

**Pioneer**

*seeing and hearing like never before*

ARCHITECTURAL LOUDSPEAKERS



ADVANCING THE SCIENCE OF SOUND.



PIONEER® AND ELITE® ARCHITECTURAL LOUDSPEAKERS.  
IN-WALL AND IN-CEILING SOLUTIONS FOR PEOPLE AS SERIOUS  
ABOUT HOME ENTERTAINMENT AS WE ARE.



It makes sense that a company with a sonic heritage as distinguished as Pioneer's would meet the challenge head on when it comes to perfecting architectural loudspeaker systems.

Pioneer began making speakers—and history—in 1938, with the introduction of the Model A-8 loudspeaker,

establishing the company as an industry leader and setting the stage for innovations to come.

Best-in-class engineering is a founding principle at Pioneer, with engineering milestones and landmark products across the audio and video landscape. Pioneer is the leader in A/V receiver and optical disc technology, pushing the performance of sound and pictures beyond the limits of reality.

It's all in the engineering, and no one knows better than Director of Speaker Engineering Andrew Jones. World-

renowned for his work in sound reproduction, Jones and his team furthered the state of the art with Pioneer's CST driver technology and the groundbreaking TAD and EX Series loudspeakers.

Now, the company that set the standard for sonic excellence introduces a complete range of in-wall, in-ceiling and subwoofer systems—27 models built for nearly every application—with the same commitment to the ultimate home entertainment experience that has long established Pioneer as the first choice of professional installers.

**THE CST ADVANTAGE: NO ORDINARY IN-WALLS.**

Pioneer's Coherent Source Transducer is a driver technology evolved from cutting-edge TAD and EX Series loudspeakers. A time-coherent point source, the CST delivers the most accurate mid and high frequencies over a wide area, while drastically minimizing distortion resulting from time-delay anomalies.



# ELITE EX SERIES SPEAKERS

CST TECHNOLOGY: CINEPHILES AND AUDIOPHILES REJOICE.

Based on the award-winning EX platform, Pioneer introduces a reference-class system that redefines the architectural speaker category. The Elite EX Series is specifically designed to deliver the most faithful reproduction in dedicated home cinema and two-channel systems for critical listeners who revel in pristine performances and ultimate fidelity.



**S-IW691**  
6 1/2" Reference Standard  
In-Wall CST Speaker



**S-IW891**  
7 1/8" Reference Standard  
In-Wall CST Speaker



**S-IW691L**  
6 1/2" Reference Standard In-Wall CST LCR Speaker



**S-IC691A**  
6 1/2" Reference Standard  
In-Ceiling CST Speaker



**S-IC891A**  
7 1/8" Reference Standard  
In-Ceiling CST Speaker



**S-W1EX**  
12" Reference Standard  
Powered Subwoofer

- Coherent Source Transducer (CST) Technology
- Three-Way Design
- 1 3/16" Ceramic Graphite Tweeter
- 5 1/2" Magnesium Midrange
- Laminated MDF Baffle

- Aramid/Carbon Composite Shell Woofer
- Treble Contour Control
- Phase Control Design
- Angled and LCR Configurations for Home Cinema Applications



Integrates with Floor-Standing EX Models



## ELITE SPEAKERS

STUDIO INSPIRED PERFORMANCE.

Equipped with the latest CST driver technology and materials inspired by our reference-class platforms, the Elite line is designed to complete the lossless, full definition home theater experience. A three-way in-wall, along with two angled in-ceiling LCR models, offer even greater flexibility for high performance installations.



**S-IW671-LR**  
6 1/2" In-Wall CST Speaker



**S-IW871-LR**  
8" In-Wall CST Speaker



**S-IW571L**  
5 1/4" In-Wall CST LCR Speaker



**S-LX70-W**  
12" Compact Powered Subwoofer  
with Gloss Black Finish



**S-IC671A**  
6 1/2" In-Ceiling CST LCR Speaker



**S-IC871A**  
8" In-Ceiling CST LCR Speaker

- Coherent Source Transducer (CST) Technology
- 1 1/2" Titanium Tweeter
- Woven Aramid Fiber Woofer

- Cast Aluminum Chassis
- Treble & Bass Contour Controls
- Phase Control Design
- Thermal Protection Circuit

- High Power Handling
- Angled and Three-way LCR Configurations for Home Theater Applications

## PIONEER CST SPEAKERS

PERFORMANCE BEYOND THE PIVOTING TWEETER.

