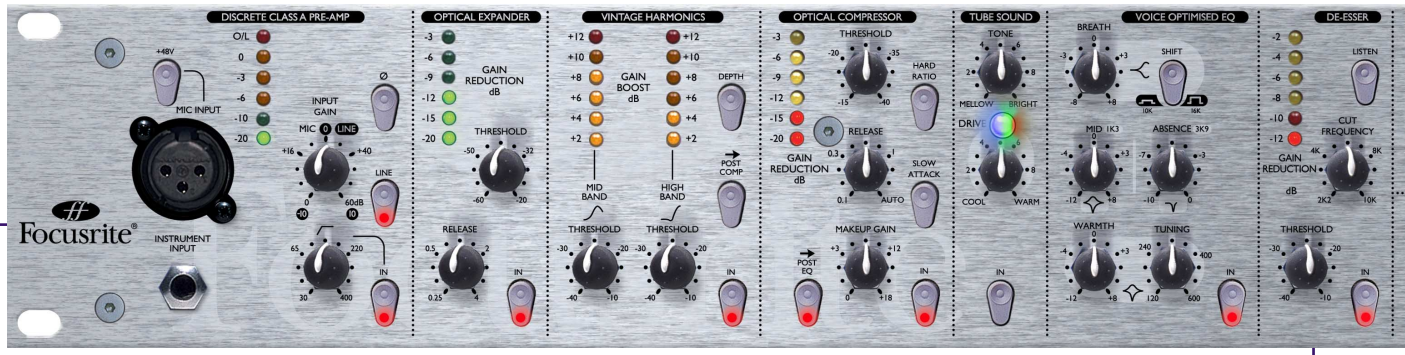


# VOICEMASTER PRO

## Capture and Create: The Perfect Vocal.

An end to the search for that elusive perfect vocal; VoiceMaster PRO represents a new generation of Channel strip design. Taking as its starting point the Award-winning original VoiceMaster design, the unit features a whole host of new processors designed to ensure you have all you require to make the most of the artist you're recording.

*"There can be no denying that the pre-amp front end is extraordinarily good."*
*Studio Sound Magazine*




- Class A Pre amp
- Stereo Latency-free Monitoring
- Vintage Harmonics processor
- Voice-optimised EQ
- ISA optical de-esser
- High quality A/D convertor option
- Insert points, FX send/returns & DI functionality
- Tube Sound circuit

The award-winning Class A Pre-amp is capable of capturing every nuance from any source, whilst Latency-free Monitoring ensures direct and delay-free mix control. Tools such as the Voice optimised EQ, 'Vintage Harmonics' and 'Tube Sound' allow you to get creative with a touch of class, putting your own stamp on every recording.

All of this, combined with the 24 bit, 96kHz A/D option means that VoiceMaster PRO is the perfect interface between your microphone and your DAW or other recording media.

### Class A Pre Amp

VoiceMaster PRO boasts the same award-winning pre amp as its predecessor, the original, industry standard VoiceMaster. This Pre amp demonstrates the same wide-bandwidth philosophy featured in the original 'Neve-designed' Focusrite units from years past, ensuring low noise and distortion, whilst displaying the signature sound for which Focusrite has become famous. Also found in this section are Phantom Power, Phase reverse and a variable High Pass filter for controlling rumble, proximity effect and pop reduction, enabling VoiceMaster PRO to handle any audio source with style and grace.

### Direct Input

Also included on the front panel are Mic and Instrument inputs, allowing quick and easy connection without the need for a separate DI box. Although optimised for Vocal use, VoiceMaster PRO can equally turn its hand to any instrument with outstanding results.

### Optical Expander

A new, less intrusive optical expander is the perfect tool for removing ambient noise and headphone bleed, whilst avoiding signal pumping. The release control is now variable, allowing for a far more accurate set-up. Whilst the Expander is optimised for vocal use and can operate as such inaudibly, with variable release it can also be tailored for a more aggressive approach on less sensitive signals such as electric guitar or drums.

