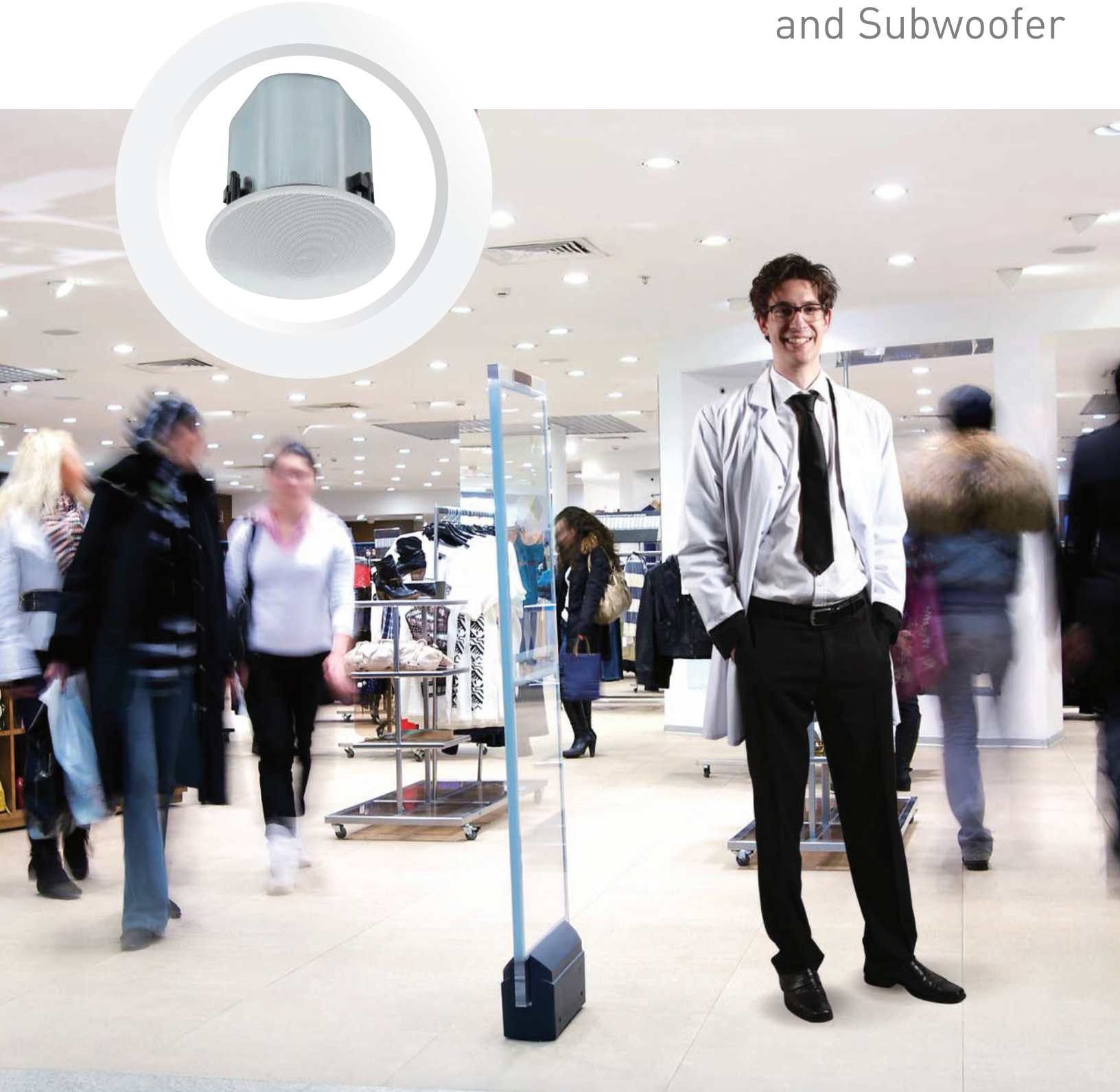
