

YAMAHA *Clavinova*®

CVP-70
CVP-50

Owner's Guide
Bedienungsanleitung
Manuel d'instructions
Manual del Propietario

IMPORTANT

Check your power supply

Make sure that your local AC mains voltage matches the voltage specified on the name plate. In both the CVP-70 and CVP-50 the nameplate is on the bottom panel. In some areas a voltage selector may be provided—on the bottom panel of the CVP-70 or on the rear panel of the CVP-50. Make sure that the voltage selector is set for the voltage in your area.

WICHTIG

Überprüfung der Stromversorgung

Sicherstellen, daß die örtliche Netzspannung den Betriebsspannungswerten entspricht, die in die Plakette auf der Rückseite des Keyboards eingetragen sind. Für manche Bestimmungsländer ist das Keyboard mit einem Spannungswähler (beim CVP-70 unten, beim CVP-50 auf der Rückseite) ausgerüstet. Darauf achten, daß der Spannungswähler auf die örtliche Netzspannung eingestellt ist.

IMPORTANT

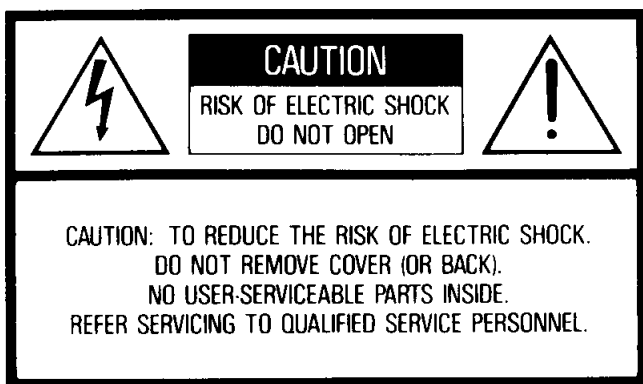
Contrôle de la source d'alimentation

S'assurer que la tension secteur locale correspond à la tension indiquée sur la plaque d'identification. La plaque d'identification du CVP-70 et celle du CVP-50 sont toutes deux situées sur le panneau inférieur. Les modèles destinés à certaines régions peuvent être équipés d'un sélecteur de tension, situé sur le panneau inférieur du CVP-70 et sur le panneau arrière du CVP-50. Vérifier que le sélecteur est bien réglé pour la tension secteur utilisée.

IMPORTANTE

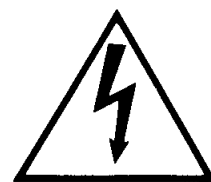
Verifique la alimentación de corriente

Asegúrese de que la tensión local de CA concuerde con la especificada en la placa de identificación. Tanto en la CVP-70 como en la CVP-50 la placa de identificación está situada en el panel inferior. En algunas áreas, la unidad viene provista de un selector de tensión, en el panel inferior en la CVP-70 o en el panel trasero en la CVP-50. Asegúrese de que este selector esté en la posición correspondiente a la tensión de su área.



See bottom of keyboard enclosure for graphic symbol markings

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



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.



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, Explanation of Graphical Symbols, 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 “PREPARATION” item.

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:

- The power-supply cord or plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the product; or
- The product has been exposed to rain; or
- The product does not operate, exhibits a marked change in performance; or
- 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 read FCC Information on back cover for additional information.

**PLEASE KEEP THIS MANUAL
FOR FUTURE REFERENCE!**

INTRODUCTION

Thank you for choosing a Yamaha CVP-70 or CVP-50 Clavinova. Your Clavinova is a fine musical instrument that employs advanced Yamaha music technology. With the proper care, your Clavinova will give you many years of musical pleasure.

- Yamaha's sophisticated AWM (Advanced Wave Memory) tone generator system offers 22 rich, vibrant, digitally sampled instrument voices, plus 32 rhythm patterns.
- A full-size 88-key keyboard and 32-note polyphony on the CVP-70 or 16-note polyphony on the CVP-50 permit use of the most sophisticated playing techniques.
- Piano-like touch response provides extensive expressive control and outstanding playability.

- A number of effects for wide-ranging sonic expression.
- A versatile range of performance functions including Solo Styleplay, Piano ABC, Keyboard Percussion, a Performance Memory, and more.
- Internal 3.5" floppy disk drive provides extended Performance Memory capacity and Disk Orchestra playback capability.
- MIDI compatibility and a range of MIDI functions make the Clavinova useful in a range of advanced MIDI music systems

VORWORT

Vielen Dank für den Kauf des Yamaha Clavinovas CVP-70 oder CVP-50. Ihr Clavinova stellt ein hochwertiges Musikinstrument dar, das auf der überlegenen Yamaha Musik-Technologie basiert. Bei angemessener Pflege wird Ihnen Ihr Clavinova über viele Jahre ungetrübten Spielgenuß bieten.

- Das überlegene Yamaha AWM-Tonerzeugungssystem, das mit gespeicherten digitalen Wellensamples arbeitet, bietet Ihnen 22 realistische, klangvolle Instrumentstimmen und 32 aufregende Rhythmusklänge.
- Das ausgewachsene 88-Tastenmanual und die 32 Noten Polyphonie des CVP-70 bzw. die 16 Noten Polyphonie des CVP-50 erlauben selbst komplizierteste Spieltechniken.

- Die klavierähnliche Anschlagsdynamik und das gewichtete Manual erlauben feinste Nuancierung des musikalischen Ausdrucks und sorgen für eine natürliche Anschlagsansprache.
- Integrierte Effektfunktionen gewähren zusätzliche musikalische Ausdrucksmöglichkeiten.
- Vielseitige Spielfunktionen und Merkmale wie Solo- und Auto-Begleitfunktion, Schlagzeug- sowie Sequenzerfunktion usw. bieten umfangreiche kreative Möglichkeiten.
- Eingebautes 3,5 Zoll Diskettenlaufwerk zum Speichern von Daten und Abspielen von Disk Orchestra-Disketten.
- Dank der MIDI-Kompatibilität und den zahlreichen MIDI-Funktionen läßt sich das Clavinova problemlos in komplexe MIDI-Musiksysteme eingliedern.