For home theater or multiroom applications that demand performance superior to pivoting driver designs, Pioneer CST speakers offer an affordable experience based upon our acclaimed driver technology.



**S-IW651-LR**  
6 1/2" In-Wall CST Speaker



**S-IW851-LR**  
8" In-Wall CST Speaker



**S-IW551L**  
5 1/4" In-Wall CST LCR Speaker



**S-IC651-LR**  
6 1/2" In-Ceiling  
CST Speaker



**S-IC851-LR**  
8" In-Ceiling  
CST Speaker

- Coherent Source Transducer (CST) Technology
- 1 1/2" Aluminum Tweeter
- Mica-Filled IMPP Woofer
- Treble and Bass Contour Controls
- Phase Control Design
- Thermal Protection Circuit
- 120-Watt Power Handling

## PIONEER SUBWOOFERS

The added authority of three powered subwoofers perfectly complement audio and video systems built around the Pioneer and Pioneer CST series speakers.



**S-W301**  
8" Powered Subwoofer  
(Speaker grille included)



**S-W501**  
10" Powered Subwoofer  
(Speaker grille included)



**S-W601**  
12" Powered Subwoofer  
(Speaker grille included)

## PIONEER CUSTOM SPEAKERS

ENGINEERING PROWESS IN ITS PUREST FORM.

These models offer a range of application solutions that challenge industry convention with benchmark entry-level performance and build quality, expanding the entertainment experience throughout the home.



**S-IW631-LR**  
6 1/2" In-Wall Speaker



**S-IW831-LR**  
8" In-Wall Speaker



**S-IW531L**  
5 1/4" In-Wall LCR Speaker



**S-IC631-LR**  
6 1/2" In-Ceiling Speaker



**S-IC831-LR**  
8" In-Ceiling Speaker



**S-IC621D**  
6 1/2" In-Ceiling Dual  
Voice Coil Speaker



**S-IC821D**  
8" In-Ceiling Dual  
Voice Coil Speaker

- 1" Pivoting Soft Dome Tweeter
- Polypropylene Woofer
- 3-Position Treble Contour Control
- Phase Control Design
- Thermal Protection Circuit
- 100-Watt Power Handling
- In-Wall LCR Fits Within Standard 16" Stud Spacing
- 6 1/2" and 8" Humidity Resistant Single-Point Stereo Options

# CST: COHERENT SOURCE TRANSDUCER. THE CONCENTRIC SOLUTION.



THE CST USES TECHNOLOGY DEVELOPED FROM THE TAD REFERENCE ONE AND EX SERIES SPEAKERS.

The CST employs a tweeter, concentrically mounted at the apex of the bass/midrange driver cone to maintain sonic coherence and seamless linearity. This configuration ensures that sound propagates as if

