

## **ARCHITECTS' & ENGINEERS' SPECIFICATIONS**

### **High Power Two-way Full-range Speaker System**

## **IF2108 (W)**

The two-way full range loudspeaker system shall incorporate a single 8-inch low frequency transducer with 2-inch voice coil and a 1-inch-exit high frequency 1.7-inch compression driver mounted to a constant directivity horn. The HF horn shall be capable of being rotated to accommodate horizontal or vertical installation. The total system shall meet the following performance criteria: System frequency response shall vary no more than  $\pm 3$  dB from 75 Hz to 18 Hz measured on axis with appropriate signal processing. The loudspeaker shall produce a Sound Pressure Level (SPL) of 95 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a continuous output of 115 dB SPL and a peak output of 121 dB SPL on axis at 1 meter. The loudspeaker shall handle 100 Watts of amplifier power (2 hrs, IEC noise) and shall have a nominal impedance of 8 Ohms. Horizontal coverage of 90° between -6 dB points; Vertical coverage of 60° between -6 dB points. The loudspeaker enclosure shall be multi-angle wedge in shape. It shall be constructed of 16 mm thick Finland birch plywood. It shall be finished in a black or white textured coating. Input connectors shall be parallel wired Neutrik NL4 and barrier strip. The loudspeaker shall have a pole mount socket and one handle for easy carrying. A total of 11 x M10 and 6 x M8 threaded mounting points shall be provided. The system's low frequency drivers shall be loaded into a vented box that provides optimally controlled acoustic diaphragm loading. An internal passive frequency dividing network shall provide a 3rd order acoustic crossover for low and 2nd order high frequency subsystems. The front of the loudspeaker shall be covered with a powder coated perforated steel grill backed with open cell foam to protect against dust. The two-way full range loudspeaker system shall be the YAMAHA IF2108 (W).