

## Focusrite ISA Two Technical Specifications

Front panel, per channel:		Rear panel, per channel:	
1/4" instrument input		XLR-F mic inputs	
Variable input impedance - Low, ISA 110, Medium, High		1/4" TRS line inputs	
Input selection - Mic, Line, Instrument		1/4" TRS Sends	
0 - 30 dB/30 - 60 dB gain switch		1/4" TRS Returns	
Phantom power switch		XLR-M line output	
Phase invert switch		Single peak meter calibration dial	
0 - 60 dB gain in 10 dB steps		Single IEC power socket	
0 - +20 dB continuously variable trim			
Variable high-pass filter with on/off switch			
Insert point on/off switch			
Eight-LED user-calibrated level meters			
Single power switch			

  

Measured Performance	
<b>Maximum Input and Output Levels</b>	
Maximum Output Level	+24 dBu with a THD+N < 0.01% at 1kHz measured with 150 $\Omega$ source impedance and 22Hz/22kHz band-pass filter
Maximum Microphone Transformer Input Level	+7 dBu with a THD+N < 0.7% at 1kHz measured at 0 dB of gain with 150 $\Omega$ source impedance and 22Hz/22kHz band-pass filter

  

Mic Input Response	
Gain range	0 dB to +60 dB in 10 dB steps, plus 0 dB to +20 dB continuously variable trim
Input Impedance	Switched Impedance setting
	Equivalent Input Impedance at 1 kHz
	Low = 600 $\Omega$
	ISA 110 = 1.4 k $\Omega$
	Med = 2.4 k $\Omega$
	High = 6.8 k $\Omega$
EIN (Equivalent Input Noise)	Measured at 60 dB of gain with 150 $\Omega$ source impedance and 22 Hz-22 kHz band pass filter -127 dB
Noise	Noise at output with unity gain (0 dB) and 22 Hz-22 kHz band pass filter -97 dBu
Signal-to-Noise Ratio	Measured with 150 $\Omega$ source impedance and 22 Hz-22 kHz band pass filter 121 dB relative to max output +24 dBu
Total Harmonic Distortion + Noise	Measured with a -20 dBu input signal at +30 dB of gain and with a 22 Hz-22 kHz band pass filter < 0.0007% at 1 kHz
Frequency Response	At minimum gain (0 dB)
	At +60 dB gain
CMRR (Common Mode Rejection Ratio)	-94 dB for mic input at 60 Hz for max. output = +24 dBu -91 dB for mic input at 10 kHz for max. output = +24 dBu
Crosstalk Channel to Channel	Mic input, with I/P = 0 dBu, gain = 0 dB @ 1 kHz input to channel A, channel B output = -85 dB

  

Line Input Response	
Gain Range	-20 dB to +10 dB in 10 dB steps, plus 0 dB to +20 dB continuously variable trim
Input Impedance	10 k $\Omega$ from 10 Hz to 200 kHz
Noise	Noise at main output with gain at unity (0 dB) measured with 50 $\Omega$ source impedance and a 22Hz - 22 kHz band pass filter -97 dBu
Signal-to-Noise Ratio	Measured with 50 $\Omega$ source impedance and a 22 Hz-22 kHz band pass filter 121 dB relative to max output +24 dBu
Total Harmonic Distortion + Noise	Measured with a 0 dBu input signal, +10 dB of gain and a 22 Hz-22 kHz band pass filter < 0.002% at 1 kHz
Frequency Response	At unity gain (0 dB) -0.3 dB at 10 Hz, -1 dB at 80 kHz, relative to 1 kHz
Crosstalk Channel to Channel	Line input, with I/P = 0 dBu, gain = 0dB @ 1 kHz input to channel A Channel B output = -91 dB

  

Instrument Input Response	
Gain Range	+10 dB to +40 dB continuously variable trim
Input Impedance	> 2 M $\Omega$
Noise	> Measured with 22 Hz-22 kHz band pass filter Minimum gain (+10 dB) = -95 dBu
Frequency Response	At minimum gain (+10 dB)
	At maximum gain (+40 dB)
	-0.1 dB at 10 Hz, -1 dB at 115 kHz, relative to 1 kHz
	-2.5 dB at 10 Hz, -1 dB at 110 kHz, relative to 1 kHz

  

High-Pass Filter	
Roll-Off	18 dB per octave (3 pole filter)
Frequency Range	Continuously variable from 16 Hz to 420 Hz (-3 dB)

  

Weight and Dimensions	
W x D x H	480 mm x 280 mm x 44 mm
Weight	3.7 kg