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BOOTHROYD STUART
MERIDIAN

MERIDIAN COMPACT DISC PLAYER-MCD

WARNING

**TO REDUCE THE RISK OF
FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE
TO RAIN OR MOISTURE.**



This symbol is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The Model and Serial Number of your Compact Disc player will be found on the bottom of the instrument. Please record the Model and Serial Number in the space provided below.

MODEL NUMBER: _____

SERIAL NUMBER: _____

CAUTION

**USE OF CONTROLS OR ADJUSTMENTS
OR PERFORMANCE OF PROCEDURES
OTHER THAN THOSE SPECIFIED
HEREIN MAY RESULT IN
HAZARDOUS RADIATION EXPOSURE.**

TECHNICAL DATA**Audio Performance**

Number of Channels	2
Frequency Range	20-20,000 Hz, ± 0.3 dB
Dynamic Range	> 90 dB
Signal-to-Noise Ratio	> 90 dB (20-20,000 Hz)
Channel Separation	> 86 dB (20-20,000 Hz) > 90 dB (at 1000 Hz)
Total Harmonic Distortion (incl. noise) at max. output level	< 0.005%
Wow and Flutter	quartz crystal precision
D/A Conversion	16 bit with digital filtering
Error Correction System	Cross Interleave Reed Solomon Code (CIRC)
Audio Output Level	2 V _{rms} , typical

Optical Readout System

Laser	semi-conductor AlGaAs
Wave length	800 nm

Signal Format

Sampling Frequency	44.1 kHz
Quantization	16 bit linear/channel

Power Supply

Supply Voltage	see type plate at the bottom of the player
Supply Frequency	60 Hz
Power Consumption	20 W approx.
Safety Requirements	U.L.

Cabinet, general

Material/finish	polystyrene with extruded alumi- num profiles
Dimensions (w x h x d)	
with cover closed	12 1/2" x 3" x 10 1/2"
with cover open	12 1/2" x 7" x 10 1/2"
Weight	11 lbs approx.

Disc

Diameter	4 3/4"
Thickness	.06"
Sense of rotation (seen from reading side)	counterclockwise
Scanning velocity	1.2-1.4 m/s
Rotation speed	500-200 rpm
Playing time (max)	60 min (stereo)
Track pitch	1.6 μ m
Material	plastic

**The right is reserved to change
data if necessary**

BOOTHROYD STUART MERIDIAN COMPACT DISC PLAYER - MCD

Through a combination of the advanced digital technology of Philips, the principal inventor of the CD format and the musically accurate analog circuitry of Meridian we have produced the MCD, the audiophile CD player. We draw your attention to the following details which will ensure your satisfaction and make the most of your investment.

Cables. Much work has been done on cables for interconnecting audio equipment. A considerable number of high quality connecting cables are available. To realize the fullest potential of your CD with high quality auxiliary equipment we recommend the use of a high quality interconnecting cable. Rather than supply the MCD without an audio cable we have included the regular Philips lead which is only adequate for some applications.

Microphony. In tests we have found that the player can be subject to some microphonic effects: that is, the very signal playing can cause small vibrations which effect performance. In order to help damp these vibrations we recommend very careful

positioning of the player. We have found that provided the grilles beneath the machine are free to the passage of air, putting the player on a carpeted floor sounds best. Since this is usually impracticable we suggest the use of a thick felt mat. It should be understood that in most respects the player is free from the mechanical problems associated with record turntables and pickup systems. Putting the MCD on a special Record Turntable Table is not necessarily a good thing and experimentation is advised.

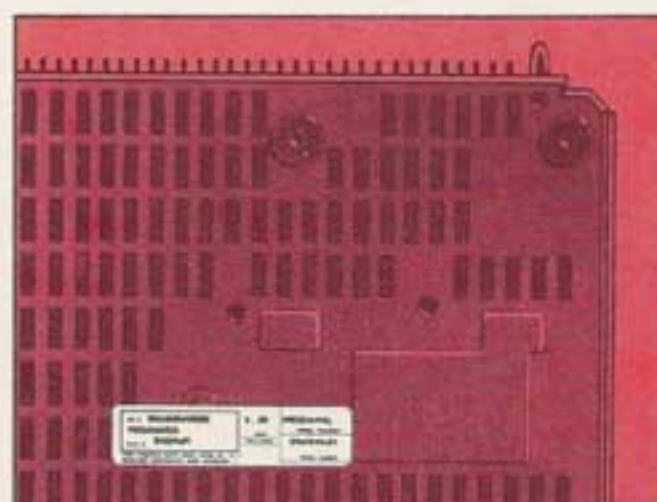
Auxiliary Equipment. Meridian has worked carefully to make the purchase of your CD Player a lasting investment. Our complementary products, Active Loudspeakers and Amplifiers are designed to provide a perfect match to the new technology of CD. Our Sales/Service Department will be pleased to help with any question which cannot be answered by your Dealer.

We wish you a lasting musical benefit from this remarkable new medium.

INSTALLATION

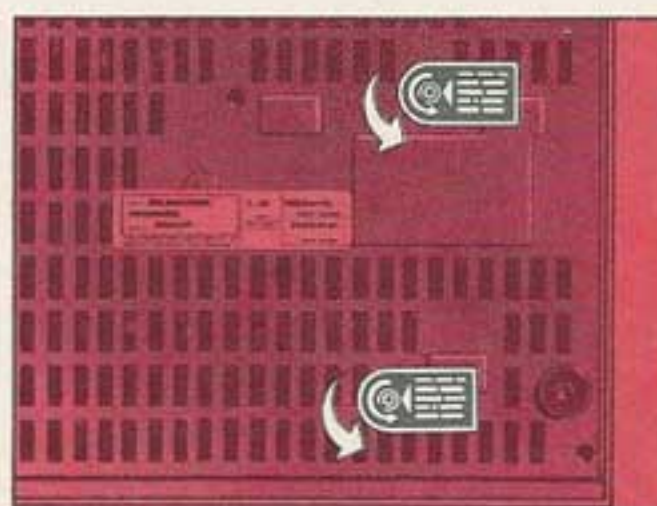
Checking the Power Supply

The type plate, on the bottom of your Compact Disc player, tells you the power voltage for which the player is set. If your power voltage is different, or becomes different in the future, get your dealer - or our Servicer - to change the voltage setting for you.