INTRODUCTION

Nous vous remercions d'avoir choisi le Clavinova Yamaha CVP-70 ou CVP-50. Le Clavinova est un instrument de musique perfectionné faisant appel aux innovations les plus récentes de la technologie musicale mises au point par Yamaha. Si vous utilisez votre Clavinova avec le soin qui convient, il vous donnera de grandes satisfactions pendant de longues années.

- Le système générateur de sons AWM (de l'anglais Advanced Wave Memory) sophistiqué de Yamaha vous offre 22 voix instrumentales, riches et vibrantes, échantillonnées numériquement et 32 patterns rythmiques.
- Un clavier à 88 touches, avec polyphonie à 32 notes pour le CVP-70 et à 16 notes pour le CVP-50, permet d'utiliser des techniques d'exécution extrêmement complexes.

- Une réponse au toucher similaire à celle d'un piano vous permet un plus grand contrôle de l'expression et vous offre des possibilités d'exécution remarquables.
- Un certain nombre d'effets incorporés offrent une variété extraordinaire d'expressions sonores extraordinaires.
- Une grande diversification de fonctions d'exécution, dont Solo Styleplay, Piano ABC, Percussion au clavier, une mémoire de performance, et bien plus encore.
- Un lecteur de disquette de 3,5" incorporé offre une capacité de mémoire de performance illimitée et la possibilité de reproduction orchestrale par disquette.
- La compatibilité MIDI et toute une série de fonctions MIDI permettent d'utiliser le Clavinova dans une grande variété de systèmes musicaux MIDI perfectionnés.

INTRODUCCION

Gracias por su elección de la Yamaha Clavinova CVP-70 o CVP-50. Su Clavinova es un instrumento musical de calidad que emplea la avanzada tecnología musical de Yamaha. Con un trato adecuado, le brindará muchos años de satisfacciones musicales.

- El sofisticado sistema generador de tonos AWM (Advanced Wave Memory, o Memoria Avanzada de Onda) de Yamaha ofrece 22 ricos y vibrantes sonidos de teclado muestreados digitalmente, más 32 sonidos de ritmos.
- El teclado de 88 teclas con polifonía de 32 notas en la CVP-70 o de 16 notas en la CVP-50 permite el uso de las más avanzadas técnicas de interpretación.
- Una respuesta al toque similar a la del piano brinda amplio control expresivo y notable facilidad de ejecución.

- Gran variedad de efectos que hacen posible una amplia gama de expresiones sonoras.
- Versátiles funciones de interpretación, incluyendo interpretación de solos, piano ABC, percusión por teclado y una memoria de interpretaciones, entre otras.
- La unidad interna de discos flexibles de 3,5 pulgadas proporciona mayor capacidad de memoria de interpretaciones y de reproducción de discos de orquesta.
- Su compatibilidad con el sistema MIDI, y sus variadas funciones MIDI, hacen de la Clavinova un útil componente en cualquier sistema musical MIDI avanzado.

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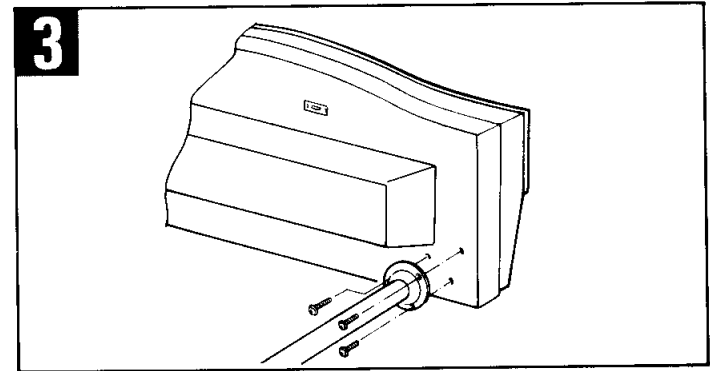
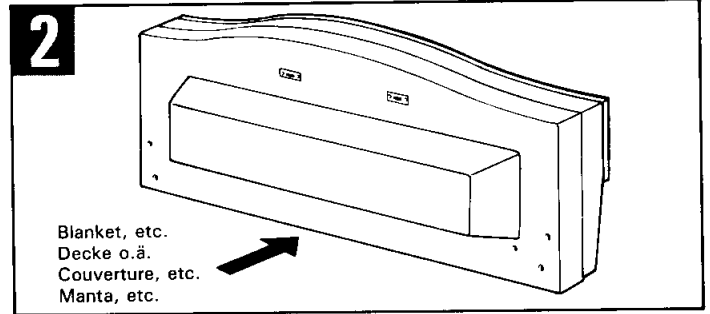
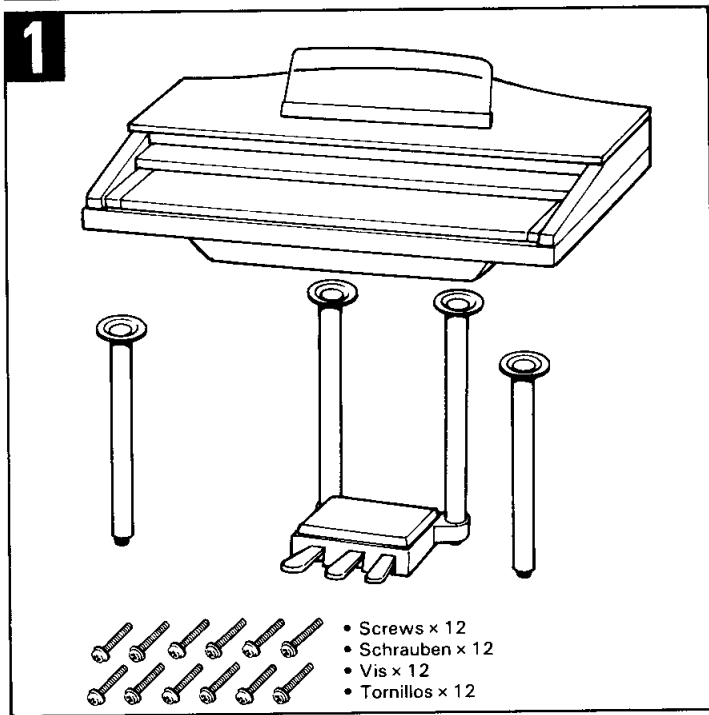
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CVP-70 ASSEMBLY/MONTAGE DES CVP-70/MONTAGE DU



