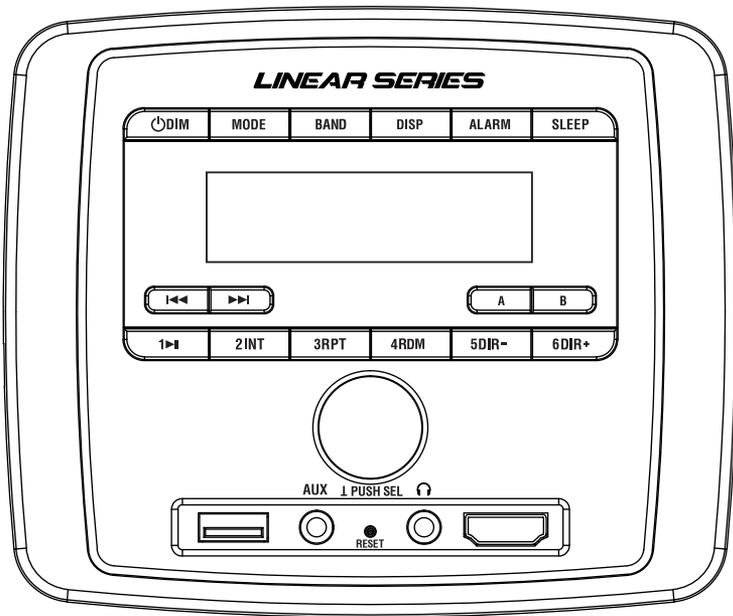


**LINEAR SERIES**

# Operation / Installation Manual



## **RV3000** AM/FM/Bluetooth Multimedia Receiver

For Technical Assistance, please call (800) 638-3600,  
or for more accessories or replacement parts visit [www.magnadyne.com](http://www.magnadyne.com).

## Introduction

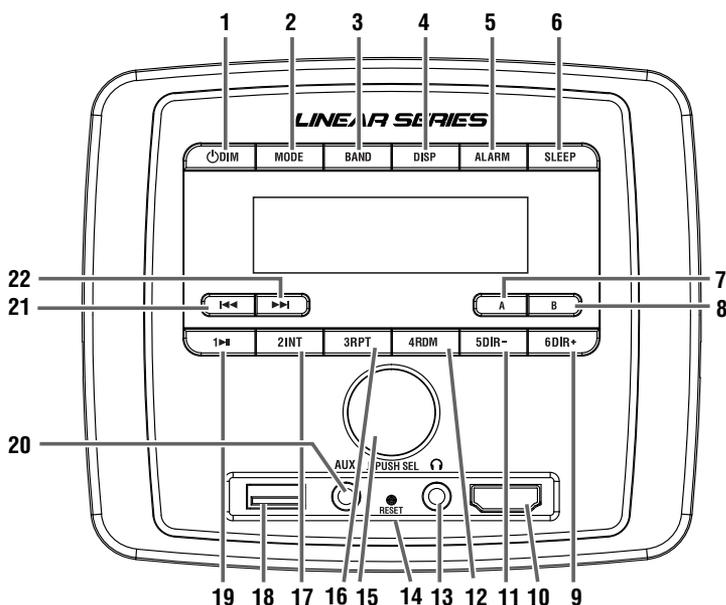
Please take the time to read all of the information in this manual. Familiarity with operation and installation procedures will help you obtain the best possible performance from your new AM/FM Stereo Multi-Media Receiver.

**WARNING!** To prevent fire or electrical shock hazard, do not expose this product to moisture. No user-serviceable parts inside. Refer servicing to qualified personnel.