### Vintage Harmonics

Vintage Harmonics ensure your vocal sits prominently in the mix, whilst adding character to an otherwise sterile digital environment. It has been designed to emulate a classic tape-based vocal enhancement technique employed during the 1970's.

Engineers in this period discovered that if vocals were recorded with a Dolby® A unit switched into the signal chain, and then played back with the Dolby® A unit switched off, a pleasing harmonic emphasis was created.

Focusrite's 'Vintage Harmonics' processor reproduces this effect during recording by compressing the audio (relative to frequency) below a certain threshold. Unlike the original method however, this process has the added benefit of variable threshold (for both mid and high bands) and depth control, so the effect can be instantly tailored to suit any voice.

To provide even further creative potential, the position of this powerful tool in the signal chain can be changed, operating either pre- or post- the compressor module.

### Optical Compressor

The Optical Compressor design in the VoiceMaster PRO is, like all other features in this unit, optimised for vocal use, offering easy-to-set-up dynamic control of performance changes. The circuit is based on the original VoiceMaster compressor, yet newly improved, providing smoother performance. The addition of a 'post EQ' switch mirrors routing flexibility found in the legendary ISA range. Enabling frequency-conscious compression, this function provides a huge boost to the creative potential of this compressor and the unit as a whole.

### Tube Sound

The 'Tube Sound' section offers cutting edge valve emulation technology, providing all the warmth and control, without the unreliability/unrepeatability that valves often entail. Focusrite's Tube Sound circuit produces 2nd, 3rd and 5th harmonics relative to the source audio, the frequencies being controlled by the Tone control knob ('Mellow' to 'Bright'). The level of effect applied is displayed via a huge tri-colour LED (Blue through Yellow, to Red) and is adjusted via the 'DRIVE' control, running from 'Cool' to 'Warm'. This section provides further creative flavour, helping to ensure you get exactly the sound you're looking for.

### Voice Optimised EQ

Focusrite's British EQ has become a by-word for excellence, and the VoiceMaster EQ is no exception, featuring controls specified to give immediate results with live or pre-recorded vocals. The VoiceMaster PRO EQ is not just a fixed three-band cicuit; Controls included are:

Breath - A shelving EQ, switchable from 16K to 10K to add air to both female and male vocals

Mid - A bell-shaped curve at 1K3 to give vocals bite in a busy mix

Absence - A notch filter with a narrow Q centred at 3K9 to remove harshness



Dolby® is a registered trademark of Dolby Laboratories

*"Coming soon to a Studio near you, Focusrite's new Platinum Series analog processors offer awesome performance at an unbelievable price."*
*George Petersen, Mix US*




Warmth - A bell curve, tuneable from 120Hz to 600Hz, adding depth and volume

### Optical De-esser

VoiceMaster PRO features the same Optical De-esser as Focusrite's award-winning flagship product, the ISA 430 Producer Pack. The circuit is based on a low-distortion optical design, allowing you to transparently remove excessive sibilance from your vocal. The circuit uses a combination of threshold-dependent EQ and phase cancellation to create a de-esser that is smoother and less intrusive than traditional compression-based designs. Included in the design is the 'Listen' switch, allowing you to isolate and monitor the excess sibilance which is triggering the De-esser, rather than trying to pick out the effect within a complex full-bandwidth signal. The most powerful, inaudible, yet effective De-esser in existence!

### Output Features and Controls

VoiceMaster PRO is the first Platinum to feature a custom peak-reading meter. This meter, combined with the fader control and an overload LED, provide superb visual indication and instant control of your output levels. Also featured within the Output section is a 'Process Bypass' switch, for instant A/B comparisons.

### Digital Connectivity

VoiceMaster PRO features the same optional high quality A/D converter as TrakMaster and Penta. The converter is 24 bit and 128 x over-sampled, handling sample rates of up to 96kHz, with S/PDIF output and BNC word clock connector. Tracking a vocal direct into your DAW or any other digital recording media has never been easier or more affordable. An ADC lock LED on the front panel shows when Word Clock sync has been established.