NOTE: We do not recommend attempting to assemble the CVP-70 alone. The job can be easily accomplished, however, with only two people.

HINWEIS: Wir raten davon ab, die Montage und Aufstellung des CVP-70 alleine auszuführen. Zwei Personen können das CVP-70 jedoch problemlos zusammenbauen und aufstellen.

1 Open the box and remove all the parts.

On opening the box you should find the parts shown in the illustration. Check to make sure that all the required parts are provided.

2 Carefully lean the main unit against a wall.

To make it easier to install the legs, place a soft blanket or similar material on the floor near a wall, place the front panel of the Clavinova (the side with the keyboard) on it and gently lean the unit against the wall—**MAKING SURE THAT IT CAN NOT FALL**—as shown in the illustration.

3 Attach the front legs.

Securely attach the two front legs using three screws each, as shown in the illustration. Make sure the screws are securely tightened.

4 Attach the rear legs and pedal box assembly.

Before attaching the rear legs and pedal box assembly, insert the plugs extending from the top of each leg into the sockets in the corresponding recesses in the main unit. Then securely attach the rear legs and pedal box assembly using three screws per leg.

5 Adjust the legs and pedal adjusters.

Stand the Clavinova upright and use the screw feet at the bottom of each leg to adjust the length of the legs for optimum stability. For pedal stability, two adjusters are also provided on the bottom of the pedal assembly. Rotate the adjusters until they come in firm contact with the floor surface. The adjusters ensure stable pedal operation and facilitate pedal effect control.

* If the adjusters are not in firm contact with the floor surface, distorted sound may result.

1 Versandkarton öffnen und alle Teile auspacken.

Der Karton sollte all die in der obigen Abbildung gezeigten Teile enthalten. Vergewissern Sie sich, daß alle benötigten Teile vorhanden sind.

2 Das Keyboard vorsichtig gegen eine Wand lehnen.

Eine Decke auf den Boden neben der Wand legen, die Vorderseite des Keyboards (Manualeseite) entsprechend der Abbildung daraufstellen und das Clavinova sanft gegen eine Wand lehnen, um das Montieren der Standbeine zu erleichtern. **ACHTEN SIE DARAUF, DASS DAS CLAVINOVA NICHT UMFALLEN KANN!**

3 Die vorderen Standbeine anschrauben.

Entsprechend der Abbildung die Standbeine an das Keyboard anschrauben. Sicherstellen, daß die Schrauben gut festgezogen sind.

4 Die hinteren Standbeine mit dem Pedalkasten montieren.

Vor dem Anschrauben die Stecker der Standbeine an den eingelassenen Anschlüssen des Keyboards anschließen. Dann die Standbeine und den Pedalkasten mit drei Schrauben pro Bein fest anbringen.

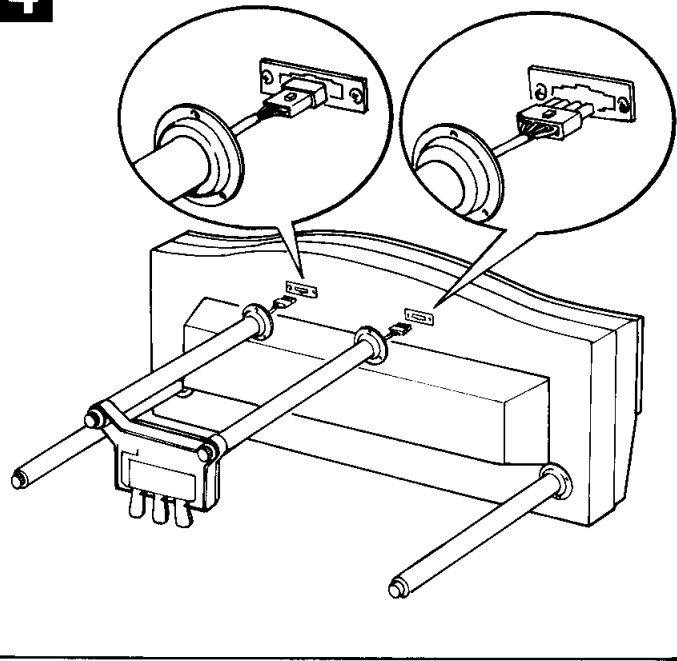
5 Die Höhe der Beine und der Pedalstützschrauben justieren.

Das Clavinova aufrecht stellen und die Schraubfüße an den Standbeinen so justieren, daß das Clavinova stabil steht. Am Pedalkasten befinden sich unten ebenso zwei Stützschrauben, um diesen zu stützen. Die Stützschrauben drehen, bis sie fest auf dem Boden aufsetzen. Diese Schrauben gewährleisten eine stabile Pedalansprechung und vereinfachen die Effektsteuerung über Pedale.

