

Pioneer

MINIDISC RECORDER

MJ-D508

Operating Instructions



IMPORTANT



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to 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.

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

[FOR EUROPEAN MODEL]

CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.

Refer all servicing to qualified personnel.

The following caution label appears on your unit.

**CLASS 1
LASER PRODUCT**

IMPORTANT

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code :

Blue : Neutral
Brown : Live

If the plug provided is unsuitable for your socket outlets, the plug must be cut off and a suitable plug fitted.

The cut-off plug should be disposed of and must not be inserted into any 13 amp socket as this can result in electric shock. The plug or adaptor or the distribution panel should be provided with 5 amp fuse. As the colours of the wires in the mains lead of this appliance may not correspond with coloured markings identifying the terminals in your plug, proceed as follows :

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Do not connect either wire to the earth terminal of a three pin plug.

NOTE

After replacing or changing a fuse, the fuse cover in the plug must be replaced with a fuse cover which corresponds to the colour of the insert in the base of the plug or the word that is embossed on the base of the plug, and the appliance must not be used without a fuse cover. If lost replacement fuse covers can be obtained from your dealer.

Only 5 A fuses approved by B.S.I. or A.S.T.A to B.S. 1362 should be used.

This product is for general household purposes. Any failure due to use for other than household purposes (such as longterm use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during warranty period.

**U.S. and foreign patents licenced from
Dolby Laboratories Licencing Corporation.**

CAUTION: This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

[For U.S. model]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

This product complies with the Low Voltage Directive (73/23/EEC), EMC Directives (89/336/EEC, 92/31/EEC) and CE Marking Directive (93/68/EEC).

CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

INFRINGEMENT OF COPYRIGHT [For U.K. model]

Recording and playback of copyrighted material may require consent. See the Copyright Act 1956 and the Performers' Protection Acts 1958 and 1972.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION — The appliance should be installed in a stable location.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left un-used for a long period of time.

GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard 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 antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

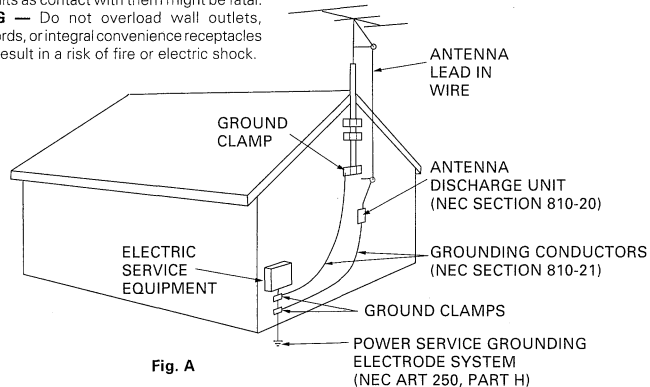


Fig. A

NEC — NATIONAL ELECTRICAL CODE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Features of the MJ-D508 MD Recorder

Sound quality and flexibility

Minidisc technology delivers sound quality comparable to that of compact disc, and adds recording and editing capabilities that make it far more flexible and easy to use than either CD-R (compact disc recordable) or DAT (digital audio tape). Because the discs themselves are small and are housed in a protective cartridge, MD is also an ideal format for music on the move. Use the MJ-D508 to make high quality digital recordings from other components in your stereo system which you can then use with your portable or car MD player wherever you go.

Advanced Parameter Processing

To fit over an hour of high quality stereo audio on such a small disc, MD uses a much more compact digital coding system than CD—there's around 80% less digital data on an MD than on a CD. The basic technology that makes this possible is called *Adaptive Transform Acoustic Coding* (ATRAC for short), and is present in all MD players and recorders. Advanced Parameter Processing is a Pioneer technology that further improves the sound quality of MD by providing extremely precise control over the ATRAC process.

Digital recording levels control

The MJ-D508 gives you more control over digital recording levels than most other digital recorders, allowing you to raise or lower the level as appropriate. This can be especially useful for equalizing the average recording levels when making 'mix discs' compiled from various sources.

Digital Noise Reduction

Pioneer's Digital Noise Reduction (DNR) technology reduces audible noise both on playback and recording. This means that you can use it to make better sounding recordings from sources such as analog cassette tapes, and use it on existing MDs that were recorded from noisy sources.

DAC function

You can use the high quality digital/analog converter (DAC) in the MJ-D508 to improve the sound quality of other components in your audio system—analogue and digital. Use it together with the Digital Noise Reduction feature for cleaner playback of records and analog cassette tapes, or use it to improve the sound of other digital components by taking advantage of the latest in DAC technology.

Advanced editing

The MJ-D508's editing features are quick and intuitive to use, yet extraordinarily powerful with precise control. Moving individual tracks, re-ordering the whole disc, combining and dividing tracks into new tracks, erasing tracks or sections of tracks, naming and copying disc and track names can all be achieved with just a few button presses. And if you make a mistake, you can always undo last edit operation—even if you just accidentally erased the whole disc.

Recovery recording

If you've ever just missed the beginning of something because you didn't get to the record start button in time, you'll appreciate the recovery recording feature. This lets you start recording from six seconds *before* you hit the record start button. When recording, or in record-standby mode, the recorder stores the last six seconds of audio passing through the unit, so when you choose recovery recording, the recorder simply records those last six seconds to the disc in addition to the material coming afterwards.

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Preparation

Basic Operations

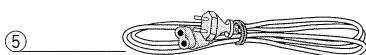
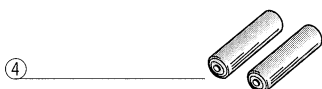
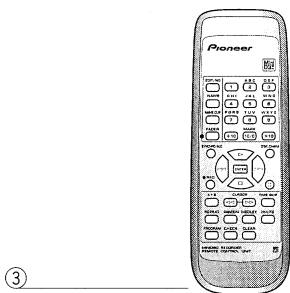
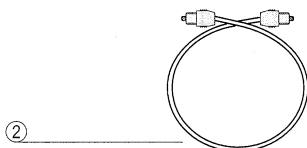
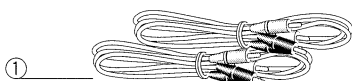
Advanced Operations

Editing

Other

Before You Start

Checking What's in the Box



Thank you for buying this Pioneer product. Before starting to set up your new minidisc recorder, please check that you've received the following supplied accessories in the box:

- ① Two sets of stereo audio cords for connecting the recorder to your amplifier.
- ② An optical digital cord for connection to another digital component. (*Not supplied in the U.S.*)
- ③ Remote Control unit.
- ④ Two 'AA' size IEC R6P batteries for use with the remote control (see below for how to load them).
- ⑤ AC power cord (multi-voltage models only).
- ⑥ Plug adaptor (multi-voltage models only).

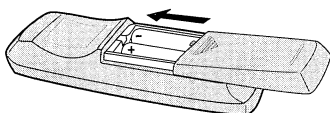
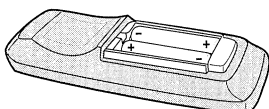
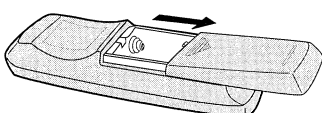
Also included in the box is your warranty card (*European and US models only*).

Using this manual

This manual is for the MJ-D508 Minidisc Recorder. It is split into two broad sections, the first covering set up, and the second, operation. Set up, which starts here, covers all aspects of getting your new minidisc recorder up and running with the rest of your stereo system. If this is the first time you've used minidisks, we recommend reading the *About Minidisks* section starting on the following page before using the recorder for the first time.

In the second section of the manual, starting on page 12, you'll learn how to use every feature of the MJ-D508, from basic playback to advanced disc editing. The final part of the manual provides reference information on error messages you might encounter during use, a troubleshooting page, and technical specifications.

Putting the batteries in the remote control



- ① Turn over the remote control, then press and slide the battery compartment cover off.
- ② Put in the batteries supplied, taking care to match the plus and minus ends of each battery with the markings inside the compartment.
- ③ Slide the cover back on, and your remote is ready for use.

CAUTION!

Incorrect use of batteries can result in hazards such as leakage and bursting. Please observe the following:

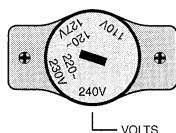
- ❖ Don't mix new and old batteries together
- ❖ Don't use different kinds of battery together—although they may look similar, different batteries may have different voltages.
- ❖ Make sure that the plus and minus ends of each battery match the indications in the battery compartment.
- ❖ Remove batteries from equipment that isn't to be used for a month or more.

Rear panel line voltage selector dial

Multi-voltage models are provided with a dial to match the unit to the local voltage. Always check that this selector is set properly before plugging the power cord into the wall outlet. To set the voltage dial:

- ① Disconnect the power cord.
- ② Use a small-sized screwdriver.
- ③ Insert a screwdriver into the groove on the voltage selector, and adjust so that the voltage marking on the dial aligns with the **VOLTS** marking on the rear panel.

Note: U.S. and European models are not provided with this dial. Mains voltages in Saudi Arabia are 127V and 220V only.



Line voltage selector dial set to 240V

Hints on Installation

We want you to enjoy using the MJ-D508 for years to come, so please bear in mind the following points when choosing a suitable location for it:

DO...

- ❖ Use in a well-ventilated room.
- ❖ Place on a solid, flat, level surface, such as a table, shelf or stereo rack.

DON'T...

- ❖ Use in a place exposed to high temperatures or humidity, including near radiators and other heat-generating appliances.
- ❖ Place on a window sill or other place where the recorder will be exposed to direct sunlight.
- ❖ Use in an excessively dusty or damp environment.
- ❖ Place directly on top of an amplifier, or other component in your stereo system that becomes hot in use.
- ❖ Use near a television or monitor as you may experience interference—especially if the television uses an indoor antenna.
- ❖ Use in a kitchen or other room where the recorder may be exposed to smoke or steam.
- ❖ Place on an unstable surface, or one that is not large enough to support all four of the unit's feet.

Avoiding condensation problems

Condensation may form inside the recorder if it is brought into a warm room from outside, or if the temperature of the room rises quickly. Although the condensation won't damage the recorder, it may temporarily impair its performance. For this reason you should leave it to adjust to the warmer temperature for about an hour before switching on and using.

About Minidiscs

Minidisc, or MD as it's usually called, is an extremely flexible and convenient format on which you can both playback and record high-quality digital audio. Because it's a disc, MD has many of the advantages of compact disc—you can jump directly to any track on the disc, program the playing order, instantly skip over tracks you don't want to play or back to tracks you want to play again, and so on. The really great thing about MD though is the flexibility it offers when recording. Things that were impossible using analog cassette tape, such as reordering tracks, programming track names, and deleting sections or tracks without leaving any gaps are all easily achieved if you're using MD. Minidiscs have other advantages over cassette tape; the recorder automatically finds the next blank space to record on, and can tell you how much room there is left on a disc before you start recording. When you delete something from the disc, the time available for recording is automatically updated.

If this is the first time you've used MD, please take a few minutes to read through this section of the manual. It gives information on how to handle the discs properly, the different kinds of disc available, and some basic MD characteristics.

Different kinds of MD available

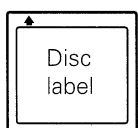
All MDs carry this mark:



Do not use any disc which does not have this mark.

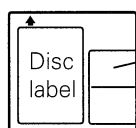
There are both recordable and non-recordable (playback-only) MDs. Commercially available music on MD generally comes on discs which are playback only. The diagrams below show the differences between the two types.

Playback-only MD



Disc has shutter on one side only.

Recordable MD

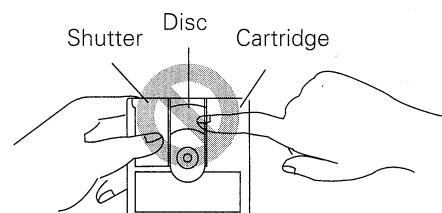


Disc has shutters on both sides.

Handling MDs

The actual disc that contains the audio is quite delicate and so is protected against dust, fingerprints and so on by an outer cartridge. Don't force open the disc shutters to expose the disc, and never touch the disc itself. Also, do not attempt to disassemble the disc cartridge.

If the disc cartridge becomes dirty or stained, wipe clean with a soft, dry cloth.

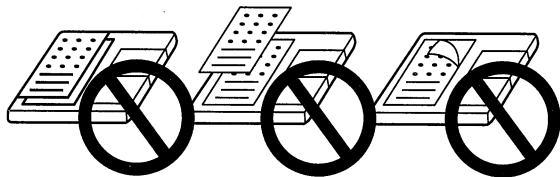


Before You Start

Storing and labeling MDs

When you're not playing a minidisc, put the disc cartridge back in the case for storage. Avoid storing or leaving discs in very hot or humid areas, such as in a car in summer. Also avoid leaving discs in direct sunlight, or in places where sand or grit might get into the disc cartridge.

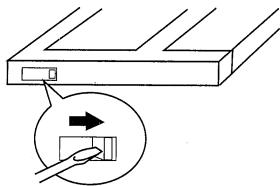
Recordable MDs come with self-adhesive labels to stick on the disc cartridge to tell you what's recorded on the disc. Always stick the label in the area provided, avoiding the disc shutter and the edges of the disc.



If the disc label starts to peel off at the corners, remove the label and replace it with a fresh one—don't simply stick another label on top of the old one.

Protecting an MD against accidental erasure

Once you've recorded a disc, it's a good idea to protect it against accidental erasure by sliding the tab on the side of the disc to the open position.



If you want to erase or re-record the disc, simply slide the tab back to the closed position before loading the disc into the recorder.

Analog and digital recording

Whatever you record onto an MD is stored on the disc as digital data (in other words, numbers). This is what we mean when we say that MD is a digital format. However, what you feed into the MJ-D508 to record can be either analog (such as the output from a turntable or a tuner), or digital (such as the direct digital output from a CD player, or another MD recorder).

If you record an analog signal, the recorder has to first change it into a digital form before writing it onto the disc.

If you're recording from another digital format, like a CD, it makes sense to just record the digital data directly. This is usually not a problem, but there are a couple of points to bear in mind.

All digital audio has something called a 'sampling rate', which is measured in kHz (kilohertz). The quality of the final sound depends to a large extent on this: the higher the better.

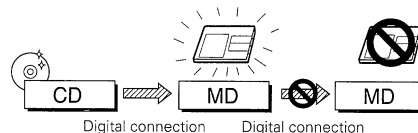
Compact discs have a sampling frequency of 44.1kHz, which happens to be the same as MDs. This means you shouldn't run into problems making digital recordings of CDs or other MDs (although see *Copying restrictions* below for exceptions to this).

Other digital sources you may come across (DAT, digital satellite and DVD) often use different sampling rates—specifically, 32kHz and 48kHz. The MJ-D508 can handle these too, and, at the time of writing, these are by far the most common sampling rates around. There is, however, a trend towards higher sampling rates. Some DVD discs and DAT tapes are recorded at 96kHz. The MJ-D508 cannot handle this rate, and you'll have to record via the analog terminals of the DVD or DAT recorder to the analog inputs of the MJ-D508.

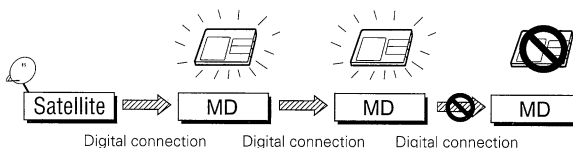
Copying restrictions

You may run into problems making digital copies of some sources, even when the sampling rate is compatible. Some DVD discs disable the DVD player's digital output to prevent illegal digital copying (you can still record via the analog outputs though).

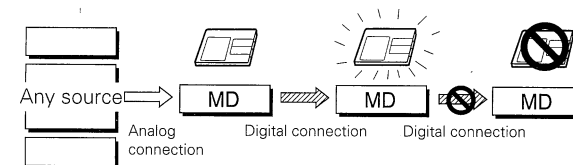
Another restriction on digital copying comes from something called SCMS, which stands for Serial Copy Management System. This stops you making multiple-generation digital recordings and is aimed at preventing illegal digital copying of copyright material. The number of generations that SCMS will let you make depends on the source.



Digital audio from CD, DVD or DAT can be copied digitally for one generation only.



Audio from digital satellite can usually be copied digitally for two generations. (Sometimes just one generation is possible.)



A recording made from any source via analog inputs can be digitally copied once only.

