THE FLEX RANGE

UFM-215

AXYS®

TOTAL TRANSPARENCY

TECHNICAL DATA [1)]

Acoustical[2)].

		UFM-215
Frequency range[3)]		46 - 18k Hz (+/-3 dB)
Max SPL (1m)[4)]	- Continuous	125 dB
	- Peak	135 dB
Coverage angle[5)]		60° H x 50° V
Self generated noise SPL (A-weighed, 1m)		27 dB

Electrical

Input	- Sensitivity (100 dB_{SPL}/1m)	-20 dBu
	- Impedance (balanced)	20k Ω
	- Connector (XLR female type)	p2=+, p3=-, p1=gnd
Link		hardwired to input
Cross-over	- Type	24 dB/Oct with transducer alignment
	- Frequency (-6 dB)	1.2k Hz
Power amplifiers[4)]		2 x 210 W_{rms} (8 Ω)
Protection	- DLC	multi band
	- Thermal	$T_{heatsink}$ > 80° C
	- Mains voltage guard	over / under voltage
	- DC per amplifier	
Mains	- Voltage (+5/-10 %)[6)]	230 V
	- Connector type	IEC 320
	- Fuses (slow type)	1 x 3.15 A and 1 x 100 mA
	- Power consumption	30 W_{idle} / 300 $W_{full\ load}$

General

Temperature range (ambient)	0 - 40° C
Transducers	1 x 15" / 1 x 2" horn loaded
Dimensions (H x W x D)	634 x 464 x 414 mm
Weight	39 kg

1 Specifications are valid for 1 unit unless stated otherwise.
2 Measured under anechoic 'full-space' conditions unless stated otherwise.
3 Low cut-off frequency 'half-space'.
4 Measured with gated sinewaves.
5 -6 dB, average value 1k - 15k Hz.
6 Other voltages available upon request.

AXYS®
is a registered trademark
of
DURAN AUDIO

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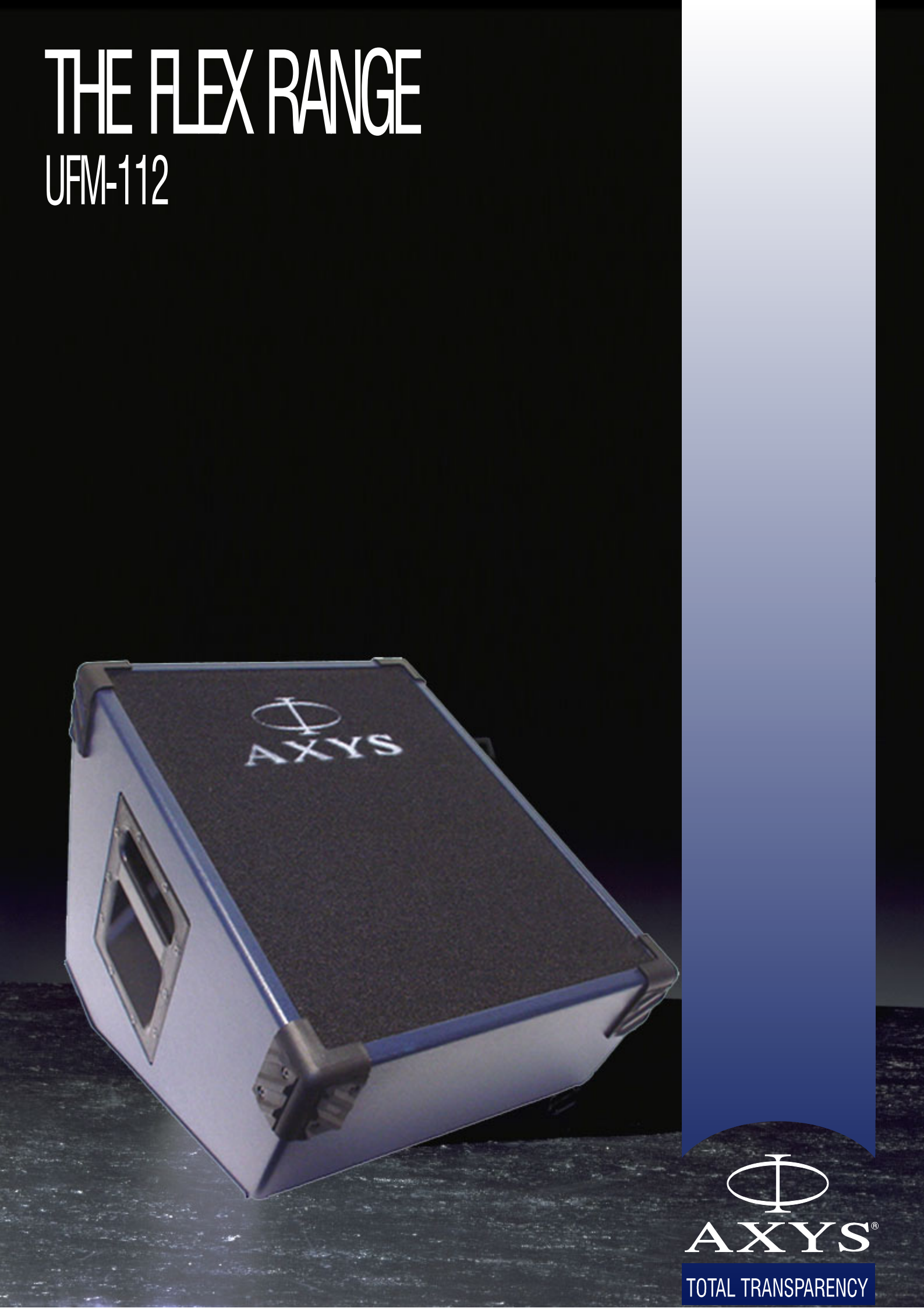
AXYS®
TOTAL TRANSPARENCY

