

YAMAHA MUSIC DISK RECORDER

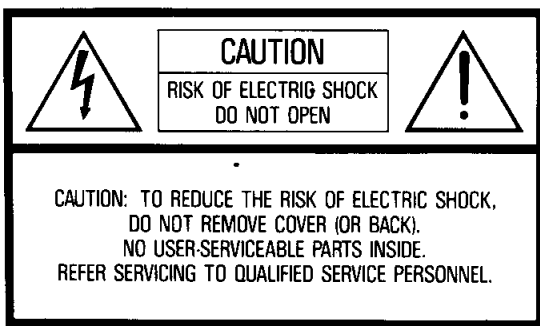
MDR-2/MDR-2P

User's Guide

Bedienungsanleitung

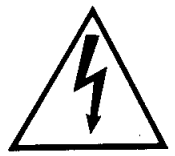
Mode d'emploi

Manual de instrucciones



Explanation of Graphical Symbols

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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 product.



*This label is attached to the MDR-2P Power Adapter.

IMPORTANT SAFETY AND INSTALLATION INSTRUCTIONS

INFORMATION RELATING TO POSSIBLE PERSONAL INJURY, ELECTRIC SHOCK, AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING—When using electronic products, basic precautions should always be followed, including the following:

1. Read all Safety and Installation Instructions, Supplemental Marking and Special Message Section data, and assembly instructions (where applicable) **BEFORE** using your Yamaha electronic product. Check unit weight specifications before you attempt to move this instrument!

2. Main Power Supply Verification: Your Yamaha electronic product has been manufactured specifically for the main supply voltage used in your area. If you should move, or if any doubt exists, please contact your dealer for instructions. The main supply voltage required by your electronic product is printed on the name plate. For name plate location see graphic in Special Message Section.

3. This product may be equipped with a polarized line plug (one blade wider than the other). If you are unable to insert the plug into the outlet, contact an electrician to have your obsolete outlet replaced. Do **NOT** defeat the safety purpose of the plug. Yamaha products not having polarized plugs incorporate construction methods and designs that do not require line plug polarization.

4. WARNING—Do **NOT** place objects on your electronic product's power cord or place the unit in a position where anyone could trip over, walk over, or roll anything over cords of any kind. Do **NOT** allow your electronic product or its bench to rest on or be installed over cords of any type. Improper installations of this type create the possibility of a fire hazard and/or personal injury.

5. Environment: Your electronic product should be installed away from heat sources such as a radiator, heat registers and/or other products that produce heat. Additionally, the unit should not be located in a position that exposes the cabinet to direct sunlight, or air currents having high humidity or heat levels.

6. Your Yamaha electronic product should be placed so that its location or position does not interfere with its proper ventilation.

7. Some Yamaha electronic products may have benches that are either a part of the product or supplied as an optional accessory. Some of these benches are designed to be dealer assembled. Please make sure that the bench is stable before using it. The bench supplied by Yamaha was designed for seating only. No other uses are recommended.

8. Some Yamaha electronic products can be made to operate with or without the side panels or other components that constitute a stand. These products should be used only with the components supplied or a cart or stand that is recommended by the manufacturer.

9. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

10. Do not use your Yamaha electronic product near water or in wet environments. For example, near a swimming pool, spa, or in a wet basement.

11. Care should be taken so that objects do not fall, and liquids are not spilled, into the enclosure through openings.

12. Your Yamaha electronic product should be serviced by a qualified service person when:

- a. The power-supply cord or plug has been damaged; or
- b. Objects have fallen, or liquid has been spilled into the product; or
- c. The product has been exposed to rain; or
- d. The product does not operate, exhibits a marked change in performance; or
- e. The product has been dropped, or the enclosure of the product has been damaged.

13. When not in use, always turn your Yamaha electronic product "OFF". The power-supply cord of the product should be unplugged from the outlet when it is to be left unused for a long period of time. Notes: In this case, some units may lose some user programmed data. Factory programmed memories will not be affected.

14. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

15. Electromagnetic Interference (RFI). This series of Yamaha electronic products utilizes digital (high frequency pulse) technology that may adversely affect Radio/TV reception or the operation of other devices that utilize digital technology.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE!

Thank you for purchasing the Yamaha Music Disk Recorder MDR-2. The MDR-2 is a totally new type of music recording device, utilizing the very latest in computer technology, made possible by Yamaha's many years of experience as a musical instrument manufacturer. As the MDR-2 is MIDI-equipped, it can be freely used for recording and playback of MIDI-standard instruments such as the Yamaha Electone HX-Series. It is a digital recorder which employs a compact floppy disk as its recording medium, enabling top-quality musical reproduction. Moreover, the MDR-2 is provided with numerous outstanding features, including editing functions such as PUNCH IN Recording, remote control of consecutive playback, repeated playback and volume or tempo adjustment.

This manual has been designed to help you get acquainted with the operating procedures of your Music Disk Recorder MDR-2 and to bring its fantastic possibilities within your reach.

Thanks again for choosing Yamaha. We recommend that you actually operate the MDR-2 while carefully reading these materials.

Herzlichen Glückwunsch zum Kauf des Yamaha Music Disk Recorders MDR-2. Der MDR-2 ist ein völlig neuartiges Musik-Aufzeichnungsgerät, das mit der neuesten Computertechnik arbeitet. Es ist entstanden auf der Basis der langjährigen Erfahrung von Yamaha als Hersteller von elektronischen Musikinstrumenten. Da der MDR-2 mit MIDI ausgestattet ist, kann er beliebig zur Aufnahme oder Wiedergabe von MIDI-Standard-Instrumenten wie solcher der Yamaha Electone-HX-Serie eingesetzt werden. Es ist ein digitaler Recorder mit Diskette als Aufnahmemedium, der Musikreproduktion höchster Qualität ermöglicht. Desweiteren ist der MDR-2 mit zahlreichen herausragenden Merkmalen ausgestattet, einschließlich Redigierfunktionen wie PUNCH-IN-Aufnahme, Fernbedienung von aufeinanderfolgender Wiedergabe, wiederholte Wiedergabe und Lautstärke- und Tempoeinstellung. Dieses Handbuch wurde geschrieben, um Sie mit der Bedienung Ihres Music Disk Recorders MDR-2 vertraut zu machen und Ihnen dessen phantastische Möglichkeiten nahe zu bringen. Nochmals herzlichen Glückwunsch zur Wahl von Yamaha. Wir raten an, diese Bedienungsanleitung mit dem Gerät vor Ihnen zu lesen.

Nous vous remercions de votre acquisition de cet enregistreur de disque Yamaha MDR-2.

Dispositif d'enregistrement musical d'un genre entièrement nouveau, cet appareil fait appel aux derniers progrès réalisés en informatique et il a pu être réalisé grâce à la longue expérience accumulée par Yamaha dans le domaine de la fabrication des instruments de musique. Comme le MDR-2 est "compatible MIDI", il pourra servir sans problème à l'enregistrement et à la lecture de la musique d'instruments, adaptés aux normes MIDI, tels que l'Electone Yamaha de série HX. Comme il s'agit d'un enregistreur numérique, utilisant une disquette compacte comme support d'enregistrement, il permettra une restitution impeccable de la musique, quelle qu'elle soit. En outre, le MDR-2 est doté d'une série de dispositifs étonnants, y compris des fonctions de montage; il permettra notamment l'enregistrement PUNCH IN, la télécommande d'une lecture consecutive, la lecture répétée et des réglages du volume et du tempo.

Ce manuel a été rédigé dans le but de vous aider à vous familiariser avec les démarches d'utilisation de l'enregistreur de disque musical MDR-2 et de mettre à votre portée ses immenses possibilités.

Tous nos remerciements pour avoir choisi ce produit Yamaha. Avant la mise en service de cet appareil, nous vous invitons à lire attentivement ce manuel.

Gracias por la adquisición de la grabadora musical en disco Yamaha MDR-2.

La MDR-2 es un nuevo tipo de dispositivo grabador de música que emplea la más reciente tecnología en ordenadores, y que ha sido posible debido a los muchos años de experiencia de Yamaha como fabricante de instrumentos musicales. Como el MDR-2 dispone de MIDI, podrá emplearse libremente para grabar y reproducir con instrumentos de normas MIDI, tales como la serie HX de Electones Yamaha. Ésta es una grabadora digital que emplea un disco flexible compacto como medio de grabación, lo que permite una reproducción musical de la más alta calidad. Además, la MDR-2 dispone de numerosas y notables características, entre las que se incluyen funciones de edición tales como grabación PUNCH IN, control remoto de reproducción consecutiva, reproducción repetida, y ajuste del volumen o el tempo.

Este manual ha sido diseñado para ayudarle a familiarizarse con los procedimientos de operación de su grabadora musical en disco MDR-2 y para poner en sus manos sus fantásticas posibilidades.

Gracias de nuevo por haber elegido Yamaha. Le recomendamos que emplee la MDR-2 mientras lea cuidadosamente este material.

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A Word Before Usage

CAUTION

The installation should be made by qualified service personnel.

Cautions Concerning the Handling of the Power Cord Plug

Touching the plug of the power cord with wet hands can result in electric shocks. In addition, when unplugging the cord from a wall outlet, do not pull on the cord, but grasp the plug itself firmly, and pull it free from the outlet.

When Removing Connection Cables

When connecting or disconnecting connection cables, be sure to first turn the POWER switch off.

Unit Placement

Do not operate this unit in the following areas:

- ★ *Where it will be subject to strong magnetic fields (eg., near speakers or television sets).*
- ★ *Where it will be subject to direct sunlight, high temperature areas, such as next to heaters, or very low temperature areas.*
- ★ *Areas where it will be subject to very high humidity and dust.*
- ★ *Areas that are subject to heavy vibration.*
- ★ *Areas where it will be slanted at an angle of 15° or more from the horizontal level.*

Spilling Water or Dropping Objects into the Unit

If water or other foreign objects accidentally get inside the unit, immediately disconnect the power cord and contact the dealer from whom you purchased the unit.

Precaution on Floppy Disk Removal

Be sure NEVER to remove a disk while the PLAY (CUSTOM/NORMAL), RECORD or SONG SEQ. lamp is lit. Such action will cause either the destruction of the data stored on that disk or damage to the disk itself.

Handling of Floppy Disks

- ★ *With your MDR-2/2P, be sure to use only 3.5" doubled-sided double-density double-track floppy disks.*
- ★ *Never touch the surface of the disk with your hand nor apply unnecessary force when inserting a disk.*
- ★ *Avoid leaving the disks near magnetic objects or areas having a strong magnetic field.*
- ★ *After you finish using the disk, always place it in the case provided and store it in a place where it will not be subject to direct sunlight, high temperatures or excessive dampness.*

Quelques conseils préliminaires

ATTENTION

Les travaux d'installation doivent être confiés à un technicien qualifié.

Précautions relatives au cordon d'alimentation

Tout contact du cordon d'alimentation avec des mains mouillées présente un risque d'électrocution. Pour débrancher le cordon au niveau de la prise du secteur, ne pas tirer sur le fil, mais le saisir par sa fiche.

Débranchement des cordons de connexion

Prendre soin de couper (OFF) l'interrupteur POWER avant tout branchement ou débranchement des cordons de connexion.

Emplacement de l'appareil

Ne pas installer ni utiliser l'appareil:

- ★ *Dans un endroit soumis à un champ magnétique puissant (p. ex. près de haut-parleurs ou d'un téléviseur).*
- ★ *Dans un endroit en plein soleil, très chaud, près d'un dispositif de chauffage par exemple, ou très froid.*
- ★ *Dans un endroit très poussiéreux ou très humide.*
- ★ *Dans un endroit soumis à de fortes vibrations.*
- ★ *Dans un endroit incliné à plus de 15° par rapport à l'horizontale.*

Pénétration de liquides ou de solides dans l'appareil

Si des liquides ou des solides devaient pénétrer à l'intérieur de l'appareil, débrancher immédiatement le cordon d'alimentation et s'adresser au concessionnaire qui a livré l'appareil.

Précautions relatives au retrait des disquettes

NE JAMAIS retirer une disquette pendant qu'est allumé le témoin PLAY (CUSTOM/NORMAL), RECORD ou SONG SEQ., car ceci entraînerait la destruction des données enregistrées, voire de la disquette proprement dite.

Manipulation des disquettes

- ★ *Sur le MDR-2/2P, utiliser uniquement des disquettes double face, double densité, double piste de 3,5 pouces.*
- ★ *Ne jamais toucher du doigt la surface intérieure de la disquette ni exercer une pression indue sur celle-ci lors de son insertion.*
- ★ *Éviter de laisser des disquettes près d'objets magnétiques ou dans un endroit soumis à un champ magnétique.*
- ★ *Après leur utilisation, replacer les disquettes dans leur étui et les ranger dans un endroit, protégé contre les rayons directs du soleil, les fortes températures et l'humidité.*

Ein Wort vor dem Einsatz

VORSICHT

Die Aufstellung darf nur vom Fachmann vorgenommen werden.

Vorsichtsmaßnahmen bei der Behandlung des Netzkabels

Wenn das Netzkabel mit nassen Händen berührt wird, können elektrische Schläge die Folge sein. Beim Herausziehen des Steckers aus der Steckdose immer am Stecker anfassen und nicht am Kabel ziehen.

Entfernen von Anschlusskabeln

Beim Anschluß oder Entfernen von Anschlusskabeln immer zuerst das Gerät mit dem Netzschalter (POWER) ausschalten.

Aufstellung des Gerätes

Dieses Gerät nicht an den folgenden Orten aufstellen:

- ★ *Orte mit starken Magnetfeldern (z.B. bei Lautsprechern oder Fernsehern)*
- ★ *Orte mit direktem Sonnenlichteinfall, hohen Temperaturen wie etwa in der Nähe von Heizkörpern oder mit sehr niedrigen Temperaturen.*
- ★ *Orte mit hoher Luftfeuchtigkeit und Staub.*
- ★ *Orte mit starker Vibration.*
- ★ *Orte, wo das Gerät mit einem Winkel von über 15° aus der Waagerechten aufgestellt werden muß.*

Wenn Wasser in das Gerät kommt

Wenn Wasser oder Fremdkörper aus Versehen in das Gerät gelangen, sofort das Netzkabel aus der Steckdose ziehen und das Gerät beim Fachhändler zur Reparatur einreichen.

Vorsichtsmaßnahmen zur Behandlung der Disketten

NIEMALS eine Diskette entnehmen, während ein PLAY (CUSTOM/NORMAL), RECORD oder SONG SEQ Lämpchen leuchtet. Dadurch werden entweder die auf der Diskette gespeicherten Daten zerstört oder die Diskette selber beschädigt.

