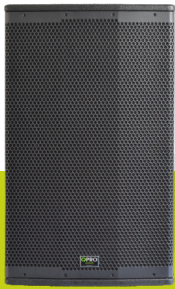


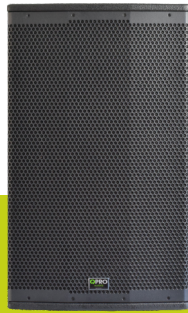


Multifunctional Fullrange Speakers and Subwoofers
Bi - Amped with integrated DSP

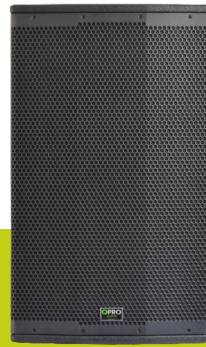
E - SERIES



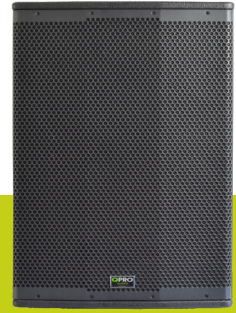
E 10 A



E 12 A



E 15 A



E 18 A

Active Solutions



The active E-Series loudspeakers are multifunctional fullrange and monitor speakers. Equipped with uncompromising chassis technology and a 1000 W Class D bi-amped power module with extensive DSP features, the E-Series can deliver outstanding sound quality and high dynamic. Ideal to use as FOH loudspeaker, delay, monitor, frontfill on small to medium stages or in installations where high sound quality is required. The rotatable 90° x 60° horn makes it possible to use in horizontal or vertical direction.

The E-Series 18" subwoofer with 100mm voice coil and a precise tuned cabinet is the perfect extension if very low frequencies with outstanding dynamic is needed.

The E 18 A is a self powered subwoofer. The powerful 3 channel amplifier module delivers 1000 W (AES) for the subwoofer channel and additional 2 x 500 W (AES) for mid/high cabinets. The switch mode power supply can deliver large headroom for the amplifiers even at full power. The 96KHz / 24-bit DSP engine features all controller functions as Noise Gate, crossover filters, parametric EQs per input and output sections, alignment delay, all in all everything needed to optimize a self-powered loudspeaker. All setup parameters for input mixing, DSP features and the limiter setting are accessible by using the remote PC software.



Features

- 1000 W Class D bi-amped power module
- Extensive DSP technology
- Single encoder DSP interface
- Dual band limiters
- Master delay function
- HF compression driver with 44 mm voice coil
- LF speakers with 65 to 100 mm voice coils
- 90° x 60° nominal coverage with rotatable horns

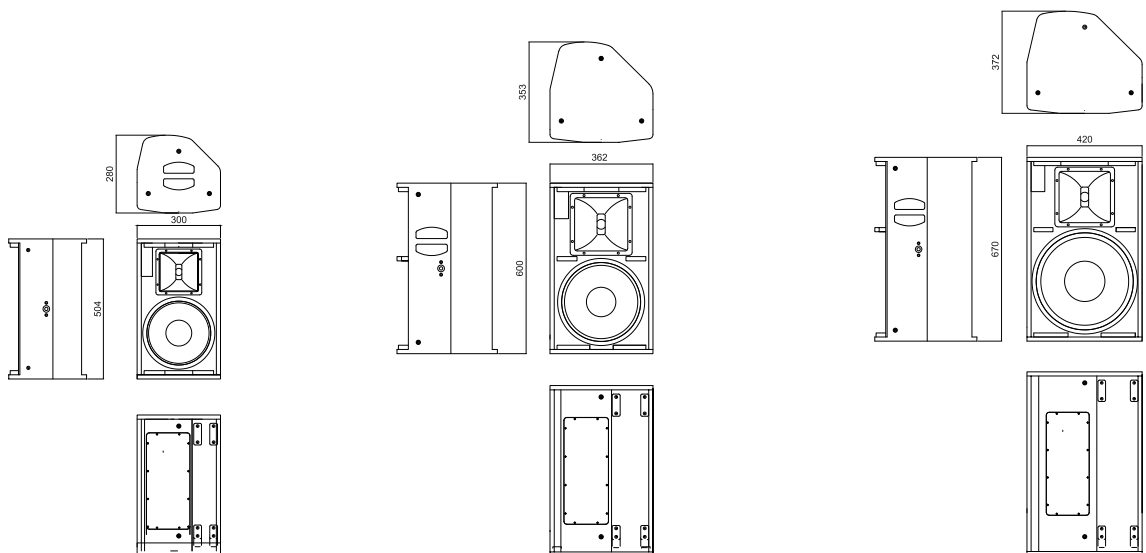
- Compact design
- Speaker stand adapter
- Ergonomic grip handles
- Full range speakers with 45° monitor angle
- 2 x 10 mm rigging points for EB brackets
- 10 additional M8 rigging points
- Black textured coating