THE FLEX RANGE

UFM-112



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TOTAL TRANSPARENCY

TECHNICAL DATA [1)]

Acoustical[2)].

		UFM-112
Frequency range[3)]		60 - 18kHz (+/-3dB)
Max SPL (1m)[4)]	- Continuous	126dB
	- Peak	135dB
Coverage angle[5)]		90° H x 90° V @ 1 kHz
Self generated noise SPL (A-weighed, 1m)		27dB

Electrical

Input	- Sensitivity (100 dB_{SPL}/1m)	-20dBu
	- Impedance (balanced)	20kΩ
	- Connector (XLR female type)	p2=+, p3=-, p1=gnd
Link		hardwired to input
Cross-over	- Type	asymmetrical with time alignment
	- Frequency (-6 dB)	1.8kHz
Power amplifiers[4)]		2 x 210 W_{rms} (8Ω)
Protection	- DLC	multi band
	- Thermal	$T_{heatsink}$ > 80° C
	- Mains voltage guard	over / under voltage
	- DC per amplifier	
Mains	- Voltage (+5/-10%)[6)]	230V
	- Connector type	PowerCon
	- Fuses (slow type)	1 x 3.15 A and 1 x 100 mA
	- Power consumption	30 W_{idle} / 500 $W_{full\ load}$

General

Temperature range (ambient)	0 - 40° C
Transducers	1 x 12" / 1 x 1.4" coaxial
Dimensions (H x W x D)	524 x 415 x 390 mm
Weight	28kg

1 Specifications are valid for 1 unit unless stated otherwise.
2 Measured under anechoic 'full-space' conditions unless stated otherwise.
3 Low cut-off frequency 'half-space'.
4 Measured with gated sinewaves.
5 -6 dB, average value 1k - 15k Hz.
6 Other voltages available upon request.

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FLEX RANGE

U-97 stadium system

FEATURES

- ✓ Network ready
- ✓ High Power Output
- ✓ Self Powered
- ✓ Small Dimensions
- ✓ High Reliability
- ✓ Carbon Fibre Technology

APPLICATIONS

- ✓ Medium Sized Stadiums
- ✓ Sports Facilities

AXYS®

TOTAL TRANSPARENCY

TECHNICAL DATA [1] (Preliminary)

Acoustical[2].

		U-97
Frequency Range (f-3 dB)[3]		70-18000 Hz (+/-3 dB)
Max. SPL (1m)[4] - Continuous		127 dB
	-Peak	135 dB
Coverage Angle[5]		90° H x 80° V
Self generated noise SPL (A-weighed, 1m)		30 dB

Electrical

Input	-Sensitivity (100 dB_{SPL}/1m)	-20dBu
	-Impedance (balanced)	10kΩ transformer balanced
	-Connector	7p female Binder 693/BD509
Cross-over	-Type	24 dB/Oct. with transducer alignment
	-Frequency (-6dB)	1.5kHz
Power amplifiers[4]		480 W_{rms} (4Ω) MF / 250 W_{rms} (4Ω) HF
Protection	-DLC	multi band
	-Thermal	$T_{heatsink}$ > 80° C
	-Mains voltage	over/under voltage
	-DC protection	each amplifier
Network interface		RS-485, full duplex 19k2 baud
	-Control	Volume setting
	-Monitoring	Protection circuitry status, and load mismatch
Mains	-Voltage (+5/-10%)[6]	230V
	-Connector type	4p male (Amphenol T3110000)
	-Fuses (slow blow)	1 x 6.3 A/1 x 100 mA
	-Power Consumption	80 W_{idle} / 600 $W_{full\ load}$

