

SIMA 1X4 HDMI Distribution Amplifier

Model VS-HD14



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**Please register online at
www.simaproducts.com**

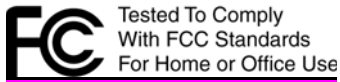
Caution:

**IMPORTANT SAFEGUARDS FOR AUDIO PRODUCTS.
PLEASE READ CAREFULLY THE FOLLOWING IMPORTANT
SAFEGUARDS THAT ARE APPLICABLE TO YOUR EQUIPMENT**

1. Read instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow instructions - Follow all operating and use instructions.
5. Water and Moisture - the appliance should not be used near water - for example: near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool.
6. Ventilation - The appliance should be located so that its location or position does not interfere with proper ventilation. For example: the appliance should not be situated on a bed, sofa, rug or similar surface that may block the ventilation openings.
7. Heat - the appliance should be situated away from heat sources such as radiators, registers, stoves or other heat-producing appliances .
8. Power sources - the appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
9. Grounding or polarization. - Precautions should be taken so that the polarization or grounding means of the appliance is not defeated.
Caution: To prevent electric shock, match the wide blade of this plug to the wide slot, fully insert. Do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.
10. Power cord Protection - Power supply cords should be routed so they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and where they exit from the appliance.
11. Cleaning - Wipe unit with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents or strong detergents.
12. Nonuse periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
13. Object and Liquid entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. Damage requiring service - The appliance should be serviced by qualified personnel when: the power cord has been damaged, objects have fallen or liquids spilled into the appliance, the appliance has been exposed to rain, does not appear to operate normally or exhibits a marked change in performance or the unit has been dropped or the enclosure damaged.
15. Service - The user should not attempt to service the appliance beyond that described in the operating manual. All other servicing should be referred to qualified service personnel.

Notice to Users

The system may cause interference to a TV or radio even when it is operating properly. To determine whether the system is causing the interference, turn it off. If the interference goes away, the system is causing the interference.



NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
- Contact your dealer for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two Conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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INTRODUCTION

Congratulations on your purchase of the 1x4 HDMI distribution amplifier from Sima Products. Sima's HDTV distribution amplifiers are designed to make your A/V equipment more efficient, more creative and more affordable. The 1x4 HDMI distribution amplifier allows distribution to four HDMI displays using one HDMI source. Simply connect your HDMI source to the distribution amplifier input and you are ready to go. The 1x4 HDMI distribution amplifier automatically regenerates the HDMI signal for long cable runs. The VS-HD14 is ideal for any business, educational or home use where multi-HDMI display distribution is required.

FEATURES

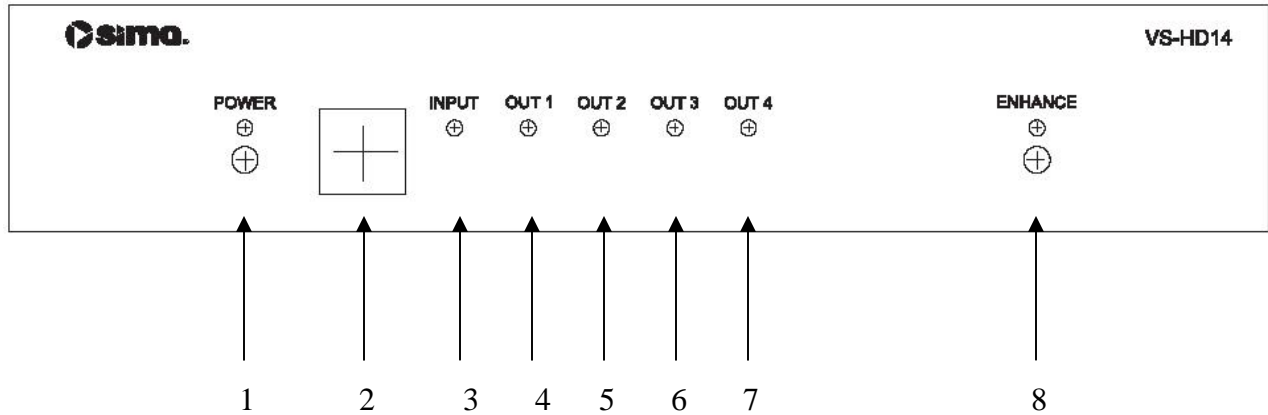
- 4 HDMI outputs
- Signal enhancement for long cable runs.
- S/PDIF digital audio output.
- Plug in and unplug detection with front panel LED indicator lights.
- Multi-unit connection for expanded distribution.
- IR remote control and dip switch addressing.
- IR and front panel button lock out.
- Maintains 480p, 720p, 1080i, and 1080p resolution
- PC Support: VGA, SVGA, XGA, SXGA, and UXGA (1600 x 1200)
- Supports HDCP compliant devices
- HDMI or DVI to HDMI cables are used to connect the inputs and switcher output

