

Intelligent Sound Reinforcement



INCEPTION

INCEPTION 12DSP

1100 Watt 12" Active Speaker with Theorem™ DSP

INCEPTION 12A

1100 Watt 12" Active Speaker

Key Features

- ▶ Remarkable sound, remarkable power, and remarkable style in a lightweight, durable enclosure
- ▶ 1100 Watts of power using Class D technology
- ▶ 131 dB maximum sound pressure level
- ▶ Custom engineered 1.75" pure titanium compression tweeter and 12" long-throw composite woofer
- ▶ Flat frequency response between 45 Hz and 22 kHz
- ▶ Impact-resistant polymer enclosure
- ▶ Tour-grade 16 gauge steel grille
- ▶ M10 rigging points for suspension installation
- ▶ Dual angle 35mm pole mount with 8 degree tilt option for extended audience reach
- ▶ Treble/bass equalizer controls and adjustable low cut (Inception 12A only)
- ▶ 40-bit Theorem™ DSP: Digital Delay, Smart EQ and Feedback Killer (Inception 12DSP only)
- ▶ Two channel combo jack inputs and XLR output
- ▶ 4th order phase-accurate Linkwitz-Riley crossover

Overview

Phonic's Inception 12A and 12DSP establish a new paradigm for molded powered speakers. The Inception's 1100 Watt amplifier uses Class D technology to produce a shattering 131dB maximum SPL, providing sufficient power for a wide range of venues. The Inception's lightweight design, ergonomic handles, M10 suspension fly points, and dual pole mounts give it exceptional portability. Phonic transducer engineers designed a high BL force factor woofer and a 1.75" pure titanium compression tweeter to achieve the Inception's astonishingly wide sound stage and a vivid, transparent signature sound. The Inception's polymer enclosure and stunning vertical curvatures also improve acoustic accuracy by minimizing distortion and diffraction. Finally, reliability and durability were paramount throughout the Inception's development. The Inception has logged more than 1000 gruelling hours of lab and real-world tests to ensure that it survives even the most difficult applications. With 1100 Watts of ground shaking power, a 2-channel on-board mixer, custom engineered transducers, and great versatility, the Inception 12A and 12DSP simply excel.

Woofers and Tweeters Engineered Right

Unlike many speaker manufacturers that use pre-assembled OEM woofers and tweeters, Inception transducers are designed from scratch – tailor made for the Inception's unique enclosure. Everything from the cone pulp, the curvature of the tweeter's titanium membrane, the Kapton voice coil, to the characteristics of the magnetic field, is uniquely Phonic, uniquely Inception. The Inception's state-of-the-art 12" woofer has a high BL force factor and long-throw extension which produce marvellously deep and defined bass traditionally unattainable in small enclosures. The 1.75" pure titanium compression tweeter and 80 degree conical horn complete the Inception's vivid, transparent sound signature.

Advanced Reliability

With experience and technology comes excellent reliability. But you can never be too careful! As of the launch date, the Inception 12A and 12DSP have logged more than 1000 hours of real world and lab tests, guaranteeing a remarkable level of reliability. From heated ovens, freezing subzero rooms, high humidity chambers, to electrical voltage spikes, the Inception has endured it all.

Advanced Active Electronics

With over 35 years of experience, Phonic has few equals when it comes to advanced electrical engineering. With the Inception 12A and 12DSP, this cumulated expertise is on display. Core features include:

- ▶ Time alignment and phase correction: In listening tests, many notice that the Inception seems more "real" or more "live" than other speakers. This is because Phonic's active electronics ensure that sounds from the Inception hit listeners' ears at the precise moments the original recording intended.
- ▶ High Dampening Factor and Woofer Stabilization: The Inception has a high amplifier dampening factor to ensure that the woofer reaches optimal excursion. Additionally, Phonic engineers added circuitry to manage the speaker's electrical feedback, in effect stabilizing woofer moment. The high amplifier dampening factor and stabilization circuitry give the Inception its spectacular bass depth.
- ▶ Transducer Protection: Active electronics oversee tweeter and woofer excursion, preventing audio artifacts, distortion and speaker damage.
- ▶ 4th order, phase-accurate Linkwitz-Riley crossover.

What is Theorem™ DSP ?

Phonic's 40-bit Theorem™ DSP, featured on the Inception 12DSP serves as a virtual "sound engineer" inside each speaker - working behind the scenes to optimize sound. DSP features include: 4th-Order crossover, driver time alignment, speaker protection, and onboard delay. Proprietary functions include Phonic's Feedback Killer and the Smart Equalization Systems.



Feedback Killer

Offering real-time cognitive processing, the Feedback Defender feature is what separates the Inception 12 DSP from the competition. Theorem™'s Feedback Killer behaves like a computer virus scanner, constantly scanning all frequencies to suppress problems, and functions without causing any delay or distortion to the audio signal.



Phase-Accurate Digital Crossover with Time Alignment

Crossovers can wreak havoc on speaker phase and time alignment. The result is that most speaker systems give you inconsistencies and strange acoustic artifacts that compromise sound quality. The Theorem™ DSP manages the problems of phase and time alignment, delivering sound that is true to the program material.



