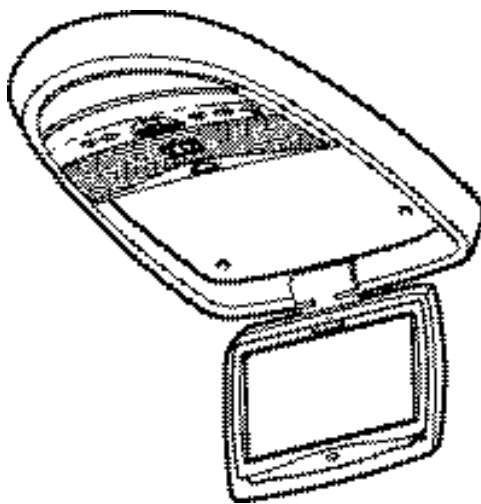


Clarion

OHM720
OHM820



7" LCD Color Monitor
8" LCD Color Monitor

OWNER'S MANUAL

INTRODUCTION

The Clarion OHM720/OHM820 is a full-featured 7"/8" LCD Color Monitor that can be used as a stand-alone monitor, or can be integrated into a mobile multimedia system.

The OHM720/OHM820 has the following features:

- TFT Active Matrix Display
- Swivel Mechanism
- 16:9/4:3 Adjustable Wide Screen Format (OHM720 only)
- 2 RCA Composite Video Inputs
- 1 RCA Composite Video Output
- Lightweight Plastic Housing
- Built-In Dome Light
- Built-In IR Transmitter for Wireless Headphones
- Front Panel Power Indicator and Separate Power, Channel Up/Down, Aux, FM Modulator and Picture Mode Button Controls
- FM Modulator Output Connector (for FM200 Add-On's)
- Includes Universal Mounting Bracket and Two IR Wireless Headphones (WH100H)
- IR Remote Controls Monitor Functions, Optional VCR (VDH910) and Optional TV Tuner (TTX001) Functions
- Includes Ribbon Cable (for TTX001 TV Tuner Add-On's)

ABOUT THE MANUAL AND WARRANTY

To start enjoying your new Clarion monitor, please read the instructions listed in the manual. Keep all instructions for future reference. Also, save your original sales receipt as proof of purchase.

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1. PRECAUTIONS

- The set is for use in DC 12V, negative ground vehicles.
- Do not operate the set in ways other than described in this guide. Doing so may damage it and voids your warranty.
- SAFETY FIRST! For rear seat use only. Do not install in dashboard or anywhere else that would permit monitor to be viewed by the driver. Monitor must never be used in any manner that will distract driver or interfere with the driver's safe operation of the motor vehicle.
- Be careful not to run down the car battery while using the set with the car stopped.
- Do not disassemble or modify the set. Doing so may damage it and voids your warranty.
- Keep drinks and drops from umbrellas away from the set. Water may damage the internal circuitry.
- Do not let the set become hot. If temperature in the car is high or the set has been exposed to direct sunlight and is hot, lower the temperature before using it. (The liquid crystal panel will work properly within a temperature range of 14°F - 144° F).
- In extremely cold temperatures, the movement of the picture may be slow and the picture may be dark, but this is not a malfunction. The set will work normally once the temperature increases.
- Small black and shiny dots inside the liquid crystal panel are normal for liquid crystal product.

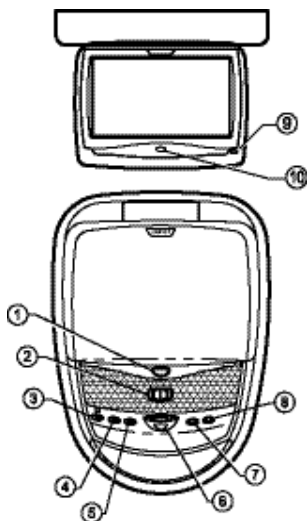
2. DESCRIPTION

The OHM720/OHM820 is a TFT active matrix color LCD monitor that delivers a striking picture and superior image resolution. The OHM720/OHM820 can be used to enjoy video images with the Clarion video sources, even if no TV tuner is connected.