About the Table of Contents

When you load any kind of minidisc into the recorder, the first thing it does is read a section of the disc called the Table of Contents, or TOC. Just as the contents page of a book tells the reader what each chapter is about and where to find it in the book, the TOC tells the recorder where the tracks are on the disc, the name and length of each track, the name of the disc, and so on. In the couple of seconds it takes to read all this, the recorder's display shows the message **TOC Reading**.

Since you can change what's on a recordable MD, the Table of Contents is rewritable, and so is called the User Table of Contents, or UTOC for short. If you have a recordable disc loaded in the recorder and hit eject, the recorder automatically updates the UTOC before giving you

the disc back. Alternatively, you can have the recorder update the UTOC at any time using the UTOC write function. In both cases, the message **UTOC Writing** appears in the display during the UTOC updating process. The UTOC is vital for the recorder to be able to play a disc correctly. Until you hit eject or perform a UTOC write command, the recorder stores all the current session's recording and editing information in its memory. If there's a power failure or you accidentally switch the recorder off before it's had a chance to write the UTOC there's a danger that all that disc information will be lost. To prevent this, switch the recorder back on as soon as possible and eject the disc. If you leave the unit off for a week or more, the information stored in the memory will be permanently lost and the recordings/edits on that disc lost.

About MD System Limitations

The sophisticated playback, editing and recording features available to you with MD are possible because of the way in which the sound data is stored on the disc together with the system of TOCs and UTOCs described above. There are times however when you might encounter odd

side-effects of the way the system works. These are not malfunctions, but limitations of the system. Below is a list of symptoms you may run across depending on the way you record or edit discs.

Symptom

The recorder shows the message **TOC full** even though there are fewer than 255 tracks on the disc (the maximum possible).

The recorder shows the message **Disc full** before you've reached the maximum recording time of the disc.

The amount of recording time available doesn't increase after erasing some short tracks.

The total recorded time, plus the recording time remaining, appears to be less than the length of the disc.

The recorder won't allow you to combine two tracks into one during editing.

The sound is interrupted during fast forward or reverse.

MD System Limitation

Although when you listen to a disc it appears that each track sits end to end in an unbroken sequence, the actual audio information may be scattered all over the disc in different places. The more times you record and edit things on a disc, the more scattered the information becomes. Usually, this doesn't affect the user; the recorder keeps track of everything using the UTOC. However, because the recorder needs to know where every little gap is on the disc (and counts each one as a track, although you don't see it), the UTOC eventually fills up, and the recorder won't let you record anything else on that disc. Erasing a complete track, or the entire disc cures the problem.

If a disc is scratched or damaged in some way, that part of the disc becomes automatically unavailable for recording. In this case, the recorder shows the reduced recording time available.

If you erase a track which is less than 12 seconds long, the recorder can't add that time to the available recording time.

Recording time on a disc is divided into two second blocks—the smallest 'unit' of a minidisc. Although a piece of audio data may be shorter than this, it still takes up two seconds on the disc, and the remainder is 'lost' (until the whole block is erased). As the number of these partially used blocks builds up, you might notice that the total disc length appears to shorten. (See also the note about damaged discs above.)

There are two situations where you can't use the combine edit feature:

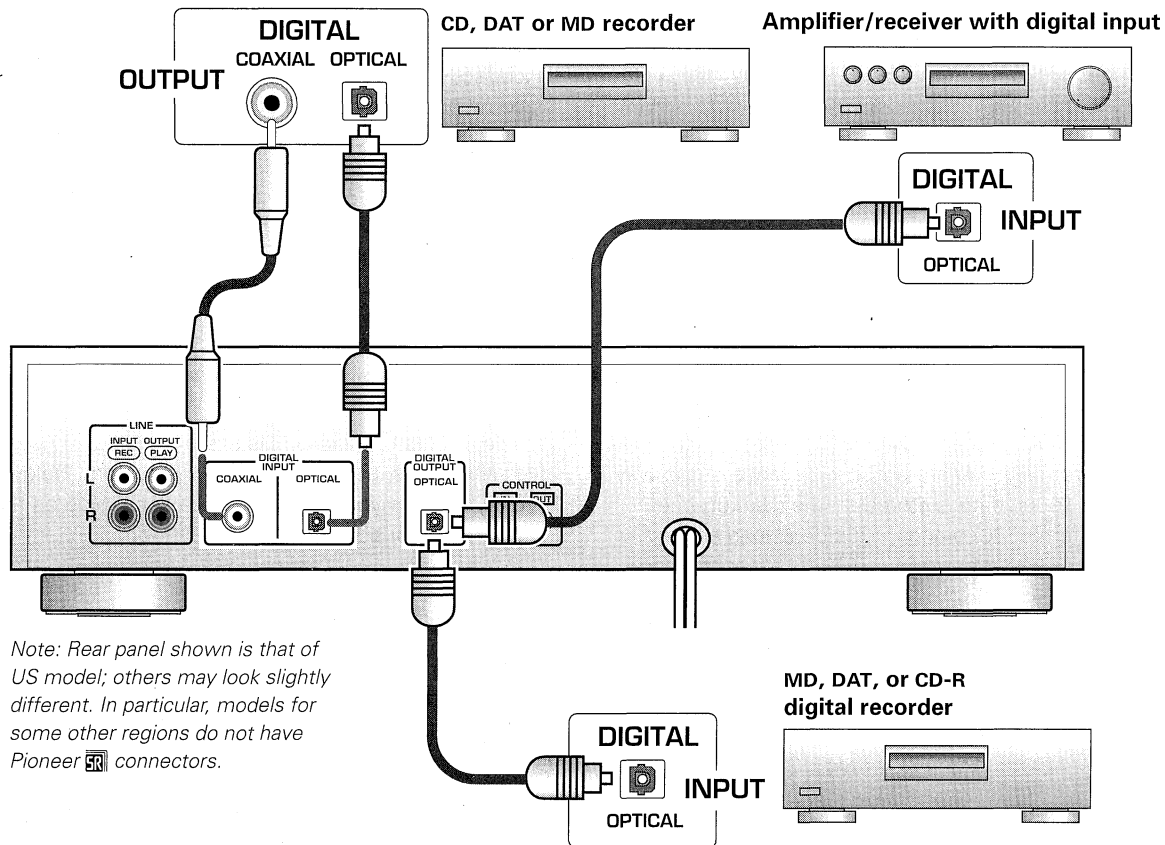
- ❖ When one of the tracks was recorded using the digital input, and the other using the analog input.
- ❖ When one track was recorded in long-play mono mode, and the other in normal stereo mode.

As we mentioned above, the more re-recording and editing you do on a disc, the more scattered the audio information on the disc becomes. During fast forward or reverse this may show up as interrupted sound.

Connecting Up

Connecting Up for Digital Playback & Recording

If you want to use the DAC function please make the connections on this page and the following page as well (for an explanation of the DAC function see p. 42).



Note: Rear panel shown is that of US model; others may look slightly different. In particular, models for some other regions do not have Pioneer connectors.

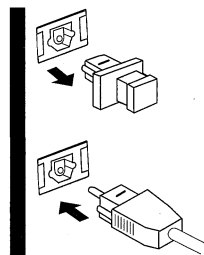
Before you start...

There are various ways to integrate the MJ-D508 into your stereo system, depending on what other equipment you have and what you want to do. The diagrams on this and the following page show possible connections with various other components. Before you start connecting your system, make sure that all the components are switched off and disconnected from the wall outlet.

About optical and coaxial jacks

The MJ-D508 has both optical and coaxial jacks for digital input (from a CD player or another MD recorder, for example). This is for convenience only; there's no difference at all in the sound quality, but since some equipment has only one type of connector—and you can only connect like with like—having both on this recorder can be an advantage. If your other component also has both, connect whichever is more convenient.

If you're using the coaxial-type digital input you'll need a lead with an RCA/phono plug at each end (the same type of connector as the audio cables supplied).



To use the optical jack, first pull out the dust cap. Keep it for future use.

The optical lead (supplied, except in the US) will only go in one way, so match up the jack and the plug before inserting.

Take care not to bend optical cable around sharp corners when installing as this can damage the cable. When storing optical cable, coil loosely.

Connecting to an amplifier with a digital input

The most basic connection is an output to your amplifier or receiver so that you can hear the disc your playing. If you own an amplifier/receiver with a PCM-compatible optical digital input (check your amplifier/receiver's instruction manual if you're unsure about this), you can connect it to the digital output of this unit. However, there may be no advantage in doing this over using the analog connections shown opposite—use your ears to judge which sounds better.

Other uses for the digital output

If you have another digital recorder, such as a CD-R or DAT deck, you might want to use this unit as a digital source. In this case, connect the optical digital output of the MJ-D508 to an optical digital input of your other digital recorder.

Using the digital inputs

To make direct digital recordings on the MJ-D508 you'll need to connect the digital output of a source (like a CD player or another MD recorder) to a digital input on this unit. To make recordings from analog sources (like a turntable or analog cassette deck) it's usually easiest to connect this recorder to your amplifier/receiver's tape inputs and outputs—see below for more on this.

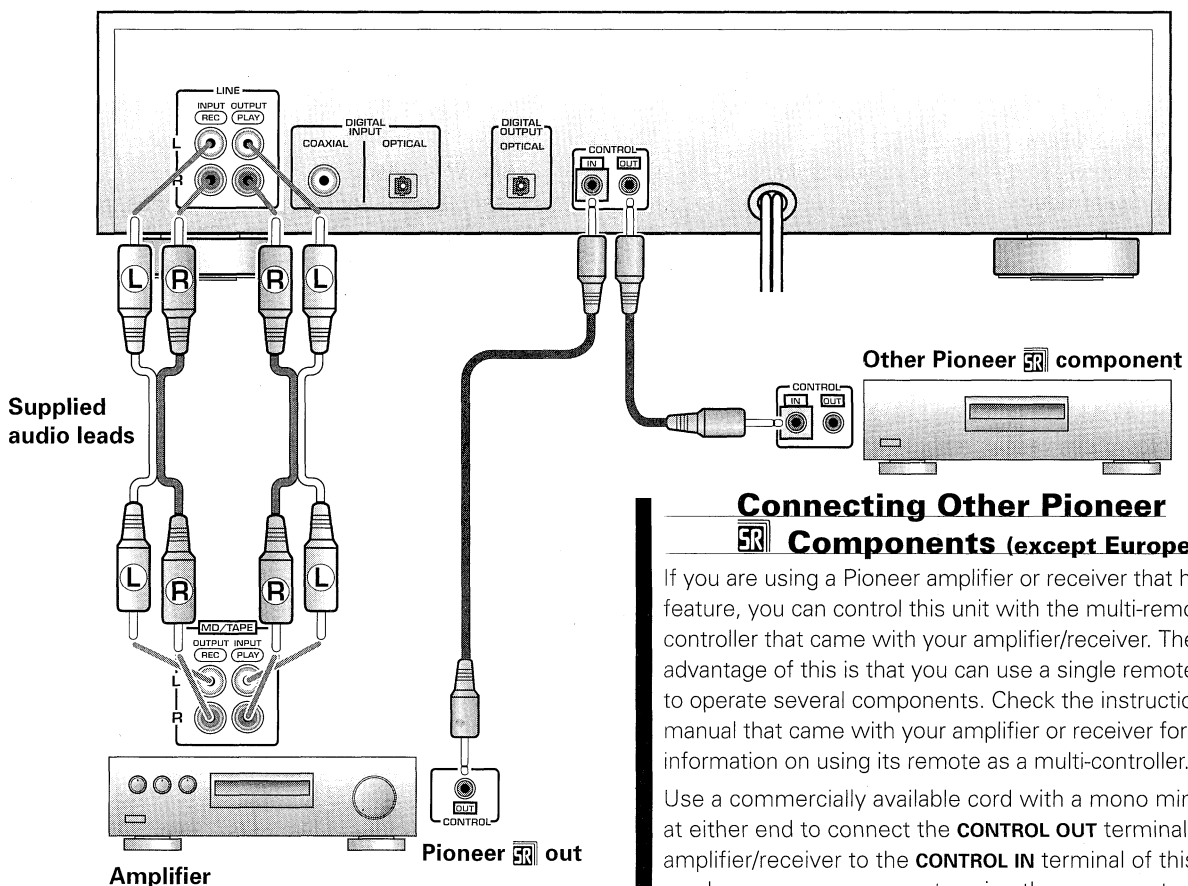
Connecting Up for Analog Playback & Recording

Before you start, make sure that all the components are switched off and disconnected from the wall outlet.

Next, connect this unit to your amplifier/receiver using the two sets of supplied audio leads—one set for playback, the other for recording. On the rear panel of your amp find an unused set of inputs/outputs for a tape/MD recorder (check the instruction manual that came with your amp if you're unsure about which terminals to use).

Using this set up you can make recordings from any other component connected to the amplifier, via the analog inputs of this unit.

Even if you connected this unit to your amplifier/receiver using the optical digital out (see previous page), it may be convenient to also connect it using the analog terminals. This will allow you to make recordings from MD to analog cassette tape, for example.



Connecting Other Pioneer Components (except Europe)

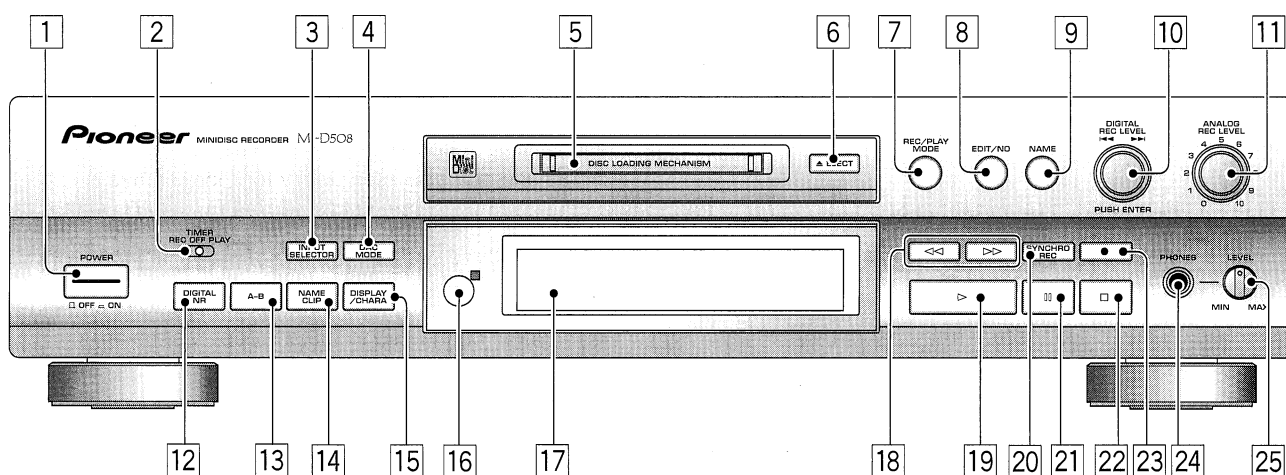
If you are using a Pioneer amplifier or receiver that has this feature, you can control this unit with the multi-remote controller that came with your amplifier/receiver. The advantage of this is that you can use a single remote control to operate several components. Check the instruction manual that came with your amplifier or receiver for more information on using its remote as a multi-controller.

Use a commercially available cord with a mono mini-plug at either end to connect the **CONTROL OUT** terminal of the amplifier/receiver to the **CONTROL IN** terminal of this unit. If you have more components using the same system you can just daisy chain them together, making sure the **CONTROL OUT** of one component is always connected to the **CONTROL IN** of another.

Make sure that at least one set of analog terminals is connected to the amplifier when using Pioneer control cords.