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## Getting Started



1. Power/DIM On/Off: Short press to turn the unit on or DIM adjustment. Long press to power off.
2. MODE: Short press for source change. Long press to turn Bluetooth off.
3. BAND: Short press to select radio band or song search in USB. Long press to auto-store stations.
4. DISP: Short press for info/clock. Long press for clock setting.
5. ALARM: Short press to set alarm on/off. Long press for alarm time setting.
6. SLEEP: Short press to set sleep timer on/off. Long press for sleep setting.
7. SPK A: Short press for speaker A selection. Long press for speakers A and B on together.
8. SPK B: Short press for speaker B selection. Long press for speakers A and B on together.
9. 6 DIR+: Short press to recall radio preset or search ahead in USB mode. Long press to memorize a radio station.
10. HDMI Port: Pass through.
11. 5 DIR-: Short press to recall radio preset or search backwards in USB mode. Long press to memorize a radio station.
12. 4 RDM: Short press to recall radio preset or use random feature for connected USB device playlist. Long press to memorize a radio station/
13. HEADPHONE SOCKET: Accepts 3.5mm stereo headphone jacks.
14. RESET: Press to reset unit to default settings.
15. VOLUME / SELECT KNOB: Rotate to increase or decrease the volume level. Press to select the sound controls: Bass, Treble, Balance and EQ.
16. 3 RPT: Short press to recall radio preset or use repeat feature for connected USB device playlist. Long press to memorize a radio station.
17. 2 INT: Short press to recall radio preset or use intro feature for connected USB device playlist. Long press to memorize a radio station.
18. USB: Media connection and device charging.
19. 1▶ Play, Pause: Short press to recall radio preset. Long press to memorize a radio station. Press to pause in Bluetooth mode, press again to restore.
20. Audio Input Jack: Plug in a device via the 3.5mm audio input plug.  
Note: The RV3000 does not control the device, it just allows the audio to be played through the system.
21. ◀◀ Seek Down: Press to tune the radio to a lower frequency or to navigate to previous track in Bluetooth mode.
22. ▶▶ Seek Up: Press to tune the radio to a higher frequency or to navigate to next track in Bluetooth mode.

## General Operations

### Power On/Off:

Press the  button to turn the unit On/Off

### Selecting a Play Source:

To select between AM/FM, AUX 1, AUX 2, USB or BLUETOOTH play sources, press the MODE button to make your selection.

### Dimming the Display:

Short press the **DIM** button to select from the 3 levels of brightness for the display area.

### Display Selection:

Press the **DISP** button to display the clock. Press again to return to previous display.

Press and hold to perform clock setting functions (See "Setting the Clock" for more details).

### Selecting Speaker Sets:

**Note:** See Sound Controls for detailed volume and mute control operations.

### Setting the Clock:

1. Press the **DISP** button until the clock appears in the display.
2. Press and hold the **DISP** button until the Hours number starts flashing.
3. Rotate the **VOLUME** knob until the correct Hour appears in the display.

**Note:** When setting the clock make sure to select the correct AM or PM.

4. Press the **DISP** button and the Minute indicators will start flashing.
5. Rotate the **VOLUME** knob until the correct Minutes appears in the display. Wait 5 seconds and the colon between the hours and the minutes will start flashing indicating the clock is set.

### Setting the Alarm Timer:

1. Short press the **ALARM** button to toggle between either ALARM ON or ALARMOFF.
2. To set the alarm time, long press the **ALARM** button. The hour will flash and then can be adjusted and set by rotating the **VOLUME** knob. To adjust the minutes, long press the **ALARM** button until the minutes flash and then can be adjusted and set by again rotating the **VOLUME** knob to the desired time.

3. With the alarm set, "ALARM" will appear in the display. When the set alarm time is reached, a beep sound will be heard and will continue until any radio button is pushed.

4. When the alarm time is set and the unit is off, the unit will automatically turn on to sound the alarm beep when the scheduled time is reached.

### Setting the Sleep Timer:

1. Press the **SLEEP** button to toggle between SLEEP ON and SLEEPOFF.
2. With SLEEP ON selected rotate the volume to set desired sleep time up to 40 minutes.
3. Wait 5 seconds and the display will return to normal operation and "SLEEP" will appear in the display.
4. After the designated sleep timer has expired the unit will turn off automatically.