Behandlung der Disketten

- ★ *Mit dem MDR-2/2P immer nur 3,5-Zoll double-sided double-density double-track Disketten verwenden.*
- ★ *Niemals die Diskettenoberfläche mit bloßen Händen berühren oder beim Einlegen der Diskette unnötige Gewalt anwenden.*
- ★ *Die Disketten niemals in der Nähe von magnetischen Gegenständen oder in Gebieten mit starken Magnetfeldern liegen lassen.*
- ★ *Wenn die Diskette nicht mehr gebraucht wird, diese in die Schutztasche stecken und an einem Ort aufbewahren, wo sie vor direktem Sonnenlicht, hohen Temperaturen oder Feuchtigkeit geschützt ist.*

Antes de nada

PRECAUCIÓN

La instalación deberá realizarla personal de servicio cualificado.

Precauciones sobre el manejo del enchufe del cable de alimentación

El tocar el enchufe del cable de alimentación con las manos húmedas puede resultar en descargas eléctricas. Además, cuando desconecte el cable de una toma de la red, no tire del propio cable, sino del enchufe.

Antes de conectar o desconectar los cables conectores

Antes de conectar o desconectar los cables conectores, asegúrese de poner el interruptor POWER en OFF.

Emplazamiento de la unidad

No utilice esta unidad en los lugares siguientes:

- ★ *Donde pueda quedar sujeta a campos magnéticos intensos (p. ej., cerca de altavoces o aparatos de televisión).*
- ★ *Donde pueda quedar sujeta a la luz solar directa, a gran temperatura, como cerca de aparatos de calefacción, o a temperaturas muy bajas.*
- ★ *Donde pueda quedar sujeta a humedad muy alta y polvo.*
- ★ *Donde pueda quedar sujeta a vibraciones fuertes.*
- ★ *Donde quede inclinada con un ángulo de 15° o más del nivel horizontal.*

Derramado de agua o caída de objetos dentro de la unidad

Si dentro de la unidad cae agua u otro objeto extraño, desconecte inmediatamente el cable de alimentación y póngase en contacto con su proveedor.

Precauciones en la extracción del disco flexible

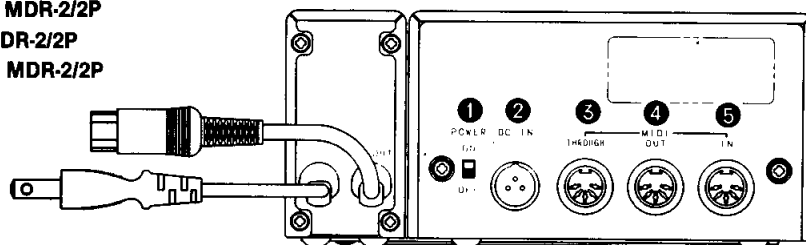
Asegúrese de no extraer NUNCA el disco mientras esté encendida la lámpara PLAY (CUSTOM/NORMAL), RECORD, o SONG SEQ. Tal acción podría destruir los datos almacenados en el disco o dañar el propio disco.

Manejo de los discos flexibles

- ★ *Con su MDR-2/2P, asegúrese de emplear solamente discos flexibles de 3,5" con doble cara, doble densidad, y doble pista.*
- ★ *No toque nunca la superficie del disco con la mano, ni aplique fuerza innecesaria para insertarlo.*
- ★ *Evite dejar los discos cerca de objetos magnéticos o en lugares donde haya campo magnético intenso.*
- ★ *Cuando termine de emplear un disco, colóquelo siempre en su caja y guárdelo en un lugar que no esté sometido a la luz solar directa, altas temperaturas, o humedad excesiva.*

Connecting Your MDR-2/2P Branchement du MDR-2/2P Anschluß Ihres MDR-2

Jacks on the MDR-2/2P Rear Panel
Buchsen an der Rückplatte des MDR-2/2P
Prises du panneau arrière du MDR-2/2P
Tomas del panel posterior de la MDR-2/2P



- ① POWER Switch
- ② DC IN jack
- ③ MIDI THROUGH jack
- ④ MIDI OUT jack
- ⑤ MIDI IN jack

■ Connecting Procedures

(1) First of all, connect the MIDI OUT jack of the instrument to be played with the MIDI IN jack of the MDR-2/2P using the MIDI cable provided. Similarly, connect the MIDI IN jack of that instrument and the MIDI OUT jack of the MDR-2/2P.

★ *In case of connection with an Electone, even if recording and playback of performance data will be performed, be sure to connect both the MIDI IN and OUT jacks because data is constantly being transferred.*

(2) MDR-2: Connect the DC IN jack, which is the direct-current input jack, and the DC OUT jack of the Electone using the cable provided.

MDR-2P: After confirming that the cord from the Power Adapter's DC OUT jack is connected to the DC IN jack of MDR-2P, insert the plug of the Power Adapter's power cord into the power outlet.

(3) Switch the POWER switch on the MDR-2/2P rear panel to ON. The power ON/OFF status of MDR-2 is switched using the POWER switch of the Electone, and that of MDR-2P is switched using the POWER switch on the Power Adapter's front panel.

■ Méthode de branchement

(1) Avant tout, raccorder la prise MIDI OUT de l'instrument à jouer avec la prise MIDI IN du MDR-2/2P en se servant du câble MIDI fourni. De même, raccorder la prise MIDI IN de cet instrument avec la prise MIDI OUT du MDR-2/2P.

★ *Dans le cas du branchement d'un Electone, même si l'on se livre à l'enregistrement et à la lecture des données de performance, veiller à laisser branchées les prises MIDI IN et OUT car le transfert des données est constant.*

(2) MDR-2: Raccorder la prise d'entrée de courant continu DC IN et la prise DC OUT de l'Electone à l'aide du cordon fourni. MDR-2P: Après avoir confirmé que le cordon de la prise DC OUT de l'adaptateur secteur est branché sur la prise DC IN du MDR-2P, introduire la fiche du cordon de l'adaptateur secteur dans une prise du secteur local.

(3) Allumer (ON) l'interrupteur POWER, prévu sur le panneau arrière du MDR-2/2P. La mise sous/hors tension du MDR-2 est commandée par l'interrupteur POWER de l'Electone, tandis le MDR-2P est mis sous/hors tension par l'interrupteur POWER du panneau avant de l'adaptateur secteur.

Anschluß Ihres MDR-2/2P Conexión de su MDR-2/2P

■ Anschlußverfahren

(1) Zuerst die Buchse MIDI OUT des Instrumentes mit der Buchse MIDI IN des MDR-2/2P mit dem mitgelieferten MIDI-Kabel verbinden. Entsprechend die MIDI IN Buchse des Instrumentes mit der MIDI OUT Buchse des MDR-2/2P verbinden.

★ *Bei Verbindung mit einem Electone immer MIDI IN und OUT Buchse anschließen, auch wenn Aufnahme und Wiedergabe von Vorführdaten durchgeführt wird, weil Daten konstant übertragen werden.*

(2) MDR-2: Die Buchse DC IN für Betriebs-Gleichstrom mittels des mitgelieferten Kabels mit der Buchse DC OUT des Electone verbinden.

MDR-2P: Wenn Sie bestätigt haben, daß das Kabel von der Buchse des Netzteils DC OUT an die Buchse DC IN des MDR-2P angeschlossen ist, den Stecker des Netzteils in die Steckdose stecken.

(3) Den Netzschalter (POWER) an der Rückplatte des MDR-2/2P einschalten (ON). Der MDR-2 wird mit dem Netzschalter des Electone ein- und ausgeschaltet, und der MDR-2P mit dem Netzschalter an der Frontplatte des Netzteils.

■ Procedimientos de conexión

(1) En primer lugar, conecte la toma MIDI OUT del instrumento que desee tocar a la toma MIDI JACK de la MDR-2/2P empleando el cable de MIDI suministrado. De forma similar, conecte la toma MIDI IN de tal instrumento y la toma MIDI OUT de la MDR-2/2P.

★ *En caso de conexión con un Electone, aunque realice la grabación y reproducción de los datos de su ejecución, asegúrese de conectar ambas tomas MIDI IN y OUT porque los datos se transfieren constantemente.*

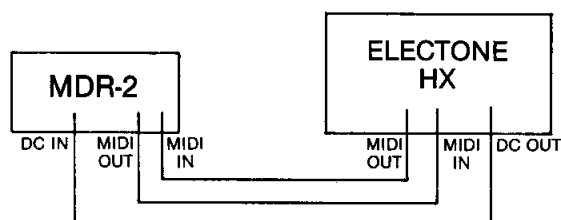
(2) MDR-2: Conecte la toma DC IN, que es la toma de entrada de corriente continua, y la toma DC OUT del Electone empleando el cable suministrado.

MDR-2P: Después de confirmar que el cable procedente de la toma DC OUT del adaptador de alimentación esté conectado a la toma DC IN de la MDR-2P, conecte el enchufe del cable de alimentación del adaptador a una toma de la red.

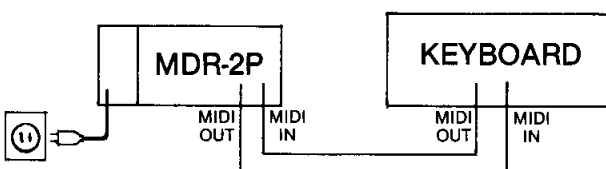
(3) Ponga el interruptor POWER del panel posterior de la MDR-2/2P en ON. La conexión/desconexión de la alimentación de la MDR-2 se realiza empleando el interruptor POWER del Electone, y la de la MDR-2P con el interruptor POWER del panel frontal del adaptador de alimentación.

Connecting MDR-2 and the Yamaha Electone HX-Series Verbindung von MDR-2 und Geräten der Yamaha Electone HX-Serie

Connexion du MDR-2 et de l'Electone Yamaha de la série HX
Conexión de la MDR-2 y un Electone de la serie HX Yamaha

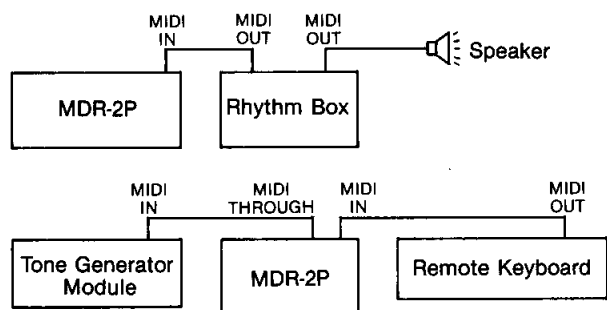


Connecting MDR-2P and Other Electones or Keyboards Verbindung von MDR-2P und anderen Electones oder Keyboards Connexion du MDR-2P et d'autres Electones ou claviers Conexión de la MDR-2P y otros Electones o teclados



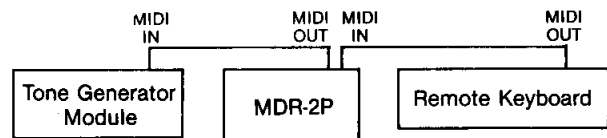
For Multiple-Track Recording Using a Tone Generator Module, etc.
 Für Mehrspuraufnahme mit einem Tongeneratormodul etc.
 Pour enregistrement multipistes à l'emploi d'un module générateur de tonalité, etc.
 Para grabación en pistas múltiples empleando un módulo generador de tono, etc.

During Recording
 Bei der Aufnahme
 Pendant l'enregistrement
 Durante la grabación

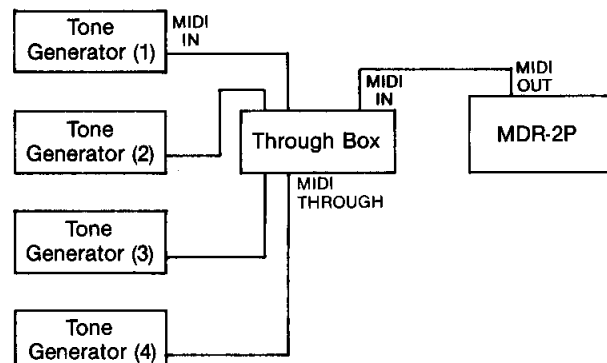


*When the MDR-2 EDIT mode is in MONITOR mode (See Page 16)
 *Wenn die EDIT-Betriebsart des MDR-2 auf MONITOR geschaltet ist (siehe Seite 29)
 *Quand le mode EDIT du MDR-2 est en mode MONITOR (voir page 42)
 *Cuando el modo de edición de la MDR-2 esté en el modo de monitor (Consulte la página 55)

For Multiple-Track Recording in EDIT Mode
 Für Mehrspuraufnahme in EDIT-Betriebsart
 Pour enregistrement multipistes en mode EDIT
 Para grabación en pistas múltiples en el modo de edición



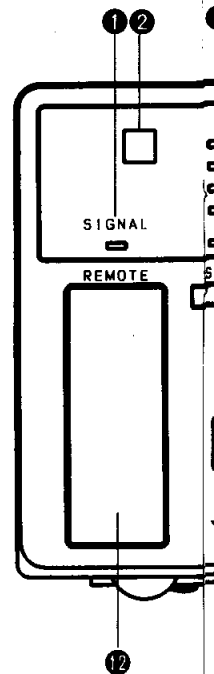
For Playback
 Für Wiedergabe
 Pour la lecture
 Para reproducción



Tone Generator for channels recorded using multiple tracks
 Tongenerator für mit Mehrspuraufzeichnung aufgenommene Kanäle
 Générateur de tonalité pour canaux enregistrés avec pistes multiples
 Generador de tono para canales grabados empleando pistas múltiples

Name and Function of Each Part Bezeichnung und Funktion jedes Bauteils Nomenclature et fonction des organes Nombre y función de cada parte

- Front Panel
- Frontplatte
- Panneau avant
- Panel frontal



1 SIGNAL / 2 Remote Control Sensor

- During remote control operation, this lamp lets you confirm the reception of Transmitter operations.
- Bei Fernbedienungsbetrieb leuchtet dieses Lämpchen auf und zeigt an, daß Sendersignale empfangen werden.
- Au cours de l'exploitation par la télécommande, ce témoin permet de confirmer la bonne réception des instructions transmises.
- Durante la operación por control remoto, esta lámpara le permitirá confirmar la recepción de las operaciones del transmisor.

3 PLAY MODE

- The lamp corresponding to the currently selected PLAY mode is lit in this section.
- Das Lämpchen, das der momentan eingestellten Spiel-Betriebsart entspricht, leuchtet in diesem Feld auf.
- Le témoin correspondant au mode PLAY en cours d'utilisation s'allume à cet endroit.
- La lámpara correspondiente al modo de reproducción seleccionado se encenderá en esta sección.