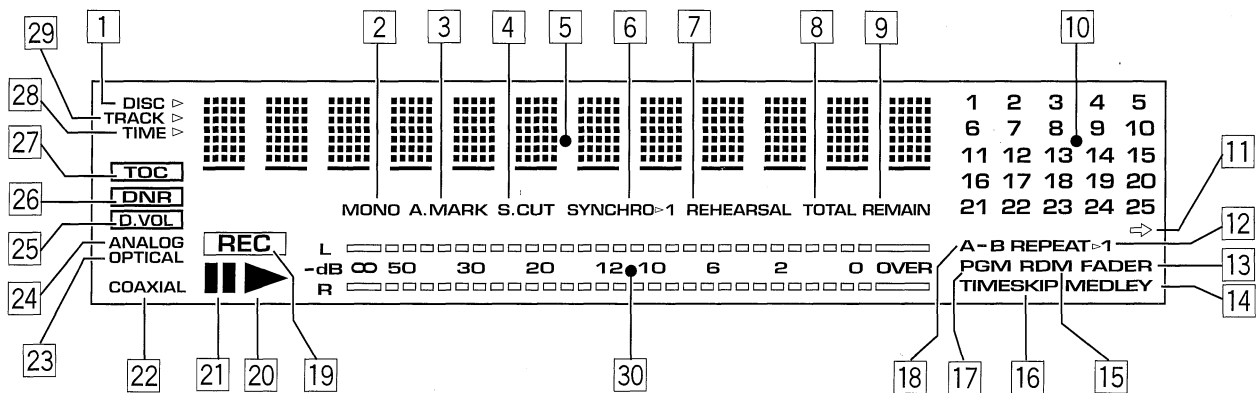
Note: Rear panel shown is that of US model; others may look slightly different. In particular, models for some other regions do not have Pioneer connectors.

Front Panel



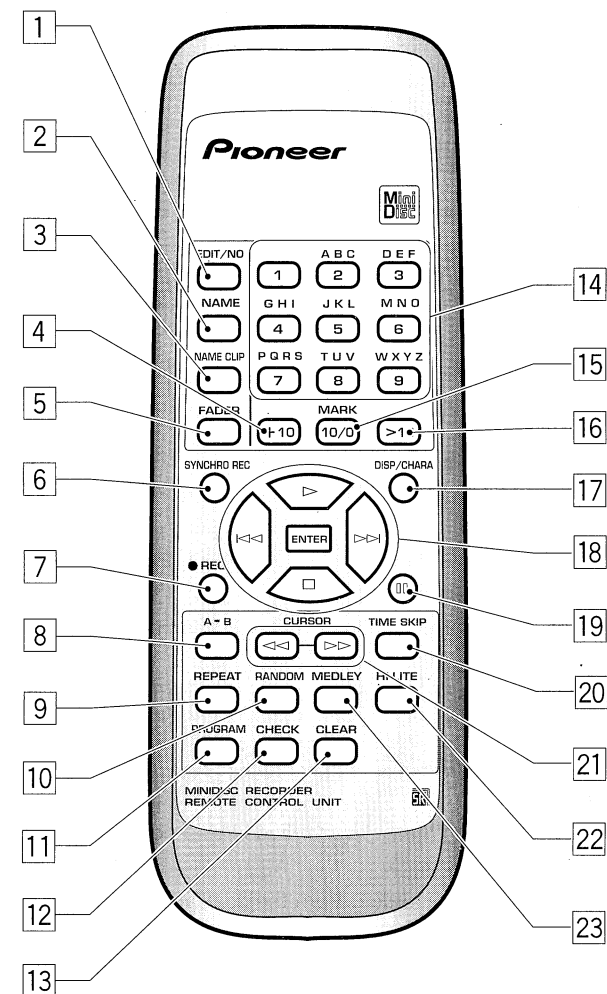
- 1 POWER ON/OFF**
Switches power to the unit on and off.
- 2 TIMER (REC/OFF/PLAY) (p.26, 31)**
Switches the timer mode between timer-controlled recording, timer-controlled playback, and timer off.
- 3 INPUT SELECTOR (p.19, 20, 42)**
Switches between the analog, optical digital and coaxial digital inputs.
- 4 DAC MODE (pp.42-43)**
Press to switch on/off the DAC function.
- 5 MD loading slot**
- 6 EJECT ▲**
Press to eject a disc from the recorder.
- 7 REC/PLAY MODE (p.24, 25, 26, 27, 29, 30)**
Press to access various record and playback options.
- 8 EDIT/NO.**
Press to access various editing features.
- 9 NAME (pp.32-33)**
Press to enter and exit the disc/track naming process.
- 10 DIGITAL REC LEVEL / ◀◀ ▶▶**
Multifunction control used to set the digital recording level (p.27), skip time/tracks (pp.16-17), choose between different menu options, and select characters in disc/track naming mode (pp.32-33). Push to confirm selections.
- 11 ANALOG REC LEVEL (p.20)**
Use to set the recording level when the analog inputs are used.
- 12 DIGITAL NR (p.18, 21, 42)**
Press to switch digital noise reduction on/off during playback or recording.
- 13 A-B (p.22, 39)**
Use to set a start point and an end point to mark a section of the disc for editing or repeat play.
- 14 NAME CLIP (p.34)**
Press to copy the current disc or track name to the recorder's memory.
- 15 DISPLAY/CHARA**
Press to switch between display modes (elapsed time, time remaining, etc.) (p.18), and between upper and lower-case characters in disc/track naming mode (pp.32-33).
- 16 Remote control sensor**
Picks up the infrared signals from the remote control unit.
- 17 Display (p.13)**
- 18 ◀◀ and ▶▶ (p.17)**
Press and hold for fast-reverse and fast-forward playback.
- 19 ▶ (p.15)**
Press to start playback. (or recording)
- 20 SYNCHRO REC (p.21)**
Press to enter synchronous recording mode: recording starts when the recorder senses an input signal.
- 21 ||**
Press to pause playback or recording.
- 22 ■**
Press to stop playback or recording.
- 23 ● (pp.19-20)**
Press to put the recorder into record-pause mode.
- 24 PHONES jack**
- 25 Phones LEVEL**
Use to raise or lower the headphone volume level.

Display



- 1 DISC ▷**
Indicates that the character display (5) is showing disc information (e.g. disc name).
- 2 MONO (p.30)**
Lights in long-play recording/playback mode.
- 3 A.MARK (p.29)**
Lights when automatic track numbering is on.
- 4 S.CUT (p.28)**
Indicates that the space cut function is active.
- 5 Character display**
Displays recorder functions, disc/track names or disc times, depending on the mode of the recorder.
- 6 SYNCHRO (p.21)**
Lights when sync recording mode is on.
- 7 REHEARSAL (p.35, 39)**
Lights when auditioning the effects of an edit.
- 8 TOTAL (p.18)**
Lights to show that the current time displayed is how far the recorder is into the disc.
- 9 REMAIN (p.18)**
Lights to show that the current time displayed is how much time is left on the disc.
- 10 Track number display**
Track numbers light to show how many tracks are on the disc.
- 11 ⇒**
Indicates that the disc has more than 25 tracks.
- 12 REPEAT ▷ 1 (p.22)**
Lights when the recorder is in repeat play mode.
- 13 FADER (p.24, 30)**
Lights when the recorder is in fade play mode.
- 14 MEDLEY (p.24)**
Lights when the recorder is in medley play mode.
- 15 RDM (p.22)**
Lights when the recorder is in random play mode.
- 16 TIMESKIP (p.17)**
Lights when the recorder is in time-skip mode.
- 17 PGM (p.23)**
Lights when the recorder is in program play mode.
- 18 A-B (p.22, 39)**
Indicates that a section of disc has been marked.
- 19 REC (p.19-21)**
Lights during record mode.
- 20 ▶**
Lights during playback.
- 21 ||**
Lights when playback/recording is paused.
- 22 COAXIAL (p.19)**
Lights when recording from the coaxial digital input.
- 23 OPTICAL (p.19)**
Lights when recording from the optical digital input.
- 24 ANALOG (p.20)**
Lights when recording from the analog inputs.
- 25 D.VOL (p.27)**
Lights when the digital volume control is active.
- 26 DNR (p.18, 21, 42)**
Indicates that Digital Noise Reduction is on.
- 27 TOC (p.9, 19)**
Indicates that there is TOC information in the recorder's memory that hasn't been written to the disc yet. When this display is lit don't turn the power of the unit off or this information will be lost.
- 28 TIME ▷**
Indicates that the character display (5) is showing time information (e.g. elapsed time of track).
- 29 TRACK ▷**
Indicates that the character display (5) is showing track information (e.g. track name).
- 30 RECORDING LEVEL**
Shows the recording level of a disc.

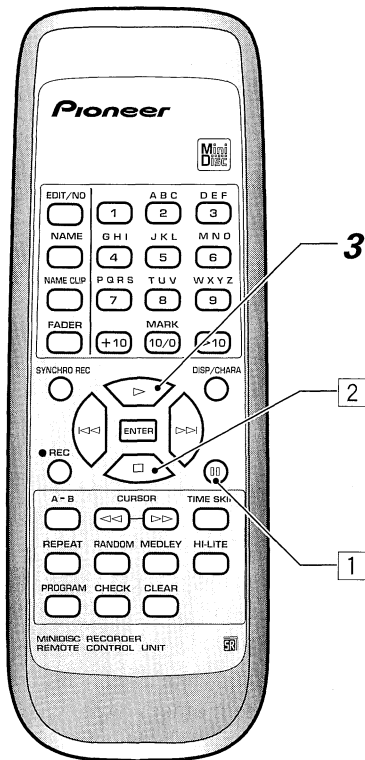
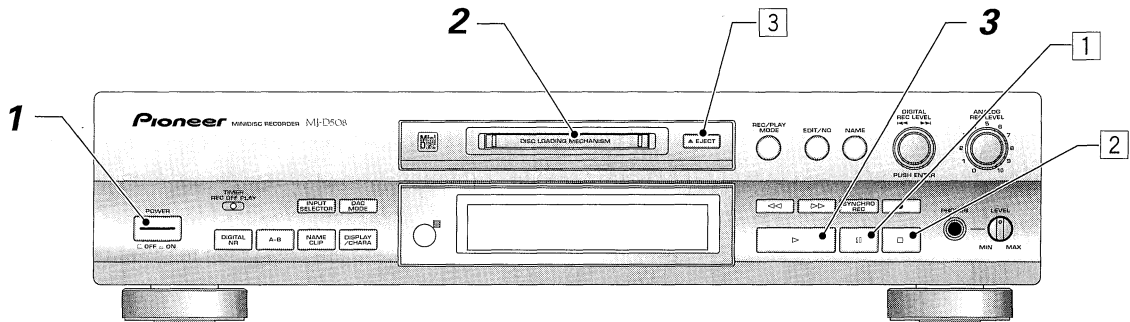
Remote Control



- 1 **EDIT/NO**
Press to access various editing features.
- 2 **NAME (p.32, 33)**
Press to enter and exit the disc/track naming process.
- 3 **NAME CLIP (p.34)**
Press to copy the current disc or track name to the recorder's memory.
- 4 **+10 (p.16, 23)**
Use to select track numbers greater than 10.
- 5 **FADER (p.24, 30)**
Press to fade in or out during playback, or to record a fade in or out during recording.
- 6 **SYNCHRO REC (p.21)**
Press to enter synchronous recording mode: recording starts when the recorder senses an input signal.
- 7 **● REC (p.19, 20)**
Press to put the recorder into record-pause mode.

- 8 **A-B (p.22, 39)**
Use to set a start point and an end point to mark a section of the disc for editing or repeat play.
- 9 **REPEAT (p.22)**
Press to set the repeat mode (repeat disc, track, or segment).
- 10 **RANDOM (p.22)**
Press to play tracks in a random order.
- 11 **PROGRAM (p.23)**
Press to start programming the track playback order.
- 12 **CHECK (p.23)**
Press to check the programmed track order.
- 13 **CLEAR (p.23)**
Press to clear the last programmed track number.
- 14 **Number / letter buttons (p.16, 32, 33)**
Use to jump directly to track numbers in playback mode, select track numbers in edit mode, and select letters in disc/track naming mode.
- 15 **MARK, 10/0 (p.16, 23)**
Use for 0 or 10 when selecting track numbers.
- 16 **>10 (p.16, 23)**
Press to select track numbers over 10.
- 17 **DISP/CHARA**
Press to switch between display modes (elapsed time, time remaining, etc.) (p.18), and between upper and lower-case characters in disc/track naming mode (p.32, 33).
- 18 **Playback control (p.15-16) / ENTER**
 - ▶ Play
 - Stop
 - ◀◀ Skip back to last track
 - ▶▶ Skip forward to next track
 - ENTER Confirm playback, recording and editing options.
- 19 **II**
Press to pause playback or recording.
- 20 **TIME SKIP (p.17)**
Press to change the skip track buttons to skip time.
- 21 **CURSOR, ◀◀ / ▶▶ (p.17, 32, 33)**
Press to move cursor in disc or track naming mode, or fast forward/reverse through a disc in playback mode.
- 22 **HI-LITE (p.25)**
Press to search for a track based on a short sample of each track.
- 23 **MEDLEY (p.24)**
Press to switch medley mode on/off. Tracks play end-to-end with each track fading out before the next one starts.

Switching On for the First Time

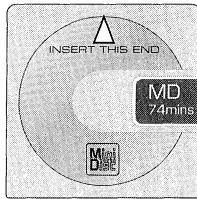


1 Switch the POWER on.

After a short time the recorder shows the message **No Disc** to tell you it's waiting for you to insert a disc—don't try and load a disc until you see this message.

2 Load an MD.

Gently push the MD into the slot in the direction indicated on the disc cartridge. The recorder pulls the MD into the recorder automatically.



The first thing the recorder does is read the table of contents (TOC) to see what's on the disc. If you've just loaded a blank MD, the recorder displays the message **Blank disc**; press **▲ EJECT** to eject the disc.

If the MD has a disc name recorded on it, the recorder displays the name.

3 Press ► (play button) to start playback.

The recorder finds the first track on the disc and starts playing.

If you've loaded a prerecorded disc, the recorder displays the track name of each track as it plays. Track names longer than 12 characters scroll across the display.

If you're playing a home-recorded disc, the recorder will display the track names if they're there, otherwise it simply says **No Name**.

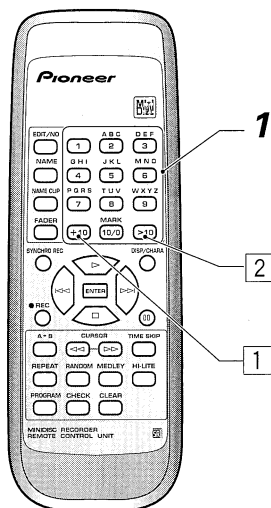
Use these controls for other basic operation:

- 1 Press **||** (pause button) to stop playback temporarily. (Press **►** (play button) or **||** again to resume playback.)
- 2 Press **■** (stop button) to halt playback completely. (If you press **►** now, playback starts again from the beginning of the disc.)
- 3 Press **▲ EJECT** to get the disc out of the recorder.

Playing Discs (the basics)

Choosing a Track to Play

Pressing the ► (play) button starts the disc playing from track one. If you want to start from a different track just enter the number of the track using the remote control's number buttons. If you do the same thing during playback, the recorder immediately jumps to that track on the disc.



1 Enter track number you want to play from.

For track numbers 1 through 10, just press the appropriate number button (use the **10/0** button for track 10).

For track numbers over 10, there are two ways to enter the track number you want:

1 Use the **+10** button.

For example, to jump to track 16, press:

+10 ⇒ **MNO 6**

2 Use the **>10** button.

For example, to select track 36, press:

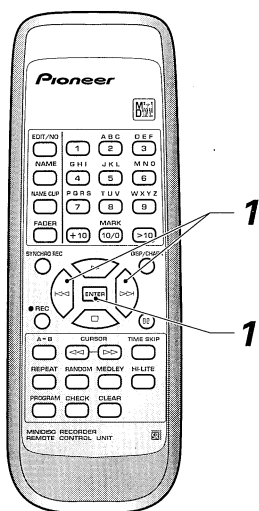
>10 ⇒ **3** ⇒ **MNO 6**

For three-digit track numbers, press **>10** twice. For example, to select track 168 press:

>10 ⇒ **>10** ⇒ **1** ⇒ **MNO 6** ⇒ **TUV 8**

Skipping Tracks

You can skip forwards or back to the start of other tracks on the disc without having to worry about the track numbers.

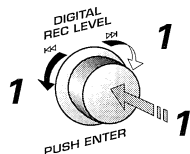


1 Press ◄◄ or ►► on the remote, or turn the jog dial on the recorder to skip a track.

❖ If the disc is already playing, skipping forward always takes you to the start of the next track. Skipping backwards takes you first to the beginning of the current track, then to the beginning of previous tracks.

When you get to the end or beginning of the disc, the track numbers 'wrap around' as you continue skipping tracks. In other words, skipping forward a track when you're already on the last track takes you back to the first track on the disc.

