



FULL 612 is a very high quality 'plug & play' system featuring an exceptional power-to-size ratio, which makes it very easy to transport and install. What differentiates the FULL 612 from similar systems available on the market is the designer's selection of high quality drivers, usually featured in larger systems.

The geometric shape of the cabinets and the bass-reflex ports have been carefully designed to reduce power-compression and turbulence. The bass cabinet, FULL 12, incorporates all the electronics needed to process and power the whole system. It is equipped with class D amplifiers (with switching-mode power supplies) controlled by the Montarbo DSP loudspeaker management processor (56 bit, 180 MHz, 24 bit converters) which provides filtering, equalization, delay, limiting and diagnostic functions. This DSP utilizes an advanced algorithm for the real time control of the power output and the temperature (both internal and external) of the amplifier. It also includes a dedicated standby function which results in reduced power consumption when no signal is present. 5 presets are available, one of which may be customized by the user, thus adapting the speaker's acoustic response to the user's personal taste. The presets can be modified by means of the Montarbo proprietary software program RAConLS™ supplied with the LD2.4 USB interface (optional device). The remote control allows: programming and storage of one preset in the DSP and the creation of an unlimited library of personalized settings in the PC; adjustment of the frequency response by means of a 10 filter 'fully parametric' equalizer; adjustment of the delay time and of the output level of each speaker system; monitoring of the power amplifier's condition.

FEATURES

- Stereo 3-way active speaker system composed of 2 passive satellites and an active bass cabinet.
- 3 class-D amplifiers (with switching-mode power supplies) that can supply a total of 2000 Watts EIAJ (1000 + 1000 W for the bass cabinet, 500 + 500 W for the satellites).
- FULL 12: 130 dB max SPL half-space.
- FULL 6: 125 dB max SPL.
- FULL 12 bass cabinet: 12" woofer (4" voice coil) with a ventilated, shielded neodymium magnet.
- FULL 6 satellite: 6" woofer (2.5" voice coil) with a ventilated, shielded neodymium magnet; HF driver, with 1" throat and 1.5" voice coil, featuring a neodymium magnet and titanium diaphragm; wide dispersion (80° H x 60° V) wave-guide horn.
- Montarbo 56 bit DSP, 180 MHz, 24 bit converters.
- Dedicated standby function.
- 5 presets one of which may be customized and loaded into the DSP.
- Presets remote control and customization by means of the proprietary software program RAConLS™ and the optional LD2.4 USB interface.
- With a single LD2.4 USB interface it is possible to operate up to 10 speaker systems of the SPOT, WIDE and FULL series.
- Birch plywood cabinet, finished with anti-abrasion paint.
- Speaker stand adapter; transport handles.

APPLICATIONS

- The sound pressure level and acoustic power that FULL 612 system is capable of generating are truly exceptional, making it possible to cover very large areas.
- Reproduction of recorded music in clubs and other entertainment venues.
- Live performances of acoustic and semi-acoustic music.
- Stage monitoring applications.
- Recording studios, control rooms.

ACCESSORIES

- LD2.4 USB interface supplied with Montarbo proprietary software program RAConLS™.
- BAG-2F6 protective transport bag for a pair of FULL 6 satellites.
- BAG-F12 protective transport bag for one FULL 12 bass cabinet.





SYSTEM'S ARCHITECTURE

FULL 612 is a stereo 3-way active speaker system composed of 2 passive satellites and an active bass cabinet.

The bass cabinet is equipped with a 12" woofer featuring a 4" voice coil and a ventilated, shielded neodymium magnet.

Each of the passive satellite speaker systems is equipped with: a 6" woofer featuring a 2.5" voice coil and a ventilated, shielded neodymium magnet; an HF driver with 1" throat and 1.5" voice coil, coupled to an elliptical tractrix wide dispersion (80° H x 70° V) wave guide horn, made of cast aluminum in order to obtain a 30% reduction of the power compression effect.