4 TIME & CONTROL

- This display indicates such information as the remaining disk capacity during recording, playback count, and the EDIT modes.
- Dieses Display zeigt Informationen an wie restliche Disketten-Kapazität bei Aufnahme, Wiedergabezählwerk und EDIT-Betriebsarten.
- Cet affichage fournit des informations, telles que la capacité encore disponible sur la disquette pendant l'enregistrement, le compte à la lecture et les modes EDIT.
- Este visualizador indicará información tal como la capacidad restante del disco durante la grabación, el cómputo de reproducción, y los modos de edición.

5 SONG NO.

- This display indicates the song number selected by 6 SONG SELECT.
- Dieses Display zeigt die durch (6) SONG SELECT eingestellte Titelnummer an.
- Cet affichage indique le numéro de la chanson, choisie par le sélecteur SONG SELECT (6).
- Este visualizador indicará el número de la canción seleccionado con (6) los botones SONG SELECT.

Bedienungselemente

nes

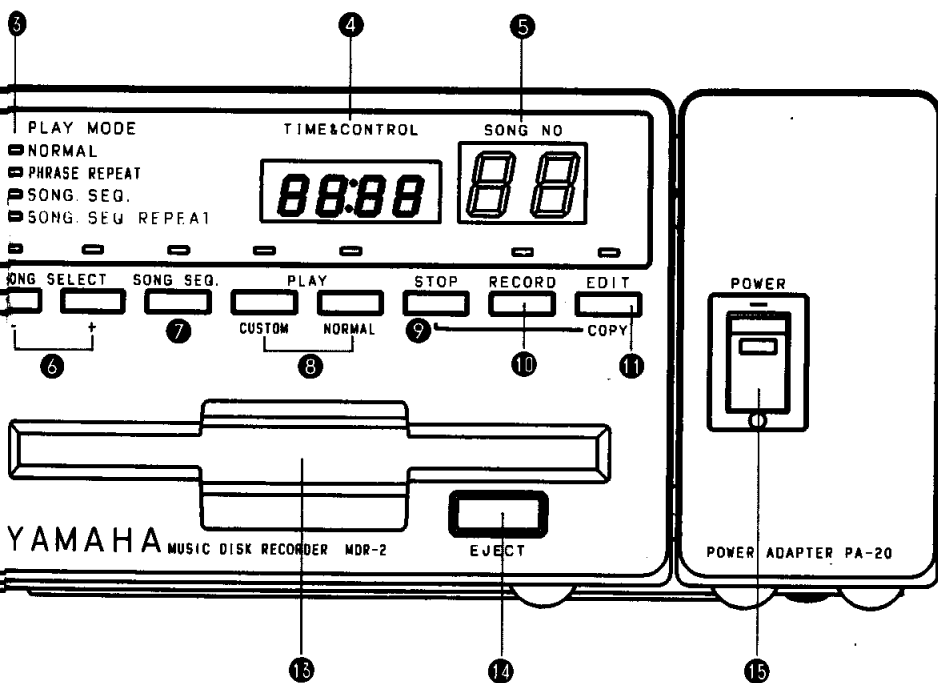


Illustration of MDR-2P
Zeichnung des MDR-2P
Illustration du MDR-2P
Ilustración del MDR-2P

6 SONG SELECT: “-”/“+”

- These buttons are for selecting the song number for recording or playback.
- Diese Tasten dienen zur Einstellung der Titelnummer für Aufnahme oder Wiedergabe.
- Ces touches permettent de choisir le numéro de la chanson pour l'enregistrement ou la lecture.
- Emplee estos botones para seleccionar el número de canción para grabación o reproducción.

7 SONG SEQ. (SONG SEQUENCER)

- This button sets the playback sequence for the consecutive playback of multiple songs.
- Diese Tasten stellen die Wiedergabe-Sequenz für die aufeinanderfolgende Wiedergabe vor Titelkombinationen ein.
- Cette touche fixe la séquence de lecture lors de la lecture consécutive de plusieurs chansons.
- Emplee este botón para establecer la secuencia para la reproducción consecutiva de múltiples canciones.

8 PLAY: “CUSTOM”/“NORMAL”

- During recording or playback, press “CUSTOM” to transfer only performance data or press “NORMAL” to transfer the performance data plus the registration data.
- Bei Aufnahme oder Wiedergabe die Taste “CUSTOM” drücken, um nur Spieldaten zu übertragen oder die Taste “NORMAL”, um die Spieldaten plus die Registraturdaten zu übertragen.
- Pendant l'enregistrement ou la lecture, appuyer sur “CUSTOM” pour transférer uniquement les données de performance, ou appuyer sur “NORMAL” pour transférer les données de performances, plus celles de registre.
- Durante la grabación o la reproducción, presione “CUSTOM” para transferir solamente datos de ejecución o “NORMAL” para transferir dichos datos más los de registro.

9 STOP

- Press this button to stop a recording or playback operation.
- Diese Taste drücken, um Aufnahme oder Wiedergabe zu stoppen.
- Sa poussée permet d'arrêter l'enregistrement ou la lecture.
- Presione este botón para detener una operación de grabación o reproducción.

10 RECORD

- This button is used for recording.
- Diese Taste dient zur Aufnahme.
- Elle s'emploie pour l'enregistrement.
- Emplee este botón para grabación.

11 EDIT

- Press this button for partial editing of recorded data or for executing a MINUS ONE performance.
- Diese Taste drücken, um aufgezeichnete Daten teilweise aufzunehmen oder um ein MINUS ONE Spiel vorzunehmen.
- Appuyer sur cette touche pour le montage partiel des données enregistrées ou pour l'exécution d'une performance MINUS ONE (moins un).
- Presione este botón para la edición parcial de los datos grabados o para realizar una ejecución MINUS ONE.

12 REMOTE

- This compartment is for storing the Remote Control Transmitter.
- Dieses Fach dient zur Ablage des Fernbedienungsteils.
- Ce logement est destiné au rangement de l'émetteur de télécommande.
- Este compartimiento es para guardar el transmisor de control remoto.

13 Floppy Disk Insertion Slot

Diskettenschlitz
Fente d'insertion de disquette
Ranura de inserción del disco flexible

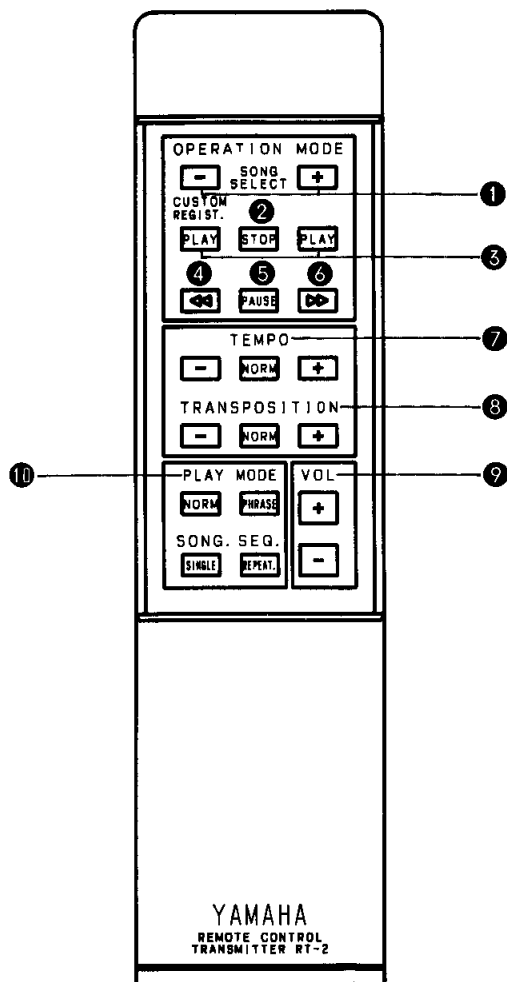
14 EJECT

- Press this button to remove a floppy disk.
- Diese Taste drücken, um die Diskette zu entnehmen.
- Sa poussée fait ressortir la disquette.
- Presione este botón para extraer el disco flexible.

15 POWER (MDR-2P only)

- Press this button to switch the power ON.
- Diese Taste drücken, um das Gerät einzuschalten.
- Sa poussée commande la mise sous tension.
- Presione este botón para conectar/desconectar la alimentación.

■ Remote Control Transmitter
■ Fernbedienungssender
■ Emetteur de télécommande
■ Transmisor de control remoto



1 SONG SELECT: “-”/“+”

- Press this button to select the song number for recording or playback.
- Diese Taste drücken, um die Titelnummer für Aufnahme oder Wiedergabe zu wählen.
- Sa poussée permet de choisir le numéro de la chanson pour l'enregistrement ou la lecture.
- Empee estos botones para seleccionar el número de canción para grabación o reproducción.

2 STOP

- Press this button to stop a recording or playback operation.
- Diese Taste drücken, um Aufnahme oder Wiedergabe zu stoppen.
- Sa poussée permet d'arrêter l'enregistrement ou la lecture.
- Presione este botón para detener una operación de grabación o reproducción.

3 PLAY: “CUSTOM”/“NORMAL”

- During recording or playback, press “CUSTOM” to transfer only performance data or press “NORMAL” to transfer the performance data plus the registration data.
- Bei Aufnahme oder Wiedergabe “CUSTOM” drücken, um nur Spieldaten zu übertragen und “NORMAL”, um Spieldaten plus Registraturdaten zu übertragen.
- Pendant l'enregistrement ou la lecture, appuyer sur “CUSTOM” pour transférer uniquement les données de performance, ou appuyer sur “NORMAL” pour transférer les données de performances, plus celles de registre.
- Durante la grabación o la reproducción, presione “CUSTOM” para transferir solamente datos de ejecución o “NORMAL” para transferir dichos datos más los de registro.

4 <<

- Press this button to quickly return to a previous position of the disk that is being played back.
- Diese Taste drücken, um schnell zu einer vorherigen Position auf der Diskette, die gerade läuft, zurückzufahren.
- Sa poussée permet de revenir rapidement à une position antérieure sur la disquette en cours de lecture.
- Presione este botón para retroceder rápidamente a una posición anterior del disco que esté reproduciéndose.

5 PAUSE

- Press this button to temporarily stop playback.
- Diese Taste drücken, um die Wiedergabe kurz zu unterbrechen.
- Sa poussée arrête momentanément la lecture.
- Presione este botón para detener temporalmente la reproducción.

6 >>

- Press this button to quickly advance to a later position of the disk that is being played back.
- Diese Taste drücken, um schnell zu einer später folgenden Position auf der Diskette, die gerade läuft, vorzufahren.
- Sa poussée permet d'avancer rapidement à une position ultérieure sur la disquette en cours de lecture.
- Presione este botón para avanzar rápidamente a una posición posterior del disco que esté reproduciéndose.

7 TEMPO: “-”/“NORM”/“+”

- These buttons control the tempo during playback. Press “-” to delay the tempo, “+” to quicken it or “NORM” to restore the tempo used during recording.
- Diese Tasten regeln das Tempo bei der Wiedergabe. “-” drücken, um es zu senken, “+”, um es erhöhen oder “NORM”, um das bei der Aufnahme eingestellte Tempo wieder einzustellen.
- Elles contrôlent le tempo au cours de la lecture. Une poussée sur “-” retarde le tempo qui est accéléré par une poussée sur “+” ou est ramené à la valeur utilisée à l'enregistrement par une poussée sur “NORM”.
- Empee estos botones para controlar el tempo durante la reproducción. Presione “-” para retardar el tempo, “+” para acelerarlo, o “NORM” para volver al tempo empleado durante la grabación.

8 TRANSPOSITION: “-”/“NORM”/“+”

- These buttons are used for transposing the key during playback. Each time “-” or “+” is pressed, the key is respectively lowered or raised a half step. Press “NORM” to restore the key used during recording.
- Diese Tasten dienen zur Transponierung der Tastatur bei der Wiedergabe. Bei jedem Drücken von “-” oder “+” wird die Tonlage um jeweils einen Halbtonschritt erhöht oder gesenkt. Drücken Sie die Taste “NORM”, die bei der Aufnahme eingestellte Tonlage erneut einzustellen.
- Elles servent à transposer la clé pendant la lecture. Chaque poussée sur la touche “-” ou “+” permet, respectivement, d'abaisser ou d'élever d'un demi palier. Appuyer sur “NORM” pour repasser à la clé, utilisée pour l'enregistrement.
- Empee estos botones para transponer la clave durante la reproducción. Cada vez que presione “-” o “+”, la clave disminuirá o aumentará, respectivamente, medio paso. Presione “NORM” para volver a la clave empleada durante la grabación.

9 VOL: “+”/“-”

- These buttons control the volume level during playback. Press “+” to increase the volume or “-” to lower it.
- Mit diesen Tasten wird der Lautstärkepegel bei der Wiedergabe geregelt. “+” drücken, um die Lautstärke zu erhöhen oder “-” um sie zu senken.
- Elles servent à ajuster l'intensité sonore pendant la lecture. Appuyer sur “+” pour augmenter ou sur “-” pour réduire le volume.
- Empee estos botones para controlar el nivel del volumen durante la reproducción. Presione “+” para aumentarlo, y “-” para disminuirlo.

10 PLAY MODE

- These buttons are used to select the PLAY mode.

NORM The normal mode for recording or playback. When the power is switched ON, MDR-2/2P automatically enters this mode.

PHRASE This mode performs repeated playback of a specific phrase.

SONG SEQ. The playback modes of the SONG SEQUENCER. Press SINGLE for one performance or press REPEAT for repeated performances. The Song Sequence can be set only on MDR-2/2P.

- Diese Tasten dienen zur Einstellung der PLAY-Betriebsart.

NORM Die normale Betriebsart für Aufnahme oder Wiedergabe. Wenn das Gerät eingeschaltet ist, geht MDR-2/2P automatisch in diese Betriebsart.

PHRASE Mit dieser Betriebsart wird wiederholte Wiedergabe einer bestimmten Phrase eingestellt.

SONG SEQ. Die Wiedergabe-Betriebsarten des SONG SEQUENCER. SINGLE für ein Spiel drücken oder REPEAT für wiederholtes Spiel. Die Titel-Sequenz kann nur beim MDR-2/2P eingestellt werden.

- Elles servent à choisir le mode de lecture.

NORM Mode normal pour l'enregistrement ou la lecture. A sa mise sous tension, le MDR-2/2P est automatiquement réglé sur ce mode.

PHRASE Ce mode autorise une lecture répétée d'une phrase particulière.

