



  
MARTIN LOGAN®  
ESL

*Descent i*  
*Depth i*  
*Grotto i*



Descent™ i

Stereo & Home Theater Subwoofer



Descent i  
Bird's Eye Maple

When we began designing subwoofers our goal was to deliver deep, tight, powerful bass that, when combined with ultra-fast electrostatics or conventional cone speakers, would blend seamlessly and extend response to the lowest extremes of the audio frequency spectrum.

Descent i incorporates numerous features and enhancements that simplify system integration while improving performance. The most important of the many elements contributing to Descent i's precision performance is the BalancedForce™ driver configuration which virtually eliminates cabinet resonance, vibration, and bass blur that afflict even the best conventional subwoofers. TriLinear™ design combines three 10-inch drivers which are equivalent in output to a single 18-inch driver, but without the weight and breakup of a large cone.

Each rugged, custom-built aluminum-cone driver is servo-locked to its own sophisticated high-power amplifier (3 x 250 watts RMS / 3 x 700 watts peak). The result is dynamic, unrestrained output to the very lowest frequencies, providing an absolutely faithful replica of the audio input signal.

We've outfitted Descent i with easily accessible top-mounted controls. RCA and XLR LFE inputs, as well as RCA and speaker level two-channel inputs, allowing separate optimization for home-theater and stereo operation within the same system. Descent i's unique 25Hz and 50Hz level controls enable you to compensate for excessive room gain, or, if you prefer, to accentuate the feeling of deep-bass energy by augmenting those frequencies. Descent i is a truly no-compromise subwoofer, regardless of application.



**Frequency Response** – Descent i provides 18 through 120 Hertz of bass response (plus or minus 3 decibels) when connected through the LFE (low frequency effects) input.

**Filters** – Inputs connected via the left/right RCA inputs utilize audiophile quality user-adjustable low-pass filters at 30, 35, 45, 55, 65 or 80 Hz. When running left/right RCA out Descent i utilizes an optional 40 or 70 Hz filter.

**Components** – Three 10-inch (25.4 cm) high-excursion aluminum cone woofers with extended-throw driver assembly are housed within a sealed non-resonant asymmetrical chamber design.

**Amplifiers** – Three 250 watt amps (2100 watt peak system total) provide output with less than 0.24% total harmonic distortion.

**Dimensions** – Descent i measures 21.4 inches high, 20.5 wide, and 19.9 deep (54.4 x 51.9 x 50.5 cm). It weighs in at 105 pounds (47.7 kg).



Depth™ i

Stereo & Home Theater Subwoofer

Depth i  
Wenge



Packing much of Descent i's innovative technology into a cabinet 40% smaller, Depth i brings deep, powerful bass with electrostatic-like detail to any audio system, whether for high-end stereo music listening or multi-channel home theater. With its easily accessible top-mounted controls and separately configurable RCA LFE and RCA/speaker level two-channel inputs, Depth i's performance can be independently optimized for home-theater and stereo operation in the same system.

Controls include level, four phase selections and six discrete crossover settings, in addition to a unique 25Hz level control that compensates for excessive room gain, or, if you prefer, accentuates the feeling of deep-bass energy. Depth i's TriLinear triple 8-inch driver configuration provides output equivalent to that of a single 15-inch driver, but without the drawbacks resulting from

a large cones weight and distortion. An advanced low-distortion switching amplifier (350 watts RMS / 900 watts peak) and sophisticated triple-servo control system extracts the very best possible performance from Depth i's high-resolution 8-inch aluminum-cone drivers, ensuring purity and accuracy during even the most demanding performances.

BalancedForce driver configuration orients the subwoofer's three drivers 120 degrees apart from each other in the cabinet. Their reaction force vectors meet at the center and cancel each other, virtually eliminating cabinet resonance and vibration. Gone are the cabinet-radiation coloration and bass blur that afflict even the best conventional subwoofers, leaving instead a clean, powerful performance down to the lowest frequencies.



**Frequency Response** – Depth i provides 20 through 120 Hertz of bass response (plus or minus 3 decibels) when connected through the LFE (low frequency effects) input.

**Filters** – Inputs connected via the left/right RCA inputs utilize audiophile quality user-adjustable low-pass filters at 30, 35, 45, 55, 65 or 80 Hz. When running left/right RCA out Depth i utilizes an optional 40 or 70 Hz filter.

**Components** – Three 8-inch (20.3 cm) high-excursion aluminum cone woofers with extended-throw driver assembly are housed within a sealed non-resonant asymmetrical chamber design.

**Amplifiers** – A 350 watt amp (900 watt peak) provides output with less than 0.5% total harmonic distortion.

**Dimensions** – Depth i measures 17.9 inches high, 17.1 wide, and 16.5 deep (45.4 x 43.5 x 41.8 cm). It weighs in at 70 pounds (31.8 kg).



Grotto™ i

Stereo & Home Theater Subwoofer



Grotto i  
Black

A powerful 300 watt (900 watt peak) low-distortion, high-reliability amplifier gives Grotto i extremely articulate bass without need of exaggerated amplifier power ratings or transient-blurring ported or passive radiator enclosures common to many modern subwoofers. A proprietary servo system further ensures that output from Grotto i's 10-inch high-resolution aluminum cone woofer is dramatically free of distortion and provides a faithful replica of the audio input signal.

