ERC-1

EMOTIVA®
AUDIO CORPORATION

ERC-1
REFERENCE CD PLAYER
OPERATION MANUAL

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THANK YOU FOR YOUR ERC-1 PURCHASE

Dear Music Enthusiast,

Thank you for purchasing the Emotiva ERC-1 CD Player. We sincerely believe that it offers you outstanding performance and value. Emotiva products are engineered and produced with the highest quality materials and incorporate the latest technology. We think you will find the Emotiva ERC-1 meets or exceeds your expectations.

The ERC-1 is a high quality audiophile grade CD player. It has been designed for maximum performance, ease of use and installation flexibility. The ERC-1 reproduces music the way it was created; dynamic, crystal clear, open and engaging. The subtle pull of a bow, the thrashing of a power chord, the gentle nuances of a vocal performance; it's all there, waiting to be experienced by you like never before.

The ERC-1 features a 24 bit processor with 384 x oversampling maintaining the ultimate transparency and openness from the CD source.

Also featured:

Independent shielded power supplies for each section of the unit (CD Carriage, Digital Circuits, Analogue Circuits, Display) ensure minimal noise and interaction between each section resulting in a cleaner pure listening experience.

The DAC (digital to analog converter) is the Analog Devices 1955.

The Op-amps are Burr Brown OPA2134.

As per the Emotiva legacy only the finest available parts are used.

LIMITED WARRANTY

The Emotiva ERC-1 CD Player has been created to perform flawlessly for many years. As a result of this quality and craftsmanship, Emotiva offers the following warranty to owners of the ERC-1.

Emotiva Audio warrants the ERC-1 to be free from defects in materials and workmanship for a period of **five years** from the original date of purchase. The following items are excluded from, or will void this warranty coverage:

1) *Damage to the ERC-1 caused during shipment and handling. (If you receive an item that you believe to have been damaged during shipment, please contact Emotiva immediately. Phone: 877-EMO-Tech (877-366-8324) / Email: support@emotiva.com*
2) *Damage to the ERC-1 caused by accident, misuse or abusive operation contrary to the instructions specified within this manual.*
3) *ERC-1 units that have had the serial numbers defaced, modified, or removed.*
4) *Damage to the ERC-1 resulting from a modification of, or attempted repair by any person or company not authorized by Emotiva.*
5) *Any ERC-1 unit purchased from a non-authorized dealer.*
6) *Emotiva does not assume liability for loss of use or damage to associated or connected equipment.*

Service Assistance for the ERC-1

1) Please note that BEFORE sending your ERC-1 in for repair you MUST call Emotiva and obtain a return merchandise authorization (RMA) number. Before contacting Emotiva to begin the RMA process, please have as detailed a description of the problem(s) you are experiencing and the conditions under which the problem(s) occur. Additionally, please be sure to check the troubleshooting guide in this manual to rule out the possibility of something simple you may have overlooked. Many instances of perceived failure are simple operational and setup mistakes and Emotiva is happy to assist you however possible. Please call 877-EMO-Tech (877-366-8324) / Email: support@emotiva.com

Once you have obtained the RMA number, you must print this clearly on the outside of the box so it will be possible to determine from whom the ERC-1 came once it arrives. Parcels arriving without an RMA numbers will be refused and returned freight collect.

Please send your repairs with RMA to:

Emotiva Audio Corp.
Attn.: Repair Department
131 Southeast Parkway Court
Franklin, TN 37064
RMA – (Put your RMA number in this spot.)
877-EMO-Tech (877-366-8324) / Email: customerservice@emotiva.com

Emotiva Disclosure

NOTE: The ERC-1 is a Class 1 Laser Product

FCC Compliance:
This device complies with part 15 of FCC Rules. Operation is subject of the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

SAFETY PRECAUTIONS

Read this User's Guide thoroughly before attempting to install and configure the ERC-1 CD Player. All the safety and operation instructions should be read before any operation of the component(s) begin. After successful installation and configuration of the ERC-1 CD Player, be sure to retain this manual in a safe place for any future reference needs.

