

DYNACORD



Xa5
System

MUTINY OF THE DWARFS

Xa5

The 105 dB-compact class

The Xa5 system is an extremely powerful, outstandingly compact loudspeaker system, providing superior efficiency in medium and long throw applications. The loudspeaker system is meant to be used in an active 2-way installation – i. e. together with the Xa2600 system power amplifier – or in a passive configuration, i. e. directly connected to a PM1000 or together with any regular power amplifier. Because of the horn-loaded system's tremendous SPL of 105 dB/1 W/1 m it is possible to achieve spectacular dynamic results and – in comparison with conventional direct radiating speaker systems – nearly double the long throw capability.

The Xa5 system consists of a combination of a F9CWH Mid/Hi cabinet and two F5 sub woofers per channel. The F9CWH is an extraordinary powerful yet very compact Mid/Hi cabinet for medium and long throw applications. The Constant Directivity Horn HT94 with a nominal dispersion angle of 90° x 40° is coaxially mounted on the conical Mid horn, resulting in greatly smooth response without interference at the transition between the Mid and Hi horn speakers.

The Mid frequency range gets reproduced by Electro-Voice's approved EVM12L Pro-Line speaker while the Hi range is taken care of by a Electro-Voice DH2T drive unit with titanium diaphragm. A driver that is known for its capability to provide superb, intelligible sound and crystal clear treble. The passive frequency crossover's transition frequency between the Mid and the Hi horn takes place at 1600 Hz with an edge steepness of 18 dB/octave in the Hi range. The F5 sub woofer system provides highest efficiency in a truly compact enclosure. The Electro-Voice DL15X woofer working in this vented cabinet design ensures highest acoustical output, tremendous efficiency, and extremely low distortion rates. On each side, two F5 sub woofers are utilized to provide the necessary low frequency sound pressure level that is needed to match the extremely high efficiency range

of the F9CWH. When the Xa5 system is operated in an active 2-way configuration, we recommend that the transition between the F5 sub woofers and the F9CWH Mid/Hi cabinets is performed at a crossover frequency of 160 Hz with an edge steepness of 18 dB/octave and Butterworth characteristics. The DYNACORD system power amplifier Xa2600 comes factory preset with these filter parameters and is therefore best equipped for the connection of the F9CWH and F5 speaker systems.

A thermal circuit-breaker and a halogen lamp array guarantee reliable protection of the Mid range speaker unit as well as the Hi frequency driver against sudden peak levels and short-term thermal overload. The cabinets are made of 15 mm plywood, which is slotted, glued and internally braced to eliminate disturbing resonance. The loudspeaker systems come with black needled felt surface covers, offering outstanding protection against rough wear. Front protection is provided by powder-coated metal grilles and acoustic-foam covers. The F9CWH's connection-board provides two 4-pole SPEAKON sockets that allow for easy bridging of i. e. side fill speaker systems during active operation. The pin-assignment of the SPEAKON connectors can be switched between NORMAL and SYSTEM, offering the possibility to directly incorporate the F9CWH in active configuration using the Xa2600 system power amplifier, without having to fear mismatching of speaker cables. The F5's connection-board provides three 4-pole SPEAKON sockets. The input and output connectors provide four-conductor parallel wiring. Four castors on the F5's rear as well as recessed handles on the sides allow for easy handling and transportation. The recessed pole-mount threaded flange on the cabinet's top and the pole-mount sleeve-joint in the bottom permit secure and easy stacking. The matched cabinet sizes of the F9CWH and the F5 offer the opportunity to place the speakers on top of each other during transportation contributing to the Xa5 system's overall handling-comfort.

**„plug'n
play“**



1718 mm

F9

DYNACORD®

Lowest HIGHEST

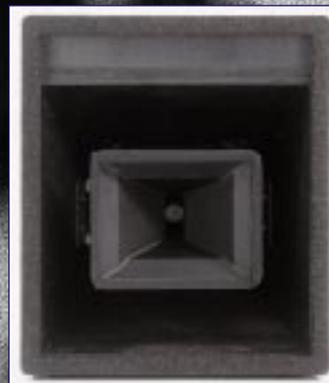
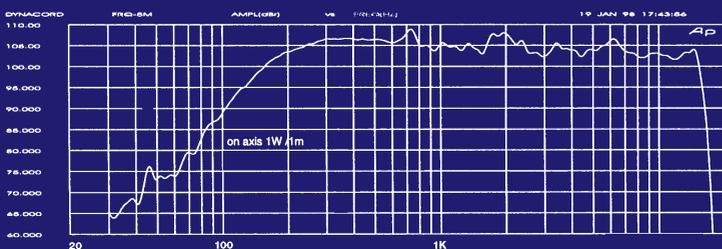