Taking Out the Transit Screws

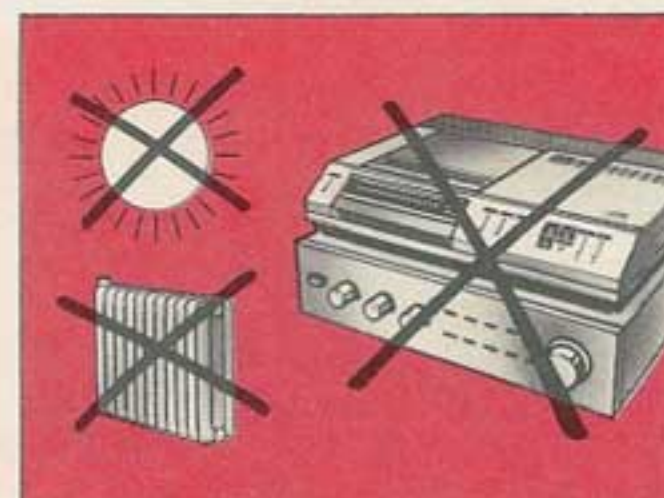
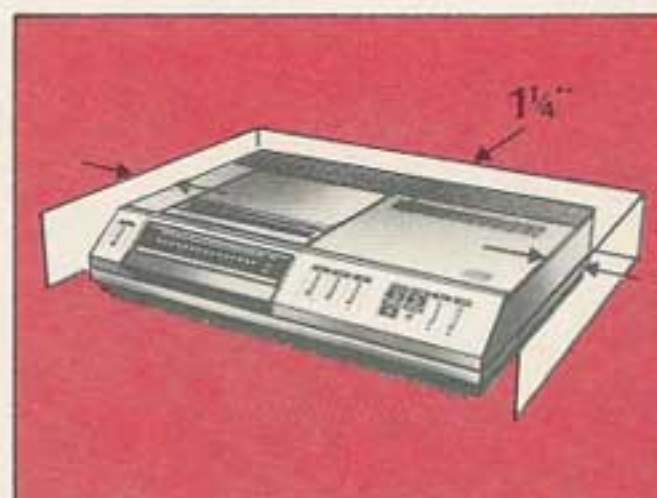
On the bottom of the player you will see two labelled screws which lock the player mechanism to protect it during transportation. Remove these screws and keep them in a safe place. Always refit them if the player is to be transported.



Locating the Player

Stand the player on a firm surface - and take care that the ventilation slots in the top and rear are kept clear so as not to interfere with the cooling of the player. If you fit the player in a cabinet, rack or wall unit, there should be a clear space of 1 1/4" all round.

Never stand the player directly upon an amplifier which gives off a substantial amount of heat, or near any heat source. Avoid positions where the player is subjected to direct sunlight for long periods.



Connecting to the Amplifier

To connect the player to your amplifier, you use the cord supplied. This has two plugs, marked L and R, at each end. Connect the cord to the L and R jacks at the back of the player, and to the CD/TV or AUX jacks on your amplifier.

If these jacks are already in use, you can plug in to the TUNER or TAPE IN jacks, but **never** the PHONO jacks! The PHONO jacks are not suitable for the connection of a Compact Disc player.



4 OPERATION

Your Compact Disc player is now ready for use. Before attempting to operate it, you are recommended to familiarize yourself with the functions of the controls and indicators as described briefly below. The names used here for the controls and indicators will be used throughout the text.

1 ON/OFF button: for switching the player on and off.

2 PROG(ram) display: a LED-bar display which indicates the number of tracks on a disc; also used as an aid in compiling a program.

3 TRACK display: a LED-bar display in which the LEDs light one at a time to indicate the track in play; also used to locate tracks for programming.

4 PAUSE LED: lights when you press the PAUSE button.

5 ERROR LED: flashes to indicate an operating or programming error.

6 REPEAT LED: lights when you press the REPEAT button.

7 PLAY/NEXT button: for starting play (PLAY) and also for moving on to the next track during play (NEXT).

8 PAUSE button: for short-term interruptions during play and for holding play at the start of a track: stops the laser pick-up, but leaves the disc motor running.

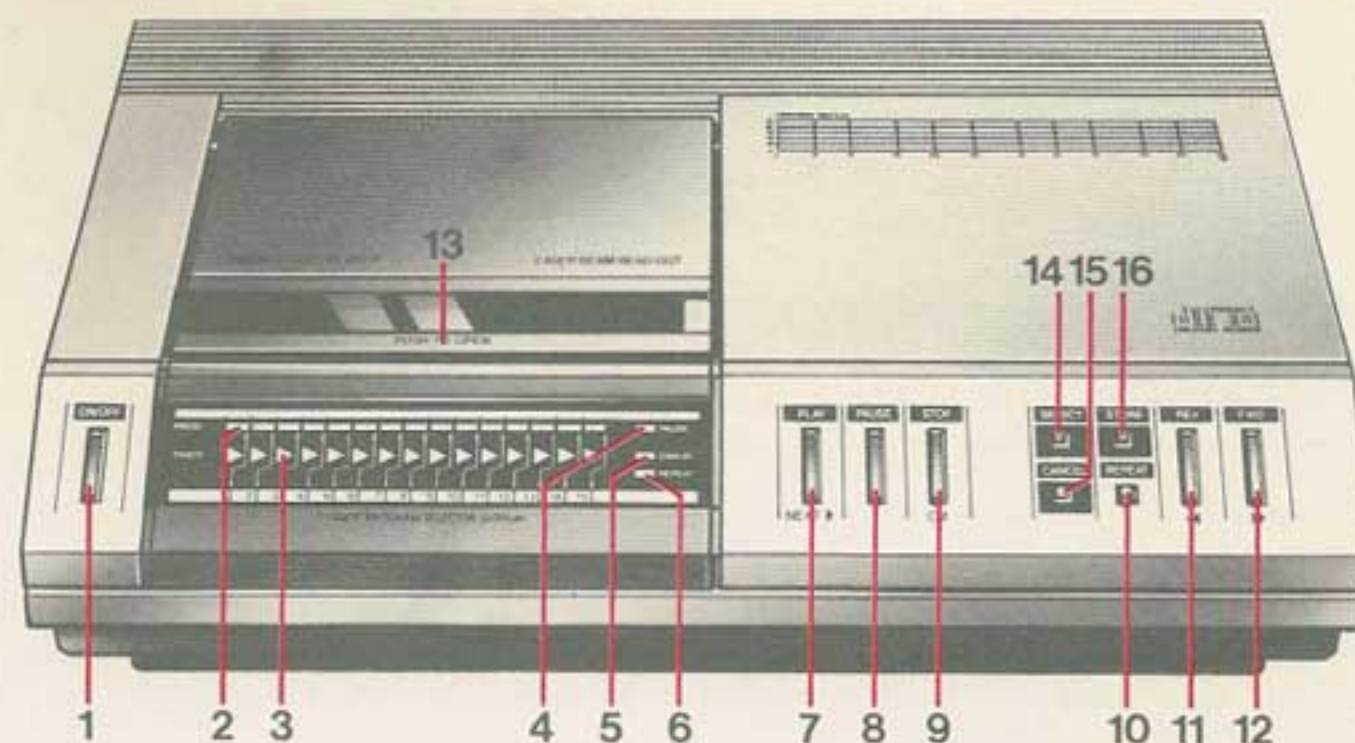
9 STOP/CM button: for stopping play during playback (STOP) and for erasing a program (CM = Clear Memory).