All warnings on the ERC-1 CD Player and in these operating instructions should be followed. Safety is a key component to a long lasting and trouble free installation. The vast majority of the subsequent safety precautions involve simple common sense. If you are not comfortable with the installation of audio/video entertainment equipment, it will be to your benefit to seek the services of a qualified installation professional.

NEVER use the ERC-1 CD Player near water such as a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool etc. There is a risk of electric shock to your body and permanent damage to the equipment. Electric shock may result in permanent bodily injury or death.

The ERC-1 CD Player should be situated so that its location or installation position does not interfere with proper ventilation. The ERC-1 CD Player should not be situated on a bed, sofa, rug or similar surface that may block any ventilation openings; or placed in a built-in installation such as a bookcase, cabinet, or closed equipment rack that may impeded the flow of air through ventilation openings. If installed in a closed equipment rack for custom installations, be sure to add forced air ventilation so that it has adequate air circulation. The ERC-1 CD Player should be situated away from heat sources such as radiators, or any other devices which produce heat.

The ERC-1 CD Player should be connected to a power supply only of the type described in this User's Guide and what is labeled on the ERC-1 CD Player component. Power supply cords should be routed so that they are not in high foot traffic areas or pinched by item placed upon or against them, paying particular attention to cords at the wall plugs, convenience receptacles, and the point where they connect into the ERC-1 CD Player. The power cord for the ERC-1 CD Player should be unplugged from the outlet when unused for a long period of time. Never spray liquids directly into the component's vent openings. Care should be taken so that small objects do not fall into the inside of the ERC-1 CD Player.

The following situations require that your ERC-1 CD Player be serviced only by qualified service personnel;

1. *The power-supply cord or the plug has been damaged; or*
2. *Objects have fallen, or liquid has spilled into the component; or*
3. *The ERC-1 CD Player has been exposed to rain; or*
4. *The ERC-1 CD Player does not appear to operate normally or exhibits a marked change in performance; or*
5. *The ERC-1 CD Player has been dropped, or its enclosure or chassis is damaged.*

A Note for the Cable Television (CATV) Installer

This reminder is to call the CATV system installer's attention to Article 82040 of the NEC that provides guidelines for proper grounding and in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

UNPACKING THE ERC-1

The Emotiva ERC-1 CD Player should reach you in flawless condition. If you notice any shipping damage or other issues upon unpacking the unit, please contact Emotiva immediately.

INVENTORY

Included with your ERC-1 CD Player should be a power cord, remote control, batteries and this User's Guide. Please take a moment to make sure all the items are there in the packaging.

Gently lift out the unit and remove all the packaging material and accessories. The ERC-1 is a delicate instrument so please unpack it carefully to avoid unnecessary damage to the CD player. It is important to save all the packing materials and the boxes in case your ERC-1 ever needs to be moved or shipped back to the factory for service.

TECHNICAL SPECIFICATIONS

- Output voltage: 1V rms (7V peak)
- Channel separation: ≥95dB - ref. 1kHz
- Frequency response: 20Hz~20kHz (+/- 0.1dB)
- S/N: ≥100dB (A weighted）
- THD: ≤0.01％ 0dB 1KHz）
- Playback formats: Redbook CD, HDCD, MP3
- Digital Output Filter: 24-Bit, 384 times oversampling (Analog Devices 1955）
- Sampling Frequency: 44.1 kHz
- Analog output filter frequency: 80 kHz (-3dB)
- Amplitude output linearity: 0.2dB
- Phase linearity: 30°
- Power consumption: ≤ 25W
- Output connection types: digital coaxial, digital optical toslink, unbalanced RCA, balanced XLR
- Weight: 17.5 lbs. (unboxed)
- Width: 17 inches
- Depth: 14 inches (including RCA jack extension)
- Height: 3.75 inches (faceplate only) – 4.25 inches including feet
- Feet are recessed 2.25 inches from face of unit, and .5 inches from back of unit

Analog Connections

The analog sections will use the DAC's in the player and pass an analog signal to the pre/pro (receiver). Plug into the analog inputs of your pre/pro (receiver) to take advantage of the processing in the ERC-1.

