

HARMONY

*"Morel's courageous design decisions yield substantial sonic benefits in the Harmony™"*  
*Brent Butterworth, Home Entertainment & Design Magazine, March 2003*



*We've turned our technology inside out. We'll turn your preconceptions about speaker technology upside down. Original components, optimal sound.*

*External Voice Coil (EVC): Morel's voice coil is three times larger than those found in conventional speakers with the same cone diameter. The extremely light and efficient voice coil optimizes the translation from electrodynamic energy to acoustic energy.*

*Hexatech: Hexatech's honeycomb structure reduces air gaps and increases efficiency by up to 20%. The lightweight structure allows for the quick transient response necessary for accurate music reproduction.*

*Acuflex™ coating: Acuflex is a specially engineered material that ensures good damping, reduces distortion levels and unwanted resonances, and provides crystal clear sound.*

*Hybrid™ motor drive magnet system: The combination of neodymium and ferrite magnets is up to four times more powerful than conventional magnets of the same size. With Hybrid, more amplifying power can be converted into sonic energy – even in a small driver.*

*Shallow drivers: As a result of the use of a large coil, Morel is able to deploy especially flat cones. This is significant for reproducing a flat and transparent sound as well as for maximum dispersion of sound, resulting in a remarkably shallower speaker that is essential for audio installations.*

*Shielded products: All of our products are magnetically shielded to eliminate interference with the audio system's wiring, CRT monitors, and home electronics.*

*C.A.R. (Controlled Acoustic Resistance) Filter: Specially designed for applications where drive units are often installed within free-air environments, the filter mimics the effect of the cabinet to restrain the airflow within the drive units and controls the cone movement, thereby improving the acoustical loading and the power handling.*

Flat cone profile provides open clear sound and better dispersion over wider listening area.

Acuflex™ hand treated coating, and large soft dome for wider frequency response and smooth musical tonal sound known as "Morel's Sound".

Powerful neodymium magnet motor and larger hexatech™ aluminum voice coil

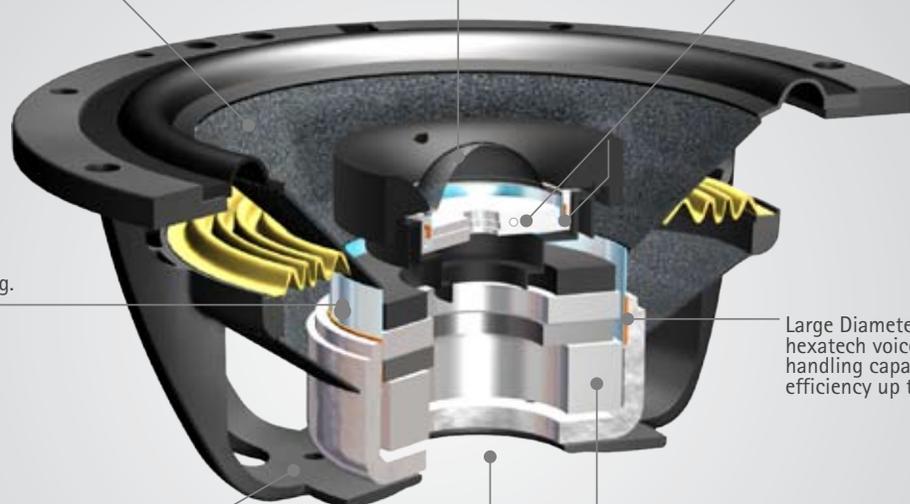
Giant voice coil supports the cone for controlled cone movement minimizing sound distortion, flexing and buckling.

Large Diameter Pure aluminum hexatech voice coil doubles power handling capability and increases efficiency up to 20%.

The external voice coil design places the motor magnets within the voice coil, enabling the creation of a high performance driver with extremely compact dimensions.

Rear vented motor system optimizing cabinet acoustic loading, creating strong air circulation that cools and protects the voice coil at high power.

Powerful compact Hybrid Magnet Motor 1/5 the size of a conventional motor with similar power, means available amp. Power is converted into more sonic energy plus leaves more enclosure space for the bass to build up.



Integra speaker cut section

# HARMONY S & HARMONY H.

## HARMONIZING LOOK AND SOUND

**The look:** Harmony has easily accessible connecting gold-plated binding posts terminals. The entire unit lies on a steel frame panel painted with strong oven-enameled paint. The panel forms the loudspeaker frame. Steel hinges grip and hold the spherical loudspeaker to the panel frame.

