

STAGE OPERA ACTIVE

BiAmp ClassH Active Monitor



STAGE OPERA M 12-4

A monitor is not just a simple loudspeaker. Much higher demands are made on a monitor. It should reproduce the performance of a musician as a reliable control, often in a very loud environment, with a high feedback limit.

With this guideline, chief development engineer Claudio Ottani has made the M 12-4 into a high level affair, developed more on the stage than at the work bench, he has developed an unusual top-class active monitor in collaboration with many musicians and sound engineers.

The acoustic requirements can only be achieved by perfect sound control and the highest quality of components, so only a BiAmp operated active concept was worth considering. The active separation enables a clean linear frequency response and thus a very high feedback limit.

The two integral output stages in class H technology provide 225 W/RMS to the 12" 18Sound woofer and 50 W/RMS to the B&C 1" pressure chamber driver, which has a pivoting 90° x 60° horn. In this way, a maximum sound pressure of 128 dB SPL is achieved.

To optimise the highest backward attenuation on microphones with cardioid or hypercardioid characteristics, the two loudspeakers are arranged one over the other, making perfect positioning possible.

The stand mount integrated in the extremely compact housing expands the range of use and makes the M 12-4 into a versatile public address system with many possibilities for use.

The input sensitivity is reversible between microphone and line level. A balanced XLR parallel out is available for looping through the input signal. The integral dynamic soft clip limiter protects the system from overload and enables reliable operation right up to the power limit.



● STAGE OPERA M 12-4

- 2 way bi-amplified active monitor
- 12" Eighteen-Sound Woofer
- 1" B&C Compr. 90°x60°, adjustable
- 225 + 50 Watt/RMS, 550 Watt/PRG
- 70 – 18000 Hz
- Max. SPL: 128 dB
- Housing made of 20mm black lacquered multiplex
- Two set-up angels, 45° & 60°
- Standmount
- Weight: only 19kg
- Very compact design



STAGE OPERA M12-4

Input (PRG)	450 + 100 W
Input (RMS)	225 + 50 W
Loudspeaker	12" dB-Bass 1" B&C Compr. 90°60°
Frequency response	50 – 20000 Hz
max. SPL.	126 dB SPL
Crossover	2 KHz active, 24 dB/oct.
Sensitivity	-50 to 0dB, adjustable
Connection, Input	Neutrik Combo® 6,3 mm Jack / XLR bal.
Connection, Output	XLR bal., parallel
Impedance	20 K Ohm bal., 10 K Ohm unbal.
Dimension	400 x 410 x 510 mm
Weight	19 kg

STAGE OPERA

LightWeight 15" Subwoofer



STAGE OPERA 41.15

To improve the bass range of the **OPERA Series** we have developed an active 15" subwoofer. This unit can be used in combination with any of the Active or Passive loudspeakers in the **OPERA Series**. The driver is powered by a 400 W/RMS Class H amplifier and develops 127 dB SPL.

As an ideal complement to the active OPERA models or even the STAGE OPERA 42.12, it offers high sound pressure (127 dB max.) with powerful bass down to 30 Hz. The housing constructed of 20 mm poplar multiplex, painted with black textured paint, along with the highly efficient class H output stage is mainly responsible for the extremely low weight of only 24 kg and thus the extreme ease of handling. The integral active diplexer separates extremely precisely, and is phase accurate, with a slope of 24 dB/octave at 100 Hz and can be operated in both mono and stereo.

The connection panel provides a high level of flexibility with its two balanced Neutrik Combo XLR / jack inputs, two XLR parallel outputs and two XLR diplexer outputs.

The integral soft clip limiter protects the system from overload and allows the cleanest reproduction even at the power limit.

Like all dB Technologies active subwoofers, the integral fan cooled output stage has a totally enclosed output stage compartment to isolate it from the loudspeaker enclosure.

STAGE OPERA 41.15 P

In applications where the use of active systems does not seem appropriate, the passive 41.15 P with its outstanding sound properties and simple handling is recommended. It can take a load of 400 W/RMS and has an integrated switched passive diplexer at 150 Hz, thus allowing the build up of a system with only one output stage or one power mixer. A high stand adapter allows the use of spacer rods with both models.

By using a satellite pole, it is possible to use both top box & sub in combination.