### Cancelling the Sleep Timer:

1. Press the **SLEEP** button and SLEEPOFF will appear in the display.
2. Wait 5 seconds and the display will return to normal operation.

### Headphone Operations:

Insert headphones into 3.5mm headphone jack located on the front panel of the radio. The speakers of the unit will automatically be muted.

### Resetting the Unit:

To reset the unit to original factory settings press the reset button located on the front of the radio using the tip of a ball point pen.

**Note:** All memory settings will need to be re-input.

## Sound Controls

### SPK A/B Volume Control Operation:

1. The volume of each set of speakers can be adjusted independently. Short press the **A** or **B** buttons to select the speakers that the volume control will effect (LCD shows "SPK A" or "SPK B" icons). Rotating VOL knob clockwise will increase volume, rotating volume knob counterclockwise will lower the volume of the speakers selected.
2. To control the volume of both sets of speakers at the same time, press and hold the **A** or **B** button for 2 seconds (LCD will display "SPK A" and "SPK B" icon).

**Note:** To bring all speaker outputs to the same volume level, press and hold the **A** or **B** button for 2 seconds (LCD will display "SPK A" and "SPK B" icons), then rotate the volume knob counterclockwise until all volume levels reach zero. From that point, rotate the volume button clockwise and all speakers will rise in volume together.

### Bass, Treble and Balance Control:

Select the desired sound mode by pressing the **VOLUME** knob. The modes will be displayed in the following order: Bass, Treble, Balance EQ, Loud.

#### Bass:

Select the Bass mode by pressing the **VOLUME** knob. Increase the Bass by rotating the knob clockwise. Decrease the Bass by rotating the knob counterclockwise. After 5 seconds control reverts back to volume control.

#### Treble:

Select the Treble mode by pressing the **VOLUME** knob. Increase the Treble by rotating the knob clockwise. Decrease the Treble by rotating the knob counterclockwise. After 6 seconds control reverts back to volume control.

#### Balance:

Select the Balance mode by pressing the **VOLUME** knob. Adjust the Balance by rotating the knob.

R = L = Equal sound Right and Left

R 7 = Right speaker only

L 7 = Left speaker only

After 5 seconds control reverts back to volume control.

#### Equalizer (EQ):

Select the EQ mode by pressing the **VOLUME** knob. Adjust the EQ by rotating the knob to choose between the preset settings: Classic, Rock, Pop, Flat or EQ OFF as indicated in the display area.

#### Loud:

To boost high and low tones at low volume levels, press the **VOLUME** knob until "LOUD ON" appears in the display. To deselect, rotate the knob until "LOUD OFF" appears in the display.

## Radio Operations

### Receive a Radio Station:

- Press the **MODE** button to select RADIO mode.
- Press the **BAND** button to select between AM 1 or 2 or FM 1, 2 or 3.
- Short presses of **◀◀** or **▶▶** will seek to the nearest reachable radio frequency. Long presses will allow you to manually find a station.

### Manually Storing and Recalling Stations:

- Tune into desired station and press and hold one of the preset buttons (1-6) for 2 seconds. The current station will be stored into that number buttons memory and then can be recalled with a just short press of that button.

### Auto Storing Stations:

- Press and hold **BAND** button for 2 seconds to auto scan and store AM 1, 2 and FM 1, 2 and 3 stations into numeric buttons 1-6.

**Note:** When the MHz (FM) band is selected the 18 strongest stations will be stored. When KHz (AM) band is selected the 12 strongest stations will be stored.

## USB Operation

### Selecting USB Audio Play Source:

When a USB device is inserted into the unit, the unit will automatically switch to USB mode and play files off of the inserted device. If the USB device is left inserted the **MODE** button can be pushed to navigate to other modes or also returned to the USB device mode.

