

OWNER'S MANUAL

Hafler™

A Division of Rockford Corporation
613 South Rockford Drive
Tempe, Arizona 85281
602 · 967 · 3565

TABLE OF CONTENTS

Introduction	Page 1
Installation	
Set-Up	Page 1
Connections	Page 2
Operation	
Explanation Of Keys	Page 2
Remote Control	Page 4
Display Indications	Page 5
Loading/Unloading Disc	Page 7
Playing a Disc	Page 7
Next/Previous Track Selections	Page 8
Searching Function	Page 9
Random Play	Page 9
Programming	Page 11
Additional Information	Page 13
Technical Data	Page 16
Symptoms and Their Likely Causes	Page 17
Factory Service and Limited Warranty	Page 17

INTRODUCTION

The Hafler IRIS system is a major step forward in the world of audio technology. The IRIS CD completes an intensive engineering effort to create a series of components which offer superior performance combined with the unprecedented convenience of the IRIS remote control.

The basic operation and features of the IRIS CD Player are described in simplified form in figures 1 and 2. Although operation of the CD Player is possible by studying these diagrams only, complete appreciation of its features and operating modes can only be realized by thoroughly reading this owner's manual.

We have tried to present this information in an easy to follow format. We urge you to take the time to read through this manual as soon as possible.

INSTALLATION

SET-UP OF THE IRIS CD PLAYER

FREE STANDING

Always set the player horizontally on a flat, firm surface. Allow a minimum space of at least 14" above the player so as not to interfere with the cooling of the player.

STACKED

Locate the player preferably at the bottom. Never set the player directly on top of a high-power amplifier, because such an amplifier gives off a substantial amount of heat.

RACK MOUNTING

The IRIS CD Player is shipped with removable end caps on its front panel. Optional rack mounting ears are available from the factory for mounting the unit in a standard 19" equipment rack.

WARNING- Never allow the player to stand for long periods in direct sunlight or near any heat source.

CONNECTIONS

REMOTE CONTROL

The IRIS CD has two recessed male connectors on the back panel. They are internally connected together to allow the IRIS digital data-bus to “daisy-chain” to other IRIS-compatible accessories.

Connect either end of the supplied ribbon-type umbilical cable to either of the CD's connectors. Note that both of the cable's connectors are keyed, and therefore fit only one way. Be sure to insert the plugs fully. Connect the free end of the cable to the connector on the rear of (either) the IRIS Preamp or IRIS Tuner.

AUDIO

Output Right/Left: For the signal output to the preamplifier. Connect a standard RCA-type patch cord from the right and left outputs into the corresponding CD input jacks of your IRIS preamplifier.

Digital: For digital output signal to an outboard Digital to Analog (A/D) converter.

POWER

For AC line (mains) power. Make sure the line voltage on the rear of the unit is appropriate for your location.

OPERATION

EXPLANATION OF KEYS (Refer to Figure 1)

1. POWER button

For switching on and off.

2. DISPLAY

Indicates the player's present function.

Displays details from the disc contents list.

The indications on the display are detailed in Figure 2.

3. PLAY button

For starting play (PLAY).

For returning to the beginning of a track (REPLAY).

4. STOP button

For stopping play.

For erasing a program.

5. OPEN/CLOSE button

For opening and closing the disc tray.

6. SHF (SHUFFLE) button

For playing all tracks on a disc in random order.

7. PRG (PROGRAM) button

For storing track numbers in a program.

For erasing track numbers from a program.

For checking the program.

8. REPEAT button

For repeating a disc or a program.

9. <<, >> (SEARCH) button

For fast search to a particular passage during play.

(<< for reverse, >> for forward.)

10. PAUSE button (HOLD on remote)

For briefly interrupting play and for returning from interrupted play.

11. ◀ (PREVIOUS), ▶ (NEXT) buttons

For selecting a previous or later track during play.

For selecting the track number you want play to begin with.

For selecting track numbers when compiling a program.

IRIS REMOTE CONTROL TRANSMITTER

You should re-read the remote section of the IRIS PREAMPLIFIER manual in conjunction with the following additional information.

HANDSHAKE SYSTEM

The umbilical connection established allows a very convenient "HANDSHAKE" operation between IRIS SYSTEM COMPONENTS. In simple terms, your IRIS CD Player tells your IRIS Preamplifier that it is connected and powered. This tells the Preamplifier, when CD is selected, to automatically "transfer" the remote's top eight (multi-legend) keys to perform CD command functions.

