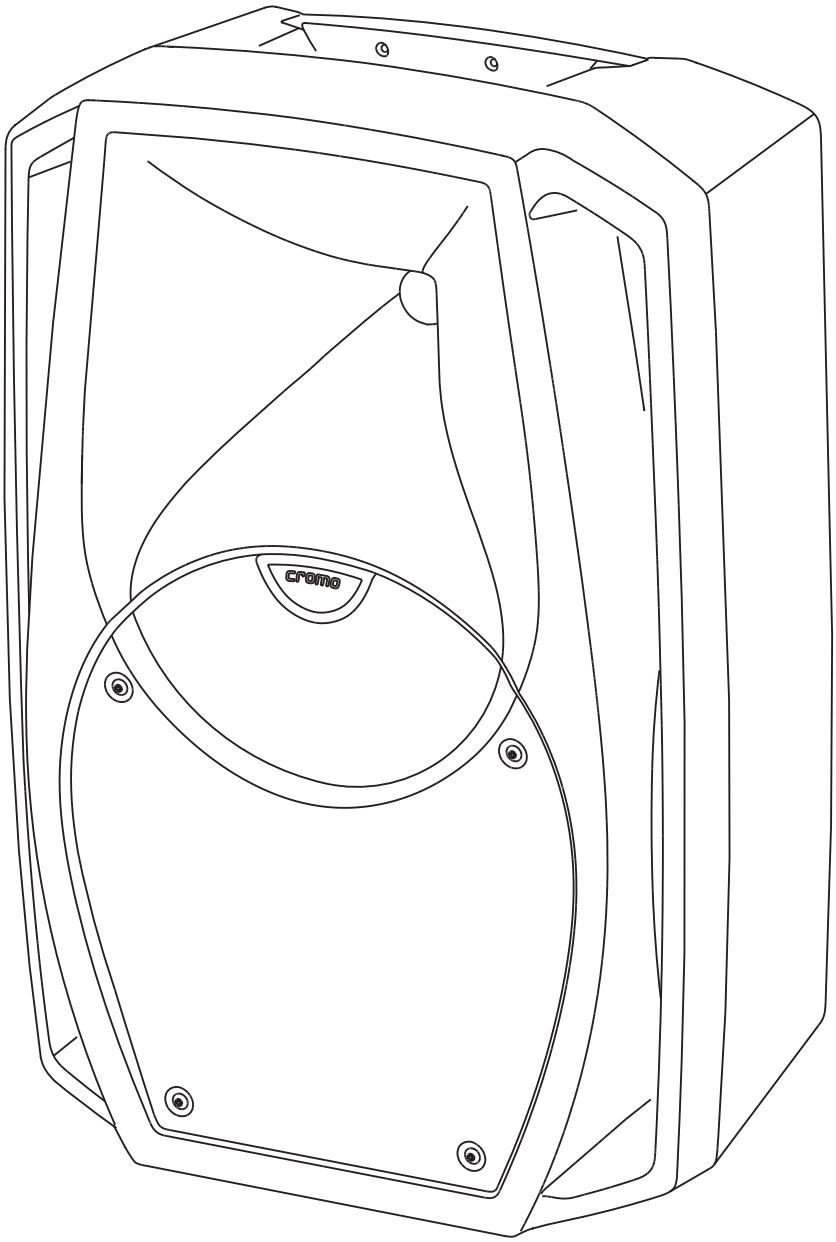
cromo + Series

club Series



MANUALE D USO - SEZIONE 1
USER MANUAL - SECTION 1
BEDIENUNGSANLEITUNG - ABSCHNITT 1
CARACTERISTIQUES TECHNIQUES - SECTION 1

CE

Made in China

COD. 420120173A

dB TECHNOLOGIES
THE SOUND OF EXPERIENCE

Series CROMO + e CROMO club

DESCRIPTION

The “CROMO +” and “CROMO club” series speakers use multichannel digital power amplifiers of last generation DIGIPACK .

These highly efficient amplifiers provide high power with limited weight and dimension. Thanks to the low power dissipated, the cooling of the amplifier module does not require a fan.

The digital preamplifier with DSP (Digital Signal Processing) controls the audio crossover of the acoustic components, the frequency response, the limiter, and the phase alignment.

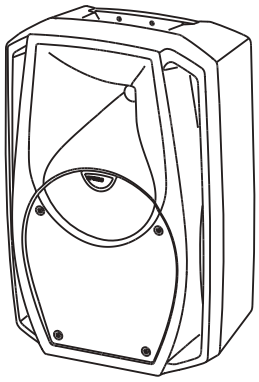
The correct switch on of the amplifier is guaranteed by an initialization procedure; during this test stage the LEDs (“LIMITER” and “READY”), located on the amplifier module,stay on together for approx. 2 sec.

At the end of the switch on procedure, on the amplifier module, the “READY” green LED flashes slowly, when there is signal absence.

During normal operation the "READY” green LED serves as Vu-meter monitoring the audio level riproduced.

The "LIMITER" red LED lights up to indicate that the internal limiter circuit has tripped to prevent amplifier distortion and protects the speakers against overloads.

CROMO 8 +



The CROMO 8 + bi-amped active speaker is equipped with digital amplifier delivering 300W power.

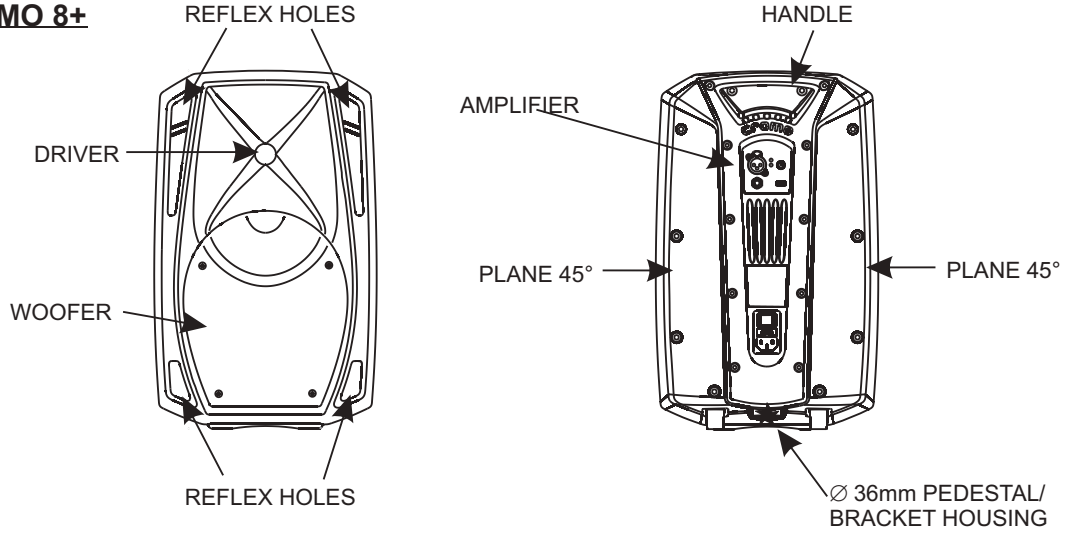
The 2-way bi-amplified speaker is equipped with 8” woofer (1,5” voice coil) and 1” Neodymium driver (1” voice coil) loaded with 90°/70°x60° asymmetric horn.

The speaker is made of plastic material, and is provided with a top handle, rubber coated , which eases transportation.

In the bottom of the box there is a standard pole mount cup (D36mm).

The speaker has been designed to be used also as stage monitor (45° angled).

CROMO 8+



CROMO 10 +

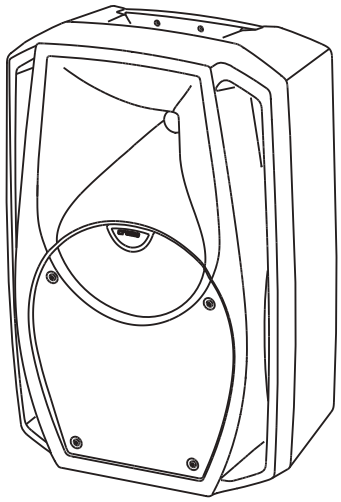
The CROMO 10+ bi-amped active speaker is equipped with digital amplifier delivering 400W power.