3. PACKAGE CONTENTS

DESCRIPTION	Q'TY
LCD Monitor	1
IR Headphones (WH100H)	2
Universal Trim Ring	1
IR Remote Control	1
A/V Din Cables	2
TV Input Ribbon Cable	1
FM Modulator Din Cable	1
Power Connector	1
M3X8 Screws	5
Manual/Installation Guide	1

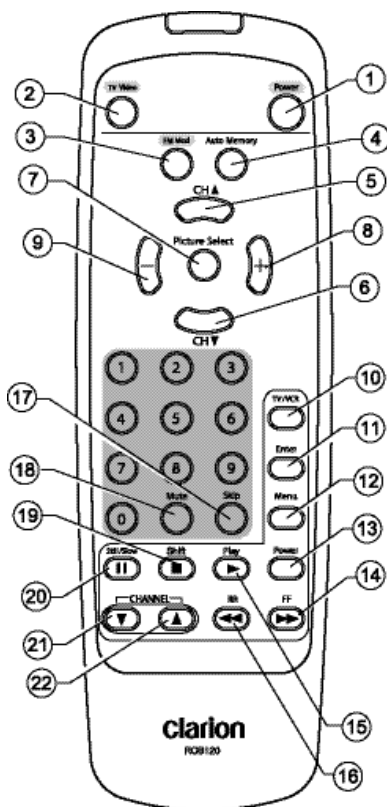
4. MONITOR BUTTON FUNCTIONS



- ① Monitor Release Button
- ② Dome Light Switch
- ③ Power Button
- ④ Channel Select Up
- ⑤ Channel Select Down
- ⑥ Mode Selector
- ⑦ FM Modulator On/Off Button
- ⑧ Auxiliary Input Selector
- ⑨ Power LED
- ⑩ IR Sensor

5. DESCRIPTION OF IR REMOTE CONTROL

Button Functions



- ① Power Button for Monitor**
Powers on monitor
- ② TV/Video Button**
Switches between AV1, AV2, TV.
- ③ FM Modulator Button**
Turns FM Modulator ON/OFF.
- ④ Auto Memory Button for TTX001 (TV Tuner)**
Locks channels with good reception.
- ⑤ Channel Up for TTX001 (TV Tuner)**
Changes TV channels up.
- ⑥ Channel Down for TTX001 (TV Tuner)**
Changes TV channels down.
- ⑦ Picture Select Button for Monitor**
Goes into picture mode menu for Monitor to select Contrast, Brightness, Color, Tint and Wide Screen Mode.
- ⑧ Picture Mode Up Button**
Adjusts selected picture mode.
- ⑨ Picture Mode Down Button**
Adjusts selected picture mode.
- ⑩ TV Tuner/VCR Button for VDH910 (VCR)**
Changes input source selection from VCR to TV Tuner.
- ⑪ Enter Button for VDH910 (VCR)**
Toggles between selection of the On-Screen Menu choice.
- ⑫ Menu Button for VDH910 (VCR)**
Displays the On-Screen Menu, or changes and exits the On-Screen Menu.
- ⑬ Power Button for VDH910 (VCR)**
Powers the unit ON or OFF.
- ⑭ FF Button for VDH910 (VCR)**
Press FF to fast forward the tape.
- ⑮ Play Button for VDH910 (VCR)**
Press button to play the videocassette.
- ⑯ REW Button for VDH910 (VCR)**
Press REW to rewind the tape.
- ⑰ Skip Button for TTX001 (TV Tuner)**
Will skip through channels with no reception.
- ⑱ Shift Button for TTX001 (TV Tuner)**
Changes menu selection.
- ⑲ Stop Button for VDH910 (VCR)**
Press to stop any play, fast forward, or rewind mode.
- ⑳ Still/Slow Button for VDH910 (VCR)**
Press once to pause for STILL frame. Press again to advance frame by frame. Press and hold button for SLOW motion playbacks.
- ㉑ Channel Track DOWN Button for VDH910 (VCR)**
In TV Tuner mode, changes TV Channels down.
- ㉒ Channel Track UP Button for VDH910 (VCR)**
In TV Tuner mode, changes TV Channels up.