Digital Connections

The digital outputs (Toslink / Coaxial) will send a digital signal to your pre/pro (receiver) allowing you to use the processing in your pre/pro (receiver).

All outputs (digital and analog) on the ERC-1 are active at all times.

KEY ERC-1 FEATURES

Four (4) independent power supplies to drive each section of the unit separately. This prevents the different sections from interacting and causing noise. The separate power supplies apply to:

1. CD carriage
2. Digital section
3. Analog section
4. Display

The CD drive mechanism and the digital section of the audio is encased in a steel substructure that shields it 100% from the audio stages. No noise from the mechanism or digital section can get into the audio. The ERC-1 features a new, state of the art magnetic loading mechanism, and uses high-density foam clamps, which eliminates any risk of scratching CD's when used properly.

The audio board itself is fully isolated from the power supply and digital sections and offers a fully discrete output stage, capable of producing 7 volts of output (no wimpy 2 volt output here!).

- Slot-load system with halo lighting.
- Lighting has two selectable functions:
    - Default setting: All lights stay brightly lit constantly.
    - 'Dim' setting: Dims the display light, and turns off the halo light and   all the front panel buttons except the On/Standby button. Halo lighting will occur when CDs are ejected. Activate this mode by pressing the 'Dim' button on the ERC-1 remote.
- 12 volt trigger for automatic turn on with other sources
- Remote control

DISC HANDLING

Use only discs with regular shapes. If an irregular disc (a disc with a special shape) is used the ERC-1 may be damaged.

Discs usable with the ERC-1
CD Audio (CD-DA), CD-R, CD-RW, HDCD

Holding discs
Avoid touching the surface of a disc where recording is performed.

Loading discs
Hold the CD by the edges loosely and gently slide the CD into the slot-loading system. ***Wait for the ERC-1 to grab the disc, there will be a short delay while the player grabs the disc.*** Release the disc into the ERC-1.

Cautions on loading discs
- ***Do not force*** the disc into the slot-loading system or it may be damaged.
- Make sure the CD label is facing up. Do not put the CD into the player upside down or the disc may get stuck and the ERC-1 may be damaged.
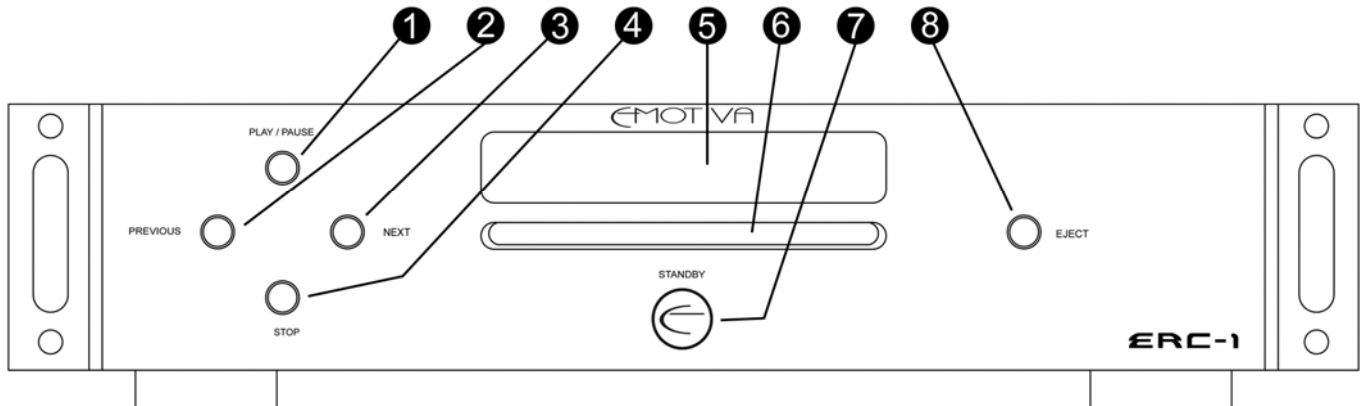
Cautions on handling discs
- Do not write on the printed side with a ball-point pen or pencil
- Do not use record cleaning sprays or antistatic. Also, do not use volatile chemicals, such as benzene or thinner.
- Do not apply labels or stickers to discs. (Do not use discs fixed with exposed tape adhesive or leftover peeled off stickers.
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.
- Do not load warped or cracked discs