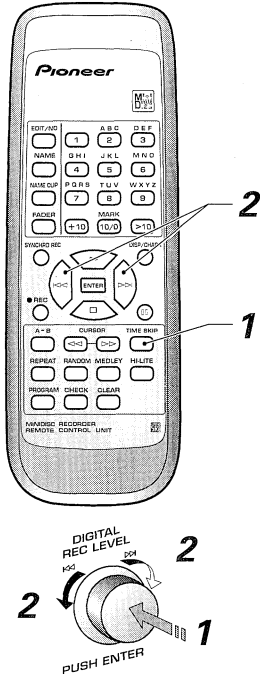
❖ If the disc is stopped, you can 'select' tracks using the track skip controls. Press the jog dial, or **ENTER** on the remote, to start the selected track playing.



*If the **TIMESKIP** indicator is showing in the display, then the ◄◄ and ►► controls will jump blocks of time rather than tracks. See Skipping Time on the following page for more on this.*

Skipping Time

You can skip through a disc in blocks of time too. If you're playing a track and want to skip a couple of minutes forward or back, it's much quicker to use this feature than the usual fast-forward/reverse playback described below.



- 1 Press **TIME SKIP** on the remote, or **ENTER** on the front panel during playback or while the disc is paused.

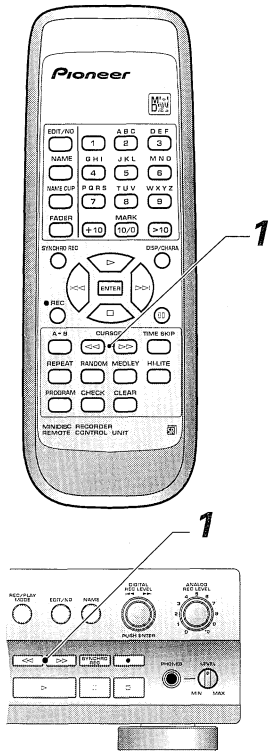
Pressing repeatedly changes the time skip mode between **15 sec**, **60 sec** and **Time skip off** (in which case, the **◀◀** and **▶▶** controls skip tracks rather than time).

- 2 Press **◀◀** or **▶▶** on the remote, or turn the jog dial on the recorder to skip time.

- ❖ Each press skips a block of time. If you want to switch to the other block length, press **TIME SKIP** or **ENTER** to select it.
- ❖ When you get to the end (or beginning) of a track, the recorder proceeds to skip time in the following (or previous) tracks.

Fast-Forwarding/Reversing

Use the fast-forward and fast-reverse play functions to search for a particular point within a track while it's playing.



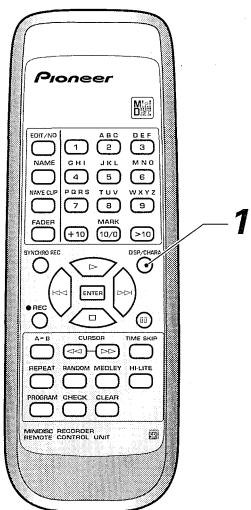
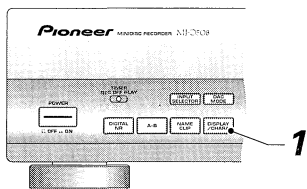
- 1 Press and hold **◀◀** or **▶▶** for high-speed reverse and forward playback.

If you reach the end (or beginning) of the current track while holding down the **◀◀** or **▶▶** button, the recorder will go straight through into the next (or previous) track on the disc.

Playing Discs (the basics)

Displaying Disc Information

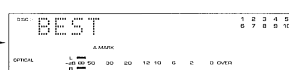
You can have the recorder display various kinds of disc information, like how much material is recorded on a disc, how much time is left on the disc for you to record on, the elapsed playback time, and so on. When a disc is playing, you have access to four different display screens; when the disc is stopped you can switch between three. These are shown below.



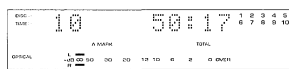
1 Press DISPLAY/CHARA to switch the kind of disc information displayed.

You can have the recorder display various disc information, both when the disc is stopped, and when it's playing. The display changes in the following sequence:

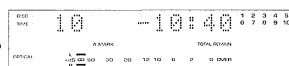
In STOP mode:



❖ Disc name.



❖ Total recorded time on disc.



❖ Remaining recording time available.

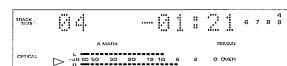
In PLAY or PAUSE mode:



❖ Track name.



❖ Elapsed time of current track.



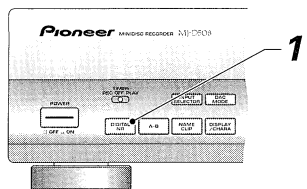
❖ Remaining playback time of current track.



❖ Remaining playback time of disc.

Reducing Noise during Playback

Minidisc captures very accurately on disc any source that you feed into the inputs, without adding extra noise or hiss. However, if what you record is noisy (such as an old vinyl record or analog cassette tape), then that noise will end up on the minidisc too. Using the Digital Noise Reduction (DNR) feature can reduce the level of rumble or hiss in such recordings.



1 Press DIGITAL NR to switch Digital Noise Reduction on.

The **DNR** indicator lights in the display to tell you that Digital Noise Reduction is on (press again to switch it off).

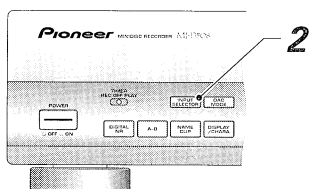
Digital noise reduction may not be effective in the following cases:

- ❖ If the recording contains transient noises, such as pops and clicks.
- ❖ If the level of noise is extreme.
- ❖ If the frequency range is narrow, (an AM radio broadcast, for example).

Recording Using a Digital Input

Recording through the optical or coaxial digital input from another digital component, such as a CD player, has a couple of advantages over analog recording.

- ❖ Copying digital information directly doesn't affect the sound quality at all, whereas you may be able to tell the difference between the original and the recording if you use the analog inputs.
- ❖ You don't have to set any recording levels, so you don't have to worry about a loud peak in the sound overloading the recorder resulting in a distorted recording.

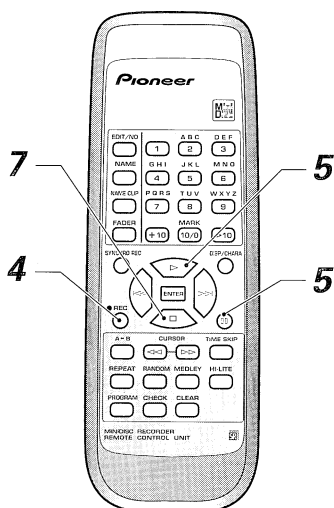


1 Insert a recordable MD.

Make sure the disc is not a playback only disc, and that the erase-protect tab is closed (see page 8 if you're unsure about these points).

If there's already material recorded on the disc, the recorder automatically records new material after what's already there—there's no need to search for blank space to record on.

You can find out how much blank space you have left on the disc by switching the display mode at this point. See the previous page for how to do this.



2 Use the INPUT SELECTOR to choose one of the digital inputs.

Pressing **INPUT SELECTOR** switches the inputs in the following order:
Optical - Analog - Coaxial

The recorder's display indicates the current input.

3 Prepare the source you're going to record.

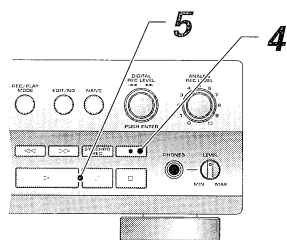
If you're recording from a CD, load the CD into the player, etc.

4 Press ● REC.

The recorder is ready to record something (record-pause mode), but is not actually recording yet.

5 Press ► (play) or || (pause) to start recording.

6 Start playing the source.



The TOC indicator

Whenever you record something, the red **TOC** indicator lights to show the disc's Table of Contents needs updating. Never switch off the recorder while the **TOC** indicator is lit or you risk losing your recording (see p.9 for more information on this). When you eject a newly recorded disc, always wait until the **UTOC Writing** message has stopped flashing and the red **TOC** indicator disappears before switching the recorder off.

To pause recording press || (pause); to end recording, press ■ (stop).

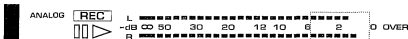
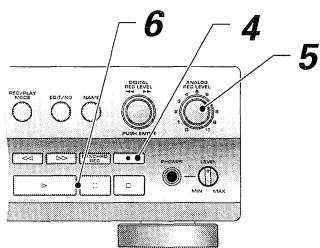
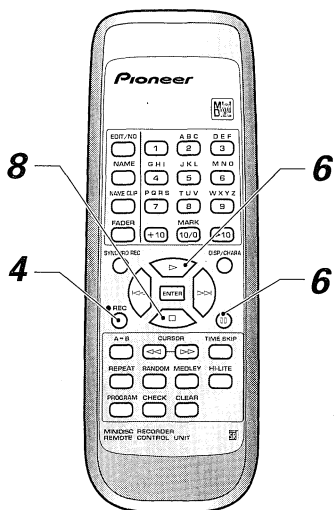
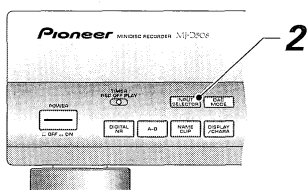
Pressing || (pause) causes the recorder to start a new track.

***memo** Even if you've loaded a recordable MD and checked that the erase protect tab is closed, the recorder won't allow you to record if: there is very little time remaining on the disc; the UTOC is full; the recorder can't read the UTOC (because it is damaged, or out of standard).*

Making a Recording (the basics)

Recording Using the Analog Inputs

Recording through the analog inputs follows much the same procedure as recording via a digital input. The only difference is that you'll have to set the recording level. This determines how loud the recording will be when you play it back. If you're used to recording on analog cassette, the idea is exactly the same, but with MD you have to be much more careful not to overload the signal. Compared to analog tape, the distortion that you get from overloading an MD is much less tolerable, and something you'll definitely want to avoid. On the other hand, recording the signal very quietly will result in lower sound quality than MD is capable of, so that's not very good either—although it is better to under-record an MD than to over-record it. What you want to aim for is a level where the loudest sound from your source material is recorded onto the MD at a level just below the point where it overloads (producing an unpleasant, buzzy distortion).



Adjust so that the maximum level is in this area, without going into the red **OVER** area.

memo See note about the **TOC** indicator on the previous page.

1 Insert a recordable MD.

Make sure the disc is not a playback only disc, and that the erase-protect tab is closed (see page 8 if you're unsure about these points).

If there's already material recorded on the disc, the recorder automatically records new material after what's already there.

You can find out how much blank space you have left on the disc by switching the display mode at this point. See the page 18 for how to do this.

2 Use the INPUT SELECTOR to choose analog input.

Pressing **INPUT SELECTOR** switches the inputs in the following order:

Optical - Analog - Coaxial

The display indicates the current input.

3 Prepare the source you're going to record.

If you're recording from a turntable, for example, put a record on and set it playing.

4 Press ● REC.

The recorder is ready to record something (record-pause mode), but is not actually recording yet.

5 Turn the ANALOG REC LEVEL dial to adjust the recording level.

Try to set the recording level against the loudest part of the source material you're recording. Adjust so that the loudest signals reach just below the red **OVER** area in the display.

Once you've found the best level, stop the source.

6 Press ► (play) or II (pause) to start recording.

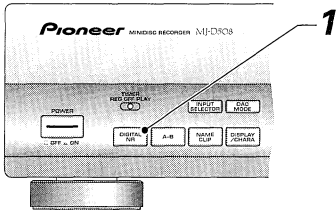
7 Start playing the source again from the beginning.

To pause recording press II (pause); to end recording, press ■ (stop).

Pressing II (pause) causes the recorder to start a new track.

Reducing Noise during Recording

If you're recording from a noisy source, such as analog tape or a vinyl record, you can use the Digital NR (Noise Reduction) feature to clean up the signal and reduce the noise that ends up on the recording. Digital NR doesn't work well if: the noise is transient (like pops and on a vinyl record); the level of noise is very high; the source has a limited frequency range (like an AM radio broadcast).



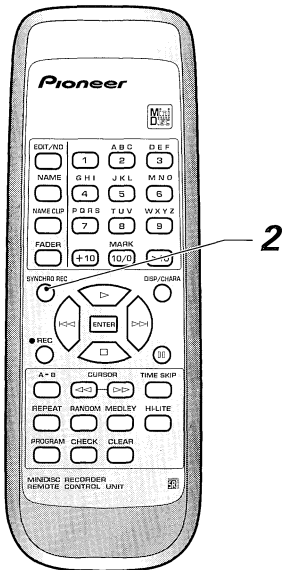
1 Press DIGITAL NR before recording.
The DNR indicator lights in the display (press again to switch off Digital NR).

2 Record in the normal way.
You can use any of the recording modes with Digital NR.

Starting a Recording Automatically

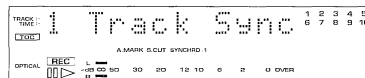
The MJ-D508 has a handy feature that makes the starting and stopping of recording completely automatic. Once set to this mode (called synchro recording), the recorder monitors the input and remains in record-pause mode all the while there is silence. As soon as the recorder detects some audio, recording starts.

There are two synchro recording modes: 1-track sync and all-track sync. In 1-track sync mode, the recorder stops recording after it detects three seconds of silence after the track. In all-track sync mode, the recorder goes into record-pause mode after it detects three seconds of silence after a track, then starts recording again as soon as it senses the start of the next track. If the space between tracks on the source material is less than three seconds, that space gets recorded. Any gap longer than three seconds is automatically reduced to three seconds. If this happens the **s.CUT** indicator lights in the display.



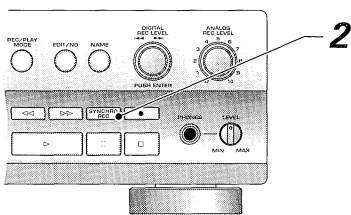
1 Prepare for analog- or digital-input recording.
Load a recordable MD and set the input selector (see pages 19 and 20 for more detailed instructions), and prepare the source material. Set the analog input level or the digital volume level as required (see pages 20 and 26 for more detailed instructions).

2 Press SYNCHRO REC.
Press once for 1-track sync mode; twice for all-track sync mode. Further presses switches between the two modes.
The display indicates the current mode:



3 Start playing the source material.
Recording starts automatically.

- ❖ If the recorder detects no input signal for 30 minutes, synchro recording mode is cancelled.
- ❖ In 1-track sync mode, recording automatically stops after the track has finished. In all-track sync mode, the recorder goes into record-pause mode after each track; press ■ (stop) to cancel synchro recording mode.

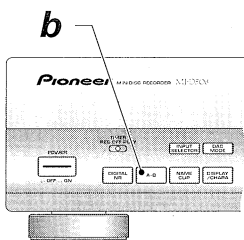
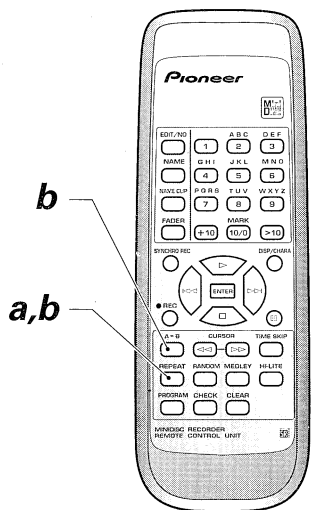


memo If you record a fade out during all-track sync mode, the synchro mode is cancelled after the fade out (see page 30 for more on recording fades).

Playing Discs (beyond the basics)

Playing Things Again

A number of repeat play features are available from the remote control: you can repeat a whole disc, the current track, or any segment of the disc by setting a start and end point. Having set the repeat mode, the recorder continues to repeat until you stop the disc or cancel the repeat mode.



a To repeat a track or all tracks: Press REPEAT to select a repeat mode.

Each press changes the repeat mode in the following sequence:

- Repeat the current track (**REPEAT** ▷1 lights)
- ↓
- Repeat the whole disc (**REPEAT** lights)
- ↓
- Repeat mode off

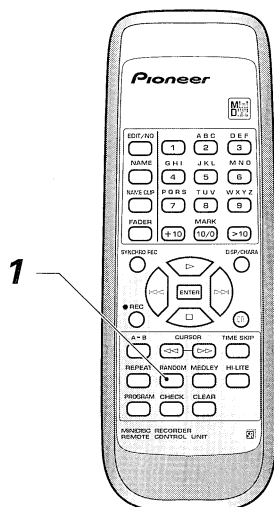
b To loop a segment of the disc:

- 1 Press **A-B** once where you want the loop to start. (**A-** lights)
- 2 Press **A-B** again where you want the loop to end. (**A-B** lights)
- 3 Press **REPEAT**. (**A-B REPEAT** lights)

- ❖ Cancel the loop by pressing **REPEAT** again. The recorder jumps to the start of the current track and playback continues as normal.
- ❖ If you press **■** (stop) while the loop is playing, playback halts and the loop points are lost.

