



PROFESSIONAL LOUDSPEAKERS

# T-CLASS / TFR94

THREE-WAY TRIAMPLIFIED 90° X 40° HIGH OUTPUT HORN SYSTEM

## SPECIFICATIONS (See notes 1 and 2)

**Loudspeaker Type:** 3-way, horn loaded  
**Operating Range:** 70 Hz - 18 kHz  
 80 Hz - 16 kHz (+/-2dB)  
**Max Input (Passive):** 600W continuous, 1500W program  
 49 volts RMS, 110 volts momentary peak

**Recommended Power Amp:** 1250W to 1800W @ 4 Ohms

### Maximum Inputs (Triamp):

LF:(Same as for Passive mode)

### Recommended LF Power Amp:

(Same as for Passive mode)

MF:75W continuous, 200W program

24 volts RMS, 57 volts momentary peak

**Recommended MF Power Amp:** 170W to 240W @ 8 Ohms

HF:100W continuous, 400W program

28 volts RMS, 80 volts momentary peak

**Recommended HF Power Amp:** 330W to 480W @ 8 Ohms

### Sensitivities 1W/1m:

LF: 108 dB SPL (80 Hz - 630 Hz 1/3 octave bands)

MF: 114 dB SPL (630 Hz - 4000 Hz 1/3 octave bands)

HF: 112 dB SPL (4000 Hz - 12500 Hz 1/3 octave bands)

**Maximum Output:** 136 dB SPL / 143 dB SPL (peak)

**Nominal Impedance (passive):** 4 Ohms

**Min Impedance:** 3.7 Ohms @ 110 Hz

**Nominal Impedances (Triamp):** LF: 4 Ohms

MF: 8 Ohms

HF: 8 Ohms

### Nominal -6dB Beamwidth:

90° H (-6° / -20°, 1600 Hz - 16000 Hz)

40° V (+9° / -11°, 1600 Hz - 16000 Hz)

**Axial Q / DI:** 20.4 / 13.1, 1.6 kHz - 16 kHz

**Crossover Frequencies:** 630 Hz / 4 kHz

### Recommended Signal Processing:

70 Hz - 700 Hz crossover (for biamp)

700 Hz - 4 kHz crossover (for triamp)

70 Hz high pass filter

**Drivers:** LF (2) 12"

MF (1) M200

HF (1) UC2

**Input Connection:** (2) Neutrik NL8MP, (tri-amp)

(3) dual banana jacks

**Controls:** None

**Enclosure:** 13-ply 18 mm Baltic Birch

**Enclosure Hardware:** (10) Ergo-Grip handles

### Mounting / Rigging Provisions:

(8) 3/8-16 rigging points, W.L.L. 300 lb. vertical pull each

(3) seat track

**Grille:** 16 gauge perforated steel (see options)

**Required Accessories:** Digital Signal Processor

**Supplied Accessories:** None

**Optional Accessories:** 3/8-EYBLTKIT: (4) forged 3/8-16 eyebolts, Digital speaker controller, TFRJP: Joiner Plate connects adjacent TFR FLY-BAR, TFR-FB: Single flybar, TFR-RAFRAC: Rear seat track mount, TFR-COVER, TFR-DOLLY, TFR-RIGCABLE,SKIP1,SKIP5

### Dimensions:

**Height:** 25.1 in. / 637.5 mm

**Width Front:** 25.45 in. / 646.4 mm

**Width Rear:** 12.1 in. / 307.3 mm

**Depth:** 33.55 in. / 852.2 mm

**Weight:** 155 lb. / 70.3 kg

**Shipping Weight:** 161 lb. / 73 kg

1. Sensitivity: Free field pink noise measurement at 40 ft / 12.2 m at 50% power; extrapolated to 1 meter and an input of 2 volts RMS.

2. Watts: All wattage figures are calculated using the rated nominal impedance.



### APPLICATIONS:

The TFR94 is well suited for use as a stand-alone element, or as a distributed system loudspeaker in properly configured indoor applications including:

- Full-Spectrum, Center Cluster Reinforcement for Churches, Auditoriums, etc.
- Dance/Nightclubs
- Athletic Field Houses (basketball, skating/ice hockey rinks, etc.)
- Convention Centers, Stadia

### DESIGN BENEFITS:

- High Efficiency Horn Loading
- High-Fidelity, Full-Range Reproduction of Music and Speech

### FEATURES:

- Drivers: LF (2) 12" cast frame
- MF (1) M200, 2" (51mm) exit, low compression driver with non-metallic diaphragm
- HF (1) UC2, 2" (51mm) exit, low compression driver with non-metallic diaphragm
- Trapezoidal Baltic Birch enclosure ships with a Tri-amp input panel
- Passive/Biamp crossover available
- Input Connections: Neutrik NL4 (passive/bi-amp), NL8 (tri-amp)
- Four top/bottom eye-bolt rigging points.

### DESCRIPTION

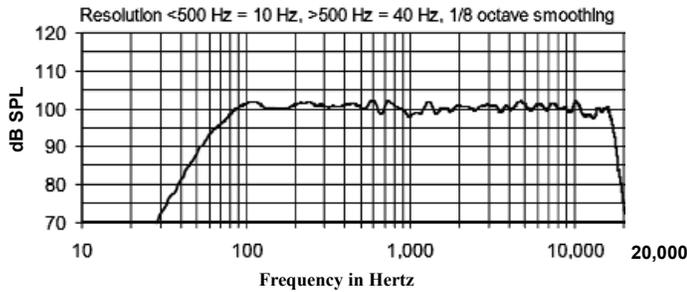
The TFR94 is an all horn-loaded tri-axial design using precision, hand-laminated fiberglass, proprietary waveguides to deliver quality, full-range sound projection in short throw applications. Its wide, smooth frequency response and high efficiency provide superb projection of clear, intelligible speech and ensure high-fidelity music reproduction at very low distortion.