10 REPEAT button: for repeating a disc or a program.

11 REV button: for searching backwards for a particular passage in a track.

12 FWD button: for searching forwards for a particular passage in a track.

13 PUSH TO OPEN: rectangular boss on cover, which you press to open the disc compartment.



14 SELECT button: for selecting the track with which you wish to start playback, and for choosing tracks when compiling a program.

15 CANCEL button: for cancelling the tracks you do not want to hear in a program.

16 STORE button: for storing tracks when compiling a program.

On and Off switching (ON/OFF)

When you plug the MCD into the power socket, the green track indicator lights will be dimly illuminated. This indicates the Standby Condition (SB). The MCD can be left in this condition permanently in complete safety. If you wish to

unplug the MCD during an extended period of non-use, be sure to disconnect the rest of the system before disconnecting the AC mains plug. Pressing the "on" switch turns the player's computer on and this is signalled by brighter illumination of the track indicator lights. In the event of the machine

failing to operate normally it is sometimes necessary to reset the computer. This is done by first switching off your amplifier and then disconnecting your CD from the power line. Wait one minute and then reconnect the CD. This procedure should be followed before a fault is suspected.



Loading and Unloading a Disc (PUSH TO OPEN)

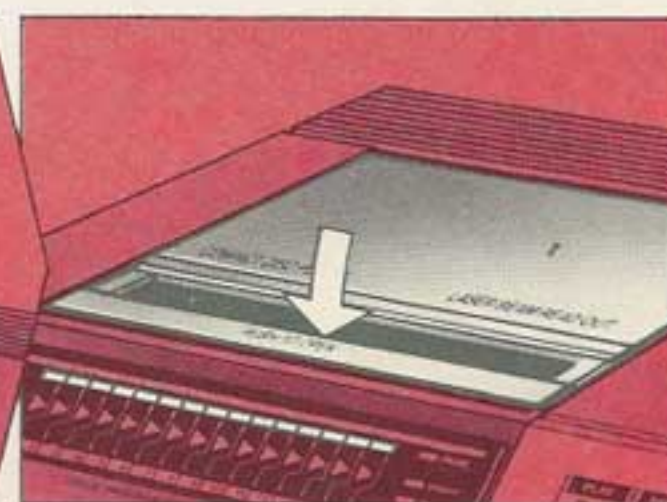
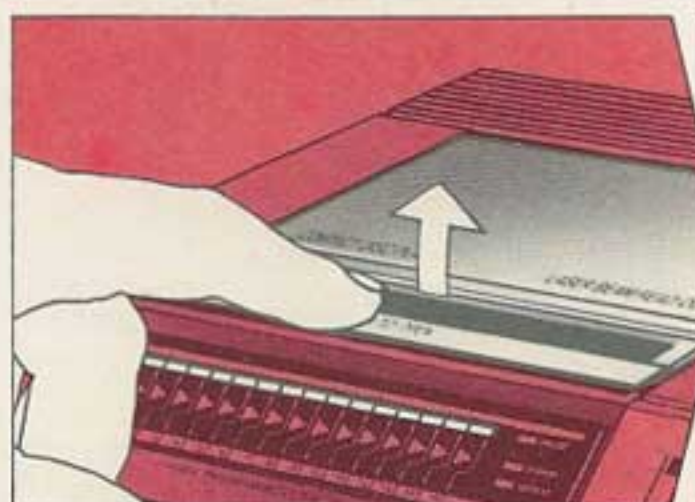
You open the disc compartment by pressing the PUSH TO OPEN boss on the cover. The cover will lift automatically.

With your hand open, and thumb and fingers extended, take the Compact Disc out of its holder and fit it, label side up, on to the spindle in the disc compartment. Close the cover by pressing it down.

Hold the disc in the same way to remove it.

To prevent the accumulation of dust and the formation of a film on the lens of the laser pick-up, never leave the cover open unnecessarily. (See also 'Player Maintenance'.)

Avoid opening the cover during play, because this will stop the disc.



Playing the Disc (PLAY)

You start the disc by pressing the PLAY button: the first TRACK Display LED will light. As soon as the player has read the contents list recorded at the beginning of the disc, the number of LEDs lighted in the PROG Display will correspond to the number of tracks on the disc. All the tracks will then be played consecutively.

As each track ends, the corresponding PROG Display LED goes out, while the lighted TRACK Display LED moves on one place. Thus the progress of the playback is always displayed.

When all the tracks have been played, the disc stops and all 15 PROG Display LEDs relight; the TRACK Display LED goes out.



Going on to the Next Track (PLAY NEXT)

If you decide to skip the track being played, and go on to the next, press the PLAY button again. The lighted TRACK Display LED moves on one place and play is suspended until the laser pick-up reaches the next track.

If you press the PLAY button during the last track, the ERROR LED will flash, reminding you that there is no next track. The player will then begin to play the first track on the disc. You can also use the PLAY NEXT mode to get a quick idea of the disc contents by listening to the beginning of each track.