CONICAL
WAVEGUIDE
HORN

The F9CWH is an extremely powerful yet very compact Mid/Hi cabinet for medium and long throw applications. The Constant Directivity Horn HT94 with a nominal dispersion angle of 90° x 40° is coaxially mounted on the conical Mid horn, resulting in greatly smooth response without interference at the transition between the Mid and Hi horn speakers. The Mid frequency range gets reproduced by Electro-Voice's approved EVM12L Pro-Line speaker while the Hi range is taken care of by a Electro-Voice DH2T drive unit with titanium diaphragm. A driver that is known for its capability to provide superb, intelligible sound and crystal clear treble. Compared to conventional direct radiating speaker cabinets, the F9CWH's tremendous SPL of 105 dB/1 W/1 m offers nearly double the long throw capability. Hence to this fact, we strongly recommend the use of two bass cabinets – i.e. two F5 or two F118 – to match the sound pressure level of the Lo range to the extreme high efficiency of the F9CWH. Combined with two F5 sub woofers, that are produced in series incorporating a Mid/Hi frequency crossover, the F9CWH can be operated passive without a problem,

providing spectacular dynamic capacities and outstanding long throw coverage. The the passive frequency crossover's transition frequency between the Mid and the Hi horn is located at 1600 Hz with an edge steepness of 18 dB/octave in the Hi range. For the transition to the Lo range in active system configurations we recommend a crossover frequency of 160 Hz with an edge steepness of 18 dB/octave and Butterworth characteristics. The DYNACORD system power amplifier Xa2600 comes factory preset with these filter parameters and is therefore best equipped for the connection of the F9CWH. A thermal circuit-breaker and a halogen lamp array guarantee reliable protection of the Mid range speaker unit as well as the Hi frequency driver against sudden peak levels and short-term thermal overload. The pin-assignment of the SPEAKON connectors is switchable between NORMAL and SYSTEM . This feature offers the possibility to directly incorporate the F9CWH in active installations, using the Xa2600 system power amplifier. Recessed carrying handles on both sides of the cabinet allow easy handling and transportation. For variable arraying and mounting, a pole-mount threaded flange and a recessed pole-mount sleeve-joint are provided on the top respectively on the bottom of the

Frequency Range



Mass CLASS

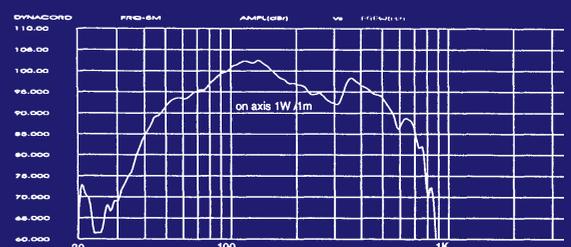


The F5 sub woofer system provides highest efficiency in a truly compact enclosure. The Electro-Voice DL15X woofer working in this vented cabinet design ensures highest acoustical output, tremendous efficiency, and extremely low distortion rates. Without switching, the F5 can be incorporated in an active 2-way installation, using for example the Xa2600 system power amplifier. The F5's internal passive 2-way crossover with an edge steepness of 12 dB/octave provides a second output to easily accomplish passive satellite systems using suitable full range or Mid/Hi cabinets with a nominal load of 8 ohms – i.e. C12.3. The crossover's nominal transition frequency is 160 Hz. A thermal circuit-breaker and a halogen lamp array offer reliable protection of the Electro-Voice DL15X woofer against sudden peak levels and short-term thermal overload conditions. The cabinet is made of 15 mm plywood, which is slotted, glued and internally braced to eliminate disturbing resonance. The cabinet comes with a

black needled felt surface cover, offering outstanding protection against rough wear and additional front protection is provided by a powder-coated metal grille and an acoustic-foam cover. Connection is possible through three 4-pole SPEAKON sockets. The four conductor parallel wiring of the input and output connectors contributes to a trouble-free connection and operation of active 2-way systems, using the Xa2600 system power amplifier. The SPEAKON socket which, during passive operation is meant for the connection of Mid/Hi loudspeaker systems, has its own spot, separated from the in/output connectors. In this way the risk of inadvertent connections during the installation of a passive satellite system is significantly reduced. Four castors on the F5's rear as well as recessed handles on the sides allow for easy handling and transportation. A pole-mount threaded flange and a recessed pole-mount sleeve-joint are provided on the top respectively on the bottom of the F9CWH cabinet allow quick, easy, and variable arraying and mounting.