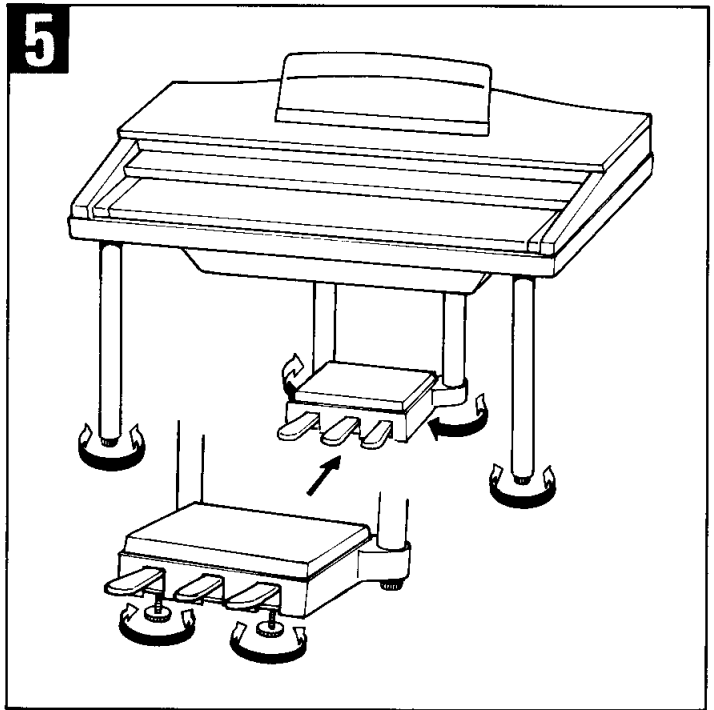
* Falls die Stützschrauben nicht am Boden aufsitzen, kann es zu Verzerrungen kommen.

CVP-70/MONTAJE DE LA CVP-70

4



5



REMARQUE: Nous ne vous conseillons pas d'essayer d'assembler le CVP-70 seul. Toutefois, ce travail peut être facilement exécuté par deux personnes.

1 Ouvrir le carton et retirer toutes les pièces

Les pièces indiquées sur l'illustration devraient toutes se trouver dans le carton. Vérifier qu'il n'en manque aucune.

2 Appuyer avec soin l'unité principale contre un mur

Afin de faciliter la pose des pieds, mettre une couverture douce sur le plancher près d'un mur, y poser le bord avant du Clavinova (le bord avec le clavier) et appuyer l'unité contre le mur de la manière illustrée—**EN FAISANT TRES ATTENTION QU'ELLE NE PUISSE PAS GLISSER.**

3 Fixer les pieds avant

Fixer solidement les deux pieds avant au moyen de trois vis par pied, comme illustré. Prendre bien soin de serrer les vis à fond.

4 Poser les pieds arrière et le pédalier

Avant de fixer les pieds arrière et le pédalier, introduire les prises sortant du haut de chaque pied dans les prises femelles correspondantes de l'unité principale. Fixer ensuite solidement les pieds arrière et le pédalier au moyen de trois vis par pied.

5 Régler la hauteur des pieds et du pédalier

Mettre le Clavinova debout et utiliser les vis de réglage situées au bas de chaque pied pour régler la hauteur afin que le Clavinova soit le plus stable possible. Deux dispositifs de réglage sont prévus à la partie inférieure du pédalier pour assurer sa stabilité. Les tourner jusqu'à ce qu'ils soient en contact ferme avec la surface du sol. Ces dispositifs assurent la stabilité du pédalier lors de son utilisation et facilitent la commande au pied des effets.

* Si ces dispositifs ne sont pas en contact ferme avec le sol, il peut se produire une distorsion du son.

NOTA: No le aconsejamos intentar montar la CVP-70 solo. Este trabajo puede realizarse fácilmente entre dos personas.

1 Abra la caja y extraiga todas las partes.

En la caja deberá encontrar las partes mostradas en la ilustración. Confirme que todas las partes necesarias estén incluidas.

2 Coloque con cuidado la unidad principal contra una pared.

Para facilitar la instalación de las patas, coloque una manta blanda o material similar sobre el piso cerca de una pared, coloque el panel frontal de la Clavinova (el lado con el teclado) encima y ponga con cuidado la unidad contra la pared—**CERCIORANDOSE DE QUE NO PUEDA CAERSE**—como se muestra en la ilustración.

3 Una las patas delanteras.

Fije bien las dos patas delanteras empleando tres tornillos para cada una, como se muestra en la ilustración. Cerciórese de que los tornillos quedan bien apretados.

4 Una las patas traseras y el conjunto de la caja de pedales.

Antes de montar las patas traseras y el conjunto de la caja de pedales, inserte las clavijas que se extienden desde la parte superior de cada pata en los receptáculos de las partes correspondientes de la unidad principal. Entonces, fije bien las patas traseras y el conjunto de la caja de pedales empleando tres tornillos para cada pata.

