

Ray-On

# R110TC

DGRC Mono channel Column Loudspeaker

Single-channel application of the patented DGRC technology (Digital & Geometric Radiation Control), the Ray-On column family comprises 4 models from 0.2 m to 2m in height. Thanks to DGRC technology, these models yield homogenous sound coverage and perfect speech intelligibility.

The elegant design of Ray-On loudspeakers with their finely perforated grid, the ability to dispose of all colors thanks to a paintable cast aluminium body, and the vertical installation of the columns inherent to the DGRC technology allow achieving optimal results in terms of aesthetics and integration.

Indoor or outdoor use, compliance with EN 54-24 standard, and wide choice of possible connectivity (8Ω / 70V line / amplified) allow Ray-On column loudspeakers to meet the requirements of sound systems in houses of worship, conference rooms, airports, railway stations, shopping malls and recreational parks.

With a height of 110cm, the Ray-on R110 column has a nominal range of 20m for a continuous power of 150W. Its characteristics are perfect for medium-range venues or in distributed sound reinforcement system in large spaces. Its nominal installation height of 2,2m allows a safety set up in public places.

With a similar height and characteristics Ray-on R110 exists in amplified version with DANTE input under the reference Ray-on R110 +.



Max SPL: 92dB at 8m

Impedance: Low Z & 100V modes

Bandwidth: 120Hz-18kHz

Continuous Power: 150W

IP55

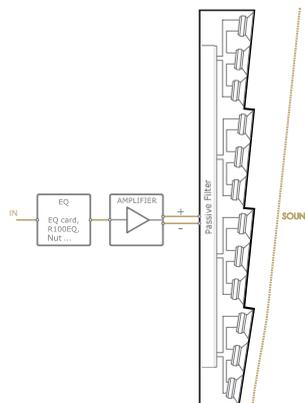
Paintable

EN54-24  
TYPE B

5 years warranty



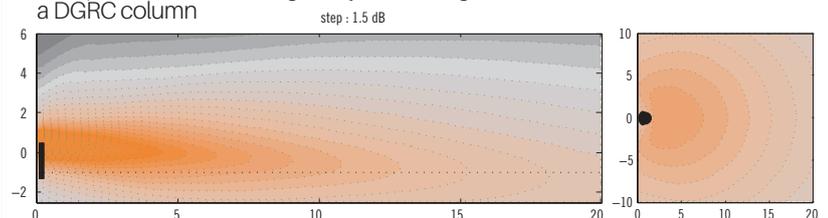
## DGRC principle (Example for a 1m column)



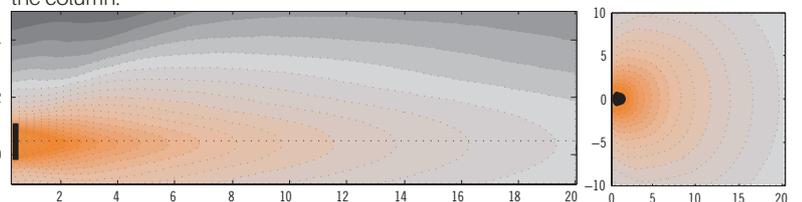
Ray-On is based on the DGRC principle: the internal loudspeaker inclination associated with the calculated height of installation allows to cover the audience area.

Hence Ray-On has to be mounted vertically. The range of Ray-On depends both of the Ray-On model and the height of installation.

Comparison of the homogeneity of coverage between a standard column and a DGRC column



Ray-on 100 horizontal and vertical directivity: Sound level for the speech band (500Hz-2000Hz) in the vertical median plane and on the audience area 80 cm below the column.



Standard 1m column vertical and horizontal directivity: sound level for the speech octaves (500Hz-1kHz-2kHz) in the vertical median plane.

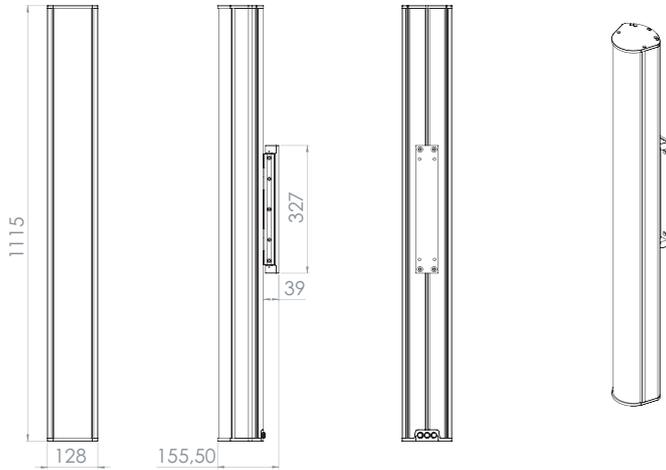


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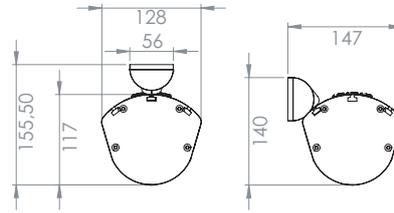
## Technical Specifications