Speaker Protection

Theorem™ DSP is responsible for protecting your tweeters and woofers. The DSP suppresses speaker over-excursion, eliminates audio artifacts and distortion, and effectively protects speakers from damage.



Delay Function

Theorem™ is the only speaker DSP that features onboard delay for speaker alignment across the sound field. A delay is a necessity in large setups, providing a slight delay to rear speakers can help compensate for the distance between the front of house and rear speakers. Adding the delay onto the speaker allows for more accurate delay times to be assigned to individual speakers rather than applying a single delay to all rear speakers. Users are able to select delay in 'meters' using a simple dial.



Smart Equalization

Sound is not one dimensional. Many companies slap a +3dB EQ boost across a particular frequency range without regard for woofer/tweeter distortion or over-excursion that behaves differently at different frequencies. Phonic's Theorem™ DSP matches EQ boost or cut at each frequency with the precise distortion and excursion characteristics of our speaker drivers. The result is satisfying EQ management for your system without added distortion or risks to your tweeters or drivers.

One-touch feedback killer

Variable digital delay for multi-speaker setups

Smart EQ to enhance audio performance

Dedicated gain controls on channels 1 and 2

Stereo RCA inputs for consumer-grade audio products

Dedicated line output for system expansion

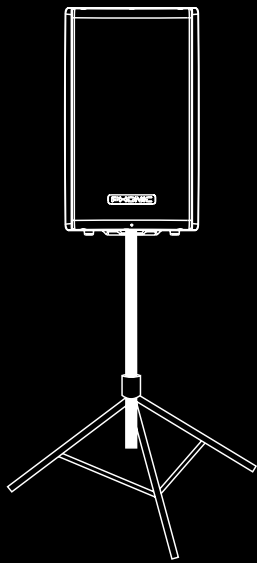
Switchable timed turnoff for energy conservation

3-pin euroblock connector for remote gain control

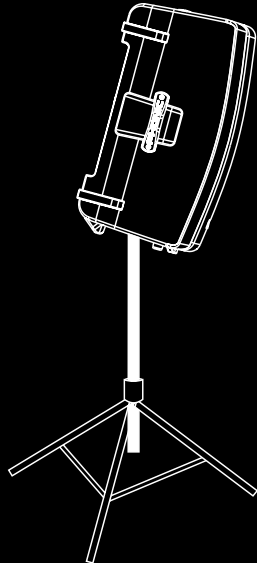
Enhanced thermal protection



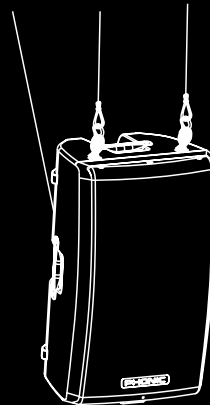
Applications



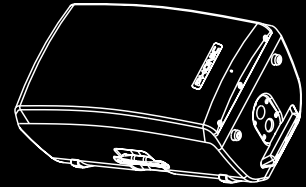
Standard 35mm pole mount



8° downtilt option for extended sound projection



Suspended from integrated M10 installation points



45° floor monitor position

Specifications

	Inception 12A	Inception 12 DSP
Configuration	2-Way Stage Speaker/45 Degree Floor Monitor	
Amplifier Technology	Class D Low Frequency / Class AB High Frequency	
AMP Total Output <1% THD	550 Watt RMS <0.1% THD / 1100 Watt Peak	
LF Output <1% THD	450 Watt RMS <0.1% THD / 900 Watt Peak	
HF Output <1%THD	100 Watt RMS <0.1% THD / 200 Watt Peak	
Low Frequency Cone	12" Paper/Fiber Composite Woofer	
High Frequency Cone	1.75 Pure Titanium Compression Horn	
Frequency Response (-6 dB)	48 Hz - 20 kHz	
Frequency Response (-10 dB)	45 Hz - 22 kHz	
Max SPL	131 dB	
Crossover	Linkwitz-Riley, 24dB, 1.8 kHz	
Nominal Coverage	80 Degree Conical	
Input Connectors	Two Channels: Combo x 2	Two Channels: Combo x 2, RCA x 1
Output Connectors	XLR	
Controls	Power, Gain A, Gain B, EQ High, EQ Low, Low Cut	Power, Gain A, Gain B, EQ, Delay, Feedback Killer, Front LED Mode, Timed Turn off
DSP / EQ	-	THEOREM™ DSP by Phonic: Feedback killer, delay, 6 EQ settings
Signal Indicators	Power, Signal A, Signal B, Thermal, Peak	
Enclosure	Impact resistant polymer	
Grille	Black powder coated 18 gauge steel	
Handles	3 PU Handles	
Suspension / Mounting	Three M10 Suspension Points	
Box Dimensions (HxWxD)	635 x 375 x 372.5 mm (25" x 14.8" x 14.7")	
Unit Weight	18.5 kg (40.8 lbs)	19 kg (41.8 lbs)