### USB File Selection:

Short press the **▶▶|/|◀◀** button to skip to next / previous audio track. File information will automatically appear in the display.

Press and hold the **▶▶|/|◀◀** button to fast forward or reverse through a selected track.

### DIR+ / DIR-:

Press the **DIR+ / DIR-** button to play next / previous folder from the USB device.

### Pausing the Audio:

Press the **▶||** button to pause the audio file. Press again to resume playback.

### Intro:

Press the **INT** button to play the first 10 seconds of each file. Press again to stop this function.

### Repeat:

Press the **RPT** button to repeat a single track or to repeat an entire playlist.

### Random:

Press the **RDM** button to play files from a playlist in random order.

### Specific Track Number:

Press the **BAND** to display NUM 0000. Rotate the volume knob or directly enter desired track number.

### To enter specific track number using radio buttons press:

Buttons 1-6

**MODE** button = 7

**|◀◀** button = 8

**▶▶|** button = 9

**DISP** button = 0

## AUX 1 / AUX 2 Operation

### Selecting the Audio Source:

**Note:** The RV3000 does not control AUX connected devices, it just allows the audio to be played through the system.

#### Front Audio Input:

Insert the 3.5mm jack from the audio device into the AUX input socket on the front of the unit. Press the **MODE** button until "AUX 1" appears in the display. Refer to the audio device's owner's manual for proper operation.

#### Rear Audio Input:

To select the rear Audio play source, press the **MODE** button until "AUX 2" appears in the display. Refer to the audio device's owners manual for proper operation.

**Note:** The volume setting of the connected audio device has an effect on the overall loudness of the RV3000.

## HDMI Digital Signal Function

### HDMI Pass Through:

The front HDMI connector is directly passed through to the rear HDMI connection. All operations and functions are operated and controlled from the connected device.

**Note:** Please use good quality HDMI cable.

The overall length (front and rear) should not be over 12 feet

## Video In / Out Function

The Video In and Video Out connection is located in the back of the unit. There is no unit operation for AV IN/OUT function. This is a pass through connection.

## Subwoofer

The RCA subwoofer connection is located in the back of the unit.

# Bluetooth Operation

## Pairing Bluetooth Devices:

1. Open the Bluetooth settings program on the mobile device and activate the Bluetooth feature.
2. From your mobile device scan for available devices.
3. Select "LINEAR SERIES" to connect to the unit  
**Note:** Enter "0000" if a password is requested.
4. When the mobile device has been paired the BT icon will be displayed on the unit's LCD screen.

**Note:** To disconnect or reconnect the paired Bluetooth device press and hold the **MODE** button.

## Bluetooth Operation:

### Play/Pause Button:

Press the ►|| button to pause or resume the Bluetooth playback.

### Changing the Track:

Press the ►►| button to select a higher track. Press the |◀◀ button to select a lower track

### Sound Controls:

Use the sound controls on the RV3000 to adjust the volume and sound quality.

**Note:** For optimum sound quality make sure the media volume on the device is set at 75% or greater.

# BT APP Operation

## APP Installation:

1. Your smart phone can be used as an alternative way to control the RV3000.  
You will need to install the "LINEAR SERIES" app into your smart phone. The APP can be downloaded from Google Play (Android phone) or App Store (iPhone). Search for "LINEAR SERIES" and proceed to download. Install per the app instructions.

