

100 - 200 - 300 Series In-Ceiling & In-Wall Trimless Speakers





High Performance Architecture

Monitor Audio's in-wall and in-ceiling speakers are engineered for high performance, reliability and ease-of-use. They've been developed using the advanced driver technologies of our award-winning hi-fi speaker ranges to deliver world-famous sound quality without compromising room design.

Available across four performance levels, Monitor Audio's architectural speakers bring innovation to every application - wherever you decide to experience dynamic music and film sound, there's an in-wall or in-ceiling speaker that's perfect for the role, expertly optimised for rhythmic wideband audio, seamless room integration and easy, secure installation.

If you love your décor and appreciate great audio, you needn't compromise:

Monitor Audio's architectural speakers will create harmony all around your home.



Performance guide

To achieve a harmony of space and sound for every possible application, we've built a wide range of in-wall and in-ceiling options across four performance levels: good/better/best/flagship, all featuring our core speaker technologies and as always, our renowned design and construction quality.

Good: 100 Series 2-way Loudspeakers

All 100 Series loudspeakers incorporate the proprietary technologies and materials found in our award-winning Radius HD. 100 Series models are 2-way designs that combine advanced MMP®II bass drivers with Monitor Audio's trademark C-CAM® gold dome tweeter to provide high performance sound, ease-of-drive, and wide frequency response and dispersion. Optimum imaging and set-up are established via a pivoting tweeter and high-frequency (+3dB / 0dB /-3dB) level adjustment.

Better: 200 Series 2-way Loudspeakers

The step to the 200 Series 2-way loudspeakers is defined by upgrades in driver technology and control features. All 200 Series loudspeakers incorporate the proprietary technologies and materials found in our highly acclaimed Silver RX series in-room loudspeakers, and in our Award winning Bronze BX range and in the Climate allweather speakers. 200 Series models marry C-CAM bass drivers with a more highly specified version of the C-CAM gold dome tweeter. Optimum imaging and set-up are established via a pivoting tweeter, high frequency (+3dB / 0dB / -3dB) level adjustment and boundary compensation (on / off) controls. The 200 Series 2-way loudspeakers provide an extended high-frequency response to 30kHz, and higher output and power handling capacity than the 100 Series 2-way models.

Best: 200 Series 3-way Loudspeakers with IDC®

200 Series 3-way loudspeakers feature our unique Inverted Dual Concentric (IDC) driver module.

The IDC driver module houses a 4-inch C-CAM midrange and 1-inch C-CAM gold dome tweeter.

200 Series 3-way models combine C-CAM bass drivers with an IDC driver module to provide rich midrange detail, higher system output, greater power handling, and superior vocal intelligibility and sound localisation than 200 Series 2-way models. Optimum imaging and set-up are established via the pivoting IDC, high frequency (+3dB /0dB / -3dB) level adjustment, and boundary compensation (on / off) controls.

Flagship: 300 Series 3-way Loudspeakers with IDC®

Our flagship 300 Series 3-way loudspeakers provide the best Monitor Audio in-wall and in-ceiling loudspeaker options for music and home theatre applications. All 300 Series loudspeakers incorporate proprietary technologies and materials found in our award-winning Apex, Silver RX and Gold Signature ranges.

300 Series 3-way models marry C-CAM bass drivers with Rigid Surface Technology (RST®) cone profiles and a cast-aluminium driver chassis with an IDC driver module to provide deeper bass, higher system output, and greater power handling than the 200 Series 3-way models.

Like the 200 Series 3-way loudspeakers, 300 Series models provide rich midrange detail, and superior vocal intelligibility and sound localisation. Optimum imaging and set-up are established via the pivoting IDC, high-frequency (+3dB / 0dB / -3dB) level adjustment, and boundary compensation (on / off) controls. The WT380-IDC in-wall loudspeaker adds a midrange-frequency level adjustment for system tuning and a die-cast aluminium front baffle for added rigidity, resulting in superior bass articulation.