Disc Storage
Be careful not to damage the disc as the data is highly susceptible to the environment
- Do not put in direct sunlight.
- Keep in a cool ventilated area.
- Store vertically
- Keep in a clean protective case.
- If you move the ERC-1 from a cold place to a warm place, condensation may collect on the inside parts and cause abnormal disc play. If this happens, wait for at least two hours before connecting the ERC-1 to a power outlet.

FRONT PANEL LAYOUT

1. PLAY/PAUSE
This is used to play and pause the disc.

2. PREVIOUS
This is used to jump to the start of the current track or to jump to the start of the previous track.

3. NEXT
This is used to advance to the start of the next track.

4. STOP
This is used to stop the disc.

5. DISPLAY
This contains all information about the disc currently playing.

6. SLOT-LOAD SYSTEM
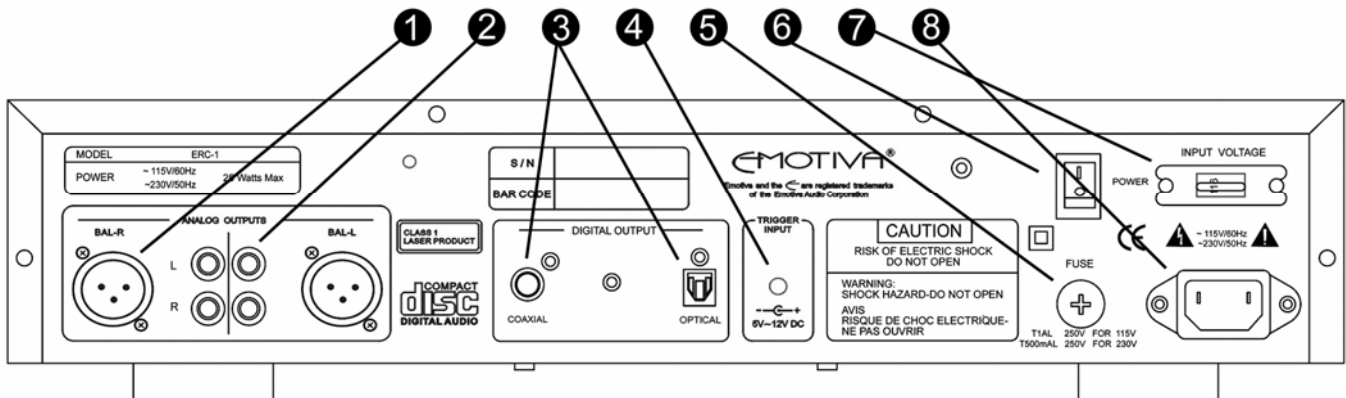This is where the disc is loaded. (Blue Halo lit)

7. STANDBY
This powers the unit to on from standby and from standby to on (also performed with the remote control). The button will glow amber when in standby and blue when on.

8. EJECT
This ejects the disc from the slot-load system.

REAR PANEL LAYOUT

1. **BALANCED OUTPUTS (1 set)**
   These are used to connect the ERC-1 to a single input device (pre/pro, receiver) with balanced (XLR) type cables.

2. **ANALOG OUTPUTS (2 sets)**
   These are used to connect the ERC-1 to two separate input devices, (pre/pro, receiver) with RCA type cables.

3. **DIGITAL OUTPUTS**
   These are used to connect the ERC-1 to an input device (pre/pro, pre-amp, receiver) via coaxial and/or optical.
   SPDIF Coaxial Digital - To obtain best results, use a high quality 75 ohm digital RCA interconnect cable (not one designed for normal audio use).
   Toslink Optical Digital - Use a high quality Toslink fiber optic interconnect cable specifically designed for audio use.

