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TH K3 II A Orchestra

350 W Max Power

eid

TECHNICAL SPECIFICATIONS					
Component	3-way system				
Size					
Woofer	mm (in.)	165 (6.5)			
Midrange	mm (in.)	70 (3)			
Tweeter diaphragm	mm (in.)	38 (1.5)			
Voice Coil Ø					
Woofer	mm (in.)	50 (2)			
Midrange	mm (in.)	30,5 (1.2)			
Tweeter	mm (in.)	34 (1.34)			
Power Handling	W peak	350			
	W continuos	200			
Sensitivity	dB SPL	87,5			
Impedance	Ω	4			
Frequency Response	Hz	40 ÷ 26k			
SUGGESTED ACTIVE FILTERING:	Woofer	LoPass 250 ÷ 400 Hz @ 24 or 48 dB/Oct Level: 0 dB			
system delivers maximum performance in active multi- amplification by exploiting the linear phase crossover FIR filters available in the two flagship processors, bit One HD and bit One HD Virtuoso.	Midrange	HiPass 250 ÷ 400 Hz @ 12dB/Oct. LoPass 3k ÷ 4kHz @ 12dB/Oct. Level: 0 ÷ -1 dB			
	Tweeter	HiPass 4kHz @ 12dB/Oct Level: -5 ÷ -7 dB			
Weight of one component					
Woofer	kg (lb)	1.25 (2.76)			
Midrange	kg (lb)	0,25 (0.55)			
Tweeter	kg (lb)	0,355 (0.78)			

ELECTRO-ACOUSTIC PARAMETERS		TH 6.5 II Sax	TH 3.0 II Voce	TH 1.5 II Violino	
				Bott. Case	Bott. Disk
D	mm	130	66,75	38	38
Xmax	mm	5,4	3,3	-	-
Re	Ω	3,8	3,4	6,1	6,1
Fs	Hz	55	100	780	980
Le	mH	0,43	0,18	0,025	0,025
Vas	1	8,6	1,01	0,019	0,013
Mms	g	24,2	4,3	0,43	0,43
Cms	mm/N	0,35	0,59	0,09	0,062
BL	T•m	8,2	4,2	3,32	3,44
Qts		0,43	0,48	0,83	0,97
Qes		0,47	0,52	1,2	1,3
Qms		5,3	5,5	2,9	3,5
Spl	dB	87	85,6	92,5	93

TH 1.5 II Violino

- 34 mm CCAW single layer voice coil combining light weight, stability 1. at lower frequencies and total absence of musical transients compression.
- Extremely powerful custom N38 "H-grade" Neodymium magnet providing 1.67 T+m in the magnetic gap for superb dynamic response and very low distortion in the whole frequency range. Exclusive air-loading system resulting in a resonance frequency below 800 Hz, for filter set-up starting as low as 1.5 kHz 12dB/Oct. 38 mm natural silk dome optimized with extensive material barcesterizing. Incerv ultermeter companies and bints Element Analyzie 2.
- 3.
- 4. characterization, laser vibrometer scanning and Finite Element Analysis methods for a smooth and extended response.
- Frequency response up to 26 kHz optimized for off-axis installation. TH 1.5 II Violino Tuning System featuring two types of electro-5 6. acoustic load: bottom case or bottom disk according to targets of highest performance as well as flexibility of in-car integration.
- Full solid metal construction structure with each part exclusively designed and produced for the Audison TH 1.5 II. 7.
- FEM (Finite Element Method) optimized faceplate and front spokes for an improved dispersion pattern. eID technology providing TH 1.5 II traceability starting from the manufacturing stage up to the owner. 8.
- 9.

TH 3.0 II Voce

- 30,5 mm mobile voice coil in CCAR (Copper Clad Aluminum Ribbon) wound with flat wire to maximize the force factor and heat dissipation. 1.
- Aluminium demodulation ring which linearizes the high excursion intermodulation distortion, canceling any sound colorations. 2. 3.
- N38 'H-grade neodymium magnet included in the voice coil to obtain superior control of the mobile crew and superior thermal stability. 4.
- Motor geometry designed using finite element simulation software to optimize efficiency by concentrating the magnetic field in the gap. Membrane made of TPX®, a transparent material that reduces frequency response irregularities and provides a view of the inside of the speaker. 5
- 6. Membrane geometry designed by simulation software to obtain homogeneous directivity.
- 7. Optimized cone/surround break-up with extensive simulations to linearize the
- response at medium frequencies. Basket made of a single piece of die-cast aluminium with four pairs of spokes for maximum rigidity without slowing down the air flow. 8. 9.
- Suspension and spider with very high excursion, optimized with simulations of the multi-physical behavior of the speaker.
- 10. eID technology for the traceability of TH 3.0 II Item from production to purchase.

TH 6.5 II Sax

- 50 mm mobile voice coil in CCAR (Copper Clad Aluminum Ribbon) 1. wound with flat wire to maximize the force factor and heat dissipation. Low inductance of the mobile voice coil to optimize the emission in
- 2. medium-high band (2-3 kHz). N48 "H-grade" neodymium magnet with superb thermal stability to
- 3. guarantee an optimal dynamic reserve in every situation. Magnetic group geometry designed using finite element simulation
- 4. software to maximize efficiency by concentrating the magnetic field in the gap.
- Membrane made of TPX®, a transparent material that reduces the frequency response irregularities in the mid-high band, leaving the 5 speaker interior in full view. Membrane geometry designed using simulation software, to obtain a
- 6. smooth emission over all the listening angles. Basket made of a single piece of die-cast aluminium featuring four
- 7. pairs of spokes to optimize heat transfer, nullify turbulent airflows and ensure maximum structural rigidity.
- Hi-excursion suspension and spider, optimized with simulations of the loudspeaker multi-physical behavior. eID technology providing TH 6.5 II traceability starting from the manufacturing stage up to the owner. 8.
- 9.



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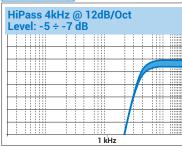
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SUGGESTED FILTER OPTIONS

TH K3 II A ORCHESTRA system delivers maximum performance in active multi-amplification by exploiting the linear phase crossover FIR filters available in the two flagship processors, bit One HD and bit One HD Virtuoso.

Tweeter Setup



ATTENTION: Tweeter phase must be reversed by DSP setting for this set-up.

TH 1.5 II

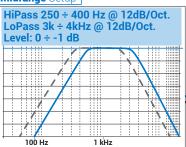
Violino

-5<u>d</u>B

-7[†]dB

0 <u>d</u>B -1 dB

Midrange Setup



Woofer Setup

LoPass 250÷400 Hz @24 or 48 Level: 0 dB	dB/Oct.
XX.	
1 kHz	



TH 3.0 II Voce



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