STAGE OPERA 41.15

- 1 x 15"
- 400 W/RMS active
- 30 – 150 Hz
- max SPL: 127 dB
- XLR/jack input
- Parallel output
- HF-Out XLR
- Stereo-Crossover
- Dynamic limiter
- cutoff frequency 100 Hz
- 480 x 500 x 500 mm
- Weight 24 kg

STAGE OPERA 41.15 Passive

- 1 x 15"
- 400 W RMS /8 Ohm
- 30 – 150 Hz
- max SPL: 127 dB
- 2 Speakon
- 8 Ohm

Combination possibilities



	STAGE OPERA 41.15	STAGE OPERA 41.15 P
Amplifier	Class H	-
Output (Music)	800 W	800 W
Output (RMS)	400 W	400 W
Loudspeaker	1 x 15" dB	1 x 15" dB
Frequency response	30 – 150 Hz	30 – 150 Hz
Max. SPL	127 dB	127 dB
Cross-over	100 Hz 24 dB/Oct.	150 Hz 12 dB/Oct.
Input Sensitivity	max. 0 dBm	-
Input Connection	Neutrik Combo®	1 x Neutrik Speakon®
Output Connection	2 x XLR bal., parallel 2 x XLR bal., X-Over-Out	1 x Neutrik Speakon®
Impedance	20 K Ohm bal.	8 Ohm
Dimension	450 x 500 x 500	450 x 500 x 500
Weight	24 kg	20 kg

"The power of these small speakers impresses when they are pushed with a hard, punchy Kick Drum."

Soundcheck Magazine 03/2003

STAGE OPERA

Speakers

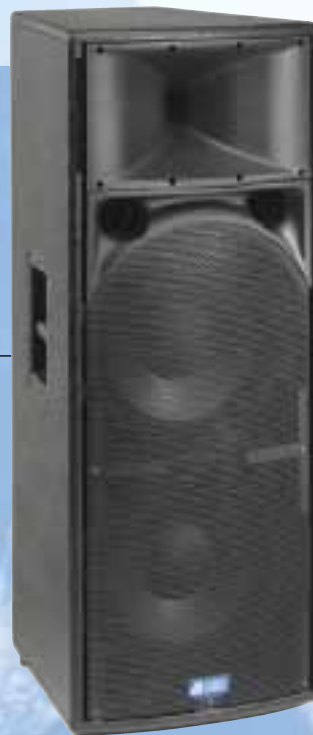


● STAGE OPERA 82.15

- 2 x 15", 1 x 6,5", 1 x 1" B&C
- 500+200+100 W/RMS
- 50 – 20000 Hz
- Max. SPL: 130 dB
- XLR/jack input
- Parallel output
- Dynamic limiter

STAGE OPERA 82.15 Passive

- 2 x 15", 1 x 6,5", 1 x 1" B&C
- 800 W/RMS, 1600 W/Peak
- 50 – 20000 Hz
- Max. SPL 130 dB
- 4 Ohm
- 2 x Speakon
- Electronic mid-high tone protection
- Optional as flown model



● STAGE OPERA 42.12

- 2 x 12", 1 x 1" B&C
- 300+100 W/RMS
- 60 – 20000 Hz
- Max. SPL 127 dB
- XLR/jack input
- Parallel output
- Dynamic limiter

STAGE OPERA 42.12 Passive

- 2 x 12", 1 x 1" B&C
- 400 W/RMS, 800 W/Peak
- 60 – 20000 Hz
- Max. SPL 127 dB
- 4 Ohm
- 2 Speakon
- PTC limiter



STAGE OPERA

After the great success of the active models of the OPERA series, the obvious thing to do was to put the know-how gained into effect in larger more powerful systems. Active systems enjoy great popularity and not without reason:

The possibility of being able to tune output stage and loudspeaker system perfectly to each other, and the use of active separation of the output stages for each path, allows unequalled sound at the highest level of effectiveness.

Class H output stages are used exclusively as the drive; they are convincing due to their high efficiency and low heat generation and guarantee high reliability.

The **2 way model 42.12** is driven by a class H BiAmping output stage with 300 W/RMS for the two 12" woofers and 100 W/RMS for the 1" driver.

The **3 way model 82.15** (2 x 15", 6.5", 1") is driven by a TriAmp output stage with 500 W/RMS for the two 15" woofers, 200 W/RMS for the B&C 6.5" medium volume loudspeaker and 100 W/RMS for the 1" B&C pressure chamber driver.

Due to the specially developed constant directivity horns designed to fit into the housing, the high-grade B&C drivers achieve a very clean radiation characteristic with angle of 90° x 60°. Thus for smaller set-ups an adequate radiation is already guaranteed with two systems.

The **3 way model 82.15** shows its true strengths mainly in the mid to high frequency area. The 6.5" B&C loudspeaker with phase plug exhibits a unique soft and natural middle range with high speech clarity, which, due more to the special horn adaptor, achieves a long throw. Due to the reduced strain on the 1" driver in the mid frequencies, this exhibits an extremely smooth response.

All active STAGE OPERA models are fitted with a dynamic limiter, which protects the system from overload and engages softly, virtually inaudibly.