Playing Tracks at Random

Selecting the random play mode leaves the track order of the disc up to the recorder. Each track on the disc is played just once, but in a random order.



1 Press **RANDOM** during playback or when the disc is stopped.

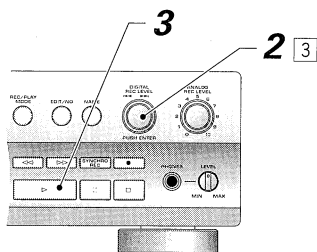
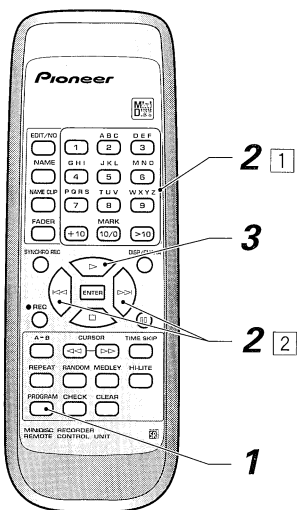
The **RDM** indicator lights in the display and random playback starts.

- ❖ Pressing **■** (stop) cancels the random play mode.
- ❖ You can still use repeat mode during random play.
- ❖ You can't use random mode together with medley mode (see page 24 for more on medley mode). Switching to medley mode cancels random play.

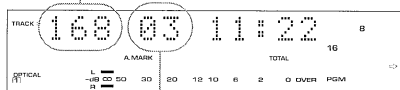
Programming the Track Order

Using the random play feature, you can have the recorder surprise you with the track order. Programming the track order means telling the recorder precisely which tracks, and in what order, you want played.

The sequence you program applies only to the disc in the recorder at the time. As soon as you eject that disc the program memory is lost. However, all the while the disc is in the recorder the programmed order will be remembered—even if you turn the recorder off.



Track number programmed



Program step number

1 Make sure the recorder is stopped, then press **PROGRAM**.

2 Enter the track numbers in the order you want them played.

You can program a sequence of up to 30 tracks. The message **PGM Full** is displayed when you reach the limit.

There are several ways to select the track numbers to play.

1 Use the number keys on the remote:

For track numbers 1 to 10 use the individual number buttons.

For track numbers over 10, use either the **+10** button or the **>10** button:

For example, to select track 16, press:

+10 ⇒ **MNO** ⇒ **6**

Alternatively, press:

>10 ⇒ **1** ⇒ **MNO** ⇒ **6**

For three-digit track numbers, press **>10** twice. For example, to select track 168 press:

>10 ⇒ **>10** ⇒ **1** ⇒ **MNO** ⇒ **6** ⇒ **TUV** ⇒ **8**

2 Use the track skip buttons on the remote:

Use the **◀◀** and **▶▶** track skip buttons to step through the track numbers, which show up in the display. To add a track to the program press **ENTER** or **PROGRAM**.

3 Use the jog dial on the front panel:

Use the jog dial to step through the track numbers, which show up in the display. Push the jog dial (**ENTER**) to add a track to the program.

3 Press **▶** (play) to start playback.

The recorder starts with the first track you programmed.

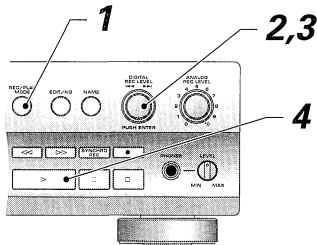
You can use the repeat feature to repeat the whole program.

- ❖ To cancel the programmed order, first stop the disc, then press **■** (stop) once more. Ejecting a disc also cancels the program.
- ❖ To delete the last track in the current program, press **CLEAR** on the remote control.
- ❖ To check the program order, press **CHECK** on the remote while the disc is stopped. Step through the tracks by repeatedly pressing **CHECK**.

Playing Discs (beyond the basics)

Playing Non-Stop Music

You can use the MJ-D508 as a kind of electronic DJ, fading out one track on a disc and immediately starting the next to form an unbroken chain of tracks. Because some music is already recorded with a fade out at the end of the track, the fade-out each track about 12 seconds before its end. After a fade-out of about two seconds, the next track starts without a pause (you miss the last 10 seconds of each track). This feature is called 'medley playback.'



- 1** During playback, or in stop mode, press **REC/PLAY MODE**.

❖ On the remote control, just press **MEDLEY** during either playback or pause mode to switch the medley feature on or off.

- 2** Turn the jog dial until the display reads **Medley Off**.

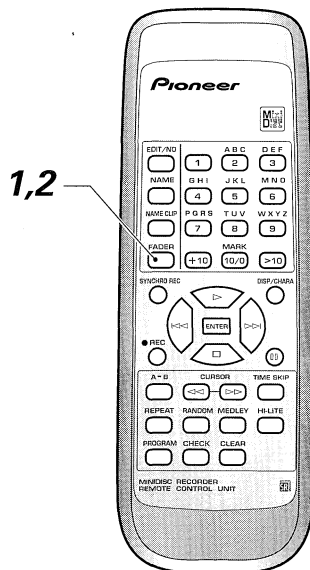
- 3** Press the jog dial (**ENTER**) to switch to **Medley On**.

Further presses switches between **Medley On** and **Medley Off**. (If you eject the disc, the medley mode is reset to off.)

- 4** Press **▶** (play) to start playback (if necessary).

Fading Out and Fading In

Pausing a disc during playback cuts the sound off abruptly. You can achieve a softer effect by using the fader feature to fade the track out over a few seconds before pausing. Likewise, when you resume playback, instead of a sudden attack of sound, you can have the recorder fade in the volume gradually.



- 1** Press **FADER** during playback to pause the disc.

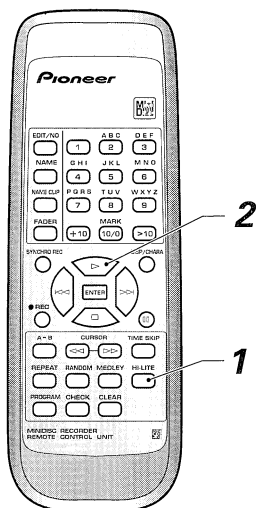
The **FADER** indicator in the display blinks and the volume fades to zero over about five seconds. The recorder then pauses playback.

- 2** Press **FADER** again to resume playback.

The **FADER** indicator in the display blinks and the volume starts to fade in.

Searching for a Track

Suppose you want to listen to a specific track, but don't know where it is on the disc. You could use the track skip controls and listen to the beginning of each track until you find the one you're looking for. But there's a better way: the highlight scan. This feature automatically plays 10 seconds of each track on the disc in turn, missing out the first minute of each track. You can use this feature while a disc is playing, or when it's stopped.



1 Press HI-LITE.

The **HI-LITE** indicator in the display lights and highlight scan starts.

- ❖ If a track is shorter than a minute, then the first 10 seconds of the track is played.
- ❖ If you're playing the disc in random or program play mode and press **HI-LITE**, those modes are cancelled and highlight scan starts.

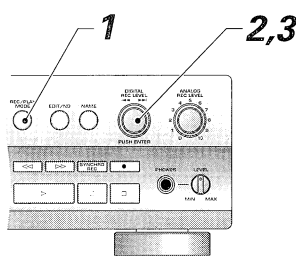
2 When you recognize the track you want to play in full, press ► (play).

Highlight scan mode is cancelled, the recorder finds the beginning of the current track and normal playback starts.

Scanning a Long-Play Disc

There may be times when you'd like to be able to record continuously for longer than the usual 74 minutes that MD provides for. The MJ-D508 has a long-play mode that doubles the available recording time on a disc at the cost of stereo recording. However, if you're recording a speech or an interview, for example, this is unlikely to be a great loss.

As an added bonus, recordings made in long-play mode (see page 30 for how to do this) can be scanned at double speed to find a certain place on the disc. Again, this is probably most useful when listening back to speech, which can usually still be understood at double speed.



1 During playback, press REC/PLAY MODE.

2 Turn the jog dial until the display reads Mono Normal.

You'll only see this option if the track currently playing is recorded in mono long-play mode.

3 Press the jog dial (ENTER) to switch to Mono Fast.

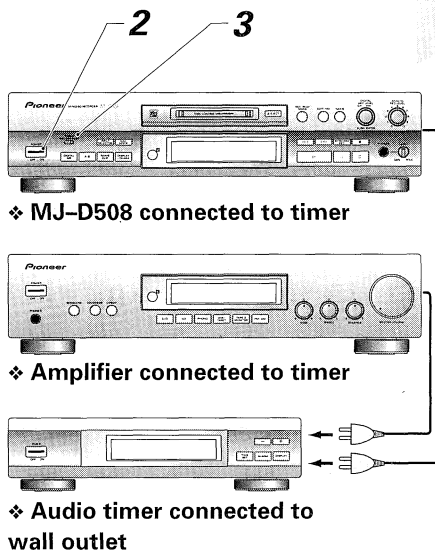
Further presses switches between **Mono Normal** and **Mono Fast**.

- ❖ If the recorder runs into a stereo recording on the disc, the scanning mode is immediately canceled.
- ❖ You can't use the scanning mode in random, highlight, repeat or medley modes.

Playing Discs (beyond the basics)

Using a Timer for Future Playback

To schedule playback or recording in advance, use a commercially available audio timer unit. These have one or more switched power outlets which you plug other components into (in this case, your amplifier and the MJ-D508). You can then set the timer to switch the components on at any time. Read the instruction manual that came with your timer for more detailed instructions.



1 Switch on the timer and amplifier.

2 Switch on the MJ-D508.

3 Set the **TIMER** switch to **PLAY**.

4 Load an MD into the recorder.

- ❖ At this point you can program the play order of the disc (see page 22 for how to do this).

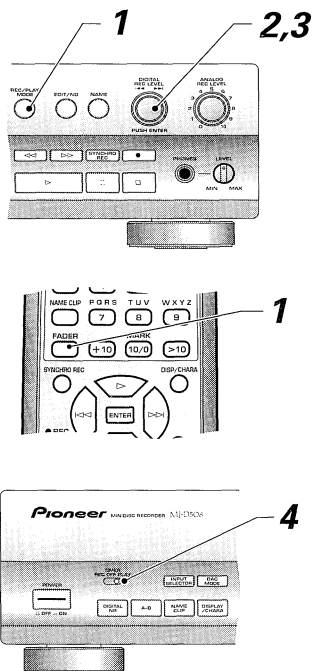
- ❖ See also *Fading In Using a Timer* below.

5 Set the timer.

After you've made the setting, the timer will shut off power to the amplifier and the MJ-D508.

Fading In Using a Timer

If you like to wake up in the morning to your MD recorder set to play using a timer (see above for how to use with an audio timer), you might prefer to have the music fade in rather than start abruptly. The fader mode lets you do just this.



1 Load a disc and press **REC/PLAY MODE**.

- ❖ Using the remote control, just press **FADER** and proceed to step 4.

2 Turn the jog dial until you see **Fader Off** in the display.

3 Press the jog dial (**ENTER**) to switch to **Fader On**.

Further presses switches between **Fader On** and **Fader Off**.

4 Set the **TIMER** switch to **PLAY**.

5 Set your audio timer.

Setting the Digital Recording Level

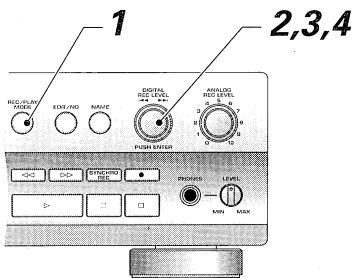
One of the advantages of digital-to-digital recording is that you don't have to set recording levels—and risk distortion by overloading the disc. If you're recording commercial material from CDs or other MDs, the digital level has already been optimized and you don't need to change it. If you're making a digital copy of a CD, DAT or MD that was not commercially produced and that was consistently under-recorded, you can boost the overall level by up to +12dB. Remember though, that any peaks in the original recording run the risk of distorting the copy.

If you record digital satellite broadcasts, you may also have cause to boost the digital recording volume since the digital volume of some broadcasts is relatively low. Again, remember that if there are any peaks in the broadcast, you run the risk of momentary distortion.

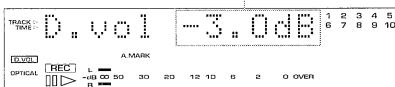
It's also possible to reduce the digital recording volume so that you end up with a recording that is quieter than the original. In most cases, this is not desirable since the recording quality will suffer very slightly. However, if you're putting together a mix MD (various tracks compiled from different sources), and there is a track which stands out as generally louder than the others (peak volumes are usually very similar, but the average level might be higher in some recordings than others so they sound louder), then you might want to reduce the level of that track.

Note that this feature won't get rid of distortion on the source material.

You can adjust the digital recording volume while the unit is in stop mode, record-pause mode or while it is actually recording. Once changed, the new digital recording level remains until you change it again, or reset it. Each digital input has its own level which can be set independently.



Digital volume level adjusted down 3dB.



1 After selecting one of the digital inputs, press REC/PLAY MODE.

- ❖ Use the **INPUT SELECTOR** button on the front panel to change inputs—see page 19 for more information.

The display shows the option **Digital Vol.**

2 Press the jog dial (ENTER).

The display changes to **D.vol 0dB** (0dB is the default and means the recording volume is the same as the original).

3 Turn the jog dial to adjust the recording level up or down.

- ❖ The maximum adjustment possible is between -48dB and +12dB.
- ❖ Between -12dB and +12dB, adjustment is in steps of 0.1dB. Down to -42dB, adjustment is in steps of 0.5dB. Below this, adjustment is in steps of 1.0dB.
- ❖ To reset the current digital input back to its default setting, press **EDIT/NO** here.

4 Press the jog dial (ENTER) again to input the level.

- ❖ If you set the level at anything other than 0dB, the **D.VOL** indicator in the display lights to remind you of the fact.

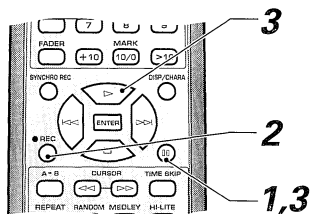
You can now record as usual.

Making a Recording (beyond the basics)

Recording Over Unwanted Material

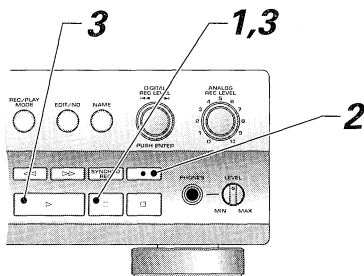
One of the convenient features of recording on MD is that the recorder automatically records on the next available section of the disc. Sometimes though, you'll want to record over something that's already on the disc. Unlike a cassette tape, all the material after the point at which you start recording is lost. So, if you just want to erase a track (or part of a track) in the middle of a disc, use the edit features instead (see pages 32–41 for more on this), then simply record as usual.

If you decide that you do want to record from midway through a disc, here's how to do it:



1 Find the place in the disc you want to record from and pause playback.

2 Press ● (REC).
The display reminds you that you are about to overwrite the disc. If you change your mind here, press ■ (stop) to cancel overwrite.

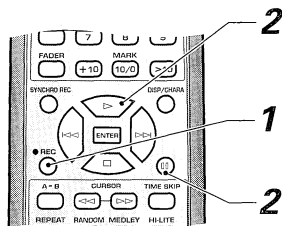


3 Press ► (play) or || (pause) to start recording.

Recovering Lost Time

If you've ever just missed the beginning of a song you were trying to record off the radio because you didn't quite get to the record button in time, you'll wish you'd had the recovery feature of the MJ-D508. This lets you start recording from six seconds before you hit the button to start recording! In other words, you can 'miss' the beginning of something by up to six seconds, yet still record it.

