

# **CROSSFIELDARRAY-2HTH**

The One Systems Cross Field Array-2HTH (CFA-2HTH) was designed to provide very high intelligibility and acoustic output where long throw requirements are specified. The enclosure features all 316 (marine) grade stainless steel rigging. The grill assembly and all other fasteners are 304 -grade stainless steel that feature a newly developed coating system allowing the CFA-2HTH to be used in ocean front and marine environments, as well as inland direct weather environments. The CFA-HTH is a nominal 55 degree horizontal by 30 degree array that features a fully rotatable high frequency horn/waveguide. This allows the CFA-2HTH 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-2HTH 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 and hockey arenas are also well very appropriate venues for the CFA-2HTH, due to the ultrahigh system intelligibility.

In order to achieve maximum system performance the CFA-2HTH should be high-pass filtered using a 4th order (24dB/octave) high-pass filter set to 80Hz. This filter frequency can be set 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

140.8dB@1 meter

#### **FEATURES & BENEFITS**

- » Very High Intelligibility
- » 316-grade stainless steel rigging
- » 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 **Power Handling:** 200 watts continuous, 2400 watts program

**Coverage Pattern:** 55° x 30° Fully Rotatable 4800 watts peak\*

Passive Crossover Frequency: 1500 Hz NOTE: All system power handling rating are amplifier headroom dependent

**Inputs:** 5-Position Barrier Strip **Nominal Impedance:** 4-ohms or Hi-Z\* (70.7-V rms or 100-V rms)

Input Impedance: 4 ohms or Hi Z \*User Configured via internal jumpers

**System Sensitivity (1 Watt / 1 Meter):** 104dB **Low Frequency:** 4 each 10 in (254 mm)

Maximum Calculated Output: 134.8dB @ 1 meter\* Continuous High Frequency: 2 each Large Format Titanium

Compression Drivers

(Peak Power/Peak Pressure) EASE 4.0 Data: www.ONESYSTEMS.com

\*(Based on RMS sound pressure levels. +3dB may be added for peak sound pressure levels) Suspension/Mounting Points: 9 each M10



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the recommended 80Hz filter corner frequency.

The CFA-2HTH is a direct weather design that features a three-layer stainless steel grille 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 where vertical tilt requirements are specified in a pole mount application. The One Systems PT7/6M is also compatible with the CFA-2 HTH when pan and tilt are both required. The PT76/M is suitable for flat surface mounting only. If pole mounting is required the PM4/M must be used.

The CFA-2HTH 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. The system ingress protection is IP 56.

### SPECIFICATIONS (continued)

**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; Eye Bolt Kit/M (Kit of 4-M10 316-grade eye bolts; SF-4 High Pass Filter; CFA-2HTH/U Y-bracket and strap kit

**NOTE:** The CFA-2HTH 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 glad 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.