FX Surround Loudspeakers

The FX Surround loudspeaker models feature selectable dipole (diffuse sound) or bipole (direct sound) modes for use as rear surround speakers in discreet home theatre applications.

Both models utilise a front-mounted switch, to change the surround mode. The CT380-FX features a 12-volt trigger input for automatic surround mode switching. The CT265-FX and CT380-FX models use dual 1-inch C-CAM gold dome tweeters mounted at a precise fixed-angle for optimised performance. The CT265-FX has a 6.5-inch C-CAM bass driver. The CT380-FX has an 8-inch C-CAM bass driver with RST cone profile and a cast aluminium driver chassis.

T2 Stereo Loudspeakers

Our T2 Stereo models feature dual, independent, pivoting 1-inch C-CAM tweeters, and 6.5 inch (CT165-T2) or 8-inch (CT180-T2) Metal Matrix Polymer (MMP®II) dual wound voice coil bass drivers for high performance stereo sound from a single speaker. The T2 models are ideal for bathrooms, hallways, or any area where space does not allow for stereo pairs.

Performance at a glance			BETTER	BEST	FLAGSHIP	FX SURROUND	T2 STEREO
	CT180 In-Ceiling 2-Way	•					
	CT280 In-Ceiling 2-Way		•				
0″10	CT280-IDC In-Ceiling 3-Way			•			
8" In-Ceiling	CT380-IDC In-Ceiling 3-Way				•		
	CT380-FX In-Ceiling Surrounds					•	
	CT180-T2 In-Ceiling Stereo						•
	CT165 In-Ceiling 2-Way	•					
	CT265 In-Ceiling 2-Way		•				
6.5" In-Ceiling	CT265-IDC In-Ceiling 3-Way			•			
	CT265-FX In-Ceiling Surrounds					•	
	CT165-T2 In-Ceiling Stereo						•
8″ In-Wall	WT180 In-Wall 2-Way	•					
	WT280 In-Wall 2-Way		•				
	WT280-IDC In-Wall 3-Way			•			
	WT380-IDC In-Wall 3-Way				•		
	WT165 In-Wall 2-Way	•					
6.5″ In-Wall	WT265 In-Wall 2-Way		•				



Technology guide

Features



'Trimless' Grilles

All speakers feature near invisible, easy-to-install 'trimless' grilles. The grilles attach magnetically to the speaker frame, allowing removal and re-fixing in seconds. Their stealthy appearance favours discreet, décor-friendly installation.



Patented Tri-Grip® Fixing Clamps

The Tri-Grip mounting clamps feature three clamping points per dogleg, providing three times the clamping surface area of conventional single-point clamping speakers. Our wider three-point clamps provide a better seal between the speaker and the ceiling, maximising bass response and midrange clarity.



Easy Handling during Installation

All models feature protective crossover covers designed to prevent the ingress of loose building materials and dust into the drivers and crossover. The protective covers also make handling easy, and protect the crossover components from damage during installation.



Ready for Action in Humid Environments

All models will resist high humidity and ultraviolet light and can be placed in bathrooms and pool areas.



Adjustable Response Controls

Optimum imaging and set-up are established via pivoting tweeters, pivoting IDC driver modules, high-frequency, midrange-frequency, and/or boundary compensation controls (depending on model). The boundary compensation control provides a gentle midrange roll-off response while preserving extreme low frequency output when the speaker is placed close to ceiling and wall boundaries.



New Construction Brackets

New construction brackets are available for all models as an accessory to help mark speaker placement during framing and prior to sheetrock application. The brackets will span up to 24-inch stud spacing. New construction brackets are not required for retrofit applications.



Painting

To achieve seamless decor integration, the trimless grilles can be painted. A replacement scrim is included to ensure the stealthy presence of the speaker is maintained after painting.

