



VT-152UCN
VT-152UCR

VT-157UCN
VT-157UCR

VTF-152UCN
VTF-152UCR

VTF-157UCN
VTF-157UCR

VT / VTF SERIES VOICE/TONE™ EMERGENCY LOUDSPEAKERS

TECHNICAL DATA SHEET



PRODUCT SUMMARY

Through proven performance, patented VT/VTF Series have earned worldwide acclaim for service reliability. These cost-effective units offer compact size, functional flexibility, optimum intelligibility, effective sound distribution, and high-level output. All models contain a high efficiency compression driver with maximum acoustic conversion efficiency. (A quality which reduces number of units needed to attain specified sound pressure levels and provides substantial savings in amplification-power requirements and labor costs.) Die-cast, water-sealed construction withstands vandalism, vermin, moisture, corrosion, and vibration during indoor or outdoor use. Selection includes a basic 70.7 or 25-volt transformer models with DC blocking capacitor (C) where noted. All models terminate via barrier strips. VT Series models are surface-mount units; VTF Series are flush-mount units for recessed installation. VT Series mounts standard 4" E.O. Boxes; VTF Series mount 4" or 4 1/2" SQ backboxes and require model AR or MR adapter rings respectively (order separately) Optional mounting accessories are offered including: indoor and outdoor enclosures, adapter plates and rings. Suffix model with color: Red (R) or Neutral Gray (N). Ex: VT-157UCN.

FEATURES

- Patented Emergency Loudspeakers Available in 70.7V, and 25V Versions.
- Units Meet or Exceed UL Standard 1480 for Fire Protective Signaling Systems when Used with Compatible Control Equipment.
- Durable, Die-Cast, Water-Sealed Housings Withstand Vandalism, Vermin, Moisture, Corrosion, and Vibration.
- Easy and Low Cost Installation Via Standard E.O. Boxes.
- Choose from Surface or Recessed Models in Red or Neutral Gray Finish.
- All Models Produce High Level Output, Optimum Intelligibility, and Effective Dispersion.
- Ideal for Reliable Voice/Tone Signaling in Public Area Emergency Communications and Heavy-Duty Industrial Applications.

APPLICATIONS

Employ patented, UL Listed Voice / Tone™ audible signaling devices in protective warning and intercom systems, for public area emergency communications, and as communication system loudspeakers in multi-occupancy and extended space areas (i.e., high-rise residences, public buildings, healthcare and educational facilities, shopping areas, athletic clubs, transportation terminals). All units are suitable for stationary or mobile use, indoors or outdoors. High-power, 15-watt models are ideal for use in commercial and heavy-duty industrial applications.

When used with compatible control equipment, VT/VTF Series comply with UL Standard 1480 (Speakers for Fire Protective Signaling Systems) and California State Fire Marshal (Title 19).

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VT / VTF SERIES MODELS & COLORS



VT-152UCN - 25V - NEUTRAL GREY
VT-157UCN - 70V - NEUTRAL GREY

Voice/Tone **Surface Mount** Compression Driver Speaker with 15-Watt 25V/70V Transformer - Available in Neutral Gray.



VT-152UCR - 25V - RED
VT-157UCR - 70V - RED

Voice/Tone **Surface Mount** Compression Driver Speaker with 15-Watt 25V / 70V Transformer - Available in Red.



VTF-152UCN - 25V - NEUTRAL GREY
VTF-157UCN - 70V - NEUTRAL GREY

Voice/Tone **Recessed** Compression Driver Speaker with 15-Watt 25V/70V Transformer - Available in Neutral Gray.



VTF-152UCR - 25V - RED
VTF-157UCR - 70V - RED

Voice/Tone **Recessed** Compression Driver Speaker with 15-Watt 25V/70V Transformer - Available in Red.

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VT-157UCN
VT-157UCR

VTF-152UCN
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VT / VTF SERIES ACCESSORIES - (ORDER SEPARATELY)

ENCLOSURES - OUTDOOR

Model SEN & SER. Surface-mounting exterior backbox provides weatherproof installation for VT Series loudspeakers. Unit is tapped for ½" conduit and includes a weatherproof gasket.

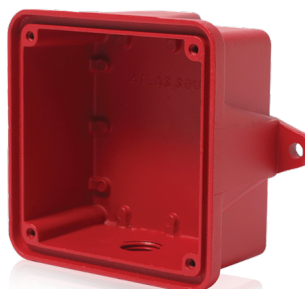
Dimensions:

4¼" SQ x 2" D (108 x 51mm). Weight is .75 lbs (.35 kg). Housing is die-cast zinc finished in a durable epoxy.