The outer TFR94 enclosure forms a double wall construction, while the mid/high frequency horn assembly is mounted in the mouth of the bass horn. The unique TFR94 mid/HF horn uses single M200 mid-range and UC2 HF drivers for symmetrical 90°H x 40°V coverage. For flexibility, a switchable, high quality passive crossover/bi-amp input panel is available.

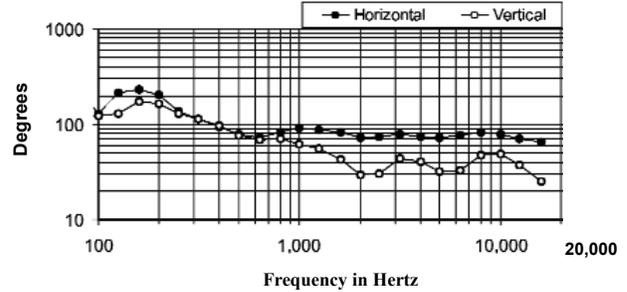
Five-year limited non-component warranty.

Two-year limited component warranty.

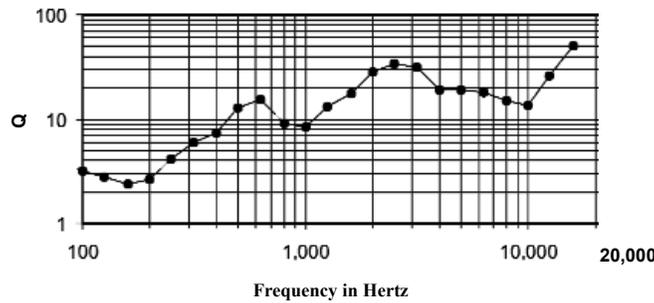
## FULL-RANGE FREQUENCY RESPONSE



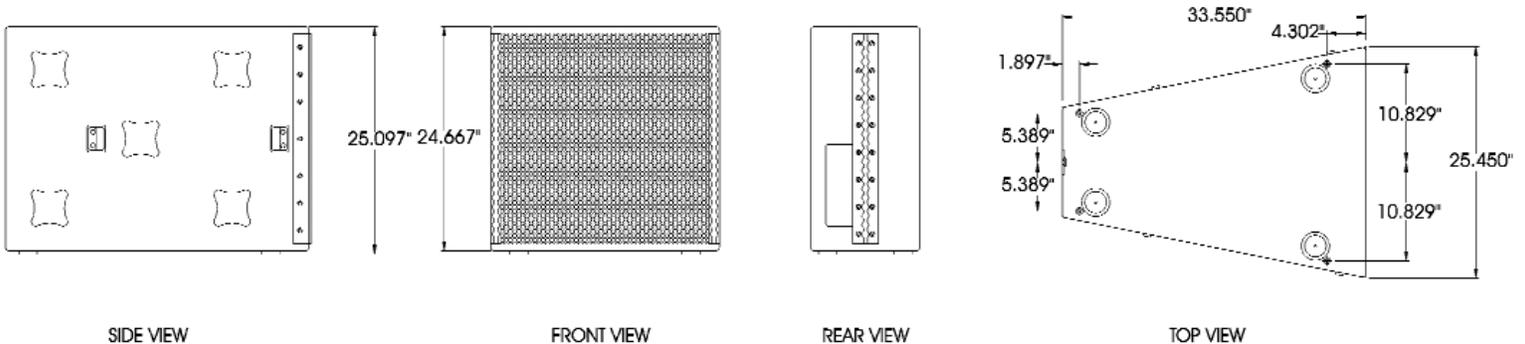
## BEAM WIDTH



## AXIAL Q



## DIMENSIONS



## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The TFR94 loudspeaker system shall be a horn-loaded, three-way, full-range bass reflex trapezoidal design with two 12" woofers, plus one 2" exit mid-range driver with a non-metallic diaphragm, and one 2" exit HF driver with a non-metallic diaphragm mounted to an integrated, interchangeable MF/HF fiberglass waveguide module. Crossover frequencies shall be 630 Hz and 4000 Hz. There shall be two NL8MP (tri-amp) connectors. The system shall meet the following performance criteria: Overall amplitude response of 80Hz to 16 kHz (+/-2dB) with LF section amplitude response 70-630Hz, mid-range section amplitude response 630 Hz-4000 Hz, and HF section amplitude response 4000 Hz-16 kHz (+/-2dB). Tri-amp mode power handling shall achieve, 600W RMS and 1200W PGM for LF, 75W RMS and 200W PGM for mid-range and 100W RMS and 400W PGM for HF (@4kHz/24dB HPF). NOTE: HF bandpass NOT accessible in passive mode. The loudspeaker enclosure shall be well-braced 18mm 13-ply Baltic birch with a black powder-coated 16 gauge perforated steel grille. The enclosure is finished with black TufCoat™. There shall be eight 3/8in-16 (threads per inch) integral threaded insert mounting points connected to top and bottom internal steel bracing. The LF sensitivity is 108 dB SPL/1W @ 4 ohms. The MF sensitivity is 114 dB SPL/1W @ 8 ohms. The HF sensitivity is 112 dB/1W @ 8 ohms. Nominal dispersion shall be 90°H x 40°V from 1.6 kHz to 16 kHz. The loudspeaker shall be 25.1"(637.5mm) H, 25.45"(646.4mm) W(front), 12.1"(309.88mm) W(rear) x 33.55"(852.2mm) D and weigh 155lbs (70.3kg). The three-way, full-range loudspeaker system shall be the Community Model TFR94.