OPERATION 5

Beginning at any Specific Track (Go-To Mode)

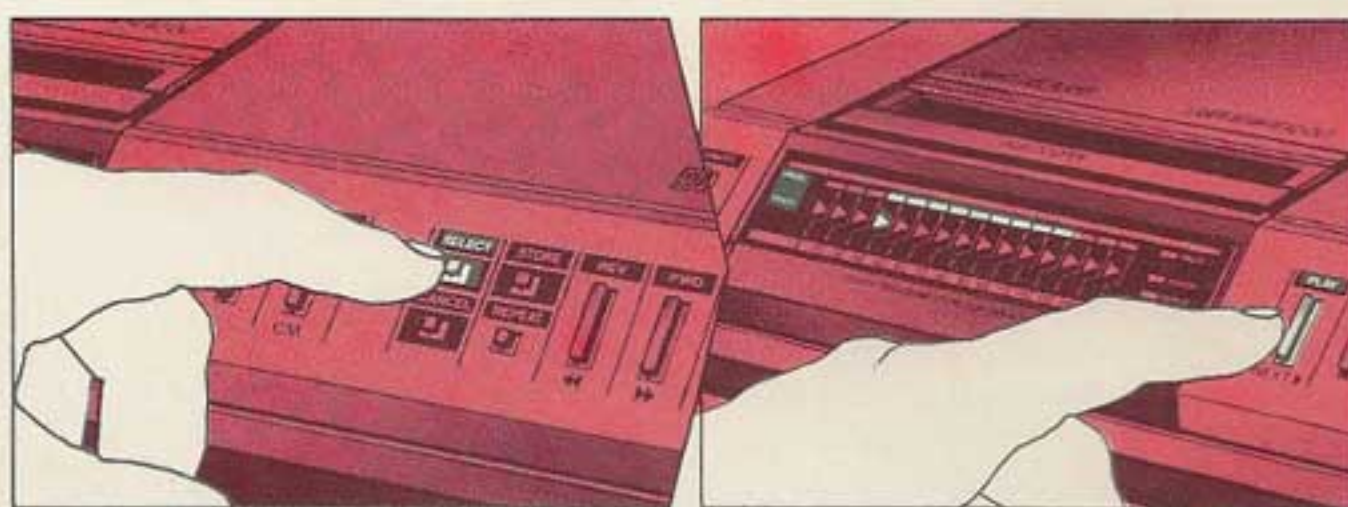
To start play with a track other than the first, you must locate the track required on the TRACK Display. To do this, you press the SELECT button; the first TRACK Display LED will begin to flash. Press the SELECT button again and the flashing TRACK Display LED will move forward one place. You press the SELECT button successively until the flashing TRACK Display LED indicates the required track. Alternatively, you can hold the SELECT button down and let the flashing TRACK Display LED run through until it reaches the track required. The TRACK Display LED will continue to flash under the chosen track for about 10 seconds, during which time you must press the PLAY button. The PROG Display LEDs will go out one after another

until the chosen track is indicated, then play will begin.

You can also use the go-to mode after play has begun, e.g. to skip a number of tracks or to repeat a specific track. Play will then be interrupted from the time the PLAY button is pressed until the newly chosen track is reached.

If, by mistake, you select a track higher than the highest track number on the disc, the ERROR LED will flash. This will happen immediately with a disc that is already playing, or after the contents list has been read with a disc that has not yet started. Play will then begin with the first track on the disc.

If you allow more than 10 seconds to elapse between choosing the required track and pressing the PLAY button, the microprocessor in the player will assume that you have changed your mind, and the command will not be executed; the



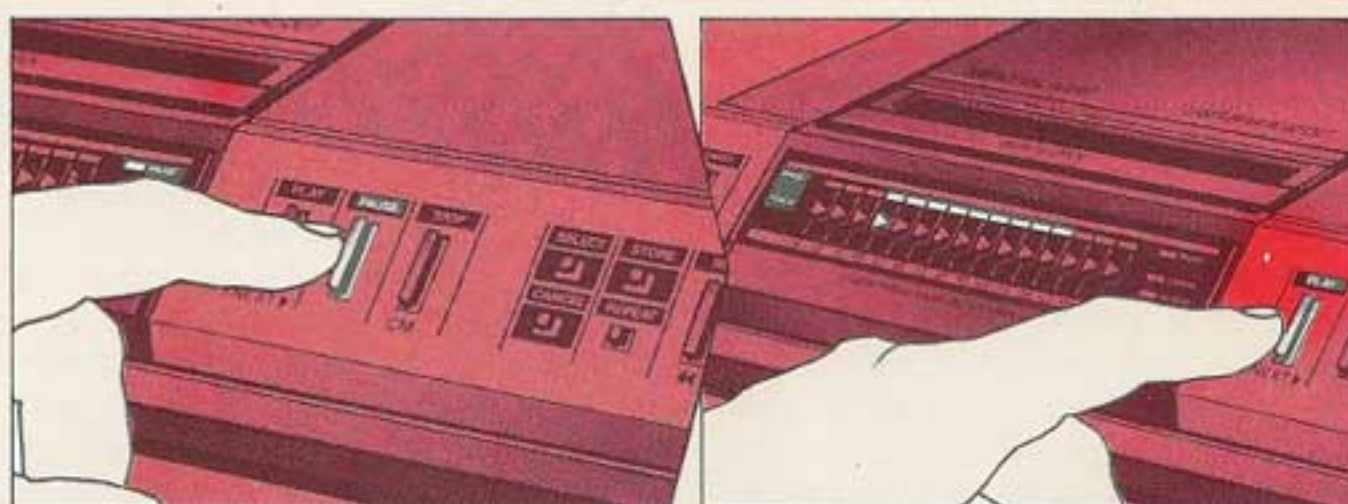
flashing TRACK Display LED will go out.

If you accidentally go past the required track, hold down the SELECT button until the TRACK Display LED runs right through and returns to track 1, then run forward to the track required.

Holding Play at the Start of a Track (Stand-By Mode)

In all three foregoing playing modes, you can stop the laser pick-up exactly at the start of a track by pressing the PAUSE button before the PLAY button. The PAUSE LED will light.

At the moment you want to start play, press the PAUSE button again. The PAUSE LED will go out.

**Repeating the Disc (REPEAT)**

If you want to hear the whole disc again, press the REPEAT button before play ends. The REPEAT LED will light, and the disc will play continuously until you either press the REPEAT button again, or press the STOP button.