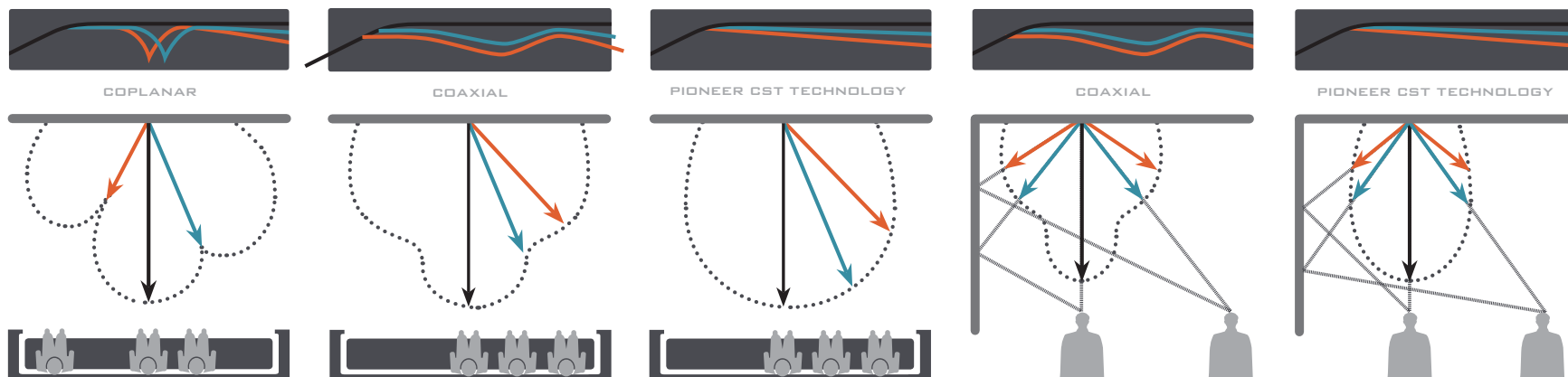
from a single point source, maximizing image stability and dramatically reducing interference.

Directivity is precisely controlled at all frequencies, and direct and reflected sound arrives at the listener

with matched timbre—especially important with in-ceiling speakers, where unwanted reflections compromise clarity and impact.

Listeners enjoy a wider sweet spot than with pivoting coplanar and

coaxial designs, while the CST's controlled dispersion increases flexibility and installation options. Uniform delivery of sound means that even off-axis positions can promise the excitement of a front-row seat.



**COPLANAR: SEPARATE WOOFER AND TWEETER**  
Acceptable sound is only achieved over a relatively small area due to mismatched directivities and driver interference.

**COAXIAL DRIVER: CONCENTRIC, NOT COHERENT**  
Improves upon coplanar designs, with a larger but still limited listening area by eliminating driver interference.

**CST: COHERENT SOURCE TRANSDUCER**  
Matched directivity and elimination of driver interference results in sound as realistic off-axis as on-center.

