

## Paradigm

THE ULTIMATE IN SOUND FOR MUSIC AND HOME THEATER™

### ROCK MONITOR SM

Thank you for choosing award-winning Paradigm® speakers and congratulations. You are about to hear the difference our sonically accurate Rock Monitor™ speakers will make in your outdoor listening experience. These speakers are the product of countless hours of comprehensive research and development. They will stand up exceptionally well to the rigors of Mother Nature and reward you with high-quality sound for many years.

To ensure proper installation please read this manual and follow all instructions. If you have further questions contact your Authorized Paradigm® Dealer or visit the Q&A page on our website at www.paradigm.com

OWNERS MANUAL

OM-140



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#### YOUR NEW SPEAKERS

Paradigm® Rock Monitor™ speakers are designed for outdoor use where they will provide true highperformance sound. Their supremely realistic textured faux-stone finish will blend naturally into the outdoor landscape. Stainless steel grilles and advanced PolyGlass™ mineral-filled enclosures with self-draining fissures are weather, water and UV-resistant, even under adverse weather conditions.

#### Paradigm® Rock Monitor™ speakers offer the following connection options:

**Stereo Input:** Wide dispersion "Left plus Right" channel sound from a <u>single</u> Rock Monitor™ speaker.

**Mono Input:** Very wide dispersion stereo sound from two Rock Monitor™ speakers, one for the left, one for the right.

#### Care of Speakers

A damp, soft cloth or the gentle spray from a garden hose may be used to clean the speakers' exterior.

- Do not use strong or abrasive cleaners on speakers
- Do not spray directly through the grilles into the drive unit
- Do not use a pressure (power) washer to clean speakers—the powerful force of the spray will damage the drivers and the finish
- Do not place speakers in direct line with an underground sprinkler
- Do not place speakers in an area where they will be drenched with pool splash—over time heavy doses of chlorine and other pool chemicals may affect the finish
- Do not allow lawn and garden chemicals to come into contact with speakers
- Where possible, avoid placing speakers in direct sunlight—over time this may cause the finish
  to fade

#### **Security Stake and Cable** (optional use)

The security stake and cable *(included)* may be used to inhibit theft and reduce the chance of unauthorized movement of your speakers. See "Installing the Security Stake and Cable" for more information.

#### **HOW TO AVOID SPEAKER DAMAGE**

**Use an appropriate amplifier.** At high volumes, a very powerful amplifier can overdrive your speakers and damage them. On the other hand, if your amplifier isn't powerful enough, it can produce clipping distortion that can easily damage high-frequency drivers. (See dealer.)

**Don't be fooled by your amplifier's volume control.** It adjusts listening level—it does not indicate power output. If your speakers begin to sound harsh or grating, or if you hear the bass breaking up, turn the volume down immediately or you will damage your speakers! This type of damage constitutes abuse and is not covered by the warranty!

**Tone controls and equalizers** can demand even more power from an amplifier, lowering the point at which it produces clipping distortion. Use them sparingly, if at all, and do not use them when listening at loud levels.

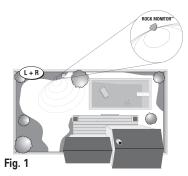
#### LISTENING OUTDOORS

Outdoors there are no walls to contain sound. Background noise is louder and the distance listeners are from the speaker(s) is usually greater. Achieving a reasonable listening level can be more difficult. The tendency is to turn up the volume, however this may disturb neighbors and when turned up too high, can seriously damage the speakers or your amplifier.

The solution? In larger areas we recommend using multiple Rock Monitor<sup>™</sup> speakers. Using more speakers ensures that sound is evenly distributed, allowing for reasonable listening levels at lower volumes. Demand on the amplifier is reduced and neighbors are not disturbed. Think of it this way: When lighting a large outdoor area, using multiple floodlights on a dimmer set to a low setting is far more effective than using a single floodlight with the dimmer set to high.