The 2-way bi-amplified speaker is equipped with 10” woofer (1,5” voice coil) and 1” Neodymium driver (1” voice coil) loaded with 90°/70°x60°asymmetric horn.

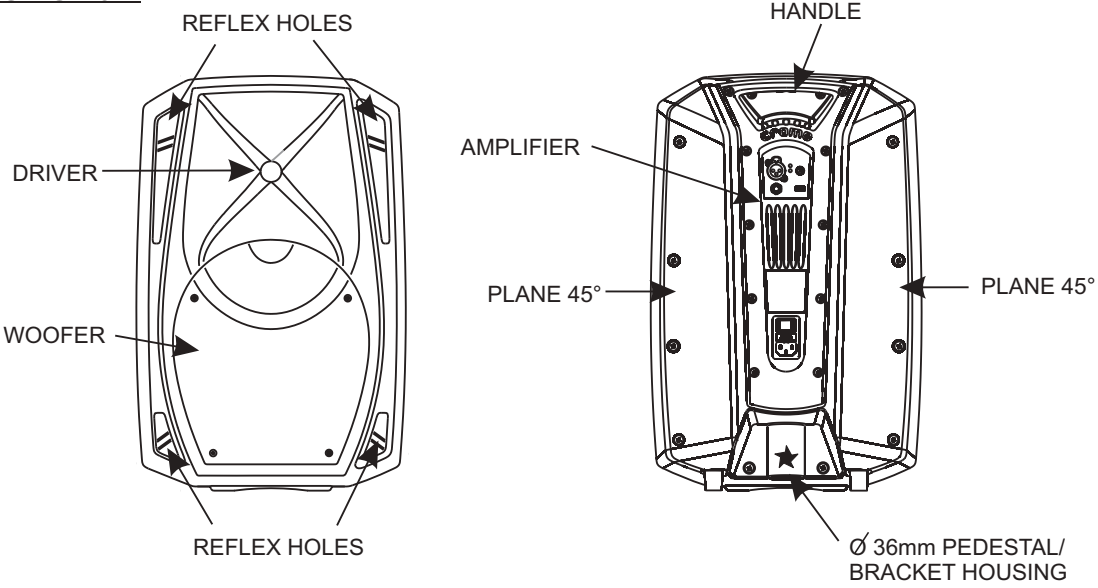
The speaker is made of plastic material, and is provided with a top handle, rubber coated , which eases transportation.

In the bottom of the box there is a standard pole mount cup (D36mm).

The speaker has been designed to be used also as stage monitor (45° angled).



CROMO 10 +



CROMO 12+

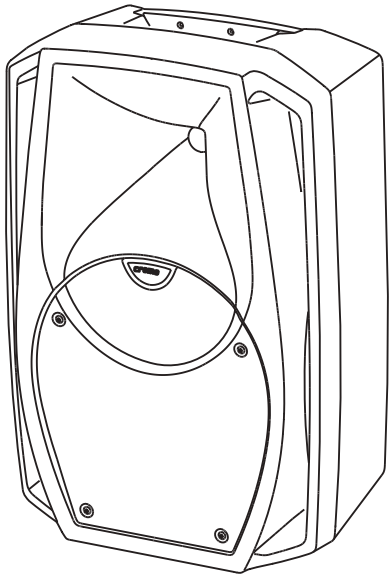
The CROMO 12 + bi-amped active speaker is equipped with digital amplifier delivering 600W power.

The 2-way bi-amplified speaker is equipped with 12” woofer (2” voice coil) and 1” compression driver (1.5” voice coil) loaded with 90°/70°x60°asymmetric horn.

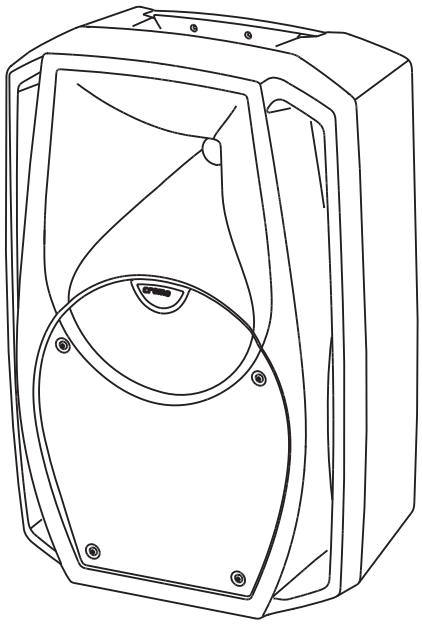
The speaker is made of plastic material, and is provided with a top handle, rubber coated , which eases transportation.

In the bottom of the box there is a standard pole mount cup (D36mm).

The speaker has been designed to be used also as stage monitor (45° angled).



CROMO 15+



The CROMO 15+ bi-amped active speaker is equipped with digital amplifier delivering 600W power.

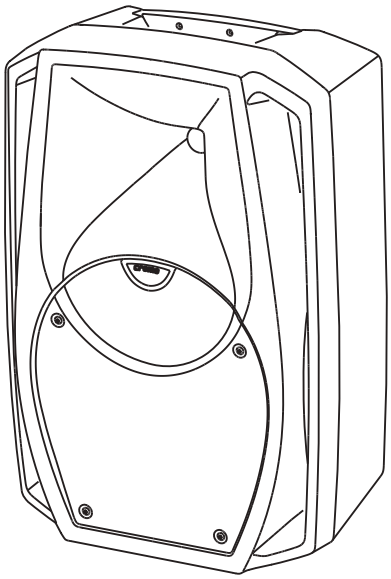
The 2-way bi-amplified speaker is equipped with 15" woofer (2" voice coil) and 1" compression driver (1.5" voice coil) loaded with 90°/70°x60°asymmetric horn.

The speaker is made of plastic material, and is provided with a top handle, rubber coated , which eases transportation.

In the bottom of the box there is a standard pole mount cup (D36mm).

The speaker has been designed to be used also as stage monitor (45° angled).

CROMO 12 club



IThe CROMO 12 club bi-amped active speaker is equipped with digital amplifier delivering 400W power.

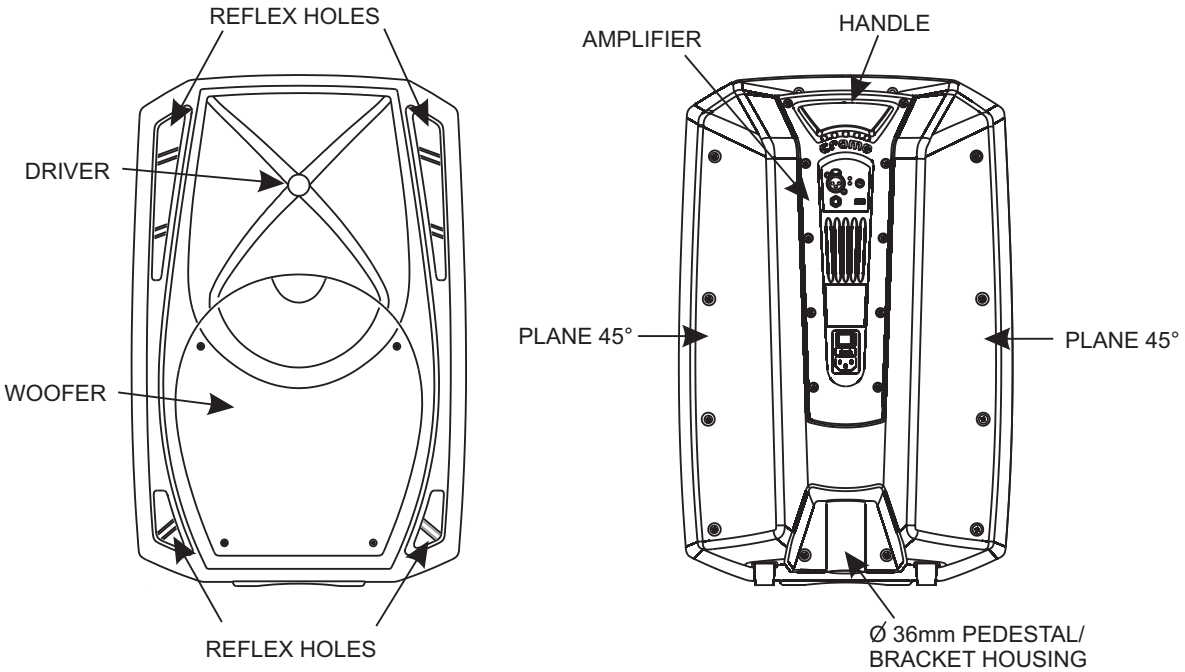
The 2-way bi-amplified speaker is equipped with 12" woofer (2" voice coil) and 1" Neodymium driver (voice coil 1") loaded with 90°/70°x60°asymmetric horn.