The panel frame has elongated, rectangular steel hinges that fasten the loudspeaker to the wall. While these hinges are very strong, installers can also easily remove the entire unit from the wall if necessary\*. The covering of the loudspeaker is a perforated metal grill for optimum acoustic transparency.

**The sound:** Harmony's panel has an opening at its center. Engineered according to an "eyeball" configuration, the loudspeaker enclosure can be swiveled in all directions, enabling tilting the loudspeaker in the preferred direction to maximize acoustic performance.

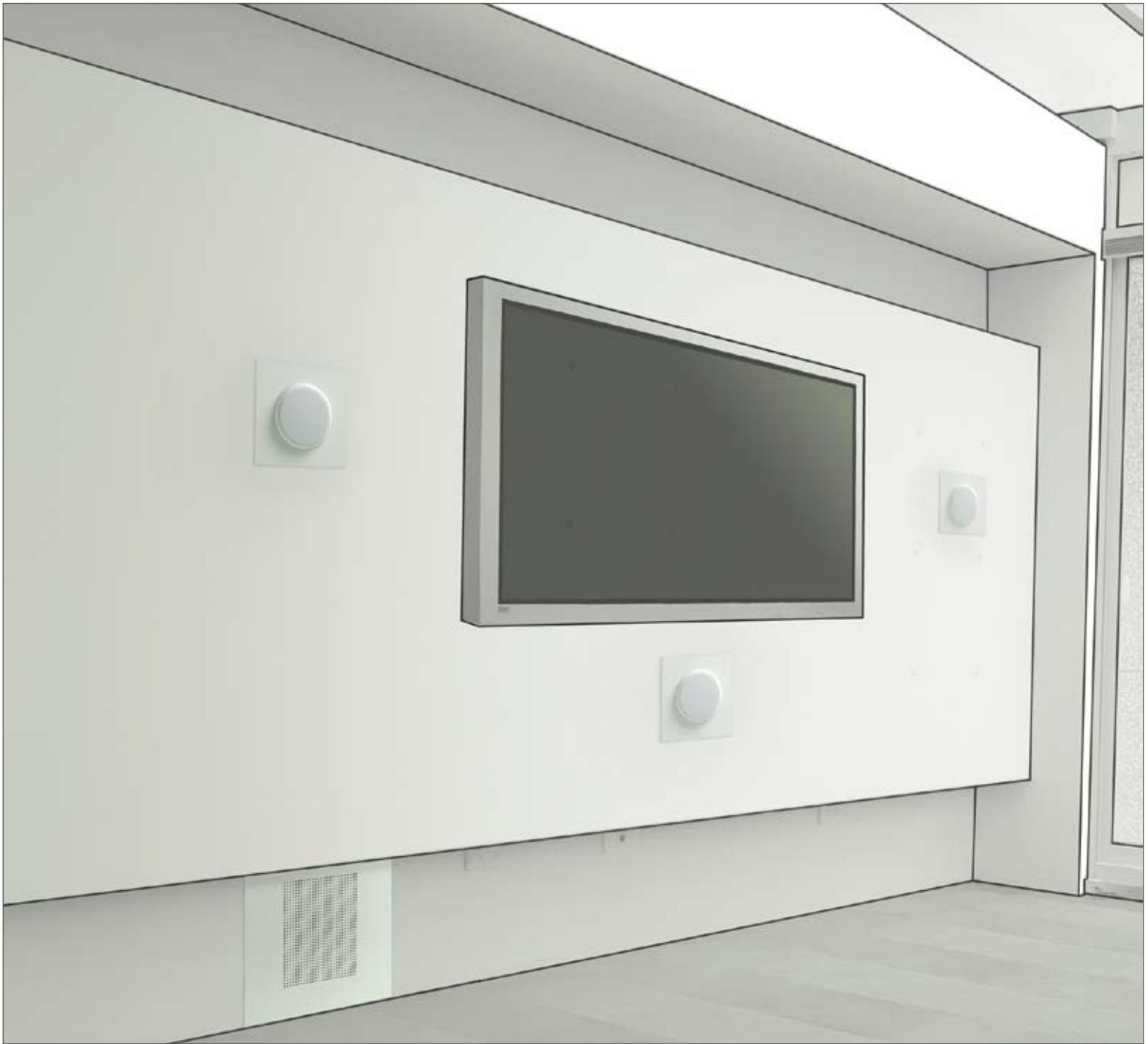
**A model of technological Harmony:** A loudspeaker encased in a steel spherical enclosure made out of a thick, rigid metal, Harmony is an offshoot of Morel's popular Soundspot™ series. Harmony is composed of Morel's INTEGRA loudspeaker, a 4" (100mm) diameter woofer with a Hexatech aluminum coil that is 2 1/4" (54mm), and a 1 1/8" (28mm) diameter tweeter with a soft dome.