Model Line		Elite EX Series In-Wall Speakers			Elite EX Series In-Ceiling Speakers		Elite In-Wall Speakers			Elite In-Ceiling Speakers	
Model Number		S-IW691	S-IW891	S-IW691L	S-IC691A	S-IC891A	S-IW671-LR	S-IW871-LR	S-IW571L	S-IC671A	S-IC871A
BASS DRIVER	CONE DIAMETER DIAPHRAGM	6 1/2" (16cm) Aramid/Carbon Composite	7 1/8" (18cm) Aramid/Carbon Composite	6 1/2" (16cm) x2 Aramid/Carbon Composite	6 1/2" (16cm) Aramid/Carbon Composite	7 1/8" (18cm) Aramid/Carbon Composite	6 1/2" (16cm) Aramid Fiber	8" (20cm) Aramid Fiber	5 1/4" (13cm) x 2 Aramid Fiber	6 1/2" (16cm) Aramid Fiber	8" (20cm) Aramid Fiber
	CST DRIVER	MIDRANGE DIAMETER DIAPHRAGM	5 1/2" (14 cm) Magnesium	5 1/2" (14 cm) Magnesium	5 1/2" (14 cm) Magnesium	5 1/2" (14 cm) Magnesium			5 1/2" (14 cm) Magnesium		
		TWEETER DIAMETER DIAPHRAGM	1 3/4" (30mm) Ceramic Graphite	1 3/4" (30mm) Ceramic Graphite	1 3/4" (30mm) Ceramic Graphite	1 3/4" (30mm) Ceramic Graphite	1 3/4" (30mm) Ceramic Graphite	1 1/2" (38mm) Titanium	1 1/2" (38mm) Titanium	1 1/2" (38mm) Titanium	1 1/2" (38mm) Titanium
TREBLE LEVEL		2-position +, 0	2-position +, 0	2-position +, 0	2-position +, 0	2-position +, 0	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -
BASS LEVEL		--	--	--	--	--	2-position +, 0	2-position +, 0	--	2-position +, 0	2-position +, 0
IMPEDANCE		6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms	6 ohms
SENSITIVITY		87dB/2.83V	87dB/2.83V	87dB/2.83V	87dB/2.83V	87dB/2.83V	88dB/2.83V	89dB/2.83V	88dB/2.83V	88dB/2.83V	89dB/2.83V
FREQUENCY RANGE		28-100kHz	26-100kHz	26-100kHz	28-100kHz	26-100kHz	32-40kHz	28-40kHz	33-40kHz	32-40kHz	28-40kHz
CROSSOVER FREQUENCY		420Hz/2.5kHz	420Hz/2.5kHz	420Hz/2.5kHz	480Hz/2.5kHz	480Hz/2kHz	2.2kHz	2kHz	450Hz/2kHz	2.2kHz	2kHz
MAXIMUM POWER		150W	150W	150W	150W	150W	130W	130W	130W	130W	130W
WEIGHT (KG) (LB, OZ)		6.0kg	6.2kg	8.2kg	4.7kg	5.0kg	3.2kg	3.2kg	5.9kg	3.1kg	3.1kg
		13lb, 4 oz	13lb, 11 oz	18lb, 1oz	10lb, 6 oz	11lb	7lb, 4oz	7lb, 4 oz	13lb, 1oz	6lb, 13oz	6lb, 13oz
SIZE (MM)		309 x 491 x 107	309 x 491 x 107	676 x 294 x 102	340 x 225	340 x 225	254 x 354 x 91	254 x 354 x 91	525 x 225 x 85	294 x 134	294 x 135
WxHxD/O.D.xD (INCH)		12 3/16" x 19 1/16" x 4 3/16"	12 3/16" x 19 1/16" x 4 3/16"	26 3/8" x 11 1/16" x 4"	13 3/8" x 8 7/8"	13 3/8" x 8 7/8"	10" x 13 3/16" x 3 3/16"	10" x 13 3/16" x 3 3/16"	20 2/32" x 8 7/32" x 3 1/2"	11 1/16" x 5 9/32"	11 1/16" x 5 9/32"
HOLE SIZE (MM)		273 x 455	273 x 455	640 x 258	305	305	219 x 319	219 x 319	490 x 190	258	258
WxH/O.D. (INCH)		10 3/4" x 17 1/16"	10 3/4" x 17 1/16"	25 5/16" x 10 3/16"	12"	12"	8 5/8" x 12 1/16"	8 5/8" x 12 1/16"	19 9/32" x 7 1/2"	10 3/16"	10 3/16"

Model Line		Pioneer CST In-Wall Speakers			Pioneer CST In-Ceiling Speakers	
Model Number		SIW651-LR	S-IW851-LR	S-IW551L	S-IC651-LR	S-IC851-LR
CST DRIVER	WOOFER DIAMETER DIAPHRAGM	6 1/2" (16cm) Mica-filled IMPP	8" (20cm) Mica-filled IMPP	5 1/4" (13 cm) x 2 Mica-filled IMPP	6 1/2" (16cm) Mica-filled IMPP	8" (20cm) Mica-filled IMPP
	TWEETER DIAMETER DIAPHRAGM	1 1/2" (38mm) Aluminum	1 1/2" (38mm) Aluminum	1 1/2" (38mm) Aluminum	1 1/2" (38mm) Aluminum	1 1/2" (38mm) Aluminum
TREBLE LEVEL		3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -
BASS LEVEL		2-position 0, -	2-position 0, -	--	2-position 0, -	2-position 0, -
IMPEDANCE		8 ohms	8 ohms	6 ohms	8 ohms	8 ohms
SENSITIVITY		86dB/2.83V	87dB/2.83V	87dB/2.83V	86dB/2.83V	87dB/2.83V
FREQUENCY RANGE		32-40kHz	28-40kHz	33-40kHz	32-40kHz	28-40kHz
CROSSOVER FREQUENCY		2kHz	2kHz	400Hz/2kHz	2kHz	2kHz
MAXIMUM POWER		120W	120W	120W	120W	120W
WEIGHT (KG) (LB, OZ)		3.2kg	3.2kg	5.7kg	3.1kg	3.1kg
		7lb, 1 oz	7lb, 1 oz	12lb, 9oz	6lb, 13oz	6lb, 13 oz
SIZE (MM)		254 x 354 x 91	254 x 354 x 91	525 x 225 x 85	294 x 115	294 x 116
WxHxD/O.D.xD (INCH)		10" x 13 3/16" x 3 3/16"	10" x 13 3/16" x 3 3/16"	20 2/32" x 8 7/32" x 3 1/2"	11 1/16" x 4 1/2"	11 1/16" x 4 1/16"
HOLE SIZE (MM)		219 x 319	219 x 319	490 x 190	258	258
WxH/O.D. (INCH)		8 5/8" x 12 1/16"	8 5/8" x 12 1/16"	19 9/32" x 7 1/2"	10 3/16"	10 3/16"

