T-CLASS / TFR34S

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
Max Input (Passive): 600W continuous, 1500W program
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: 113 dB SPL (630 Hz - 4000 Hz 1/3 octave bands)
  HF: 114 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 (+44° / -4°, 1600 Hz - 16000 Hz)
  40° V (+11° / -21°, 1600 Hz - 16000 Hz)
Axial Q / DI:
  37.1 / 15.1, 1.6 kHz - 16 kHz
Crossover Frequencies:
  630 Hz / 3.5 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 mode 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-EYBLTKIT: (4) forged 3/8-16 eyebolts,
  Digital speaker controller, TRFP: Jointer Plate connects adjacent TFR FLYBAR, 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. / 307.5 mm
  Depth: 35.5 in. / 892.2 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 TFR34S 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 TFR34S is an all horn-loaded tri-axial design using precision, hand-laminated
multi-layer glass, proprietary waveguides to deliver quality full-range symmetrical
pattern projection to even the most acoustically challenging venues.
Its wide, smooth frequency response and high efficiency provide superb projection of
clear, intelligible speech and ensure high fidelity music reproduction at very low dis-
tortion levels. The outer TFR34S enclosure forms a double wall construction, while
the mid/high frequency horn assembly is mounted in the mouth of the bass horn. The
unique TFR34S enclosure forms a double wall construction, while the mid/high fre-
quency horn assembly is mounted in the mouth of the bass horn. The unique TFR34S
mid/HF horn uses a single M200 mid-range and a UC2 HF driver for symmetrical
300H x 400V coverage. For flexibility, a switchable, high quality passive
crossover/bi-amp input panel is available. The TFR34S permits exceptional
horizontal “tight pack” array performance with a vertical pattern that is ver-
satile for many applications.
With its T-Class Signature interchangeable mid/HF waveguide module, the TFR34S
can become a cornerstone product of the growing performance audio contractors working invento-
ry. The TFR34S precisely matches the dimensions of the TSS single 18” low frequency system
to further enhance the reconfigurable versatility of the entire T-Class solution.
Five-year limited non-component warranty.
Two-year limited component warranty.
The TFR34S loudspeaker system shall be a horn-loaded, three-way, full-range bass reflex trapezoidal design with two 12" Ferrofluid-cooled 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 3.5 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. (all+/-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 guage perforated steel grille. The enclosure is finished with black Tuf-Coat™. 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 113 dB SPL/1W @ 8 ohms. The HF sensitivity is 114 dB/1W @ 8 ohms. Nominal dispersion shall be 30°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"(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 TFR34S.