## VOICEMASTER PRO SPECIFICATIONS

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|---|---|
| **Inputs** | |
| **MIC** | |
| **Gain** | 0dB to 60dB continuously variable |
| **Frequency Response** | 0dB at 10Hz and –2dB down at 200KHz. |
| **Mic EIN** | -128dB (measured at 60dB of gain with 150 Ohm terminating impedance and 20Hz /22KHz bandpass filter.) |
| **THD + N** | 003% (measured with a –36dBu input signal and with a 20Hz/22KHz bandpass filter.) |
| **Line** | |
| **Gain** | -10dB to +10dB continuously variable |
| **Frequency Response** | 0.25dB down at 10Hz and –3dB down at 200kHz. |
| **THD + N** | .0006% (measured with 0dBfs (+22dBu) input) |
| **Noise** | -94dBu (measured with a 20Hz/22kHz bandpass filter.) |
| **Instrument** | |
| **Gain** | 0dB to 40dB continuously variable |
| **Frequency Response** | 0.5dB down at 10Hz and –1dB down at 200kHz. |
| **THD + N** | .006% measured with –10dBu input signal and with a 20Hz/22kHz bandpass filter. |
| **Noise** | -90dBu (measured with a 20Hz/22kHz bandpass filter.) |
| **High Pass Filter** | 30Hz to 400Hz continuously variable 18dB per octave 3 pole filter |

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|---|---|
| **Optical Expander** | Threshold hold range 20dBfs (0dBu) to –60dBfs (-40dBu) |
| **Expander ratio** | 2:1 |
| **Attack time** | 750uS |
| **Release time** | 0.25s to 4s |
| **Vintage Harmonics** | |
| **Threshold range** | -10dBfs (+12dBu) to –40dBfs (-18dBu) |
| **Mid band centre frequency** | 3.5kHz |
| **High band centre frequency** | 20kHz |
| **Band Q** | 0.2 |
| **Optical Compressor** | |
| **Soft Ratio** | 2.5:1 |
| **Hard Ratio** | 6:1 |
| **Fast Attack** | 0.5ms |
| **Slow Attack** | 5ms |
| **Noise** | -94dBu (measured with a 20Hz/22kHz bandpass Filter.) |
| **Voice Optimised EQ** | |
| **Breath** | Peak frequency Shift switch out = 10kHz<br>Peak frequency Shift switch in = 16kHz<br>Gain range = +/-8dB |
| **Mid** | Centre frequency = 1.3kHz<br>Gain range = +8 to -12dB |
| **Absence** | Centre frequency = 3.9kHz<br>Gain range = 0dB to -10dB |
| **Warmth** | Centre frequency range = 120Hz to 600Hz<br>Gain range = +8 to -12dB |
| **De-esser** | |
| | Centre frequency range 2.2kHz to 10kHz |
| **Q of cut** | 3.5 |
| **Noise** | 94dBu (measured with a 20Hz/22kHz bandpass filter.) |

**Output Stage**

**Electronically balanced; 50 Ohms, nominal level +4dBu**
**Unbalanced; ground compensated, 75 Ohms, nominal level –10dBv.**
**Pre-de-esser; 50 Ohms, nominal level +4dBu**




### Latency-free Monitoring

VoiceMaster PRO is the only channel strip to offer latency-free monitoring, a major new development in recording technology. This section offers the capacity to monitor your source signal within the mix, direct from the unit, avoiding having to resort to monitoring via your DAW or digital desk, both of which may be prone to latency issues. A headphone mix can be created for either the artist or the engineer, with immediate and tactile control over levels, as well as the opportunity to feed in and control an external effect (e.g. reverb) for the source signal. With all the controls for latency-free monitoring available direct from the front fascia, VoiceMaster PRO means an end to latency issues. Capturing and creating the perfect vocal has never been easier, more enjoyable, or more affordable.