4. **TRIGGER INPUT**
   When connected to a pre/pro or receiver with a trigger output, the ERC-1 will power up and power down in synchronization with the connected device.

5. **FUSE**
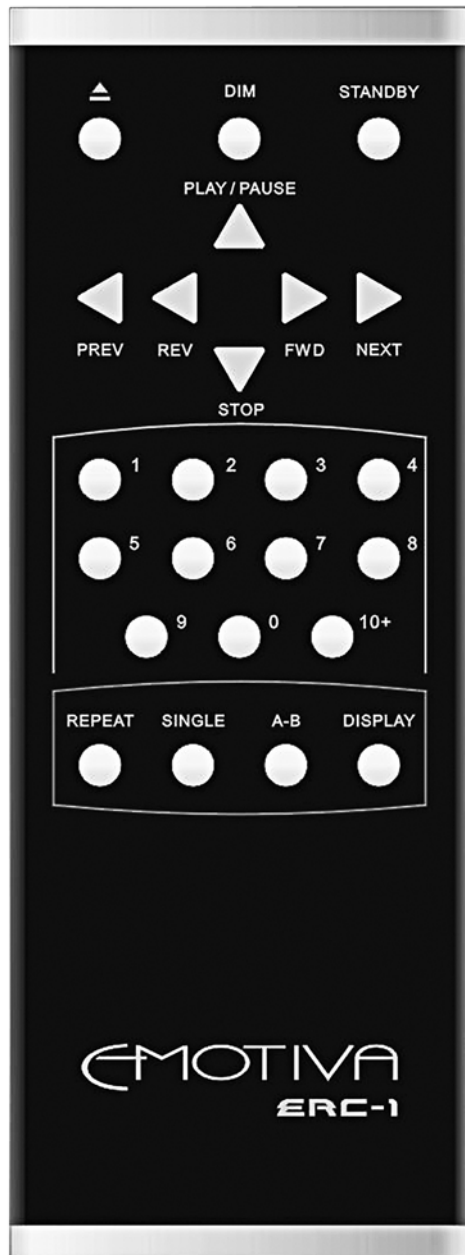
6. **MAIN POWER SWITCH**
   This rocker switch provides the master power for the ERC-1. After it is in the ON position, the ERC-1 can be turned on manually from the front panel switch, remote control or automatically with the trigger input via a 3.5mm input jack.

7. **INPUT VOLTAGE**

8. **POWER RECEPTACLE**
   This is a standard IEC 3 prong power receptacle.

REMOTE CONTROL

1. EJECT
Ejects the disc from the unit.

2. DIM
This is used to dim the display light. It also turns off the halo light and the lights for all the front panel buttons except the On/Standby button.

3. STANDBY
Switches the unit between On and Standby mode.

4. PLAY/PAUSE
This is used to Play and Pause the disc.

5. PREV
This is used to jump to the start of the current track or to jump to the start of the previous track.

6. REV
This is used to search backward and has three different speeds. Press once and it moves backward, press again faster, press a third time faster. You don't have to hold the button down. Hit PLAY or REV again to resume normal play.

7. FWD
This is used to search forward and has three different speeds. Press once and it moves forward, press again faster, press a third time faster. You don't have to hold the button down. Hit PLAY or FWD again to resume normal play.