Suffix model with color designation: Red (R) or Neutral Gray (N).



Model: SEN



Model: SER

ENCLOSURES - INDOOR

Model SIN & SIR. Surface-mounting indoor backbox for VT Series models mounts to any single or double-gang backbox for concealed conduit applications. CRS unit includes ½" conduit knockouts (three on each side; five on rear). Epoxy finished surface.

Dimensions: 4" SQ x 1 ½" D

(102 x 38mm). Weight is .7 lbs (.3 kg).

Suffix model with color designation: Red (R) or Neutral Gray (N).



Model: SIN

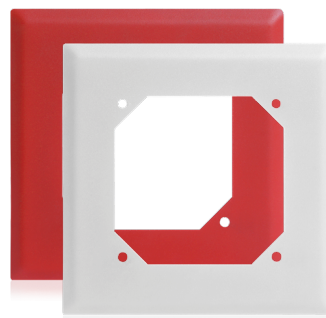


Model: SIR

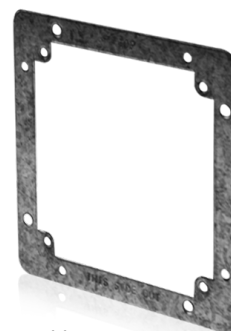
ADAPTER PLATES

Model SFP. Semi-flush adapter plate mounts behind VT Series to cover any recessed 4" SQ x 1 ½" D (102mm x 38mm) outlet box. CRS wall plate is stamped and painted. Dimensions: 6" SQ x ½" D (152mm x 6mm). Weight is .5 lbs (.2 kg). Suffix model with color designation: Red (R) or Neutral Gray (N).

Model F-P. Flush adapter plate for VTF Series loudspeakers allows recessed mounting to standard 4 1½" (119mm) backboxes. Unit is also suited to mount solid exterior or hollow interior wall surfaces where a backbox is not required. Weight is .4 lbs (.18 kg). Unit is of CRS stamped construction; not painted.



Model: SFP-N & SFP-R



Model: F-P

ADAPTER RINGS

Model A-R. Adapter ring for recessed mounting of VTF Series units. Welded steel collar is 4" SQ x 2" D (103mm x 51 mm) to provide necessary extension for any 4" SQ x 2¼" D (102mm x 54mm) E.O. box. Weight is .6 lbs. (.27 kg). When assembled, the unit is 3½" deep and will fit in a standard 4" stud wall. Assembly includes four "S" clips. Finished in neutral gray.

Model M-R. Overlapping extension ring is equipped with clips for recessed mounting of VTF Series models. Welded steel collar is 4" SQ (I.D.) x 2" D (119mm x 51mm) to provide extension for any 4 1½" SQ (O.D.) x 2¼" D (119mm x 54mm) backbox. When assembled, the unit is 3½" deep and will fit in a standard 4" stud wall. Assembly includes four "S" clips. Weight is .7 lbs (.3 kg). Finished in neutral gray.



Model: A-R



Model: M-R

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TECHNICAL SPECIFICATIONS

VT / VTF LOUDSPEAKER SPECIFICATIONS AUDIO SPECIFICATIONS / PERFORMANCE

Model	TRANSFORMER	POWER TAPS (Watts)	FREQ RESP	DISPERSION	SENSITIVITY	DIMENSIONS / WEIGHT	CAPACITOR (C)
VT(F)-157UC	70.7 V	15, 8, 4, 2	600 Hz - 5500 Hz (±5dB)	> 190° (- 6dB pt., 1 and 2 kHz octave bands)	96.9dB (1 watt, 1 meter)	4-1/4" SQ x 3-1/4" D (108 x 83mm) 3.2 Lbs. (1.5 kg)	5 mfd.
VT(F)-152UC	25 V	15, 8, 4, 2	600 Hz - 5500 Hz (±5dB)	> 190° (- 6dB pt., 1 and 2 kHz octave bands)	96.9dB (1 watt, 1 meter)	6" SQ x 3-1/4" D (152 x 83mm) 3.2 Lbs. (1.5 kg)	5 mfd.