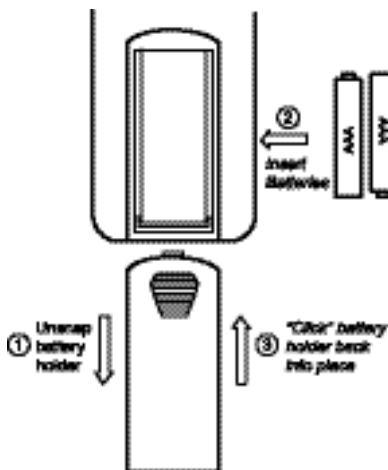
6. USING REMOTE CONTROL

Inside the vehicle, simply aim the IR Remote Control directly at the OHM720/OHM820, or at a Clarion monitor, or video source with an IR eye input and press any desired button for better results. Also note the following:

- Aim the IR Remote Control from no further than 7 feet away and no more than 3 feet on either side of the sensor.
- Direct sunlight or very bright light will reduce sensitivity to the IR remote signal commands. Be sure the monitor is not located in direct sunlight.
- Objects between the monitor will interfere or block IR remote signal commands.

7. INSERTING THE BATTERIES

1. Locate the battery compartment on the back of the IR Remote Control.
2. Remove the battery holder and insert two AAA alkaline batteries matching polarity as shown inside the battery holder.
3. Snap the battery holder back into the remote unit until it locks with a click.



8. WIRING PRECAUTIONS

Read all wiring precautions. If you are not sure of the connections, contact your authorized Clarion dealer.

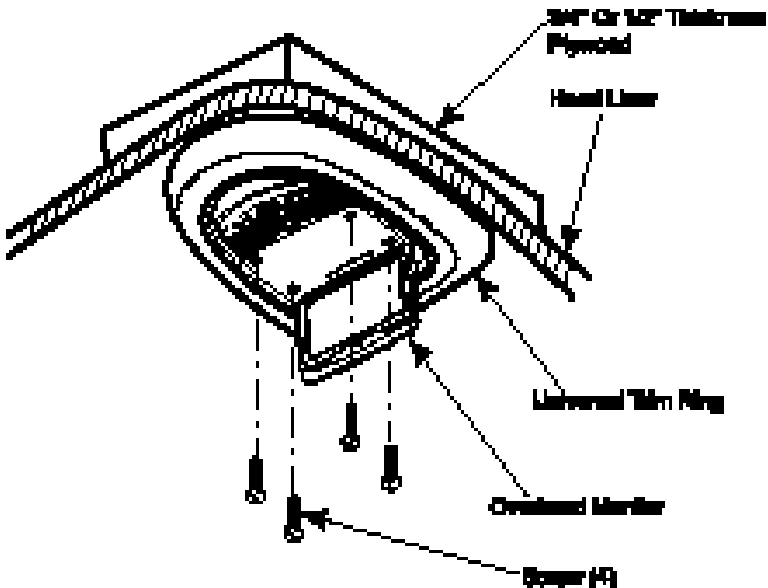
1. Disconnect the negative (-) lead of the battery before making any power connections.
2. When creating passage holes for the power wires, use grommets to eliminate any sharp edges created during drilling. This will protect the wire from being nicked and causing a short circuit.
3. When connecting the ground lead, fasten the ground lead (black wire) securely to a clean metal plate on the vehicle.

NOTE: The OHM720/OHM820 monitor displays video images only. It does not provide audio output. Refer to the owner's manual of the connected device for the information on audio output.

9. INSTALLATION INSTRUCTIONS

The OHM720/OHM820 is an overhead, flip-down 7⁷/₈" monitor with an infrared (IR) eye. It will accept a video signal from any video source with composite video out. The IR eye will work directly with any Clarion video source product with an IR Eye Input.

1. Look over the vehicle for a location for the monitor. Each vehicle is different and locations will vary. Make sure the monitor will not interfere with the driver.
2. Run necessary wires to the mounting location. When necessary cut the headliner and pull wires through.
3. Use a 12"W x 12"L x ½" or ¾" thick piece of plywood to mount the OHM720/OHM820.
4. Silicone the piece of plywood to the top of the roof or screw the plywood to the dome light mounting assembly and or the roof support rail.
5. Once the plywood has been mounted, connect the IR, power and DIN cables to the designated sources.
6. Make sure all wires and DIN cables are way from screws when drilling.
7. Screw the monitor and universal pod assembly (factory pre-assembled) into the plywood using 4 wood screws (not supplied). Use the shortest screws possible to prevent roof penetration.