SONG SEQ. Modes de lecture du séquenceur de chansons. Appuyer sur SINGLE pour une interprétation ou sur REPEAT pour des interprétations répétées. Le séquenceur de chansons peut être réglé uniquement à MDR-2/2P.

- Emplee estos botones para seleccionar el modo de reproducción.

NORM Modo normal para grabación o reproducción. Al conectar la alimentación, la MDR-2/2P entrará automáticamente en este modo.

PHRASE En este modo se realiza la reproducción repetida de una frase específica.

SONG SEQ. Modos de reproducción del secuenciador de canciones. Presione SINGLE para una ejecución, o REPEAT para ejecuciones repetidas. La secuencia de canciones solamente podrá establecerse en la MDR-2/2P.

•Battery Installation

(Two AAA-type batteries)

•Einlegen der Batterien

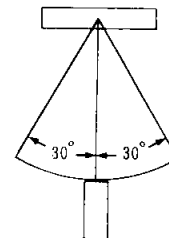
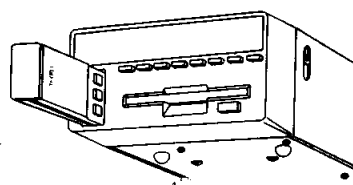
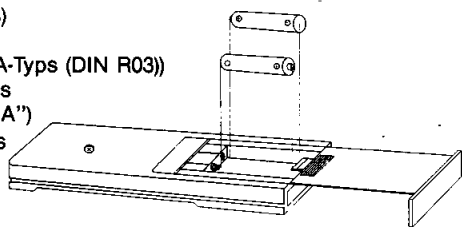
(Zwei Batterien des AAA-Typs (DIN R03))

•Mise en place des piles

(deux piles de type "AAA")

•Instalación de las pilas

(Dos pilas tipo AAA)



■Precautions on Remote Control Operation

- After use, please store the Transmitter in the REMOTE compartment of the unit by inserting it as shown in the figure below. To remove the Transmitter, press it lightly once then pull it out.
- The operating range of remote control consists of the area within approximately 7 meters from the sensor section of MDR-2/2P and within 30° in both directions from the front of the sensor section. The Transmitter operates best when used directly in front of the sensor section.
- The Transmitter may not function in case there is an obstacle between MDR-2/2P and the sensor section or when intense sunlight or intense illumination shines on the sensor section.
- When the Transmitter batteries run down, you will not be able to perform remote control. In that case, replace the worn batteries with two new AAA-type batteries.
- If the Transmitter will not be used for an extended period, be sure to remove its batteries.

■Précautions relatives à la télécommande

- Après son utilisation, ranger l'émetteur de télécommande dans le logement marqué "REMOTE" sur l'appareil; l'insérer de la façon illustrée ci-dessus. Pour retirer l'émetteur, appuyer doucement dessus et l'enlever du logement.
- La portée de la télécommande peut aller jusqu'à environ 7 mètres du senseur du MDR-2/2P; elle est limitée par un angle d'environ 30° de part et d'autre du senseur. La transmission des instructions est idéale quand l'émetteur fait face au senseur. L'émetteur n'agira pas si un obstacle se trouve entre lui-même et le senseur ou si ce dernier est frappé par les rayons du soleil ou une lumière intense.
- La transmission des instructions est impossible quand les piles de l'émetteur sont épuisées. Dans ce cas, remplacer les piles usées par deux neuves de type "AAA".
- Retirer les piles de l'émetteur si l'on prévoit de ne pas l'utiliser pendant longtemps.

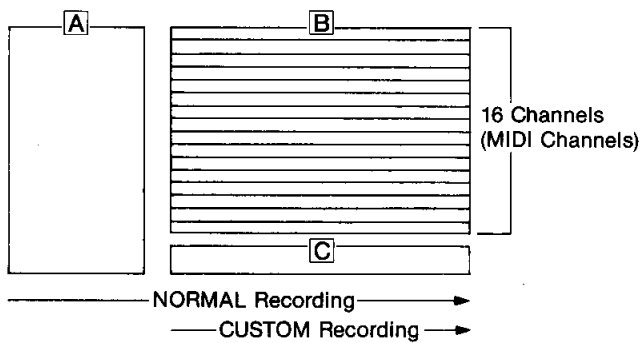
■Vorsichtsmaßregeln zum Betrieb mit Fernbedienung

- Nach der Verwendung den Sender im Fernbedienungsfach des Gerätes lagern. Dabei wird er in das Fach eingelegt, wie in der Abbildung unten gezeigt. Zum Entnehmen des Senders drücken Sie leicht und ziehen ihn dann nach oben heraus.
- Der Arbeitsbereich der Fernbedienungseinheit besteht aus einem Bereich von etwa 7 Metern vom Sensorteil des MDR-2/2P und innerhalb von 30° in beiden Richtungen vor dem Sensorteil. Der Sender arbeitet am besten, wenn er direkt vor dem Sensorteil verwendet wird.
- Der Sensor kann Funktionsstörungen aufweisen, wenn ein Hindernis zwischen dem MDR-2/2P und dem Sensorfenster ist oder wenn starkes Sonnenlicht oder andere starke Beleuchtung auf das Sensorfenster fällt.
- Wenn die Senderbatterien leer werden, funktioniert das Fernbedienungsteil nicht. In diesem Fall die schwach gewordenen Batterien durch neue des AAA-Typs (DIN R03) ersetzen.
- Wenn der Sender längere Zeit über nicht verwendet werden soll, immer die Batterien entnehmen.

■Precauciones sobre la operación de control remoto

- Después de utilizar el transmisor de control remoto, guárdelo en el compartimiento REMOTE de la unidad insertándolo como se muestra en la figura siguiente. Para extraerlo, presiónelo ligeramente y después tire del él hacia afuera.
- El radio de acción de control remoto es un área de aproximadamente 7 metros desde la sección del sensor de la MDR-2/2P y dentro de 30° en ambas direcciones desde la parte frontal de dicha sección del sensor. El transmisor funcionará al máximo cuando se emplee directamente delante de la sección del sensor.
- El transmisor puede no funcionar en caso de que haya algún obstáculo entre la MDR-2/2P y la sección del sensor, o cuando esta sección reciba luz solar intensa o una gran iluminación.
- Cuando se desgasten las pilas, no podrá realizarse la operación de control remoto. En tal caso, reemplace las pilas gastadas por otras dos nuevas tipo AAA.
- Cuando no vaya a emplear el transmisor durante mucho tiempo, asegúrese de extraer las pilas.

Configuration of Recording and Playback



(1) Two types of recording modes can be utilized:

NORMAL recording or CUSTOM recording.

The above figure is a simple illustration indicating the contents that are recorded for one song number. The entire contents of **A**, **B**, and **C** are recorded in NORMAL mode, **B**, and **C** are recorded in CUSTOM mode, and the same contents are also played back according to the respective modes.

■ Data Recorded as Type **A** Data

Type **A** data consists of special messages that are only transferred between MDR-2/2P and Yamaha Electones. When recording a performance of another keyboard, even if the contents are recorded in NORMAL mode, it will be recorded as if in CUSTOM mode. The data of each Electone series that can be recorded is as follows:

HX-Series: All data, including the contents of the REGISTRATION MEMORY, Sequencer, and rhythm

ME-Series: The contents stored in REGISTRATION MEMORY (ME-50)

The REGISTRATION MENU contents (ME-50/30)

The contents stored in C.S.P. (ME-50/30)

MC-Series: The contents stored in REGISTRATION MEMORY, C.S.P., and M.P.

MR-Series: The contents stored in REGISTRATION MEMORY, C.S.P., and F.M.P.

The REGISTRATION MENU contents

■ Data Recorded as Type **B** Data

Type **B** data consists of the contents of the performance, that is, it contains data on which notes of which keyboard have been pressed and the duration of each note. Because MDR-2/2P performs data transfer via MIDI, you can perform recording by assigning the data of the various keyboards to MIDI channels 1-16. In case of the Electone, three channels are used: The upper keyboard data is assigned to Channel 1, the lower keyboard data is assigned to Channel 2, and the pedal keyboard data is assigned to Channel 3. You have the choice of recording on all 16 channels or only one channel. Furthermore, even if you simultaneously record on multiple channels or record the performance on separate channels, the performance will be simultaneously played back (EDIT).

The selection of which channels will be used for recording is determined by the transmission channels of the keyboard or other device. (For details, refer to the User's Guide of the keyboard.) As for playback, if the keyboard used has the same reception channel as that of the transmission channel, you can also perform using a non-Yamaha keyboard. The timbre, however, will vary according to the keyboard used.

The data recorded as Type **B** is referred to as the MIDI Channel Messages and also includes such data as program changes or control changes. This data conveys which voice or effect has been used as well as the duration of its use, so it is recorded as a Registration No. (or REGISTRATION MENU No.) in the case of the Electone. If a non-Yamaha keyboard is used, the data recorded will vary with the MIDI functions of that keyboard, so refer to the User's Guide of the keyboard concerned.

■ Data Recorded as Type **C** Data

- Type **C** records via MIDI the data referred to as Exclusive, Realtime or System-Common data, and also includes the clock messages for synchronizing the recorded performance and the tempo of the playback rhythm. Except for the clock messages, Type **C** data varies according to the keyboard used. They are unique messages that can be reproduced only between similar models. With the Electone, Type **C** data consists of such data as the ON/OFF status of FILL IN or the Foot Switch.
- Type **C** messages cannot be rewritten using the EDIT operations.

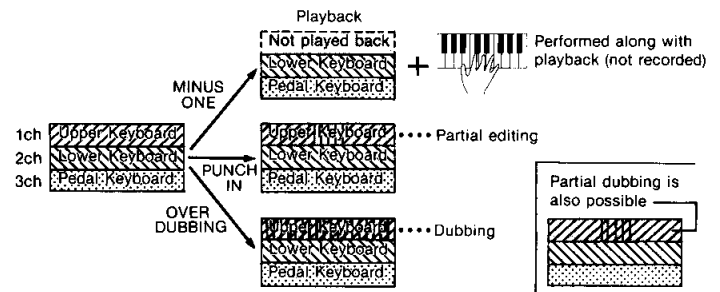
(2) Up to 16 songs can be recorded.

- As with a cassette tape, there is no limit to the recording time of one song if it is within the disk's memory capacity. One disk may be used to record one long song or 16 songs.
- The recording time is not fixed, but varies according to the volume of Type **A** data, the performance tempo, and the performance contents. When recording, refer to the display indicating the remaining disk capacity as your guide. Note that one floppy disk has a memory capacity of 634 kbytes.

(3) The recorded performance can be edited.

- The only data that can be edited is Type **B** data, which can be separately edited according to the MIDI Channel.
- Three types of EDIT modes can be utilized: MINUS ONE mode plays back the data of all channels except one, PUNCH IN/OUT Recording mode performs a partial revision of the performance of a single channel, and OVER DUBBING mode layers multiple performances onto the same channel.

[Example] Editing of Channel 1



(4) Four types of playback modes can be utilized.

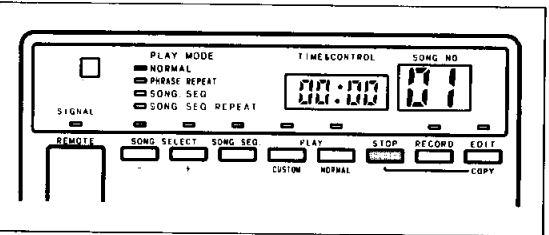
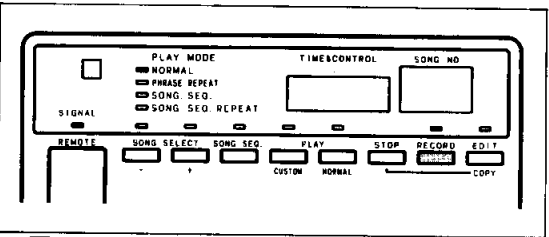
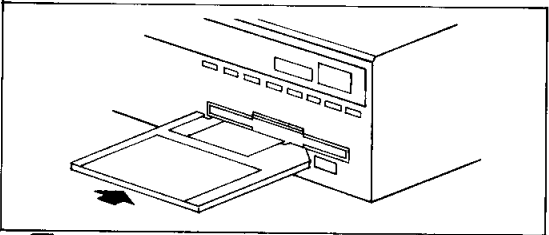
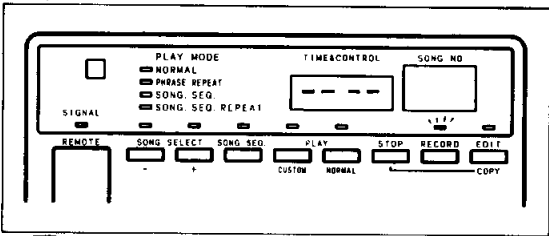
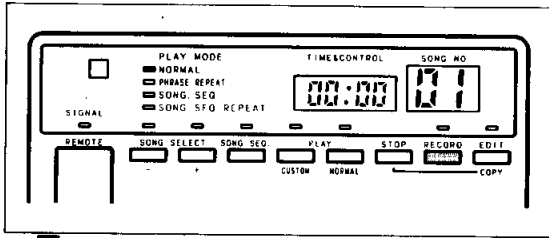
- NORMAL mode: Performs individual playback according to Song No.
- PHRASE REPEAT mode: Performs repeated playback of a specific phrase of a song.
- SONG SEQ. mode: Performs consecutive playback (up to 16 songs) of the recorded songs in the sequence you select.
- SONG SEQ. REPEAT mode: Performs repeated playback of SONG SEQ. mode.

★ In the case an inappropriate or erroneous operation is performed, MDR-2/2P is designed to display "CF" (Confirm) on the Time & Control display to indicate the cause. Prior to actually starting operation of MDR-2/2P, please read the section on 'The "CF" (Confirm) Display' on Page 20 of this manual.

Before Starting Recording or Playback

■ Inserting and Initializing a Floppy Disk

A new floppy disk must be processed for compatibility with MDR-2 before it can be recorded with performance data, so be sure to perform the following operation before use. In addition, when the operation below is performed on a disk that has already been used, all of the previously recorded data will be erased to enable the recording of new data.



1) Immediately after switching the power ON, without pressing any other buttons, press the MDR-2/2P RECORD button continuously for several seconds.

● First, set the POWER switch on the MDR-2/2P rear panel to ON. Next, either set the Electone's POWER switch (MDR-2) or the Power Adapter's POWER switch (MDR-2P) to ON, then press the RECORD button. In that status, "----" is displayed on the TIME & CONTROL display, so keep the RECORD button depressed until the RECORD lamp begins flashing (about 10 seconds).

