

BUTTERFLY LOW-PACK

C.D.L. 1815

TECHNICAL SPECIFICATIONS

FREQUENCY RESPONSE

Single element +/- 3dB 40Hz ÷ 120Hz

NOMINAL COVERAGE ANGLE -6dB

Horizontal 180°
Vertical According to array height and position

BANDPASS NOMINAL IMPEDANCE

Low/mid 5 Ohms (min. 4.9)
High 8 Ohms (min. 7.9)

INPUT POWER RATING (AES-Standard)

<i>Continuous WRMS</i>	1.000	High-pass filtered front 18"
	350	High-pass filtered back 15"
<i>Calculated W peak + 6dB</i>	4.000	High-pass filtered front 18"
	1.400	High-pass filtered back 15"
<i>Continuous VRMS</i>	70.71	High-pass filtered front 18"
	52.92	High-pass filtered back 15"

CALC. MAX SPL - 1m (Single Unit - half space)

Continuous long term 132
Calculated +6dB Peak 138
Calculated +10dB Peak 142

MULTIPLE BOX ARRAY MAX SPL - 1m (4 Units - half space)

Continuous long term 144
Calculated +6dB Peak 150
Calculated +10dB Peak 154

MULTIPLE BOX ARRAY FLYABLE BASS UNITS - 1m (8 Units - half space)

Continuous 149
Calculated +6dB Peak 155
Calculated +10dB Peak 159

Single Unit Weight (kg)

Net 45.80 (Including flying hardware)

Single Unit Dimensions (mm)

Front Height 483
Rear Height 437
Width 700
Depth 600

Number of Speakers

Main Low 2x 18" vented high-pass loaded woofer
Reverse low 1x 15" vented band-pass loaded NdFeB woofer

Operating configuration

Biamped and electronically controlled

Enclosure

High impact exterior grade shaped composite plywood

Finish

Textured scratchproof fire-retardant black paint

Connectors

2x Neutrik NL4

Rigging hardware

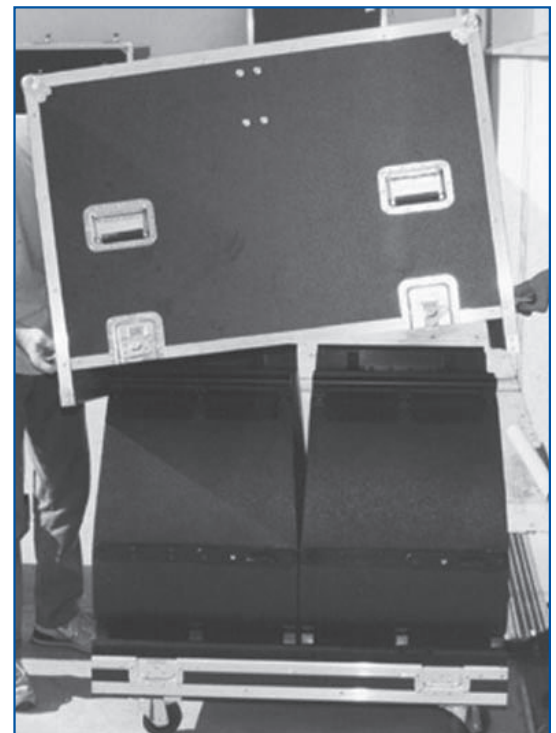
Butterfly compatible; integrated flying hardware and handles

