



PROFESSIONAL LOUDSPEAKERS

# T-CLASS / TFR34A

THREE-WAY TRIAMPLIFIED 30° X 40° HIGH OUTPUT HORN SYSTEM

## SPECIFICATIONS (See notes 1 and 2)

**Loudspeaker Type:** 3-way, horn loaded  
**Operating Range:** 60 Hz - 18 kHz  
 70 Hz - 17 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: 112 dB SPL (630 Hz - 4000 Hz 1/3 octave bands)  
 HF: 117 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:**  
 30° H (+43° / -7°, 2000 Hz - 16000 Hz)  
 40° V (0° above 40° below plane) (+23° / -10°, 2000 Hz - 16000 Hz)  
**Axial Q / DI:** 28.5 / 14.5, 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)  
 (2) Neutrik NL4MP, (passive/bi-amp)  
 (3) dual banana jacks  
**Controls:** Passive / Bi-amp switch  
**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-EYBLKIT: (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:** 33.5 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 TFR34A 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
- Asymmetrical Coverage Pattern
- 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

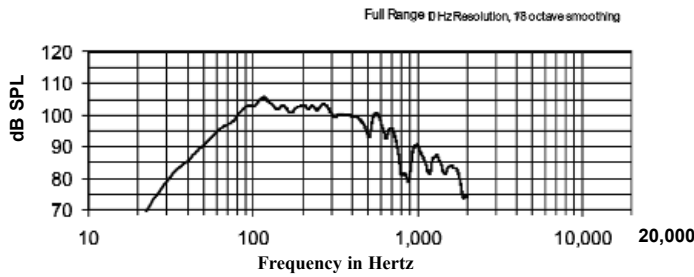
The TFR34A is an all horn-loaded tri-axial design using precision, hand-laminated fiberglass, proprietary waveguides to deliver quality, full-range sound projection in short throw downfill applications. Its wide, smooth frequency response and high efficiency provide superb projection of clear, intelligible speech and ensure high-fidelity music reproduction at very low distortion.

The outer TFR34A enclosure forms a double wall construction, while the mid/high frequency horn assembly is mounted in the mouth of the bass horn. The unique TFR34A mid/HF horn uses single M200 mid-range and a UC2 HF driver for asymmetrical 30°H x 40°V coverage. Intensity is highest on axis and drops off as down angle increases. Asymmetrically, vertical coverage is 0° up and 40° down. For flexibility, a switchable, high quality passive crossover/bi-amp input panel is available.

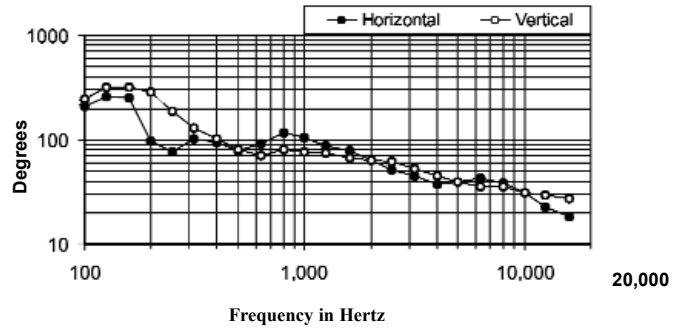
The TFR34A permits good down-angle coverage from a dead-hung array, especially where TFR34As can be interspersed with TSS subwoofers. The TFR34A is also appropriate where a section of the listening area is positioned above the loudspeaker array and can be used in vertical pairs with the upper cabinet inverted in situations requiring 80°V coverage.

Five-year limited non-component warranty.  
Two-year limited component warranty.

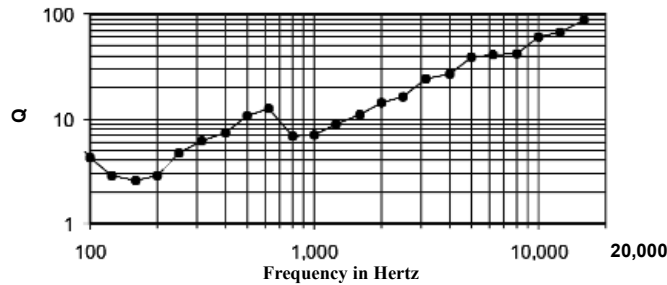
## FULL-RANGE FREQUENCY RESPONSE (PROCESSED)



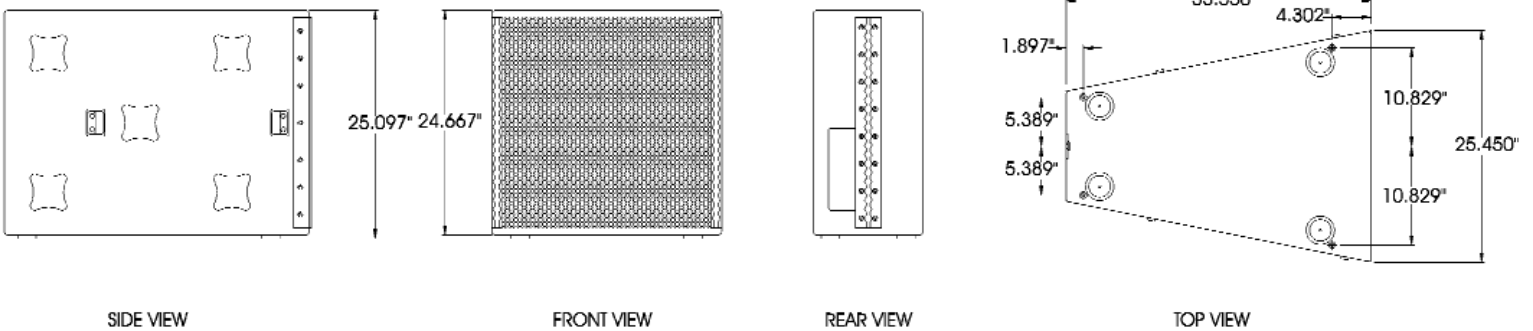
## BEAM WIDTH



## AXIAL Q



## DIMENSIONS



## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The TFR34A 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 of 630 Hz and 4 kHz. There shall be two NL8MP (tri-amp) connectors. The system shall meet the following performance criteria: Overall amplitude response of 70Hz to 17 kHz (+/-2dB) with LF section amplitude response 80-630Hz, mid-range section amplitude response 630 Hz-4000 Hz, and HF section amplitude response 4000 Hz-12.5 kHz. (+/-2dB) Tri-amp mode power handling shall achieve, 600W RMS and 1500W 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 Tuf-Coat™. There shall be eight 3/8-16 (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 112 dB SPL/1W @ 8 ohms. The HF sensitivity is 117 dB/1W @ 8 ohms. Nominal dispersion shall be 30°H x 40°V from 1.6 kHz to 16 kHz (verticle 0° up and 40° down). The loudspeaker shall be 25.1"(637.5mm) H, 25.45"(646.4mm) W(front), 12.1"(307.3mm) W(rear) x 33.5"(852.2mm) D and weigh 155lbs (70.3kg). The three-way, full-range loudspeaker system shall be the Community Model TFR64A.