

1

CROSSFIELDARRAY-2™

LONG THROW/HIGH INTELLIGIBILITY
ALL-WEATHER LOUDSPEAKER SYSTEM

ONE SYSTEMS®

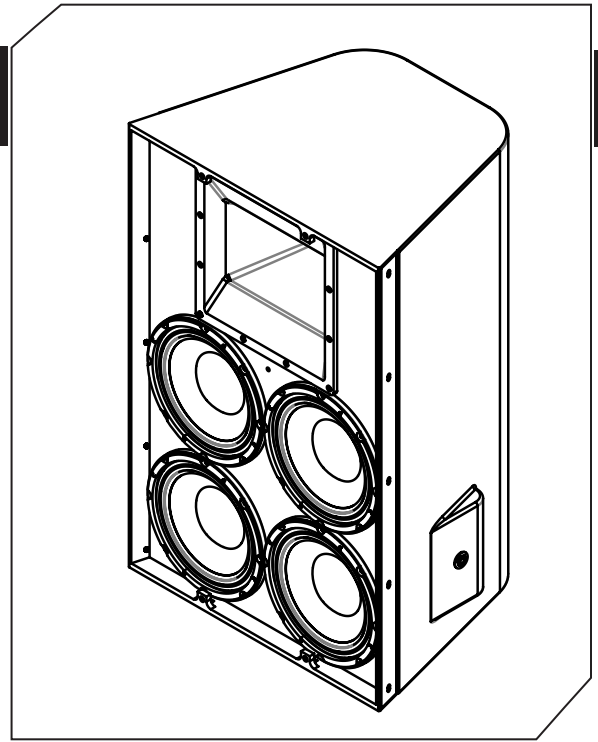
The One Systems Cross Field Array-2 (CFA-2) was designed to provide very high intelligibility and acoustic output where long throw requirements are specified. The CFA-2 is a nominal 55 degree horizontal by 30 degree array that features a fully rotatable high frequency horn/waveguide. This allows the CFA-2 to be used in either a vertical or horizontal orientation and still allows the desired coverage patterns. The high frequency configuration consists of two large format close-spaced compression drivers coupled to a 2" (50.8mm) constant directivity horn. The low frequency configuration consists of 4 bandwidth optimized 10" (254mm) diameter woofers in a 2 x 2 array. The CFA-2 is ideal for both outdoor/direct weather long throw applications and indoor applications in high ambient noise environments. Typical applications are football and soccer fields, baseball fields and large theme park environments. Indoor environments such as basketball arenas are well suited due to the ultra-high system intelligibility.

In order to achieve maximum system performance the CFA-2 should be high pass filtered using a 4th order (24dB/octave) high pass filter set to 80Hz. This filter frequency can be set using the One Systems SF-4 High Pass Filter system or by using any high quality DSP based loudspeaker processor. High pass filter frequencies as low as 60Hz may be used but maximum system dynamics and headroom are achieved by using the recommended 80Hz filter corner frequency.

The CFA-2 is a direct weather design that features a three layer stainless steel grill assembly. The enclosure design is a laminated fiberglass construction with high safety factory structural rigging points molded in the enclosure shell.

The system is also compatible with the One Systems Pole Mount System PM4/M if vertical tilt requirements are specified in a pole mount application. The One Systems PT76/M is also compatible with the CFA-2 when pan and tilt are both required.

The CFA-2 has an internal 600 watt autoformer and an internal jumper system that allows the enclosure to be used in either a "Lo Z" (4 ohm) or "Hi Z" configuration. The autoformer taps are 600 watts, 300 watts, and 150 watts. The input will allow for either 70.7Vrms operation or 100Vrms operation. The autoformer is a very low insertion loss (<0.4dB) impedance converter that exhibits very wide bandwidth.



FEATURES & BENEFITS

- » Very High Intelligibility
- » Long Throw/High Acoustic Output
- » Fully Rotatable High Frequency Waveguide
- » IP 56 Direct Weather Rated
- » Double Large Format High Frequency Drivers
- » Lo Z and Hi Z User Switchable Operation
- » 4 x 10" (254mm) Low Frequency Long Throw Array (2x2 array configuration)
- » Multiple Fly Points and Rigging Accessories

SPECIFICATIONS

Frequency Response:	60Hz - 16kHz
Coverage Pattern:	55° x 30° Fully Rotatable
Passive Crossover Freq.:	1500 Hz
Inputs:	5-Position Barrier Strip
System Sensitivity (1watt / 1meter):	104dB
Maximum Calculated Output	
(Continuous)	134.8dB @ 1 meter*
(Peak Power/Peak Pressure)	140.8dB @ 1 meter*
Power Handling:	1200 watts continuous, 2400 watts program, 4800 watts peak*

*(Based on RMS sound pressure levels. +3dB may be added for peak sound pressure levels)

* NOTE: all system power handling rating are amplifier headroom dependent



CROSSFIELDARRAY-2™

LONG THROW ALL-WEATHER LOUDSPEAKER SYSTEM

ONE SYSTEMS®

NOTE: The CFA-2 is factory configured for 4 ohm operation. Internal jumpers are supplied and must be re-configured for "Hi Z" operation.