Includes:

1x4 HDMI distribution amplifier
120V AC Power Supply
IR Remote Control Model # CR-22 (Battery Included)
This User Manual

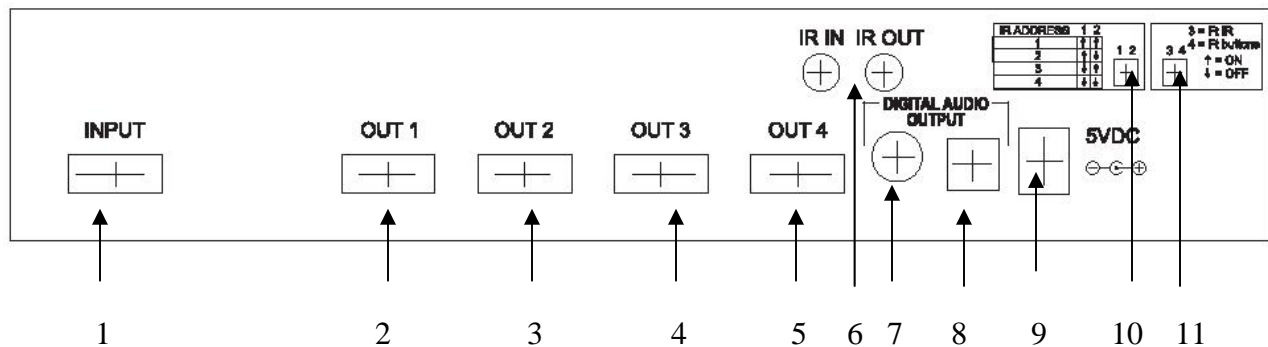
PANEL DESCRIPTIONS

Front Panel



1. Power button and LED indicator
2. IR sensor eye
3. Indicator LED Input
4. Indicator LED Output 1
5. Indicator LED Output 2
6. Indicator LED Output 3
7. Indicator LED Output 4
8. Signal Enhancement button and LED

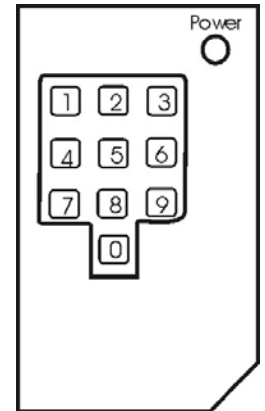
Rear Panel



1. Input
2. Output 1
3. Output 2
4. Output 3
5. Output 4
6. IR In and IR Out jacks
7. Digital audio Coaxial output
8. Digital audio optical output
9. 5V DC power jack
10. IR address dip switches
11. Front panel IR and button lock dip switches

Remote Control

- Power button to toggle device on/off
- 9 digit keypad (1 –2 –3-4 will be used to toggle between multiple units)
- Remote takes a 3v Lithium button battery.
- Replacement battery # CR2025 can be found at electronic retail stores.



Connecting and Operating the VS-HD14

How to Connect the 1x4 HDMI distribution amplifier to your devices

Use the connection diagrams on pages 8 and 9 for reference

1. Plug the 5V DC power supply into the 1x4 HDMI distribution amplifier and connect to AC wall outlet or power strip. The red Power indicator LED on the front panel will light up.
2. Connect the cable from your HDMI source into the HDMI input on the rear panel. The Input indicator LED on the front panel will light up when the input is active.
3. Connect a cable from HDMI output #1 to the input on your monitor. The two devices will communicate to identify HDMI compatibility. When compatibility is confirmed (about 15 seconds) the Output #1 LED indicator will light up.
4. Connect additional monitors/displays to outputs #2-4 as needed.

Note: If the source and monitor cannot confirm HDMI or HDCP compatibility, the VS-HD14 reverts to a default signal of 480p and may not have audio. When this default occurs, turn the monitor off for about 10 seconds and then power up again to reset the connection.

When connecting multiple monitors of mixed HD formats, we recommend connecting an HDMI monitor to output #1. The VS-HD14 assigns priority to output #1. For example, if a DVI monitor is connected to output #1, outputs 2, 3 & 4 may not receive an audio signal, depending on the source device.