10. DOME LIGHT WIRING

Negative Trigger Door Switch

Brown: + 12V

Gray: Ground

White: Door Switch

Positive Trigger Door Switch

Brown: Ground

Gray: + 12V

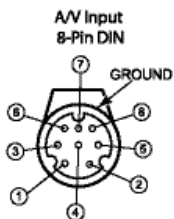
White: Door Switch

11. DOME LIGHT ON/OFF SWITCH DESCRIPTION

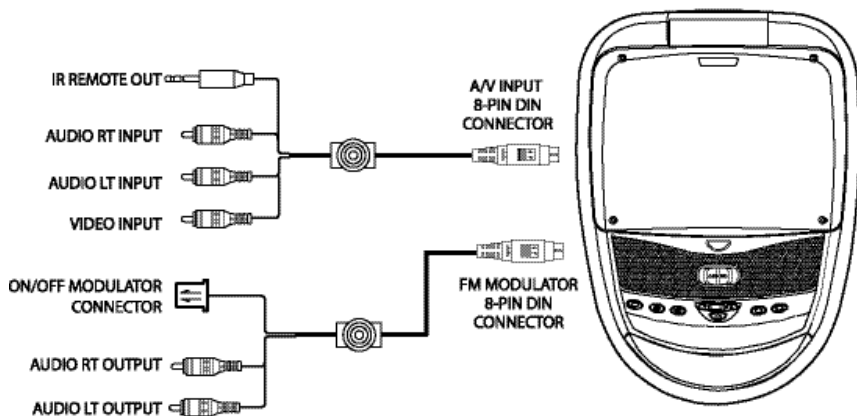
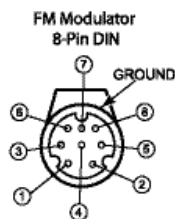
A three-position slide switch controls the lights integrated into the OHM720/OHM820. Sliding the switch to the ON position will turn the lights on. The OFF position will prevent the lights from turning on at all times, and the auto position will allow the lights to turn on and off with the vehicle interior lighting. Do not leave the vehicle unattended with the dome light switch in the ON position, as this could result in a discharged battery.

12. DIN CABLE PIN LAYOUT

A/V Input 8-Pin DIN Connector	
Pin	Function
1	AUDIO LEFT INPUT
2	NC
3	AUDIO RIGHT INPUT
4	VIDEO GROUND
5	VIDEO INPUT
6	IR AUDIO L/R GROUND
7	IR OUTPUT
8	NC



FM Modulator 8-Pin DIN Connector	
Pin	Function
1	NC
2	NC
3	NC
4	NC
5	FM MOD ON/OFF
6	AUDIO LEFT OUTPUT
7	AUDIO L/R GROUND
8	AUDIO RIGHT OUTPUT



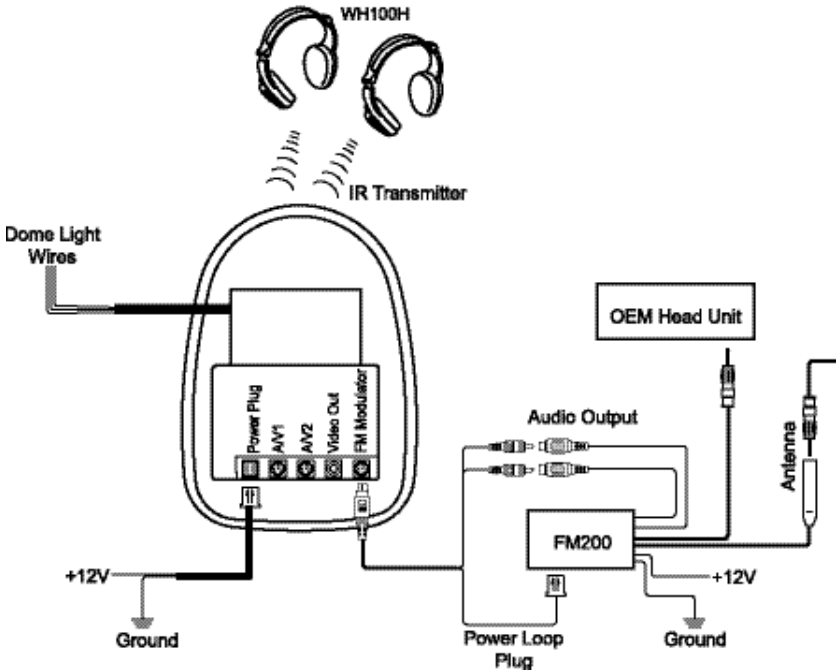
13. PICTURE ADJUSTMENT

To adjust the picture use the mode button to select the mode feature you would like to adjust. Adjustment selections are as follow:

- Contrast
- Brightness
- Color
- Wide screen ON/OFF (OHM720 only)
- Tint

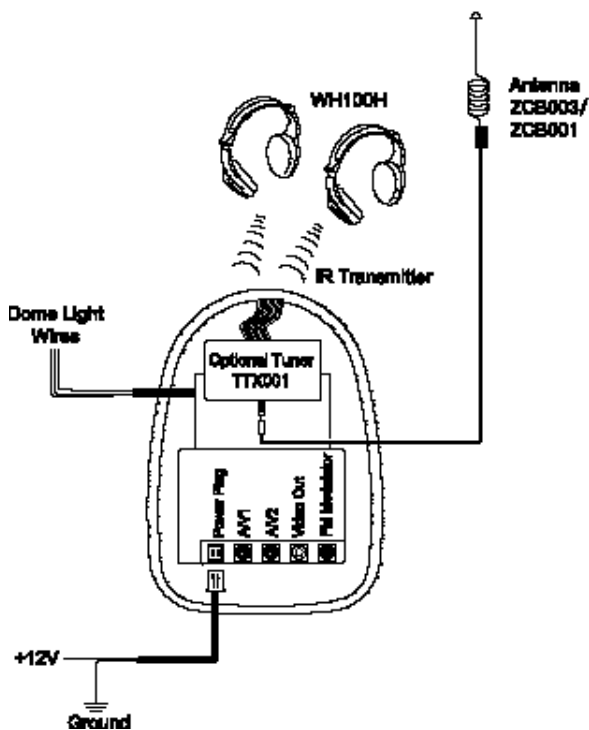
Press the up button to increase and the down button to decrease.

14. FM MODULATOR (FM200) SYSTEM DIAGRAM

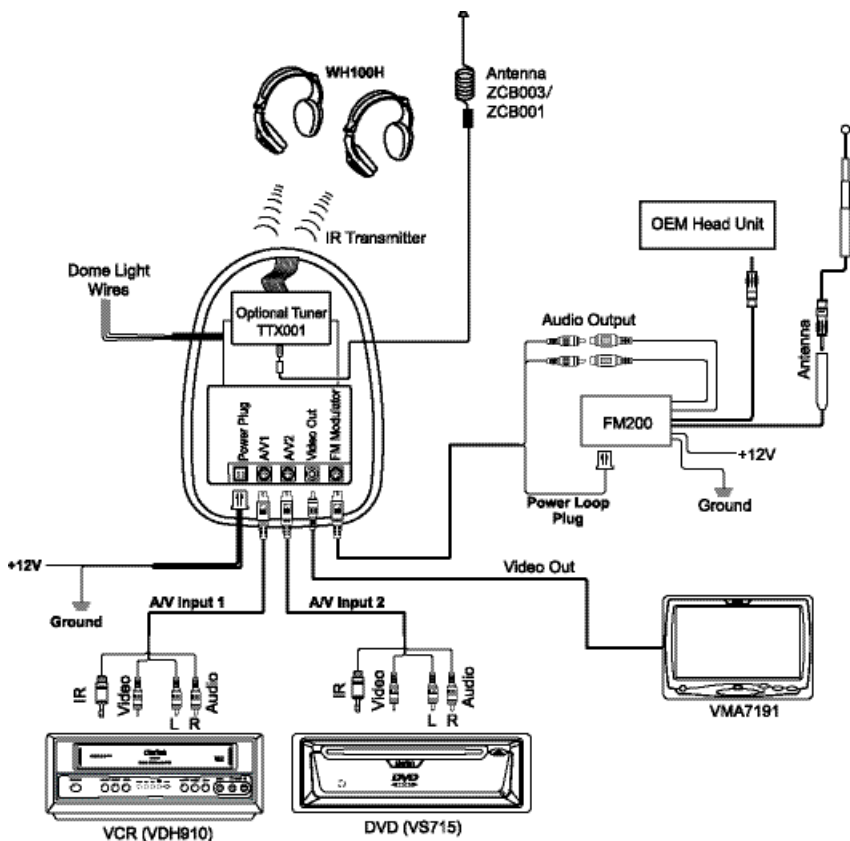


15. TV TUNER (TTX001) INSTALLATION INSTRUCTIONS AND SYSTEM DIAGRAM

1. Insert the tuner into the back of the OHM720/OHM820.
2. Plug the ribbon cable into the back of the OHM720/OHM820. Connect another side of this cable to the TV Tuner (TTX001)
3. Screw the tuner down to the existing tuner holes.
4. Screw on the Clarion TV Tuner antenna ZCB001 OR ZCB003 (not included).