Model Line		Pioneer In-Wall Speakers			Pioneer In-Ceiling Speakers			
Model Number		S-IW631-LR	S-IW831-LR	S-IW531L	S-IC631-LR	S-IC831-LR	S-IC621D	S-IC821D
BASS DRIVER	CONE DIAMETER DIAPHRAGM	6 1/2" (16cm) Polypropylene	8" (20cm) Polypropylene	5 1/4" (13cm) x2 Polypropylene	6 1/2" (16cm) Polypropylene	8" (20cm) Polypropylene	6 1/2" (16cm) Polypropylene	8" (20cm) Polypropylene
	TWEETER	DIAMETER DIAPHRAGM	1" (25mm) Polyester	1" (25mm) Polyester	1" (25mm) Polyester	1" (25mm) Polyester	1" (25mm) x2 PEI	1" (25mm) x2 PEI
TREBLE LEVEL		3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	3-position +, 0, -	2-position +, -	2-position +, -
IMPEDANCE		8 ohms	8 ohms	6 ohms	8 ohms	8 ohms	8+8 ohms	8+8 ohms
SENSITIVITY		86dB/2.83V	87dB/2.83V	87dB/2.83V	86dB/2.83V	87dB/2.83V	89dB/(2.83V+2.83V)	91dB/(2.83V+2.83V)
FREQUENCY RANGE		32-30kHz	28-30kHz	33-30kHz	32-30kHz	28-30kHz	32-25kHz	28-25kHz
CROSSOVER FREQUENCY		2.2kHz	2.2kHz	2.4kHz	2.2kHz	2.4kHz	2.8kHz	2.8kHz
MAXIMUM POWER		100W	100W	100W	100W	100W	50+50W	50+50W
WEIGHT (KG) (LB, OZ)		2.0kg	2.0kg	2.9kg	1.9kg	2.0kg	2.0kg	2.0kg
		4lb, 7 oz	4lb, 7 oz	6lb, 6 oz	4lb, 3 oz	4lb, 7 oz	4lb, 7 oz	4lb, 7 oz
SIZE (MM)		254 x 354 x 87	254 x 354 x 87	207 x 399 x 81	294 x 113	294 x 113	294 x 113	294 x 113
WxHxD/O.D.xD (INCH)		10" x 13 15/16" x 3 7/16"	10" x 13 15/16" x 3 7/16"	8 1/8" x 15 11/16" x 3 3/16"	11 9/16" x 4 7/16"	11 9/16" x 4 7/16"	11 9/16" x 4 7/16"	11 9/16" x 4 7/16"
HOLE SIZE (MM)		219 x 319	219 x 319	171 x 363	258	258	258	258
WxH/O.D. (INCH)		8 5/8" x 12 9/16"	8 5/8" x 12 9/16"	6 3/4" x 14 3/16"	10 3/16"	10 3/16"	10 3/16"	10 3/16"

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