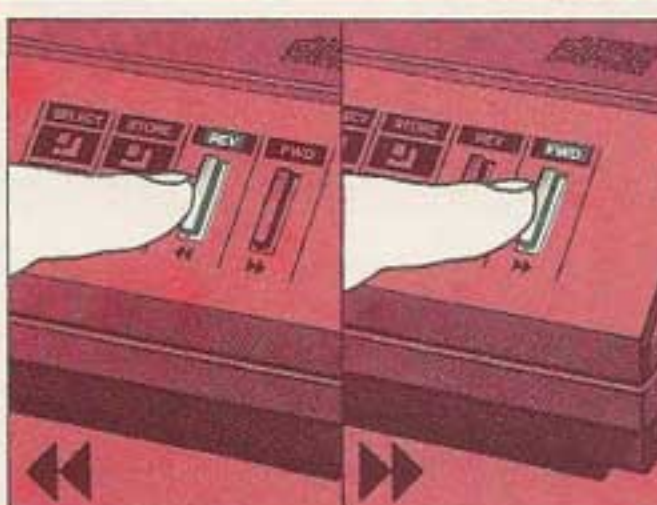
In the first case the disc will play on to the end before stopping. In the second case play will stop at once. The REPEAT LED will go out. During repeat the PROG Display LEDs remain lighted and only the TRACK Display LED indicates the progress of play.

**Finding a Particular Passage (REV and FWD)**

During play, you can quickly locate a particular music passage in a track with the REV and FWD buttons.

If you hold the REV button down, the laser pick-up runs back towards the beginning; if you hold the FWD button down, the laser pick-up runs

towards the end. Note that the laser pick-up moves at three successively faster speeds: the highest is reached when you hold down the REV or FWD button for more than six seconds. When you release the button, play restarts at once. By pressing the buttons alternately, you can find any part of any passage.

**Interrupting Play (PAUSE)**

For short play interruptions, you can press the PAUSE button. The disc continues spinning, but the sound stops, and the PAUSE LED lights. If you press the PAUSE button again, the sound restarts at the exact point where it was interrupted. The PAUSE LED goes out.

**Stopping Play (STOP)**

To stop play before the end of the disc, you press the STOP button. The disc stops, and all the LEDs in the PROG Display relight, while the TRACK Display LED goes out.



6 PROGRAMMING

Instead of playing a complete disc, you can choose any number of tracks, and play only these. You can even decide on the playing sequence. You do this by programming your choice into the microprocessor memory.

The memory will accept a maximum of 15 entries. Individual tracks can be programmed to play more than once, as long as the maximum of 15 memory positions is not exceeded.

Programming is easiest when the disc is stationary and the title list contained in the disc holder is used. The titles and tracks on the disc label itself are often impossible to read through the disc compartment window. It is also possible to program a disc in play, but this can interrupt the smoothness of the playback. For this reason, programming of a stationary disc is to be preferred.

Depending on the kind of program you want, there are two methods of programming the player: the 'Add-in' method and the 'Take-out' method.

With **'Add-in'** programming, you put the tracks that you want to hear into the memory. This is the method to use for programming only a few tracks from a disc, for programming the same track, or tracks, to play more than once, or for changing the playing sequence; the sequence of play is entirely yours to decide.

With **'Take-out'** programming, you erase the tracks that you do not want to hear from the memory. This is the method to use when your program will play the majority of the tracks on the disc, and you do not want to change the sequence.

During programmed play, all player functions remain operative. You start play by pressing the PLAY button. You move to the next programmed track by pressing the PLAY button again; if you do this during the last track of the program, the disc stops and the program is erased from the memory. Using REV and FWD to search for a passage in one of the program tracks is possible, but it is not recommended because if the laser pick-up moves outside the track which is being scanned, the program will be upset. To repeat the program, you press the REPEAT button, and to interrupt it, or to hold it at the start of a track, you press the PAUSE button. When the program has been played, the disc stops and the program is cleared from the memory; all the PROG Display LEDs relight and the TRACK Display LED goes out. The same thing happens if you press the STOP button before the end of the program.



'Add-in' Programming (SELECT and STORE)

By pressing the SELECT button, bring the flashing TRACK Display LED under the PROG Display LED corresponding to the first track that you want to program, then press the STORE button. All the PROG Display LEDs go out, except the one selected. Repeat this SELECT and STORE procedure for each track that you want to program. To go from a high to a lower number, you hold the SELECT button down so that the TRACK Display LED moves to the end of the display, switches to the beginning, and then runs to the track required.

Do not allow more than 5 seconds to elapse between releasing the STORE button and pressing the SELECT button to make the next selection, otherwise the TRACK Display LED will go out. It will flash again if you press SELECT once more, but then under the first LED of the PROG Display.

The program already stored, however, remains intact - and you can move the TRACK Display LED on to the next desired track.

Each time a track is stored, the appropriate PROG Display LED lights so that the programmed tracks are progressively displayed. To program a track several times, press the STORE button as many times as necessary. If, in doing this, you exceed the storage capacity of the memory, the ERROR LED flashes to tell you so. When you program a track several times, the PROG Display LED concerned will glow continuously, regardless of the number of times the STORE button is pressed.

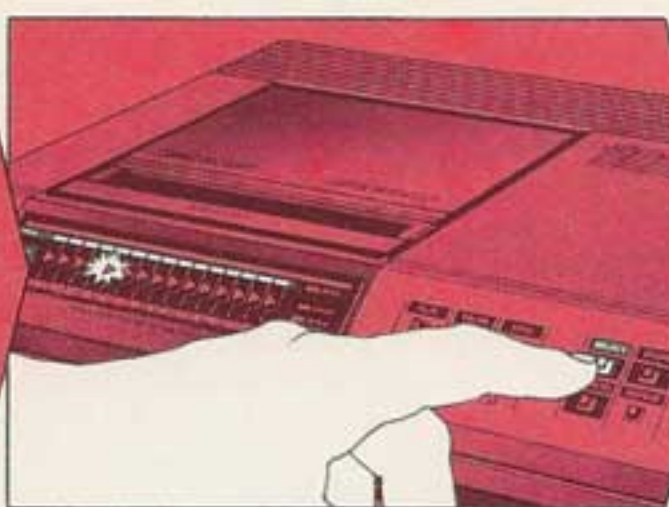
If you make a mistake and store a wrong track, this is easily rectified by immediately pressing the CANCEL button. The track number is erased from the memory and the corresponding PROG Display LED goes out.

To erase the whole program, you press the STOP/CM (CM = Clear Memory) button. All the PROG Display LEDs light and the TRACK Display LED goes out.