Technology



MMP®II (Metal Matrix Polymer) driver cones have a polypropylene base loaded with metallic particles for a rigid and responsive structure. A high pressure, injection-moulded process achieves a different cone thickness at critical points to optimise stiffness and consistency, resulting in superior sonic performance.



C-CAM®

C-CAM (Ceramic-Coated Aluminium Magnesium) is an innovative alloy material originally developed by the aerospace industry for use in the construction of jet engine blades where low mass and extreme rigidity are required. Monitor Audio C-CAM driver cones are formed from an alloy of aluminium and magnesium, which is shaped by a two-stage high pressure forming technique. After forming, a layer of pure ceramic (alumina) is depleted onto the surfaces to give a completely rigid exterior. The resulting properties are lightning-fast response for incredible clarity and extreme rigidity for low distortion.



RST®

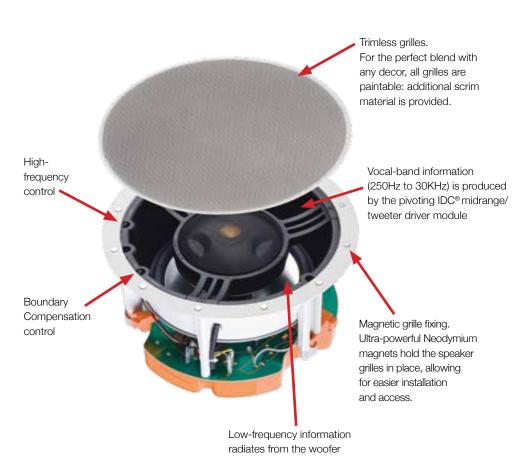
The dimpled surface of C-CAM drivers with the RST cone profile provides the driver surfaces with a greater degree of resistance to mechanical bending forces. The dimples significantly increase cone rigidity and allow us to use thinner and therefore lighter C-CAM cones. The dimpled RST pattern also displaces any standing waves that can propagate across the cone surface. C-CAM drivers with the RST cone profile provide speed and accuracy, while virtually eliminating the distortion caused by cone-flex during operation.



Technology at a glance	C-CAM Tweeter	MMP II Woofer	C-CAM Woofer	RST Technology
100 Series	•	•		
200 Series	•		•	
300 Series	•		•	•

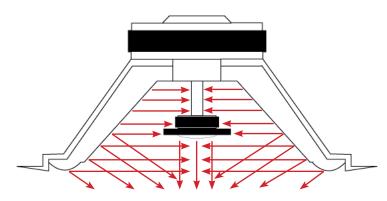
Inverted Dual Concentric Driver module

For the in-ceiling and in-wall IDC models

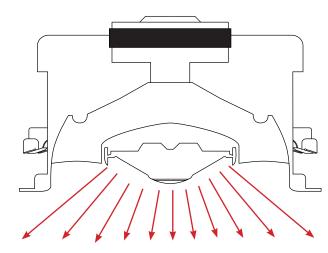


The in-ceiling and in-wall IDC models feature a unique Inverted Dual Concentric (IDC) pivoting midrange/tweeter module with up to 18 degrees of adjustment in all directions. Speakers can be discreetly positioned, and the sound directed toward the desired listening area by pivoting the IDC driver module for maximum performance. These models are true 3-way designs offering superior performance and flexibility over typical 2-way or fixed angle speaker designs.

