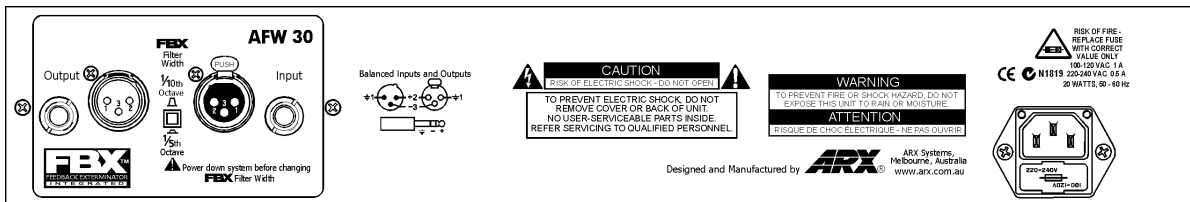
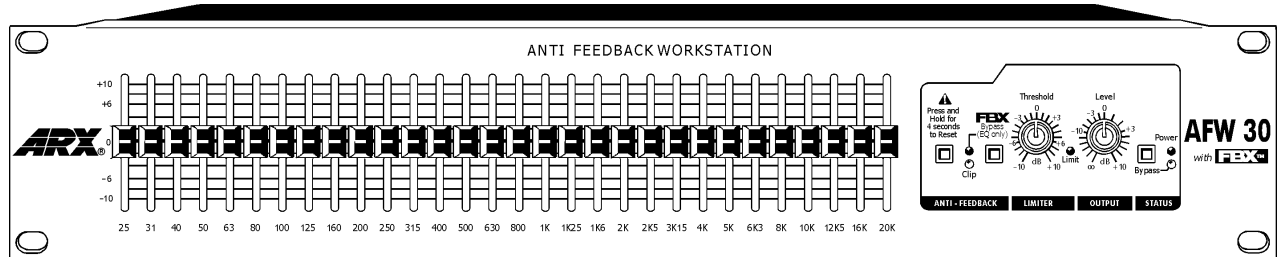


AFW 30



ANTI-FEEDBACK WORKSTATION™

EQUALIZER, PEAK LIMITER, SABINE FBX FEEDBACK SUPPRESSION



Tuning and calibrating an audio system, whether it's for a conference or a concert, 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 frequency response of the system in the room.

In the ideal world you'd have an equalizer to set the system EQ 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 ARX **AFW 30 Anti Feedback Workstation**.

A super accurate 30 band graphic equalizer, with 30 of our new **XR Extended Resolution** long throw faders providing up to ± 10 dB of cut and boost, a fast, smooth sounding peak limiter, plus onboard 9 band FBX Feedback Exterminator DSP circuitry licensed from Sabine.

The first 6 FBX filters lock in at the primary feedback nodes, leaving 3 filters 'floating' to handle any short term feedback problems, such as presenters or artists moving the microphone in front of the speakers, or too close to monitors, or something similar. These are usually short term problems, and once they have passed, the floating filters go back to a waiting mode.

Operation of the **AFW 30** is simplicity itself. Just use the EQ section to set the curve you require, press the Reset switch in the anti feedback section for 4 seconds, and start increasing the system gain.

If the system is in a fixed installation, simply power everything down when you've finished. The **AFW 30** remembers your anti-feedback settings next time it is used - there's no need to re-set the circuit when it is turned back on.

The **AFW 30** also features a Variable Threshold Output Limiter to ensure freedom from System overload and Amplifier clipping.

The ARX **AFW 30 Anti Feedback Workstation** has an application for every mode of live and installed audio: Monitors, Front of House, Church installations, TV audience monitors, Conferences.

In fact, anywhere there's a live microphone and loudspeakers, there's a need for the **AFW 30**.