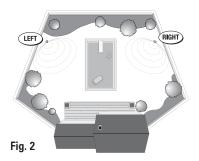
#### SPEAKER PLACEMENT AND CONNECTION (pictorial) POSITIONNEMENT ET RACCORDEMENT DES ENCEINTES (figures)

Sample Layouts of Backyards / Exemples de configurations de cours arrière

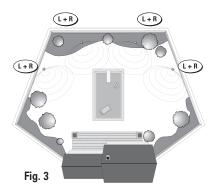


Single Speaker, Wide Dispersion "Left plus Right" Channel Sound Couverture large à une seule enceinte,

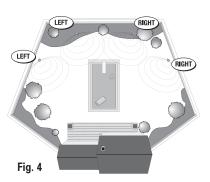
canaux Gauche+Droit



Two Speakers (each wired for Mono) **Very Wide Dispersion Stereo Sound** Couverture stéréophonique très large à deux enceintes (raccordées en mode mono)



Multiple Speakers, Distributed "Left plus Right" Channel Sound Couverture distribuée à enceintes multiples. canaux Gauche+Droit



Multiple Speakers (each wired for Mono) **Ultra-Wide Stereo Coverage** 

Couverture stéréophonique ultra-large à enceintes multiples (raccordées en mode mono)

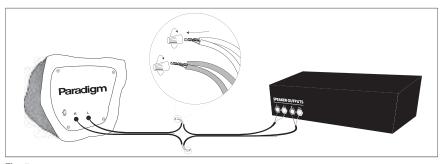
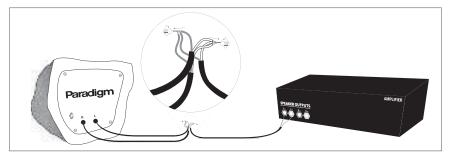


Fig. 5 Stereo Input (Single Speaker) Sortie stéréo (une seule enceinte)



Left Rock speaker only shown / Seule l'enceinted acoustique de gauche apparaît sur l'illustration

Fig. 6 Mono (Wide dispersion stereo sound from <u>two</u> speakers)

Sortie mono (couverture stéréophonique large à <u>deux</u> enceintes)

## Installing Security Stake and Cable (optional) Installation du piquet et du câble de sécurité (optionnelle)

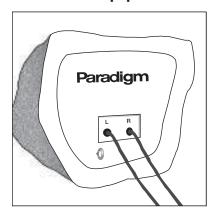


Fig. 7

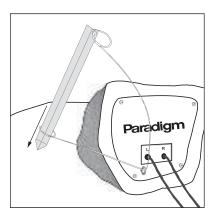


Fig. 9

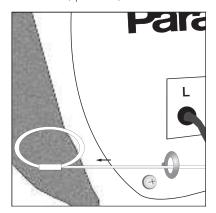


Fig. 8

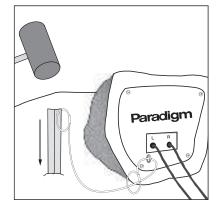


Fig. 10

#### SPEAKER PLACEMENT

Paradigm® Rock Monitor™ speakers can be placed:

- · On the ground
- In a flower bed
- · On a deck or patio
- Around a pool

See "Care of Speakers" section when selecting placement.

NOTE: Rock Monitor™ speakers may be installed on a grade of up to 20° while still allowing for adequate drainage.

#### **Sound Coverage**

At a reasonable listening level, sound from one Rock Monitor™ speaker will cover a 20' (approximately) wide dispersion arc in front of the speaker.

#### **Placement Options**

With their Dual-Directional Soundfield™, Rock Monitor™ speakers provide wider than normal dispersion which allows for a great deal of placement flexibility—something that is especially important outdoors.

#### Single Speaker, Wide Dispersion "Left plus Right" Channel Sound (Fig. 1)

Ideal in small areas less suited to a stereo pair of speakers or where a single speaker is the preferred choice. The speaker is connected to both Left and Right amplifier channels. Place the speaker so that it is "aimed" toward the main listening area.

#### Two Speakers, Very Wide Dispersion Stereo Sound (Fig. 2)

Ideal for stereo coverage in small to medium sized areas. One speaker is connected to the Left amplifier channel and the other to the Right channel (wired for Mono). Place speakers about 12 – 16 feet apart to achieve good stereo imaging throughout your listening area.