The speaker is made of plastic material, and is provided with a top handle, rubber coated , which eases transportation.

In the bottom of the box there is a standard pole mount cup (D36mm).

The speaker has been designed to be used also as stage monitor (45° angled).

CROMO 12+ **CROMO 15+** **CROMO 12 club**



COMMANDS AND FUNCTIONS

AMPLIFIER PANEL (Ref. page 25)

1) " Inputs" CONNECTORS
These balanced inputs can be used to connect balanced or unbalanced microphones or audio sources at line level (0dB) (eg. preamplifier, mixer, recorder, CD player, musical instrument, ...).
The balanced connector is connected in parallel and can be used to send the audio signal to other amplified speakers, recorders or supplementary amplifiers.

2) "Limiter" INDICATOR LIGHT
This indicator shows red to indicate that the internal limiter circuit has tripped.
This prevents amplifier distortion and protects the speakers against overloads.

3) "Ready" INDICATOR LIGHT
The "READY" indicator light comes on green to indicate that the amplifier is switched on and it is working properly. During normal operation the LED serves as Vu-meter monitoring the audio level riproduced.

4) "VOLUME" CONTROL
The knob regulates the speaker´s volume.
This control does not affect the output "LINK" levels.

5) "Sensitivity" SWITCH
Position the switch in LINE to use a line level source (0 dB) or MIC to use a microphone.

6) POWER SWITCH "POWER"
This switch can be used to switch the speaker on and off.

7) FUSE CARRIER "FUSE"
Mains fuse housing. Replace only with identical value!

8) POWER CABLE SOCKET "MAINS"
Used for connecting the power cable supplied.

PROTECTIONS

Front Grille
The speakers's components in the box are protected by 1.0mm metal steel grille.

Cooling
Thermal control is provided by the internal DSP, by means of one sensor, controls the temperature of the amplifier, avoiding overheating by limiting the overall volume.

In case of overheating (> 90°C) the volume decreases proportionally to the temperature increase, making the change unnoticeable.

The correct volume and all the functions are automatically restored when standard operating temperatures are reached.

LOUDSPEAKER INSTALLATION

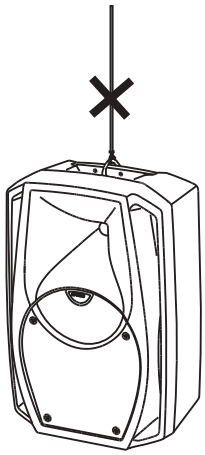
WARNING
Make sure that the loudspeaker is securely installed in a stable position to avoid any injuries or damages to persons, animals or property.

For safety reasons do not place one loudspeaker on top of another without proper fastening systems. Before suspending the loudspeaker check all the components for damages, deformations, missing or damaged parts that may compromise safety during installation.
If you use the loudspeakers outdoors avoid places that are exposed to bad weather.

The loudspeaker has the following mounting options:

- bookshelf (Fig. 1 page 32)
- floor (monitor) (Fig.2 page 32)
- on speaker stands .

WARNING
Never use the handles to suspend the speaker!



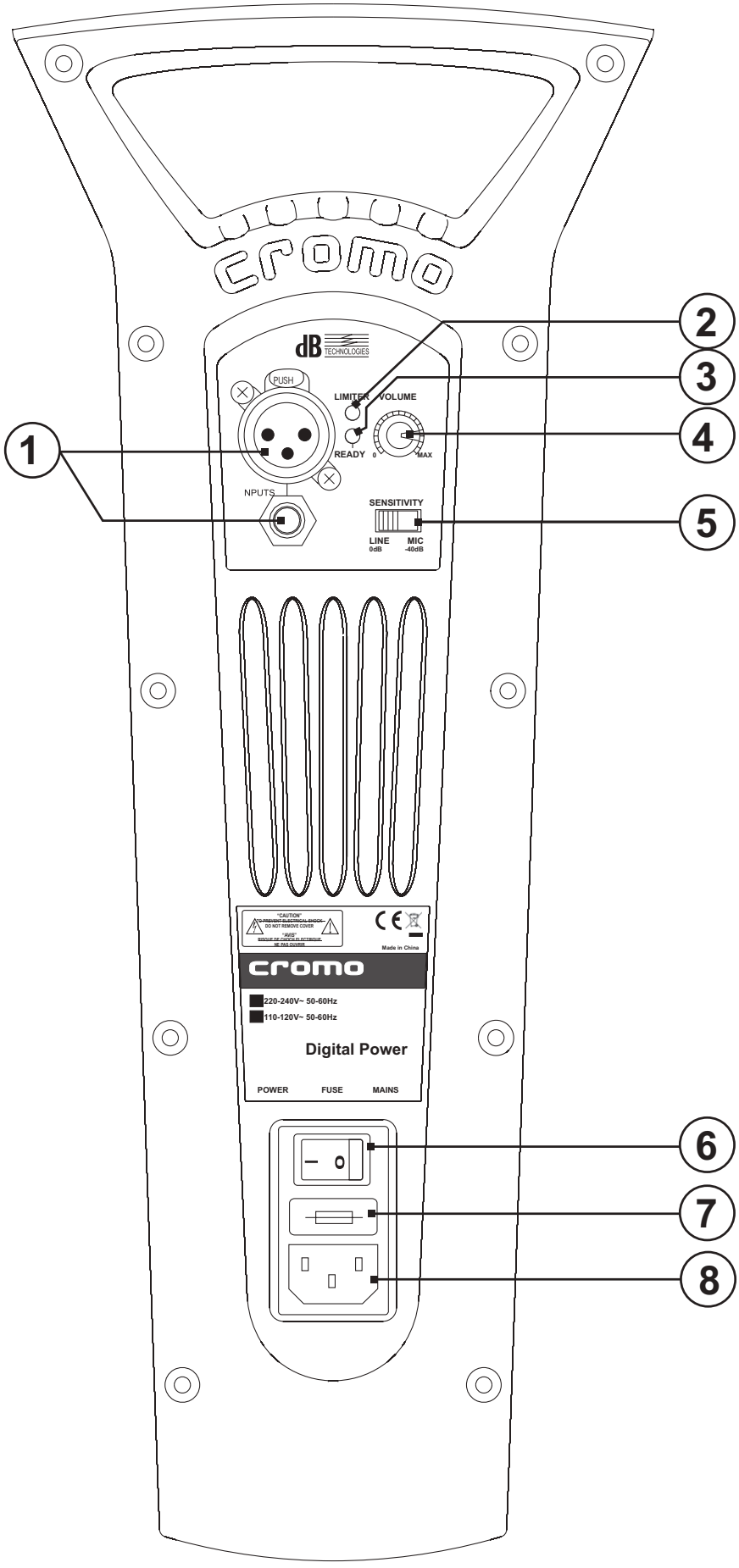
EMI CLASSIFICATION

According to the standards EN 55103 this equipment is designed and suitable to operate in E3 (or lower E2, E1) Electromagnetic environments.