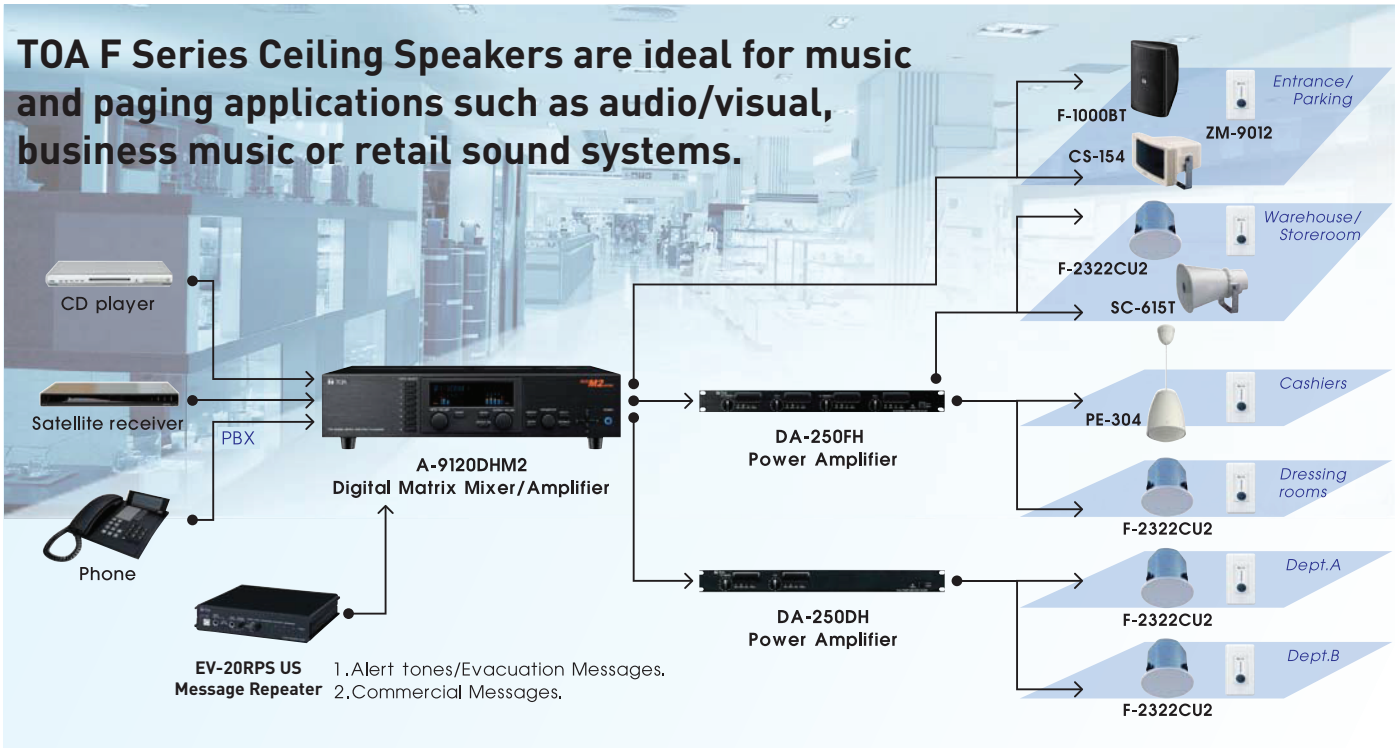
TOA