All of the KEY functions of the CD Player panel which are convenient from remote operation are available from the 8 remote KEYS:

<i>PREAMP</i>	<i>TUNER</i>	<i>CD</i>	
PHONO	MEM 1	PLAY	
CD	MEM 2	STOP	
TUNER	MEM 3	<<	(REVERSE SEARCH)
VIDEO	MEM 4	>>	(FORWARD SEARCH)
AUX 1	MEM 5	RPT	(REPEAT)
AUX 2	DOWN	⏮	(PREVIOUS)
TAPE 1	SCAN STOP	HOLD	(PAUSE)
TAPE 2	SCAN UP	⏭	(NEXT TRACK)

CLEAR KEY

The CLR (CLeAr) key on the remote transmitter causes the CD Player to stop and allows selection of another input source to the IRIS Preamp within 3 seconds. If another source is not selected within three seconds, the remote's key functions will remain in CD mode. If you wish to select another source but keep the CD Player operational:

Press the **HOLD** key (prior to the CLR key).

- This causes the CD Player to pause
- Press the CLR key
- Select another SOURCE

To return to the CD Player:

- Press CLR key
- Select CD
- Press HOLD key
- The CD Player will now continue playing

RECORD SECURITY

As explained in the "remote" section of the IRIS Preamplifier Manual, if RECORD SECURITY is in effect (either RECORD switch is IN on the IRIS Preamplifier), the CD or Tuner will refuse all IRIS remote commands, including CLR. (Volume and Balance are always active.) The Preamp's red MUTE legend will remind you of this by its distinctive interrupted-flashing mode.

THE INDICATIONS OF THE DISPLAY **(Refer to Figure 2)**

Each Compact Disc has, along with the music, a list of contents detailing the numbers of the tracks, the playing time of each track and the total playing time of the disc. The player always scans this first and stores it in memory to provide information via the display.

1. **POWER**

- Lights up when the player is switched on.
- Flashes during scanning of the disc contents list.

2. **TRACK**

- The number of the track which is currently playing.
- The number of tracks on the disc when the tray is closed with the OPEN/CLOSE button.

3. **ARROW SYMBOL**

- Lights up when the tray is closed by hand, with PLAY, or with SHF.

4. **TIME**

- The elapsed playing time in minutes and seconds of the track which is playing.
- The total playing time of the disc when the tray is closed with OPEN/CLOSE.

5. **PROGRAM**

- Lights up when the first track number of a program is entered.

6. **SHUFFLE**

- Lights up when the disc is played in random order.

7. **REVIEW**

- Lights up when checking the program.

8. **PAUSE**

- Lights up when the player is in the pause mode.

9. **REPEAT**

- Lights up when repeating a disc or program.

10. **'0)))' SYMBOL**

- Lights up briefly when receiving a command through the IRIS Handshake system.

11. **ERROR**

- Lights up briefly when an operating error is made.

LOADING THE DISC

Open the disc tray by pressing OPEN/CLOSE.

- Insert the disc into the tray printed side up.
- Handle disc by edges only - do not touch the surface.

To close the tray:

- Press the front of the tray lightly or OPEN/CLOSE, or press PLAY, to simply play the disc.
- Press SHF to play the disc in random order.

If ERROR lights up after the tray is closed, this means that the disc is upside-down, dirty, badly scratched or otherwise faulty.

UNLOADING THE DISC

Open the tray by pressing OPEN/CLOSE.

- Hold the disc in same way as when loading.
- Store the disc immediately in its holder. This prevents soiling and damage.

Close an empty tray by pressing OPEN/CLOSE.

- Avoid leaving the tray open, to prevent dust from entering.

PLAYING THE ENTIRE DISC

Close the tray by hand or by pressing PLAY

- The ARROW SYMBOL indication lights up.
- Track '1' appears on the display.
- Play starts as soon as the elapsed time indicates '0:00'. Some compact discs have a 3 or 4 second count-down feature that precedes the actual program material.
- After the last track the disc stops.
- The ARROW SYMBOL indication goes out.
- The display again shows the number of tracks and the total playing time of the disc.

GOING BACK TO THE BEGINNING OF A TRACK (REPLAY)

Press **PLAY**

- The current track starts again from the beginning.

SELECTING ANOTHER TRACK DURING PLAY

SELECTING A HIGHER TRACK NUMBER

Press **▶** (NEXT) until the desired track number appears on the display.

- The playing time indication disappears.
- Play is interrupted until selecting is finished.
- As soon as the playing time indication returns, the selected track begins to play.

