

# SR-28212ai Loudspeaker

## KEY FEATURES

- Dual Professional 12-inch, 1400W Subwoofers with 4-inch Voice Coils
- Dual Professional 8-inch, 500W midrange drivers with 2.5-inch Voice Coils
- Professional 1.75-inch Ultra-Purity™ Compression Driver on PRO Theorem™ Wide Dispersion Axi-symmetric Waveguide
- High-Sensitivity: 102dB LF; 106dB MF; 108dB HF
- Wide Bandwidth from 6" Deep Enclosure: 22Hz-22kHz, -6dB
- Maximum Output: Greater than 131dB
- MF / HF baffle may be inverted to bring HF waveguide to ear level
- Serves as full-range surround speaker and subwoofer(s) simultaneously
- **PRO Pivot Aiming Brackets Included**

## APPLICATIONS

- Surround Sound / Home Theater
- Studio Reference Monitor / Dance Clubs
- Two-Channel Stereo



Available with 40-degree asymmetric wave guide as model "SR-28212ai-40" (shown above). MF/HF Baffle shown inverted for symmetrical layout.



## DESCRIPTION

The SR-28212ai is the highest-performance, most versatile loudspeaker system Pro Audio Technology has ever produced.

The SR-28212ai is a large format multipurpose loudspeaker with built in subwoofer system, designed for ultimate accuracy, resolution and unrestricted dynamics. Though only 6" deep, the SR-28212ai produces surprisingly full-range, visceral sound typically only found in much larger loudspeakers. The SR-28212ai is the first PRO model to utilize our new Theorem™ axi-symmetric waveguide with wide-bandwidth Ultra-Purity™ high-frequency compression driver to provide ideal dispersion of high-frequency energy. The sound is clean, pure and coherent with no trace whatsoever of compression driver harshness.

A first in high-end residential audio, with its built-in subwoofer section, *the SR-28212ai can serve as three speakers simultaneously: wide-bandwidth full-range loudspeaker, surround subwoofer for bass management and main LFE subwoofer to reproduce the low frequency effects channel content* - all in an easy-to-locate 6" deep enclosure. As in commercial and professional audio systems, the SR-28212ai is tri-amplified to maximize the performance of each driver section in the system. With maximum output exceeding 130dB, it is the ideal choice for screen channel or reference applications in small, medium, and large sized rooms where loudspeaker depth limitations might be a concern.

The subjective and measured performance of the SR-28212ai is so good it can be successfully used as a reference monitor in studios and other applications where absolute accuracy and high resolution are required.

## SPECS

<b>APPLICATION:</b>	Tri-amp large format multipurpose loudspeaker with internal subwoofer
<b>LF SECTION:</b>	Dual 12" professional grade woofers with 4" voice coils
<b>MF SECTION:</b>	Dual high-output 8" midrange drivers with 2.5" voice coils and 106dB sensitivity
<b>HF SECTION:</b>	1.75" polymer compression driver
<b>POWER HANDLING:</b>	2800W LF / 1000W MF / 120 W HF
<b>SENSITIVITY:</b>	102dB LF / 106dB MF / 108dB HF
<b>POWER REQUIREMENTS:</b>	Tri-amplification via PRO Amplified Loudspeaker Controller
<b>POWER RECOMMENDATION:</b>	1500W LF / 800W MF / 180W HF
<b>WIRING REQUIREMENTS:</b>	6 conductors
<b>FREQUENCY RANGE:</b>	22Hz – 22kHz, -6dB
<b>MAXIMUM OUTPUT:</b>	131dB
<b>NOMINAL IMPEDANCE:</b>	4-ohms LF / 4-ohms MF / 8-ohms HF
<b>DIMENSIONS:</b>	68"H x 14"W x 6"D
<b>WEIGHT:</b>	117 lbs.