ACTIVE	STAGE OPERA 42.12	STAGE OPERA 82.15	STAGE OPERA 61.18
Amplifier	Bi Amp Class H	Tri-Amp Class H	Class H
Output (RMS)	300+100 W	500+200+100 W	600 W
Loudspeaker	2x12" Bass	2x15" dB Bass 6,5" B&C Mid.	18" B&C Bass -
Frequency response	1" compr.B&C HF 60 – 20000 Hz	1" compr.B&C HF - 50 – 20000 Hz	20 – 150 Hz
max. SPL	127 dB	130 dB	130 dB
Cross-over	2,2 KHz	700 Hz/3 KHz	90/120/150 Hz
Input Sensitivity	max. 0 dBm	max. 0 dB	max. 0 dB
Input connection	Neutrik Combo®	Neutrik Combo®	Neutrik Combo®
Output connection	XLR balanced, parallel	2 x XLR bal., parallel	2 x XLR bal. X-Over-Out
Impedance		20 K Ohm balanced, 10 K Ohm unbalanced	
Dimension	1000 x 430 x 480	1400 x 500 x 500	600 x 800 x 600
Weight	39 kg	59 kg	54 kg



STAGE OPERA 61.18

This active sub-woofer offers a level of body-moving performance at a unique price-performance ratio. Powerful clearly-defined bass frequencies from 20Hz to a maximum of 150 Hz with a maximum sound pressure level of 130 dB.

The integral class H high efficiency output stage provides the 18" B&C woofer with a saturated 600 watt/RMS and thus ensures high dynamics and clean reproduction right up to the power limit. The cut off frequency of the integral active diplexer allows a setting between 90 Hz, 120 Hz and 150 Hz and cuts off precisely at 24 dB/octave, by selection in stereo or mono.

The connection panel provides a high level of flexibility with its two balanced Neutrik Combo XLR / jack inputs, two XLR parallel outputs and two XLR high-pass outputs. The integral soft clip limiter protects the system from overload and allows the cleanest reproduction even at the power limit. Like all dB Technologies active subwoofers, the integral fan cooled output stage has a totally enclosed output stage compartment to isolate it from the loudspeaker enclosure.

STAGE OPERA 61.18 P

In contrast to other passive versions of our active loudspeakers, the 61.18 P uses a different loudspeaker to the active version. In collaboration with the Italian loudspeaker manufacturer 18Sound an 18" chassis was developed which due to its light diaphragm material and high load 3" oscillation coil knows how to convince with its extremely fast response, not an everyday occurrence for 18" loudspeakers. 18" performance with the attack of a 15" chassis is how the impressive results can be described in brief. Since a passive separation in this power class makes little sense, we offer the active ASX18 diplexer with cut-off frequency for external BiAmping.

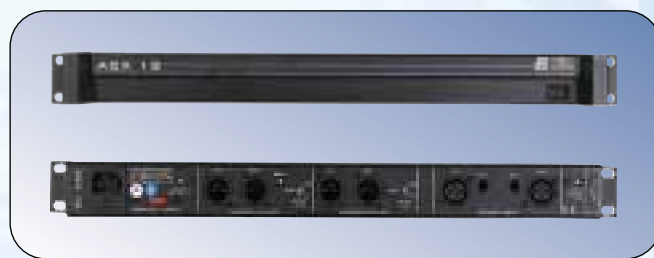
● STAGE OPERA 61.18

- 1 x 18"
- 600 W/RMS active
- 20 – 150 Hz
- max SPL: 130 dB
- 2 x XLR/jack-Input
- Parallel output
- HF-Out XLR
- Stereo-Crossover
- Dynamic limiter
- cutoff frequency 90/120/150 Hz (24 dB/oct.)
- 600 x 800 x 600 mm
- Weight:54 kg

● STAGE OPERA 61.18 Passive

- 1 x 18" EighteenSound®
- 600 W RMS/8 Ohm
- 20 – 150 Hz
- max SPL: 130 dB
- 2 x Speakon4
- 8 Ohm

NEU!



● ASX 18

- Active frequency shunt available as an option

PASSIVE	STAGE OPERA 42.12 P	STAGE OPERA 82.15 P	STAGE OPERA 61.18 P
Output (RMS)	400 W	800 W	600 W
Output (PEAK)	800 W	1600 W	1200 W
Impedance	4 Ohm	4 Ohm	8 Ohm
Loudspeaker	2x12" Bass	2x15" Bass	18" Bass
	-	6,5" B&C Mid.	-
	1" comp. B&C HF	1" comp. B&C HF	-
Frequency response	60 – 20000 Hz	50 – 20000 Hz	200 – 150 Hz
Sensitivity	101 dB 1W/1m	99.5 dB 1W/1m	-
Max. SPL	127 dB	130 dB	130 dB
Cross-over	2 KHz	750 Hz/3,5 KHz	-
Connection	2 x Speakon 4	2 x Speakon 4	2 x Speakon 4
Dimension (mm)	1000 x 430 x 480	1400 x 500 x 500	600 x 800 x 600
Weight	37 kg	54 kg	45 kg