of the **AFW-1** is simplicity itself. Just use the EQ section to set the curve you require, press the switch in the anti feedback section for 4 seconds, and start pushing up the level.

That's all there is to it. When you're happy with the way things sound, set the limiter Threshold at the appropriate level, and start mixing.

If the system is in a fixed installation, simply power everything down when you've finished. The **AFW-1** remembers your anti-feedback settings next time it is used - there's no need to reset the circuit when it is turned back on. And if you forget the instructions, we've printed them on the lid for you!

The ARX **AFW-1 Anti Feedback Workstation** has an application for every mode of live audio: Monitors, Front of House, Church installations, TV audience monitors, Conferences; in fact, anywhere there's a live microphone, there's a need for the **AFW-1**.

## Features

- Automatic Feedback control
- Genuine FBX Feedback Exterminator
- 30 band Graphic Equalizer
- Fast, smooth Output limiter
- Intuitive, 'user friendly' layout
- Ultra low noise 'Constant Q' circuitry
- Balanced Inputs and Outputs on XLR and Jack connectors
- Audio Ground lift switch on rear
- Flawless performance in any audio environment
- Security cover available

# AFW-1 Specifications

## Input

- 40 K Ohm Balanced
- 20 K Ohm Unbalanced

## Output

- 300 Ohm Balanced
- 150 Ohm Unbalanced

## Nominal Operating Level

0 dB

## Maximum Input Level

+20 dB

## Maximum Output Level

+20 dB EQ section only  
+10 dB FBX in

## Signal to Noise Ratio

-86 dB 'A' Weighted  
EQ section only  
-98 dB Unweighted

## Distortion

0.004% EQ section only  
0.02% FBX in  
measured @ 1 KHz, +4dB

## Frequency Response

20 Hz to 20 KHz,  $\pm 0.5$  dB

## Equalizer Filters

30 x Constant Q on  
standard ISO frequencies

## FBX Filters

6 fixed, 3 dynamic

## FBX Clip Indicator

Amber LED

## FBX Filter Range

51Hz to 17 KHz

## FBX Filter Width

1/5th or 1/10th octave  
Switchable; refer manual

## FBX Filter Depth

0dB to -40dB

## FBX Filter Reset Time

4 seconds

## Peak Limiter Threshold

Variable -10 dB to +10 dB

## Limiter Status Metering

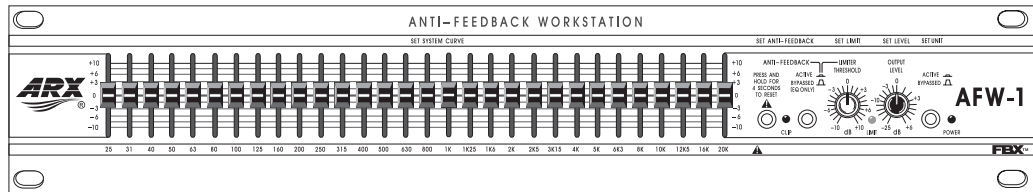
Red LED: Limiter Active

## AC requirements

100-120, 220-240 VAC,  
50-60Hz, 18 VA

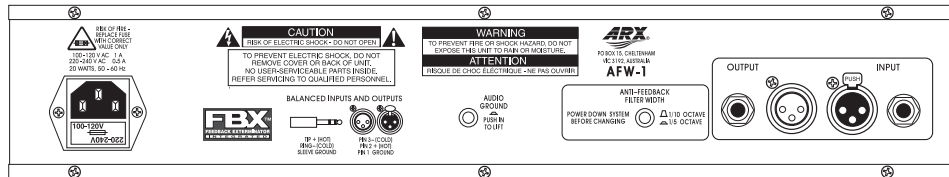
## Size

482 x 88 x 230 mm  
19"W x 3 1/2"H x 9"D



## FRONT PANEL

- 30 smooth, centre grounding sliders per channel, on standard ISO frequencies
- Reset control for Feedback Exterminator circuitry
- Clip LED indicates imminent clipping, monitored at all vital stages through the AFW-1
- Active/Bypass switch for Feedback Exterminator, Limiter and Output level controls
- Limiter Threshold and Limit LED
- Hardwire Active/Bypass switch for unit
- Power LED indicates AFW-1 is connected to AC power



## REAR PANEL

- Balanced Input and Output TRS sockets. Tip + HOT, Ring - COLD, Sleeve GROUND
- Balanced Input and Output XLR connectors. Pin 2 + HOT, Pin 3 - COLD, Pin 1 GROUND
- Feedback Exterminator filter width switch
- Audio Ground Lift switch
- IEC 3 pin AC connector and integral fuseholder.

## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The Workstation shall be a single channel unit in a steel chassis nine inches deep and tworack units high, with an extruded aluminium front panel.

The EQ section shall have 30 smooth, well damped centre grounding sliders on standard ISO frequencies, from 25 Hz to 20 KHz. At the 0 point each slider shall be grounded, and in effect removed from the circuit.

The Anti Feedback section shall consist of an onboard FBX Feedback Exterminator card, with Reset switch, an Amber LED to indicate the onset of clipping, and an Active or Bypassed switch. Additionally there shall be a rear panel switch for changing the FBX filter width.

The Limiter Threshold shall be variable by a front panel control, from -10dB to +10dB, with a Red Limit LED to indicate Limiting taking place.

There shall be an overall Output level control, variable from -25dB to +6dB and also an overall Active or Bypass switch on the front panel. An LED on the front panel shall indicate AC power being

applied. On the rear panel there shall also be an audio ground lift switch.

The unit shall have electronically Balanced inputs and outputs, on TRS jack and XLR type connectors, with passive RFI filters and an Input impedance of 40 Kohms. The Input headroom shall be +20dB, and the frequency response shall be 20 Hz to 20 KHz,  $\pm 0.5$ dB.

The Output impedance shall be 300 ohms, and the maximum Output level +20dB (+10dB FBX in), with a Signal to Noise ratio of better than -98dB unweighted (-86dB FBX in). Total Harmonic Distortion shall be 0.004% (0.02 FBX in) @ 0dB, 1 KHz.

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

The unit shall be the ARX AFW-1 Anti Feedback Workstation.

Specifications available on disk



## YOUR ARX DEALER IS:

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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.



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