If **▶** (NEXT) is pressed while playing the last track, ERROR lights up to indicate that there is no next track and playing of the last track continues. If the player is in the REPEAT mode, then play continues with the first track.

SELECTING A LOWER TRACK NUMBER

Press **◀** (PREVIOUS) until the desired track number appears on the display.

- The playing time indication disappears.
- Play is interrupted until selecting is finished.
- As soon as the playing time indication returns, the selected track begins to play.

If **◀** (PREVIOUS) is pressed while playing the first track, ERROR lights up to indicate that there is no previous track and playing of the first track continues. If the player is in the repeat mode, then play continues with the last track.

SEARCHING FOR A PARTICULAR PASSAGE DURING PLAY

Hold << (SEARCH) down to search backward to the beginning.

Hold >> (SEARCH) down the search forward to the end.

As soon as the button is released play restarts at once.

The length of time for which the button is held down determines the search speed:

- The first three seconds searching is relatively slow.
- After approximately four seconds searching is slightly faster.
- After approximately seven seconds searching reaches highest speed.

At the first two speeds of searching, the sound of the disc remains audible, although accelerated. When searching by ear it is therefore advisable to release the button as soon as the sound disappears. If PAUSE has been pressed before beginning searching, then no sound will be heard.

During searching, as soon as the beginning of the first track has been reached, ERROR lights up. Play will resume there as soon as the button is released. If the end of the last track is reached, ERROR lights up. Play will resume a few seconds before the end of the disc as soon as the button is released.

BEGINNING WITH A TRACK NUMBER OTHER THAN THE FIRST

Close the tray by pressing OPEN/CLOSE.

- The highest selectable track number appears on the display, together with the total playing time of the disc.

Press ► (NEXT) until the required track number appears.

- The playing time indication disappears.

Press PRG

- The PROGRAM indicator will light up and the display will indicate '7 P'.

Go back to '3.' using ◀ (PREVIOUS)

Press PRG again

- You will now see '3P'.

Continue this sequence until track 10 has been stored.

- When the last number has been stored the display will show '10P' continuously.

CHECKING THE PROGRAM (REVIEW)

The stored program sequence may be checked by pressing PRG.

- The REVIEW indication lights up.
- All the track numbers appear in the programmed sequence on the display.
- The REVIEW goes out again.

In our example: '7' '3' '9' '4' '12' '10' 10P' will appear.

If ERROR lights up, this means that no track numbers have yet been stored.

ERASING A TRACK NUMBER FROM THE PROGRAM OR THE ENTIRE PROGRAM

Bring up the track number you wish to erase by pressing ▶ (NEXT) or ◀ (PREVIOUS).

Press PRG while the 'P' after the number is flashing.

- The 'P' is replaced by a 'C' (for clear).

Press STOP if you wish to erase the entire program.

- The display shows the number of tracks and the total playing time of the disc.

PLAYING THE PROGRAM

Press PLAY

- The ARROW SYMBOL will light up.
- The first number of the program appears on the display.
- Play begins as soon as the time display of the first track is shown.
- As play continues the selected sequence and the corresponding track numbers will appear.
- While playing, the entire program can be reviewed by pressing PRG.
- Pressing ◀ (PREVIOUS) or ▶ (NEXT) during programmed play will change the track to the previous or next track in the sequence.

All player functions can be used during programmed play except for:

- Beginning with a track other than the first one on the program.
- Playing the program in random order.

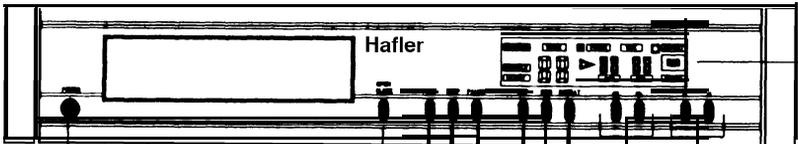
Searching for a particular passage is limited to within the track being played. When either end of the track is reached ERROR lights up. When STOP is pressed or when all the tracks of the program have been played, the disc stops, but the program remains stored. The program will be erased when you open the tray. It will also be erased if you press STOP twice in succession during playback.