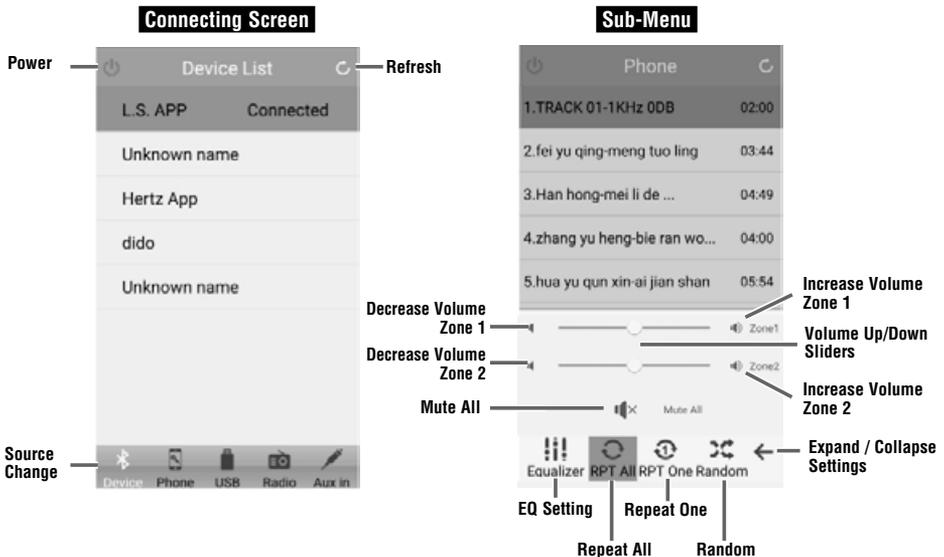
**Note 1.** Your smart phone must be Bluetooth version 4.0 or above.

**Note 2.** Before turning on the APP, make sure the unit didn't pair with another device.

## RADIO Mode:

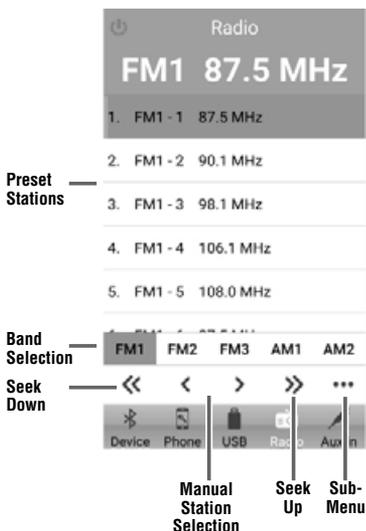
The "LINEAR SERIES" App displays memorized preset radio stations that are set manually or automatically on the RV3000 unit. See instructions on page 5 for Storing Radio Stations under Radio Operations.

All other App operations refer to key below.



# BT APP Operation (continued)

## Radio Mode



## AUX in 1 / AUX in 2 Mode



## USB/BT Mode



### To Download App:

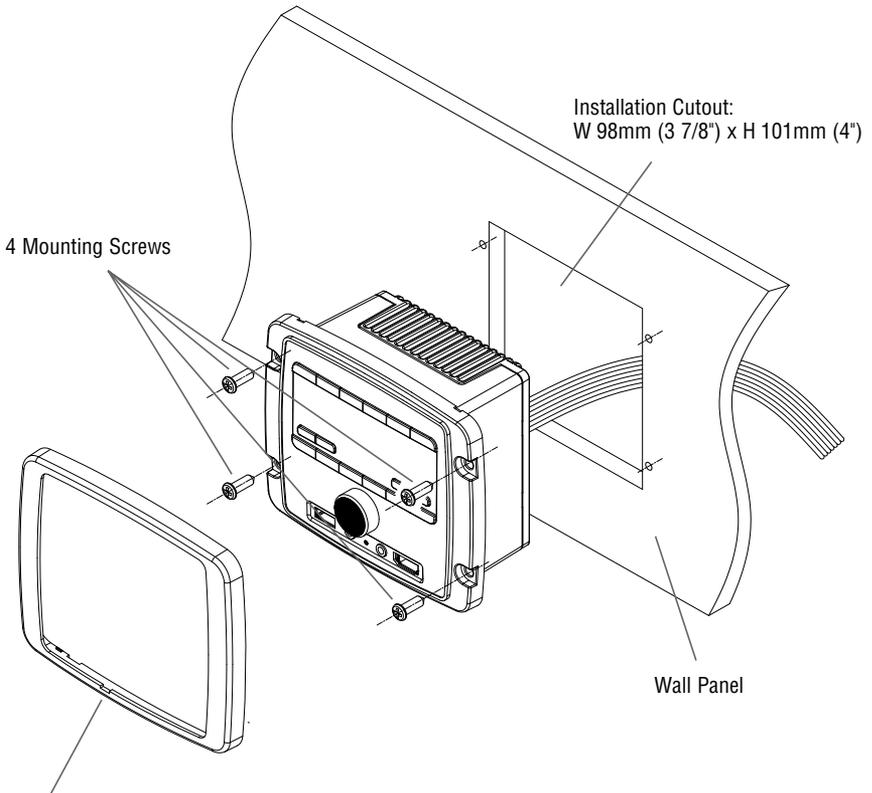
Go to Google Play/Apple store  
 Search for 'Linear Series Remote'  
 Install application  
 Accept any permissions