16. COMPLETE A/V SYSTEM DIAGRAM



17. CARE AND MAINTENANCE

Cleaning the cabinet

- Use a soft, dry cloth to gently wipe off any dirt.
- Do not use benzene, thinner, car cleaner, etc., as these substances may damage the cabinet or cause the paint to peel.

Cleaning the LCD panel

- Use a soft, dry cloth to gently wipe off any dust.
- The surface is easily scratched; do not rub it with hard objects.

18. SPECIFICATIONS

General Specifications

Power Source:	Car Battery (DC 9-16V)
Power Consumption:	DC 12V 15W (without Dome lights)
Max Current Consumption:	Less than 1.5A (without Dome lights)
OHM720 Dimensions:	8-1/2" x 11-3/4" x 1-3/16" (W x H x D) 216 x 300 x 31.5 mm (W x H x D)
OHM820 Dimensions:	9-1/8" x 13-3/16" x 1-3/16" (W x H x D) 232 x 336 x 31.5 mm (W x H x D)
OHM720 Weight:	3 lb (1.4 kg)
OHM820 Weight:	3.5 lb (1.6 kg)
Operating Temperatures:	14°-140° F

Monitor Specification

Display Type	Color TFT Active Matrix LCD
OHM720 Display Screen size	7.0"
OHM820 Display Screen size	8.0"
Format	1440 x 234
Screen Resolution	336,960 dots
Video Signal	1Vp-p with 75-ohm load
Video System	Auto NTSC/PAL

19. WARRANTY INFORMATION

This product is warranted against all defects in material workmanship for a period of one year from the date of original purchase. Clarion Multimedia products are covered by a one-year warranty when installed by an authorized Clarion dealer. The conditions of this warranty and the extent of responsibility of Clarion Corporation under this warranty are as follows:

1. PROOF OF DATE OF PURCHASE WILL BE REQUIRED FOR WARRANTY SERVICE OF THIS PRODUCT. IN CASE OF 1-YEAR WARRANTY FOR CLARION MULTIMEDIA PRODUCT, PROOF OF INSTALLATION BY AUTHORIZED DEALER IS REQUIRED. INFORMATION ABOUT CLARION AUTHORIZED WARRANTY SERVICE CENTERS MAY BE OBTAINED BY CONTACTING OR WRITING CLARION CORPORATION AT THE ADDRESS LISTED BELOW.

2. This warranty will become void if service performed by anyone other than an approved Clarion Warranty Service Center results in damage to product.

3. This warranty does not apply to any product which has been subject to misuse, neglect or accident, or which has had the serial number altered, defaced or removed, or which has been connected, installed, adjusted or repaired, other than in accordance with the instructions furnished by Clarion Corporation.

4. This warranty does not cover car static or other electrical interferences, tape head cleaning or adjustments, or labor costs for the removal or reinstallation of the unit for repair.

5. The sole responsibility of Clarion Corporation under this Warranty shall be limited to the repair or replacement thereof, at the sole discretion of Clarion Corporation.

6. If it becomes necessary to send the product or any defective part to Clarion Corporation or an authorized warranty service station, the product must be shipped in its original carton or equivalent carton, fully insured, with shipping charges prepaid. Clarion Corporation will not assume any responsibility for any loss or damage incurred in shipping.

7. ALL IMPLIED WARRANTIES EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW SHALL HAVE NO GREATER DURATION THAN THE WARRANTY PERIOD SET FORTH ABOVE. UNDER NO CIRCUMSTANCES SHALL CLARION CORPORATION BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT. BECAUSE SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

8. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

9. For instructions on how to obtain warranty service, please call 1-800-GO-CLARION or visit our web site at www.clarion.com for a listing of Authorized Warranty Service Centers in your area, or contact the Clarion Customer Service Manager at the address listed below:

Clarion Corporation of America

Attn: Customer Service Manager
661 W. Redondo Beach Blvd
Gardena, Ca. 90247-4201

clarion

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Gardena, CA 90247
1-800-GO-CLARION
www.clarion.com