#### Multiple Speakers, Distributed "Left plus Right" Channel Sound (Fig. 3)

In larger or unusually shaped areas, multiple speakers (each wired for "Left plus Right" channel sound) may be used to eliminate the sound imbalances that occur with stereo sound when people move around or are seated closer to one speaker than the other.

#### Multiple Speakers, Ultra-Wide Stereo Coverage (Fig. 4)

In larger areas multiple speakers (each wired for Mono) can be used in a 'flanked' (see illustration) stereo placement to provide ultra-wide stereo coverage and broader imaging.

#### **Speaker Impedance with Multiple Speakers**



If you are planning to use multiple speakers, first determine the number of speakers your amplifier is capable of driving safely. Check your amplifier's specifications to determine minimum safe speaker impedance load (in ohms).



The MINIMUM load impedance of one Rock Monitor™ speaker is:

- · 8 ohms per channel when wired for Stereo Input
- 4 ohms per speaker when wired for Mono Input



Each additional speaker you connect will drop nominal impedance by half. We strongly recommend using a Paradigm® VC-150 volume control when connecting more than two speakers. See "Using a Volume Control," or see dealer for more information.

#### **ABOUT SPEAKER CABLE**

PRECAUTION: Before proceeding, read and follow the safety precautions below.



Before running speaker cable through walls, under walkways, patios, etc., check local building code requirements or contact a qualified installer (see dealer)



Before digging, verify location of gas lines and buried cables with local utility companies

Information on running speaker cable through walls, under walkways, patios, etc. is not provided in this manual. If you are not comfortable with this type of installation, contact a qualified installer (see dealer).

#### **Preparing the Cable**

Always use high-quality, moisture-resistant speaker cable (see dealer).

- Measure and mark the path from amplifier to speaker(s) and/or speaker to speaker to determine length of cable required.
- 2. Add 2' to 3' feet extra to allow some play when installing.
- 3. Select correct gauge using the chart on page 7.
- 4. If cable is to run underground it must be rated for direct burial and/or enclosed in PVC pipe to prevent deterioration over time. Contact a qualified installer before commencing installation in this case (see dealer).
- 5. Cut cable to required length.
- 6. Using wire strippers, strip the outer casing of the cable back about 2" at either end.
- 7. Strip inner insulation on both wires back about 1/2" at either end.

... you are now ready to evaluate your speaker placement.

#### ABOUT SPEAKER CABLE (cont'd)

The following chart identifies the minimum gauge requirements for various cable lengths:

MINIMUM GAUGE REQUIREMENTS		
LENGTH	DIAMETER	GAUGE
Under 4.5 m (15 feet)	1.3 mm (0.05 in)	16 awg
Under 9 m (30 feet)	1.6 mm (0.06 in)	14 awg
Over 9 m (30 feet)	2.0 mm (0.08 in)	12 awg

#### **CONNECTING THE SPEAKERS**



Turn your receiver/amplifier OFF before connecting the speakers. This will avoid damage which could result from accidental shorting of speaker cables.

#### FIRST ... TEST your speaker placement

<u>Perform a temporary connection (see "Connecting") to test your speaker placement as follows:</u>

**Volume:** Walk around the area and ensure that sound is coming from each speaker, and that it is balanced throughout the listening area. If using a Volume Control(s) ensure that it is operating.

Single Speaker, Wide Dispersion "Left plus Right" Channel Sound (Fig. 1): When sitting in the main listening area, sound should be spacious and clear.

**Multiple Speakers, Distributed "Left plus Right" Channel Sound** (Fig. 3): Walk around your entire area. Adjust position of speakers for the most uniform sound coverage possible.

Two Speakers, Very Wide Dispersion Stereo Sound (Fig. 2) and Multiple Speakers, Ultra-Wide Stereo Coverage (Fig. 4): When sitting in the main listening area, sound should be spacious and clear. Fine-tune placement to achieve optimal imaging. This may involve moving speakers a small amount in one direction or the other, or turning speakers slightly to point toward the listening area.

If a speaker is not working correctly, refer to the "Troubleshooting Guide" at the end of this manual, otherwise finalize connections.

#### Connecting

**IMPORTANT NOTE:** Connect wires with wire nuts (not included) following wire nut manufacturer's instructions. Fill nuts with waterproof silicone sealant (not included) to prevent deterioration over time — do this only after testing speaker placement. (See dealer for more information.)