The bass cabinet incorporates all the electronics needed to process and power the whole system. It includes 3 class D power amplifiers (with switching-mode power supplies) that may source a total power of 2000 Watts EIAJ (1000 W to the bass cabinet, 500 + 500 W to the two satellite speakers), managed by the Montarbo DSP.

The small size and weight of the system can be deceiving: the sound pressure level (125 dB max SPL for each satellite and 130 dB max SPL half-space for the bass cabinet) and acoustic power that FULL 612 system is capable of generating are exceptional, making it possible to cover truly large areas. The crossover point are 100Hz for the bass cabinet and 1800Hz (passive) for the satellite. Operating frequency range of the complete system is 40Hz to 20KHz. Coverage is 80-degree horizontal x 70-degree vertical.

The active bass cabinet controls and connections panel is fitted with:

- SPEAKON® sockets for the connection of the two model FULL6 satellite speakers, right channel and left channel (1).
- Left and Right input connectors (2). These are 3-pin female XLR balanced, line level inputs, that may be fed by balanced or unbalanced sources.
- Input link connectors for channels L and R (3): they are wired in parallel to the corresponding input connectors and they make it possible to send the input stereo signal to other equipment (usually to another FULL612 system).
- Master volume control (4) that adjusts the system's volume (of both subwoofer and satellites).
- DSP section (5) includes: 4 status Led indicators; 5 active Preset Led indicators; UP and DOWN pushbuttons which allow for preset selection.
- RJ45 sockets of the two DATA ports (6) for connection to the Montarbo USBNet control network: a Montarbo LD 2.4 USBNet interface and/or another active speaker of the FULL, SPOT and WIDE series.
- Mains supply inlet socket with type A PowerCon® (blue) (8) connector which guarantees a reliable, vibration-proof contact.
- Type B (gray) PowerCon® connector (9) allows to link other devices to the mains power.
- Mains ON/OFF switch (10).

The passive satellite controls and connections panel is fitted with:

- SPEAKON® socket for the connection to the FULL12 active bass cabinet (10).



The cabinets of the three elements are built from birch plywood and their surfaces have been coated with a special paint providing increased protection and resistance to scratches and abrasion, even with intensive use. They feature a steel protection grille with external foam (foam on the bass cabinet only) and ergonomically designed handles, which have been located in the correct, balanced position to ensure convenient handling by a single person.

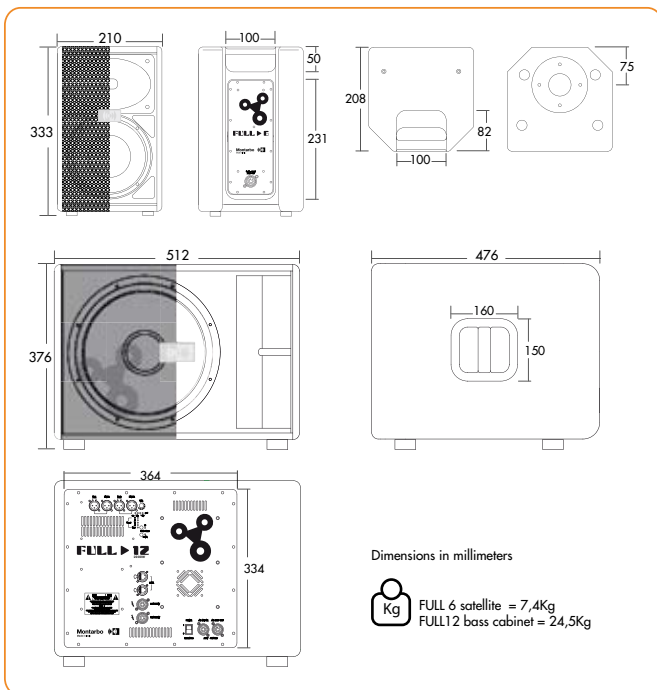
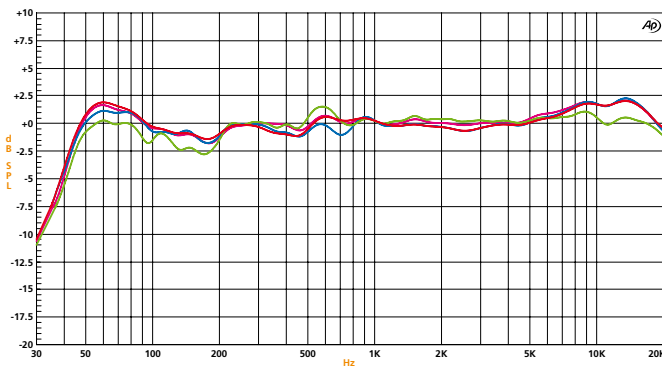
The satellites feature an adapter for a supporting pole. Dimensions of the FULL 6 satellite are 210mm wide x 333mm high x 208 mm deep; dimensions of the FULL 12 bass cabinet shall be 512mm wide x 376mm high x 476 mm deep. Weight of each FULL 6 is 7.4 kg.

