



# SPECIFICATIONS FR153z

## FEATURES

- Entry-level access to truly professional loudspeaker systems
- Three-way design improves overall performance 15-in woofer, 6.5-in mid cone, 1-in HF on Wave Guide Plate™
- Handles, threaded mounting points, rubber footpads and pole mount cup standard
- Works with FR250z subwoofer/pole mount base to create instant PA

## DESCRIPTION

A three-way full range system (passive LF/MF/HF crossover) in a compact vented trapezoidal enclosure. It includes a 15-in woofer, a 6.5-in midrange cone in a sealed, internal subenclosure and a 1-in exit/2-in voice coil compression driver mounted on a 100° (conical) Wave Guide Plate™ (WGP™). Designed primarily for portable applications, the FR153z offers entry-level access to high quality, truly professional loudspeaker systems for musicians and DJ's servicing small to medium venues.

True three-way asks each transducer to operate only in its optimum passband for superior overall response. By handling the majority of the vocal range within a dedicated midrange subsystem, true three-way design provides increased intelligibility for more natural sounding vocals.

The system's full range passive powering is accomplished via EAW's internal passive crossover/filter network. This complex design goes beyond merely dividing the signal by performing critical equalization functions.

## APPLICATIONS

The FR153z provides high output full range response in a versatile, compact system. Effective for both permanent and portable applications, it comes with handles, rubber footpads, a pole mount cup and three (3) 3/8"-16 threaded mounting/suspension points.

The FR153z is optimized for use with the FR250z dual 15-in subwoofer system which also serves as a pole mount base. In such a configuration, a standard 5-ft mounting pole positions the FR153z's HF subsystem above the heads of audience members for maximum coverage. Six Year Warranty.

Application include:

- Band PA
- Ballroom Events
- Small HOW's
- Dance Clubs
- Live Music Clubs



## PERFORMANCE

### Frequency Response (1 W @ 1m)

|        |                 |
|--------|-----------------|
| ±3 dB  | 60 Hz to 18 kHz |
| -10 dB | 48 Hz           |

### Axial Sensitivity (dB SPL, 1 Watt @ 1m)

|            |    |
|------------|----|
| Full Range | 97 |
|------------|----|

### Impedance (Ohms)

|            |   |
|------------|---|
| Full Range | 8 |
|------------|---|

### Power Handling, AES Standard (Watts)

|            |     |
|------------|-----|
| Full Range | 500 |
|------------|-----|

### Calculated Maximum Output (dB SPL)

|                      |       |
|----------------------|-------|
| Full Range Peak      | 130.0 |
| Full Range Long Term | 124.0 |

### Nominal Coverage Angle, -6 dB Points (degrees)

|         |     |
|---------|-----|
| Conical | 100 |
|---------|-----|

### Recommended High-Pass Frequency

|              |    |
|--------------|----|
| 24 dB/Octave | 40 |
|--------------|----|

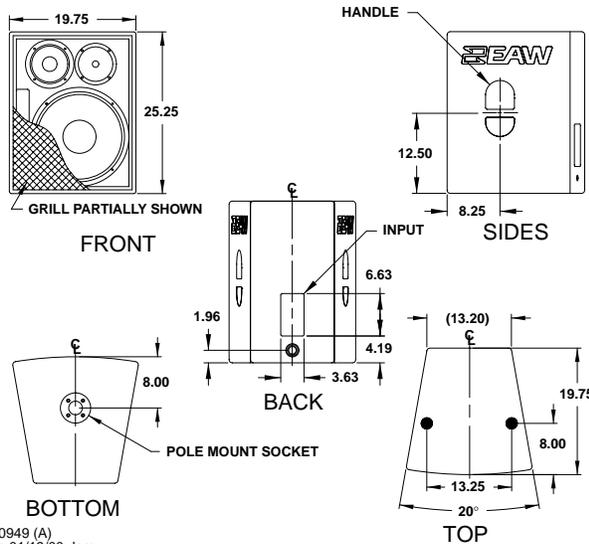




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## DIMENSIONAL DRAWING

**FR153z** ○ INDICATES MOUNTING POINT, 3/8-16 THREADED HOLE (RIVNUT).  
● INDICATES MOUNTING POINT, 3/8-16 THREADED HOLE (NUT PLATE).



## PHYSICAL

|                      |   |
|----------------------|---|
| Configuration        | 3-way, full range   |
| Powering             | Passive (LF/MF/HF crossover)  |
| LF Subsystem         | 15-in woofer, vented  |
| MF Subsystem         | 6.5-in cone, sealed subenclosure                                    |
| HF Subsystem         | 1-in exit/2-in voice coil compression driver on Wave Guide Plate™   |
| Cabinet Type (shape) | Trapezoidal   |
| Enclosure Materials  | Baltic birch plywood  |
| Finish               | Black polyurethane  |
| Connectors           | 2 x Neutrik NL4 Speakon   |
| Suspension Hardware  | (3) 3/8-16 threaded mounting points (2 top, 1 back), pole mount cup |
| Grille               | Powder coated perforated steel                                      |

| Dimensions      | Inches       |       | Millimeters |  |
|-----------------|--------------|-------|-------------|--|
|                 | Height       | 25.25 | 641         |  |
| Width (front)   | 19.75        | 502   |             |  |
| Width (rear)    | 13.08        | 332   |             |  |
| Depth           | 19.75        | 502   |             |  |
| Trapezoid Angle | 10° Per Side |       |             |  |

| Weights         | Pounds     |      | Kilograms |  |
|-----------------|------------|------|-----------|--|
|                 | Net Weight | 75   | 34.1      |  |
| Shipping Weight | 79         | 35.9 |           |  |

| Companion Systems |        |
|-------------------|--------|
| Sub Bass          | FR250z |

## A & E SPECIFICATIONS

The three-way full range loudspeaker systems shall incorporate a 15-in LF transducer, a 6.5-in cone MF transducer and 1-in exit/2-in voice coil compression driver HF transducer.

The LF driver shall be mounted in a vented enclosure tuned for optimum low frequency response. The MF driver shall be mounted in a sealed subenclosure. The HF driver shall be loaded on an axis-symmetrical wave guide plate with a nominal coverage pattern of 100° (conical). An internal passive filter network shall provide fourth order acoustical crossover and system equalization.

System frequency response shall vary no more than  $\pm 3$  dB from 60 Hz to 18 kHz measured on axis. The loudspeaker shall produce a Sound Pressure Level (SPL) of 97 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 130 SPL on axis at 1 meter. The loudspeaker shall handle 500 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 1/2-in thickness void-free cross-grain-laminated Baltic birch plywood and shall be finished in black polyurethane. Recessed handles and rubber footpads shall be provided. Input connectors shall be dual Neutrik NL4 Speakon. Three 3/8"-16 threaded mounting points (2 top, 1 back) shall be provided as well as a recessed cup to accept a standmount pole. The front of the loudspeaker shall be covered with a powder coated perforated steel grille.

The three-way full range loudspeaker shall be the EAW model FR153z.

## INPUT PLATE