F Series

Wide Dispersion Ceiling Speakers and Subwoofer





Features:

- Superior Sound Quality
- Wide-Dispersion, Smooth Off-Axis Coverage
- Fast And Easy Installation
- UL-Listed And Compliant Models
- Built-In 25/70.7 V Multi-Tap Transformer
- Low Impedance Mode (8/16 Ohms)
- Convenient Power Tap Selector On Front Baffle
- Integral Metal Back-Can And Safety Cable
- Low-Profile, Paintable Grille
- Overload Protection Circuitry
- Mounting Hardware Included
- Competitive Pricing
- Individually Packaged
- Five Year Warranty

The lineup consists of six models with features and price points to suit premium-to-economy applications; all built with the same high quality and reliability the industry has come to expect from TOA products. Key benefits include smooth off-axis coverage, versatile range of models, ease of installation, and competitive pricing.

For premium wide-dispersion performance, the F-122C and F-122CU2 are 5” full-range processed ceiling speakers. Other full-range models include the F-2322C and F-2322CU2 with 5” full-range driver and the ultra-compact F-1522SC with 4” full-range driver.

Three two-way co-axial models include the F-2852C and F-2852CU2 with 6.5” cone driver, the F-2352C and F-2352CU2 with 5” cone driver and the economy F-2352SC with 5” cone driver. Each model has a special diffuser with built-in dome tweeter for superior co-axial performance.

The F-122C, F-122CU2, F-2322C, F-2322CU2, F-2352C, F-2352CU2 and F-2852C, F-2852CU2 all include integral metal back-cans with safety cable, quick-mount hardware and removable Phoenix-style connectors with loop-through points for adjacent speakers. Built-in overload protection circuitry ensures outstanding reliability.

All six models include built-in multi-tap transformers with 8/16 ohm direct modes, front baffle power tap selection and double-locking, paintable grilles.

The F Series ceiling speakers are individually packaged and backed with a five year warranty.

Our CU2 version models (F-2852CU2, F-2322CU2, F-2352CU2 and F-122CU2) are UL1480 (UUMW/UEAY), UL2043, CAN/CSA C22.2 No.205 (UEAY7) listed for fire protective, general purpose signaling and air-handling spaces.

The F-1522SC and F-2352SC works best in high-quality, wide-dispersion applications, where lower power (lower volume) is needed and where a back-can is not required or where custom back-can will be used. Good option for lower budgets.

The F-2322C/CU2, F-2352C/CU2 and F-122CU/CU2 can be used where high-quality sound and widest dispersion is required (170˚-180˚). Moderate power rating for BGM. CU2 for plenum installation requirements. Models cover low-moderate budget range.

The F-2852C/CU2 is great in BGM/FGM applications where higher-power, longer distance (e.g.-high ceilings) and best sound-quality are the main requirements. CU2 for plenum installation requirements. Moderate budget range.

F-2852CU2, F-2322CU2, F-2352CU2, F-122CU2 are certified to UL1480 (UUMW/UEAY), UL2403, CAN/CSA C22.2 No. 205 (UEAY7).

F-122C & F-122CU2

Full-Range Processed Ceiling Speaker (5”), 30W

- 5” full-range driver
- Wide-dispersion: 180º (1-4k Hz avg.)
- Frequency Response: 70 to 20k Hz
- Sensitivity: 90 dB SPL (1 W, 1 m)
- Continuous Power Handling: 120 W, (30W @ 70V)
- Special diffuser provides wide off-axis high frequency response
- UL-Listed for Fire Protective, General Purpose Signaling and Air-Handling Spaces (UL1480 UUMW/UEAY, UL2043) Ported bass-reflex design
- Integral metal back-can and safety cable
- Removable terminal block with loop-through terminations
- Overload protection circuitry

F-2852C & F-2852CU2

Co-Axial Ceiling Speaker (6.5”), 60W

- Ideal for high ceiling applications
- Ported bass-reflex design
- Co-axial: 6.5” cone driver and dome tweeter
- Wide-dispersion: 120º conical (1-4k Hz avg.)
- Frequency Response: 60 to 20k Hz
- Sensitivity: 91 dB SPL (1 W, 1 m)
- Continuous Power Handling: 180 W (8 ohms)
- Special diffuser provides wide off-axis high frequency response
- Metal back-can and safety cable
- CU2 is UL Compliant for Air-Handling Spaces (UL2043)
- Removable terminal block with loop-through terminations
- Overload protection circuitry