System input is a five position barrier strip. The input section features an aluminum weather cover with an integral IP68 rated gland nut. The gland nut will accommodate cable outside diameters of 7mm to 12mm (0.236" to 0.472"). The maximum diameter will accept most 2 conductor AWG12 cable assemblies.

SPECIFICATIONS (continued)

Nominal Impedance: 4-ohms or Hi-Z*
(70.7-V rms or 100-V rms)

* User Configured via internal jumpers

System Components

Low Frequency: 4 each 10 in (254 mm)

High Frequency: 2 each Large Format
Titanium Compression Drivers

EASE 4.0 Data: www.onesystems.com

Suspension/Mounting Points: 9 each M10

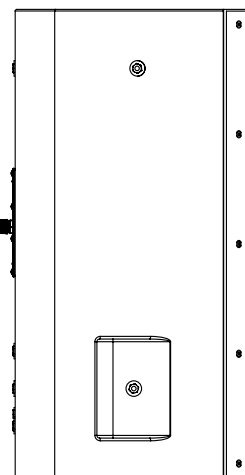
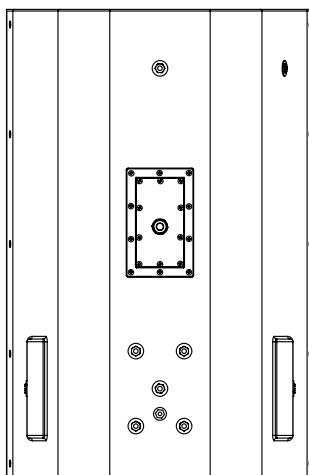
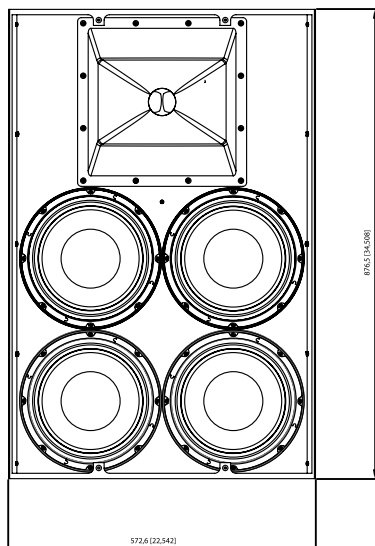
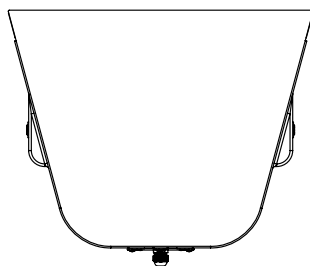
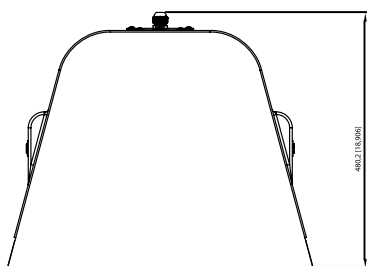
Weather Performance: IEC 529 IP 56
Mil Spec 810

Dimensions (H x W x D) mm: 876.5 x 572.6 x 446.3*

Dimensions (H x W x D) in: 34.5 x 22.5 x 17.6

Net Weight: 60.6 kg / 133.6 lbs

Optional Accessories: PM4/M Pole Mount System, PT76/M Pan/Tilt Bracket, CFA-2-U/M "U" Bracket, Eye Bolt Kit- Marine, SF-4 High Pass Fitter



ONE SYSTEMS®

One Systems, Inc • Nashville, TN
One Systems Global Co. Ltd. • 87/114 Modern Town 15th Floor • Sukhumvit 63 Ekkamai Soi 3
Klongtoey, Bangkok 10110 Thailand



CROSSFIELDARRAY-2™

LONG THROW ALL-WEATHER
LOUDSPEAKER SYSTEM

ONE SYSTEMS®

All ONE SYSTEMS enclosures that feature constant voltage transformers may be wired as shown below. The Cross Field Array-2 allows for both 70.7V and 100V wiring. The taps are 600 watts, 300 watts, and 150 watts. All wiring is via the five-position barrier strip. Please note that the autoformer primary and secondary grounds are not isolated.

CAUTION: The weather cover must be installed (even if the enclosure is not installed in an outdoor venue) after the connections to the barrier strip are made. Installation of the weather cover is mandatory and will isolate the high voltages present on the terminal strip from contact.

Figure 1 is a schematic diagram of the transformer wiring for both the 100 volt and 70.7 volt models.

INPUT	POWER LEVEL
1+	Ground
1-	600 Watts
2+	300 Watts
2-	150 Watts



ONE SYSTEMS®

One Systems, Inc • Nashville, TN
One Systems Global Co. Ltd. • 87/114 Modern Town 15th Floor • Sukhumvit 63 Ekkamai Soi 3
Klongtoey, Bangkok 10110 Thailand