#### **Stereo Input** (Single Speaker) (Fig. 5)

Connect one speaker channel at a time to your receiver/amplifier ...

Connect the Right red (+) amplifier terminal to the Right red (+) input wire and the Right black (-) amplifier terminal to the Right black (-) input wire. Twist wires together, then cap with wire nut. Connect the Left red (+) amplifier terminal to the Left red (+) input wire and the Left black (-) amplifier terminal to the Left black (-) input wire. Twist wires together, then cap with wire nut. Fill wire nuts with silicone.

#### Mono Input (Wide dispersion stereo sound from two speakers) (Fig. 6)

Connect one speaker at a time to the left and right channels of your receiver/amplifier ...

Connect the red (+) amplifier terminal to both the Right red (+) and the Left red (+) input wire. Twist wires together, then cap with wire nut using a twisting motion. Connect the black (-) amplifier terminal to both the Right black (-) and the Left Black (-) input wire. Twist wires together, then cap with wire nut using a twisting motion. Fill wire nuts with silicone.

Speaker cable can now be buried, where burying is required.

#### **Using a Volume Control**

Using a Paradigm® VC-150 Volume Control (sold separately) eliminates the need for additional amplifiers, and compensates for the impedance drop that results when connecting multiple speakers. You can also use the VC-150 on individual speakers or groups of speakers, to control volume at various points on your property — further promoting even and spacious coverage. Follow the directions included with the VC-150 Volume Control.



When used outdoors, the Paradigm® VC-150 must be enclosed in a weather-proof box designed for use with electrical switches (see dealer).

#### **INSTALLING THE SECURITY STAKE AND CABLE** (optional)

- 1. Without moving the speaker too much out of position, turn it so that the bottom is facing you. (Fig. 7)
- Feed the looped end of the security cable (the end without spike attached) through the factory-installed eyelet, until you are able to feed spike through (see next step). (Fig. 8)
- 3. Feed the spike (with attached cable) through the loop. Once spike and most of the cable are through, pull gently on cable until it is snug around the eyelet. (Fig. 9)
- 4. Using a rubber mallet, drive the security stake into the ground close to where the speaker will sit. It must be completely under the surface of the ground. Give cable a gentle tug to make sure stake is firmly planted in the ground. (Fig. 10)

#### TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
No Sound	Make sure receiver, preamp or amplifier is plugged in and turned on. Check power outlet at the wall is working. Are headphones plugged in, or is system on Mute? Re-check all connections.
No Sound from One or More Speakers	Check your balance control or VC-150 Volume Control (if using). Check that all power cords are properly plugged in and functioning. Swap a non-working speaker with one that works to determine if the problem is with the speaker or something else (i.e. wiring, amplifier).
Lack of Bass or Dislocated Image (Stereo)	One or more speakers may be connected out of phase (their polarity is reversed).  Re-check to ensure that each speaker's cable is connected with correct polarity: red (+) to red (+) and black (-) to black (-).

#### LIMITED WARRANTY

Paradigm® Rock Monitor™ speakers are warranted to be and remain free of manufacturing and/or material defects for a period of **five (5)** years from the date of original purchase. Within the time period specified, repair, replacement or adjustment of parts for manufacturing and/or material defects will be free of charge to the original owner.

#### Thermal or mechanical abuse/misuse is not covered under warranty.

#### Limitations:

- Warranty begins on date of original retail purchase from an Authorized Paradigm<sup>®</sup> Dealer only.
   It is not transferable
- Warranty applies to product in normal residential use only. If product is subjected to any of the conditions outlined in the next section, warranty is void
- Warranty does not apply if the product is used in professional or commercial applications
- Warranty also excludes normal cosmetic deterioration caused by environmental conditions.