Maximum Degree Cabinet Coupling

7.5° with 0.125° minimum increments

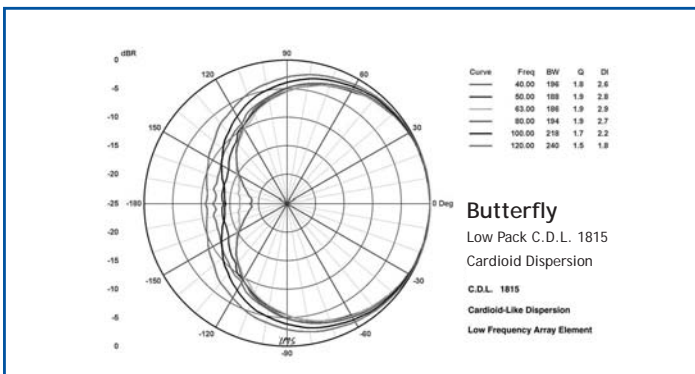
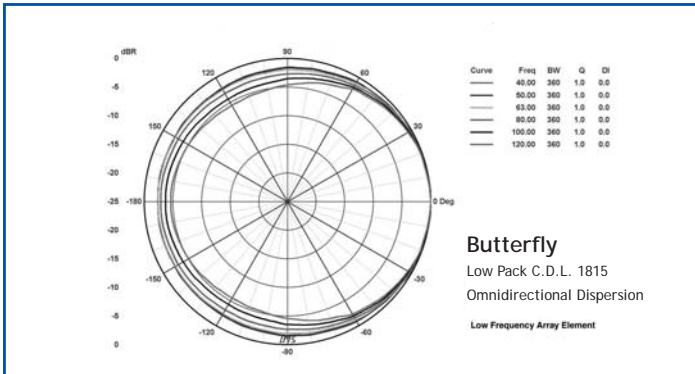
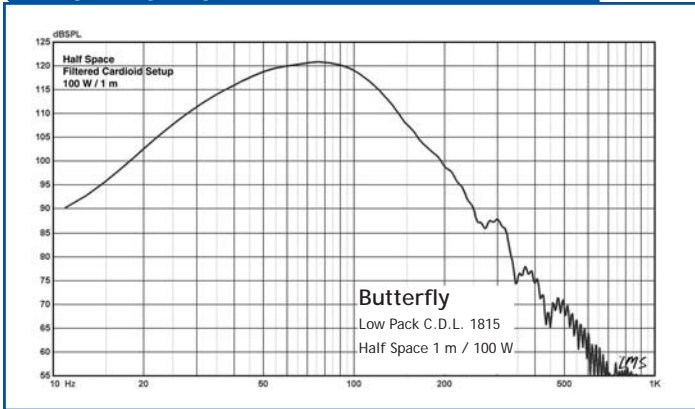
Maximum Flyable Elements

24 Height 11.59 m (38 ft)
 Weight 1099 kg. (2418 lb)



Fly case housing 2 units of LOW PACK C.D.L. 1815

frequency response



DESCRIPTION

The C.D.L. 1815 Low-Pack is the Butterfly system's low frequency element. To all effects, it's an enclosure built with the criteria necessary for forming a real low frequency Vertical Line Array. It weighs just 45.8 kg. and its dimensions are the same as two C.D.H. 483 Hi-Packs one above the other. Being fitted with the same flying hardware, it's therefore completely compatible and able to be perfectly combined with the latter.

CARDIOID OR HYPERCARDIOID DISPERSION

The C.D.L. 1815 Low-Pack is equipped with a 18" woofer for front emission and a 15" woofer inside the box, used to recreate the system's Cardioid or Hypercardioid dispersion. The two loudspeakers are powered by separate amplifiers. The diagram, related to the most useful cardioid configuration, shows the uniform reduction of rear emission for all frequency bands involved and the remarkable "front-to-back" ratio which, from a minimum of 12dB at 120Hz (the suggested upper cut-off frequency) gives an attenuation of over 15dB on rear emission for all the other frequency bands (100, 80, 63, 50, 40 Hz). Applications have been made for Italian and international (PCT) patents for the C.D.L. 1815 Low-Pack too, supported by frequency response polar plots and a circuit diagram to make its original operating principle more easily understood.

FLIGHT-CASES FOR TRANSPORTING THE ELEMENTS

Dedicated cases fitted with sturdy smooth-running wheels have been designed and built to transport and protect the elements. A 2 or 3-unit case protects Hi-Packs and becomes a handy trolley, perfect for facilitating the raising in rapid succession of the elements of the "train" of enclosures in an array. Illustrations of assembly procedure can be seen alongside.

A 2-unit case protects the Low-Pack and transforms into a trolley designed to facilitate fast hassle-free lifting of each element (see alongside).

loudspeakers

BUTTERFLY LOW-PACK C.D.L. 1S 15

outline

Via L. da Vinci, 56 - 25020 Flero (Brescia) Italy
tel. +39 030 3581351 - fax +39 030 3580431
www.outline.it - e-mail: info@outline.it