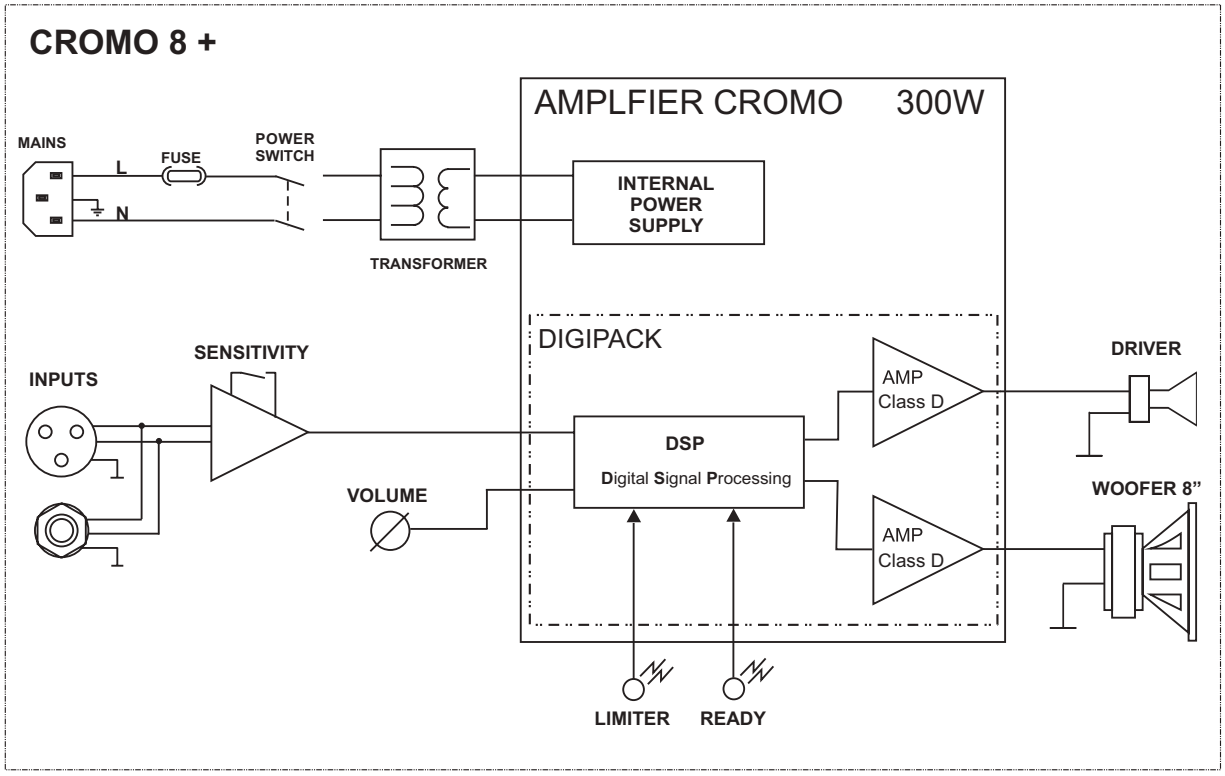
TECHNICAL SPECIFICATION

	CROMO 8+	CROMO 10+	CROMO 12 club	CROMO 12+	CROMO 15+
Amp and processor					
Power supply:	Toroidal Transformer	Toroidal Transformer	Toroidal Transformer	Toroidal Transformer	Toroidal Transformer
Pre-Amp:	24bit 48KHz DSP	24bit 48KHz DSP	24bit 48KHz DSP	24bit 48KHz DSP	24bit 48KHz DSP
Amplifier:	Digital (Class-D)	Digital (Class-D)	Digital (Class-D)	Digital (Class-D)	Digital (Class-D)
Power:	300 W	400 W	400 W	600 W	600 W
Cooling:	Convection, fan-free	Convection, fan-free	Convection, fan-free	Convection, fan-free	Convection, fan-free
Limiter:	Peak, RMS, Thermal	Peak,RMS, Thermal	Peak,RMS, Thermal	Peak, RMS, Thermal	Peak, RMS, Thermal
X-over frequency:	2100 Hz, 24 dB/oct	2000 Hz, 24 dB/oct.	2000 Hz, 24 dB/oct.	1900 Hz, 24 dB/ oct.	1900 Hz, 24 dB/ oct.
Audio Data					
Frequency response -10 dB:	68 Hz - 20 kHz	65 Hz - 20 kHz	60 Hz - 20 kHz	55 Hz - 20 kHz	47 Hz - 20 kHz
Frequency response +-3 dB:	80 Hz - 19 kHz	70 Hz - 19 kHz	65 Hz - 19 kHz	60 Hz - 19 kHz	52 Hz - 19 kHz
Max SPL:	118 dB	121 dB	123 dB	126,5 dB	128 dB
Bass/midrange woofer:	1x8“ Ceramic -1,5“ voice coil	1x10“ Ceramic -1,5“ voice coil	1x12“Cearamic -2“ voice coil	1x12“Cearamic -2“ voice coil	1x15“Cearamic -2“ voice coil
High frequency driver:	1x1“ compression driver 1“ voice coil Neodymium	1x1“ compression driver 1“ voice coil Neodymium	1x1“ compression driver 1“ voice coil Neodymium	1x1“ compression driver 1,5“ voice coil	1x1“ compression driver 1,5“ voice coil
Horn coverage:	90°/70° x 60°	90°/70° x 60°	90°/70° x 60°	90°/70° x 60°	90°/70° x 60°
Input section					
Signal input/link:	XLR fem. Balanced 6,3mm JACK balanced	XLR fem. Balanced 6,3mm JACK balanced	XLR fem. Balanced 6,3mm JACK balanced	XLR fem. Balanced 6,3mm JACK balanced	XLR fem. Balanced 6,3mm JACK balanced
Input sensitivity:	-40dBu/0dBu (Mic/Line)	-40dBu/0dBu (Mic/Line)	-40dBu/0dBu (Mic/Line)	-40dBu/0dBu (Mic/Line)	-40dBu/0dBu (Mic/Line)
Mains:	IEC, VDE	IEC, VDE	IEC, VDE	IEC, VDE	IEC, VDE
Inrush current:	5,9 A	8,8 A	8,8 A	12,1 A	12,1 A
Hardware					
Pole mount:	36 mm	36 mm	36mm	36mm	36mm
Handles (rubber):	one on top (with rubber)	one on top (with rubber)	one on top (with rubber)	one on top (with rubber)	one on top (with rubber)
Monitor use angles:	45° both sides	45° both sides	45° both sides	45° both sides	45° both sides
Grille:	1mm Metal	1 mm Metal	1 mm Metal	1 mm Metal	1 mm Metal
Dimensions (W x H x D):	270 x 435 x 252mm	320 x 508 x 297mm	402 x 615 x 356mm	402 x 615 x 356mm	475 x 726 x 423mm
Weight:	7,8 kg	12 kg	17,7 kg	18,5 kg	22,9 kg
Optional accessories:	gig bag	gig bag	gig bag	gig bag	gig bag