Frequency Range



ACTIVE MODE

with the Xa2600 system amp



During active 2-way operation together with the system power amplifier Xa2600, two F5 sub woofer cabinets and one F9CWH Conical Waveguide Horn are utilized per channel in a stereo setup. Cabling is performed preferably using 4-pole system cables of the types PSS (415, 408, 404, 401) which provides the advantage that only a single cable is necessary per loudspeaker stack. Between the individual speaker systems cabling is performed using short system cables of the types PSS 401 or PSS404. The risk of erroneously mismatching cables is widely eliminated.

PASSIVE MODE

here shown with PowerMate1000



The Xa5 loudspeaker system can also be used without a problem in passive system configuration employing the F5's passive frequency crossover. And again, the wiring is reasonably easy: The power mixer's power outputs have to be connected to the lower F5 cabinet. From here cabling leads to the upper F5 sub woofer system and through utilizing its crossover output, the F9CWH cabinet gets connected.

TECHNICAL SPECIFICATIONS

PASSIVE MODE

Nominal impedance:	4 Ohms
Minimal impedance:	2.5 Ohms
Rated Power capacity RMS:	800 W
Program power capacity:	1600 W
SPL 1W/1m:	105 dB
Max. SPL 1m:	133 dB
Frequency Range (-10 dB):	40 Hz - 19 kHz
Subwoofer:	2 x F5
Mid Hi cabinet:	F9 CWH
Recomm. Amplifier Complement:	L1000, P1050, L1600 or equivalent PowerMate1000, PowerMate1600, PowerMate500

F5

Nominal impedance:	8 Ohms
Minimal impedance:	5 Ohms
Rated Power capacity RMS:	400 W EIA-RS-426A
Program power capacity:	800 W
SPL 1W/1m:	100 dB
Max. SPL 1m:	129 dB
Frequency Range (-10 dB):	48 Hz - 280 Hz
Components Lo:	EV DL15X OEM
Connections:	3 x Speakon connectors
Cabinet style:	15 mm poplar plywood 4 handles, 4 castors, 1 speakerstand threaded flange 1 speakerstand sleeve
Outfit:	Needled felt surface black Powder-coated steel grid Acoustic foam front
Dimensions (W x H x D) mm:	436 x 617 x 674 mm (incl. castors, feet)
Weight:	30,5 kg
Accessories:	4 rubber feet
Warranty:	36 months

ACTIVE MODE (with Xa2600)

Nominal impedance:	4 Ohms
Minimal impedance:	2.5 Ohms
Rated Power capacity RMS:	800 W
Program power capacity:	1600 W
SPL 1W/1m:	105 dB
Max. SPL 1m:	133 dB
Frequency Range (-10 dB):	40 Hz - 19 kHz
Subwoofer:	2 x F5
Mid Hi cabinet:	F9 CWH
Recomm. Amplifier Complement:	Xa2600 or active 2-way system with DSP224, L1000, L1600 or equivalent

F9 CWH

Nominal impedance:	8 Ohms
Minimal impedance:	5 Ohms
Rated Power capacity RMS:	300 W EIA-RS-426A
Program power capacity:	600 W
SPL 1W/1m:	105 dB
Max. SPL 1m:	133 dB
Frequency Range (-10 dB):	140 Hz - 19 kHz
Components Lo:	EVM12L Proline OEM 0812-0906
Components Hi driver:	EV DH2T
Components Hi horn:	EV HT94
Connections:	2 x Speakon connectors NORMAL: PIN 1+/1- SYSTEM: PIN 2+/2-
Cabinet style:	15 mm poplar plywood 2 handles 1 speakerstand threaded flange 1 speakerstand sleeve
Outfit:	Needled felt surface black Powder-coated steel grid Acoustic foam front
Dimensions (W x H x D) mm:	436 x 517 x 471 mm (incl. feet)
Weight:	28,5 kg
Accessories:	4 rubber feet
Warranty:	36 months