Rear Panel dip switch settings

IR Address Dip switches

You can operate multiple VS-HD14 distribution amplifiers via IR remote control using the IR IN and OUT jacks located on the rear panel. The units can be connected by using a 1/8" male to male stereo cord. Connect the cord from the IR OUT jack of unit # 1 to the IR IN jack of Unit #2. To add a third unit, connect the IR OUT jack of unit #2 to the IR IN jack of unit #3 and so on up to 4 units.

Once connected, the units will respond to IR commands from the remote control according to the IR address set for each unit. All units set to address #1 will respond to commands sent to address #1 from the remote. To customize commands for individual units, press the unit 3 after the command. For example, to power off unit #2, press the Power button followed by the #2.

You can connect up to 4 VS-HD14 units together and control them using the remote control. To do so, you must designate the IR address for each unit. The IR address factory default (as shown in Fig. 1 below) is set to location 1. All units with an IR address of 1 will respond to the commands for Unit 1 from the remote control. Set IR addresses for other units by aligning the dip switches as shown on the chart in Fig.1.

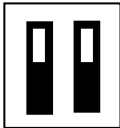
IR addresses	1	2	
1	↑	↑	
2	↑	↓	
3	↓	↑	
4	↓	↓	

Fig. 1

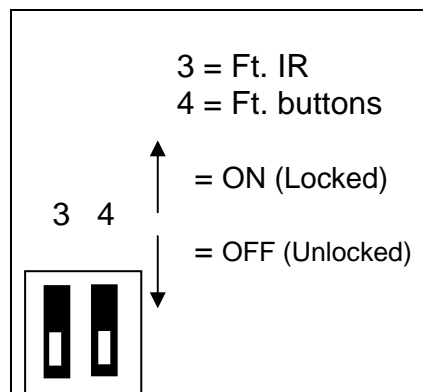


Fig. 2

Front panel locks

To eliminate changing distribution amplifier settings by using the front panel, you can lock the front panel controls by setting the Front Panel Lock dip switches located on the rear panel. Use switch #3 to lock the front IR window. Use switch #4 to lock the front panel buttons. The front panel lock factory default is for both locks to be turned OFF as shown in Fig. 2 above.

Note: for dip switch settings to take effect, you must cycle power on the VS-HD14. Unplug the AC adapter from the outlet. Wait 5 seconds and plug it in again. Press the Power button to turn on.

Trouble Shooting

Problem	Solution
Picture blanks for 5 to 15 seconds when a 2 nd monitor is attached to the VS-HD14	This is normal due to the HDMI and HDCP protocols

1080p Video

1080p (1080 lines of resolution, progressive scan mode) is a new high-resolution video mode used on some of the newest DVD players and TVs. Because of the high signal bandwidth, you will need to use the highest quality cables to obtain a solid picture. It is recommended that these cables are HDMI certified. If you have picture problems in 1080p mode you can either reduce the picture mode to 1080i (interlaced) or 720p or purchase higher quality cables that are designed to support 1080p video.