Typical 2-Way Speakers



Monitor Audio IDC® Speaker

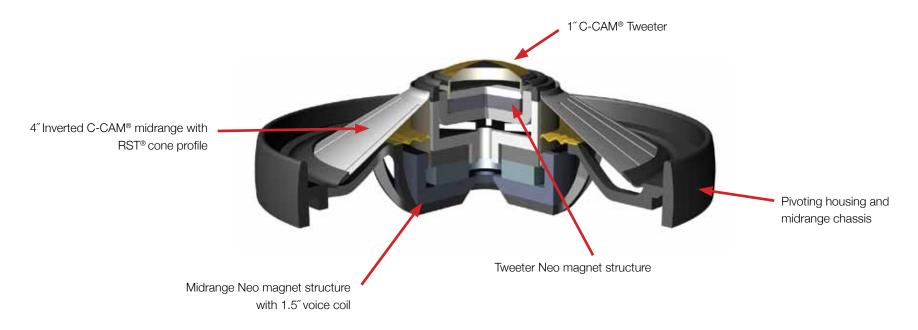


Monitor Audio's innovative IDC driver module is proprietary. Its inverted 4" midrange driver provides superior dispersion, while enabling the midrange cone and tweeter dome to be set as far forward as possible. This configuration allows for the clear acoustic 'sighting' of the desired listening area and reduces undesirable diffraction effects. It's impossible to avoid the diffraction of critical vocal band frequencies in two-way designs, where the bass driver is set 3" to 6" back from the speaker grille.

Inverted Dual Concentric Driver module

Our 'IDC' models are the best choice as front speakers in theatre and music applications.

Two of the most important qualities for the reproduction of movies and music from front speakers are vocal band intelligibility and front sound localisation.



Vocal Band Intelligibility

The ability to hear every sound clearly and without strain is difficult when dialogue is competing with the film score and loud sound effects such as explosions and collisions. When you can't hear the dialogue clearly, it's difficult to understand the movie plot or in the case of music, to appreciate what the vocalist is singing.

Front Sound Localisation

The ability to match the sound of on-screen action with the image is critical to the success of any film performance. For example, if a car travels from left to right on the screen, the scene only becomes believable if the sound pans with the action. Likewise with music: an accurate "stereo image" of the band, which places all instruments properly in space, will add realism to your listening experience.

Superior Clarity and Imaging

The IDC driver module houses a 4-inch C-CAM midrange and 1-inch C-CAM dome tweeter, covering the response from 250Hz to 30kHz.

We selected a 4-inch midrange driver so that a wider range of directional frequencies - which are critical to vocal band intelligibility and accurate sound localisation - can radiate without diffraction from the IDC driver module.

High Power Handling and Output

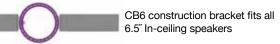
The 4-inch midrange driver utilises an over-sized 1.5-inch edge-wound voice coil. Separate tweeter and midrange Neodymium magnet systems provide high overall power handling and efficiency. The IDC driver module operates within its own sealed chamber to provide accurate damping and perfect acoustic alignment.