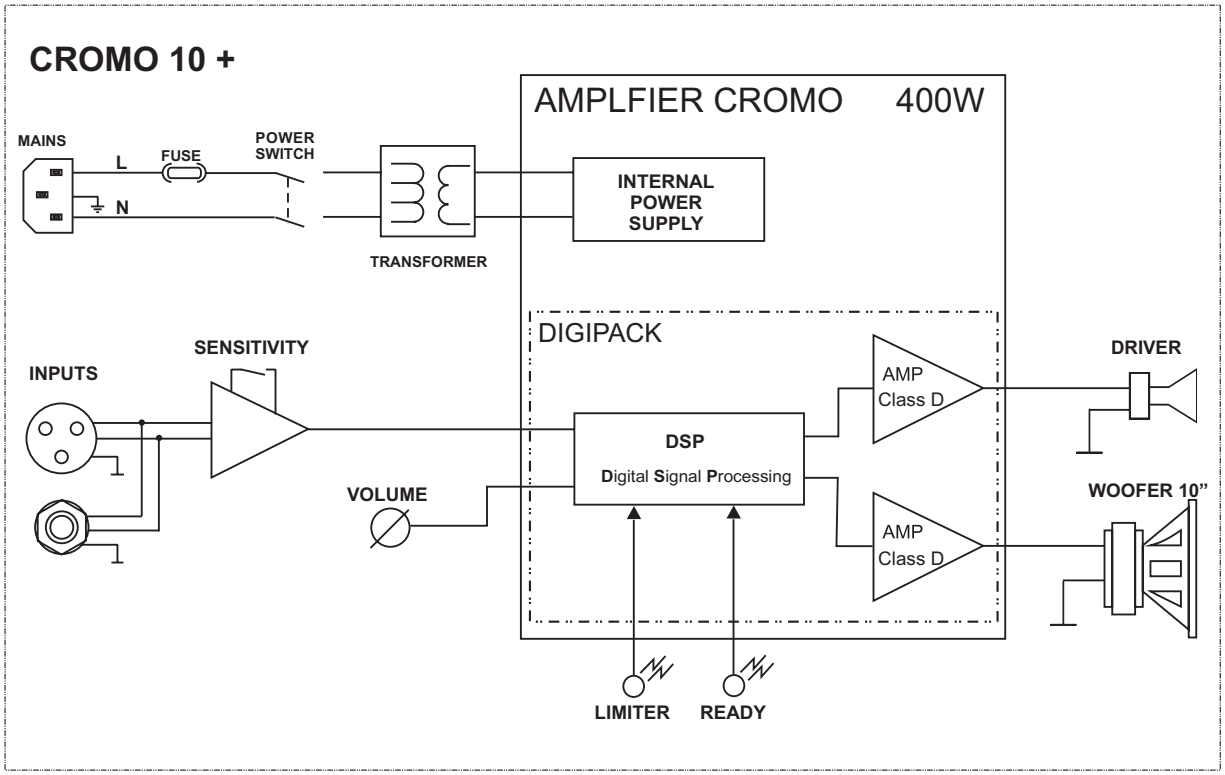
AMPLIFICATORE - AMPLIFIER
VERSTÄRKER - AMPLIFICATEURS