F-2322C & F-2322CU2

Full-Range Ceiling Speaker (5”), 30W

- Ported bass-reflex design
- 5” full-range driver
- Frequency Response: 70 to 20k Hz
- Wide-dispersion: 170º conical (1-4k Hz avg.)
- Sensitivity: 90 dB SPL (1 W, 1 m)
- Continuous Power Handling: 120 W (8 ohms), (30W @ 70V)
- Metal back-can and safety cable
- CU2 is UL Compliant for Air-Handling Spaces (UL2043)
- Removable terminal block with loop-through terminations
- Overload protection circuitry

F-2352C & F-2352CU2

Co-Axial Ceiling Speaker (5”), 30W

- Ported bass-reflex design
- Co-axial: 5” cone driver and dome tweeter
- Wide-dispersion: 170º conical (1-4k Hz avg.)
- Frequency Response: 70 to 20k Hz
- Sensitivity: 90 dB SPL (1 W, 1 m)
- Continuous Power Handling: 120 W (8 ohms), (30W @ 70V)
- Special diffuser provides wide off-axis high frequency response
- Metal back-can and safety cable
- CU2 is UL Compliant for Air-Handling Spaces (UL2043)
- Removable terminal block with loop-through terminations
- Overload protection circuitry

F-2352SC

Low Power Co-Axial Ceiling Speaker (5”), 6W

- Co-axial: 5” cone driver and dome tweeter
- Wide-dispersion: 155º conical (1-4k Hz avg.)
- Frequency Response: 80 to 20k Hz
- Sensitivity: 89 dB SPL (1 W, 1 m)
- Continuous Power Handling: 18 W (8 ohms), (6W @ 70V)
- Special diffuser provides wide off-axis high frequency response
- Four pole push-terminal input connector
- Dust cover to protect components

F-1522SC

Compact Full-Range Ceiling Speaker (4”), 6W

- Ultra-compact – only 4.2” (106 mm) deep
- 4” full-range driver
- Wide-dispersion: 160º conical (1-4k Hz avg.)
- Frequency Response: 65 to 18k Hz
- Sensitivity: 88 dB SPL (1 W, 1 m)
- Continuous Power Handling: 18 W (6W @ 70V)
- Four pole push-terminal input connector
- Dust cover to protect components

Optional Accessories

Back Can (with 4 Knockouts)
HY-BC1 (black)
Q-HY-BC1W (white)

Shallow Back Can
Q-HY-BC2
For F-2352SC

Trim Ring
HY-TR1

Tile Rails
HY-TB1

Mounting Channel
Q-HY-TB2

Anchor Hanging Bracket
HY-AH1**

Drywall Rough-in Kit
F-DRYWALLKIT

Black Grill
Q-F122GRBK
For F-122C, F-2352C, F-2352SC

Reinforcement Ring
HY-RR1
For F-1522SC

Reinforcement Ring
HY-RR2
For F-2352SC

Equalization for F-122C
E-03R
(900 Series module)