General

Temperature Range (ambient)	-20° to +40° C
Transducers	2 x 10"/2 x 2", horn loaded
Dimensions (H x W x D)	24.4" x 22" x 21.6"
	620 x 560 x 550 mm
Weight	156 lbs / 70 kg

1) Specifications are valid for 1 unit unless stated otherwise.
2) Measured under anechoic 'full-space' conditions unless stated otherwise.
3) Low cut-off frequency 'half space'.
4) Measured with gated sinewaves.
5) -6 dB, average value 1k - 8k Hz.
6) Other voltages are available upon request

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THE FLEX RANGE

U-12+

AXYS®

TOTAL TRANSPARENCY

THE FLEX RANGE

U-12+

INTRODUCTION

The **AXYS®** U-12+ is the introduction to a new generation in compact sound reinforcement systems. It represents an ultra-compact public address or sound distribution system, self-powered and two-way actively controlled, with high acoustical output capability and true studio reference quality.

MULTI-PURPOSE

Because of the well considered design, both in terms of quality and in terms of usability, this system will cover a large variety of applications, from industrial sound processing to any other kind of sound reinforcement like live music, monitoring and as music playback system.

THE ACTIVE CONCEPT

The introduction of the active concept in a system also designed for industrial purposes will be a breakthrough in the world of sound contracting. The active concept does not suffer the disadvantages of conventional and often outdated 70 volt ELA speaker systems. Why distributing high voltage audio while mains power is nowadays almost everywhere at hand?

The U-12+ is equipped with two power amplifiers and control electronics, eliminating the need of extreme long speaker wiring and high power audio transformers. With this concept the use of delay grouping in industrial applications has come within reach and thus proper sound projection possibilities. The system features a volume control and a contour switch offering maximum flexibility in all situations.

HIGH RELIABILITY

The control electronics contain the DLC (Dynamic Level Control), a circuit which monitors and controls the average power applied to the speakers according to their power handling capacity without affecting the dynamic response. This method guarantees save operation under all circumstances.

HIGH FIDELITY

The U-12+ is equipped with one 6.5" low frequency cone driver, supplied with a 1.5" voice coil preventing power compression, providing high SPL capability and a 1.1" ferrofluid cooled soft dome tweeter to ensure high definition and low distortion. The U-12+ is offering superb fidelity and full bandwidth reproduction. If extended low-end reproduction is required the **AXYS®** UB-24, an optional active sub-woofer, can be easily integrated in a system set-up.

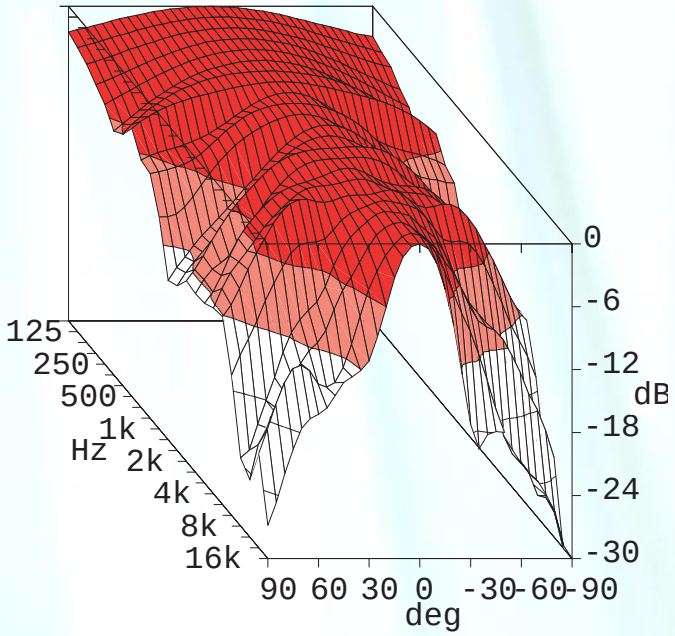
ULTRA COMPACT

The **AXYS®** U-12+ is an ultra compact loudspeaker system with high acoustical power capability (110 dB_{SPL} continuously), decreasing the often large space required. Its distinguished design and the small housing make the U-12+ unobtrusive in all kinds of environments. Upon request the unit can be factory finished in any color in order to meet the architectural requirements. The U-12+ comes with a vertical U-bracket offering ease of installation. A horizontal U-bracket is available as an accessory.