# Installation

- Read the instruction manual carefully before installing the unit
- Make sure to connect all wires before powering on the unit.
- To avoid short circuit, make sure all the exposed wires are insulated.
- Secure all wires after installation.
- Connect the player according to the wiring connection instruction on page 4 of this manual.  
Wrong connection may cause damage to the unit.
- This player only fit for 12V DC device.

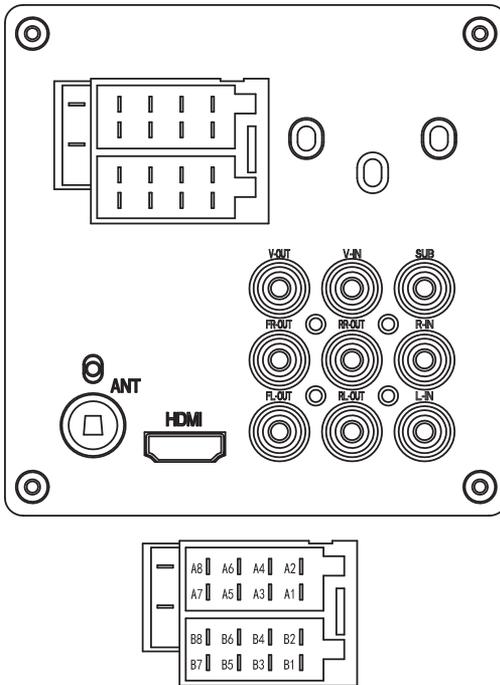
## MOUNTING THE RV3000

1. Take off the units front trim ring.
2. Align the unit in the cutout.
3. Secure unit with 4 screws.
4. Snap the front trim ring back onto the unit with the notch at the bottom.



Trim Ring Notch  
Use small flathead screwdriver  
here to carefully remove trim ring.

# Wiring



| NO | WIRE COLOR | DESCRIPTION | NO | WIRE COLOR   | DESCRIPTION         |
|----|------------|-------------|----|--------------|---------------------|
| A1 |            |             | B1 | PURPLE       | SPEAKER - B RIGHT+  |
| A2 |            |             | B2 | PURPLE/BLACK | SPEAKER - B RIGHT-  |
| A3 |            |             | B3 | GRAY         | SPEAKER - A RIGHT+  |
| A4 | RED        | B+          | B4 | GRAY/BLACK   | SPEAKER - A RIGHT - |
| A5 | BLUE       | ANTENNA     | B5 | WHITE        | SPEAKER - A LEFT+   |
| A6 |            |             | B6 | WHITE/BLACK  | SPEAKER - A LEFT-   |
| A7 |            |             | B7 | GREEN        | SPEAKER - B LEFT+   |
| A8 | BLACK      | GROUND      | B8 | GREEN/BLACK  | SPEAKER - B LEFT-   |

1. This player operates on 12V DC.
2. Do not connect to the battery until the player is absolutely well connected.
3. Make sure the red wire is connected to the batteries positive (+) terminal.
4. When changing the fuse, make sure the rating is the same.
5. For the best sound from this equipment, use good quality 4-8 ohm speakers.