★ After switching the power ON, if you release the RECORD button before the RECORD lamp begins flashing, the disk will not be initialized. In such case, switch the power OFF and repeat the above procedure from the beginning.

2) Insert a floppy disk.

● Insert a floppy disk into the insertion slot and press it in horizontally until it is automatically locked. Make sure not to mistake the front and back sides of the disk during insertion.

● If you wish to remove the disk, press EJECT.

3) Press the RECORD button.

● The RECORD lamp lights up and formatting is begun. After about one minute, disk initialization is completed, the RECORD lamp begins flashing again, and MDR-2/2P enters standby mode.

★ At this time, if you replace the floppy disk and press the RECORD button again, you can initialize multiple disks without starting from Step (1).

4) Press the STOP button.

● The initialization operation is now completed.

★ If you wish to initialize another disk now, switch the power OFF then start from Step (1).

★ A disk that is write-protected cannot be initialized. To enable its initialization, be sure to reset the write-protection tab to the position at which write-protection is cancelled.

Additional Notes on Floppy Disk Usage

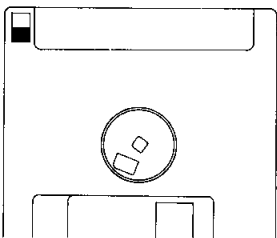
■ Write-Protection

A write-protection tab is provided to protect data recorded on the floppy disk. If a disk contains important data that you do not wish erased, simply move the tab to the top position to prevent unintentional erasure of or recording over the data.

★ On a disk that is write-protected, it is impossible not only to record, but also to perform editing operations (excluding MINUS ONE editing), PHRASE REPEAT, SONG SEQ., copying of a song, and so on.

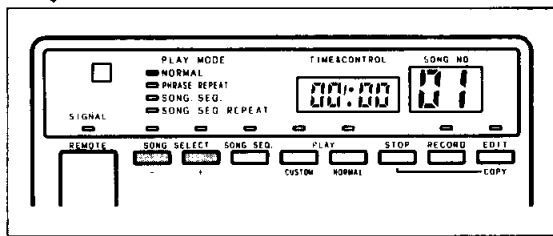
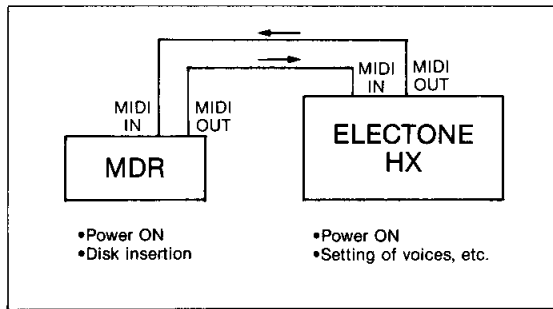
■ Recording Time

The total recording time for one floppy disk is not fixed but varies according to such factors as the performance contents and recording tempo as well as the registration data, other data, and so on. When recording, refer to the display indicating the remaining disk capacity as your guide. (One floppy disk has a memory capacity of 634 kbytes.)

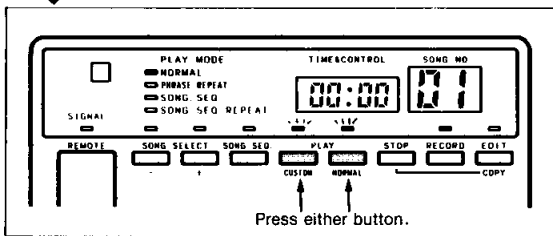
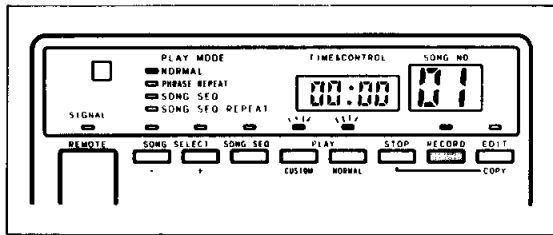


Recording Operation

Switch the power ON and insert an initialized disk, then begin recording.

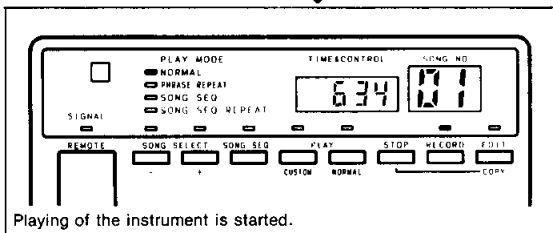
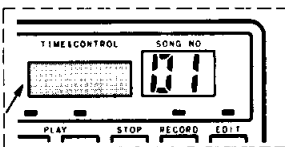


[Example] When a new disk is used:

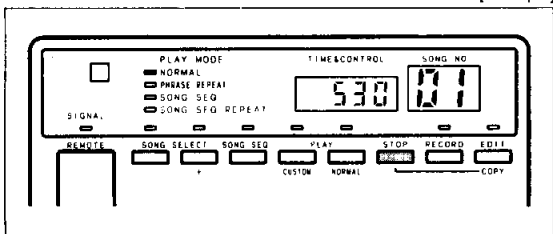


- <CUSTOM>
 - When registrations will not be recorded at the Electone.
 - When a non-Electone instrument is used.
- <NORMAL>
 - When Electone registrations will be recorded.

While a registration is being recorded.



[Example]



1) Prepare the instrument for playing.

- Set the voices, effects, rhythm, and so on.
- If REGISTRATION MEMORY of an Electone is used, store the required registrations.
- Set AUTO RHYTHM START or SYNCHRO START to OFF.

2) Using SONG SELECT, select the program number to be recorded.

- While viewing the SONG NO. display, press “+”/“−” of SONG SELECT to select a number from 1-16. Song No. 1 will be automatically selected when the power is switched ON.
- Each time “+” is pressed, the value on the SONG NO. display is incremented by one. It returns to “1” after “16” when pressed again. Each time “−” is pressed, the value is decreased by one, changing from “1” to “16” to “15”.
- When recording is done on a Song No. that has already been recorded, the previously recorded song is erased.

3) Press the RECORD button.

- The RECORD lamp lights up and the NORMAL or CUSTOM lamp of the PLAY section begins flashing.

4) Press the NORMAL or CUSTOM button of the PLAY section to start recording.

- NORMAL: First, such data as the REGISTRATION MEMORY data stored at the Electone is recorded, and nothing is displayed on the TIME & CONTROL display during that time. After the TIME & CONTROL display changes to display the disk's remaining memory capacity, switch Rhythm START or SYNCHRO START to ON, then begin playing.
- CUSTOM: After the disk's remaining memory capacity appears on the TIME & CONTROL display, either press Rhythm START or SYNCHRO START, then begin playing.
- When recording a performance, the display of the remaining memory capacity shown on the Time & Control display is reduced by decrements of two, then begins blinking when the remaining capacity goes below “8”.
- With models using a Registration Pack, reading and writing cannot be performed during recording.

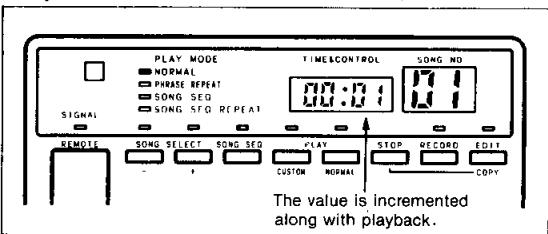
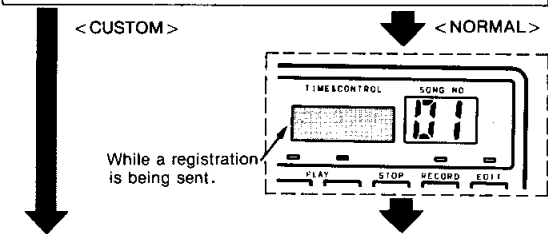
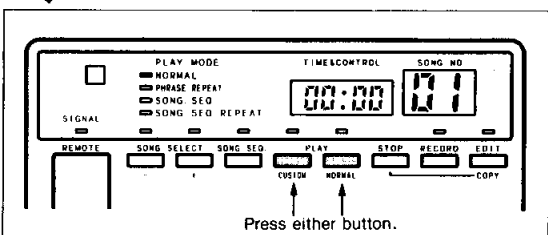
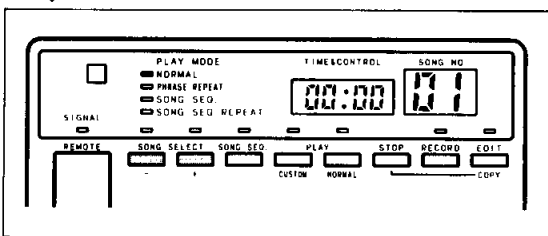
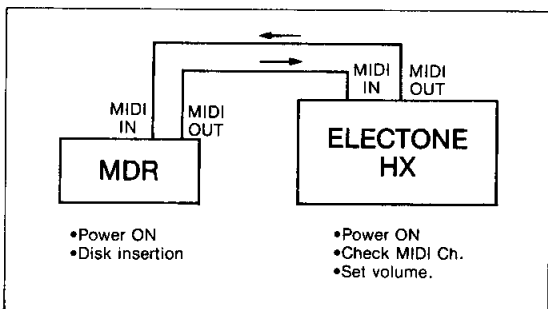
5) When you finish playing, press the STOP button.

- Before recording the next song, be sure to change the Song No. using SONG SELECT.
- During recording, NEVER switch the power OFF nor press the EJECT button. Furthermore, do not press EJECT from the time you press STOP until the RECORD lamp goes out. Not heeding these precautions may result in an imperfect recording.

Playback Operation

■ Normal Mode

The figure below uses the MDR-2/2P panel as an example, but playback can also be performed by remote control.



1) Prepare the instrument to be played back.

- Switch the power of the instrument ON, then adjust its volume level.
- Check that the MIDI reception channel is set to the same transmission channel that was used for recording.
- When recording was done in CUSTOM mode or playback will be in CUSTOM mode, set the registrations (such as the RHYTHM selectors, etc.) that cannot be transferred as program changes or control changes.

2) Select the Song No. to be played back using SONG SELECT.

- While viewing the SONG NO. display, press “+”/“−” of SONG SELECT to select the Song No. to be played back.
- Playback is separately performed for each Song No. For consecutive playback of multiple songs, use the SONG SEQUENCER function.

3) Press NORMAL or CUSTOM of the PLAY section.

- **NORMAL:** First, the recorded registration data and so on are sent to the Electone, and nothing is displayed on the TIME & CONTROL display during that time. After 5-10 seconds, the TIME & CONTROL display returns to “00:00”, then is consecutively incremented by one as playback is begun. When the song ends, MDR-2/2P automatically stops and the disk returns to its leading position.
- **CUSTOM:** The TIME & CONTROL value is consecutively incremented by one as playback is begun. When the song is finished, it automatically stops and returns to its initial display.

- ★ Pay close attention when pressing NORMAL to send the registration data and other data, because the data stored in REGISTRATION MEMORY and other data of the Electone will be automatically erased.
- ★ After “00:00” appears on the TIME & CONTROL display, playback may not always begin immediately. The number of seconds required should equal the time required during recording when beginning a performance from standby mode.
- ★ You can also play the instrument along with the playback. As the number of notes sounded by that keyboard will not differ from that of a normal performance, however, some of the notes may not be sounded.
- ★ When the playback is stopped before its completion by pressing STOP, it will return to the beginning of the song and will not automatically start again from an intermediate point of the song. To temporarily stop playback, press PAUSE of the Remote Control Transmitter.
- ★ Even if the recorded instrument and the playback instrument are changed, the performance data can be received if the MIDI Channels are set identically. As the Exclusive Messages unique to that instrument cannot be received, however, the played back performance may not be satisfactory in some cases.

Remote Control Operation During Playback

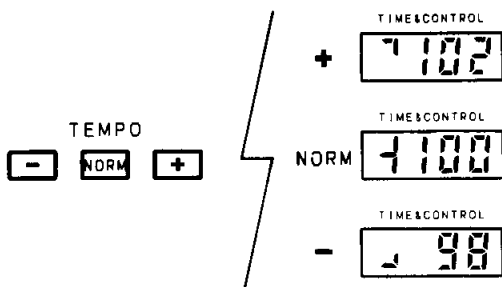
When the Remote Control Transmitter is used, the following operations can be performed in addition to playback operations which are identical to that of MDR-2/2P.

■Fast Reverse (<<), Fast Forward (>>), PAUSE



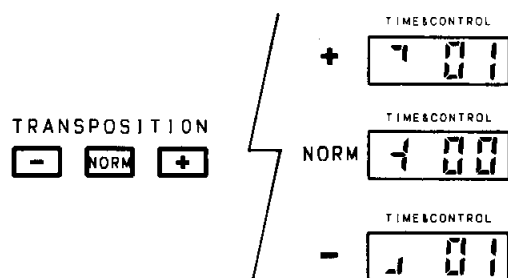
- When the Fast Reverse (<<) or Fast Forward (>>) button is pressed during playback, playback is interrupted and a Fast Forward or Fast Reverse operation can be performed during the time that the button is pressed. Continue to press the button while viewing the value of the TIME & CONTROL display, then release the button at the point from which you wish to begin playback. At this time, MDR-2/2P will enter PAUSE mode so you can again perform Fast Reverse (<<) or Fast Forward (>>) as required. To resume playback after pressing the (<<) or (>>) button, press the flashing NORMAL or CUSTOM button of the PLAY section.
- When PAUSE is pressed during playback, playback is temporarily stopped. Press PAUSE once more to resume playback.
- After pressing PAUSE and entering PAUSE mode, Fast Reverse or Fast Forward cannot be performed.
- In the case Fast Reverse or Fast Forward is performed with instruments not of the Yamaha Electone HX-Series or HS-Series, Auto Rhythm may not synchronize with the performance or may not be sounded.

■TEMPO



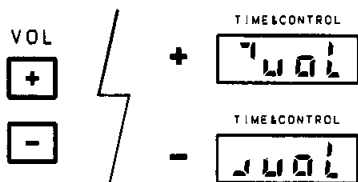
- Press this button to change the tempo during playback. Press “-” to delay the tempo, “+” to quicken the tempo or “NORM” to return it to the tempo used for recording.
- For a short while, the changed tempo is displayed on the TIME & CONTROL display as a percentage of the tempo used for recording, which is considered as “100%”. Although the variable width varies with the functions of the instrument being played back, its approximate range is 50-200%.
- As long as EJECT is not pressed or the power is not switched OFF, even if a song of a different Song No. is played back, the music will be produced at the changed tempo.
- Be very careful if the MIDI of the instrument being played back does not have an external synchronization function for its clock, because the Auto Rhythm and the performance may not synchronize.

