



- Multi-channel DSP amplifier for live applications for operating all K&F loudspeakers
- Power density of 10 kW and 20 kW in 2U
- Fully integrated 96 kHz DSP with FIR Drive technology
- OMNEO integration for seamless compatibility with Dante and OCA
- Color touchscreen for control without software

The TGX Series delivers uncompromising power, ultimate reliability and state-of-the-art DSP performance, purpose-built for the most demanding live sound environments. With market-leading power density of up to 20 kW in just 2U, a fully integrated 96 kHz DSP with FIR-Drive, and seamless Dante/OCA networking, TGX amplifiers provide exceptional control and pristine audio quality. Their rock-solid stability down to 2 ohms and robust German-engineered construction make them the first choice for large-scale touring applications. TGX represents engineering at its finest, setting a new benchmark for professional amplifier platforms.

K&F TGX Series

K&F TGX10

	2 Ω	2.7 Ω	4 Ω	8 Ω
Load impedance				
Maximum Output Power ¹ All channels driven	2,600 W	3,000 W	2,500 W	1,250 W
Number of amplifier channels		4		
Maximum Output Voltage		150 V Peak		
Maximum Output Current		53 A Peak		
AMPLIFIER				
Voltage Gain ref. 1 kHz		32.0 dB, adjustable 24-40 dB		
Input Sensitivity ref. to Max. Output Voltage		10.7 dBu (2.66 V), adjustable 2.7-18.7 dBu		
THD 3 dB below Max., AES17, 1 kHz		< 0.05 %		
IMD-SMPTE 60 Hz, 7 kHz		< 0.05 %		
DIM100 3,15 kHz, 15 kHz		< 0.15 %		
Crosstalk ref. 1 kHz, 12 dB below Max., 8 Ω		< -80 dB		
Frequency Response ref. 1 kHz, analog in to speaker out		20 Hz to 20 kHz (± 0.5 dB)		
Damping Factor 20 Hz to 200 Hz, 8 Ω		> 400		
Output Stage Topology		Class D, fixed frequency		
Signal to Noise Ratio				
A-weighted, analog input		112 dB		
A-weighted, digital input		115 dB		
Output Noise				
A-weighted, analog input		< -70 dBu		
A-weighted, digital input		< -73 dBu		

DIGITAL SIGNAL PROCESSING

Sampling rate	48 kHz/96 kHz, OMNEO/Dante synchronized
Signal Delay/Latency	
Analog in to Speaker Out, 48 kHz/96 kHz	0.70 ms/0.53 ms
AES3 in to Speaker Out, 48 kHz/96 kHz	1.00 ms/0.66 ms
Dante Network Latency	typ. 1.00 ms
Signal Processing	32-/40-Bit, floating point
User EQ	12 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Lo-ShelvQ, Hi-ShelvQ, Hi-Pass, Lo-Pass and Notch; 2 filters of them with additional asymmetric filter type
User Delay	0 to 2000 ms per channel (units: μs, ms, s, cm, m, inches, feet)
Array-EQ	5 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Lo-ShelvQ, Hi-ShelvQ, Hi-Pass, Lo-Pass, and All-Pass
Array-Delay	0 to 500 ms per channel (units: μs, ms, s, cm, m, inches, feet)
Speaker FIR	up to 1025 taps, Linear Phase Filter, Linear Phase Brickwall X-Over
Speaker Limiters	Peak Anticipation Limiter and RMS/TEMP Limiter per channel
Other functions	Source Selection and Mix, Level, Mute, Polarity, Sine and Noise Generator, Level Meters, Impedance Measurement, and Load Monitoring
Memory	
DSP Presets	1 Factory + 20 User
Source Supervision and Fallback	AES3 Lock and OMNEO/Dante network supervision, switchover to alternative Source Selection

K&F TGX Series

CONNECTIVITY

Analog Audio Input/Thru

Type	4 x 3-pin XLR female/male
Maximum Input Level	+24 dBu
Input Impedance, active balanced	20 kΩ
Reference level equal to digital input	+21 dBu for 0 dBFS

Digital Audio Input/Thru

Type	2 x 3-pin XLR (alternative use of Analog In/Thru)
Format	AES3 (AES/EBU)
Input Sample Rates	32 to 192 kHz, internal Sample-Rate-Converter
Thru Connector	active buffered, direct bypass if device is unpowered

Network

Type	2 x Neutrik etherCON/RJ45, redundant PRIMARY/SECONDARY
Format	1000BASE-T/100BASE-TX, integrated switch
Network Audio Inputs	8 channels, 48/96 kHz, OMNEO/Dante format
Network Audio Outputs (Monitor)	2 channels, 48/96 kHz, OMNEO/Dante format

Front side Service Port

Mains Input	1 x Neutrik powerCON-HC
Speaker Output	4 x NL4

GENERAL

User Interface

Display	320 x 240 pixel, 3.5" color TFT
Front panel indicators	Full color LED illuminated ring
Front panel operating elements	Rotary encoder, Capacitive Touch Screen
Rear panel indicators	2 x LED (AES3 Input mode active, Amp-Find)
Rear panel operating elements	Mains switch