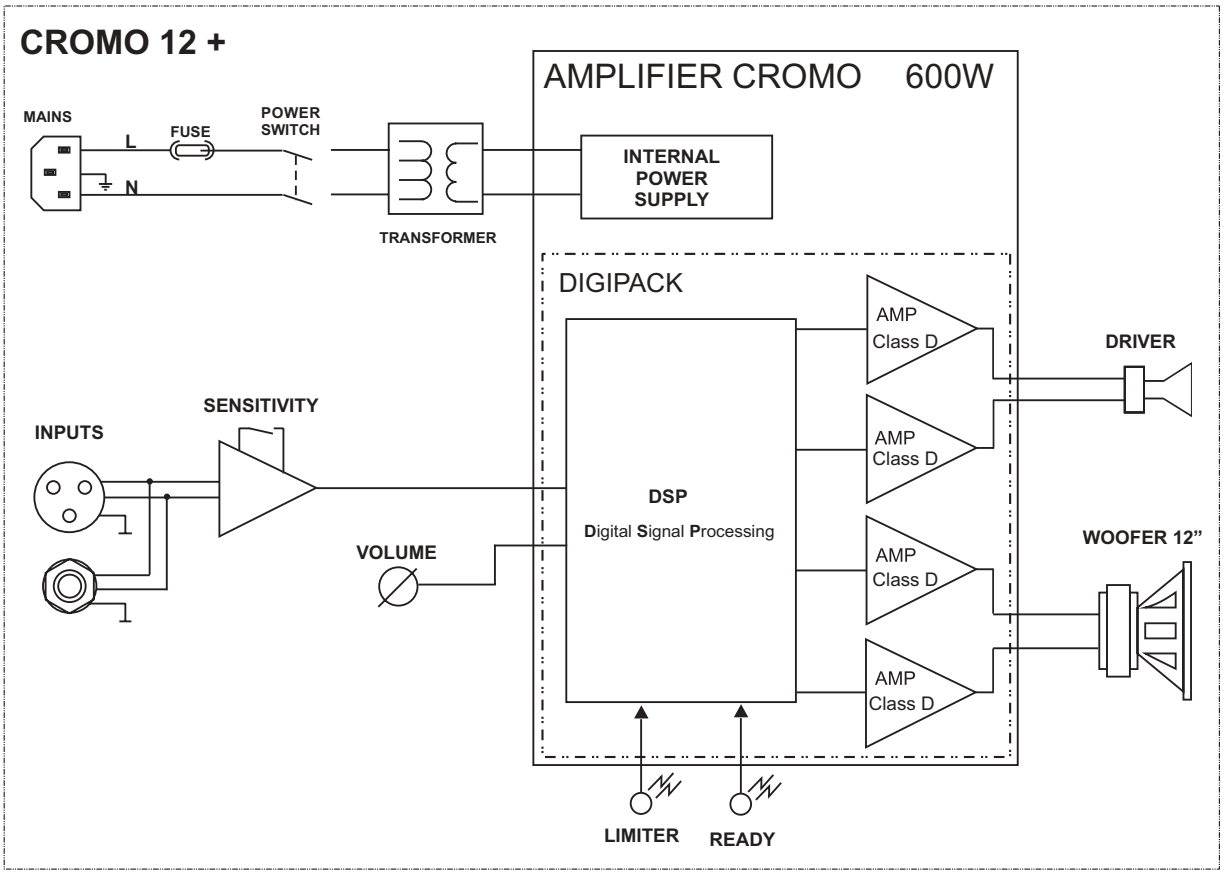
CROMO 8 +



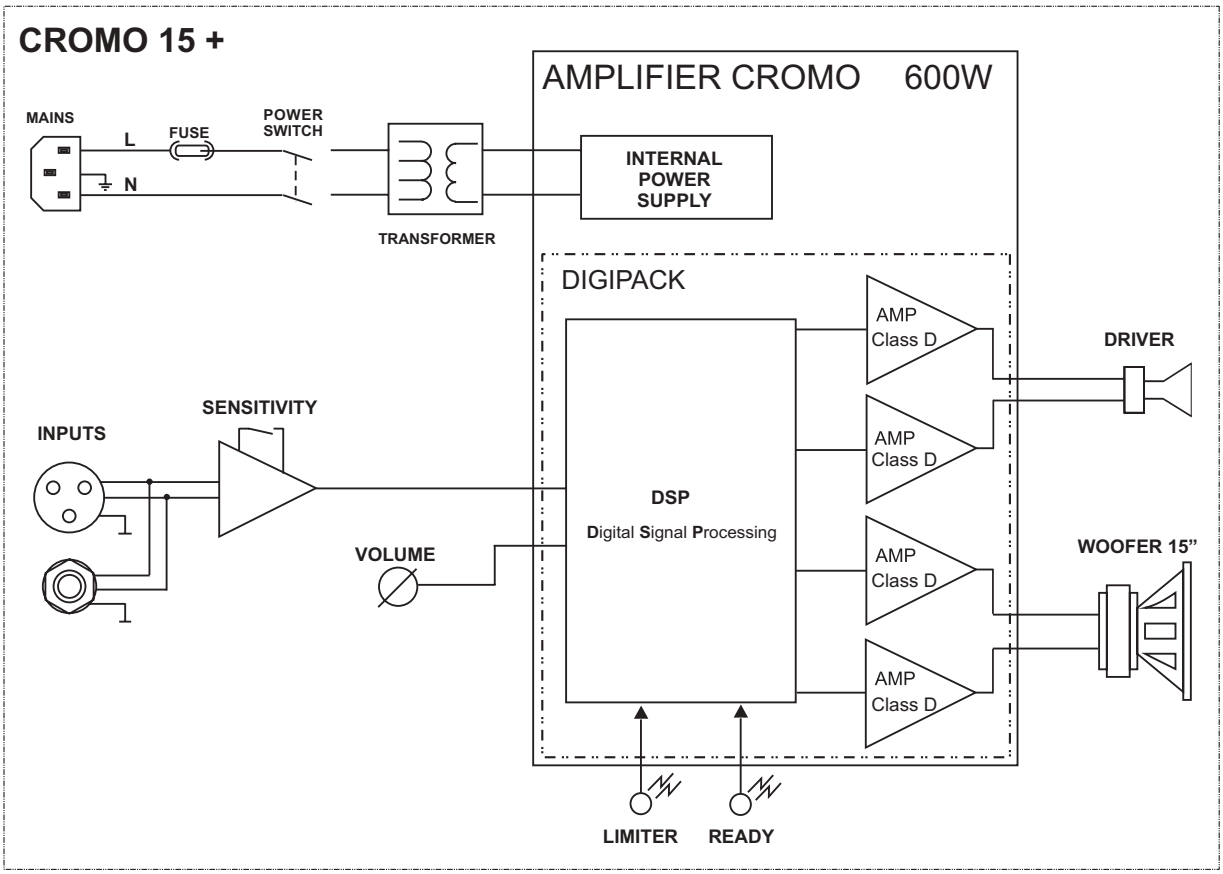
CROMO 10 +



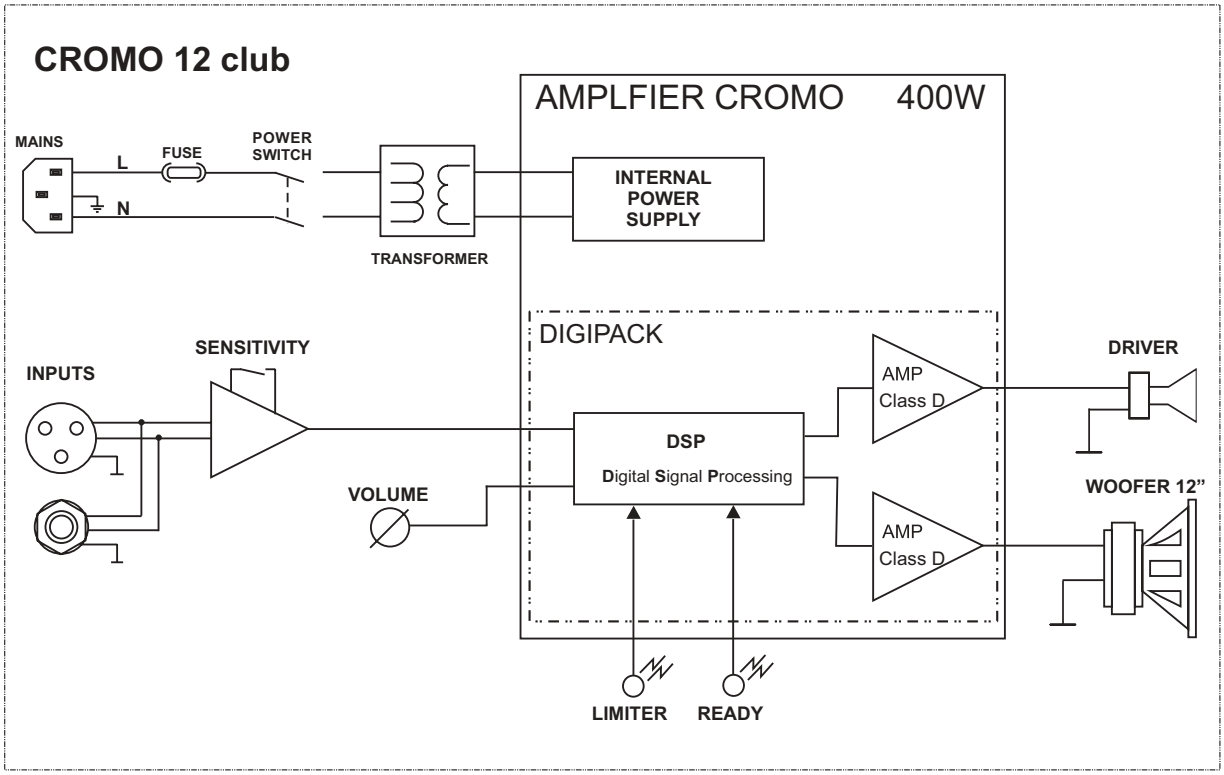
CROMO 12 +



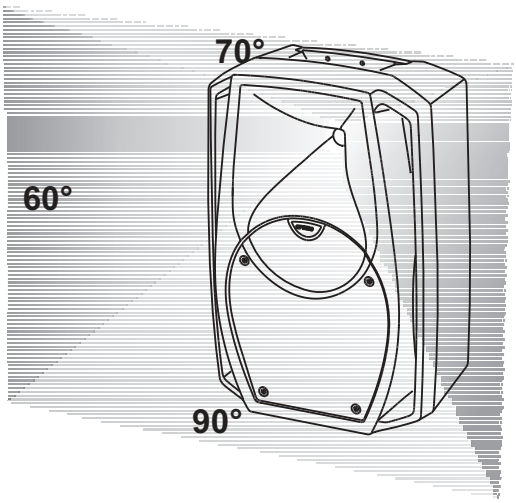
CROMO 15 +

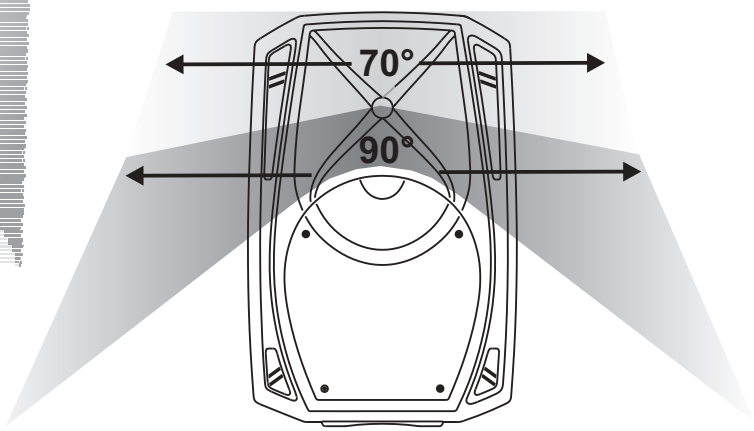


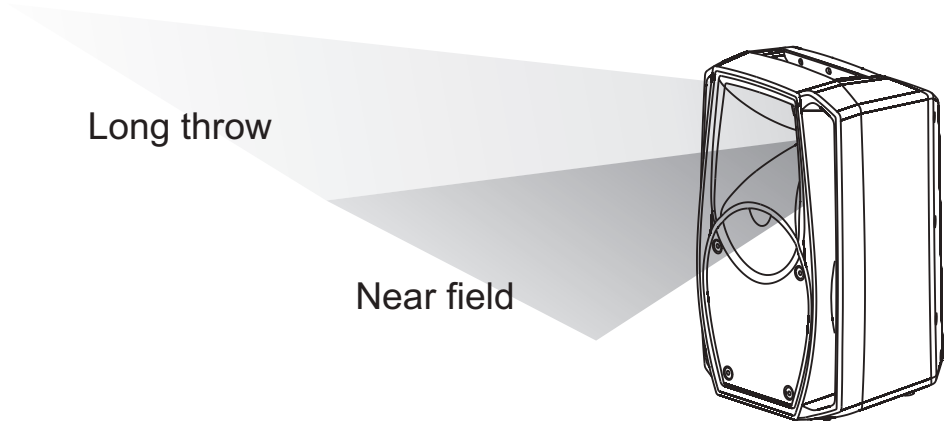
CROMO 12 club