■TRANSPOSITION



- Press this button to transpose the key of the recorded song during its playback. Each time “-” is pressed, the key is lowered a half step. Each time “+” is pressed, it is raised a half step. The key can be transposed up to one octave either upward or downward, and will return to its initial key by pressing “NORM”.
- After transposition is performed, the notes higher than the highest note of the instrument being played back will be sounded one octave lower, and the notes lower than its lowest note will be sounded one octave higher. (In rare cases, according to the instrument being played back, some notes may not be sounded.)
- As long as EJECT is not pressed or the power is not switched OFF, even if a song of a different Song No. is played back, the music will be produced in its transposed status.

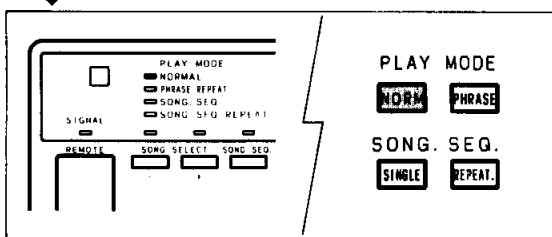
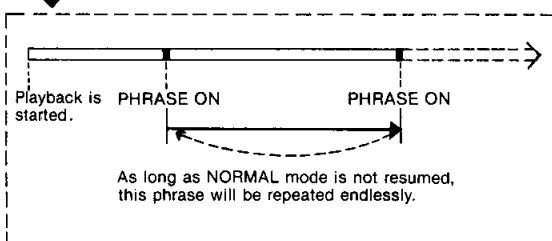
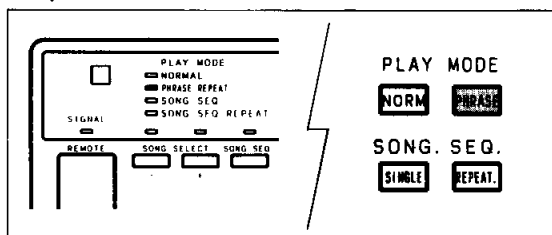
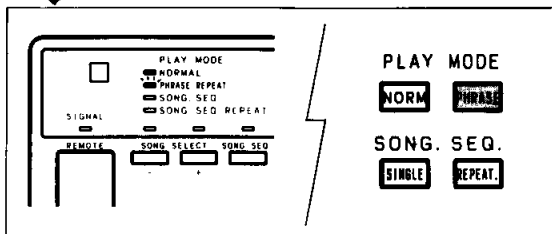
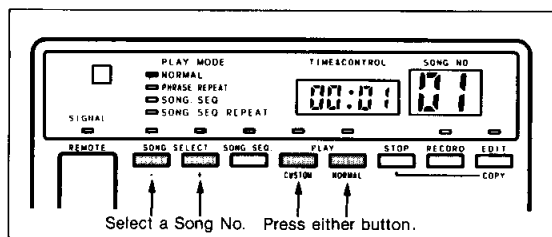
■VOL (Volume)



- Press this button to control the volume level during playback. Press “+” to increase the volume or “-” to decrease it.
- This volume control cannot be performed for instruments not of the Yamaha Electone HX-Series.

■ PHRASE REPEAT Mode

This mode performs the repeated playback of a section of the recorded song. It can also be performed by remote control.



1) Start playback.

- After selecting the Song No. using SONG SELECT, press NORMAL or CUSTOM of the PLAY section to start playback.

2) Press the PHRASE button at the beginning of the phrase you wish to repeatedly play back.

- While listening to the performance being played back, specify the phrase you wish to repeatedly play back. First, press the PHRASE button of the Remote Control Transmitter at the exact beginning of the phrase.
- The PHRASE REPEAT lamp of the PLAY MODE section of MDR-2/2P begins flashing.
- In that status, playback of the performance will proceed.
- ★ To perform PHRASE REPEAT from the beginning of a song, immediately after pressing NORMAL or CUSTOM of the PLAY section to start playback, press the PHRASE button.

3) Press the PHRASE button again at the end of the phrase you wish to repeatedly play back.

- The playback will stop briefly, then return to the beginning of the specified phrase and repeat playback.
- The PHRASE REPEAT lamp of the PLAY MODE section of MDR-2/2P lights up and the NORMAL lamp goes out. The TIME & CONTROL display also returns to the initial count of the beginning of the specified phrase.
- ★ If the end of the phrase is not specified, the phrase will automatically be repeated until the end of the recorded song.
- ★ When PHRASE REPEAT is performed with instruments not of the Yamaha Electone HX-Series or HS-Series, Auto Rhythm may not synchronize with the performance.

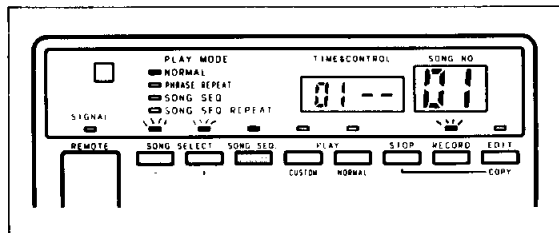
4) To stop PHRASE REPEAT, press NORM of the PLAY section.

- When returning to NORMAL mode from PHRASE REPEAT mode, playback will stop at the end of the specified phrase.
- When STOP is pressed in PHRASE REPEAT mode, playback from that moment automatically begins again from the beginning of the phrase and playback is not stopped.
- If you wish to repeat the same phrase again, press the PHRASE button, then press one of the PLAY buttons. Pressing any button of the PLAY section will cause MDR-2/2P to enter CUSTOM Playback mode.
- Once a phrase is specified, it is recorded on the disk as data and can be retrieved at any time (if write-protection of that disk is cancelled) as long as a new phrase is not specified for that song.
- If the PHRASE button is pressed and playback is started without having specified the phrase to be repeated, the entire song will be repeatedly played back.
- During PHRASE REPEAT, Fast Reverse or Fast Forward can only be performed within the range of the specified phrase. Also, they can only be performed while the performance is being sounded.

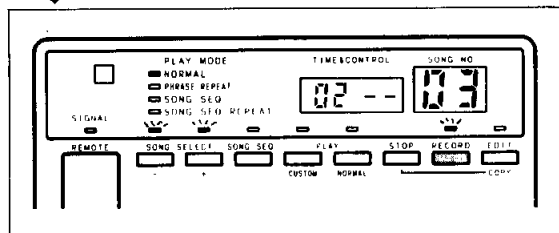
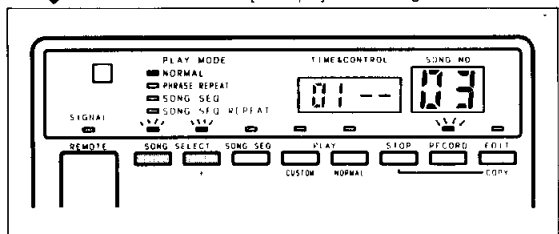
■ SONG SEQ. Mode/SONG SEQ. REPEAT Mode

Use of the **SONG SEQUENCER** function allows you to consecutively play back recorded songs in any sequence you desire. Setting of the Song Sequence to be played back is performed at MDR-2/2P, but playback can be controlled by remote control.

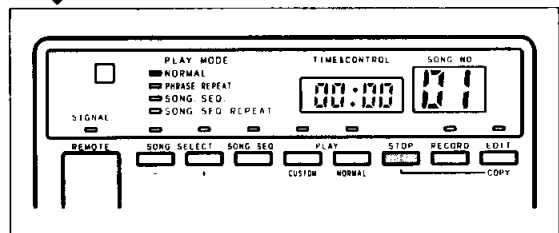
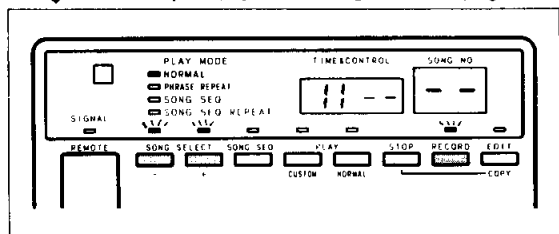
How to Set the Song Sequence



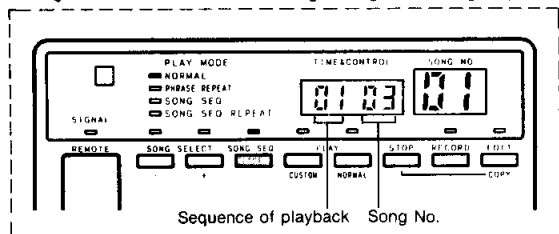
[Example] When Song No. 3 is selected:



[Example] When 10 songs have been programmed:



Checking the registered Song Sequence.



1) Press the SONG SEQ. button.

- The lamps of SONG SEQ., SONG SELECT “+”/“-”, and RECORD light up.
- The TIME & CONTROL display changes to “01--”.
- ★ If a Song Sequence has already been set, the Song No. set as the first song of the sequence will be displayed in place of “--”.

2) Use “+”/“-” of SONG SELECT to select the first song of the sequence to be played back.

- While viewing the SONG NO. display, select the Song No.

3) Press the RECORD button.

- After selecting the Song No., press the RECORD button to register it.
- When the RECORD button is pressed, the TIME & CONTROL display automatically changes to “02--”. At that point, select the second Song No. of the playback sequence, then press RECORD again. Repeat Steps (1) and (2) to register all of the Song Nos. you wish to play back as well as their playback sequence.
- Registration is performed from Nos. 1 to 16, regardless of the quantity of songs registered, and the quantity of songs to be registered can be freely determined. You may also register the same Song No. multiple times if you so wish.

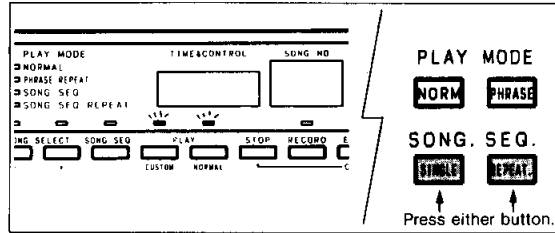
4) Lastly, register the end of the Song Sequence.

- Press “+”/“-” of SONG SELECT to display “--” (between Song Nos. “01” and “16”), then press the RECORD button.
- In the case all 16 songs have been registered, the above operation is not required.

5) Press the STOP button.

- Registration is now completed.
- The registered Song Sequence will be saved in the floppy disk (if the write-protection of the disk has been cancelled).
- You may wish to re-register a new Song Sequence but only want to change the initial part of the sequence. In this case, press the STOP button at the end of the last song in the part of the sequence you wish changed and do not register the final “--”; the remaining songs of the initial sequence will be stored as they are.
- ★ It is possible to check the registered Song Sequence by pressing the SONG SEQ. button. On the TIME & CONTROL display, the Sequence No. is shown on the left and the Song No. is shown on the right, with the next Song No. in the sequence being displayed each time the SONG SEQ. button is pressed.

How to Perform Playback

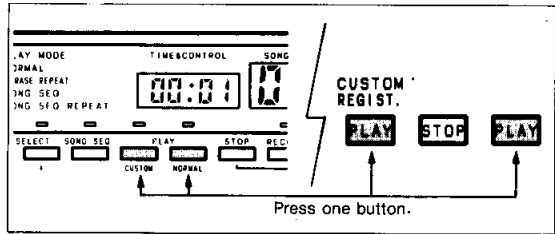


1) Using the Remote Control Transmitter, select the **SINGLE** or **REPEAT** mode of the **SONG SEQ.** section.

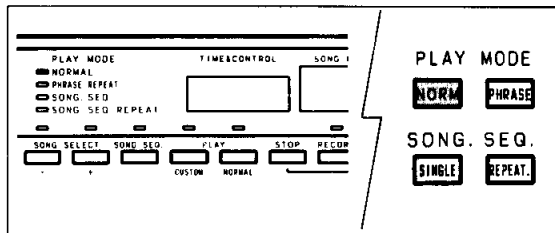
- **SINGLE:** Press this button when you wish to play back the registered Song Sequence one time.
- **REPEAT:** Press this button when you wish to repeatedly play back the registered Song Sequence.
- The lamp of the selected **PLAY MODE** button lights up, and the **NORMAL** or **CUSTOM** lamp of the **PLAY** section begins flashing.

2) Press **NORMAL** or **CUSTOM** of the **PLAY** section to start playback.

- The Song No. registered as the first song of the sequence is displayed on the **SONG NO.** display, and playback is started.



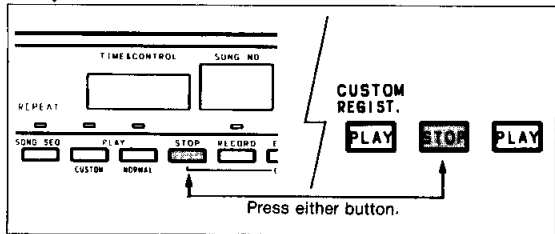
*In case of SONG SEQ. REPEAT



3) To stop the playback, return the **PLAY MODE** to **NORMAL**.

- In case **SINGLE** was selected to start playback, **NORMAL** mode is automatically resumed after the performance is completed, then playback is stopped.
- In case **REPEAT** was selected to start playback, return the **PLAY MODE** to **NORMAL** by remote control, then press the **STOP** button.
- When the **STOP** button is pressed while still in **SONG SEQ.** mode, the playback of the currently played song is discontinued, then the playback recommences from the song set as the next one in the sequence.