As soon as you press the PLAY button, the TRACK Display LED goes to the first programmed track, and the program is then played in the chosen sequence, with the TRACK Display LED always indicating the track being played.

If, while programming a stationary disc, you mistakenly store as the first track a higher numbered track than actually exists on the disc, the ERROR LED will flash after the contents list has been read, and the track will be erased from the memory.

If, when programming a disc in play, you try to program a wrong track, the ERROR LED will flash at once and the command will not be carried out.



'Take-out' Programming (SELECT and CANCEL)

By pressing the SELECT button, bring the flashing TRACK Display LED under the PROG Display LED corresponding to the first track that you want to leave out of the program, then press the CANCEL button. Repeat this SELECT and CANCEL procedure for each track that you do not want to program; each time the associated PROG Display LED will go out.

Do not allow more than 5 seconds to elapse between releasing the CANCEL button and pressing the SELECT button to make the next selection, otherwise the TRACK Display LED will go out. It will flash again if you press SELECT once more, but then under the first LED of the PROG Display. This, however, does not affect the tracks that have already been cancelled from the memory - they remain cancelled - and you can move the TRACK Display LED on to the next track you want to cancel.

If you make a mistake and cancel a wrong track, this is easily rectified by immediately pressing the STORE button. The track is re-stored in the memory, and the corresponding PROG Display LED relights.

To erase the whole program, press the STOP/CM (CM = Clear Memory) button. All the PROG Display LEDs light and the TRACK Display LED goes out.

Discs with more than 15 Tracks

You will have no problems in playing such discs on your Compact Disc player, but the operation of the PROG Display, the functions of the player and the programming will be slightly affected.

The PROG Display will work in the normal way for the first fifteen tracks: after the contents list has been read, all 15 PROG Display LEDs will light. As play progresses, these LEDs will go out one after another, while the TRACK Display LED moves along to indicate the track being played. At the end of the fifteenth track, the ERROR lights to indicate that there is still a number of tracks to follow, although this number is not shown on the PROG Display. The TRACK Display LED continues to operate, so that by simply adding 15 to the displayed track number, you can see which track is being played.

All the functions of the player will remain operative during the whole period of play, except the go-to mode. This can only be used for the first 15 tracks.

Programming, both 'Add-in' and 'Take-out', will also be limited to the first 15 tracks; higher numbered tracks cannot be stored in the memory.

Player Maintenance

The player mechanism is fitted with self-lubricating bearings, and must not be oiled or greased. You can clean the cabinet, when necessary, with a chamois cloth slightly moistened with water. Do not use cleaning agents containing alcohol, spirits or ammonia. The disc compartment (A) and the spindle (B) should be kept free of dust. Be careful while cleaning in the area of the laser pick-up. You can clean the lens (C) of the laser pick-up with a cotton swab,



moistened with distilled water if there is a film on the lens. Do not press too hard!

The disc pressure plate in the disc compartment cover incorporates a magnet. Make sure that this does not attract any metal objects.

Disc Maintenance

Although the music track in the disc is covered with a protective layer, it is still advisable to treat the disc carefully. As long as you always pick up discs by the edge, and put them back in their holders immediately after use, cleaning will not normally be necessary.

However, should fingerprints, dust or dirt appear, you can wipe them off with a disc cloth. You can breathe on the disc first if necessary, but detergent or abrasive cleaning agents must never be used, nor must be cleaning agents for conventional records!

Warning

Because of the magnetic fields produced by the magnet in the disc pressure plate and the power transformer in the player itself, it is advisable not to place audio or video cassettes on the player.

FAULTS AND THEIR LIKELY CAUSES

Although the greatest care has been taken in the manufacture of this Compact Disc player, the possibility remains that a fault could appear or that for some reason the player fails to function to your complete satisfaction.

The cause, however, will certainly

not always be found in the player itself. External factors, and the fact that it takes time to become accustomed to the whole concept of the new product and the new discs, can also play a role.

To save you unnecessary calls on your dealer or our Servicer, we

have compiled a list of possible faults and their causes. To even mention some of these causes, such as those to do with connections, may perhaps seem excessive. Our experience shows, however, that they are easily overlooked as sources of trouble.

If, by using this list, you do not succeed in solving the problem, stop your investigation. Disconnect the power plug and phone your dealer. He will be able to advise you what to do next. Under no circumstances should you open up the player; this will invalidate the warranty.

1. After switching on the player, the PROG Display LEDs do not light.

- The ON/OFF button is not pressed in far enough to latch in.
- The power plug of the player is not properly plugged in.
- There is no power at the electrical outlet. Plug in another electrical appliance and check if that works.

2. After pressing PLAY, the disc does not begin to turn.

- The player is not switched on.
- The disc is not properly located on the spindle.
- The disc compartment cover is not properly closed.
- There is an unwanted object in the disc compartment, e.g. a piece of paper or a remnant of packaging.

3. The disc begins to turn, but stops after a few seconds.

- The disc is not inserted with the label upwards.
- The disc is not flat. Try another disc which appears flat, and see if that clears the fault.
- The disc is dirty. See if cleaning the disc, or using another, clean disc, clears the fault.

4. The disc turns, but there is no sound.

- The position of the (pre)amplifier source selector switch does not correspond with the input to which the player is connected.
- The (pre)amplifier is not switched on.
- The (pre)amplifier or the (active) loudspeakers connected to it are not working. Check with another sound source to see if this is the case.

5. The sound is poor or distorted.

- The player is not connected to the CD/TV, AUX, TUNER or TAPE IN input of the (pre)amplifier but to the PHONO input.
- The (pre)amplifier or the (active) loudspeakers connected to it are not working properly. Check with another sound source to see if this is the case.
- The disc is dirty or badly scratched. See if cleaning the disc or using another, clean or scratch-free, disc improves the situation.
- The laser pick-up lens may show signs of a film of dirt. See if cleaning it with a cotton swab improves the situation.
- There is an unwanted object in the disc compartment, e.g. a piece of paper or a remnant of packaging.
- The transport screws have not been removed.

6. The 'Add-in' program is not working properly.

- The disc is dirty or badly scratched. See if cleaning the disc helps or try programming a scratch-free disc.
- All 15 memory entries have been used and you have not noticed the flashing ERROR LED. Press SELECT and STORE again to see if this is the case.
- You have tried to program a higher track number than exists on the disc. Check the number of tracks on the disc title list.