ANGOLO DI COPERTURA TROMBA / HORN COVERAGE ANGLE
HOCHTONHORN ABSTRAHLWINKEL / ANGLE DE COUVERTURE COTÉ

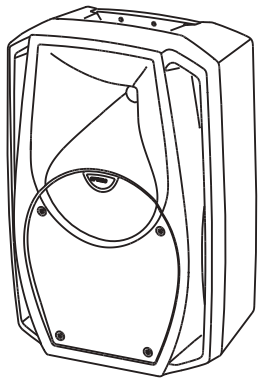


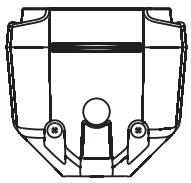


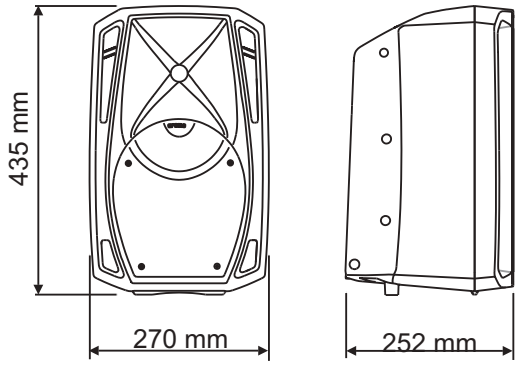


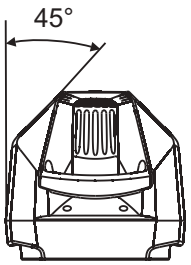
DIMENSIONI / DIMENSIONS
ABMESSUNGEN / DIMENSIONS