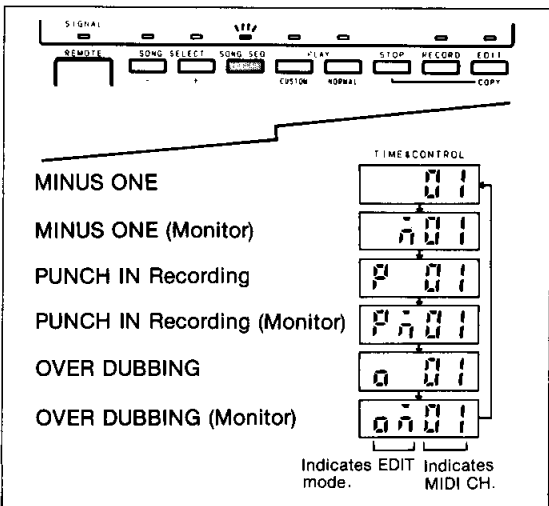
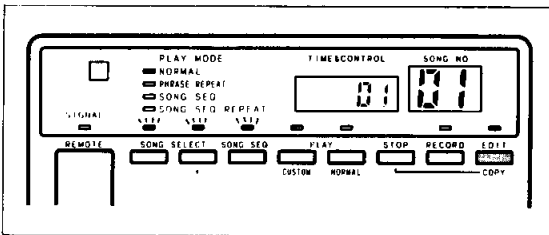
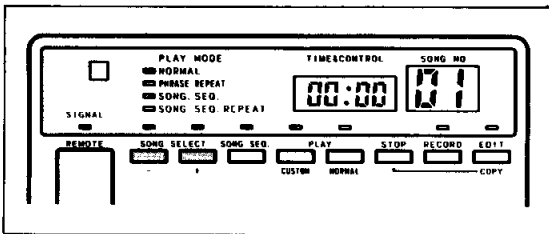
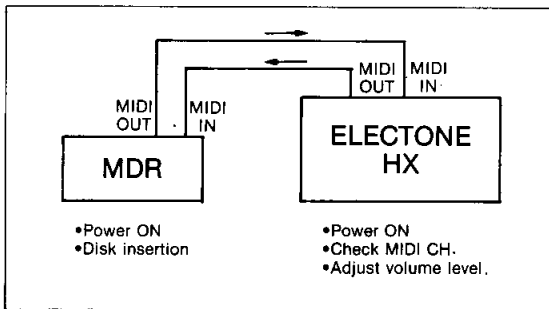
★ In **SONG SEQ.** mode, the **PHRASE REPEAT** or **EDIT** operations cannot be performed.



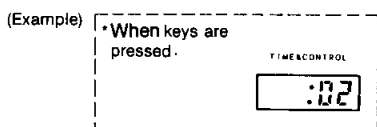
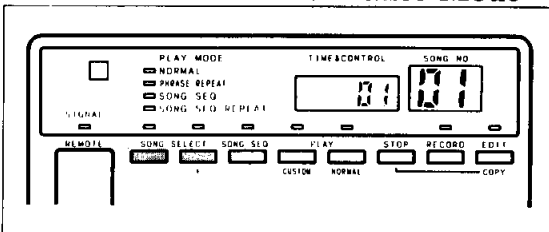
Editing Operation

Three types of EDIT modes are provided: MINUS ONE Performance, PUNCH IN/OUT Recording (REPLACE), and OVER DUBBING.

■ Before Entering the EDIT Modes



■ MINUS ONE Performance Mode



1) Prepare the musical instrument to be played.

- So that both recording and playback can be done in EDIT mode, perform connection as shown on the left.
- Confirm that the MIDI Channel is identical to that used for recording.
- In case recording was done in CUSTOM mode, set the registrations (such as Rhythm selectors, etc.) that cannot be transferred as program changes or control changes.

2) Use the “+”/“–” buttons of SONG SELECT to select the Song No. you wish to edit.

- After any of the EDIT modes are entered, Song No. selection cannot be performed.

3) Press the EDIT button.

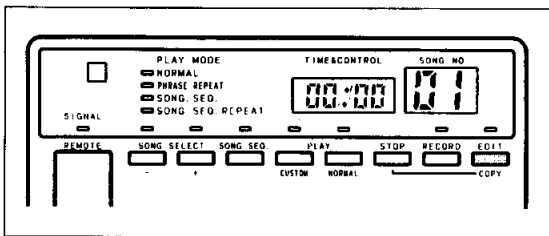
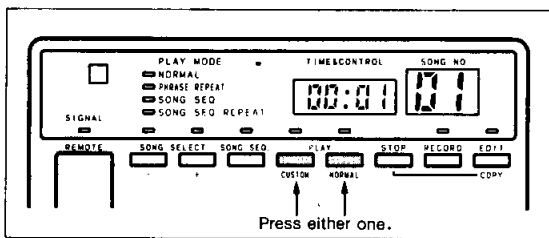
- The EDIT lamp lights up, and the lamps of SONG SELECT “+”/“–” and SONG SEQ. begin flashing.
- “01” is displayed on the TIME & CONTROL display.
- ★ When the PLAY MODE is set to PHRASE REPEAT or SONG SEQ., the EDIT button cannot be switched ON. In such case, return to NORMAL mode, then press EDIT.
- ★ The EDIT button cannot be switched ON during a playback performance.

4) Use the SONG SEQ. button to select the EDIT mode.

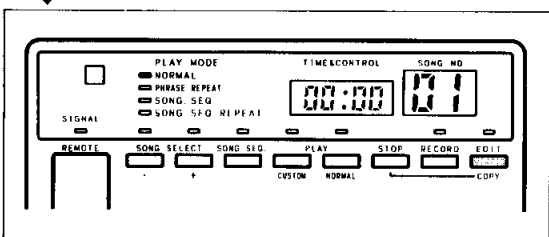
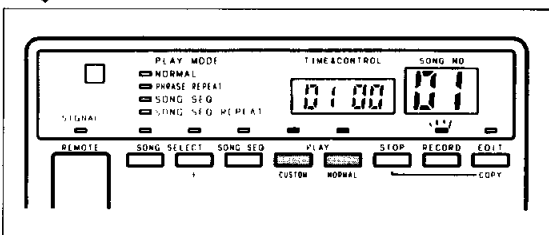
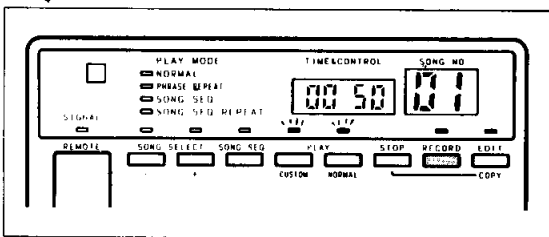
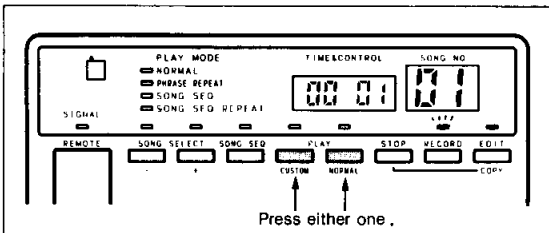
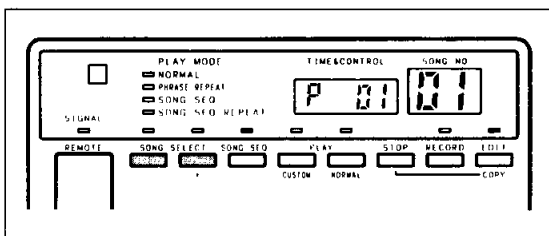
- Each time the SONG SEQ. button is pressed, the TIME & CONTROL display changes as on the left to indicate which EDIT mode is being selected.
- The MONITOR mode of each EDIT Mode is useful when editing with a keyboard that has no sound source, such as the control keyboard. When MONITOR mode is entered, in addition to the recording/playback data that is normally sent from the MIDI OUT jack of MDR-2/2P, the realtime performance data that is received by the MIDI IN jack can also be sent to the Tone Generator module or other device.

5) Use “+”/“–” of SONG SELECT to select the MIDI Channel of the section that you do not wish to be played back.

- ★ When keys of the connected keyboard are pressed at this time, the Channel No. of the transmission channel of that keyboard is displayed on the TIME & CONTROL display, letting you check the Channel No. (common to all modes).



■PUNCH IN/OUT Recording Mode (REPLACE Mode)



6) Press **NORMAL** or **CUSTOM** of the **PLAY** section to start playback.

- Playback is begun so that the performance section that was recorded using the MIDI Channel selected in Step (5) is in **MINUS ONE** status (that is, it is not played back). Please try playing the **MINUS ONE** section yourself along with the playback.
- The performance playback can also be performed in **PHRASE REPEAT** mode.
- When the song is finished, **MDR-2/2P** is automatically stopped.

7) Press the **EDIT** button once more to return to **NORMAL** mode.

- If you wish to set another Song No. for **MINUS ONE** Performance, return to **NORMAL** mode, then start this procedure again from Step (1).

5) After using the **SONG SEQ.** button to select the **PUNCH IN** Recording mode, select the MIDI Channel of the section containing the performance data you wish to edit using the **SONG SELECT** “+”/“−” buttons.

6) Press **NORMAL** or **CUSTOM** of the **PLAY** section to start playback.

- The **RECORD** lamp begins flashing, and the standby status of **PUNCH IN** Recording is entered.
- The count value of the **TIME & CONTROL** display is identical to the count value during **NORMAL** playback.

7) While listening to the playback performance, press the **RECORD** button at the beginning of the section you wish to edit, then play the keyboard.

- When the **RECORD** button is pressed, playback of the section of the specified MIDI Channel is disabled, and the data you play at the keyboard will be recorded as new data.
- When the **RECORD** button is pressed and playback is started using **NORMAL** or **CUSTOM** of the **PLAY** section, the **REPLACE** mode is entered and you can begin recording again from the beginning of the song.

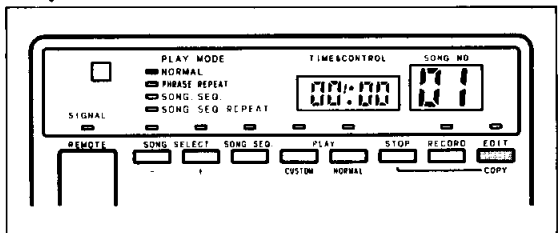
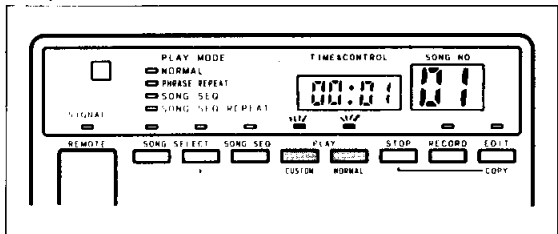
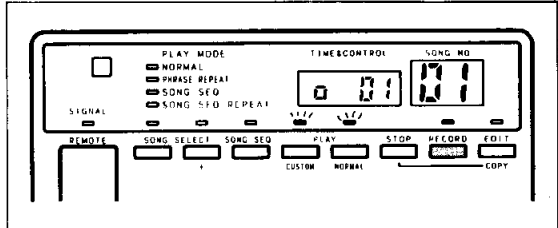
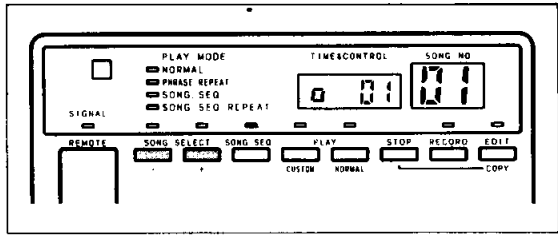
8) After **PUNCH IN** Recording is completed, press **NORMAL** or **CUSTOM** of the **PLAY** section once more to perform **PUNCH OUT**.

- During **PUNCH IN** Recording, if the flashing **NORMAL** or **CUSTOM** button of the **PLAY** section is pressed, the standby status of **PUNCH IN** Recording is re-entered and then the performance is played back.
- During playback, partial editing of the performance can be performed any number of times by performing **PUNCH IN/PUNCH OUT**.
- When the song is finished, **MDR-2/2P** is automatically stopped.

9) When the **EDIT** button is pressed once more, the **NORMAL** mode is re-entered.

- When you wish to play back the edited performance, return to **NORMAL** mode, then press the **NORMAL** or **CUSTOM** button of the **PLAY** section.

OVER DUBBING Mode



5) Use the **SONG SEQ.** button to select the **OVER DUBBING** mode, then select the **MIDI Channel** of the section on which you wish to layer multiple performances using the **SONG SELECT** “+”/“-” buttons.

6) Press the **RECORD** button.

- The **NORMAL** or **CUSTOM** lamp of the **PLAY** section begins flashing.

7) Press **NORMAL** or **CUSTOM** of the **PLAY** section to start playback. Next, play the keyboard along with the playback.

- Using the keyboard of the selected **MIDI Channel**, play and record the additional section to be dubbed.
- It is also possible to perform **OVER DUBBING** from an intermediate point of the song by first starting playback using a **PLAY** section button, then pressing the **RECORD** button.
- In this mode, it is not possible to delete or re-record only the dubbed performance section.
- When the song is finished, **MDR-2/2P** is automatically stopped.

8) When the **EDIT** button is pressed once more, the **NORMAL Mode** is re-entered.

- To play back the edited performance, return to **NORMAL** mode, then press **NORMAL** or **CUSTOM** of the **PLAY** section.
- ★ You can also perform any number of dubbing operations on the same **MIDI Channel**. It is not possible, however, to change the voices of only the dubbed performance. Also, depending on the quantity of sounded notes the instrument being played has, some of the notes may not be sounded.
- ★ In **PUNCH IN Recording** or **OVER DUBBING** mode, you can select the unrecorded **MIDI Channels** to enjoy the maximum 16-channel multiple-track recording.

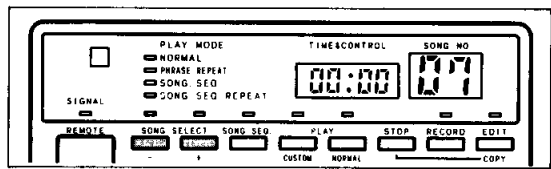
CAUTION:

In **PUNCH IN Recording** or **OVER DUBBING** mode, editing cannot be performed if the remaining memory capacity of the disk is too small. Although the remaining memory capacity required for editing will vary according to the contents of the performance, as a general guideline, the remaining capacity should be roughly at least 1.5 to 2.0 times the amount of data contained in the song to be edited.

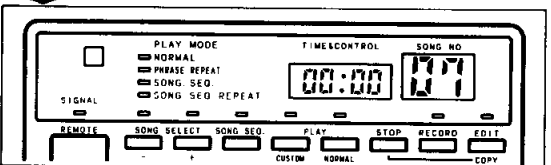
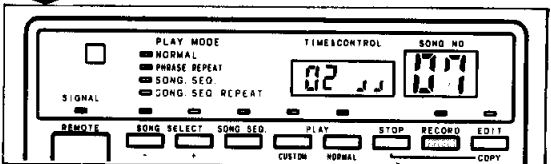
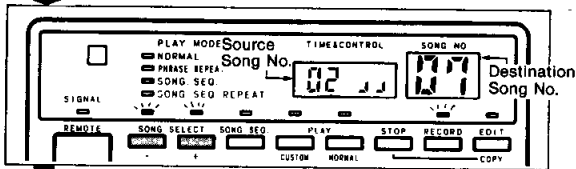
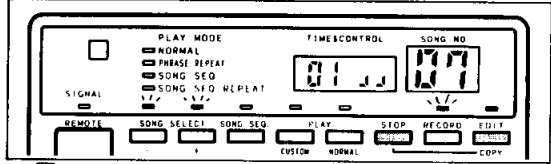
Other Operations

■ Copying a Recorded Song

With MDR-2/2P, you can also copy a song onto the same disk by using a different Song No. This copy operation is most effective when performed prior to a PUNCH IN or OVER DUBBING operation.