monitoraudio.com

	8" Full Range Speakers				8″ Special Application Speakers		
	Good	Better	Best	Flagship	T2 Stereo	FX Surrounds	
	CT180	CT280	CT280-IDC	CT380-IDC	CT180-T2	CT380-FX	
8" In-Ceiling speakers							
Frequency Response	50Hz - 25kHz	50Hz - 30kHz	50Hz - 30kHz	45Hz - 30kHz	50Hz - 25kHz	45Hz - 30kHz	
Impedance	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	
Sensitivity (1W@1m)	90dB	90dB	90dB	90dB	90dB	90dB	
Maximum SPL	111.6dBA	111.6dBA	111.6dBA	112dBA	111.6dBA	111.6dBA	
Power Handling (RMS)	120 W	120 W	120W	150 W	120 W	120 W	
Recommended Amp Requirements	30 - 120W	30 - 120W	30 - 120W	40 - 150W	30 - 120W	30 - 120W	
Drive Unit Complement	2- Way	2-Way	3-Way	3-Way	2-Way	2-Way	
	8" MMP®II cone bass driver	8" C-CAM® cone bass driver	8" C-CAM® cone bass driver, pivoting IDC module housing:	8" C-CAM® cone bass driver featuring RST® pivoting IDC module housing:	8" MMP®II cone bass driver	8" C-CAM® cone bass driver featuring RST®	
	1" C-CAM® pivoting gold dome tweeter	1" C-CAM® pivoting gold dome tweeter	4" C-CAM® RST® inverted mid range driver	4" C-CAM® RST® inverted mid range driver	2 x 1"C-CAM® pivoting gold dome tweeters	2 x 1"C-CAM® fixed angle gold dome tweeters	
			1" C-CAM® gold dome tweeter	1"C-CAM® gold dome tweeter			
Adjustment Controls	HF Level Switch (+3dB/ 0dB/ -3dB)	HF Level Switch (+3dB/ 0dB/ -3dB) Boundary Compensation Switch			HF Level Switch (+3dB/ 0dB/ -3dB)	HF Level Switch (+3dB/ 0dB/ -3dB) Bi pole/ Di pole Switch with Additional 12v Trigger Switching	
Overall Diameter (Including grille)	11 ^{1/4"} (285mm)	11 ^{1/4"} (285mm)	11 ^{1/4"} (285mm)	11 ^{1/4"} (285mm)	11 ^{1/4"} (285mm)	11 ^{1/4"} (285mm)	
Overall Depth (Including grille)	4 15/16" (125mm)	4 ^{15/16} " (125mm)	6 ^{5/16} " (160mm)	6 ^{5/16"} (160mm)	4 ^{15/16} " (125mm)	6 ^{5/16} " (160mm)	
Cut Out Diameter	9 ^{3/4} " (247mm)	9 ^{3/4"} (247mm)	9 ^{3/4"} (247mm)	9 ^{3/4} " (247mm)	9 ^{3/4} " (247mm)	9 ^{3/4"} (247mm)	
Mounting Depth	4 ^{3/4} " (121mm)	4 ^{3/4"} (121mm)	6 ^{1/8"} (156mm)	6 ^{1/8"} (156mm)	4 ^{3/4} " (121mm)	6 ^{1/8} "(156mm)	
Fixing Type	3 Position Tri-Grip® Dog Leg Fixings						
Construction Material	Mineral Filled ABS Plastic (UL V0 Fire Retardent, RoHS2 Compliant)						
Pre-Construction Bracket	CB8 (Green)						
Weight	6lb (2.72kg)	6lb 2oz (2.8kg)	7lb 8oz (3.42kg)	8lb (3.64kg)	6lb 10oz (3kg)	7lb (3.2kg)	