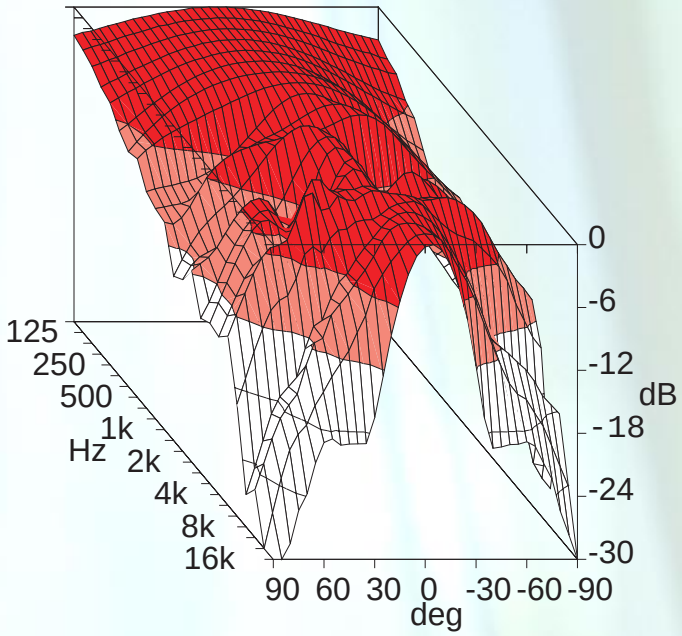
For fixed installations as well as various stage applications the U-12+ is the ultimate choice.

APPLICATIONS

- ✔ Paging and announcing indoors and outdoors
- ✔ Audio/Visual productions
- ✔ Live broadcasting production facilities
- ✔ Front fill and under balcony or over balcony delay system in theaters
- ✔ Music playback system in hotels, restaurants or small clubs
- ✔ Churches
- ✔ Conference rooms
- ✔ Personal monitoring
- ✔ Surround sound in cinemas



U-12+ 3-D graph horizontal 1/3 oktave averaged (-6 dB and -12 dB). Angular resolution 5 degrees.



U-12+ 3-D graph vertical 1/3 oktave averaged (-6 dB and -12 dB). Angular resolution 5 degrees.

U-12+ Architectural and engineering specifications.

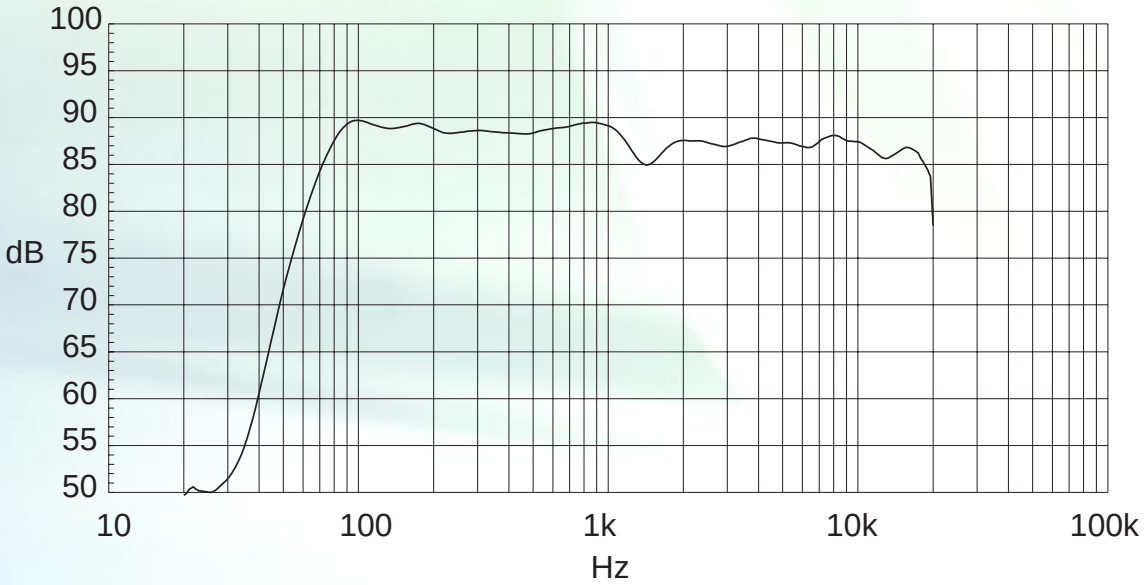
The loudspeaker unit shall be of the two-way active type with integrated electronics, one direct-radiating 6.5" low/mid speaker in a vented enclosure and one 1.1" ferrofluid cooled soft-dome tweeter, optimized for high power handling.