TB-200 Tile Bridge
5070723950
Included with F-122CU2, F-2322CU2, F-2352CU2

TB-250 Tile Bridge
5070724030
Included with F-2852CU2

Ceiling Reinforcement Ring
7020116720
Fits model F-2852C

** Special Order Product

Wide Dispersion Ceiling Speakers

SPECIFICATIONS

Model	F-2852C F-2852CU2	F-2322C F-2322CU2	F-2352C F-2352CU2	F-122C F-122CU2	F-2352SC	F-1522SC
Type	Co-axial	Full-Range	Co-axial	Full-Range	Co-axial	Full-Range
Enclosure	Bass-reflex type				--	
Rated Input (High impedance)	60 W	30 W	30 W	30 W	6 W	6 W
Dispersion (1 to 4k Hz avg.)	120 degrees	170 degrees	170 degrees	180 degrees (hemispherical)	155 degrees	160 degrees
Power Handling Capacity ***Continuous Pink Noise:***	90 W (8 ohms) 60 W (16 ohms)	60 W (8 ohms) 30 W (16 ohms)			9 W (8 ohms) 6 W (16 ohms)	
Continuous Program:	180 W (8 ohms) 120 W (16 ohms)	120 W (8 ohms) 60 W (16 ohms)			18 W (8 ohms) 12 W (16 ohms)	
Impedance 70.7 V:	60 W (83 ohms) 30 W (170 ohms) 15 W (330 ohms) 7.5 W (670 ohms) 1.5 W (3.3k ohms)	30 W (170 ohms) 15 W (330 ohms) 5 W (1k ohms) 1.5 W (3.3k ohms) 0.5 W (10k ohms)			6 W (830 ohms) 3 W (1.7k ohms) 1.5 W (3.3k ohms) 0.5 W (10k ohms) 0.25 W (20k ohms)	6 W (830 ohms) 3 W (1.7k ohms) 1.5 W (3.3k ohms)
25 V:	7.5 W (83 ohms) 3.7 W (170 ohms) 1.9 W (330 ohms) 0.9 W (670 ohms) 0.2 W (3.3k ohms)	3.7 W (170 ohms) 1.9 W (330 ohms) 0.6 W (1k ohms) 0.2 W (3.3k ohms) 0.06 W (10k ohms)			0.75 W (830 ohms) 0.4 W (1.7k ohms) 0.2 W (3.3k ohms) 0.06 W (10k ohms) 0.03 W (20k ohms)	0.75 W (830 ohms) 0.4 W (1.7k ohms) 0.2 W (3.3k ohms)
100 V:	60 W (170 ohms) 30 W (330 ohms) 15 W (670 ohms) 3 W (3.3k ohms)	30 W (330 ohms) 10 W (1k ohms) 3 W (3.3k ohms) 1 W (10k ohms)		--	6 W (1.7k ohms) 3 W (3.3k ohms) 1 W (10k ohms) 0.5 W (20k ohms)	6 W (1.7k ohms) 3 W (3.3k ohms)
Low Impedance (Adjustable)	8 and 16 ohm direct mode (transformer bypass)					
Sensitivity (1 W, 1 m)	91 dB SPL	90 dB SPL	90 dB SPL	90 dB SPL	89 dB SPL	88 dB SPL
Frequency Response (1/2 space)	60 - 20k Hz (-10 dB) 45 - 20k Hz (-20 dB)	70 - 20k Hz (-10 dB) 50 - 20k Hz (-20 dB)			80 - 20k Hz (-10 dB) 50 - 20k Hz (-20 dB)	65 - 18k Hz (-10 dB) 45 - 20k Hz (-20 dB)
Speaker Component ***High Frequency***	Dome-type	4.72" (12 cm) cone-type	Balanced dome-type	4.72" (12 cm) cone-type	Balanced dome-type	3.94" (10 cm) cone-type
Low Frequency	6.3"(16 cm) cone-type		4.72"(12 cm) cone-type		4.72"(12 cm) cone-type	
Mounting Hole (Maximum ceiling thickness 1.46"/ 37 mm)	9.84" (250 mm)	7.87" (200 mm)				5.31" (135 mm)
Input Terminal	Removable locking connector (Phoenix-type) with screw-down terminals (2 input terminals and 2 bridge terminals)				Push-in connector (Bridging terminal-2 branch type)	
Usable Cable	Stranded / solid copper wire: AWG No. 24 - 14				Solid copper wire: AWG No. 20 - 15 Stranded copper wire: AWG No. 18 - 17	
Enclosure	Steel plate, plating					
Baffle	Fire-resistant ABS resin (resin material grade; UL-94 V-0 or equivalent), black					
Rim	Fire-resistant ABS resin (resin material grade; UL-94 V-0 or equivalent), white, paint					
Punched Net	Steel plate, white, paint					
Dust-proof Bag	--				Artificial fiber, black	
Dimensions (grille diameter x depth)	11.02"x 8.94" (280 x 227 mm)	9.06"x 7.87" (230 x 200 mm)	9.06"x 9.02" (230 x 229 mm)	9.06"x 9.02" (230 x 229 mm)	9.06"x 6.06" (230 x 154 mm)	6.10"x 4.61" (155 x 117 mm)
Weight (including mounting accessories)	11.24 lbs (5.1 kg)	8.16 lbs (3.7 kg)	8.16 lbs (3.7 kg)	8.16 lbs (3.7 kg)	3.31 lbs (1.5 kg)	2.2 lbs (1 kg)
UL Code	CU version only (F-2852CU2, F-2322CU2, F-2352CU2, F-122CU2): UL1480 (UUMW/UEAY), UL2043, CAN/CSA C22.2 No.205 (UEAY7)					
Accessories	Grille/Panel, Ceiling Reinforcement Ring, Safety Wire, Cutout Paper Pattern				Grille/Panel, Cutout Paper Pattern	
Options *Surface-Mount Back Can*	--	HY-BC1	HY-BC1	HY-BC1	HY-BC1	--
Tile Bar Bridge	HY-TB1	HY-TB1	HY-TB1	HY-TB1	HY-TB1	--
Anchor Hanging Bracket	HY-AH1**	HY-AH1**	HY-AH1**	HY-AH1**	HY-AH1**	--
Trim Ring	--	HY-TR1	HY-TR1	HY-TR1	HY-TR1	--
Ceiling Reinforcement Ring	--	--	--	--	HY-RR2 (required for HY-AH1, HY-TB1, HY-TR1)	HY-RR1
Black Grill	--	--	Q-F-122GRBK	Q-F-122GRBK	--	--
Electronic Controller	--	--	--	E-03R	--	--