		6.5" Full Range Speaker	6.5" Special Application Speakers			
Good		Better	Best	T2 Stereo	FX Surrounds	
	CT165	CT265	CT265-IDC	CT165-T2	CT265-FX	
6.5" In-Ceiling speakers						
Frequency Response	60Hz - 25kHz	60Hz - 30kHz	60Hz - 30kHz	60Hz - 25kHz	60Hz - 30kHz	
Impedance	6 ohms	6 ohms	6 ohms	6+6 ohms	6 ohms	
Sensitivity (1W@1m)	88.5dB	88.5dB	88.5dB	88.5dB	88.5dB	
Maximum SPL	107.4dBA	108dBA	108dBA	107.9dBA	108dBA	
Power Handling (RMS)	65W	75W	85W	65W	85W	
Recommended Amp Requirements	20 - 65W	20 - 75W	20 - 85W	20 - 65 W	20 - 85W	
Drive Unit Complement	2-Way	2-Way	3-Way	2-Way	2-Way	
	6.5" MMP®II cone bass driver 1" C-CAM® pivoting, gold dome tweeter	6.5" C-CAM® cone bass driver 1" C-CAM® pivoting, gold dome tweeter	6.5" C-CAM® cone bass driver, pivoting IDC module housing: 4" C-CAM® RST® inverted mid range driver 1" C-CAM® gold dome tweeter	6.5" MMP®II cone bass driver 2 x 1"C-CAM® pivoting gold dome tweeters	6.5" C-CAM® cone bass driver 2 x 1" C-CAM® fixed angle gold dome tweeters	
Adjustment Controls	HF Level Switch (+3dB/ 0dB/ -3dB)	HF Level Switch (+3dB/ 0dB/ -3dB) Boundary Compensation Switch		-	HF Level Switch (+3dB/ 0dB/ -3dB) Bi pole/ Di pole Switch	
Overall Diameter (Including grille)	9 ^{13/16"} (250mm)	9 ^{13/16"} (250mm)	9 ^{13/16"} (250mm)	9 ^{13/16"} (250mm)	9 ^{13/16"} (250mm)	
Overall Depth (Including grille)	4 ^{5/8} ′ (118mm)	4 ^{5/8"} (118mm)	6" (153mm)	4 ^{5/8} " (118mm)	6" (153mm)	
Cut Out Diameter	8 ^{1/4"} (211mm)	8 ^{1/4"} (211mm)	8 ^{1/4"} (211mm)	8 ^{1/4"} (211mm)	8 ^{1/4"} (211mm)	
Mounting Depth	4 ^{1/2"} (114mm)	4 ^{1/2"} (114mm)	5 ^{7/8"} (149mm)	4 ^{1/2"} (114mm)	5 ^{7/8"} (149mm)	
Fixing Type	3 Position Tri-Grip® Dog Leg Fixings					
Construction Material	Mineral Filled ABS Plastic (UL V0 Fire Retardent, RoHS2 Compliant)					
Pre-Construction Bracket	CB6 (Purple)					
Weight	4lb 4oz (1.92kg)	4lb 8oz (2.04kg)	6lb 10oz (2.54kg)	4lb 10oz (2.08kg)	4lb 10oz (2.08kg)	



	8″ Full Range Speakers				6.5″ Full Range Speakers		
	Good	Better	Best	Flagship	Good	Better	
8" and 6.5" In-Wall speakers	WT180	WT280	WT280-IDC	WT380-IDC	WT165	WT265	
Frequency Response	50Hz - 25kHz	45Hz - 30kHz	45Hz - 30kHz	45Hz - 30kHz	60Hz - 25kHz	55Hz -30kHz	
Impedance	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	
Sensitivity (1W@1m)	90dB	90dB	90dB	90dB	88.5dB	88.5dB	
Maximum SPL	111.6dBA	111.6dBA	111.6dBA	112dBA	107.4dBA	107.4dBA	
Power Handling (RMS)	120 W	120 W	150 W	120W	65 W	65 W	
Recommended Amp Requirements	30 - 120W	30 - 120W	40 - 150W	30 - 120W	20 - 65W	20 - 65W	
Drive Unit Complement	2-Way	2-Way	3-Way	3-Way	2-Way	2-Way	
	8" MMP®II cone bass driver	8" C-CAM® cone bass driver	8" C-CAM® cone bass driver, pivoting IDC module housing:	8" C-CAM® cone bass driver featuring RST® pivoting IDC module housing:	6.5" MMP®II cone bass driver	6.5" C-CAM® cone bass driver	
	1" C-CAM® pivoting gold dome tweeter	1"C-CAM® pivoting gold dome tweeter	4" C-CAM® RST® inverted mid range driver	4"C-CAM® RST® inverted mid range driver	1" C-CAM® pivoting gold dome tweeter	1" C-CAM® pivoting gold dome tweeter	
			1" C-CAM® gold dome tweeter	1"C-CAM® gold dome tweeter			
Adjustment Controls	HF Level Switch (+3dB/ 0dB/ -3dB)		ch (+3dB/ 0dB/ -3dB) ompensation Switch	HF Level Switch (+3dB/ 0dB/ -3dB) MF Level Switch (+3dB/ 0dB/ -3dB) Boundary Compensation Switch	HF Level Switch (+3dB/ 0dB/ -3dB)	HF Level Switch (+3dB/ 0dB/ -3dB) Boundary Compensation Switch	
Overall Dimensions (Including Grille)	17 ^{3/8"} x 11 ^{5/16"} (441 x 288mm)	17 ^{3/8"} x 11 ^{5/16"} (441 x 288mm)	17 ^{3/8"} x 11 ^{5/16"} (441 x 288mm)	17 ^{3/8"} x 11 ^{5/16"} (441 x 288mm)	14 ^{9/16} " x 9 ^{13/16} " (370 x 250mm)	14 ^{9/16"} x 9 ^{13/16"} (370 x 250mm)	
Overall Depth (Including grille)	3 ^{13/16} " (97.5mm)	3 ^{13/16} " (97.5mm)	3 ^{13/16"} (97.5mm)	4" (101.5mm)	3 ^{1/2"} (89.5mm)	3 ^{1/2"} (89.5mm)	
Cut Out Dimensions	15 ^{1/4} " x 9 ^{3/16} " (387 x 234mm)	15 ^{1/4} " x 9 ^{3/16} " (387 x 234mm)	15 ^{1/4} " x 9 ^{3/16} " (387 x 234mm)	15 ^{1/4"} x 9 ^{3/16"} (387 x 234mm)	13 ^{1/16"} x 8 ^{3/8"} (332 x 213mm)	13 ^{1/16"} x 8 ^{3/8"} (332 x 213mm)	
Mounting Depth	3 ^{11/16} " (93mm)	3 ^{11/16} " (93mm)	3 ^{11/16} " (93mm)	3 ^{13/16} " (97.5mm)	3 ^{3/8"} (85.5mm)	3 ^{3/8"} (85.5mm)	
Fixing Type	6 Position Tri-Grip® Dog Leg Fixings						
Construction Material	Mineral Filled ABS Plastic (UL V0 Fire Retardent, RoHS Compliant)						
Pre-Construction Bracket			WB8 (Green)		,	WB6 (Purple)	
Weight	6lb 12oz (3.08kg)	6lb 14oz (3.1kg)	7lb 14oz (3.6kg)	9lb (4.1kg)	4lb 14oz (2.21kg)	5lb (2.26kg)	