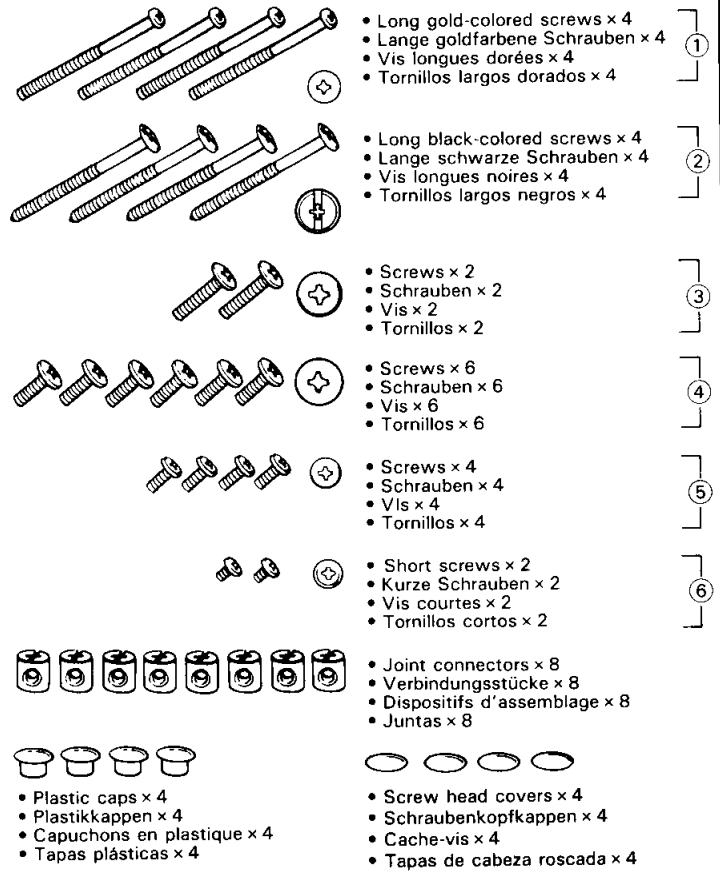
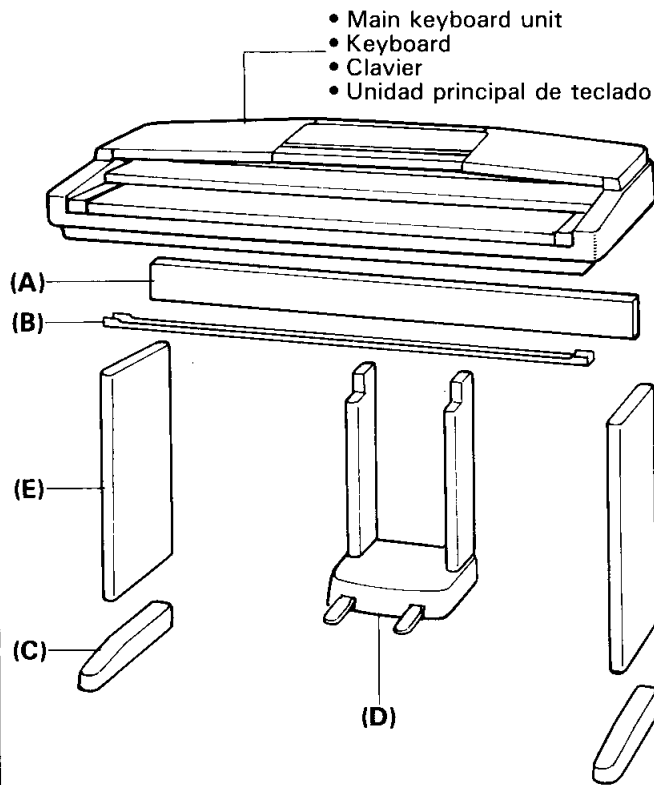
5 Ajuste las patas y los ajustadores de los pedales.

Coloque la Clavinova de pie y emplee el tornillo de las patas de la parte inferior de cada pata, para ajustar la longitud de las patas que ofrezca la mejor estabilidad. Para la estabilidad de los pedales, hay dos ajustadores en la parte inferior del conjunto de pedales. Gire los ajustadores hasta que se pongan bien en contacto con la superficie del piso. Los ajustadores aseguran una operación estable de los pedales y facilitan el control de efectos con los pedales.

* Si los ajustadores no están bien en contacto con la superficie del piso, puede producirse distorsión del sonido.

CVP-50 ASSEMBLY/MONTAGE DES CVP-50/MONTAGE DU

1



NOTE: We do not recommend attempting to assemble the CVP-50 alone. The job can be easily accomplished, however, with only two people.

HINWEIS: Wir raten davon ab, die Montage und Aufstellung des CVP-50 alleine auszuführen. Zwei Personen können das CVP-50 jedoch problemlos zusammenbauen und aufstellen.

1 Open the box and remove all the parts.

On opening the box you should find the parts shown in the illustration. Check to make sure that all the required parts are provided.

1 Versandkarton öffnen und alle Teile auspacken.

Der Karton sollte all die in der obigen Abbildung gezeigten Teile enthalten. Vergewissern Sie sich, daß alle benötigten Teile vorhanden sind.

2 Assemble the side panels (E) and feet (C).

Install the joint connectors in side panels (E) as shown in the illustration, then secure the feet (C) to the side panels (E) with the long gold-colored screws ①. Once secure, push in the plastic caps provided.

2 Die Standbeine (E) und Füße (C) verschrauben.

Entsprechend der Abbildung die Verbindungsstücke an den Standbeinen (E) anbringen. Dann die Füße (C) mit Hilfe der goldfarbenen langen Schrauben ① an den Standbeinen (E) anschrauben. Nach dem Festziehen der Schrauben die mitgelieferten Plastikkappen auf die Schraublöcher aufsetzen.

* When installing the joint connectors in the holes in the side panels (E), make sure that they are rotated to the position shown in the illustration.

* Beim Einsetzen der Verbindungsstücke in die Standbeine (E) sicherstellen, daß sie in die Position gedreht sind, wie in der Abbildung gezeigt.

3 Attach the side panels (E) to the center panel (A).

Install four joint connectors in the holes provided in the center panel (A), and attach to the side panels (E) using the four long black-colored screws ② as shown in the illustration. Cover the screw heads with the screw head covers.

3 Die Standbeine (E) mit dem Auflagebrett (A) verschrauben.

Die vier Verbindungsstücke in die Löcher in der Rückwand (A) einsetzen. Dann die beiden Standbeine (E) entsprechend der Abbildung mit Hilfe der schwarzen Schrauben ② am Auflagebrett (A) anschrauben. Die Schraubenkopfkappen aufsetzen.