8. NEXT
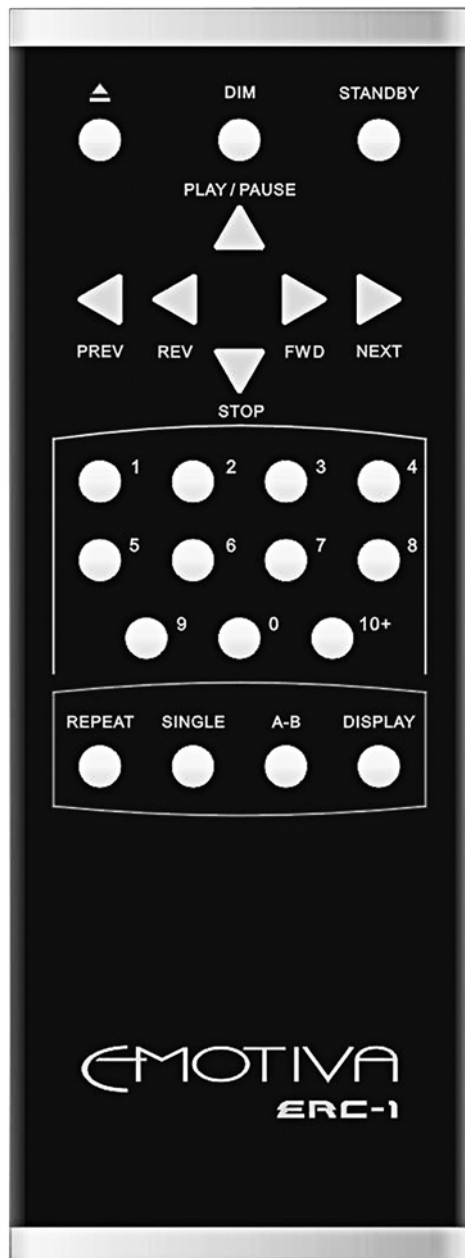This is used to advance to the start of the next track.

9. NUMERIC BUTTONS (1 to 10+)
These are used to specify a desired track. Press the number and the corresponding track will be played from the start of the track and play the remainder of the CD.

10. REPEAT
This is used to repeat one track or all of the tracks on a disk. Press the REPEAT button once and the display reads REPEAT ONE, press the REPEAT button again and the display reads REPEAT ALL, press the REPEAT button again the display reads REAPEAT OFF and the ERC-1 returns to normal play.

11. A-B

This allows you to loop a certain section of a track, a full track, multiple tracks etc. Press once to start the loop, press again where you want the loop to end. The player will now play the section between the two loop points. Press the A-B button again and the ERC-1 returns to normal play.

12. DISPLAY

Pressing the display button changes the information on the screen.

- When the ERC-1 first starts playing a disc the display will show the time elapsed on the current track.

- Press the DISPLAY button while the disc is playing and the display will change to total time left on the current track.

- Press the DISPLAY button again and the display will change total time elapsed on current disc.

- Press the DISPLAY button again and the display will change to total remaining time on the disc currently playing.

- Press the DISPLAY button again and the display will revert to the default of total time elapsed on current track.

CHANGING THE REMOTE CONTROL BATTERIES

Emotiva recommends using high quality AAA batteries in the ERC-1 remote control.

To change the remote control batteries you will need a small Philips head screwdriver.

Remove the six (6) Philips head screws on the back of the remote. Make sure you use the proper size screwdriver so you do not damage the screw heads. This should be performed on a stable surface. Take care not to lose any of the screws. If you lose any of the screws bring one of the remaining screws to your local hardware store, they should be able to find you an adequate replacement.

Turn the screw counter clockwise gently so not to damage the screw heads. When all six (6) screws are removed, remove the back panel.

Remove the old batteries and discard according to battery maker's instructions. Insert new batteries making sure they are installed correctly. Use diagrams in the battery slots for reference.

Place the back panel back on the remote and reinstall the six (6) screws, turning clockwise gently until a snug tight fit is achieved. Do not over tighten the screws as you may damage the screw heads and/or screw holes in the back of the remote.

Your remote is now ready to use.

OPERATING INSTRUCTIONS

LOADING & EJECTING DISCS

1. Press the Standby/On button, make sure unit is on.

2. The display will read EMOTIVA for a few seconds at power up. LOADING will then appear on the screen. The player will then say READY. **Insert disc into the slot-loader gently. Do not push hard. Allow the slot-loader to grab the disc from your hand; there will be a short delay.** *(If the ERC-1 does not say ready at power up, a disc is already in the player. The disc will start playing automatically. Press STOP and then EJECT to eject the disc.*

Note:

- Do not put anything except a Compact Disc into the slot loader; foreign objects may damage the ERC-1.

- ***Do not force discs into the slot-loader.***

- If the Compact disc is too dirty or scratched the disc may not play.

