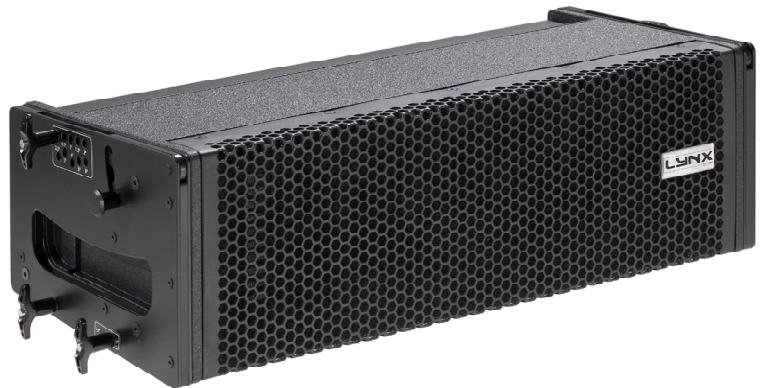
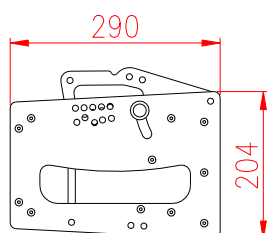
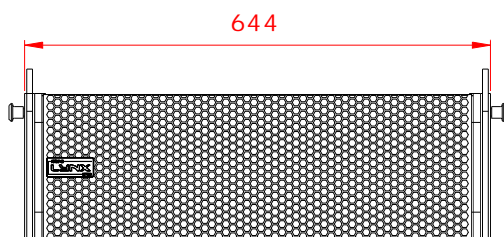
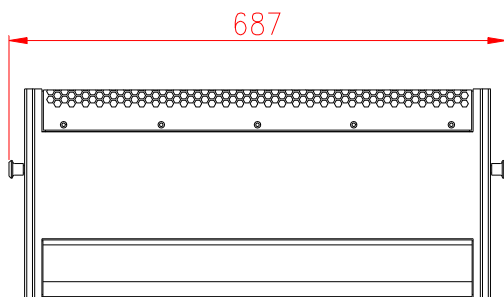


- ▶ Class D Powered (bi-amplified)
- ▶ Integrated Digital Processing
- ▶ Internal temperature control
- ▶ Electronic protection
- ▶ Digital inclinometer system
- ▶ FIR linear phase filtering
- ▶ Online monitoring available



## APPLICATION:

- Theatres
- Concert Halls
- Auditoriums
- Conferences
- Sport Stadiums
- Houses of worship
- Outdoor events



## SPECIFICATIONS:

FREQUENCY RANGE	75Hz -20KHz
FREQUENCY RESPONSE	90Hz- 18KHz ± 3dB
HORIZONTAL COVERAGE	100°
VERTICAL COVERAGE	According to Array configuration
MAX SPL	124 dB/ 127dB peak
TRANSDUCERS	LF/MF: 2 x 6" Custom Nomex Cone Neodimium HF: 1 x 5" Air Motion Transformer with horn
SHAPE	Bass Reflex Direct Radiation
SIGNAL CONNECTION	NEUTRIK connectors XLR Male Input XLR Female Loop Thru
AC POWER	230v / 115v selectable. 50/60 Hz 3A
AC CONNECTIONS	16A NEUTRIK POWERCON with Looping Output
ONLY LX-F6	ACTIVE CABINET
POWER AMPLIFIER	1500W Class D with Switching Power supply 1000W Low/Mid + 500W High
DSP	Internal Lynx processor DSPB-22® with FIR filters
CABINET ADJUSTMENT	Back panel LCD screen
INTERNAL CONTROLS	Cabinet Angle detection / Temperature sensor / Fan Speed control
CONTROL CONNECTIONS	USB (DSP programming), ETHERNET* (Online Control System OCS®)
CONSTRUCTION	15 mm Premium Birch plywood
FINISH	High resistant water-based black paint (white RAL)
FRONT DESIGN	Black steel grille
DIMENSIONS (H x W x D)	204 x 644 x 290 mm 204 x 687 x 290 mm with ball-pins
WEIGHT LX-F6	23 Kg (50 lbs)
WEIGHT LX-F6P	20 Kg (44 lbs)
INTERCABINET ANGLE ADJUSTMENT	0°/ 0,5°/ 1°/ 1,5°/ 2°/ 2,5°/ 3°/ 4°/ 5°/ 6° / 7° 8° / 9° + 7° Front adjust
RIGGING	Integrated flying plates

## GENERAL DESCRIPTION:

The LX-F6 is part of the Lynx Line Array Series. Line Array topology is employed to create cylindrical radiation, increasing throw and achieving a precise control of both horizontal and vertical dispersion. The LX-F6 is the ideal solution for application in theatres, concert halls, stadiums, auditoriums, conference halls or any event where high precision Line Array is required.