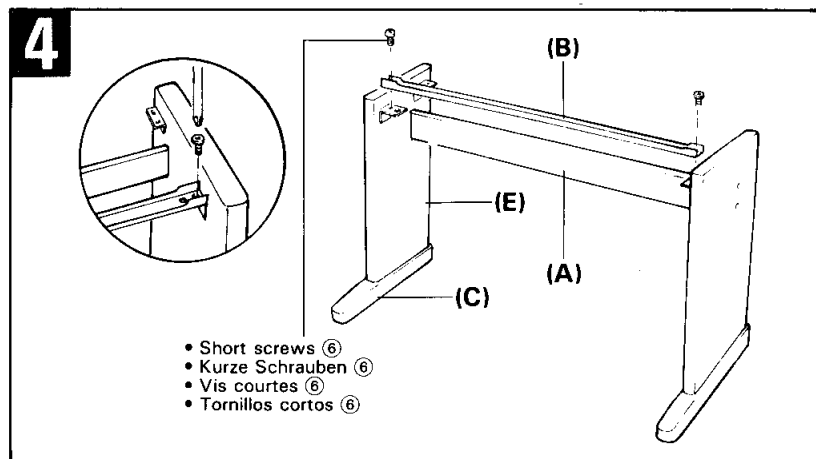
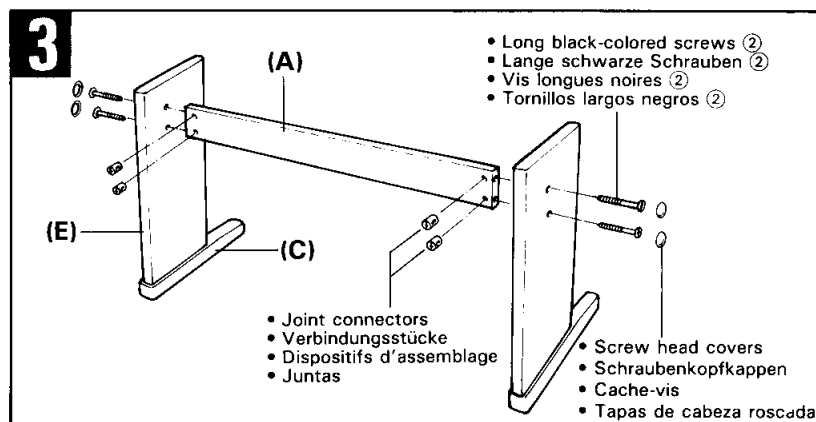
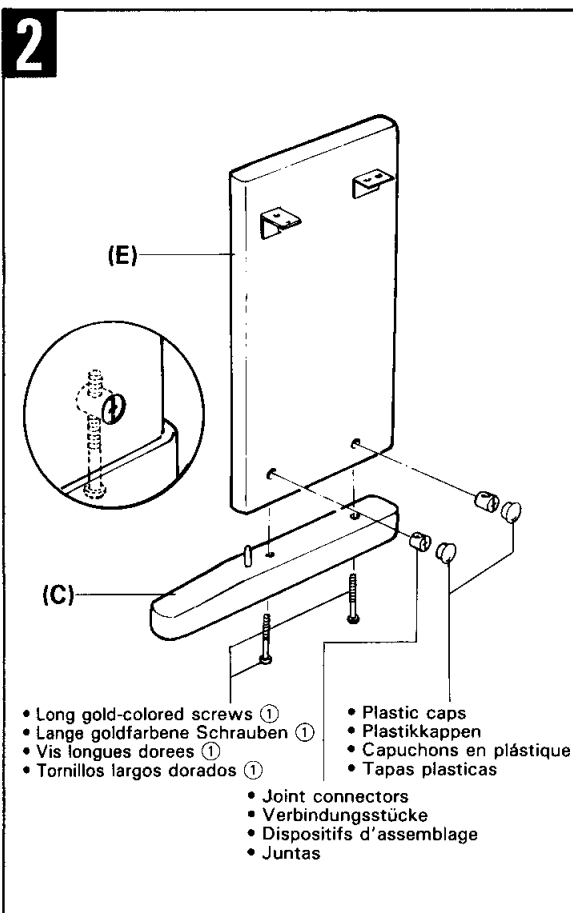
4 Attach front bracket (B) between side panels (E).

Attach the long black metal bracket (B) to the corresponding brackets on the side panels using two short screws ⑥, as shown in the illustration. The flanged edges of bracket (B) should face upwards.

4 Die Strebe (B) zwischen den Standbeinen anbringen.

Gemäß der Abbildung die lange schwarze Metallstrebe (B) an den entsprechenden Halterungen der Standbeine mit zwei kurzen schwarzen Schrauben anbringen. Die Flanschenden der Strebe (B) sollten dabei nach oben weisen.

CVP-50/MONTAJE DE LA CVP-50



REMARQUE: Nous ne vous conseillons pas d'essayer d'assembler le CVP-50 seul. Toutefois, ce travail peut être facilement exécuté par deux personnes.

NOTA: No le aconsejamos intentar montar la CVP-50 solo. Este trabajo puede realizarse fácilmente entre dos personas.

1 Ouvrir le carton et retirer toutes les pièces
Les pièces indiquées sur l'illustration devraient toutes se trouver dans le carton. Vérifier qu'il n'en manque aucune.

1 Abra la caja y extraiga todas las partes.
En la caja deberá encontrar las partes mostradas en la ilustración. Confirme que todas las partes necesarias estén incluidas.

2 Monter les panneaux latéraux (E) sur les pieds (C)
Poser les dispositifs d'assemblage sur les panneaux latéraux (E) de la manière illustrée, puis fixer les pieds (C) aux panneaux latéraux (E) à l'aide des vis longues dorées ①. Une fois les vis posées, placer les caches en plastique fournis.

2 Una los paneles laterales (E) con las patas (C).
Coloque las juntas en los paneles laterales (E) como se ve en la ilustración, y fije las patas (C) a los paneles laterales (E) con los tornillos largos dorados ①. Después coloque las tapas plásticas incluidas.

* Lors de la pose des dispositifs d'assemblage dans les trous des panneaux latéraux (E), veiller à les diriger dans le sens indiqué sur l'illustration.