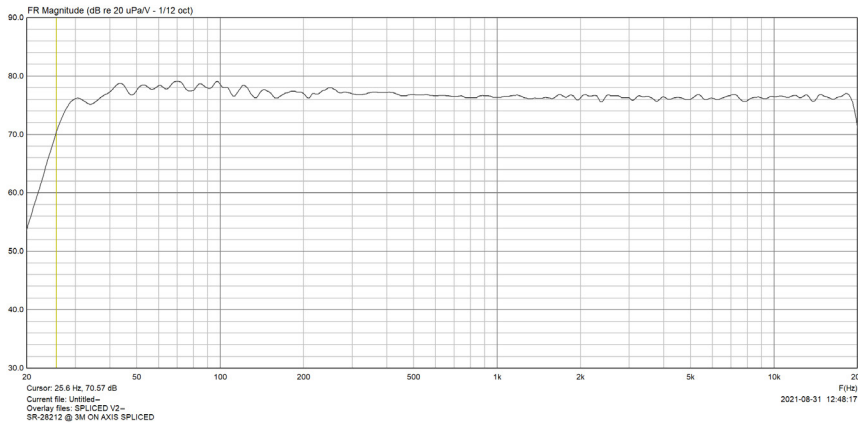
# SR-28212ai Measurements

## ON-AXIS FREQUENCY RESPONSE

The on-axis frequency response tells us the most about a loudspeaker's performance. An ideal response would be a horizontal straight line.

*The SR-28212ai frequency response is remarkably flat and smooth, offering state of the art sonic performance. The response shown is unsmoothed.*

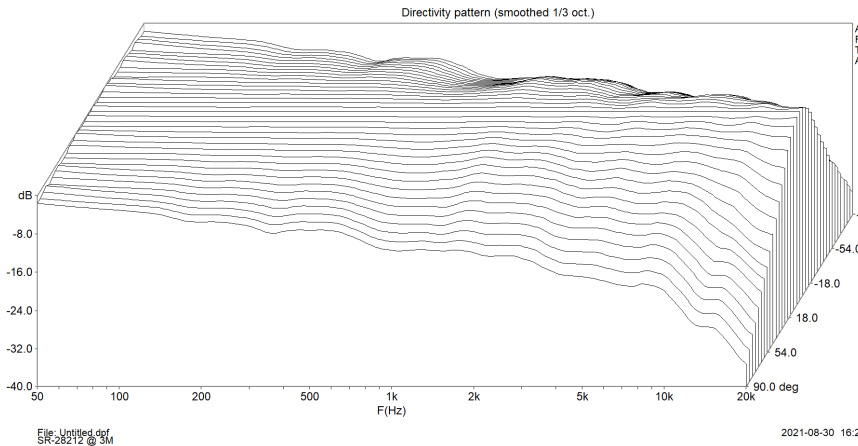
NOTE: The small dips in response shown at 80Hz and 200Hz are caused by reflections in the measurement environment and are not in the loudspeaker actual response.



## 0-90 DEGREE OFF-AXIS WATERFALL PLOT

The "Off-Axis Waterfall Plot" or "Lateral Response Family" depicts the response of the loudspeaker at progressively more off-axis angles normalized to the on axis response. This shows how the sound "changes" when you're not sitting directly on-axis and also give a good view of the coherence of the reflected energy in the room. An ideal response would be smooth gradual fall off of acoustic energy with rising frequency (left to right on the plot) and angle (front to back on the plot).

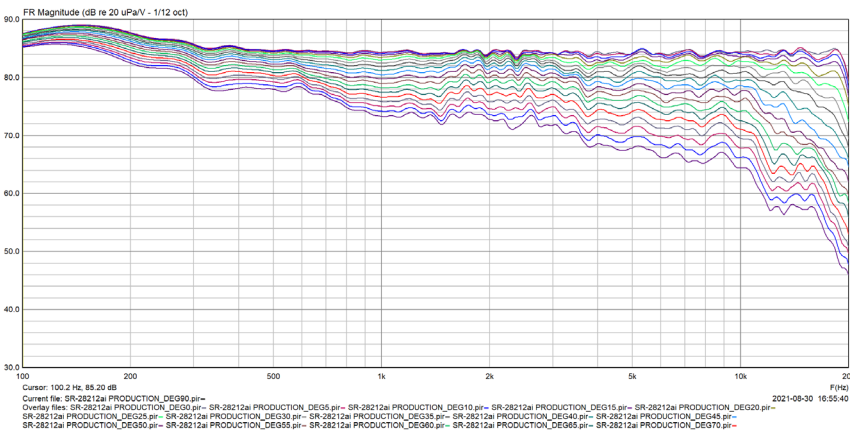
*The SR-28212ai exhibits near text-book-perfect very wide yet controlled dispersion all the way to 90 degrees off axis. The performance of the Theorem™ waveguide is exemplary.*