SOUND LEVEL REFERENCE INDEX FOR VT AND VTF SERIES LOUDSPEAKERS (BASED ON UL RATING OF 90dB AT 1 WATT 10 FEET)

DISTANCE	15-W INPUT	8-W INPUT	4-W INPUT	2-W INPUT
10' (3.0 m)	102.0dB	99 .0dB	96.0dB	93.0dB
20' (6.1 m)	96 .0dB	93.0dB	90.0dB	87.0dB
30' (9.1 m)	92.5dB	89 .5dB	86.5dB	83.5dB
40' (12.2 m)	90 .0dB	87.0dB	84.0dB	81.0dB
50' (15.2 m)	87.7dB	84.7dB	81.7dB	78.7dB

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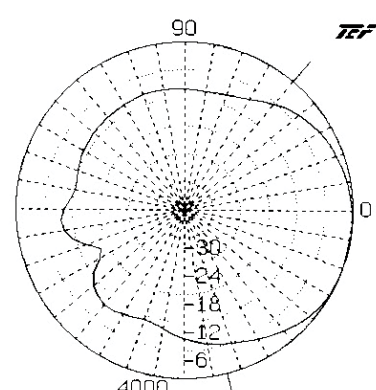
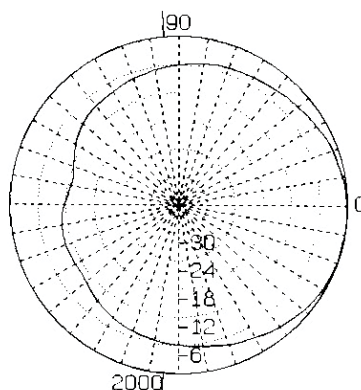
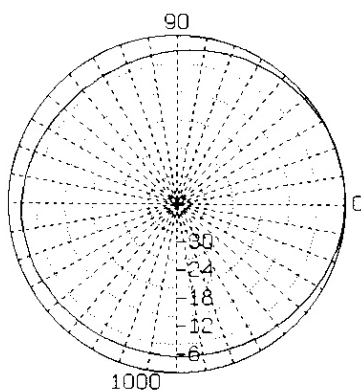
VT / VTF SERIES VOICE/TONE™ EMERGENCY LOUDSPEAKERS

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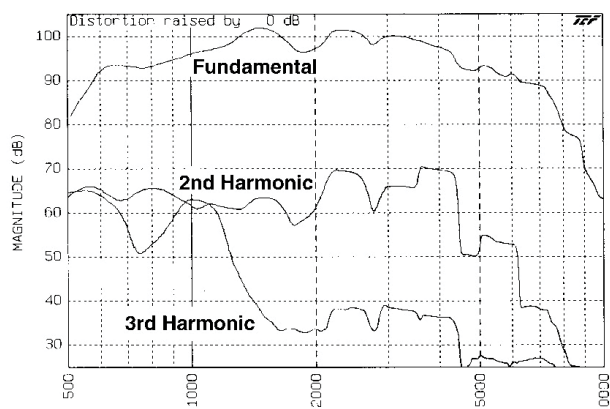


PERFORMANCE MEASUREMENTS

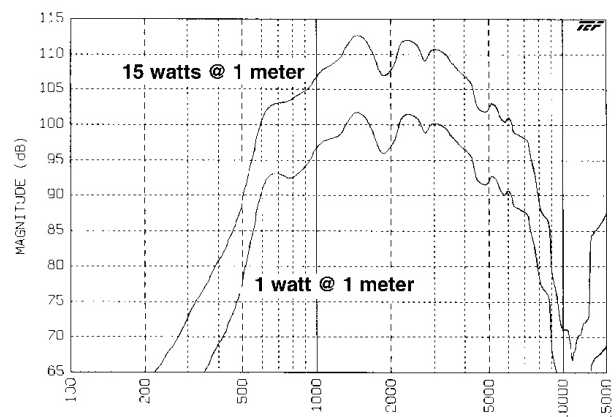
Frequency (Hz)	Q	Di	Dispersion Angle (Degrees)
1000	1.83	2.61	360
2000	3.09	4.91	190
4000	4.54	6.57	125



VT / VTF SERIES
Polars Are Normalized To Zero On Axis



VT / VTF SERIES Harmonic Distortion
(1 watt @ 1 meter)