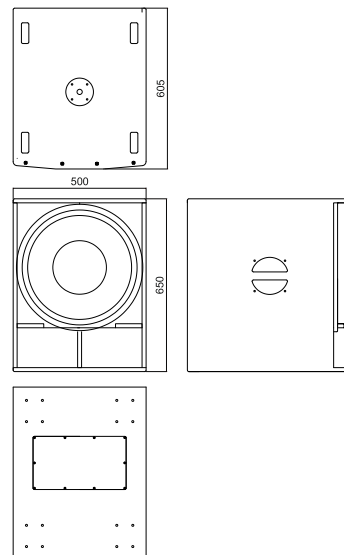
Multifunctional Fullrange Speakers and Subwoofers
Bi - Amped with integrated DSP

E - SERIES

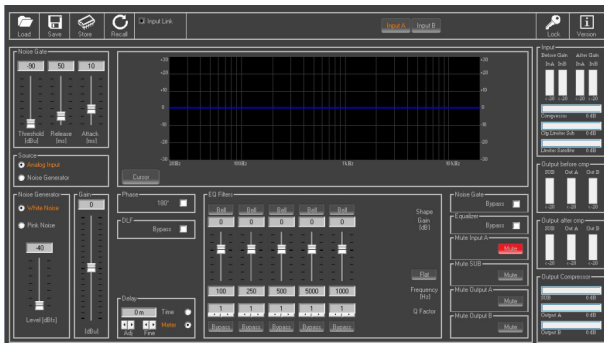
	E 10 A	E 12 A	E 15 A
System	10"/1" multipurpose full range	12"/1" multipurpose full range	15"/1" multipurpose full range
Frequency Range (-10 dB):	45 Hz - 20 kHz	40 Hz - 20 kHz	40 Hz - 20 kHz
Coverage Pattern HxV:	90° x 60° rotatable	90° x 60° rotatable	90° x 60° rotatable
Crossover Frequency:	2000 Hz active DSP	1.850 Hz active DSP	1.850 Hz active DSP
Power Rating	500 W / 1000 W	600 W / 1000 W	700 W / 1000 W
(AES/Program)			
Maximum SPL:	126 dB SPL peak	128 dB SPL peak	130 dB SPL peak
Nominal Impedance:	8 ohms	8 ohms	8 ohms
LF Driver:	10Q250	12Q400	15Q600
HF Driver:	Q44	Q44	Q44
Enclosure:	15 mm, birch plywood	15 mm, birch plywood	15 mm, birch plywood
Suspension / Mounting:	35 mm pole socket, 10 x M8, 2 x M10 for optional EB 10 bracket	35 mm pole socket, 10 x M8, 2 x M10 for optional EB 12 bracket	35 mm pole socket, 10 x M8, 2 x M10 for optional EB 15 bracket
Transport:	1 x integrated handle	2 x integrated handles	2 x integrated handles
Finish:	Black textured coating	Black textured coating	Black textured coating
Grille:	Powder coated, black perforated steel with acoustic cloth inside	Powder coated, black perforated steel with acoustic cloth inside	Powder coated, black perforated steel with acoustic cloth inside
Input Connectors:	Input: 2 x XLR combo female, Mic / Line Output: 1 x XLR mix output	Input: 2 x XLR combo female, Mic / Line Output: 1 x XLR mix output	Input: 2 x XLR combo female, Mic / Line Output: 1 x XLR mix output
Dimensions (W x H x D):	300 mm x 504 mm x 280 mm	362 mm x 600 mm x 353 mm	420 mm x 670 mm x 372 mm
Net Weight:	13 kg	16 kg	18 kg
Optional Accessories:	EB 10 U-bracket EC 10 black Cover	EB 12 U-bracket EC 12 black Cover	EB 15 U-bracket EC 15 black Cover