#### Warranty is Void if:

- The product has been abused (intentionally or accidentally)
- The product has been used in conjunction with unsuitable or faulty equipment
- The product has been subjected to damaging signals, derangement in transport, mechanical damage or any abnormal conditions
- The product (including cabinet) has been tampered with or damaged by an unauthorized service facility
- The serial number has been removed or defaced

#### Owner Responsibilities:

- Provide normal/reasonable operating care and maintenance
- Provide or pay for transportation charges for product to service facility
- Provide proof of purchase (your sales receipt given at time of purchase from your Authorized Paradigm® Dealer must be retained for proof-of-purchase date)

Should servicing be required, contact your nearest Authorized Paradigm® Dealer, Paradigm Electronics Inc. or Import Distributor (outside the U.S. and Canada) to arrange, bring in or ship prepaid, any defective unit. Visit our website, www.paradigm.com for more information.

Paradigm Electronics Inc. reserves the right to improve the design of any product without assuming any obligation to modify any product previously manufactured.

This warranty is in lieu of all other warranties expressed or implied, of merchantability, fitness for any particular purpose and may not be extended or enlarged by anyone. In no event shall Paradigm Electronics Inc., their agents or representatives be responsible for any incidental or consequential damages. Some jurisdictions do not allow limitation of incidental or consequential damages, so this exclusion may not apply to you.

Retain this manual and your sales receipt for proof of warranty term and proof of purchase.

Si une réparation est nécessaire, contacter le revendeur autorisé Paradigm®, Paradigm Electronics Inc. ou le distributeur à l'étranger (à l'extérieur du Canada et des États-Unis) pour planifier l'envoi prépayé de l'enceinte défectueuse. Consulter le site Web **www.paradigm.com** pour plus d'information.

Paradigm Electronics Inc. se réserve le droit d'améliorer ou de modifier ses produits en tout temps sans responsabilité ou engagement envers les produits existants.

La présente garantie de qualité marchande tient en lieu et place de toute autre garantie explicite ou implicite et ne peut être modifiée, élargie ou étendue à d'autres obligations par quiconque. Paradigm Electronics Inc. et ses représentants ou agents ne peuvent pas être tenus responsables de dommages découlant de l'utilisation de ces produits. Là où une réglementation spécifique interdit une telle limitation de la responsabilité, cette exclusion ne s'applique pas.

Conserver le présent manuel et le reçu comme preuves d'achat jusqu'au terme de la garantie.

#### **NOTES**



#### RECYCLING AND REUSE GUIDELINES (Europe)

In accordance with the European Union WEEE (Waste Electrical and Electronic Equipment) directive effective August 13, 2005, we would like to notify you that our speakers may contain regulated materials which, upon disposal, require special reuse and recycling processing. For this reason Paradigm Electronics Inc. (the manufacturer of Paradigm speakers and Anthem electronic products) has arranged with its distributors in European Union member nations to collect and recycle this product at no cost to you. To find your local distributor please contact the dealer from whom you purchased this product or go to our website at www.paradigm.com.

Please note that only the product falls under the WEEE directive. When disposing of packaging and other shipping material we encourage you to recycle through the normal channels.

#### DIRECTIVES EUROPEENNES SUR LE RECYCLAGE ET LE TRAITEMENT DES DECHETS

Dans le respect de la directive WEEE (Waste Electrical & Electronic Equipment) mise en place par les institutions Européennes à compter du 13 Août 2005, nous souhaitons vous informer que nos enceintes peut contenir des matières devant faire l'objet d'une procédure de recyclage ou de traitement approprié des déchets. Dans cette optique, Paradigm Electronics Inc (fabricant des enceintes Paradigm et des électroniques Anthem) avec ses Distributeurs agréés dans l'Union Européenne, ont mis en place une procédure de collecte et de retraitement gratuite. Pour en savoir davantage sur cette procédure veuillez contacter votre revendeur, ou notre Distributeur dans votre pays (vous en obtiendrez les coordonnées sur simple demande ou en consultant notre site internet www.paradigm.com <a href="https://www.paradigm.com">https://www.paradigm.com</a> \https://www.paradigm.com \.

Notez que seul le produit fini est concerné par cette directive et ses obligations. S'agissant de son emballage et de ses accessoires de transport nous vous recommandons de les recycler selon les procédures mises en place par votre commune ou votre département.