Power Requirements

Power Consumption	100 V to 240 V, 50 Hz to 60 Hz AC
1/8 Maximum Output Power at 4 Ω	1,200 W
Idle Mode (no input signal)	1,765 W
Standby Mode	80 W
	< 18 W

Power Supply Topology

Switching Mode Power Supply with digital controlled Power Factor Correction

Protections	Audio Limiters, High Temperature, DC, HF, Short Circuit, Back-EMF, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Over/Under voltage Protection
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Cooling

Front-to-rear, temperature controlled fans, supervised

Ambient Temperature Limits	+5 °C to +40 °C (+40 °F to +105 °F)
IEC Protection Class	Class I (grounded)

Electromagnetic Environment

E1, E2, E3

Color

Black

Dimensions (W x H x D), mm

483 x 88.1 x 514.2

Weight

15.0 kg (33.0 lb)

Shipping Weight

17.2 kg (37.8 lb)

Amplifier at rated conditions; all channels driven, 4 Ω loads, analog input, 32 dB gain, 48 kHz sample rate, unless otherwise specified.

¹ Test signal for max. output power according IHF-A-202 (Dynamic-Headroom, burst 1 kHz/20 ms on/480 ms off/low level -20 dB).

K&F TGX Series

K&F TGX20

	2 Ω	2.7 Ω	4 Ω	8 Ω
Load impedance				
Maximum Output Power¹ All channels driven	5,200 W	6,000 W	5,000 W	2,500 W
Number of amplifier channels		4		
Maximum Output Voltage		210 V Peak		
Maximum Output Current		83 A Peak		
AMPLIFIER				
Voltage Gain ref. 1 kHz		32.0 dB, adjustable 24-40 dB		
Input Sensitivity ref. to Max. Output Voltage		13.7 dBu (3.73 V), adjustable 5.7-21.7 dBu		
THD 3 dB below Max., AES17, 1 kHz		< 0.05 %		
IMD-SMPTE 60 Hz, 7 kHz		< 0.15 %		
DIM100 3,15 kHz, 15 kHz		< 0.15 %		
Crosstalk ref. 1 kHz, 12 dB below Max., 8 Ω		< -80 dB		
Frequency Response ref. 1 kHz, analog in to speaker out		20 Hz to 20 kHz (± 1 dB)		
Damping Factor 20 Hz to 200 Hz, 8 Ω		> 400		
Output Stage Topology		Class D, fixed frequency		
Signal to Noise Ratio				
A-weighted, analog input		115 dB		
A-weighted, digital input		118 dB		
Output Noise				
A-weighted, analog input		< -70 dBu		
A-weighted, digital input		< -73 dBu		

DIGITAL SIGNAL PROCESSING

Sampling rate	48 kHz/96 kHz, OMNEO/Dante synchronized
Signal Delay/Latency	
Analog in to Speaker Out, 48 kHz/96 kHz	0.70 ms/0.53 ms
AES3 in to Speaker Out, 48 kHz/96 kHz	1.00 ms/0.66 ms
Dante Network Latency	typ. 1.00 ms
Signal Processing	32-/40-Bit, floating point
User EQ	12 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Lo-ShelvQ, Hi-ShelvQ, Hi-Pass, Lo-Pass and Notch; 2 filters of them with additional asymmetric filter type
User Delay	0 to 2000 ms per channel (units: μs, ms, s, cm, m, inches, feet)
Array-EQ	5 filters per channel, selectable as PEQ, Lo-Shelv, Hi-Shelv, Lo-ShelvQ, Hi-ShelvQ, Hi-Pass, Lo-Pass, and All-Pass
Array-Delay	0 to 500 ms per channel (units: μs, ms, s, cm, m, inches, feet)
Speaker FIR	up to 1025 taps, Linear Phase Filter, Linear Phase Brickwall X-Over
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Other functions	Source Selection and Mix, Level, Mute, Polarity, Sine and Noise Generator, Level Meters, Impedance Measurement, and Load Monitoring
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Type	4 x 3-pin XLR female/male
Maximum Input Level	+24 dBu
Input Impedance, active balanced	20 kΩ
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Digital Audio Input/Thru

Type	2 x 3-pin XLR (alternative use of Analog In/Thru)
Format	AES3 (AES/EBU)
Input Sample Rates	32 to 192 kHz, internal Sample-Rate-Converter
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Power Requirements

Power Consumption	100 V to 240 V, 50 Hz to 60 Hz AC
1/8 Maximum Output Power at 4 Ω	2,250 W
Idle Mode (no input signal)	2,850 W
Standby Mode	110 W
	< 19 W

Power Supply Topology

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Protections	Audio Limiters, High Temperature, DC, HF, Short Circuit, Back-EMF, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Over/Under voltage Protection
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Weight	18.3 kg (40.4 lb)

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