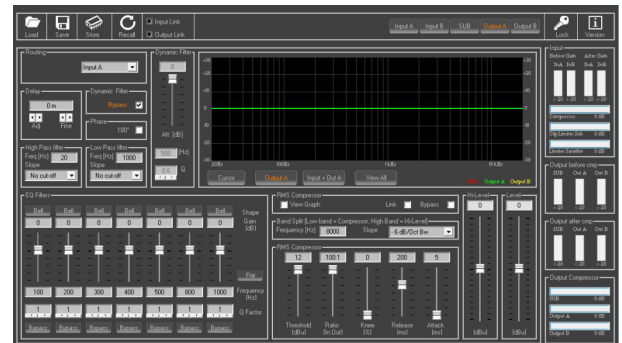
	E 18 A
System	18" three channel active subwoofer
Frequency Range (-10 dB):	35 Hz - 300 Hz
Crossover Frequency:	70 Hz to 140 Hz with internal DSP
Power Rating Sub Channel	1 x 1000 W @ 4 Ohms
Power Rating Top Channel	2 x 500 W @ 4 Ohms
Maximum SPL Sub:	130 dB SPL
LF Driver:	18Q800
Enclosure:	15 mm, birch plywood
Suspension / Mounting:	M20 pole socket
Transport	2 x integrated handles
Finish:	Black textured coating
Grille:	Powder coated, black perforated steel with acoustic cloth inside
Connectors:	2 x Speakon NL 4, 2+/- external Sub / 1+/- Top 2 x XLR combo Line in, 2 x XLR out, 1 x XLR combo MIC in, Chinch in R/L, 1 x USB
Dimensions (W x H x D):	500 mm x 650 mm x 605 mm
Net Weight:	38 kg
Optional Accessories:	Amplifier module protection cover



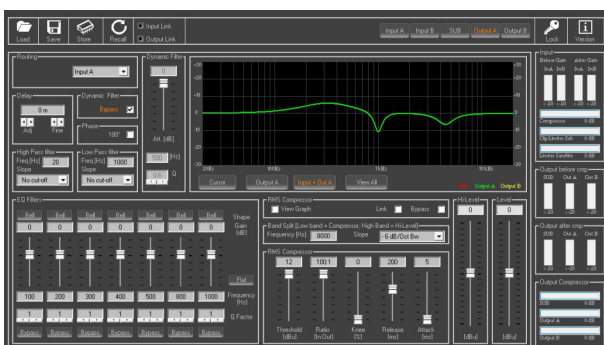
E 18 A DSP Remote Control Software



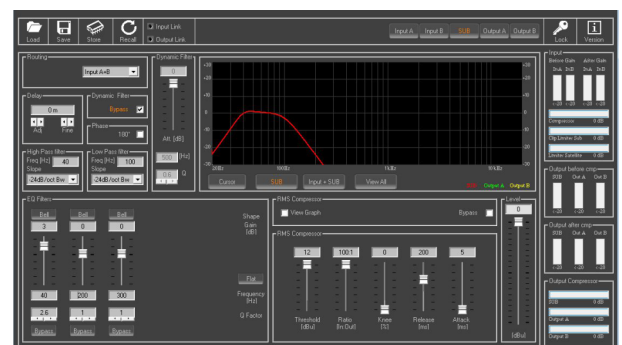
Input window with locked Outputs



Output window



Unlocked Output window (out A)



Unlocked Output window (Sub out)

Technical Data DSP

DSP Resolution

24bit (data) x 24 bit (coeff.), 54bit accumulation registers, 96 bit precision on intermediate processing data

Parametric Equalization

5 filters on input channel, selected as Bell, Low/High-Shelving variable Q

3 filters on output SUB channel, selected as Bell

7 filters on output A/B channel, selected as Bell, Low/High-Shelving variable Q

Filter Type

Bell, Low/High Shelving Variable Q

Filter Gain

Input from -12dBu up to +12dBu by 0.5dBu resolution steps

Output from -18dBu up to +18dBu by 0.5dBu resolution steps

Center Frequency

Selectable with 1Hz resolution step from 20Hz up to 20kHz

Bell Filter Q/BW

Q from 0.5 up to 10 by 0.1 resolution steps

Low/High Shelving Filter Q/BW

Q from 0.5 up to 3 by 0.1 resolution steps

Crossover Section HPF/LPF

Butterworth 6/12/18/24dB per octave

Bessel and Linkwitz-Riley 12/24dB per octave

Filter resolution 1Hz steps

Output RMS Compressor

Threshold from -18dBu up to +12dBu

Knee: 0~100%; Ratio: 2:1~100:1

Release time from 40ms up to 1000ms;