### Mechanical drawing

Front views



Top views



Rigging



### Technical Specifications

#### Acoustical data

Range +/- 3dB (nominal height)	15 m
Range +/- 5dB (nominal height)	20 m
Max SPL (pink noise)	92dB at 8m (110dB at 1m)*
Efficiency 1W/1m	89dB 1W/1m
Continuous power	150W
Frequency bandwidth (-10 dB)	120Hz- 18kHz
Horizontal opening angle (1 kHz)	180°
Loudspeaker	12x 2,5"

#### Mechanical data

Net weight	8,5 kg
Shipping weight	9,3 kg
Height	1115 mm
Width	128 mm
Depth	117 mm
Standard colors	White RAL 9016 Black RAL 9005
Material	Aluminium body, treated steel Rustproof and UV proof

#### Electrical data

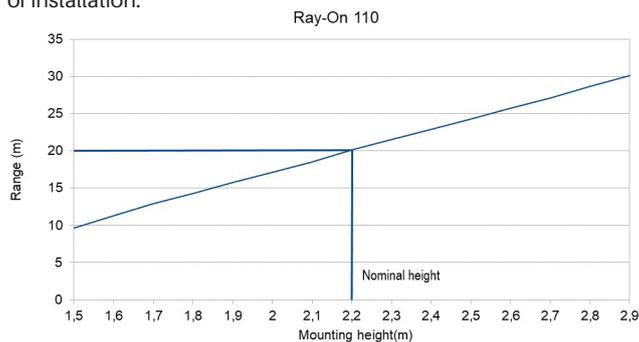
Impedance	8Ω, 400/200/100Ω
Max continuous power	150W, 25W/50W/100W
Connector	Lever quick connector with loop-thru
Wire section	from 0,5 to 2,5mm <sup>2</sup>

#### Tuning and exploitation

Recommended equalisation	Speech: 5 param Cells Music: 6 param Cells
Modeling	EASE/ CATT
Environnement	IP55 from -25°C to 55°C / IK08 indoor & outdoor
Mounting	Vertical
Nominal mounting height	2,2 m (bottom of loudspeaker)

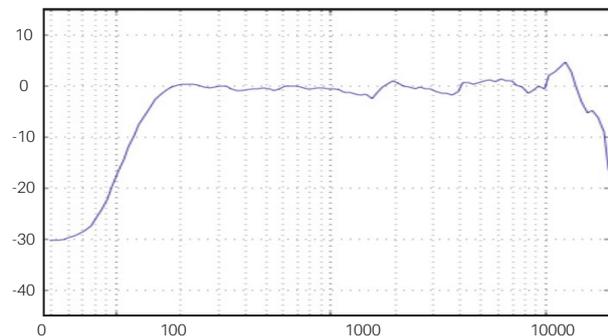
\*Estimated sound level based on a 6dB decreased by doubling distance from the measure pressure level at 8m.

The following graph shows the range of the column versus height of installation.

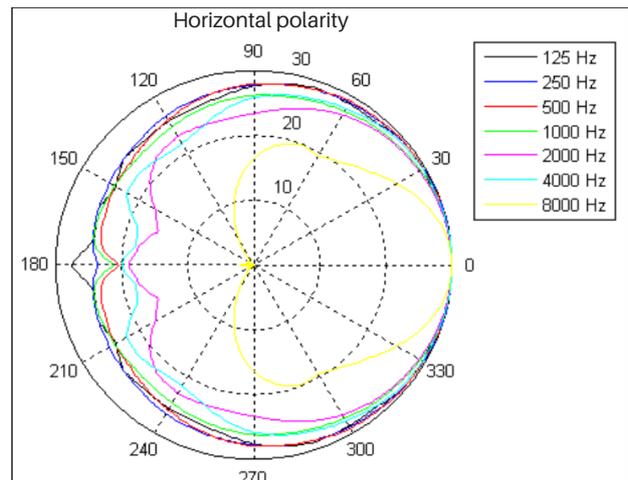
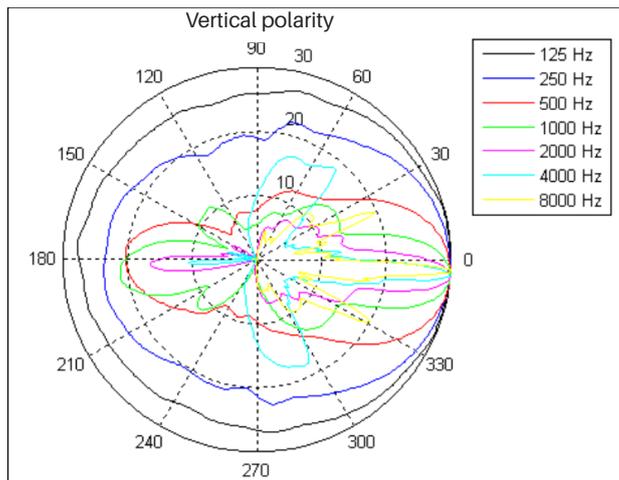


### Frequency response

Ray-On 110 frequency response, with recommended equalisation. Average from 2 to 15m axis.



## Polarity diagrams



## Impedance curve

Impedance curve of R110.