The complete electronics shall be mounted on a chassis which is placed in the backside of the enclosure. Electronics shall consist of active filters to implement cross-overs and equalization, protection circuitry and two power amplifiers. Filter section shall include a 'contour' filter push-push switch forming an integral part of the volume control potmeter which enables the user to equalize the response in the mid frequency band centered around 800 Hz. Protection shall consist of a Dynamic Level Control (DLC) circuit that limits the dissipated mean power of the transducers to a safe value, an overload monitoring circuit that reduces the input gain by 11 dB if an input overload occurs, an amplifier DC protection circuit and a high chassis temperature protection circuit. A bi-color LED at the rear shall display the status of the 'contour' filter, the DC- and the temperature protection. The balanced signal input connector shall be a 3p female XLR type (p2=+, p3=-, p1=gnd) and the full-range signal output link connector shall be a 3p male XLR type (hardwired to input connector). All connectors and controls shall be grouped together at the lower side of the chassis.

The enclosure shall be constructed of laminated birch plywood. It shall be equipped with eight ABS interlocking corners and four sockets for horizontal or vertical attachment of a U-bracket. The front of the enclosure shall be covered with open cell foam mounted on a protective perforated steel grill. The enclosure shall be finished with a polyurethane coating.

The complete loudspeaker unit shall meet the following criteria:
Frequency range of 80 - 20k Hz on axis (+/- 3 dB), max. SPL at 1m of 110 dB_{SPL} continuous and 113 dB_{SPL} peak, - 6 dB coverage angle of 110° horizontal by 110° vertical averaged 2k to 15k Hz. Dimensions are 12.4" (315 mm) H x 8.25" (210 mm) W x 8.1" (206 mm) D. Weight 20 lbs (9 kg).

The loudspeaker unit shall be the AXYS model U-12+.



U12+ Full space on axis SPL, 1/3 octave averaged; Distance 4.0 m, input level 0.05 V_{rms}; Low end (<200 Hz) from nearfield measurements.

TECHNICAL DATA [1)]

Acoustical[2)].

		U-12+
Frequency Range (f-3 dB)[3)]		80-20kHz (+/-3 dB)
Max. SPL (1m)[4)]	- Continuous	110 dB
	- Peak	113 dB
Coverage Angle[5)]		110° H x 110° V
Self generated noise SPL (A-weighed, 1m)		10dB

Electrical

Input	- Sensitivity (100 dB_{SPL}/1m)	-6 dBu
	- Impedance (balanced)	2x10kΩ
	- Connector (XLR female)	p2=+, p3=-, p1=gnd
Link	- Connector (XLR male)	hard wired to input
Cross-over	- Type	24 dB/Oct
	- Frequency (-6 dB)	3.5kHz
	- Controls	contour filter switch and volume control
Power amplifiers[4)]		100 W_{rms} (8Ω) LF, 100 W_{rms} (8Ω) HF
Protection	- DLC	
	- Overload	11 dB gain reduction
	- Thermal	11 dB gain reduction if $T_{heatsink}$ > 72° C
		mute if $T_{heatsink}$ > 80° C
	- DC protection	
Indicator LED	- green	contour filter off
	- red	contour filter on
	- flash	start-up/thermal and DC-protection mute
Mains	- Voltage (+5/-10%)[6)]	230V
	- Connector type	IEC 320
	- Fuses (slow blow)	1 x 1.6 A
	- Power Consumption	17 W_{idle} / 120 $W_{full\ load}$

General

Temperature Range (ambient)	0 to +40° C
Transducers	1 x 6.5" / 1 x 1.1" soft-dome tweeter
Dimensions (H x W x D)	12.4" x 8.25" x 8.1"
	315 x 210 x 206 mm
Weight	20 lbs / 9 kg

1) Specifications are valid for 1 unit with 'contour' filter off (green LED) and volume at max position unless stated otherwise.
2) Measured under anechoic 'full-space' conditions unless stated otherwise.
3) Low cut-off frequency 'full space' conditions, 'contour' filter on.
4) Measured with gated sinewaves.
5) -6 dB, average value 2k - 15k Hz.
6) Other voltages are available upon request

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