

# **MANUAL**



## **COL SERIES**

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This manual applies to all types available: COLS41-COLS81- COLS101-COLS141 ( 66 mm wide) and COLW41-COLW81-COLW101 (100mm wide).

The APart COL series speakers are more than just nice looking columns speakers: COL series speakers have been designed as highly effective line array speakers, featuring excellent vertically controlled directivity, wide horizontal directivity, high sensitivity and high power handling. COL series speakers offer you very clear and natural speech reproduction, while music performs very pleasing too.

Drastically improved audio directivity results in wider coverage range over longer distance. This means that they cover a wider area than conventional column speakers, so less speaker-cabinets are needed for achieving the same sound pressure level in a certain area. Also there will be reduced problems with microphone feedback that is easily generated in reverberant locations. The especially developed drivers with extended frequency response and low distortion give much better speech intelligibility. COLS series acoustic response has been specifically tailored for speech where COLW series are ideal for speech and music reproduction.

Thanks to their unobtrusive appearance and excellent acoustic directivity, COL series speakers can be used in highly reverberant spaces, such as churches, houses of worship, railway stations, as well as conference rooms, recreational areas or sports facilities. The speaker cabinets are made of a sturdy extruded aluminum, and all material and construction has been adapted to be used for both indoor as outdoor, so weather proof and even impact proof (f.e. footballs).

Both 100 volt and low impedance (Lo-Z) connections are provided for increased installation flexibility. 100V line with several transformer power taps as well as low impedance connectors are hidden inside the cabinet. To access the connector, open the cabinet: remove the two philips screws at the bottom of the enclosure, see picture below. In normal indoor situations you can feed the cable(s) through the rubber cable sleeves, for IP66 compatibility, use the supplied cable entries and washers provided in the accessory kit. A second cable entry point is present for easily looping the cable through.









Mounting these speakers has never been easier. An adjustable stainless steel mounting bracket with extension is included in the packing. The extension piece can be used to mount the speakers under an angle. Attach the brackets according to the picture: you can mount the speaker under a certain angle from the wall by extending the top bracket with the supplied bracket extender.

To obtain the best performance, it is VERY important to position the column correctly, this means that the center point of the column must be precisely directed towards the height of the listeners (or just above it) in the appointed area. For advise in acoustics, contact your dealer.

For improved security, a special mounting rail is incorporated at the back of the cabinet. You can use M6 flat head carriage or T-bolts to attach additional safety cables or special mounting brackets (not included).





#### Color code internal connector:

Common (for 100 volt use or lo-Z use): Black

Lo-Z connection: White High power tap: Red Medium power tap: Yellow Low power tap: Green

Note: you can only use 1 power tap at the same time: never connect the speaker to a Lo-Z and 100 volt amplifier simultaneously and never use multiple 100 volt taps at the same time. Connect the speaker correctly as required and don't connect the unused wires. Example: for use as a lo-Z speaker, connect the black (negative) and white (positive) wire.



### **Technical Specifications**

	COLS41	COLS81	COLS101	COLS141	COLW41	COLW81	COLW101
SPEAKERS	4 x 2" fullrange + 1 x 1" tweeter	8 x 2" fullrange + 1 x 1" tweeter	10 x 2" fullrange + 1 x 1" tweeter	14 x 2" fullrange + 1 x 1" tweeter	4 x 3.3" fullrange + 1 x 1" tweeter	8 x 3.3" fullrange + 1 x 1" tweeter	10 x 3.3" fullrange + 1 x 1" tweeter
LO-CUT	yes	yes	yes	yes	yes	yes	yes
100 VOLT TRANSFORMER POWERTAPS	20-10-5 W	30-15-6 W	40-20-10 W	60-30-20 W	40-30-15 W	80-40-30 W	100-60-40 W
IMPEDANCE	8 Ohm	16 Ohm	8 Ohm	8 Ohm	16 Ohm	8 Ohm	8 Ohm
RMS POWER AES RATED	20 W	30 W	40 W	60 W	40 W	80 W	100 W
MUSIC POWER	30 W	40 W	60 W	80 W	60 W	120 W	140 W
SPL 1W/1M	95 dB	96 dB	97 dB	98 dB	97 DB	98 DB	99 DB
FREQUENCY RANGE	250 Hz – 20 kHz	220 Hz – 20 kHz	200 Hz - 20 kHz	195 Hz – 20 kHz	190 HZ – 20 KHZ	170 HZ – 20 KHZ	160 HZ – 20 KHZ
DISPERSION AT 1 KHZ HOR/VER	165°/ 75°	165°/55°	165°/50°	165°/40°	165°/65°	165°/45°	165°/40°
IP RATING	66	66	66	66	66	66	66
Dimensions (HxWxD) mm	400 X 66 X 66	613 X 66 X 66	723 X 66 X 66	940 X 66 X 66	555 X 100 X 83	974 X 100 X 83	1180 X 100 X 83
WEIGHT (KG)	2.0	2.9	3.3	4.0	3.9	6.7	7.7

#### ANY SUGGESTION?

They are well appreciated and eventually rewarded! Send your ideas or suggestions to

suggestions@apart-audio.com

COL SERIES Speakers are developed by

Audioprof nv Lanteernhofstraat 90 BE-2100 Deurne BELGIUM