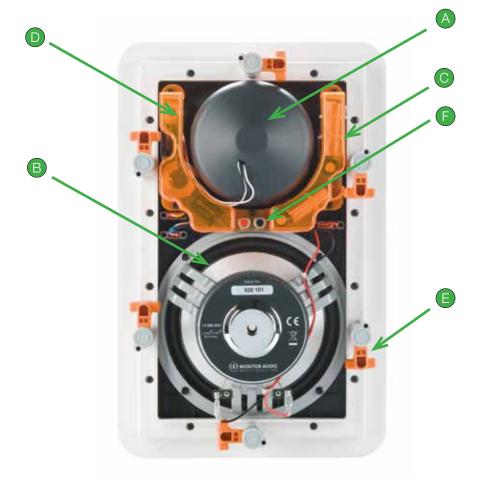






WT380-IDC Front

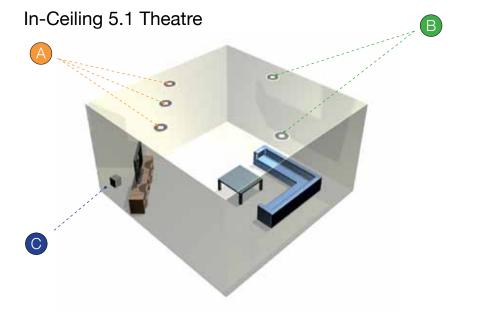
- A Pivoting IDC® Midrange/Tweeter Driver Module
- B High-Frequency Control
- Midrange-Frequency Control
- 8" C-CAM® Woofer with RST® Cone Profile
- Rigid Cast-Aluminum Front Baffle
- Boundary Compensation Control
- G Ultra-powerful Neodymium magnets