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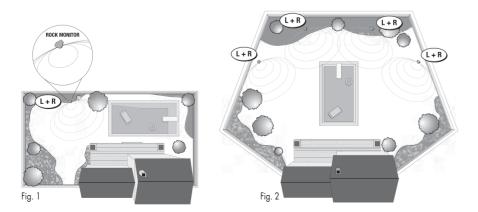


#### ... NOT YOUR GARDEN-VARIETY DESIGN!

These high-performance single-speaker systems provide two channels of L/R sound outdoors. Their Dual-Directional Soundfield™—two tweeters, each offset at a 30° angle—and twin voice coil bass/midrange driver ensure extremely wide dispersion, a particularly important consideration outdoors where there are no walls or ceiling to contain sound.

Rock Monitors are ideal in small outdoor areas less suited to a stereo pair of speakers (Fig. 1) or where a single speaker is preferred. In large, or unusually shaped areas, multiple rock speakers can be used to eliminate sound imbalances that occur with stereo sound as people move around or are seated closer to one speaker than the other (Fig. 2). For additional placement options, see your Dealer or visit our website at www.paradigm.com.

#### **PLACEMENT**



# Ock Monitor™ Series

- "... I was truly blown away by their sound ... they sound better for an outside speaker than many more expensive indoor speakers ... will really blow your hair back ... I doubt there is a better outdoor patio speaker out there."
  - Cory Potts, Secrets of Home Theater and High Fidelity



Rock Monitors	Rock Monitor™ 60-SM	Rock Monitor™ 80-SM
Design	Single speaker system with stereo L/R inputs, 3-driver, 2 x 2-way coaxially mounted high-frequency drivers, weather, water, UV-resistant sealed enclosure, self draining fissures	Single speaker system with stereo L/R inputs, 3-driver, $2 \times 2$ -way coaxially mounted high-frequency drivers, weather, water, UV-resistant sealed enclosure, self draining fissures
Crossovers	Two 2nd-order electro-acoustic at 3.0 kHz	Two 2nd-order electro-acoustic at 2.5 kHz
High-Frequency Drivers	Two 25-mm (1 in) PTD™ domes	Two 25-mm (1 in) PTD™ domes
Bass/Midrange Driver	Dual voice-coil, 165-mm (6-1/2 in) ICP™ cone, die-cast chassis	Dual voice-coil, 190-mm (7-1/2 in) ICP™ cone, die-cast chassis
Low-Frequency Extension*	44 Hz (DIN)	42 Hz (DIN)
Frequency Response: On-Axis 30° Off-Axis	±2 dB from 66 Hz — 20 kHz ±2 dB from 66 Hz — 18 kHz	$\pm 2$ dB from 63 Hz $-$ 20 kHz $\pm 2$ dB from 63 Hz $-$ 18 kHz
Sensitivity — Outdoor	89 dB (groundplane measurement)	90 dB (groundplane measurement)
Suitable Amplifier Power Range	15 – 100 watts Mono; 15 – 55 watts/channel Stereo Input	15 — 120 watts Mono; 15 — 60 watts/channel Stereo Input
Maximum Input Power†	70 watts Mono; 35 watts/channel Stereo Input	80 watts Mono; 40 watts/channel Stereo Input
Impedance	Compatible with 4 ohms Mono; 8 ohms/channel Stereo Input	Compatible with 4 ohms Mono; 8 ohms/channel Stereo Input
Height, Width, Depth	31.0 cm x 28.2 cm x 27.0 cm 12-1/4 in x 11-2/16 in x 10-10/16 in	38.5 cm x 34.0 cm x 33.0 cm 15-2/16 in x 13-6/16 in x 13 in
Weight (unpacked)	5.5 kg / 12.1 lb each	7.7 kg / 17 lb each
Finishes	North Western Dark Granite, Western Sandstone, Fieldstone	North Western Dark Granite, Western Sandstone, Fieldstone



## PROTECT YOUR PURCHASE BY REGISTERING

Register your new Paradigm purchase within 30-days **ONLINE** to secure your warranty and you will automatically be entered into our monthly drawing for **FREE** Paradigm product!

Visit: paradigm.com/register

SEE BACK OF PRODUCT FOR SERIAL NUMBER

IMPORTANT: Please keep your original proof of purchase – a copy of your original receipt is required for all warranty claims. Visit paradigm.com/warranty for more information.



If you have any questions regarding the setup or operation of this Paradigm product, please visit:

paradigm.com/support