FB-3862CU Ceiling Subwoofer

The FB-3862CU is a high-performance flush-mount ceiling subwoofer assembly for low frequency enhancement of distributed loudspeaker systems. A 60W 70/100V transformer is included, and the bandpass design eliminates the need for a bi-amplified system. The 8-Ohm bypass allows for applications using electronic crossovers and dedicated low impedance power amplifiers. The FB-3862CU subwoofer rounds out TOA's F-Series premier speaker line to offer a full spectrum sonic experience suitable for retail environments, restaurants, lounges, conference rooms, and any application where music or video content require high quality sound.

Installation Example

SPECIFICATIONS

MODEL	FB-3862CU
Enclosure	Bandpass
Rated Input	60W (70/100V)
Power Handling Capacity	100W RMS 200W Peak
Impedance	70V line- 60W/30W/15W/7.5W/3.8W/1.9W with 8 Ωbypass
Sensitivity	91dB 1W/1m
Frequency Response	45-200 Hz (-10dB)
Speaker Component	8” driver with oiled paper cone and foam surround
Certifications	UL2043/UL1480A. Baffle meets UL 94-V0 flammability rating. RoHS
Mounting Hole	350mm diameter (13.8")
Input Terminal	Phoenix-type with parallel outputs (max 12AWG stranded cable)
Recommended Cable	Max 12AWG stranded unshielded twisted pair (jacket per code)
Finish	White
Dimensions	383 mm diameter x 326.5 mm height (15.08" x 12.85")
Weight	6.71 kg (14.79 lbs.)
Included Accessories	Steel support ring (C-ring), qty 2 steel support rails, speaker hole template, operation manual
Optional Accessories	Support and safety cables (load rated chain or load rated aircraft cable)

TOA
Smiles for the Public
FB-3862CU-AM-MO

TOA Canada Corporation
www.toacanada.com
sales@toacanada.com