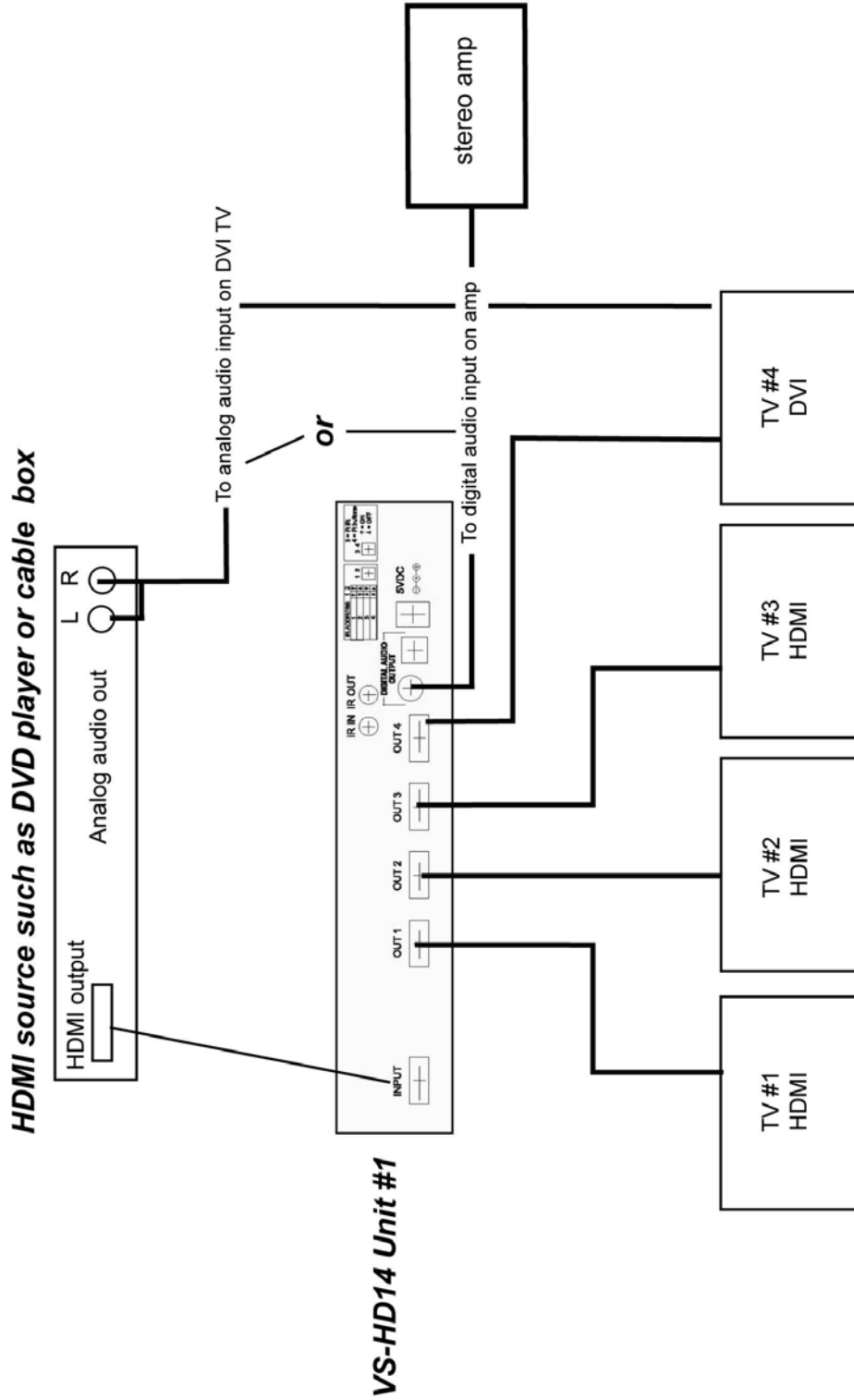
ENHANCE Feature

The ENHANCE feature of the VS-HD14 HDMI switcher provides an additional boost to the HDMI signal when using longer HDMI cables. It is recommended to leave the ENHANCE mode off for most situations. If you see the picture breaking up or no picture, try the ENHANCE mode on. If you still don't get an acceptable picture, use a shorter cable or a higher quality of cable.

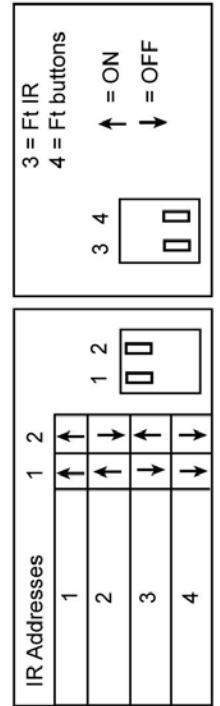
SPECIFICATIONS:

Video Amplifier Bandwidth.....	1.65Gbps
Input Video Signal.....	1.2 volts p-p
Input Connector Type.....	HDMI Type A Female
Output Connector Type.....	HDMI Type A Female
Power Source.....	.120V AC 50/60 Hz
Power Adapter Output.....	5V DC 2.6A
Weight.....	27oz
Dimensions.....	8.5" W x 4.1" D x 1.6"H