The LX-F6 is a high output three-way, front loaded self-powered cabinet. For the low-mid frequencies it uses dual 6" neodymium transducers with nomex cones and suspension. The high frequencies are looked after by a 1" x 5" AMT (Air Motion Transformer). The advantage of this type of device consists in the small and very controlled movement of each fold, accelerating the surrounding air inside each fold producing an almost perfect acoustical output in amplitude, phase and all the radiating areas of the transducer. This creates unbeatable transient response, far superior to both conventional drivers and ribbon drivers. The result is crystal clear vocals. The system is powered with a total of 1500W of class D amplification, 1000W for the low/mid frequencies and 500W for the high frequencies. Each cabinet has a DSP integrated which applies linear phase (FIR) and classical crossover. Other features include temperature sensor, fan speed control, inclinometer, Ethernet options and many more.

The LX-F6 has a selection of rugged hardware available. The SV-LXF6 flying frame can hold up to 36 cabinets with splay angles selectable in 0.5° increments between 0° to 3° and 1° increments between 3° to 12°. Sub bass cabinet LX-212S can also be flown in array with the LX-F6 with the SV-LX212 flying frame. The FC-LXF6 flight case can house up to 4 cabinets and the FC-LX212/6 flight case houses one LX-212S sub-bass and 4 LX-F6. Rain hoods are also optional to protect the system electronics.

A passive version of the cabinet, the LX-F6P is also available. This cabinet can be linked to and powered by the LX-F6 creating a more economical Line Array whilst maintaining the same power as a fully powered line array configuration.

With a very high power to size ratio and with easy rigging options offered the system can be taken from the truck and rigged up in record time. It is also very easy to use and control without the need for any external amps. To extend the low frequency response, the LX-212S or the LX-218S sub bass cabinets can be used.

## SOFTWARE:



- ONLINE CONTROL SYSTEM

Offers detailed system information for each cabinet and via ethernet or PC controls the cabinet/s in real time.



- RAINBOW

Acoustical Prediction software for accurate loudspeaker planning offering both horizontal and vertical views.

## KEY FEATURES AND BENEFITS:

### SELF POWERED

Bi-amplified Class D with switching power supply. Includes one 1000W power modules, for the 6" transducers and one 500W power module for the High Frequency AMT. The amplification far exceeds the transducers needs thus resulting in high output, high damping factor and extremely low levels of distortion

### DIGITAL PROCESSING & DOUBLE DYNAMICS

Latest generation 24bit/96Khz digital processor which optimizes the system components. It includes 2 channel processing electronics with functions for phase correction, driver protection, gain control, equalization classic crossover and linear phase filtering, using double precision filters with 56bit internal processing. This enables a noticeable reduction in distortion with clean and clear equalization. The DSP incorporates sophisticated double protection limitation; RMS and Peak. The RMS limiter is used to adjust the transducer reproduction level, maintaining the original dynamics whilst at the same time respecting the original transients and achieving a better acoustical result. The Peak limiter controls the movement of the speaker, protecting it from any damage and also reducing distortion caused by over-exursion. These double dynamics lower levels of distortion and provide protection for all the speaker components and internal electronics.

### DIGITAL INCLINOMETER

Automatic function to calculate cabinet splay angles. The inclinometer data can be viewed and controlled from the cabinet LCD display either manually or automatically. The inclinometer automatically communicates with the DSP and modifies the equalization algorithms. According to the splay angle of the inclinometer the DSP compensates for atmospheric loss. The result is a more efficient performance and a flat response, even at long distances.

### TEMPERATURE & PROTECTION CONTROL

Via internal sensors a micro controller analyzes in real time the temperature of each power module. It then automatically adjusts the fan speed to apply the correct temperature dissipation, reducing both the speed of the fan and the noise generated leaving the system as quiet as possible.