VT / VTF SERIES FREQUENCY RESPONSE

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VT-157UCN
VT-157UCR

VTF-152UCN
VTF-152UCR

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VTF-157UCR

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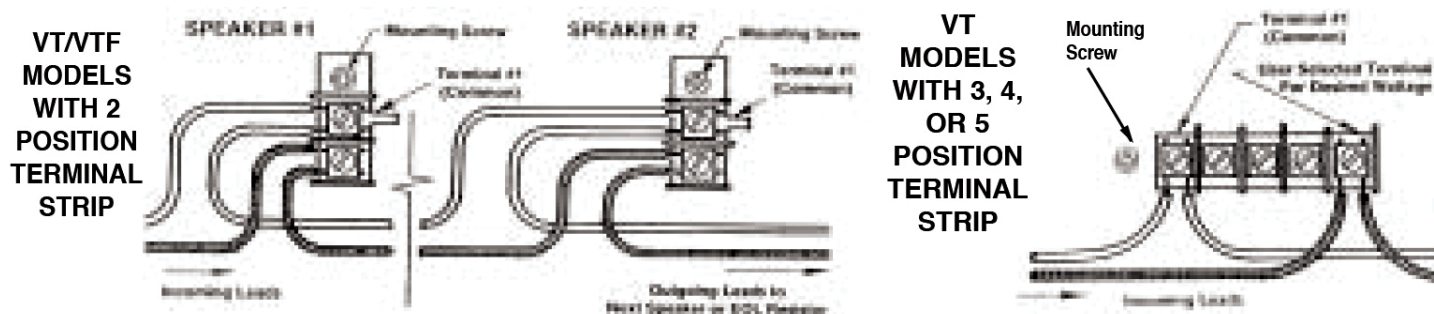
TECHNICAL DATA SHEET



VT / VTF SERIES UL WIRING REQUIREMENTS

NOTE: To conform with UL 1480 requirements, wires must be connected to appropriate terminals as shown in the wiring diagram (Image 1).

Do NOT use looped wire under terminals. Break wire run to provide for supervision of connection.



(Image 1)

VTNTF-152U VTNTF-152UC			
25V Line Xfmr			
Term	Color	Watt	Rating *
1	White	Com	-
2	Red	2	90
3	Grey	4	93
4	Brown	8	96
5	Green	15	99

* UL 3dB Increment Rating

VTNTF-157U VTNTF-157UC			
70 V Line Xfmr			
Term	Color	Watt	Rating *
1	White	Com	-
2	Red	2	90
3	Grey	4	93
4	Brown	8	96
5	Green	15	99

* UL 3dB Increment Rating

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VT-152UCR

VT-157UCN
VT-157UCR

VTF-152UCN
VTF-152UCR

VTF-157UCN
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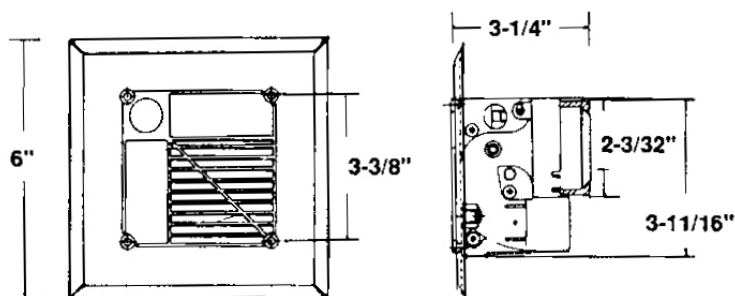
VT / VTF SERIES VOICE/TONE™ EMERGENCY LOUDSPEAKERS

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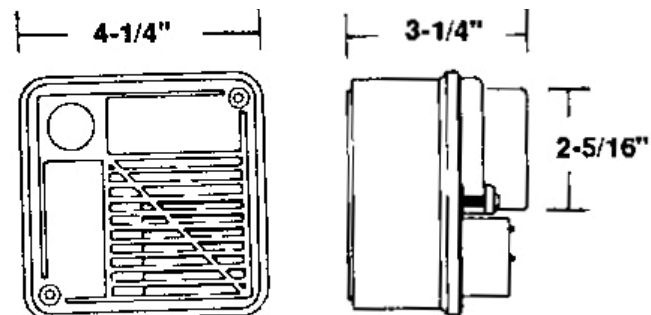