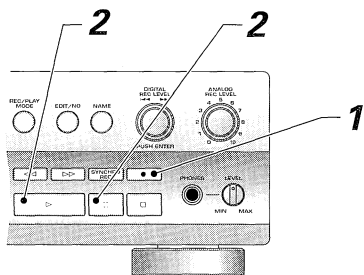
Recovery recording works because all audio signals that go into the recorder while it's in record or record-pause mode pass through a six second 'reservoir' of memory. In other words, the recorder always has the last six seconds of audio in its memory. When you start recovery recording, the recorder uses that audio instead of what's actually going into the recorder at the moment you press the record button.



1 With the recorder already in record-pause mode, press ● REC to switch on recovery recording.

The display indicates that recovery recording mode is on; the recorder remains in record-pause mode.

❖ Pressing ● REC again switches recovery recording mode off again.



2 Press ► (play) or || (pause) to start recording.

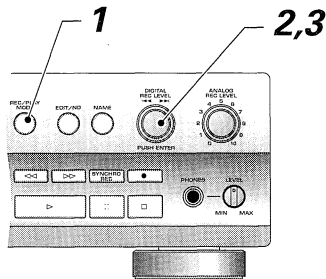
❖ To stop recording and cancel recovery recording, press ■ (stop).

❖ To pause recording, but remain in recovery mode, press || (pause).

Making a Recording (beyond the basics)

Automatically Numbering Tracks

If you're recording directly from a CD or another MD using a digital input, track numbers are automatically copied along with the audio. When recording other digital or analog sources, if the recorder detects more than 1.5 seconds of silence, it regards that as the space between tracks and starts a new track. Although this usually works fine, you may run into problems if you're recording a noisy vinyl record or analog tape and the recorder doesn't recognize the gap between tracks. For this reason you can adjust the level of sound that the recorder regards as "silence."



1 With the recorder in stop mode, press **REC/PLAY MODE**.

The display shows the current "silence" threshold for automatic track numbering.

2 Turn the jog dial until you see **A.mark -50dB** displayed.

3 Press the jog dial (**ENTER**) to change the level.

Press repeatedly to choose between the following levels:

-50dB ⇌ **-60dB** ⇌ **OFF** ⇌ **-40dB**

-50dB (Initial level.) A 'mid' level suitable for most recordings.

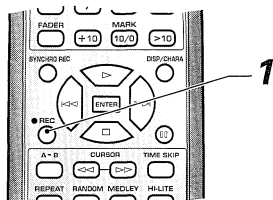
-60dB Use this setting if you find the recorder is putting new track numbers in during very quiet sections of classical music, for example.

-40dB Use this setting if you find the recorder is not putting in new track numbers because the original source is too noisy.

OFF This turns off automatic track numbering: everything is recorded as a single track. (Digital copies of CDs and MDs will still have track numbers.)

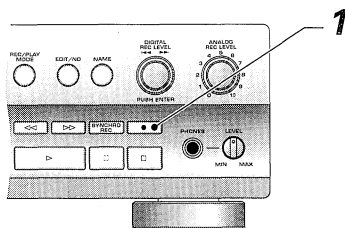
Manually Numbering Tracks during Recording

You can increase the track number incrementally wherever you want during a recording, so if there are two tracks on the original that run into each other without a pause, for example, you can still separate them into separate tracks on the MD. Also, if you switched off the auto track numbering (see above), you can number each track using this method.



1 Wherever you want a new track to begin, press **REC** to increase the track number in increments of one.

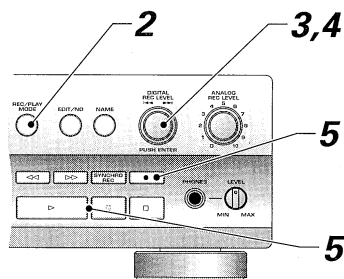
Recording continues unbroken.



Making a Recording (beyond the basics)

Recording Extra-Long Material

There may be times when you'd like to be able to record continuously for longer than the usual 74 minutes that MD provides for. The MJ-D508 has a long-play mode that doubles the available recording time on a disc at the cost of stereo recording. However, if you're recording a speech or an interview, for example, this is unlikely to be a great loss. You can freely mix long-play mono recordings and normal stereo recordings on the same disc—the recorder automatically detects the mode on playback.



❖ Regular stereo recording mode

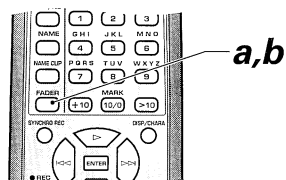


❖ Long-play mono recording mode

- 1 Prepare for analog- or digital-input recording.**
Load a recordable MD and set the input selector (see pages 19 and 20 for more detailed instructions), and prepare the source material. Set the analog input level or the digital volume level as required (see pages 20 and 27 for more detailed instructions).
- 2 Press REC/PLAY MODE.**
- 3 Turn the jog dial until you see Stereo displayed.**
- 4 Press the jog dial (ENTER) to switch to Mono recording mode.**
Further presses switch between **Stereo** and **Mono** recording modes.
 - ❖ The recorder will stay in the mode you set now (even after ejecting the disc or switching the power off) until you change it again.
- 5 Press ● REC, then ► (play) or II (pause) to start recording.**
 - ❖ You can't switch the record mode during recording. To switch, first pause the recording.

Recording Fade Ins and Fade Outs

Sometimes, for example if you're recording just an excerpt from something, it may be better to fade in the recording, then fade out again at the end, rather than start and end abruptly. Note that you can't record fade ins when in synchro or recovery recording mode (although you can record a fade out).

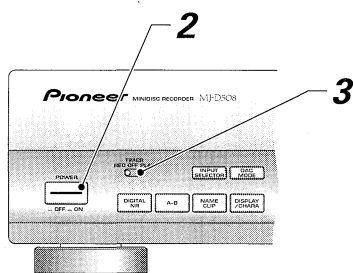


- a Press FADER during record-pause to fade in.**
If in normal record mode, the recording starts immediately with a five second fade in.
- b Press FADER during recording to fade out.**
After recording a five second fade out, the recorder goes into record-pause mode. This happens in either normal or synchro record mode.
 - ❖ You can also just press ■ (stop) if you don't need a fade out.

memo If you record a fade out during sync recording, the synchro mode is cancelled after the fade out (see page 21 for more on synchro recording).

Using a Timer for Future Recording

If you're using your MJ-D508 with an audio timer (see page 26 for how to connect this up), you can set it to record at a preset time and date, making it useful for recording a radio or satellite program when you're away, for example.



1 Switch on the timer, amplifier and the source component.

2 Switch on the MJ-D508.

3 Set the timer switch to REC.

4 Prepare for recording.

Load a recordable MD, select the correct input, set recording levels/volume as appropriate, set for mono or stereo recording, etc.

5 Set the timer.

After you've made the setting, the timer shuts off power to the components connected to it.

- ❖ It takes about a minute from when the timer switches everything on to when the recorder actually starts recording, so bear this in mind when setting the timer.

6 Make sure the recorder writes the disc's UTOC within a week of timer recording.

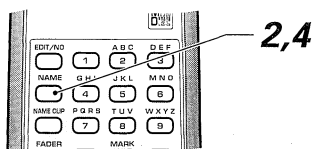
The UTOC is not written until you eject the disc or do a UTOC write (see page 41). Until then, the UTOC information is stored in the recorder's memory. This is fine for at least a week, but may be lost after that. Generally, switch on the recorder and eject the disc or use the UTOC write command as soon as possible after timer recording.

Introduction

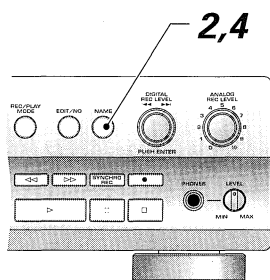
The MD system allows for very flexible editing of discs. Using the editing features described on the following pages you can easily: create names for discs and for individual tracks; combine two tracks into one long one, or divide a track into two short ones; move single tracks, or reorder a whole disc; erase tracks or parts of tracks on a disc.

Naming a Disc

You can name a recordable MD so that when you load the disc into the recorder, the disc's name appears in the recorder's display. The name can be up to 100 characters long, including spaces. You can also edit the existing disc name (if you've recorded something else on the disc, for example), but you can't change the name of a playback-only disc.



1 Make sure the disc you want to name/edit is loaded into the recorder and is stopped.

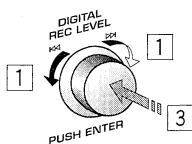


2 Press **NAME**.
If the disc doesn't already have a name, the character display is blank with a blinking cursor on the first character. If the disc is already named, the character display shows the name (or the first 12 characters if it is too long to be displayed completely), with a blinking cursor under the first character.

3 Enter/edit the name for the disc.

You can do this from either the front panel or the remote control.

Front panel controls:



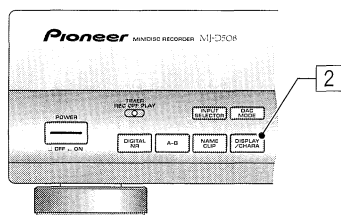
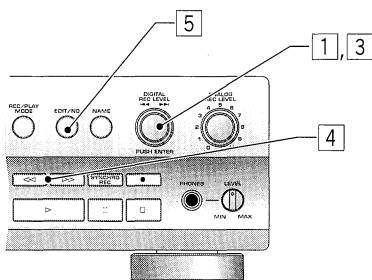
1 Select/change the character at the current cursor position by turning the jog dial. See below for the complete list of letters, numbers and symbols available.

2 Change between uppercase and lowercase by pressing **DISPLAY/CHARA**. The case of the character at the current cursor position changes between upper- and lowercase with each press.

3 Confirm the character and move the cursor to the next character position by pressing the jog dial (or by pressing **▶▶**).

4 Move the cursor backwards or forwards along the display using the **◀◀** and **▶▶** buttons. Although you can't move backwards beyond the beginning of the name, you can move forwards as far as you like.

5 Erase the character at the current cursor position by pressing **EDIT/NO**. The characters either side of the current cursor position close up to fill the gap.



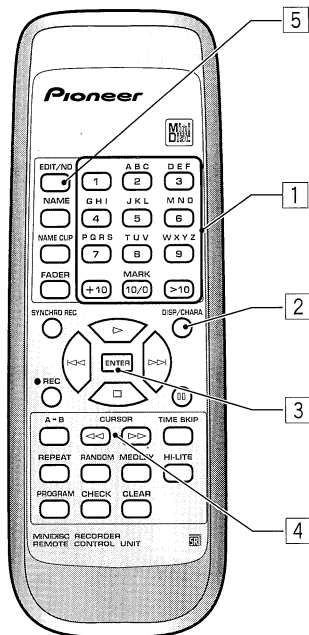
Characters available for disc and track names:

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

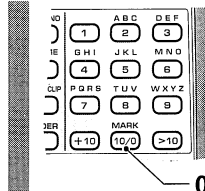
1234567890

!"#\$%&'()*+,-/;<=>?@_ ' <space>



Remote control:

- 1 Select/change the character at the current cursor position using the remote buttons as shown:



Use number keys 1–9 for numbers and the letters shown above each key. Press a key repeatedly to cycle through the letters and numbers on that key.

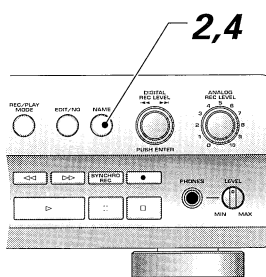
0! "#\$%&'()*+,-/,:;<=>?@_ ' <space>

- 2 Change between uppercase and lowercase by pressing **DISP/CHARA**. The case of the character at the current cursor position changes between upper- and lowercase with each press.
- 3 Input the character and move the cursor to the next character position by pressing **ENTER** (or by pressing **▶▶**).
- 4 Move the cursor backwards or forwards along the display using the **◀◀** and **▶▶** buttons. You can't move backwards beyond the beginning of the name, or past the next blank position after the end of the name.
- 5 Erase the character at the current cursor position by pressing **EDIT/NO**. The characters either side of the current cursor position close up to fill the gap.

- 4 Press **NAME** again to input the disc name and exit the disc naming mode.

Naming a Track

In addition to naming the disc, you can name each track on a disc too. Again, the names can be up to 100 characters long.



- 1 **Select the track on the disc you want to name.**

You can name tracks in any mode, but if the disc is stopped, the track must still be selected—use the jog dial or **◀◀** and **▶▶** buttons to select tracks in stop mode.

If the disc is playing, you must finish entering the name before the track finishes—pausing playback is a good idea.

- 2 **Press NAME.**

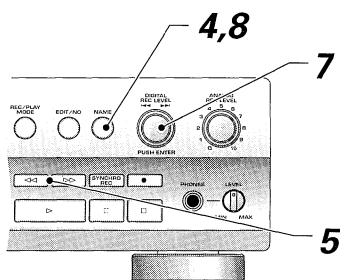
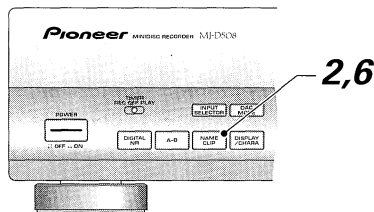
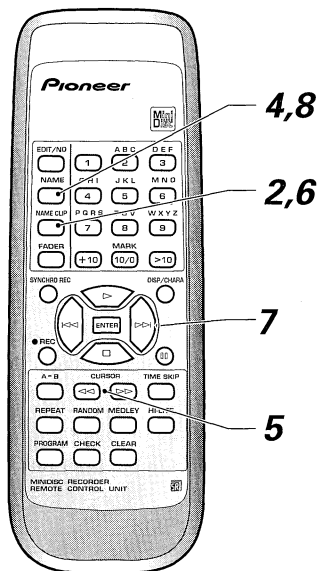
- 3 **Input the track name**

Use exactly the same procedure as naming a disc to name a track.

- 4 **Press NAME again to input the track name and exit the track naming mode.**

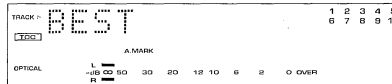
Copying Track Names to Other Tracks

If you need to name several tracks with similar names—several parts of one suite, for example—you can name the first one using the procedure detailed above, then simply copy that name to the other tracks and edit them as required. This can save you a lot of time over naming each track individually. The recorder stores the last three names you've copied using the name clip function in its memory (up to 40 characters each). When you copy another track name, the oldest one is deleted from memory.



1 Go to the track with the name you want to copy.

- ❖ Use one of the usual methods—track skip, direct selection, etc.



2 Press NAME CLIP to copy the currently displayed name into memory.

The display should confirm that the track name has been copied.

- ❖ You cannot copy the track names of playback-only discs.

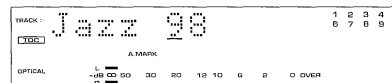
3 Go to the track that you want to copy the name to.

- ❖ Use one of the usual methods—track skip, direct selection, etc.

4 Press NAME to start editing the current track name.

5 Move the cursor to the position you want to insert the copied name.

Use the ◀◀ and ▶▶ buttons to move the cursor around the character display.



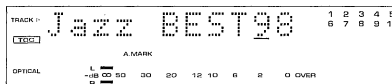
6 Press NAME CLIP again.

The display flashes **Name Insert** briefly and the most recently clipped name appears.

7 Use the jog dial to select one of the previous three names stored, then press the jog dial (ENTER).

On the remote, use the ◀◀ and ▶▶ buttons to select a name, then press ENTER.

The selected name is inserted at the point you chose.



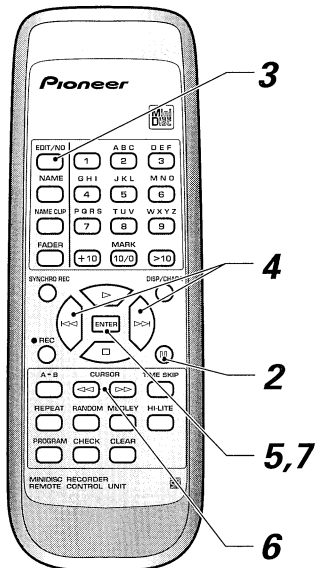
- ❖ Edit the name further if necessary.

8 Press NAME to leave the track name mode.

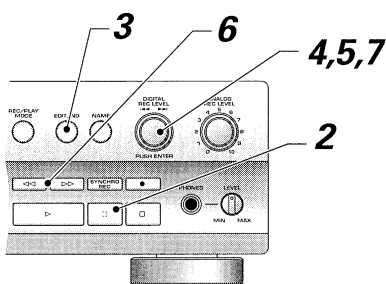
Dividing a Track into Two

If you recorded two pieces of music that run into each other without a break through the analog inputs, the recorder wouldn't have automatically given them their own track numbers. After the recording is complete, you might want to assign the two tracks different track numbers. Use the divide function to do this. The recorder inserts the new track number and shunts all the subsequent tracks up one automatically.