### COMPONENTS

Transducers with neodymium magnet groups, nomex cones and suspension with weather protected membrane for outdoor use and ventilated voice coil for improved heat dissipation. For the HF it uses an AMT (Air Motion Transformer). The advantage of this type of device consists in the small and very controlled movement of each fold, accelerating the surrounding air inside each fold producing an almost perfect acoustical output in amplitude, phase and all the radiating areas of the transducer. The transient response is far superior to both a conventional driver and a ribbon driver. The result is crystal clear vocals.

### HARDWARE

Cabinet constructed from premium birch plywood and finished with high-resistant water based black paint. Robust steel flying frame for easy rigging options and splay configuration.

## HARDWARE:

SV-LXF6  
Flying frame



SA-212  
Fit LX-F6 to LX-212S

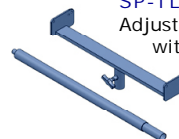
FD-1LXF6NL  
Rain cover



SP-TLXF6  
Adjustable T bar for F6  
with sub

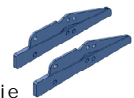


FC-LXF6  
Flight case for 4 LX-F6



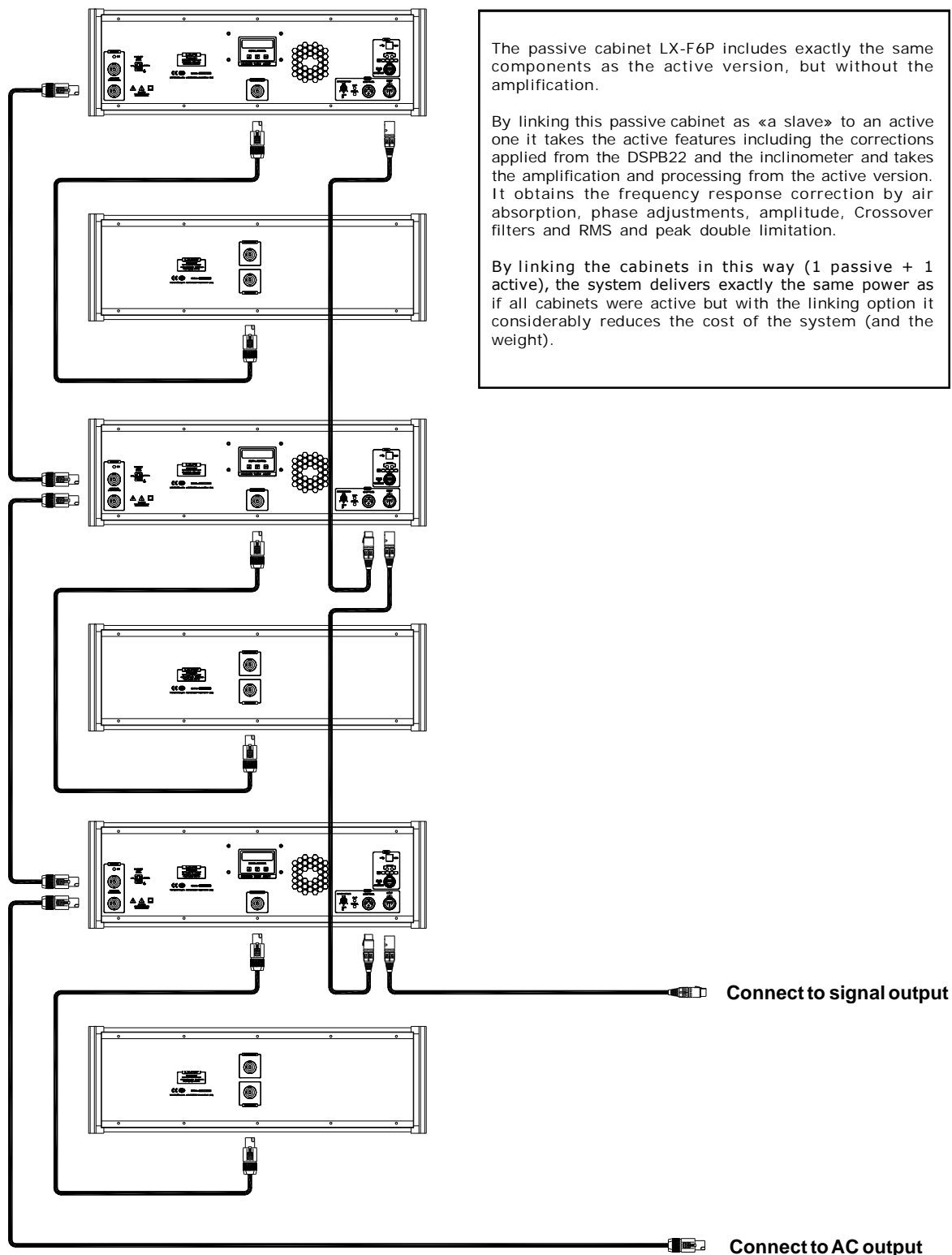
FC-LX212/6  
Flight case for 1 LX-212 + 4 LX-F6