DIMENSIONAL DRAWINGS

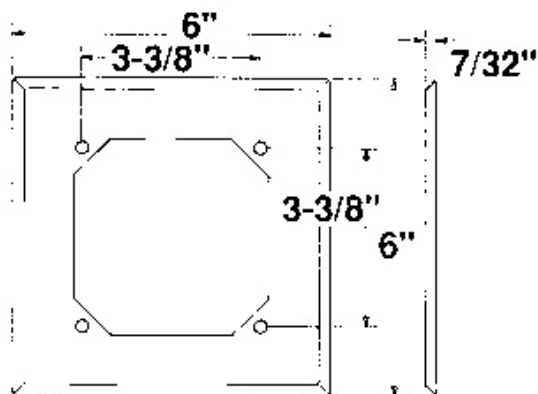
(VTF) - RECESSED MOUNT



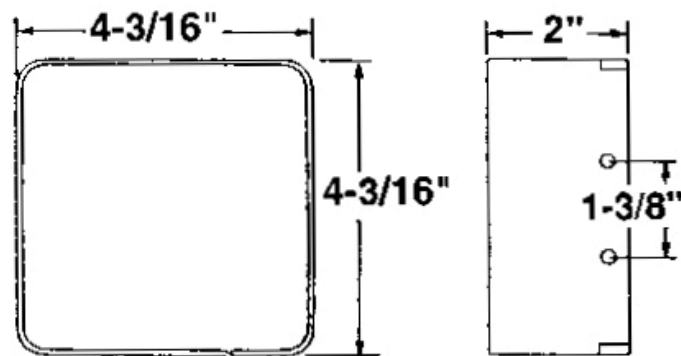
(VT) - SURFACE MOUNT



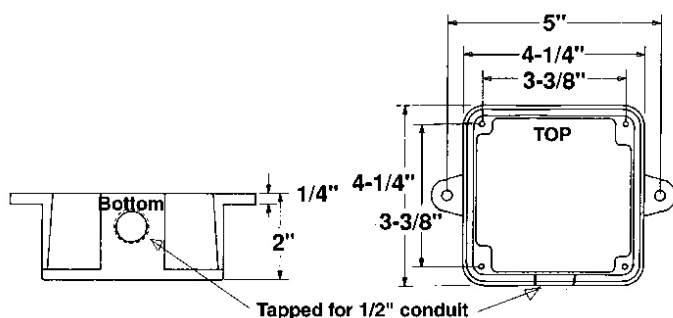
(SFP) - SEMI FLUSH PLATES / SEMI-RECESSED MOUNTING



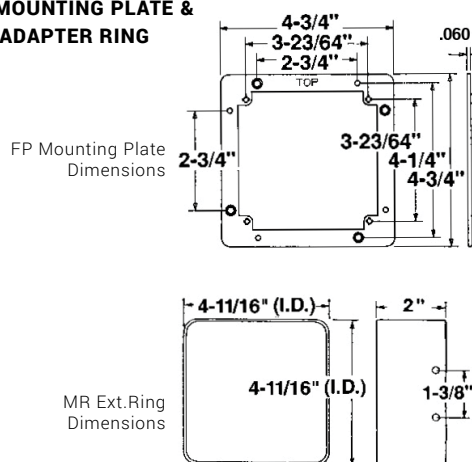
(A-R) - ADAPTER RING



(SE) - SURFACE EXTERIOR BACKBOX / WEATHERPROOF MOUNTING
VT Series with Model SE for weatherproof installations.



(FP) MOUNTING PLATE &
(MR) ADAPTER RING



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INSTALLATION INSTRUCTIONS

(SE) - SURFACE EXTERIOR BACKBOX

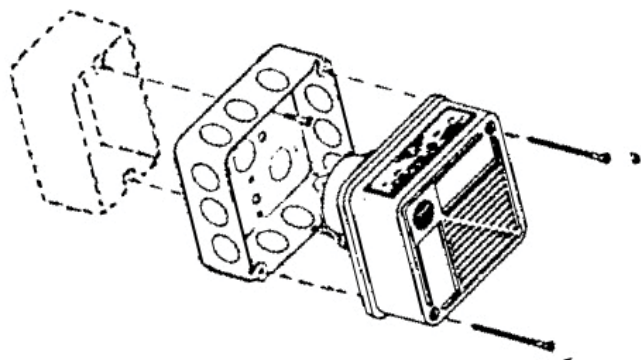
Weatherproof Mounting.

VT Series with Model SE for weatherproof installations.

(SI) - SURFACE EXTERIOR BACKBOX

Surface or Concealed Conduit Mounting.

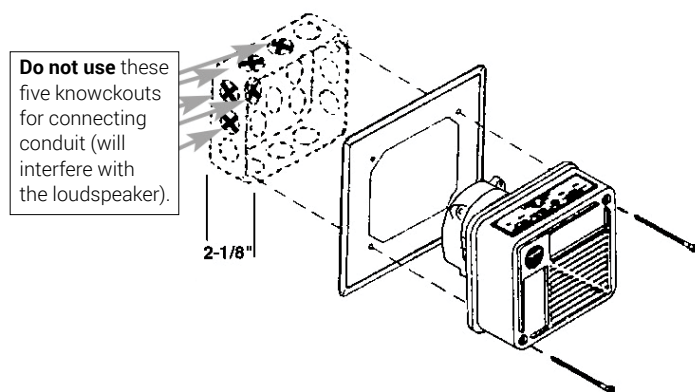
VT Series with Model SI for backbox..