## Trouble Shooting

| Symptom  | Cause  | Solution  |
|--|--|---|
| No power.  | The car ignition switch is not on.                                 | If the power supply is connected to the car accessory circuits, but the engine is not moving, switch the ignition key to "ACC". |
|  | The fuse is blown.   | Replace the fuse.   |
| No sound.  | Volume is in minimum.  | Adjust volume to a desired level.   |
|  | Wiring is not properly connected.                                  | Check wiring connection.  |
| The operation keys do not work.                      | The built-in microcomputer is not operating properly due to noise. | Press the reset button.   |
| The radio does not work.                             | The antenna cable is not connected.                                | Insert the antenna cable firmly.  |
| The radio station automatic selection does not work. | The signals are too weak.  | Select a station manually.  |
| APP play phone music sound can't send to unit.       | Unit paired with another mobile phone.                             | 1) Turn off the Bluetooth function of another mobile. 2) Exit APP and turn on APP again.  |

## Specifications

### GENERAL

Power Supply Requirements: DC 12 Volts, Negative Ground

Chassis Dimensions: 129(W) x 112(D) x 65(H)

Tone Controls:

Bass (at 100 Hz):  $\pm 10$  dB

Treble (at 10 kHz):  $\pm 10$  dB

Maximum Output Power: 4 x 15 watts

Current Drain: 5 Ampere (max.)

### RADIO

#### FM

#### AM

Frequency Coverage: 87.5 to 108 MHz      520 to 1710 kHz

IF: 10.7 MHz      450 KHz

Sensitivity: 4 $\mu$ V(S/N=30dB)      36dBuV(S/N=20dB)

Stereo Separation: >25dB      /

### ONE (1) YEAR LIMITED WARRANTY

Magnadyne Corporation or its authorized agents will within one year from the date of sale to you, repair, replace or refund the retail sales price of said product or any part thereof, at the option of the Magnadyne Corporation or its authorized agents, if said product or part is found defective in materials or workmanship, when properly connected and operating on the correct power requirements designated for the specific product. This warranty and Magnadyne Corporation or its authorized agent's obligations hereunder do not apply where the product was; damaged while in the possession of the consumer, subjected to unreasonable or unintended use, not reasonably maintained, utilized in commercial or industrial operations, or serviced by anyone other than Magnadyne Corporation or its authorized agents, or where the warning seal on the product is broken or the power and/or plugs are detached from the unit. Magnadyne Corporation or any of its authorized agents will not assume any labor costs for the removal and reinstallation of any product found to be defective, or the cost of transportation to Magnadyne Corporation or its authorized agents. Such cost are the sole responsibility of the purchaser.

This warranty does not cover the cabinet appearance items or accessories used in connection with this product, or any damage to recording or recording tape, or any damage to the products resulting from improper installation, alteration, accident, misuse, abuse or acts of nature.

MAGNADYNE CORPORATION OR ITS AUTHORIZED AGENTS SHALL NOT BE LIABLE TO ANYONE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OR CLAIMS EXCEPT THOSE ACCORDED BY LAW. NO EXPRESSED WARRANTY OR IMPLIED WARRANTY IS GIVEN EXCEPT THOSE SET FORTH HEREIN. NO IMPLIED WARRANTY SHALL EXTEND BEYOND ONE YEAR FROM THE DATE OF SALE.

This warranty extends only to the original purchaser of the product and is not transferable. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

**“NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the User's authority to operate the equipment.”**

Defective merchandise should be returned to the original point of purchase or secondly, to Magnadyne Corporation, 1111 W. Victoria Street, Compton CA 90220. Return Authorization must be obtained before sending, or merchandise may be refused.