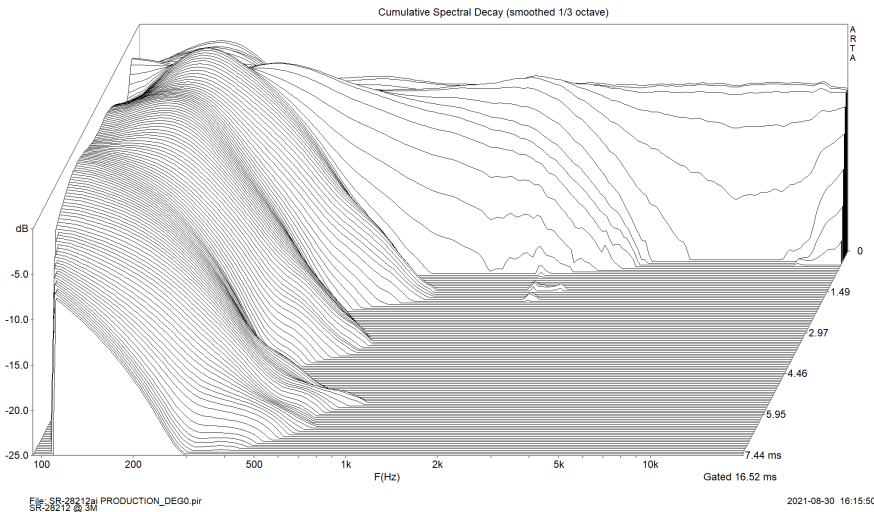
## 0-90 DEGREES OFF-AXIS RESPONSE

The off-axis frequency response is the second most important measurement of a loudspeaker's performance. An ideal response would be a horizontal straight line on-axis with a uniform and gradual fall off at the higher frequencies as you move off axis.

*The SR-28212ai off-axis response is remarkably uniform and smooth as you move farther off-axis, offering state of the art sonic performance with dense, pinpoint stereo imaging.*



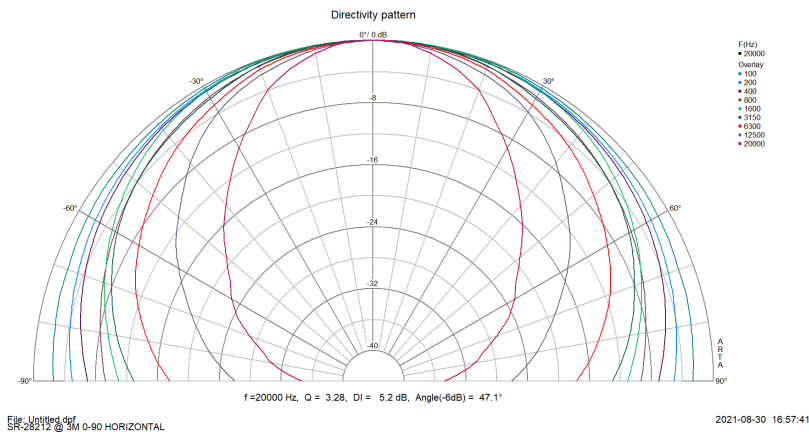
# SR-28212ai Measurements (con't)



## ON-AXIS CUMULATIVE SPECTRAL DECAY

The on-axis Cumulative Spectral Decay or "Waterfall" plot reveals resonances within a system. An ideal response would be a horizontal straight line at time=0 (the back of the plot window).

*The SR-28212ai waterfall is remarkably clean and smooth, showcasing the pure and resonance-free performance of the Ultra-Purity™ compression tweeter.*



## 0-90 POLAR RESPONSE

The Polar Response plots the off-axis dispersion of the speaker at discrete frequencies on a 180-degree polar "map". Amplitude is shown concentric circles with 0dB (reference level) at the outer ring with decreasing amplitude toward the center of the circular plot. 0 degrees is the main speaker axis.

*It can be seen from the plot that the dispersion of the SR-28212ai is more than 100 degrees at 12.5kHz. The sound is extended and "open" up to the very highest audio frequencies.*

## 10-YEAR LIMITED LOUDSPEAKER WARRANTY

Professional Home Cinema, LLC dba "Pro Audio Technology" (PHC) guarantees its loudspeaker products to be free from defective materials and/or workmanship for a period of ten (10) years from the date of manufacture, and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use. This warranty does not extend to any product which has been subject to misuse, neglect, accident, improper installation - including the use of PRO loudspeakers with 3rd-party amplification - or where the date code has been removed or defaced.

For more information please see [www.proaudiotechnology.com](http://www.proaudiotechnology.com).

## CONTACT

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