TWINTRAK PRO

Lose the Mixer

Designed principally as an affordable, high-specification dual mono / stereo tracking device, TT Pro, (as it's affectionately known,) also boasts comprehensive stereo latency-free monitoring for direct and delay-free mix control, and unmatched digital connectivity, including a D-A as standard, all within a sturdy 2U 19" rack-mount chassis. The award-winning Class A pre amps are capable of capturing every nuance from any source, whilst the optical compressor, with its custom fast-acting optos, comprehensive controls and true stereo linking, provides extremely smooth yet effective control of the signal's dynamics.

○ **2 Class A mic pre's**   ○ **Dual mono/stereo compressor**   ○ **Stereo latency free monitoring**

○ **Dual 'scoop' eq**   ○ **D-A Converter as standard**   ○ **Twin output meters**

Combining all these facilities, TT Pro provides everything you need to track, monitor and mix, leaving your mixer gathering dust.

- Two Class A Focusrite mic pre-amps,
- Wire-wound, inductor-induced 'Air' and controllable mic input impedance
- Dual-mono compressor, featuring custom fast-acting optos and true stereo linking
- Comprehensive stereo latency-free monitoring with enhanced routing and control
- High quality 24bit D-A, fitted as standard
- Optional high quality 24 bit/96kHz A-D, including word clock
- Two mid-scoop EQ's
- Post pre-amp inserts and compressor side-chain inserts
- Custom Focusrite Ocean Blue peak-reading meters.
- Front panel direct instrument inputs

Two Class A Pre-amps

TT Pro boasts two award-winning pre-amps, but with some exclusive new improvements; 'Air' utilises a unique wire-wound inductor circuit that imparts a boost in the high-end frequencies, enabling the pre-amp to recreate the open and airy qualities of more expensive transformer-based pre-amps.

TT Pro also sports variable impedance control, allowing you to perfectly match the pre-amp with any microphone, (and so maximise level,) or to use different settings creatively, to interactively shape the sound of your chosen microphone.

The Pre-amps demonstrate the same wide-bandwidth philosophy featured in original Focusrite ISA units from years past, ensuring low noise and distortion, whilst displaying the signature sound for which Focusrite has become famous. Also in this section are Phantom Power, Phase reverse and a High Pass/Low Cut filter for controlling pops, rumble and proximity effect, enabling TT Pro to handle any mono or stereo audio source with ease.

Direct Instrument Input

Also included on the front panel are two instrument inputs, allowing quick and easy connection without the need for a separate DI box. A High Gain switch provides the option to boost the incoming signal by 20dB, allowing you to accurately set the input level for both passive and active instruments.

Mid Scoop EQ

The Mid-scoop EQ is a quick and effective problem-solver, with two different depths of cut and an adjustable frequency control. Ranging from 120Hz to 2K, it's ideal for vocal problem solving or for creating great miked-up cabinet ambience.

Optical Compressor

In pride of place is TT Pro's powerful dual mono/stereo optical compressor. It features Focusrite's custom fast-acting optos and operates in Class A mode, allowing for smoother, lower distortion performance than off-the-shelf VCA-derived circuits. With the addition of both Hard/Soft knee switches and side-chain inserts, every compression need is provided for.

True Stereo Linking

The link feature allows TT Pro to act as a true stereo compressor, enabling complete stereo control of every parameter. When switched to 'link', channel one becomes the master and controls both compressors simultaneously. Unlinking allows you to operate the unit as a dual mono device, processing two separate channels independently.

A Hardware Plug-in.

TT Pro is the first Platinum to feature a D-A converter as standard, alongside its optional A-D converter. The D-A converter enables the user to feed mono or stereo digital signals into TT Pro. These signals can be fed either into the stereo Latency-free Monitoring section, or via line inputs, (post- the pre-amp stage) for further processing as a 'hardware plug-in'.

The signal can then return to the digital audio workstation via Focusrite's optional stereo 24bit/96kHz A-D converter. The converter is 24 bit and 128 x over-sampled, handling sample rates of up to 96kHz, with S/PDIF output and a BNC word clock connector. An ADC lock LED on the front panel shows when Word Clock sync has been established, whilst two DAC input LED's show when signal is flowing through the D-A converter.

Together, these facilities make TT Pro an ideal tracking device, the perfect analogue interface for any digital audio workstation, and equally the world's first 'hardware plug-in'.

Stereo Latency-Free Monitoring

This section offers the capacity to monitor your source signals within the mix, directly at source, avoiding having to resort to monitoring via your DAW or digital desk, both of which may be prone to latency issues. A headphone or monitor mix can be created for either the artist or the engineer, with immediate and tactile control over levels. The opportunity to feed in and control an external effect (e.g. reverb) for the source signals is also available. With all the controls for latency-free monitoring available direct from the front fascia, TwinTrak Pro spells an end to all your latency nightmares.

TWINTRAK PRO SPECIFICATIONS

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	0.0004% (measured with a +16dBu input signal and with a 20Hz/22KHz bandpass filter.)
LINE	
Gain	-10dB to +10dB Continuously variable
Frequency Response	0.1dB down at 10Hz and -3dB down at 200kHz.
THD + N	0.0006% (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	0.006% measured with -10dBu input signal and with a 20Hz/22kHz bandpass filter.
Noise	-90dBu (measured with a 20Hz/22kHz bandpass filter.)

High Pass Filter	
Roll off	12 dB per octave 2 pole filter
Cut off frequency	-3 dB at 120 Hz

Channel Insert and Compressor Sidechain Insert	
Connectors	Unbalanced input and output on TRS socket as follows: Tip=Send (Output) Ring=Return (Input)

Optical Compressor	
Threshold range	-12dBfs (10dBu) to -42 dBfs (-20 dBu)
Compressor Ratio	
Hard ratio switch out	2.5:1
Hard ratio switch in	6:1
Attack time	
Slow Attack switch out	0.5ms
Slow Attack switch in	5ms
Release time	100 ms to 1 s and then auto release mode when the release knob is turned fully clockwise.
Makeup gain	0 to +21dB

Mid Scoop EQ	
EQ shape	Peak
Centre Frequency	Variable between 120 Hz and 2 kHz
Cut and Q	
Deep switch out	Cut=-6dB; Q=1.5
Deep switch in	Cut=-12dB; Q=3

FX Send and Headphones Mix	
Connector	Unbalanced output, signal level equivalent to -6dB below normal operating level
Noise	-94dBu, measured with a 20Hz/22kHz bandpass filter.
Maximum output signal level	+20 dBu

FX Return and Monitor Input	
Connector	Balanced input (TRS socket)
Operating level	+4 dBu

Monitor Output	
Connector	Balanced output (XLR)
Operating level	+4 dBu
Noise	-98 dBu, measured with a 20Hz/22kHz bandpass filter and monitor level knob at maximum output level

DAC Performance	
Playback sample frequency	32 kHz to 96 kHz.
Maximum bit depth	24 bit
Maximum analogue output level	+21 dBu
Dynamic Range	111 dB measured with A-weighted filter.

Dimensions	482mm(W)x88mm(H) x180mm(D)
Weight	5 Kg