7. The following four faults can be caused by the same circumstances:

Playback does not begin within a few seconds of pressing PLAY.

After playback has begun, all 15 PROG Display LEDs remain lighted although there are fewer tracks on the disc.

Playback does not begin with the first track on the disc or the program, but with another track.

Playback stops before the end of the disc, the TRACK Display LED flashes under the last played track number, the PROG Display LEDs for the tracks that have been played also flash, and the remaining PROG Display LEDs all light.

- The disc is dirty or badly scratched. See if cleaning the disc or using another, clean or scratch-free, disc clears the fault.
- The disc is not flat. Try another disc which appears flat and see if that clears the fault.
- The laser pick-up lens may show signs of a film of dirt. See if cleaning it with a cotton swab helps.
- There is an unwanted object in the disc compartment, e.g. a piece of paper or a remnant of packaging.

8. The sound disappears, the LEDs may switch in a random way, and all player functions will be blocked.

This condition is unlikely to occur during the whole lifetime of your player and will only be caused under exceptional circumstances. Although this condition interrupts play, it can cause no harm. You can clear the interruption by simply switching the player off, and then back on again, after which it will function normally once more.

International distributors of Boothroyd Stuart Meridian products:

AUSTRALIA	Audio 2000 Wexxon Holdings P/L, 96 Smith Avenue, Allambie Heights, Sydney. Tel: 2939-2159. Telex: 7170535 WEXXON	BELGIUM	C.D. Tronics Ter Tommen Straat 3, 2520 Edegem, Antwerp. Tel: 323-440-2299
CANADA	Edon Acoustics 722 Bank Street, Ottawa, Ontario. Tel: 613-232-0561	DENMARK	Audio Arts Lindevej 9, 1877 Copenhagen V. Tel: 22-84-21. Telex: 16600B FOTEX DK
GERMANY	Audio Arts 6000 Frankfurt/Main 70, Max-Reger-Strasse 17. West Germany. Tel: 069-682367. Telex: 413683 ARTSD	GREECE	Audio K. Masselos & SIA EE 5 Daidalou Street, Athens 119, Greece. Tel: 1-3221903. Telex: 219984 KIMOGR
HONG KONG	Excel Hi-Fi Co., 7th Floor, BCC House, 10 Queen's Road, Central. Tel: 5-228844. Telex: 63664 EXLHK HX	ISRAEL	Audio Acoustics 31 Eder Street, Haifa. Tel: 04-24-48-56. Telex: 606464004 BXHA LL
ITALY	Hi Fi Esoter Via Lupetta 2, 20123 Milan. Tel: 803269. Telex: 310056 ESOTER I	JAPAN	Imai & Co. Ltd., 1-6 Tomihisacho, Shinjuku, Tokyo Tel: 3570401. Telex: 7226927 IMATTECO
NEW ZEALAND	Microstatic Systems 7 Stack Street, Herne Bay, Auckland. Tel: 765-444-469. Telex: 742484 NZ2484	PORTUGAL	Electrosound Portuguesa Fabricante De Equipamentos, Electronicos LDA, Apartado 3229, 1306 Lisboa Codex. Tel: 2100004. Telex: 18215 ELEPOR P
SOUTH AFRICA	Phonovox S.A. P.O. Box 31629, Braamfontein 2017. Tel: 11-724-5953. Telex: 95430217 SA4-30217	SINGAPORE	Atlas Sound (PTE) B1/3 UIC Building, 5 Shenton Way, Singapore 1 Box 2097, Singapore. Tel: 65-2204484. Telex: 8720734 ASPL RS20734
SPAIN	Chemison s.a. Bosch y Gimpera, 30 bajos, Barcelona 34, Tel: 203-30-54. Telex: 51180	U.S.A.	Madrigal Ltd., 2081 South Main Street, Middletown. Connecticut 06457. Tel: 2304942158 Telex: 966405 LVNSNAUDO MIWA
VENEZUELA	Sonex de Venezuela C.A., Final Av. Vargas. Edif. Berimer, Boleita Norte. 4 Piso, Caracas, Venezuela. Tel: 35-24-92. Telex: 21808 DERIV VC		
UNITED KINGDOM	Boothroyd Stuart Ltd., 13 Clifton Road, Huntingdon, Cambs. Tel: (0480) 57339 Telex: 32577 (MERIDN)		

FOR YOUR PERSONAL SAFETY

1. Read all of these instructions carefully before using the appliance and follow all warnings and instructions marked on and/or provided with the appliance.
2. Save these instructions for later use.
3. Don't be a conductor — a conductor of electricity, that is. Water pipes, swimming pools, washbowls, laundry tubs, sinks or bathtubs full of water, damp earth, damp basement floors, can all conduct electricity. Don't handle any appliance that connects to the power line while your body is in contact with any of these things. Electricity normally flows through one wire, then back along the other, making a complete circuit back to the power company "ground". Don't become part of that circuit!
4. If the appliance is equipped with a polarized AC line plug (one blade of the plug is wider than the other), this plug will fit into the power outlet only one way. This is a safety feature. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should this then fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.
5. Never place this appliance on an unstable cart, stand, table or shelf. The appliance may fall causing injury to you and serious damage to the unit. Use only a cart or stand recommended by the manufacturer. Do not allow anything to rest on the power cord. Do not locate the appliance where the power cord is subject to traffic or abuse. The power supply cord should be routed so that it is not likely to be pinched, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
6. Removal of the back cover of the appliance may expose you to dangerous voltage and other hazards. Do not attempt to service this appliance yourself.
7. Never drop or push objects into the appliance through cabinet slots, as it is possible to touch hazardous voltage points or shortout parts that could result in a fire or electric shock.
8. If the appliance has been dropped or the enclosure damaged, shock hazard may exist. Unplug the appliance and have it checked by a qualified service person before use.
9. Never operate the appliance if liquid has accidentally spilled or objects have fallen into it. Unplug the unit and have it checked by a qualified service person before use.
10. Unplug the appliance from the wall outlet before cleaning or polishing the cabinet. The appliance should be cleaned only as recommended in the instruction book.
11. Overloaded wall outlets and extension cords are dangerous and can result in fire or electric shock, as can frayed power cords and broken plugs. Unplug the appliance and have it inspected by a qualified service person.
12. If an outside antenna is connected to the appliance, be sure the antenna system is installed so as to provide some protection against built-up static charges and voltage surges. Mount the antenna mast on a sturdy

structure. Remember, the antenna must withstand extreme weather conditions such as high wind and ice. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1978, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of an antenna discharge unit, and the connection to and requirement for the grounding electrode. An outside antenna should not be located near overhead power lines or where it can fall into such power lines. Extreme care should be taken during installation to keep from touching such power lines as contact with them might be fatal.

