

# Technical Data PicoSpot



▶ we amplify emotions.



# **General Information**



At the first glance you may not believe the PicoSpot to be a high performance sound reinforcement loudspeaker for complex applications because of its size - but it is indeed! The ultra compact 5" coaxial transducer is equipped with a 1" exit compression driver having a 1.7" voice coil. The high frequency driver is coupled to a circular 90° aluminium waveguide which works as heat sink as well. Its enclosure is so tiny, that it perfectly fits as stage near fill, conference speaker, at trade and fashion shows etc. - everytime when premium class sound quality and minimum size is nescessary. The PicoSpot works from 80Hz upwards and delivers a rich, well balanced and crystal clear sound.

The PicoSpot is designed as semi-active system and as such uses only one amplifier channel, but it needs external processing. For best reliability, performance, tonal balance and ease of use we recommend our AD-Systems Impuls series system amplifiers.

#### Application

- ▶ Nearfill, under balcony
- compact front system
- ▶ fixed installation
- Conference rooms, TV shows, personal monitor
- Pubs, Bars, mobile DJs

#### Features

- ► Ultra compact and ultra light
- ▶ 5" High power coax transducer
- Weather proof enclosure made of Baltic birch plywood
- Finished with black Polyurea coating, RAL colours optionally

# Specifications

#### Performance Data

Basic layout	2-way coaxial, semi-active
Frequency response (-6 db)	140 Hz - 20 kHz
Sensitivity 1W @ 1 m	91 dB (full space)
Maximum SPL	119 dB (SPL peak @ 1 m)
Horizontal coverage (-6 dB)	90°
Vertical coverage (-6 dB)	90°
Power handling RMS	175W
programme	350W
peak	700W
Nominal impedance	16 Ω

# Transducers / Components

Low mid frequency	5" Nd woofer w/ 1.75" voice coil, membrane w/ moisture repellent coating
Nominal impedance	16 Ω
Power handling	175W AES / 700W Peak
Sensitivity	91 dB, 1W @ 1W
High frequency	1" Nd compression driver w/ 1.7" voice coil
Nominal impedance	16 Ω
Power handling	50W AES / 100W Peak
Sensitivity	107 dB, 1W @ 1m
Horn	90°, circular
Crossover	2-way crossover w/ phase correction, divition w/ 12dB/12dB at about 2.5 kHz

### Physical Data

Enclosure	Multipurpose design, 12mm birch plywood, Polyurea coated
Rigging points	1x M10 fly point in side wall, Aeroquip receptacle for saving purposes
Colour	black; white and RAL standard colours optionally
Protective grille	sheet steel w/ 1.5mm thickness, hex-stamped, powder coated, black acoustic foam on inside
Connectors	2 x Speakon NL4 MP (1+/1-)
Dimensions (W x H x D)	156 x 166 x 156 mm
Net weight	3.5 kg



# **Measurement Data**

#### Processed frequency response



#### Horizontal coverage pattern



Notes on performance data and graphs:

1) Performance Specifications: All acoustic specifications rounded to nearest whole number.

Either AD Impulse DSP Amplifiers or external DSP with provided settings are required to achieve the specified performance.

2) Frequency response: Range of the processed response, where the level stays within 6dB from nominal sensitivity.

- 3) Power Handling: Is based on the AES power handling of the transducers.
- 4) Nominal Sensitivity: SPL produced by the unit at 1 Watt at nominal impedance, referenced to 1 Meter.

Measurement condition: Full space in the far field of the speaker. Time-windowed to approximate an anechoic environment. 5) Maximum SPL: Calculated from nominal sensitivity at stated peak input power.

6) Resolution: For better readability a 1/6 octave smoothing is applied to all response graphs shown.

All data provided are subject to change without prior notice.

#### Impedance



#### Vertical coverage pattern



# Accessories

For best possible usability, mobility and safety there are various means of transportation and rigging available.

For using the PicoSpot with a pole or speaker stand as well as for flown applications the L-bracket is used. Trigger clamps, pipe clamps, hook clamps, TV spigots or the M10 pole flange adaptor can be attached to the L-bracket for maximum flexbility in the field. The M10 pole flange adaptor can also be attached directly to the PicoSpot.

For easy and safe transportation of two PicoSpot units including accessories a padded road bag made of durable polyester fabric is available.



7011000194	L-bracket PicoSpot
7011000190	M10 pole flange adaptor
tba.	PicoSpot Twin-Softbag



# Drawings



### Spare parts

7100000181	5" Coaxial transducer
n/a	Recone kit
7100000355	1.0" Diaphragm
7100000347	X-Over Picospot
7100000106	spare grille

# Architectural & Engineering Specifications

The professional 2-way fullrange loudspeaker system shall incorporate a coaxial 5 inch / 1 inch neodymium transducer. The LF transducer shall be mounted in a closed type enclosure, the HF compression driver shall be coupled to a circular 90° constant directivity horn. The loudspeaker shall withstand short peaks of up to 700 Watt generating a maximum sound pressure level of 119 dB. System frequency response shall vary no more than +/-3dB from 140 Hz to 18 kHz measured on axis. The loudspeaker enclosure shall have a multifunctional shape, be constructed of weatherproof Baltic birch plywood and finished in black Polyurea coating. Optionally all RAL standard colours shall be available. The loudspeaker components shall be protected by a powder coated grille made of hex-stamped sheet steel and internally attached acoustic foam in appropriate colour. The enclosure shall be equipped with a threaded M10 flypoint to be used with the separately available flying bracket or pole mount adaptor for suspended applications. CAAD simulation data for ULYSSES and EASE suites shall be available. The loudspeaker system shall be the AD-Systems PicoSpot.

Optional features: Flying bracket M10-treaded pole mount adaptor Special colours: all standard RAL colours

Technical specifications: Acoustical Design: Point source, passive loudspeaker, 2-way, coaxial Components: 5" low-mid woofer w/ 1.5" voice coil / 1" HF driver w/ 1.7" voice coil Power handling (nominal): 175 W Power handling (programme): 350 W Power handling (peak): 700 W Nominal sensitivity: 90 dB Maximum sound pressure level: 119 dB Frequency response: 140 Hz – 18 kHz Nominal coverage pattern (h x v): 90° circular Nominal impedance: 16 Ohm

Features:

Enclosure: 12mm Baltic birch plywood, multifunctional shape, Polyurea coated Protective grille: hex-stamped sheet steel, powder coated Rigging hardware: 1x M10, Aeroquip receptacle Connectors: 2x Neutrik NL4 Speakon Front design: Acoustic foam in appropriate colour behind the grille Dimensions (W x H x D): 156 x 166 x 156 mm Net weight: 3.5 kg

CAAD simulation data: ULYSSES, EASE Brand: AD-Systems Model: Touring PicoSpot



For more information please visit our website! There you will find also:

Autocad Files (DXF, DWG, PDF) Measurement data for acoustical simulation in Ease and Ulysses Manuals Architectural & Engineering Specs

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