(SFP) SEMI-FLUSH PLATE

SEMI-RECESSED MOUNTING

VTF Series with Model SFP installed to any recessed 4" SQ x 2 1/8" D backbox.

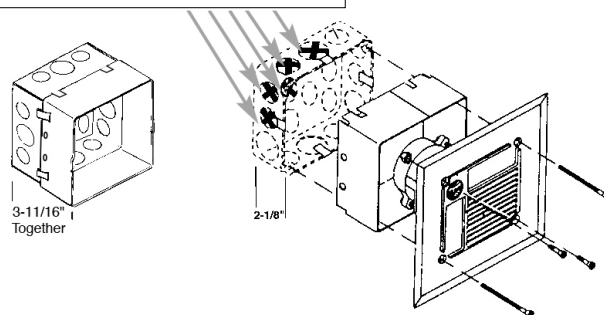


(A-R) - ADAPTER RING

RECESSED MOUNTING OPTION

VTF Series with standard 4" SQ x 2 1/8" D backbox* & Model Adapter Ring (A-R).

Do not use these five knockouts for connecting conduit (will interfere with the loudspeaker).



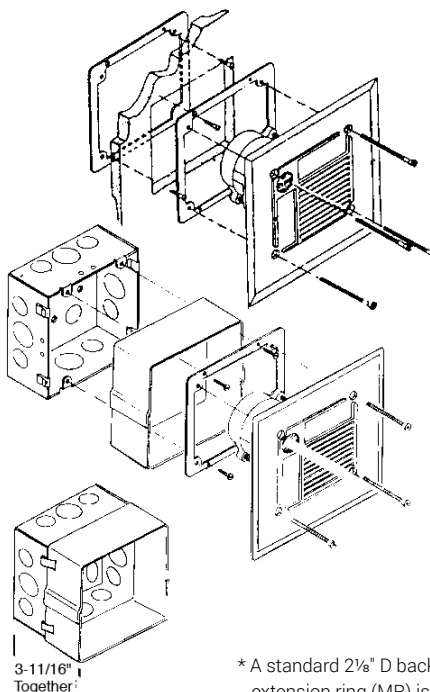
* A Standard 2 1/8" D backbox assembled with overlapping extension rings (A-R is 3 11/16" Deep).

(F-P) FLUSH MOUNTING PLATE

(M-R) ADAPTER RING

RECESSED MOUNTING OPTION

VTF Series with Model F-P mounted to solid exterior (or hollow interior) wall where backbox is not required.



VTF Series with standard 4 11/16" SQ x 2 1/8" D backbox* and overlapping extension ring (M-R). Flush plate (F-P) required for loudspeakers alignment.

* A standard 2 1/8" D backbox assembly with overlapping extension ring (MR) is 3 11/16" D.

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VT/ VTF Series Audible signalling device shall be AtlasIED Model VT-152UCN, VT-152UCR, VT-157UCN & VT-157UCR (surface mount) or VTF-152UCN, VTF-152UCR, VTF-157UCN & VTF-157UCR (flush-recessed mount). Continuous power rating shall be __ (15, 8, 4, 2 watts) at rated power. Frequency response shall be 600 to 5500 Hz ($\pm$ 5dB). Sensitivity shall be 96.9dB (at 1 watt, 1 meter). Sound pressure level shall be at a distance of __ (see Sound Level Reference Index). Dispersion shall be greater than 190° (-6dB point, 1 and 2 kHz octave bands). Model shall be water/moisture sealed and constructed of die-cast zinc. Unit shall operate within the temperature range of 150°F (66°C) to -30°F (-35°C). VT Series shall be installed in __ (a standard 4" SQ E.O. Box, AtlasIED Model SFP semi-flush plate, Model SE surface exterior backbox, or Models). VTF Series shall be installed in a standard __ (4" or 4-11/16" SQ) backbox using AtlasIED Model __ (AR, MR) overlapping extension ring.

Dimensions shall be:

VT Series, 4-1/4" SQ. x 3-1/4" D (108 x 83mm).

VTF Series, 6" SQ. x 3-1/4" D (152 x 83mm).

Finish shall be:

Red or Neutral Gray.