INSTALLATION LOCATION

13. For added protection of the appliance during a lightning storm or when the appliance is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent possible damage due to lightning and power line surges.
14. Never expose the appliance to rain or excessive moisture as this can be a potential cause of fire or shock hazard. If so exposed, pull the plug and have the unit checked by a qualified service person.
15. Slots and openings in the cabinet are provided for ventilation purposes, to protect it from over heating so as to provide reliable operation of the unit. Never block the ventilation slots of your appliance by placing it on a bed, sofa, or rug, or by covering it with cloth or other material. Never place the unit near or over a radiator, heat register, stove, or other appliance (including amplifiers) which produce heat. Never place your appliance in a "built-in" enclosure, unless proper ventilation is provided.

APPLIANCE OPERATION

16. Operate this appliance only from the type of power source indicated on the unit. If you are unsure of the type of power supplied to your home, consult your dealer or local power company. Refer to the operating instructions for appliances designed to operate from battery power.
17. Adjust only those controls that are described in the operating instructions. Improper adjustment of other controls may result in possible damage and require the services of a technician to restore proper operation.
18. It is advisable to turn the unit "off" when it is not being used. This will extend the useful life of the appliance.

OPERATING DIFFICULTIES

19. If you are unable to restore normal operation by following the detailed procedure in your Operating Instructions, do not attempt any further adjustments. Unplug the appliance and call a qualified service person.
20. Whenever the appliance is damaged or fails, or a

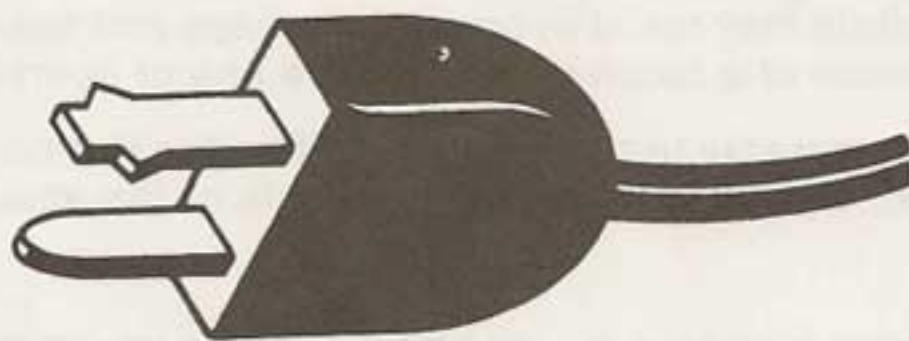
distinct change in performance indicates a need for service, unplug the unit and have it checked by a qualified service person.

21. It is normal for some appliances to make occasional snapping or popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your dealer or service technician.

SERVICING MODIFICATION

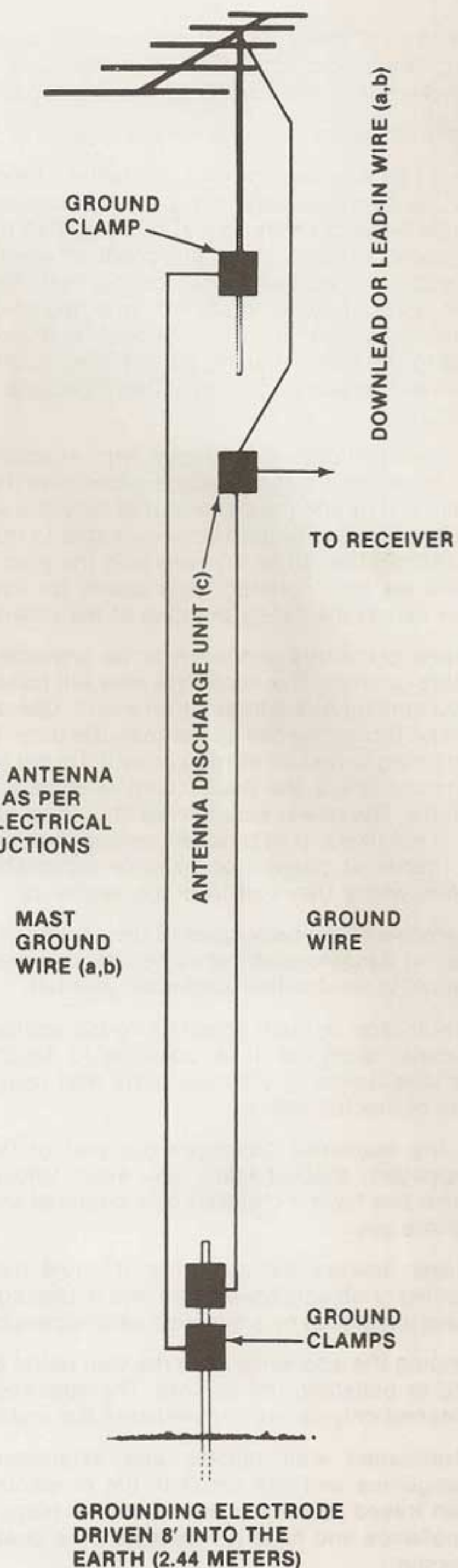
22. Never add accessories (such as extension speakers, or outlets for record player or tape recorders) to an appliance that has not been designed for this purpose, since such additions may result in an electrical shock hazard or damage to the equipment.
23. When replacement parts are required, have the service technician verify in writing that the replacements have the same safety characteristics as the original part. Unapproved substitutions can cause fire, shock, or other hazard.
24. Upon completion of any service or repairs to the set, please ask the service technician to perform the safety check described in the Manufacturers' service literature.

- a. Use No. 10 AWG copper or No. 8 AWG aluminum or No. 17 AWG copper-clad steel or bronze wire, or larger as ground wires for both mast and lead-in.
- b. Secure lead-in wire from antenna to antenna discharge unit and mast ground wire to house with stand-off insulators, spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
- c. Mount antenna discharge unit as close as possible to where lead-in enters house.



AC POLARIZED PLUG

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS



Television • Stereo High Fidelity • Custom Stereo Systems • Radios • Tape Recorders