[Example] Copying Song No. 2 to No. 7 :



1) Use the SONG SELECT “+”/“–” buttons to display an unrecorded Song No. on the SONG NO. display.

- The selected Song No. becomes the destination Song No. of the copy operation. If performance data, registration data, and so on are already recorded in the selected Song No., copying cannot be performed.

- If no unrecorded Song Nos. are available, delete all unnecessary data from the disk.

2) While pressing the STOP button, press the EDIT button.

- The SONG SELECT “+”/“–” lamps and the RECORD lamp begin flashing.

3) Use the SONG SELECT “+”/“–” buttons to select the Song No. to be copied.

- The TIME & CONTROL display indicates the Song No. recorded with the performance data you wish to copy.

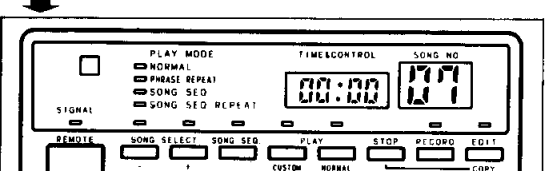
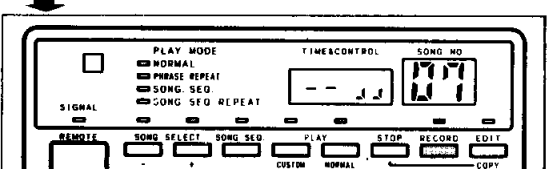
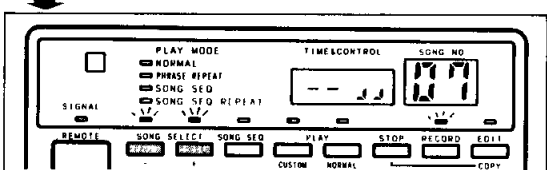
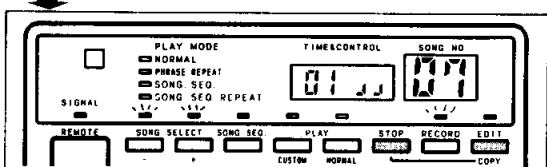
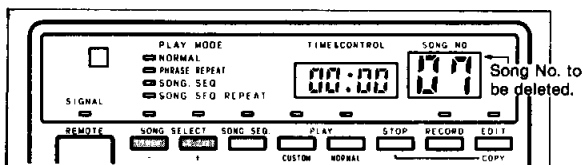
4) Press the RECORD button.

- The RECORD lamp lights up and copying is begun. After several seconds, copying is automatically terminated, and “00:00” is shown on the TIME & CONTROL display.

- The copy operation cannot be stopped before completion even by pressing the STOP button.

■ Deleting Data

Song data that is no longer needed can be deleted by Song No.



1) Use the SONG SELECT “+”/“–” buttons to display the Song No. you wish to delete on the SONG NO. display.

2) While pressing the STOP button, press the EDIT button.

- The SONG SELECT “+”/“–” lamps and the RECORD lamp begin flashing.

3) Use the SONG SELECT “+”/“–” buttons to display “--” on the TIME & CONTROL display.

4) Press the RECORD button.

- The RECORD lamp lights up and the data of the selected Song No. is deleted. After several seconds, the deletion operation is automatically terminated.

- The remaining memory capacity of the disk will be increased in correspondence to the amount of data deleted.

Error Message Display

The "EF" Display

In the case an inappropriate or erroneous operation is performed, "EF" is displayed on the TIME & CONTROL display as shown below, indicating the cause of the error by a numeric value. In such case, perform the steps required to remedy the situation according to the table. Note that when any button is pressed, this display will be cleared.

| Display | Cause and Remedy |
|---------|--|
| EF01 | The disk is improperly inserted. Remove the disk and re-insert it correctly. If "E 01" is displayed despite correct disk insertion, please contact your Yamaha dealer. |
| EF02 | The disk has not been initialized for use with MDR-2, so refer to the page on "Inserting and Initializing a Floppy Disk". Also, the display of this error message for an initialized disk indicates some defect in the disk such as scratches on the disk surface, so replace the disk with a new formatted one. |
| EF03 | Recording cannot be performed because the disk is write-protected. Reset the write-protection tab to enable recording, then re-do the recording operation. |
| EF04 | No performance is recorded on the selected Song No. Confirm the Song No. |
| EF05 | Copying cannot be performed because there is data recorded on the selected Song No. Change the Song No. or delete the unnecessary data, then re-do the copying operation. |
| EF06 | The performance cannot be correctly played back due to a disk defect or a tempo control setting that is too fast. Slow the tempo down by remote control, then perform playback again. |
| EF07 | The disk is defective. Replace the disk with a new initialized one and perform recording again. Disk memory is full, so disk cannot memorized more data. To increase disk memory, delete songs you do not need. |

Guide to Troubleshooting

| Symptom | Cause and Remedy |
|---|---|
| The power is switched ON, but no electric current is conducted. | The current will not be conducted unless both the MDR-2/2P rear-panel POWER switch and either the POWER switch of the Electone connected to MDR-2 or the POWER switch of the MDR-2P Power Adapter are switched ON. |
| Playback is stopped after one song. | Recording and playback are designed to function only for single Song Nos. To perform consecutive playback of a song, use the SONG SEQUENCER function. |
| Auto Rhythm was started but stopped at the start of recording. The rhythm cannot be started at the start of recording. | MDR-2/2P is designed so that Auto Rhythm START and SYNCHRO START will automatically be switched OFF when recording is started. Also, START and SYNCHRO START cannot be switched ON during the recording of registrations and other data in NORMAL mode while the TIME & CONTROL display is off. |
| Recording and/or playback cannot be performed. | Recording and playback are sometimes disabled by mistaken operation, use of an inappropriate disk or playback model, and so on. Refer to the page on "Error Message Display". Playback cannot be done unless the MIDI Channel is set to the same one used for recording. |
| Recording or playback is not temporarily stopped even if STOP is pressed. | MDR-2/2P is designed to return to the beginning of the song without stopping temporarily, even if STOP is pressed. To temporarily stop recording or playback, press PAUSE of the Remote Control Transmitter. Note that PAUSE mode cannot be entered during recording. |
| Operation is stopped during recording or editing. | The amount of data recorded on the disk is close to the disk's maximum capacity. Either replace the disk or delete unnecessary data from the current disk. |
| Playback performance does not stop even if STOP is pressed. | In PHRASE REPEAT or SONG SEQ. mode, playback is not stopped even if STOP is pressed. Return to NORMAL mode using the Remote Control Transmitter, then press STOP. |
| The keyboard's tempo control does not function during playback. | During playback, a message is sent to the connected keyboard so it will automatically conform to the MDR tempo. For tempo control, use the TEMPO button of the Remote Control Transmitter. |
| The recorded performance and the played back performance are different. | Depending on the functions of the keyboard used for recording, some data may not be sent by MIDI or the use of such functions may not permit recording to MDR-2/2P. Refer to the MIDI Implementation Chart regarding the keyboard in use. |
| When Fast Reverse or Fast Forward is performed, Auto Rhythm and the performance go out of sync. | During recording or playback using a keyboard not of the Yamaha Electone HX-Series, avoid performing Fast Reverse and Fast Forward insofar as possible. Also, the volume cannot be controlled by remote control. |
| After changing a voice during editing, that voice is also changed in other registrations. A voice was changed but remains unchanged during playback. | Data of REGISTRATION MEMORY cannot be partially sent. Also, when registrations are changed at the Electone panel, only the corresponding Registration Nos. are recorded. |
| The keyboard continues to produce sound without stopping. | The POWER switch was set to OFF during playback. To stop recording or playback, always use the STOP button. Never switch OFF the POWER switch nor press EJECT during playback as such actions will destroy the data on the disk. |

Specifications Technische Daten

Fiche technique Especificaciones

- ★ Recording Medium: 3.5" compact floppy disk
- ★ Memory Capacity: 634 kbyte/max. 16 programs
- ★ Controls: <Of MDR-2/2P>
SONG SELECT (+/-), SONG SEQ.,
PLAY (CUSTOM, NORMAL), STOP,
RECORD, EDIT (MINUS ONE,
PUNCH IN/OUT (REPLACE), and
OVER DUBBING modes), POWER
(ON/OFF), EJECT
<Of MDR-2P Power Adapter>
POWER (ON/OFF)
<REMOTE CONTROL TRANSMITTER>
OPERATION MODE... SONG SELECT (-/+), PLAY
(CUSTOM/NORMAL), STOP, < <,
PAUSE, > >
TEMPO (-/NORM/+), TRANSPOSI-
TION (-/NORM/+), VOL. (+/-)
PLAY MODE... NORM, PHRASE,
SONG SEQ.
(SINGLE, REPEAT)
- ★ Display: SONG, NO. TIME & CONTROL,
PLAY MODE, SIGNAL

- ★ Terminals: MIDI (IN/OUT/THROUGH) jacks,
DC IN jack
- ★ Rated Power Supply
Voltage: MDR-2 ... DC5V
MDR-2P... Refer to the name plate
REMOTE CONTROL
TRANSMITTER... DC3V
- ★ Rated Power
Consumption: 16W
- ★ Dimensions:
(W x D x H)
<MDR-2> 138 x 210 x 78mm
(5-2/5" x 8-1/4" x 3")
<MDR-2P> 180 x 210 x 78
(7" x 8-1/4" x 3")
- ★ Weight: <MDR-2> 1.85kg (4.1 lbs.)
<MDR-2P> 3.1kg (6.8 lbs.)
- ★ Accessories: MIDI Cable (1.5m) x 2
5V Power Cable (1.5m) x 1 (MDR-2 only)
3.5" 2DD Floppy Disk x 1
Remote Control Transmitter [RT-2] x 1
(including two 1.5V "AAA" batteries)

FCC INFORMATION (USA)

While the following statements are provided to comply with FCC Regulations in the United States, the corrective measures listed are applicable worldwide.

Yamaha Music Disk Recorder MDR-2/2P use frequencies that appear in the radio frequency range, and if installed in the immediate proximity of some types of audio or video devices within three meters (approximately ten feet), interference may occur.

Yamaha Music Disk Recorder MDR-2/2P has been type-tested and found to comply with the specifications set for a class B computer in accordance with those specifications listed in sub-part J. part 15 of the FCC rules. These rules are designed to provide a reasonable measure of protection against such interference. However, this does not guarantee that interference will not occur.

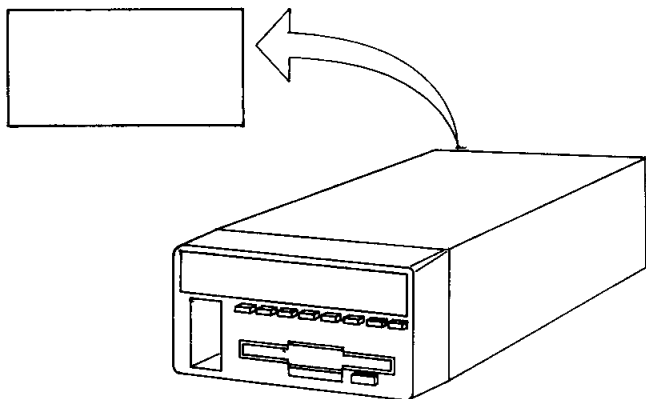
If your MDR-2/2P should be suspected of causing interference with other electronic devices, verification can be made by turning your MDR-2/2P off and on. If the interference continues when your MDR-2/2P is off, the MDR-2/2P is not the source of the interference. If your MDR-2/2P does appear to be the source of the interference, you should try to correct the situation by using one or more of the following measures:

- Relocate either the MDR-2/2P or the electronic device that is being affected by the interference.
- Utilize power outlets for the MDR-2/2P and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install a/c line filters.
- In the case of radio-TV interference, relocate the antenna or if the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact an authorized Yamaha dealer for suggestions and/or corrective measures. If you can not locate an authorized Yamaha dealer in your general area, please contact the Service Division, Yamaha International, 6600 Orangethorpe Ave. Buena Park, CA 90620, U.S.A.

If for any reason, you should need additional information relating to radio or TV interference, you may find a booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve radio-TV Interference Problems." This booklet, Stock # 004-000-00345-4, is available from the U.S. Government Printing Office, Washington D.C. 20402.

[Where to find the Name plate]
[Hier ist das Typenschild angebracht]
[Emplacement de la plaque signalétique]
[Dónde localizar el membrete]



Bescheinigung des Importeurs

Hiermit wird bescheinigt daß das Gerät in Übereinstimmung mit den Bestimmungen der VERFÜGUNG 1046/84. (Amtsblattverfügung) funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt. Das Funk Schutzzeichen ist beim VDE beantragt. Yamaha Europa GmbH: (Name des Importeurs)

MIDI Implementation Chart

Date : 05/15, 1986
Version: C

| Function... | Transmitted | Recognized | Remarks |
|---|--|--|---------------|
| Basic Channel Default Changed | all channels × | all channels × | not Basic ch. |
| Mode Default Messages Altered | 1 ***** | 1 × | |
| Note Number: True voice | 0-127 ***** | 0-127 | |
| Velocity Note ON Note OFF | <input type="radio"/> 9nH, V = 0-127 <input type="radio"/> 8nH, V = 0-127 | <input type="radio"/> 9nH, V = 0-127 <input type="radio"/> 8nH, V = 0-127 | |
| After Touch Keys Ch's | <input type="radio"/> <input type="radio"/> | <input type="radio"/> <input type="radio"/> | |
| Pitch Bender | <input type="radio"/> | <input type="radio"/> | |
| Control Change 1 2 5 6 7 64 65 96 97 | all | all | |
| Program Change: True # | <input type="radio"/> | <input type="radio"/> | |
| System Exclusive | <input type="radio"/> | <input type="radio"/> | |
| System: Song Pos : Song Sel Common: Tune | <input type="radio"/> <input type="radio"/> <input type="radio"/> | <input type="radio"/> <input type="radio"/> <input type="radio"/> | |
| System Real Time: Clock Commands | <input type="radio"/> <input type="radio"/> | <input type="radio"/> <input type="radio"/> | |
| Aux Local ON/OFF ALL Notes OFF Messages Active Sense Reset | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> | <input type="radio"/> <input type="radio"/> × <input type="radio"/> | |
| Notes: | | | |

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

○: YES
×: NO



YAMAHA
HAMAMATSU, JAPAN