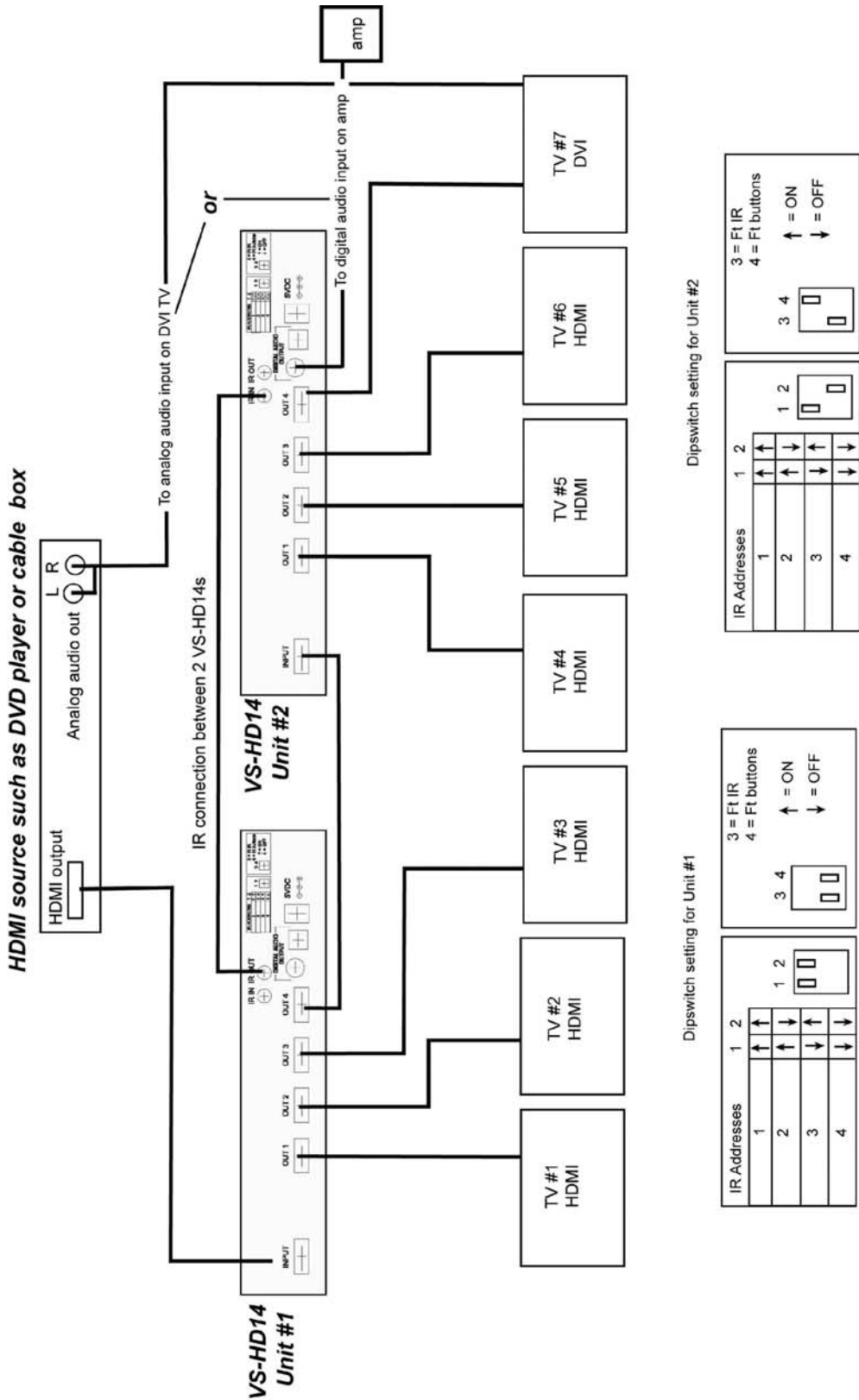
Typical connection using single VS-HD14 and multiple displays



Dipswitch setting



Typical connection using multiple VS-HD14s and displays



Notes:
 When using DVI display, audio feed will come from distribution amp via digital audio output on VS-HD14 or from analog audio output from HDMI source.
 To lock front panel IR and button controls on Unit #2, set dipswitches as shown above.
 HDMI outputs will support any HDMI device such as TVs or computer monitors.

Limited Warranty

Sima Products Corp. ("Company") warrants that if the accompanying product proves to be defective to the original purchaser in material or workmanship within 90 days from the original retail purchase, the Company will, at the Company's option, either repair or replace same without charge (but no cash refund will be made).

What you must do to enforce Warranty

You must deliver, mail or ship the product, together with the original bill of sale, this limited Warranty statement as proof of warranty coverage to:

Sima Products Corporation
Attn: Customer Service
140 Pennsylvania Ave., Bldg. #5,
Oakmont, PA 15139

To receive special offers and discounts, register your product online at www.simacorp.com

Limitation of Liability and Remedies

Sima shall have no liability for any damages due to lost profits, loss of use or anticipated benefits, or other incidental, consequential, special or punitive damages arising from the use of, or the inability to use, this product, whether arising out of contract, negligence, tort or under any warranty, even if Sima has been advised of the possibility of such damages. Sima's liability for damages in no event shall exceed the amount paid for this product. Sima neither assumes nor authorizes anyone to assume for it any other liabilities.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

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