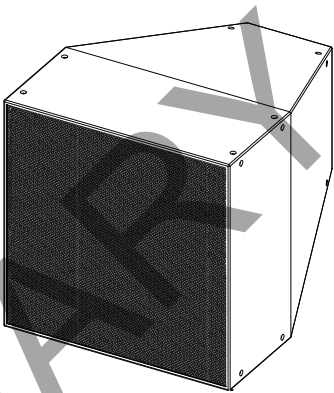


MTS-4153-43FWB Loudspeaker
high output 40x30 FW blk



Electro-Voice

- Full-range, quad 15-inch, horn-loaded loudspeaker with exact directivity for very long throw applications
- Propriety, lossless-Hydra™ and constant directivity (CD) wave guide with pattern control to below 350 Hz
- Four woofers couple to the same CD wave guide to create a true point source with substantial bass response
- Geometry, amplifier matching, and DSP are computer optimized to ensure perfectly controlled SPL and coverage even at full output
- Full-bandwidth directivity control cardioid versions reduce sound spill and improve dynamics, sound quality and speech intelligibility



The MTS-4153-43FWB is a full-range, high-output, point-source loudspeaker system with exact directivity for very-long-throw applications. MTS is the product of a holistic loudspeaker design approach. Loudspeaker geometry, complementary amplifier matching, and digital processing are computer-optimized to ensure precisely distributed SPL that remains balanced and controlled throughout the entire coverage area, even at full output. Four slot-loaded, 15-inch high efficiency low-frequency drivers are symmetrically coupled to the same full-range constant directivity waveguide as two coaxial mid/high frequency compression drivers. This creates a true point-source with substantial bass response, discarding additional subwoofers in many applications. The three-way MTS-4153-43FWB has a 40° x 30° coverage pattern. The loudspeaker can deliver 152 dB peak (music) and 155 dB peak (speech) and low-frequency response extends to 50 Hz at -10 dB. The speaker is typically configured in biamp mode with two low-frequency inputs driven as a single 4 Ω load. The installer could also choose to drive the low-frequency inputs separately using two cable runs to minimize signal losses over long distances. The loudspeaker is designed for outdoor use and for full exposure to the elements.

All MTS loudspeakers have an IP55 rating, indicating that they are impervious to dust and water ingress. MTS is engineered for use with Dynacord IPX series amplifiers. Proprietary speaker settings and limiter functions ensure exceptional performance with long-term reliability at extremely high output levels. A complete package of design files is provided for advanced acoustical and mechanical system simulation in venues. Electro-Voice PREVIEW Loudspeaker Software is the fastest and most accurate way to create acoustic designs with MTS.

Parts included

Quantity	Component
1	Full-range horn-loaded speaker
1	Gland nut cover
1	Installation manual
1	Warranty card

Technical specifications

Frequency response (-3 dB) ¹ :	55 Hz - 18 kHz
Frequency range (-10 dB) ¹ :	50 Hz - 20 kHz
Max. SPL (music) ² :	152 dB
Max. SPL (speech) ³ :	155 dB
Coverage angle:	40° - 30°
Input connections:	LF1, LF2, MHF
Minimum required amplifier channels 2 (LF1 + LF2 wired parallel):	
LF1 maximum input power (20 ms avg) ⁴ :	1250 W
LF1 maximum peak input voltage ⁵ :	150 V
LF1 nominal input impedance:	8 Ω
LF2 maximum input power (20 ms avg) ⁴ :	1250 W
LF2 maximum peak input voltage ⁵ :	150 V
LF2 nominal input impedance:	8 Ω
MHF maximum input power (20 ms avg) ⁴ :	1250 W
MHF maximum peak input voltage ⁵ :	140 V
MHF nominal input impedance:	6 Ω
Connectors:	10 AWG (6 mm ²) phoenix/euro block input and pass through
Enclosure:	Weather resistant birch ply with EVCoat
Grille:	16 gauge stainless steel with hydrophobic screen
Suspension:	(24) M10 hard points
Color:	Black
Dimensions (H x W x D):	1092 mm x 1092 mm x 1491 mm (43.0 in x 43.0 in x 58.7 in)
Net weight:	188 kg (414 lbs)
Shipping weight:	235 kg (519 lbs)
Weatherization:	FW: outdoor full exposure
Ingress Protection (IP) rating:	55

¹Full space with MTS full range preset.

²Peak SPL measured full space at 4 m and referenced to 1 m. 12 dB crest factor broadband pink noise.

³Peak SPL measured full space at 4 m and referenced to 1 m. 12 dB crest factor 100-5k Hz pink noise.

⁴Required amplifier power for maximum output.

⁵Electro-Voice 500 hour music-abuse accelerated life test.

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Amplifier configurations

Amplifier	IPX 20:4		IPX 10:4
Total no. of speakers	2	4	2
Channel			
1	LF1 LF2 (1 box)	LF1 LF2 (2 boxes)	LF1 LF2 (1 box)
2	MHF (1 box)	MHF (2 boxes)	MHF (1 box)
3	LF1 LF2 (1 box)	LF1 LF2 (2 boxes)	LF1 LF2 (1 box)
4	MHF (1 box)	MHF (2 boxes)	MHF (1 box)
Monitoring and processing	Per Box	Per Pair	Per Box
Worst case Max SPL reduction (dB)	0*	-0.8	0

* 3 dB Headroom

Tab. 1: Standard models with single amplifier

Complementary products

MTS-4153-64FWB Loudspeaker high output 60x40 FW blk

MTS-6154-43CFWB Loudspeaker cardioid 40x30 FW blk

MTS-6154-64CFWB Loudspeaker cardioid 60x40 FW blk

Compatible system solutions

X12I-128-FGB 2x18" Install sub black FG

Compatible system solutions, electronics

Dynacord IPX10:4 DSP power amplifier 4x2500W, install

Dynacord IPX20:4 DSP power amplifier 4x5000W, install

Dynacord IPX10:8 DSP power amplifier 8x1250W, install

Dynacord IPX5:4 DSP power amplifier 4x1250W, install

Compatible system solutions, software

Dynacord SONICUE control software

Electro-Voice PREVIEW Loudspeaker software

Ordering information

MTS-4153-43FWB Loudspeaker high output 40x30 FW blk

Full-range, point-source, three-way loudspeaker with 40° x 30° coverage, fully weatherized, black

Order number **MTS-4153-43FWB | F.01U.386.398**