An optimized selection of connections and controls allow connection of both 2-channel stereo music and multi-channel home theater while allowing each connection to have unique crossover and level settings. LFE input effectively uses no low-pass filter, leaving crossover control to the processor. Left/right line level and speaker level inputs integrate six discrete audio-

phile grade low-pass filters between 30–80Hz allowing a different level and crossover point when playing back two channel music.

RCA output allows multiple Grotto i subwoofers to operate in series. A unique 25Hz level control allows adjustment of system response by  $\pm 10$ dB to eliminate low-frequency build-up or suck-out at a room's most problematic bass frequency. ETC™ spikes couple the sub directly to the floor, minimizing lost energy and allowing tight, well defined bass in any system.



Black

**Frequency Response** – Grotto i provides 22 through 120 Hertz of bass response (plus or minus 3 decibels) when connected through the LFE (low frequency effects) input.

**Filters** – Inputs connected via the left/right RCA inputs utilize audiophile quality user-adjustable low-pass filters at 30, 35, 45, 55, 65 or 80 Hz. When running left/right RCA out Grotto i utilizes a 70 Hz filter.

**Components** – A 10-inch (25.4 cm) high-excursion aluminum cone woofer with extended-throw driver assembly is housed within a sealed non-resonant asymmetrical chamber design.

**Amplifiers** – A 300 watt amp (900 watt peak) provides output with less than 0.5% total harmonic distortion.

**Dimensions** – Grotto i measures 18.6 inches high, 15.2 wide, and 13.8 deep (47.3 x 38.6 x 35 cm). It weighs in at 51 pounds (23.2 kg).

**Descent i™**

Frequency Response:	18–120 Hz $\pm$ 3dB. Anechoic through the LFE effects input
Low Pass Filter Frequencies:	30, 35, 45, 55, 65, 80Hz
High Pass Filter Frequencies:	Bypass, 40Hz, 70Hz
Phase:	0°, 90°, 180°, 270°
25Hz & 50Hz Level:	$\pm$ 10dB
Power:	On, Auto, Standby
Components:	3 $\times$ 10" (25.4cm) high excursion, aluminum cone with extended throw driver assembly, sealed non-resonant asymmetrical chamber format
Amplifiers:	3 $\times$ 250W (at $<$ 0.24%THD) 3 $\times$ 700W (peak) 2100W (peak, system total)
Inputs:	Left/Right RCA Line Level, RCA & XLR LFE, Speaker Level
Output:	RCA Sub Out (all inputs summed), RCA Right/Left (with High Pass Filter)
Input Impedance:	20,000 Ohms
Power Draw:	Max: 750 Watts; Idle: 30 Watts; Standby: 15 Watts
Weight:	105 lbs each (47.7 kg)
Size (HxWxD):	21.4" $\times$ 20.5" $\times$ 19.9" (54.4 $\times$ 51.9 $\times$ 50.5 cm)

**Depth i™**

Frequency Response:	20–120 Hz $\pm$ 3dB. Anechoic through the LFE effects input
Low Pass Filter Frequencies:	30, 35, 45, 55, 65, 80Hz
High Pass Filter Frequencies:	Bypass, 40Hz, 70Hz
Phase:	0°, 90°, 180°, 270°
25Hz Level:	$\pm$ 10dB
Power:	On, Auto, Standby
Components:	3 $\times$ 8" (20.3cm) high-excursion, aluminum cone with extended throw driver assembly, sealed non-resonant asymmetrical chamber format
Amplifier:	350W (at $<$ 0.5%THD) 900W (peak)
Inputs:	Left/Right RCA Line Level, RCA LFE, Speaker Level
Output:	RCA Sub Out (all inputs summed), RCA Right/Left (with High Pass Filter)
Input Impedance:	20,000 Ohms
Power Draw:	Max: 300 Watts; Idle: 15 Watts; Standby: 10 Watts
Weight:	70 lbs each (31.8 kg)
Size (HxWxD):	17.9" $\times$ 17.1" $\times$ 16.5" (45.4 $\times$ 43.5 $\times$ 41.8 cm)

**Grotto i™**

Frequency Response:	22–120 Hz $\pm$ 3dB. Anechoic through LFE effects input
Low Pass Filter Frequencies:	30, 35, 45, 55, 65, 80 Hz
High Pass Filter Frequencies:	70Hz
Phase:	0°, 90°, 180°, 270°
25Hz Level:	$\pm$ 10dB
Power:	On, Auto, Standby
Components:	10" (25.4cm) high-excursion, aluminum cone with extended throw driver assembly, sealed non-resonant asymmetrical chamber format
Amplifier:	300W (at $<$ 0.5% THD) 900W (peak)
Inputs:	Left/Right RCA Line Level, RCA LFE, Speaker Level
Output:	RCA Sub Out (all inputs summed), RCA Left/Right (with High Pass Filter)
Input Impedance:	20,000 Ohms
Power Draw:	Max: 250 Watts; Idle: 15 Watts; Standby: 10 Watts
Weight:	51 lbs. each (23.2 kg)
Size (HxWxD):	18.6" $\times$ 15.2" $\times$ 13.8" (47.3 $\times$ 38.6 $\times$ 35 cm)



*The Loudspeaker Technology Company*

©2007 MartinLogan Ltd.  
785.749.0133 Lawrence, Kansas USA  
www.martinlogan.com info@martinlogan.com