SA-F6  
Accessorie  
for negative angulation



SA-LX212  
To stack LX-F6  
on LX-212S

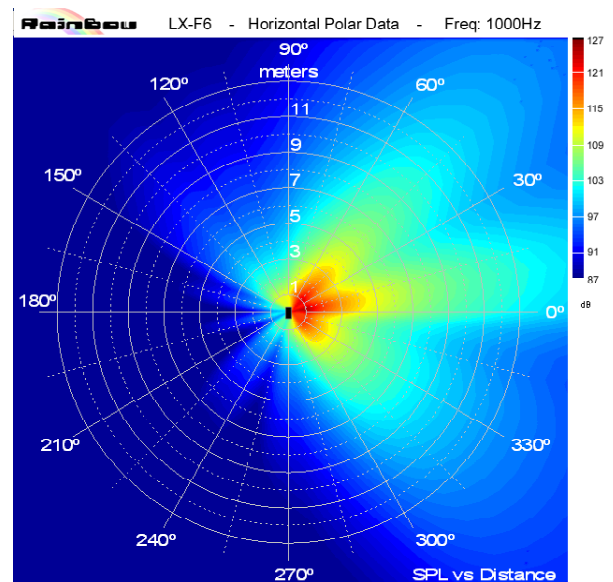
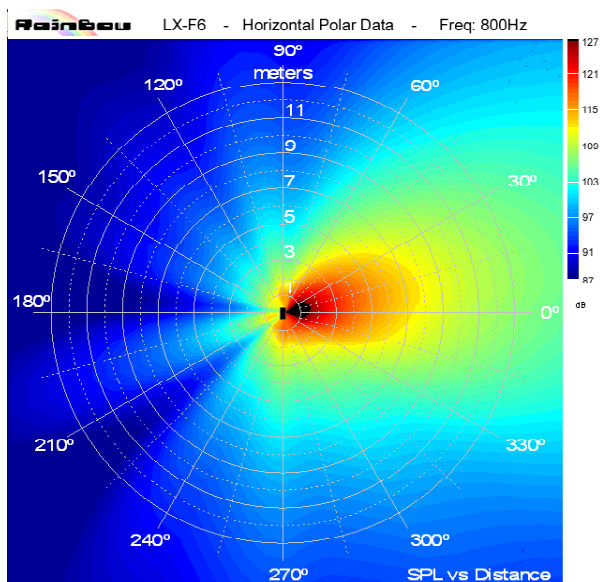
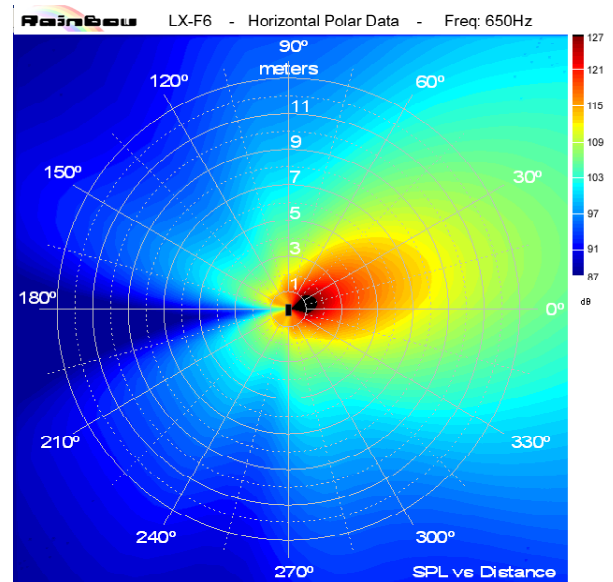
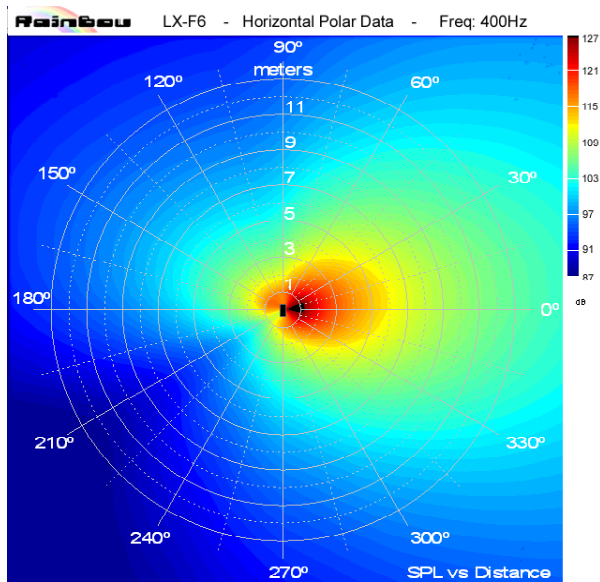
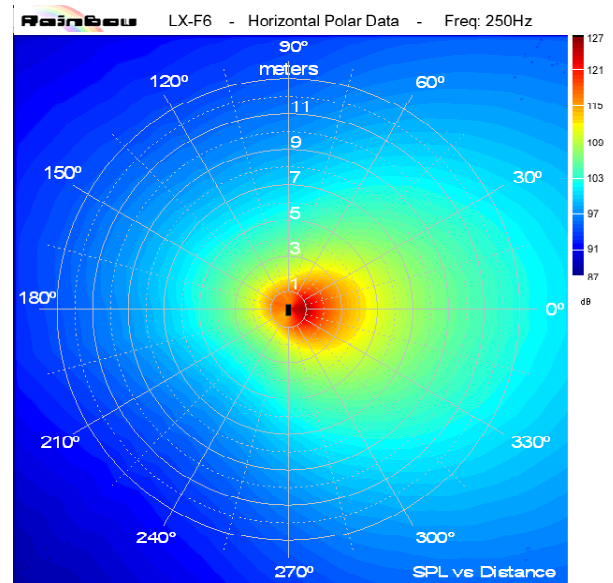
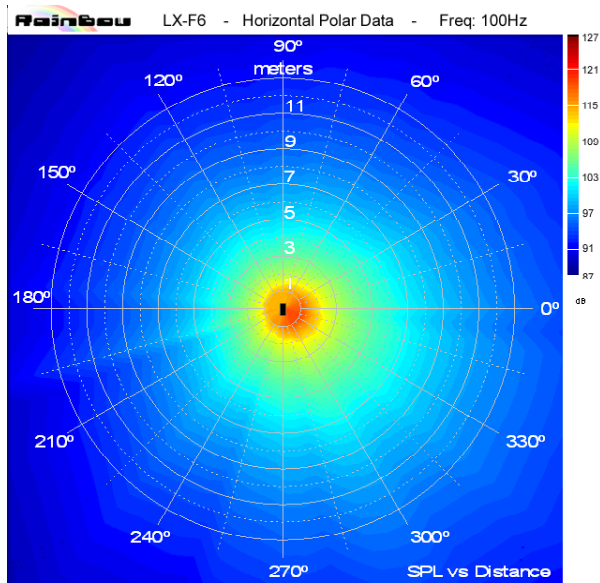
## MIXED ACTIVE/PASIVE SYSTEM CONNECTION EXAMPLE (3 ACTIVE + 3 PASSIVE CABINETS)



The passive cabinet LX-F6P includes exactly the same components as the active version, but without the amplification.

By linking this passive cabinet as «a slave» to an active one it takes the active features including the corrections applied from the DSPB22 and the inclinometer and takes the amplification and processing from the active version. It obtains the frequency response correction by air absorption, phase adjustments, amplitude, Crossover filters and RMS and peak double limitation.

By linking the cabinets in this way (1 passive + 1 active), the system delivers exactly the same power as if all cabinets were active but with the linking option it considerably reduces the cost of the system (and the weight).



## DATA SHEET

pag.5/5 V.06.17