- Never load more than one disc into the player at one time.

NORMAL DISC PLAY

Switch on your pre/pro and amplifier or receiver and select the input the ERC-1 is connected to. Make sure your volume control is turned all the way down.

1. Press the Standby/On switch

2. Insert disc into the slot-loader (***Do not force the disc. Allow the slot-loader to grab the disc from your hand.)***

3. The ERC-1 will read the disc and begin to play automatically.

4. To stop the disc at any point press the Stop button. Pressing the Play/Pause button while the disc is playing will pause the disc. When the disc is paused the display will read PAUSE. Play can be resumed by pressing the Play/Pause button again.

LOCATING A SPECIFIC TRACK

1. Make sure that a disc is in the player

2. Pressing the Next Button on the either the ERC-1 or the remote control will forward the CD by one track. Repeat as necessary to find the desired track.

3. Press Play and the disc will play to the end of the disc.

4. Pressing the Previous Button on either the ERC-1 or the remote control will access the previous track.

5. Press a number on the remote control and the corresponding track will be played.

LOCATING A PARTICULAR POINT IN A TRACK

1. Make sure that the disc is playing the desired track.

2. Press the Left REV Button on the remote control, the CD will then rewind within the track. Press again and the disc will rewind faster. Press a third time and the disc rewinds faster. Press a fourth time and the disc will resume normal play or press Play to resume normal speed. The button does not need to be held down during this function.

3. Press Right FWD Button on the remote control, the CD will then fast forward within the track. Press again and the disc will fast forward faster. Press a third time and the disc fast forwards faster. Press a fourth time and the disc will return to normal play or press Play to resume normal speed. The button does not need to be held down during this function.

REPEATING DISCS AND TRACKS

1. Make sure that the disc is playing.

2. Press the Repeat Button on the remote control. REPEAT ONE will appear on the display. This will cause the current track to repeat.

3. Press the Repeat Button again and REPEAT ALL will appear on the display. This will cause the disc currently in the ERC-1 to repeat.

4. Press the Repeat Button a third time and REPEAT OFF will appear on the display and the ERC-1 returns to normal play back functions.

TROUBLESHOOTING

- **The disc does not rotate**
    1. Is the power cable plugged in?
    2. Is the power switch on?
    3. Is the disc placed upside down?
    4. Is the disc dirty?
    5. Is the disc scratched?
    6. Is the disc warped?

- **The disc is playing but there is no sound**
    1. Are the receiver or pre/pro and amplifier and speakers connected correctly?
    2. Is the receiver or pre/pro and amplifier turned on?
    3. Is the receiver or pre/pro function set to the correct input?
    4. Is the volume control set at the minimum level?

- **The disc stops, noise is heard or the sound drops out**
    1. Is the disc dirty?
    2. Is the disc scratched?
    3. Is the disc warped?

    *In the case of a CD-R or CD-RW disc this may occur when the conditions under which the disc in question was recorded were substandard or if the quality of the disc itself is poor.
    *This may also occur if the disc in question has the CDDA format mixed with other data.

- **A CD-R / CD-RW disc cannot be played**
    1. Is the disc placed upside down?
    2. Does the disc in question contain the properly written TOC (Table of Contents)?
    3. Is the disc in question recorded in an audio (CD-DA) format?

- **The remote control does not operate**
    1. Is the remote control sensor blocked?
    2. Is the remote control sensor pointed at the remote sensor on the front of the unit?
    3. Are there batteries in the remote control?
    4. Have the batteries in the remote control expired?
    5. Is there strong light (from a window etc.) hitting the ERC-1's remote sensor?

- **A specific CD cannot be played**
    1. A CD with copy controls cannot be played on the ERC-1. These are special discs that do not comply with the current CD standards. When normal CDs can be played and the problem only occurs with discs with copy controls there is not a problem with the ERC-1.

- **Digital signal has no output**
    1. Are the coaxial and/or optical cables connected correctly?
    2. Is the receiver or pre/pro set to the correct input?
    3. Is the input set up to receive a digital signal?

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