ADDITIONAL INFORMATION

CARE OF THE DISCS

Although both sides of a disc are protected by a special coating, it is still advisable to treat the discs with care:

Never leave discs lying around: put them back in their holders immediately after use. Never write on the printed side! Do not attach any stickers on that side. Keep the shiny surface of the disc clean. Use a soft lint-free cloth and always wipe the disc in a straight line from center to



POWER For switching on and off

OPEN/CLOSE: Open and close the disc tray

PLAY. Starts play or returns to track beginning

STOP Stops or erases a program

PAUSE: Briefly interrupt or return from interrupted play

SHF: Play all tracks on a disc in random order

PRG: For storing/erasing/checking the program

REPEAT. Repeat a disc or a program

<< SEARCH >> Fast search to a particular passage during play

< PREVIOUS/NEXT > Select previous/later track during play or programming

DISPLAY
SEE DETAIL

FIGURE
ONE

PROGRAM: Indicates storage of the first track of a program

TRACK: Indicates number of track playing

PAUSE: Indicates pause mode

TIME: Indicates playing time in minutes and seconds

REPEAT: Indicates repeat playing of disc

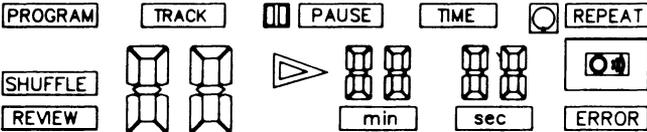
SHUFFLE: Indicates playing disc in random order

REVIEW: Indicates review of stored program selections

ERROR: Indicates error in operating

Indicates reception of remote control command

Indicates when tray is closed by hand, with PLAY, or SHF



edge. You may breathe lightly on the disc first, to provide slight moisture.

Warning: Cleaning agents for conventional vinyl records are not suitable for cleaning a Compact Disc, nor may detergents or abrasive cleaning agents be used.

PLAYER MAINTENANCE

When cleaning the player and face-plate, we advise a soft cotton cloth with a non-abrasive cleaner that is safe for Lexan and painted surfaces.

DO NOT use paper towels or any coarse material to clean the face-plate as these materials may scratch the insert.

The disc tray should be kept free of dust with a dry cloth.

TECHNICAL DATA

TYPICAL AUDIO PERFORMANCE

- Frequency Response: 2-20,000 Hz
Amplitude Linearity: +/- 0.1 dB (20-20,000 Hz)
- Phase Linearity: +/- 0.5 degrees (20-20,000 Hz)
- Dynamic Range: 96 dB (20-20,000 Hz)
- Signal-to-Noise Ratio: 100 dB (20-20,000 Hz)
- Channel Separation: 96 dB (1 kHz)
- Wow and Flutter: Quartz Crystal Precision
- D/A conversion: quadruple oversampling (176.4 kHz) with digital filter and two 16-bit D/A converters.
- Audio Output Level: 2V rms

POWER SUPPLY

Supply Voltage: 120 VAC (or as marked)
Supply Frequency: 60 Hz
Power Consumption: 25W approx.

Specifications are subject to change without notice

SYMPTOMS AND THEIR LIKELY CAUSES

Insufficient familiarity with the combination of a new product and new discs may lead to faults arising during use. These are generally caused by a simple error in operation or external factors.

It is perhaps useful to check the points listed below and where possible remedy these before taking your player for repair.

- Condensation has formed on the lens of the laser due to a dramatic change in temperature. This will disappear automatically after some time.
- There is a foreign object in the disc tray.
- The disc has not been inserted with the printed side up or there is no disc in the tray.
- The disc is dirty, badly scratched or warped.
- The player has been connected to the PHONO jacks of the preamplifier.

If the fault remains, try to clear it by switching the player off and on. If this also fails to help, do not continue experimenting, but remove the plug from the socket and consult your dealer.

Under no circumstances should you repair the player yourself: this action will void the warranty!

FACTORY SERVICE AND LIMITED WARRANTY

If you encounter any difficulty or have any questions concerning your IRIS CD player, please call our Customer Service weekdays, 8 am to 3:30 pm Mountain Standard time, at **602-967-3565**.

Before returning any unit to the factory for service, please call us. All units being returned (regardless of warranty status) must receive a Return Authorization (RA) Number. In addition, we can offer trouble-shooting assistance that

may often simplify or even eliminate the need for factory service.

The Hafler IRIS CD Player is warranted for 1 year from the date of purchase, including parts, labor, and return shipping costs from the factory to the owner within the Continental USA.

It is the owner's responsibility to pay shipping (preferably UPS) to the factory: collect shipments will not be accepted. Units under warranty should be accompanied by a copy of a dated Bill of Sale. Use the original carton and all packaging material, and be sure to include a return address, and a brief description of the difficulty, including whether it is intermittent.

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

Hafler
A Division Of Rockford Corporation
613 South Rockford Drive
Tempe, Arizona 85281
602 - 967 - 3565