The woofer and the tweeter have magnetic systems composed of powerful neodymium magnets that significantly reduce internal volume and leave more space in the enclosure for allowing the bass notes to build up.

Harmony's enclosure is made out of metal sprayed on the inside and outside with strong, oven-enameled paint and filled with acoustic absorption material, absorbing noise and vibrations. The unit contains a crossover with high-quality components and poly film capacitors.

*\* The harmony line has the available components for pre-construction and retro-fit installation.*

SPECIFICATIONS	HARMONY S	HARMONY H
Construction	5 1/4" (130mm) mild steel sphere enclosure	5 1/4" (130mm) mild steel sphere enclosure
Mounting Depth	3 1/2" (90mm)	3 1/2" (90mm)
Finish	Epoxy spray, oven-enameled	Epoxy spray, oven-enameled
Color Availability	Sanded White, Custom orders available upon request	Sanded White, Custom orders available upon request
Drive Units	Woofer: 4"(100mm) with 2 1/8" (54mm) Aluminum Hexatech™ voice coil Neodymium magnet Motor. Tweeter: Acuflex™ coated soft dome, 1 1/8" (28mm) Liquid cooled, Aluminum Hexatech voice coil, Neodymium magnet motor	Woofer: 4" (100mm) with 3/4" (20mm) high temperature voice coil, ferrite magnet motor. Tweeter: Semi-soft polymer 1/2" (12 mm) liquid cooled voice coil, Neodymium magnet motor.
Nominal Impedance	8 Ohm	8 Ohm
Nominal Power handling	100W (200W peak)	80W (120W peak)
Crossover	6 dB + 12dB per octave, 3500 Hz	6dB + 12dB per octave, 8000Hz
Frequency Response	95-22000 Hz	100-22000 Hz
Sensitivity (2.83V 1M)	86dB	89dB



□ 7<sup>3</sup>/<sub>4</sub>" (198mm)  
□ Cut out: 6<sup>1</sup>/<sub>2</sub>" (165mm)

SQ21 / HQ21



∅ 7<sup>3</sup>/<sub>4</sub>" (198mm)  
∅ Cut out: 6<sup>7</sup>/<sub>8</sub>" (175mm)

SD20 / HD20

# HARMONY 10 SUB.

## LOW FREQUENCY IN-WALL SUBWOOFER.

**Striking the right chord:** A low frequency subwoofer meeting the acoustic requirements of today's smart homes, Harmony 10 rounds out the Harmony line by filling the room with the rich, full sound that music connoisseurs look for.

**Smart looks for smart homes:** The ideal solution for finished smart homes, Harmony 10 uses one complete face plate for a smooth, blended look. As a state-of-the-art architectural subwoofer, Harmony 10 is especially suitable for retrofit in-wall installations\*.

**In sync with installers' needs:** The easy to install, Harmony 10 features Morel's new, screw-free Fast-Grip™ installation mechanism that enables installers to quickly and easily fit in, regardless of panel thickness. Installers simply cut a hole according to the provided dimensions, then insert the subwoofer top first and finally pull it all the way down until the Harmony 10 is securely fastened into the wall.

In addition, Harmony 10 's 8 ohm impedance and its MSX 5.6 external passive crossover unit offer greater installation and system design flexibility.

**Technological harmony:** Harmony 10 is a passive subwoofer made from a 1/8" (3mm) mild steel faceplate that is connected to a 10" (254mm) driver using Morel's EVC and Hexatech voice coil technology, along with a double hybrid magnet motor. Harmony 10 employs Morel's unique C.A.R.™ filter to increase power handling (180W RMS) and enable perfect acoustic loading for an infinite baffle acoustic cavity, thereby making it ideal for hollow wall applications.