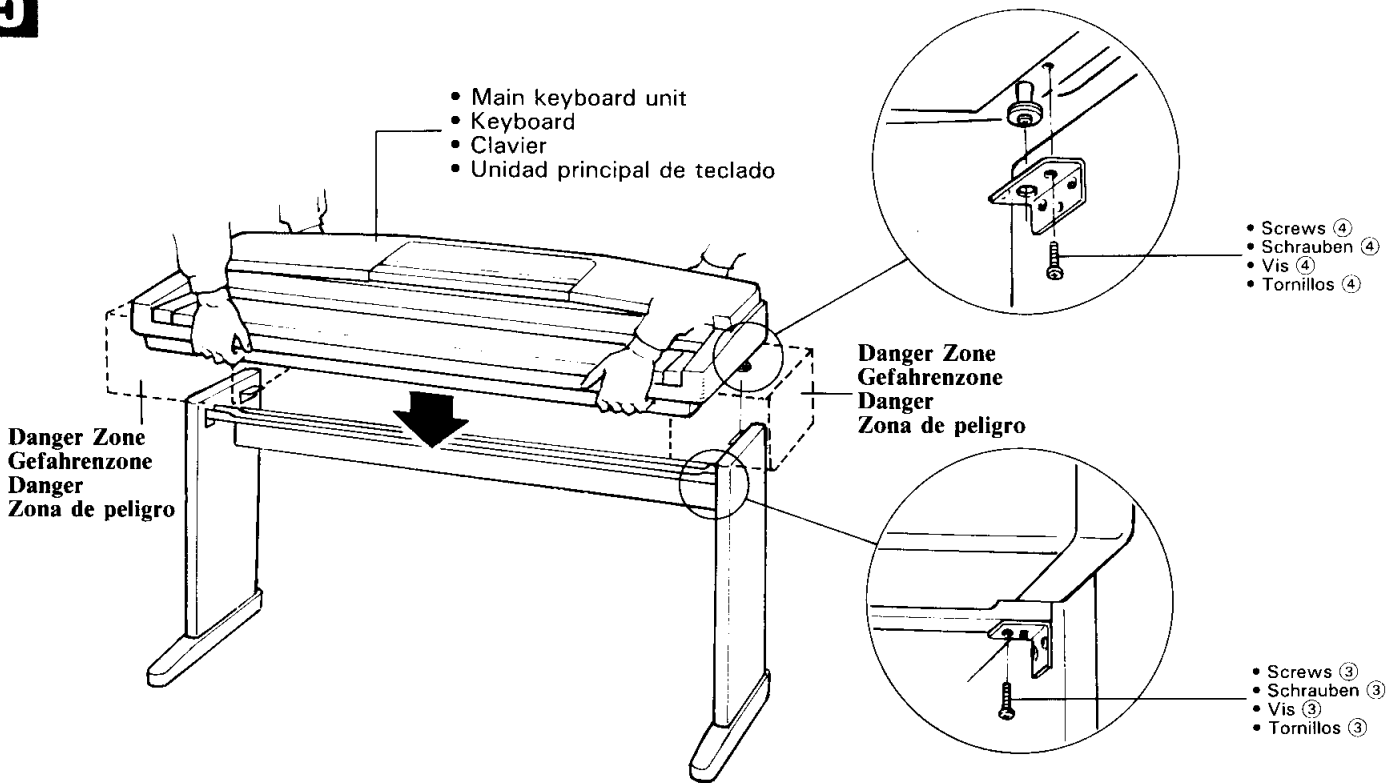
* Cuando coloque las juntas en los orificios de los paneles laterales (E), asegúrese de que queden en la dirección mostrada en la figura.

3 Fixer les panneaux latéraux (E) au panneau central (A)
Poser de la manière illustrée les quatre dispositifs d'assemblage dans les trous du panneau central (A) et le fixer aux panneaux latéraux (E) à l'aide des quatre vis longues de couleur noire ②. Couvrir la tête de chaque vis à l'aide des caches fournis.

3 Una los paneles laterales (E) al panel central (A).
Coloque cuatro juntas en los orificios del panel central (A) y únele los paneles laterales (E) mediante los cuatro tornillos negros largos ② como se ilustra. Cubra las cabezas de los tornillos con las tapas de tornillos.

4 Fixer le support avant (B) entre les panneaux latéraux (E)
Fixer de la manière illustrée le support métallique long (B) aux ferrures correspondantes des panneaux latéraux à l'aide de deux vis courtes ⑥. Le bord recourbé du support (B) doit être dirigé vers le haut.

4 Coloque la ménsula delantera (B) entre los paneles laterales (E).
Una la ménsula de metal negra larga (B) con las correspondientes ménsulas de los paneles laterales empleando dos tornillos cortos ⑥ como se ve en la figura. Los bordes con pestaña de la ménsula (B) deben quedar mirando hacia arriba.

5**5 Install the main keyboard unit.**

As shown in the illustration, gently lower the main keyboard unit onto the stand assembly so that the two black plastic cones protruding from the bottom of the keyboard fit into the larger holes in the brackets near the rear edge of the side panels (E). Secure the main keyboard unit to the stand assembly using two screws ④ screwed through the rear brackets and two screws ③ through the front bracket.

* When disassembling the Clavinova unscrew the black cones using a "+" (Philips) screwdriver.

* Keep your fingers away from the area marked "Danger Zone" in the illustration when lowering the main keyboard unit onto the stand assembly.

6 Attach the pedal assembly.

Before actually attaching the pedal assembly (D), be sure to plug the pedal cord connector which is protruding from the top of the pedal assembly into the corresponding connector in the bottom of the main keyboard unit. Once the pedal cord has been connected, align the pedal assembly with the screw holes on the main unit and center panel (A), making sure that the slack section of pedal cord fits into the recess in the top of the pedal assembly, and screw the four screws ⑤ into the center panel (A), and the four screws ④ into the main keyboard unit.