CROMO 8 +

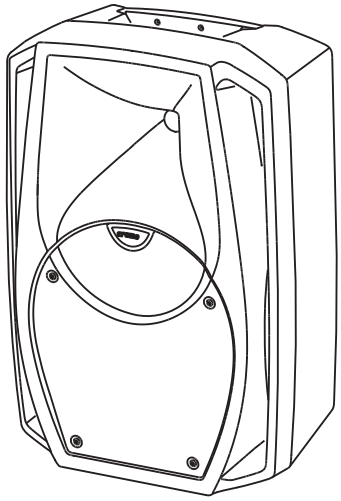


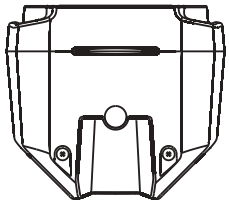


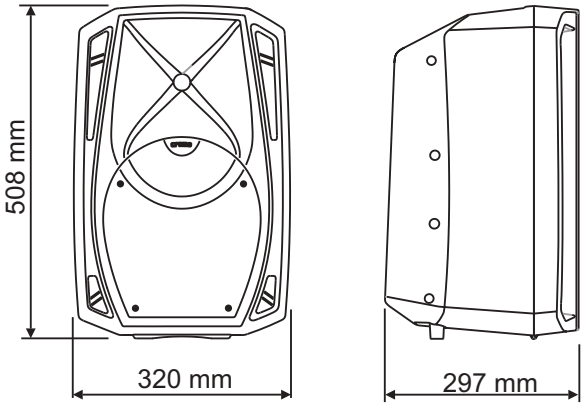


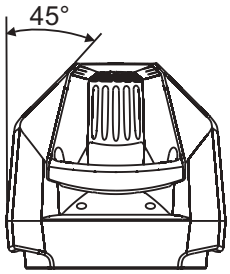


CROMO 10 +

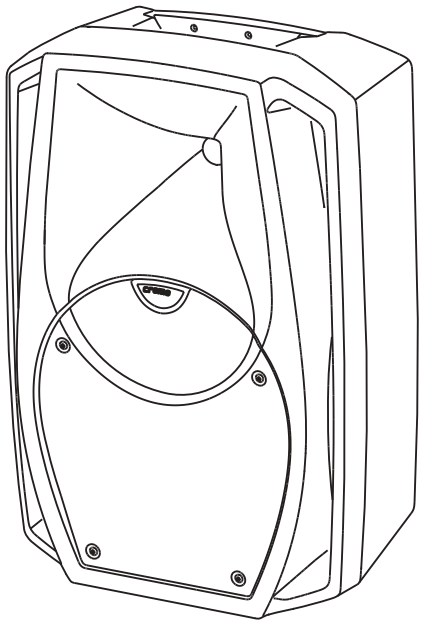


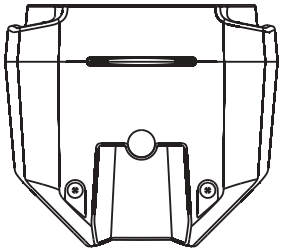


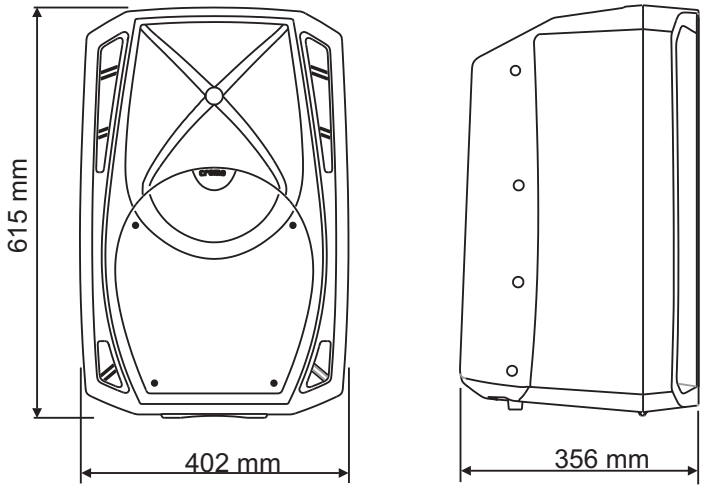


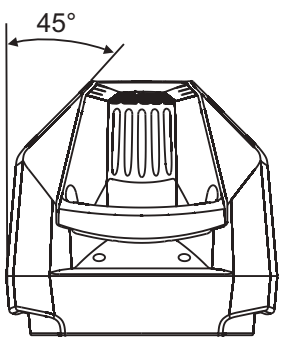


CROMO 12 +
CROMO 12 club



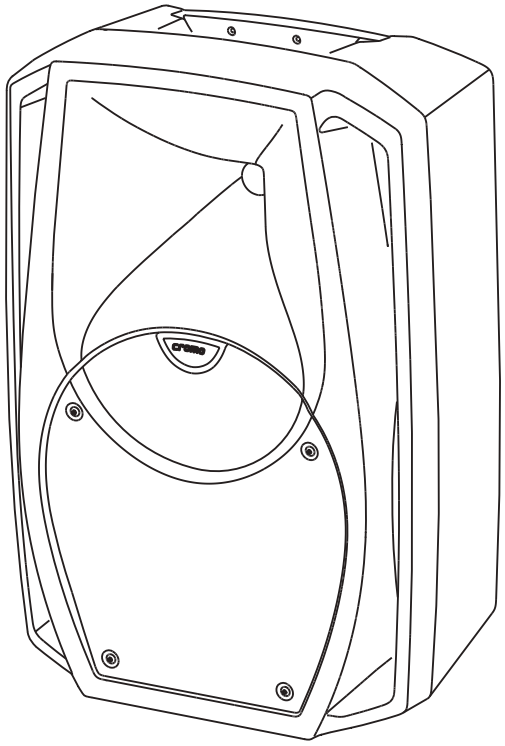


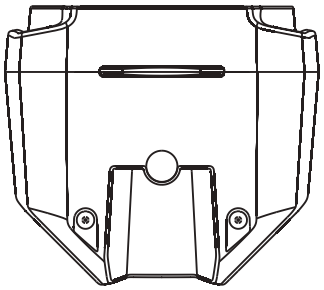


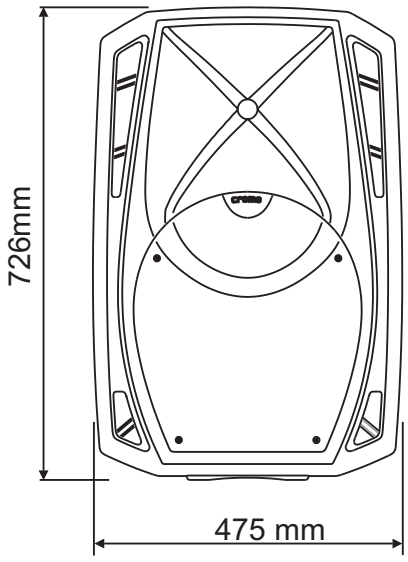


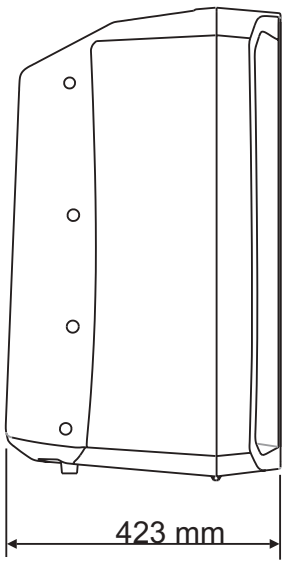
DIMENSIONI / DIMENSIONS
ABMESSUNGEN / DIMENSIONS

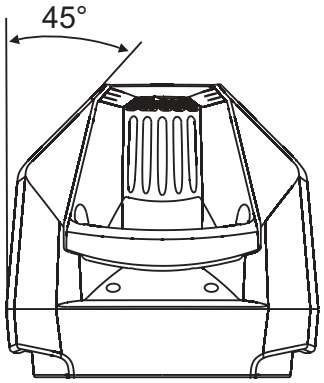
CROMO 15+





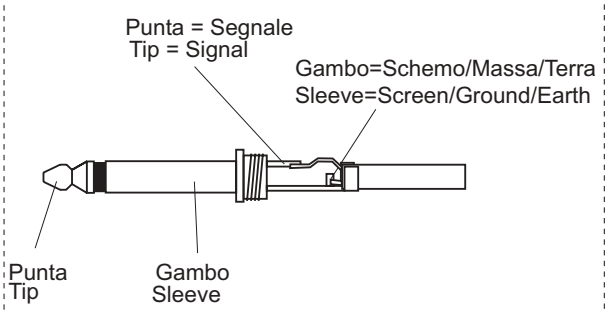




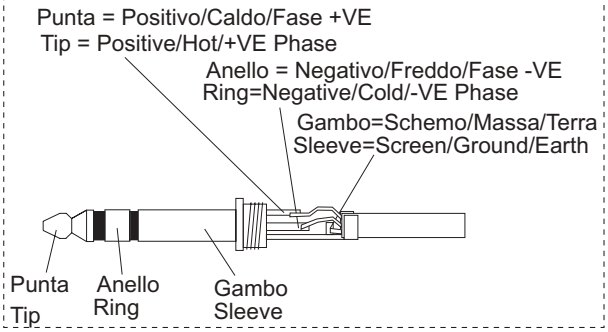


COLLEGAMENTI - CONNECTIONS - ANSCHLÜSSE - BRANCHEMENTS

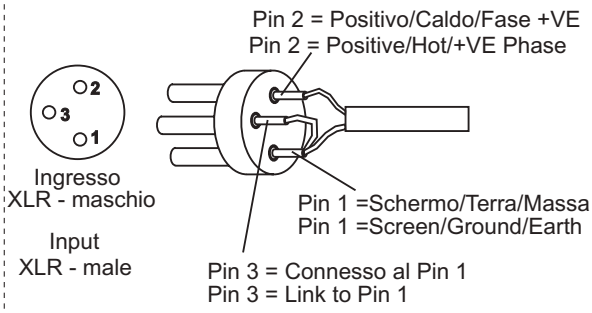
Funzionamento sbilanciato con connettore jack 1/4" (6,3mm)
Unbalanced use of stereo 1/4" jack plug



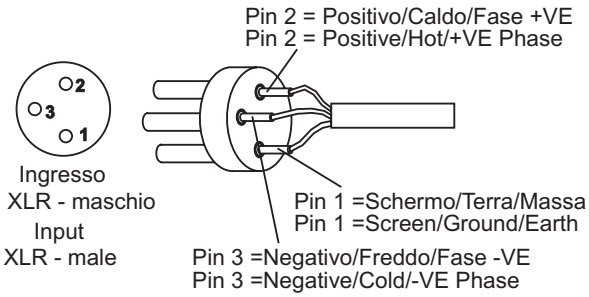
Funzionamento bilanciato con connettore jack 1/4" (6,3mm)
Balanced use of stereo 1/4" jack plug



Funzionamento sbilanciato con connettore XLR
Unbalanced use with XLR connectors



Funzionamento bilanciato con connettore XLR
Balanced use with XLR connectors



UTILIZZO IN APPOGGIO - SUPPORTED USE
ANWENDUNG - UTILISATION EN APPUI

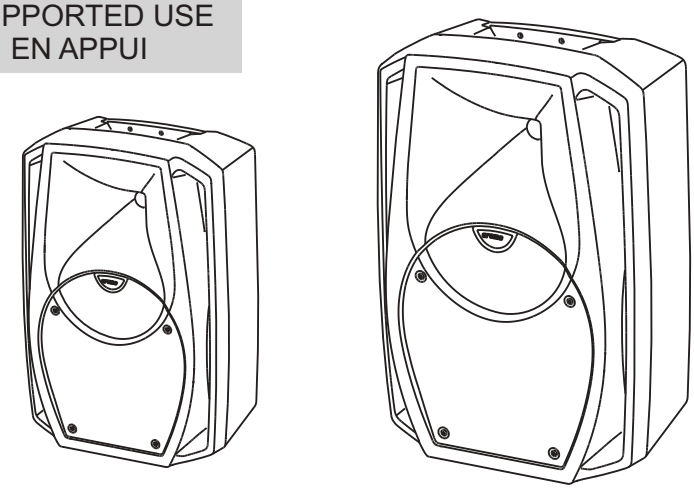


Fig. 1
Abb.1

UTILIZZO A PAVIMENTO (MONITOR) - FLOOR USES (MONITOR)
VERWENDUNG AUF DEM BODEN (MONITOR) - UTILISATION AU SOL (ÉCRAN)

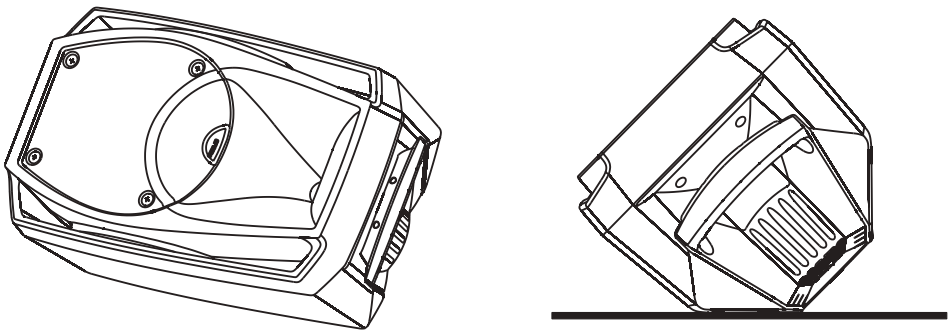


Fig. 2
Abb.2

A.E.B. INDUSTRIALE s.r.l.
Via Brodolini, 8 - 40056 Crespellano (Bo) - ITALIA
Tel. + 39 051 969870 - Fax. + 39 051 969725
Internet: www.dbtechnologies.com
E-mail: info@dbtechnologies-aeb.com