WT380-IDC Back

- A IDC® Driver Module Enclosure
- B Rigid Cast-Aluminum Woofer Chassis
- Sophisticated 4th Order Crossover
- Protective Crossover Cover
- Patented Tri-Grip Mounting Clamps
- Gold-plated Cable Terminals

Theatre systems



- A Front Left-Centre-Right main loudspeakers
- B Rear Left-Right surround loudspeakers
- Add your choice of Monitor Audio subwoofer to complete the theatre
- O You can use in-wall front IDC loudspeakers with in-ceiling left-right surrounds if desired

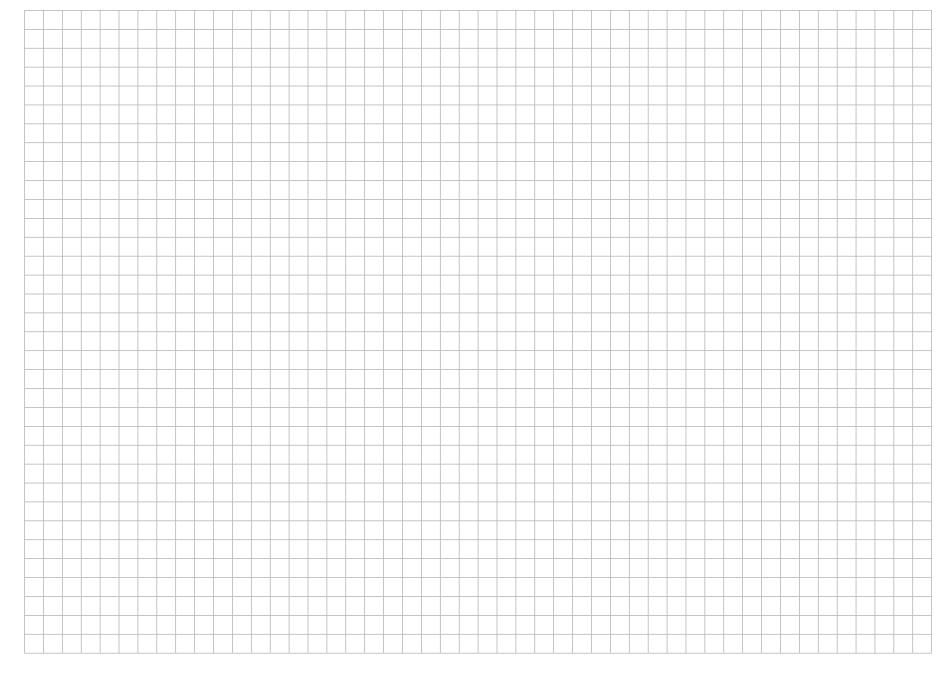
In-Wall 5.1 Theatre
B

Theatre at a glance	Front Left - Center - Right Speakers	Rear Surround Speakers				
8" In-Ceiling Loudspeakers	CT180, CT280, CT280-IDC, CT380-IDC	CT380-FX, or use same as front speaker choice				
6.5" In-Ceiling Loudspeakers	CT165, CT265, CT265-IDC	CT265-FX, or use same as front speaker choice				
8" In-Wall Loudspeakers	WT180, WT280, WT280-IDC, WT380-IDC	CT380-FX, or use same as front speaker choice				
6.5" In-Wall Loudspeakers	WT165, WT265	CT265-FX, or use same as front speaker choice				
Best choice speakers are indicated by bold, coloured type						

6.1 and 7.1 Theatres:

Use three surround loudspeakers for 6.1 theatres and use four surround loudspeakers for 7.1 theatres

Create your theatre





Monitor Audio Ltd 24 Brook Road, Rayleigh Essex, SS6 7XJ England

Tel: + 44 (0)1268 740580 Fax: + 44 (0)1268 740589 Email: info@monitoraudio.co.uk

monitoraudio.com

Designed in the United Kingdom