Features

- Automatic Feedback control
- Genuine Sabine FBX Feedback Exterminator DSP
- 30 band Graphic Equalizer with Extended Resolution long throw faders
- Fast, smooth Output limiter
- Intuitive, 'user friendly' layout
- Ultra low noise 'Constant Q' circuitry
- Balanced Inputs and Outputs on XLR and Jack connectors
- Flawless performance in any audio environment
- Security cover available

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

EQ section only
-93 dB Unweighted
FBX in
-82 dB Unweighted

Gain

User Variable 00 to +10 dB

Distortion

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

Frequency Response

20 Hz to 20 KHz, ± 0.5 dB

Dynamic Range

+113 dB EQ section only
+92 dB FBX in

Equalizer Filters

30 x Constant Q on
standard ISO frequencies

FBX Filters

6 fixed, 3 dynamic

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

Minimum 4 seconds

Peak Limiter Threshold

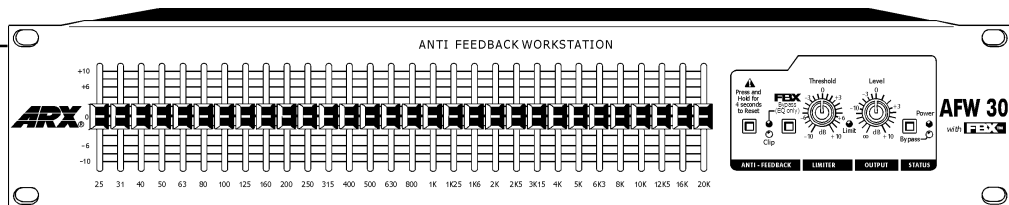
Variable -10 dB to +10 dB

AC requirements

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

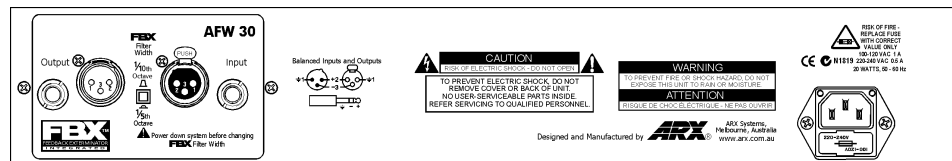
Size

482 x 88 x 205 mm
19"W x 3 1/2"H x 8"D



Front Panel

- 30 x Extended Resolution long throw centre grounding faders per channel, on standard ISO frequencies
- Reset control for Feedback Exterminator DSP circuitry
- Clip LED indicates imminent clipping, monitored at all vital stages through the AFW-30
- Active/Bypass switching for Feedback Exterminator DSP circuitry
- Limiter Threshold control and Limit LED
- Level control from 00 to +10 dB
- Hardwire Active/Bypass switch for unit
- Power LED indicates AFW-30 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
- IEC 3 pin AC connector and integral fuseholder.

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 Workstation shall be a single channel unit in a steel chassis eight inches deep, two rack units high, with a steel front panel.

The EQ section shall have 30 x 60mm (45mm travel) 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 DSP 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 from 1/5th to 1/10 octave.

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

There shall be an overall Output level control, variable from 00 to +10dB and also an overall Active or Bypass switch on the front panel. An LED on the front panel shall indicate AC power being applied.

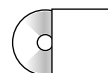
The unit shall have electronically Balanced inputs and outputs, on TRS jack and XLR type connectors, with passive RFI filters and an Input impedance of 40 Kohms. The Input headroom shall be +20dB, and the frequency response shall be 20 Hz to 20 KHz, ± 0.5 dB.

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 -93dB unweighted (-82dB with 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 30 Anti Feedback Workstation.

Specifications available on CD ROM.
Latest updates available at:
www.arx.com.au



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.



ARX Systems Pty Ltd; PO Box 15, Moorabbin, Victoria 3189, Australia
Phone: 03 9555 7859 Fax: 03 9555 6747 International Fax +61 3 9555 6747
Email: info@arx.com.au Internet: www.arx.com.au

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