Weight of the FULL 12 bass cabinet is 24.5 kg.





FULL612 Frequency Response:
RED: PRESET1 - MAGENTA: PRESET2 - BLUE: PRESET3 - GREEN: PRESET4



TECHNICAL SPECIFICATIONS

Enclosure	FULL 6: 2-way bass reflex; FULL 12: bass-reflex
Frequency response	40 - 20.000 Hz
Sensitivity	101 dB SPL @ 1W/1m
Max SPL (peak)	FULL 6: 125 dB; FULL 12: 130 dB half-space
Total Power	2000 W EIAJ
<ul style="list-style-type: none"> • Components 	
FULL6	LF 6" woofer (2.5" voice coil) with shielded ventilated neodymium magnet HF compression driver (1" throat, 1.5" voice coil)
FULL12	elliptical tractrix high dispersion wave guide horn (80° H x 70° V) 12" woofer (4" voice coil) with shielded ventilated neodymium magnet
<ul style="list-style-type: none"> • Electronic cross-over 100 Hz / passive 1800 Hz 	
<ul style="list-style-type: none"> • Built-in amplifier 3 class D power units 	
Total Output Power	2000 W EIAJ
LF	1000 W
MHF left	500 W
MHF right	500 W
Input sensitivity	0 dBu (775mV)
<ul style="list-style-type: none"> • Built-in DSP Montarbo 	
Processing	56 bit/180 MHz
Conversion	24 bit
ADC	112 dB
DAC	113dB
Management function	Filtering, EQ, delay, limiting, diagnostic 5 presets, 1 of which is custom-programmable Remote control by PC by means of LD2.4 USB interface (optional device)
<ul style="list-style-type: none"> • Connections and controls 	
FULL12	4-pole Speakon® connector for the satellites Balanced XLR connectors for the L/R inputs and L/R link RJ45 DATA connectors for the connection to a PC (Montarbo net) PowerCon® for mains power supply (input + link) Volume control Status Led indicators (signal, clipping, thermal warning protection) Active preset LED indicators
FULL 6	4-pole Speakon® for the bass cabinet

PHYSICAL SPECIFICATIONS

• Construction	Birch plywood, anti-abrasion paint Steel protection grille with foam (FULL 12)
• Features	Speaker stand adapter; transport handles
• Dimensions / Weight	FULL 6: W 210 x H 333 x D 208 mm / 7.4 kg FULL 12: W 512 x H 376 x D 476 mm / 24.5 kg

LD24 USB INTERFACE

This compact, USB-powered interface allows to control and monitor up to 10 systems, using a single USB port of the controlling computer.

Data connection is provided by a single RJ45 connector – a single CAT5 cable is run up to 100 m to the first system and further systems are connected in series.

The network connection between the LD2.4 and the systems is through a standard RS485FD physical interface using Montarbo's proprietary protocol.



TECHNICAL SPECIFICATIONS

• Dimensions	W 73 x H 45 x D 22 mm
• Interfaces	1 x USB-B 1 x RJ45
• Cable length	100 m (CAT5)
• Maximum network size	10 SPOT, WIDE and FULL speaker system, in any combination.

LD2.4 is supplied with one USB type AB cable and one CD with RACONLS™ software