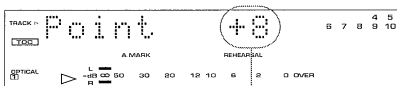
You can split any track into two at anytime using the divide function, so you can, for example, divide up a long track into several parts for easy searching, and so on.



- 1 Start playing the track you want to divide.**
- 2 Press II (pause) at the point where you want to divide it.**
- 3 Press EDIT/NO.**
The edit menu appears in the display.
- 4 Turn the jog dial and select Divide.**
On the remote control use the ◀◀ and ▶▶ buttons.
- 5 Press the jog dial (ENTER) to input the division.**
On the remote control press ENTER.
The four-seconds either side of where you pressed pause start playing alternately and repeatedly.



- 6 Use the ◀◀ and ▶▶ buttons to adjust the dividing point backwards or forwards.**
The display indicates how far you've moved the dividing point, and the segments continue to play giving you aural feedback.
 - ❖ You can move the break point about 2.5 seconds either direction from your original point.
 - ❖ Each step indicated in the display corresponds to about 1/100th sec.
 - ❖ To abort the divide function here, press ■ (stop) or EDIT/NO.



This shows how much you've adjusted the original dividing point

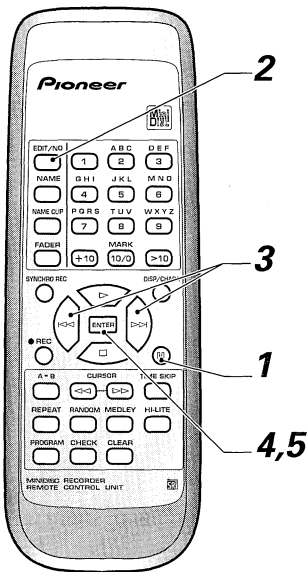
- 7 Press the jog dial (ENTER) to confirm the divide point.**
On the remote control press ENTER.
 - ❖ If the track you just divided has a name, the recorder gives that name to both parts automatically. If the disc's User Table of Contents (UTOC) is full, however, the new track won't be given any name.
 - ❖ You can keep dividing the track (or other tracks on the disc) until you reach the maximum allowed of 255 tracks.

Combining Two Tracks into One

If there are two consecutive tracks on a disc that you'd rather were a single track, you can 'glue' them together using the Combine function. All the tracks following the newly combined tracks are automatically renumbered.

There are a few limitations when using this feature: it will not work if one or both tracks are less than 12 seconds long; you cannot combine two tracks if one of them is recorded in long-play mode while the other is in stereo; and you can't combine tracks if one was recorded using a digital input and the other using the analog inputs.

If both the tracks are named, then the new single track takes the name of the first track. If only one track is named then the new track takes that name.



1 During playback of the later track of the two, press **II (PAUSE)**.

Combine only works with two consecutive tracks, so if you wanted to combine tracks 3 and 4, pause during playback of track 4.

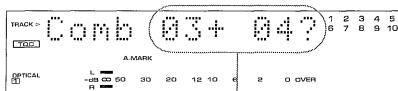
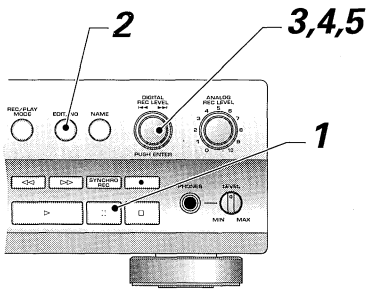
❖ If you want to combine two tracks which are not consecutive, you'll have to first move them next to each other—see page 37 for how to do this.

2 Press **EDIT/NO.**
The edit menu appears in the display.

3 Turn the jog dial and until you see **Combine**.
On the remote control use the **◀◀** and **▶▶** buttons.

4 Press the jog dial (**ENTER**) to select it.
On the remote control press **ENTER**.
❖ To abort at this point, press **■** (stop) or **EDIT/NO.**

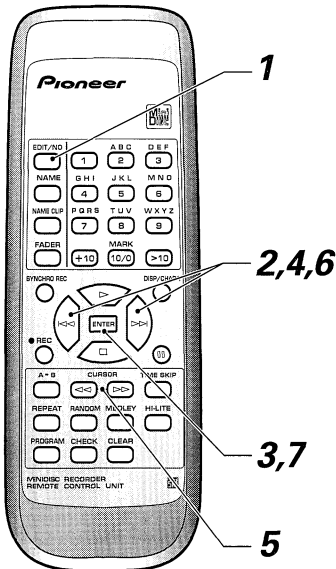
5 Press the jog dial (**ENTER**) once more to input the combination.
On the remote control, press **ENTER**.
The two tracks are combined to form a single, long track.



Tracks to be combined.

Moving Tracks on a Disc

Although you can use the program playback feature to play a disc out of the 'regular' track order, you can also edit the track order itself so that the disc permanently plays in a different order (unless, of course, you edit the track order again). If you just want to move a track or two to a different position on the disc, it's probably quickest to use this feature; if you want to seriously change the order of the whole disc, use the Reorder feature described on the next page in *Reordering Tracks on a Disc*.



1 Press EDIT/NO while the disc is stopped.

The edit menu appears in the display.

2 Turn the jog dial until you see Move.

On the remote control use the ◀◀ and ▶▶ buttons.

3 Press the jog dial (ENTER) to select it.

On the remote control press ENTER.

You now have to specify which track you want to move, and where you want to move it to.

❖ To abort at this point, press ■ (stop) or EDIT/NO.

4 Use the jog dial or ◀◀ and ▶▶ buttons to select the track number you want to move.

5 Press ▶▶ to move the cursor to the destination track number.

6 Use the jog dial or ◀◀ and ▶▶ buttons to select a new track number.

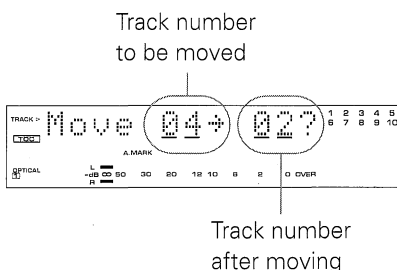
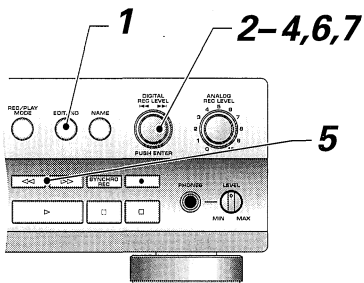
For example, if you want track 4 to be the second track on the disc:

❖ If you made a mistake with either track number, you can still change them. Use the ◀◀ and ▶▶ buttons to move between the two track numbers.

7 Press the jog dial (ENTER) to move the track.

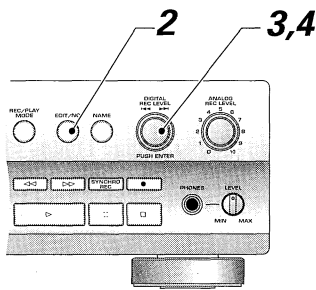
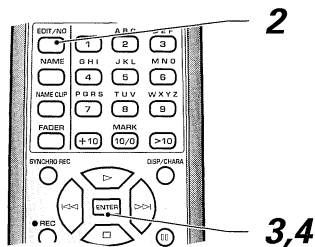
On the remote control press ENTER.

All the tracks are renumbered automatically.



Reordering Tracks on a Disc

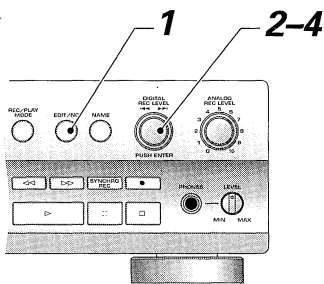
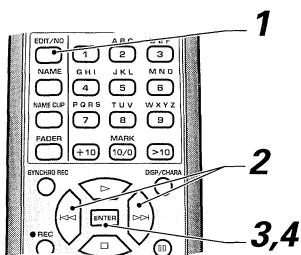
The track reorder feature takes the play order you've programmed for the disc using the program play feature (see page 23), and reorders the tracks on the disc accordingly. If you want to change the position of more than a couple of tracks on the disc, it's probably quicker to do it this way than use the move track function described on the previous page.



- 1 Program the track playback order.**
See page 22 for more on how to do this.
- 2 Press EDIT/NO while the disc is stopped.**
Program Move appears in the display.
- 3 Press the jog dial (ENTER) to select it.**
On the remote control press ENTER.
❖ To abort at this point, press ■ (stop) or EDIT/NO.
- 4 Press the jog dial again to reorder.**
All the tracks on the disc are automatically renumbered to reflect the new order.

Erasing a Whole Disc.

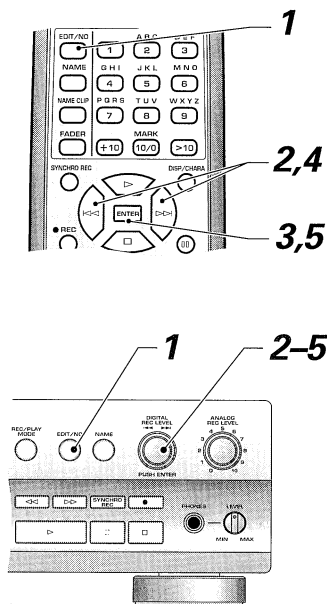
The MJ-D508 offers several erase options, from the whole disc, to just a segment of a single track. Erasing the whole disc erases not only all the tracks on the disc, but also the disc name (if you've entered one).



- 1 Press EDIT/NO while the disc is stopped.**
The edit menu appears in the display.
- 2 Turn the jog dial until you see All Erase in the display.**
On the remote control use the ◀◀ and ▶▶ buttons.
- 3 Press the jog dial (ENTER) to select it.**
On the remote control press ENTER.
❖ To abort at this point, press ■ (stop) or EDIT/NO.
- 4 Press the jog dial again to erase.**
The recorder erases the disc and displays the message **Blank Disc**.

Erasing Individual Tracks

Erasing unwanted tracks on a disc frees up disc space for further recording. When you erase a track, all the tracks following it are automatically renumbered.



1 Press EDIT/NO while the disc is stopped.

The edit menu appears in the display.

2 Turn the jog dial until you see Erase in the display.

On the remote control use the **◀◀** and **▶▶** buttons.

3 Press the jog dial (ENTER) to select it.

On the remote control press **ENTER**.

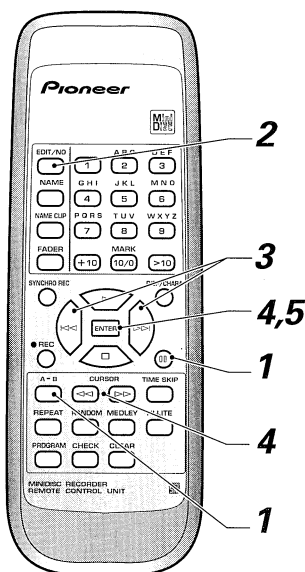
❖ To abort at this point, press **■** (stop) or **EDIT/NO**.

4 Use the jog dial or the ◀◀ and ▶▶ buttons to select the track you want to erase.

5 Press the jog dial (ENTER) again to erase.

Erasing a Section of a Track

When you erase a section of a track, you can either have the recorder create separate tracks from the parts before and after the erased section, or you can have the recorder combine the parts either side of the erased section into one track.



1 Set the start and end points of the section you want to erase.

1 Play the disc and press **A-B** at the start point. (A- lights)

2 Press **A-B** again when you reach the end point. (A-B lights)

3 Press **||** (pause).

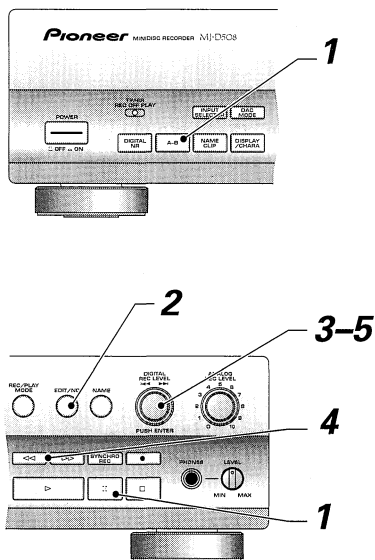
2 Press EDIT/NO.

3 Turn the jog dial until you see A-B Erase or A-B Combine in the display.

On the remote control use the **◀◀** and **▶▶** buttons.

Choose **A-B Erase** to create separate tracks before and after the erase points. Choose **A-B Combine** to create a single track from the parts either side of the erase points.

Editing a disc



4 Press the jog dial (ENTER) to select the function.

On the remote control press **ENTER**.

You'll now hear a few seconds of the track before and after the A and B erase points. The recorder repeats these alternately. To change either the A or B points:

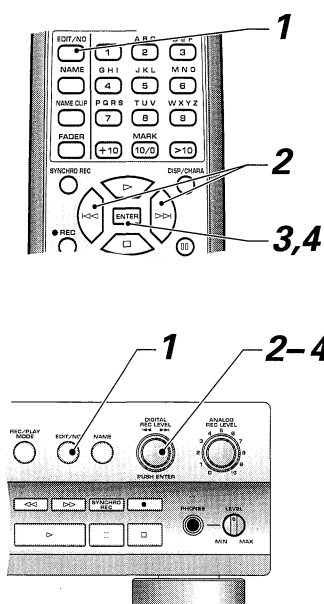
- 1 Press the **A-B** button to select one of the points. Each press switches between the A and B erase points.
- 2 Move the currently selected point backwards or forwards using the **◀◀** and **▶▶** buttons. Each step corresponds to about 1/100th sec. Each erase point can be adjusted 176 steps either way (almost 2 seconds backwards or forwards from the original point).
 - ❖ The recorder will not allow you to move point A beyond point B.
 - ❖ If the display shows the message **Point ERR** while adjusting either point, move the point in the other direction until the error message disappears.
- 3 Repeat steps 1 and 2 until you have the erase points you want.
 - ❖ To abort at this point, press **■** (stop) or **EDIT/NO**.

5 Push the jog dial or press ENTER on the remote to finalize the edit.

The track numbers are automatically updated to reflect the edit.

Undoing a Mistake

Although the MJ-D508 gives you several opportunities to abort an edit if you make a mistake, there will probably still be times when you complete an edit operation only to find that it wasn't what you had intended. As long as you haven't updated the UTOC by ejecting the disc or performing a UTOC write command, or recorded anything else on the disc, you can still undo the last edit operation.



1 Press EDIT/NO when the disc is stopped.

2 Turn the jog dial until you see UNDO in the display.

On the remote control use the **◀◀** and **▶▶** buttons.

- ❖ If no undo is possible, then the recorder won't give you this option.

3 Push the jog dial or press ENTER on the remote.

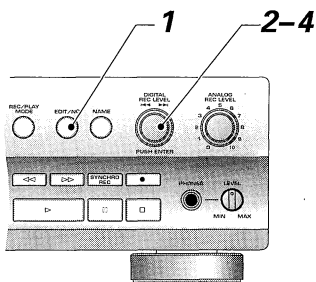
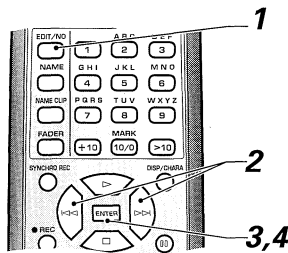
- ❖ Cancel the undo operation by pressing **■** (stop) or **EDIT/NO**.

4 Input by pushing the jog dial or pressing ENTER on the remote again.

Writing the UTOC

Every time you record or edit anything on a recordable MD, the recorder needs to update the User Table of Contents (UTOC) so that it can playback the disc properly next time (see page 9 for more detailed information on what the UTOC is and what it does). Generally, the recorder keeps track of all the records and edits you make on a disc during a session then, when you eject the disc, it writes the updated UTOC to the disc all in one go.

In addition to this automatic update, you can have the recorder write an updated UTOC to the disc anytime using the UTOC write command. This can be a good thing to do occasionally to safeguard the contents of a disc after a series of recording or editing operations. For example, if there is a power outage or you accidentally switch off the recorder, there's a danger that the recorder will lose the recording and editing information and so won't be able to update the UTOC correctly when you eject the disc. Here's how to use the UTOC write function:



1 Press **EDIT/NO** when the disc is stopped.

2 Turn the jog dial until you see **UTOC Write** in the display.

On the remote, use the **◀◀** and **▶▶** buttons.