*\*Pre-construction kit available*



# HARMONY AMP 200.

## HARMONIC DUET.

Aiming to meet the needs of the custom installation market, Morel has designed the Harmony AMP200 amplifier: a flexible high-quality amplifier. This feature-rich amplifier matches the technological excellence of the Harmony 10 in-wall subwoofer. Full range output, 12V trigger input, variable crossover control, and bass boost are some of the key features that make system integration an easier task.

**Going the extra step:** With the addition of the Harmony AMP200 amplifier, Morel takes the extra step in meeting installer needs. The Harmony 10 and AMP200 combination enables installers to achieve optimum performance through this top-quality system.

HARMONY 10 SUBWOOFER SPEC.	
Construction	2.5 mm mild steel face-plate
Dimension W x H x D	Overall: 13" (330mm) x 13 <sup>3</sup> / <sub>4</sub> "(350mm) x 3 <sup>3</sup> / <sub>4</sub> "(95mm) cut out: 12 <sup>1</sup> / <sub>8</sub> " (305mm) x 11 <sup>1</sup> / <sub>4</sub> " (285mm) x 3 <sup>3</sup> / <sub>4</sub> "(95mm)
Weight	8.4 Lbs / 4 Kg
Color Availability	White
Drive Units	10"(250mm) rear Vented w/C.A.R loading filter Hybrid magnet Motor (Neodymium and ferrite) 3" Aluminum Hexatech™ voice coil using EVC™
Nominal Impedence	8 Ohm
Nominal Power handling	180W
Crossover	120 Hz 12dB (MSX 5.6 crossover Included)
Frequency Response	22-2500 Hz
Sensitivity (2.83V 1M)	89dB

HARMONY AMP 200 SPEC.
• 220 WRMS @ 4 ohms
• Variable phase and volume control
• Variable crossover control from 40Hz to 1600Hz
• Variable bass boost at 45Hz ±3dB
• Auto on/off, constant mode or 12V trigger input
• Full range/LFE/Sub-signal output mode
• Composite and 5-way binding post inputs
• Rack mountable option (U1)
• Weight: 15lb (6.8kg)
• W x H x D 17" (436mm) 1 <sup>7</sup> / <sub>8</sub> "(47mm) 11 <sup>1</sup> / <sub>2</sub> "(290mm)



**WE HEAR YOU LOUD AND CLEAR.** IN THIS AGE OF HOME CONVENIENCE, WHEN THE MOVIE EXPERIENCE CAN BE REPRODUCED IN YOUR OWN FAMILY OR LIVING ROOM, YOU WANT MORE THAN JUST A BIG SILVER SCREEN. YOU WANT CLEAN, CRISP SOUND THAT PLACES YOU IN THE MIDDLE OF THE ACTION.

**THE QUEST FOR MORE.** WHAT BEGAN AS A DREAM IN 1975 – TO CREATE THE PERFECT LOUDSPEAKER – HAS TURNED INTO A LIFE'S WORK FOR MOREL'S FOUNDER, MEIR MORDECHAI. INSPIRED BY HIS LOVE OF MUSIC, MEIR'S QUEST TO CREATE THE ULTIMATE SPEAKER HAS RESULTED IN A COMPANY KNOWN WORLDWIDE FOR ITS DEDICATION TO PROVIDE SUPERB SOUND QUALITY. ALONG THE WAY, MOREL HAS BUILT UP AN ENVIABLE REPUTATION FOR TECHNOLOGICAL INNOVATION AND DESIGN EXCELLENCE. MOREL MANUFACTURES A WIDE RANGE OF HIGH QUALITY DRIVERS AND SPEAKERS INCLUDING TWEETERS, MIDRANGES AND WOOFERS FOR THE MID - TO HIGH-END HOME HI-FI, HOME THEATRE AND CAR AUDIO MARKETS.

**AT MOREL, QUALITY IS HANDMADE.** MOREL'S PRODUCTS ARE MADE WITH EXCEPTIONAL CARE. IN FACT, THEY ARE ALL ASSEMBLED BY HAND AND EXTENSIVELY TESTED – UNDERGOING SEVEN DIFFERENT QUALITY TESTS – TO ENSURE THEY MEET THE HIGHEST STANDARDS.



**OCTAVE**



**VARIO**



**SOUNDSPOT**



**HARMONY**



**CAR AUDIO**