Attack time from 5ms up to 100ms

input A/B channel, selected as Bell,

Low/High-Shelving variable Q

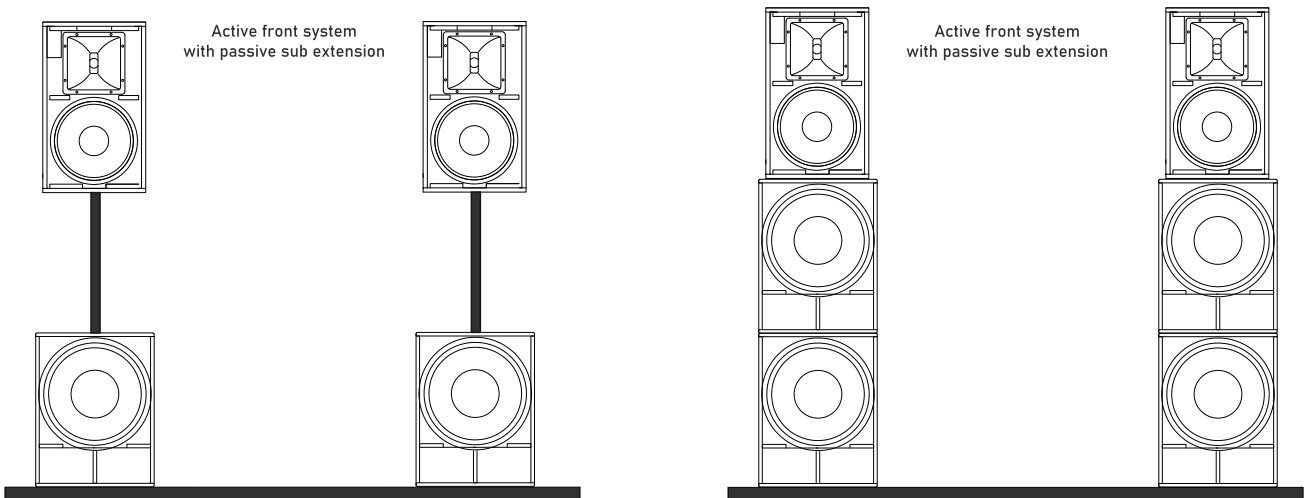
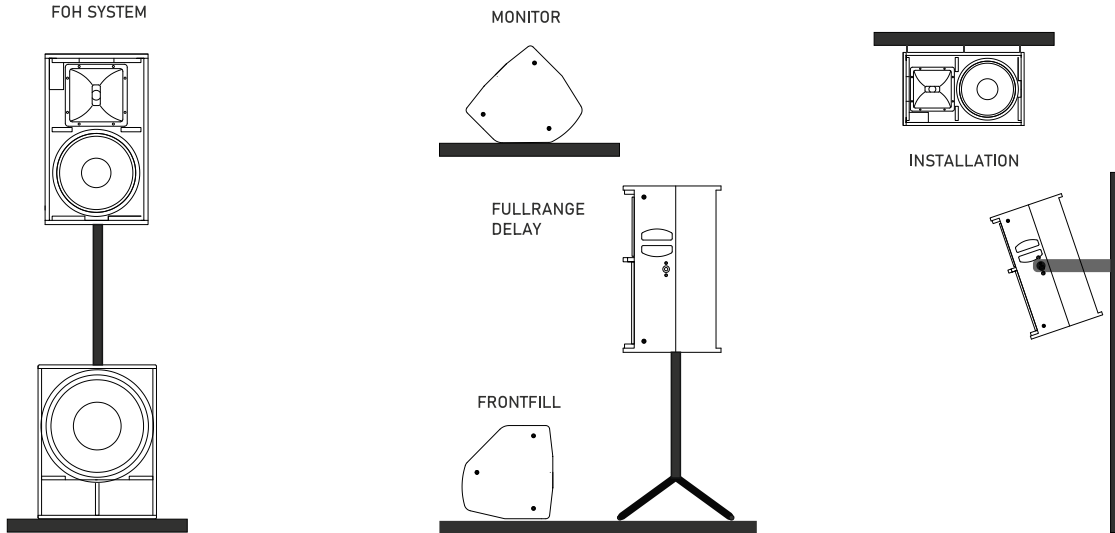
Output Routing

In1, In 2, In 1+2

Delay

up to 40ms for ea ch input, and up to 20ms for each output, with step of 10.4us

Applications



Accessories

EC 10 EC 12 EC 15 EC 18



EB 10



EB 12



EB 15