3 Press the jog dial (**ENTER**).

On the remote, press **ENTER**.

The recorder prompts you to write with the message **UTOC Write?**

❖ To abort at this point, press **■** (stop) or **EDIT/NO**.

4 Press the jog dial (**ENTER**) again to write.

On the remote, press **ENTER**.

Using the DAC

Using the DAC

The DAC (short for Digital/Analog Converter) is one of the most important parts of the MJ-D508. That's because it acts as the interpreter between the language of digital audio spoken by MD, and the language of analog sound that we hear and understand. Just as two people who speak different languages need an interpreter who can speak and understand both languages, the DAC keeps busy converting analog signals to digital, and digital signals back to analog.

In normal use, the DAC works in the background: you play a disc; you hear the sound—you don't need to worry about what happens in between. However, with the MJ-D508 it's possible to use just the DAC part on its own to convert any analog signal to digital, or digital signal to analog. In fact, any source you feed into one of the recorder's inputs appears at all of the recorder's outputs. This, combined with the option of applying Digital NR to any of the inputs, creates several uses for the stand-alone DAC.

What can I do with it?

❖ **Improve the sound of your CD player, or other digital component, by using MJ-D508's DAC**

The sound quality of digital audio is largely dependent on the quality of the DAC, so taking advantage of the latest design DAC in the MJ-D508 may improve the digital-to-analog conversion and therefore the overall sound quality.

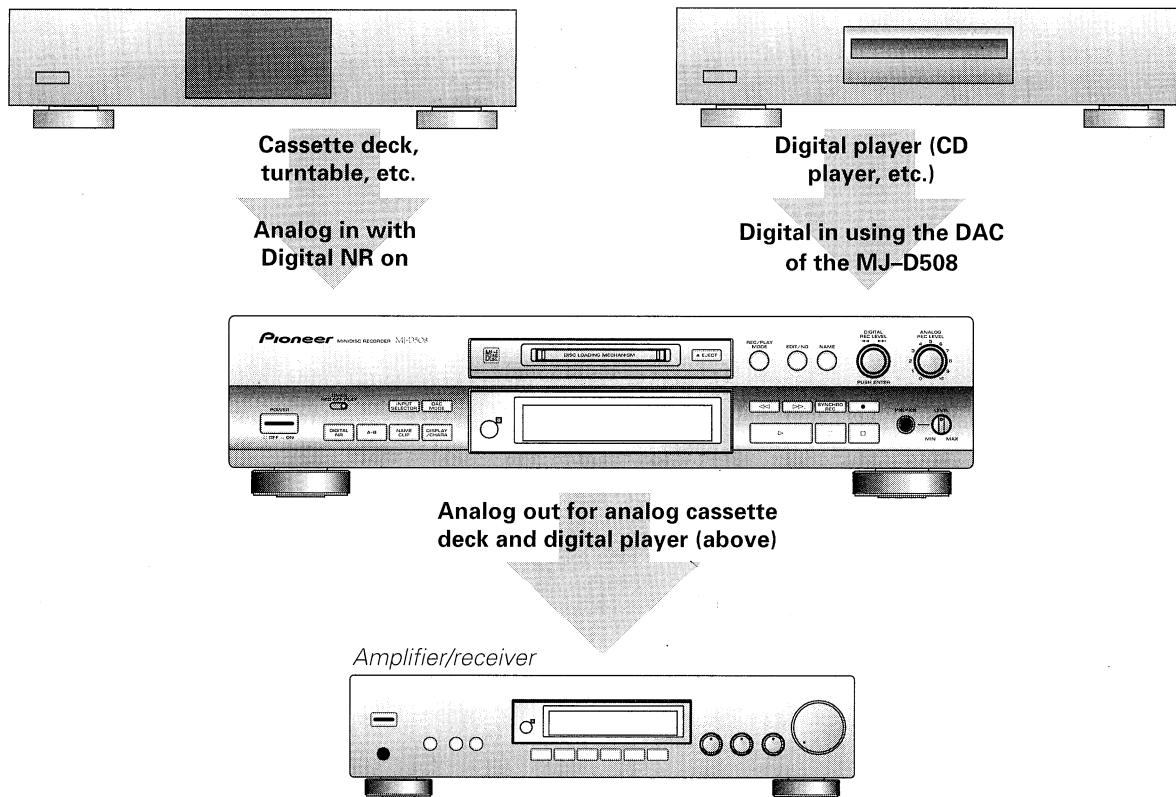
❖ **Use Digital NR to clean up noisy sources**

Connect your cassette tape deck, or any other component, to your amplifier via the MJ-D508 and switch on the Digital NR for improved playback sound quality.

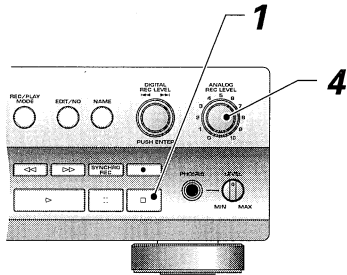
❖ **Improve the audio performance of your PC**

Because the inside of a computer is less-than-ideal for high quality analog audio, sound quality can be improved dramatically if an external DAC is used to get audio in and out of your PC. (Note that you'll need a soundcard with suitable digital inputs and outputs—see the instructions that came with your PC soundcard for more information.)

Example set up:



1 Make sure that if there's a disc in the recorder that it's stopped.



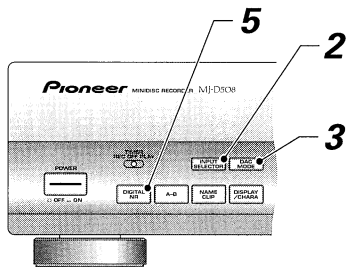
2 Press **INPUT SELECTOR** to select a DAC input.

Each press switches between optical, analog and coaxial—the display shows the current selection.

Optical — The DAC will convert from the optical digital input to analog, as well as sending the digital signal to both the optical and coaxial outs.

Analog — The DAC will convert from analog to digital (optical and coaxial), and can also process the signal using the Digital NR.

Coaxial — The DAC will convert from the coaxial digital input to analog as well as sending the digital signal to both the optical and coaxial outs.



3 Press **DAC MODE** to switch the DAC function on/off.

The display indicates the current DAC mode.

If in either **Optical** or **Coaxial** mode, the display shows the sampling frequency of the input signal (**32**, **44.1** or **48kHz**), or **DAC Unlock** if there is no signal present. In **Analog** mode, the sampling frequency is always 44.1kHz.

4 If you are converting from analog to digital, adjust the level using the **ANALOG INPUT LEVEL** control.

Set so that the maximum signal level is just below the red **OVER** area indicator. If you set the level so that the red level indicators light, you'll end up with a distorted digital signal.

5 Switch **DIGITAL NR** on/off as required.

Understanding Error Messages

Message	Description	Action
No Disc	<ul style="list-style-type: none"> ❖ MD is not loaded. ❖ The MD data cannot be read. 	<ul style="list-style-type: none"> ❖ Load an MD. ❖ Reload the MD.
Disc ERR	<ul style="list-style-type: none"> ❖ The disc is damaged. ❖ The MD does not contain the TOC or the data is corrupted. 	<ul style="list-style-type: none"> ❖ Reload the MD. ❖ Use another MD.
?Disc	<ul style="list-style-type: none"> ❖ The data is corrupted or the MD is out of standard. 	<ul style="list-style-type: none"> ❖ Use another MD.
Disc Full	<ul style="list-style-type: none"> ❖ The MD has no space available for recording. 	<ul style="list-style-type: none"> ❖ Use another recordable MD.
Blank Disc	<ul style="list-style-type: none"> ❖ The MD does not contain any recorded information (including disc name information). 	<ul style="list-style-type: none"> ❖ The disc is ready to be recorded on.
Playback MD	<ul style="list-style-type: none"> ❖ An attempt is made to record or edit a playback-only MD. 	<ul style="list-style-type: none"> ❖ Use a recordable MD.
Protected	<ul style="list-style-type: none"> ❖ The MD is protected against accidental erasure. 	<ul style="list-style-type: none"> ❖ Release the accidental erasure protection.
TOC Full	<ul style="list-style-type: none"> ❖ The disc does not have the space for recording the track number and character data (including disc/track names). 	<ul style="list-style-type: none"> ❖ Use another recordable MD.
Can't REC	<ul style="list-style-type: none"> ❖ Recording cannot be completed successfully due to shock or disc damage. 	<ul style="list-style-type: none"> ❖ Restart recording or use another MD.
Temp Over	<ul style="list-style-type: none"> ❖ The temperature is too high. 	<ul style="list-style-type: none"> ❖ Turn power off and leave to cool.
Can't Edit	<ul style="list-style-type: none"> ❖ Editing is not possible. 	<ul style="list-style-type: none"> ❖ Retry at another position on the disc.
Name Full	<ul style="list-style-type: none"> ❖ There is no space left for registering a disc/track name. 	<ul style="list-style-type: none"> ❖ Shorten the disc/track name.
Defect	<ul style="list-style-type: none"> ❖ Recording interrupted due to disc damage. 	<ul style="list-style-type: none"> ❖ Use another recordable MD.
MECHA ERR*	<ul style="list-style-type: none"> ❖ The MD recorder is not functioning properly. 	<ul style="list-style-type: none"> ❖ Turn power off then on again.
Can't Copy	<ul style="list-style-type: none"> ❖ An attempt is made to record copy-prohibited material. 	<ul style="list-style-type: none"> ❖ Use a copy-permitted source (an ordinary CD, etc.). ❖ Record the analog input from the source.
Not Audio	<ul style="list-style-type: none"> ❖ The disc contains non-audio data. 	<ul style="list-style-type: none"> ❖ Use another track. ❖ Use another MD.
UTOC W ERR	<ul style="list-style-type: none"> ❖ The UTOC data cannot be written properly due to physical shock or disc damage. 	<ul style="list-style-type: none"> ❖ Turn power off and on again, then retry UTOC writing. Do not to expose the unit to any physical shock during UTOC writing.
UTOC ERR*	<ul style="list-style-type: none"> ❖ The recorded UTOC data is not conforming to the MD standard or is otherwise illegible. 	<ul style="list-style-type: none"> ❖ Use another MD. ❖ Use the all erase function and record the MD from the beginning.
Din Unlock	<ul style="list-style-type: none"> ❖ The signal at the digital input is not recognized by the recorder. 	<ul style="list-style-type: none"> ❖ Check the connections, and the output mode of the source component.
TOC ERR*	<ul style="list-style-type: none"> ❖ The disc is scratched or otherwise damaged. ❖ The TOC data cannot be read. ❖ The MD is out of standard. 	<ul style="list-style-type: none"> ❖ Use another MD.
SIO Error	<ul style="list-style-type: none"> ❖ Internal communication in the unit has broken down. 	<ul style="list-style-type: none"> ❖ Turn power off then on again.

Note: Error messages marked with an asterisk are followed by a number or other symbol.

Troubleshooting

It's often easy to mistake incorrect operation for trouble and malfunction of the unit. If you think there is something wrong with the component, check the points below first. If the problems persists, contact your nearest Pioneer-authorized service center and have them check over the unit.

Symptom	Possible Causes	Remedy
No sound.	<ul style="list-style-type: none"> ❖ The power cord is unplugged. ❖ Connection cords aren't connected properly. 	<ul style="list-style-type: none"> ❖ Connect to an AC power outlet. ❖ Connect the cords correctly; see <i>Connecting Up</i> starting on page 10.
Can't record.	<ul style="list-style-type: none"> ❖ The MD is protected against accidental erasure. ❖ A playback-only MD is in use. ❖ The TOC is full (this may occur after repeated recording and editing operations). 	<ul style="list-style-type: none"> ❖ Close the accidental erasure protect tab (see page 8.) ❖ Use a recordable MD. ❖ Execute the all-track erase command and record the disc from the beginning.
Can't record in stereo.	<ul style="list-style-type: none"> ❖ The MD recorder is in long-play mono recording mode. 	<ul style="list-style-type: none"> ❖ Use the stereo recording mode (see page 30).
No Disc is displayed when an MD is loaded.	<ul style="list-style-type: none"> ❖ Damaged disc. 	<ul style="list-style-type: none"> ❖ Use another MD.
Sound is intermittent.	<ul style="list-style-type: none"> ❖ Condensation inside the MD recorder. 	<ul style="list-style-type: none"> ❖ Leave the MD recorder for about an hour before retrying playback.
The remaining recording time doesn't increase even after erasing some short tracks.	<ul style="list-style-type: none"> ❖ Tracks shorter than 12 seconds are sometimes not counted in the recording time information. 	<ul style="list-style-type: none"> ❖ This is not a malfunction.
The total of the recorded time and remaining recording time of an MD doesn't match the maximum recording time of the MD.	<ul style="list-style-type: none"> ❖ All tracks consist of a number of two-second blocks. Often, the end of a track will not fall right at the end of one of these blocks. As a result, the actual available recording time may be slightly shorter than the value calculated based on the displayed time information. ❖ The disc contains a damaged section, making that part unusable. 	<ul style="list-style-type: none"> ❖ This is not a malfunction. ❖ Use another MD.
Tracks cannot be combined.	<ul style="list-style-type: none"> ❖ The MD has been repeatedly re-recorded and edited ❖ One of the tracks was recorded using the digital input, while the other was recorded using the analog input. 	<ul style="list-style-type: none"> ❖ This is not a malfunction. ❖ This is not a malfunction: a track recorded using the digital input cannot be combined with a track recorded using the analog input.

- ❖ It is possible that this unit will cause interference on nearby television sets, especially if you're using the TV with an indoor antenna. If you experience this problem, either use an outdoor television antenna, or move the MD player away from the television.
- ❖ Static electricity and other external interference can cause the unit to temporarily malfunction. Try switching the power off and unplugging from the wall outlet, then plugging in and switching on again.

Additional Information

Specifications

Type Minidisc digital audio system
Recording system Field modulation overwrite system
Reproduction system Non-contact optical readout
Sampling frequency 44.1 kHz
Frequency response 8 Hz to 20 kHz
S/N ratio 100 dB
Wow & flutter Below measurable limit

Power requirements

U.S. model AC 120V, 60 Hz
U.K. model AC230V, 50/60Hz
European model (except U.K.) AC 220~230V, 50/60Hz
Multi-voltage model AC110, 120~127V, 220~230V, 240V
50/60Hz (switchable)

Power consumption

U.S. model 15W
European model 15W
Multi-voltage model 15W

Dimensions 420(W) x 105(H) x 294(D) mm
(19^{-9/16} x 4^{-1/8} x 11^{-9/16} in.)

Main unit weight 3.5 kg (7 lb 12oz.)

Audio input :

Line input jacks RCA PIN x2 ; reference input level 500mV
(input impedance 50 k Ω)

Audio output :

Line output jacks RCA PIN x2 ; reference output level 500mV
(input impedance 1 k Ω)

Headphone output jack 1.0mW
(volume max. , load impedance 32 Ω)

Other jacks :

Coaxial digital input jack RCA PIN ; 0.5 Vp-p
(input impedance 75 Ω)

Optical digital input jack x1

Optical digital output jack x1

Control IN jack (Except European model) x1

Control OUT jack (Except European model) x1

Accessories

Warranty card (U.S. and European models only) x 1

Operating Instructions (this manual) x 1

Audio cord x 2

Optical cord (Except U.S. model) x 1

Remote control unit x 1

batteries (AA/R6P) x 2

AC power cord (multi-voltage model only) x 1

Plug adaptor (multi-voltage model only) x 1

NOTE:

Specifications and design subject to possible modification without notice, due to improvements.

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POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest Pioneer authorized service center or your dealer for a replacement.

This unit stores the following information in its memory:

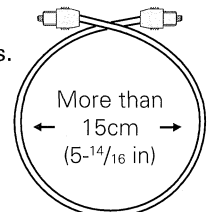
- Digital input volume level setting
- Program play order
- Timer playback with fade in
- Digital NR setting
- Auto mark operation level setting
- Stereo/mono recording setting
- DAC mode setting
- Input selector setting

To return stored settings to their initial values (factory settings), hold down the STOP (■) button and press the DNR button.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

When storing optical cable, coil loosely as shown right. The cable may be damaged if bent around sharp corners.





Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel

Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.



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