* Check to make sure that all screws have been securely tightened.

7 Be sure to set the pedal adjusters.

For stability, two adjusters are provided on the bottom of the pedal assembly (D). Rotate the adjusters until they come in firm contact with the floor surface. The adjusters ensure stable pedal operation and facilitate pedal effect control.

* If the adjusters are not in firm contact with the floor surface, distorted sound may result.

5 Das Keyboard montieren.

Gemäß der Abbildung das Keyboard vorsichtig auf den Ständer so absenken, daß die beiden schwarzen Plastikknöpfe auf der Unterseite des Keyboards in die größeren Löcher nahe der hinteren Kante der Standbeine (E) fassen. Das Keyboard mit zwei Schrauben ④ hinten und zwei Schrauben ③ vorne befestigen.

* Beim Zerlegen des Keyboardständers die schwarzen Plastikknöpfe mit einem Kreuzschraubenzieher entfernen.

* Beim Aufsetzen auf den Ständer das Keyboard nicht am mit "Gefahrenzone" bezeichneten Bereich fassen, um ein Einklemmen der Finger zu verhindern.

6 Pedalgestell anbringen.

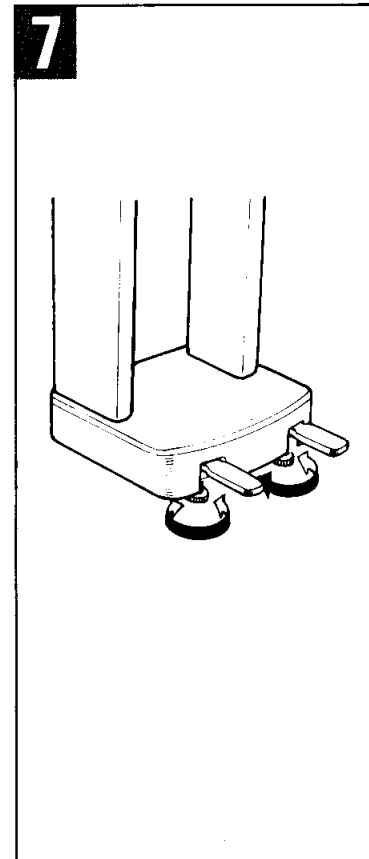
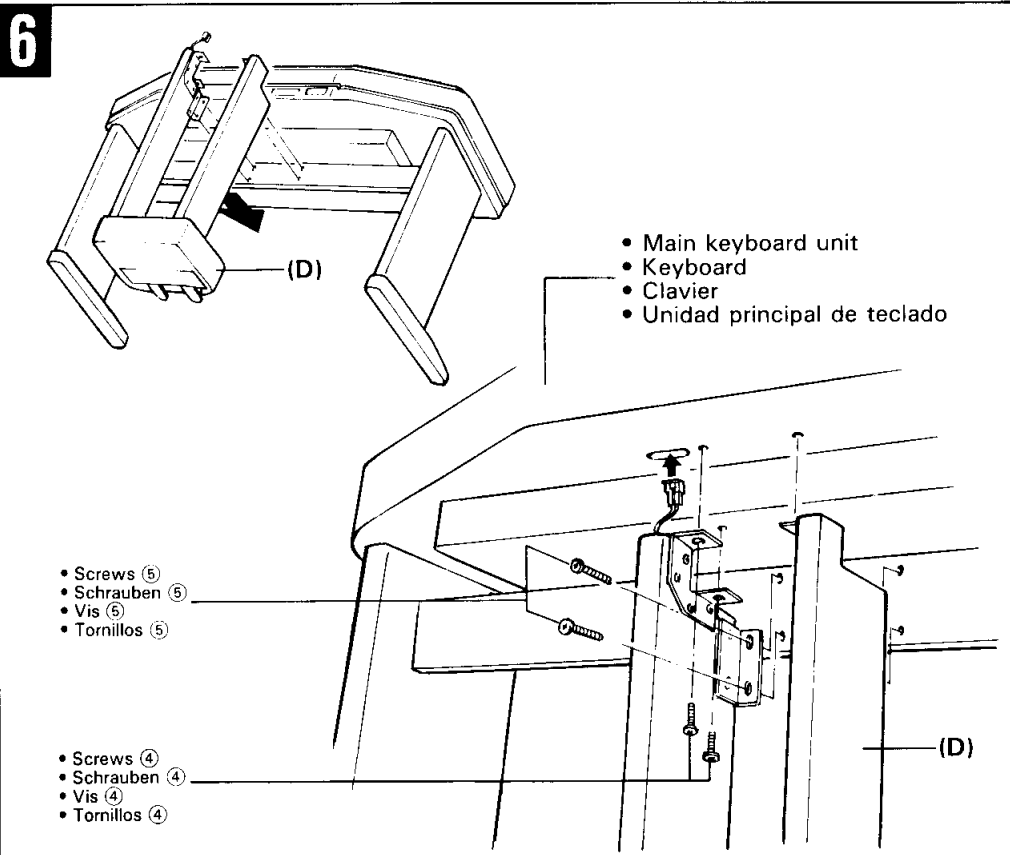
Vor dem Anbringen des Pedalgestells (D) zunächst den Anschluß oben am Pedalgestell mit dem Anschluß unten am Keyboard verbinden. Nach dem Anschließen des Pedalkabels das Pedalgestell mit den Schraubenlöchern im Keyboard und am Auflagebrett (A) ausrichten. Dabei darauf achten, daß das Pedalkabel in der Einbuchtung oben am Pedalgestell sitzt. Dann das Pedalgestell mit vier Schrauben ⑤ am Auflagebrett und mit vier Schrauben ④ am Keyboard anbringen.

* Sicherstellen, daß alle Schrauben gut festgezogen sind.

7 Stützschrauben des Pedalgestells einstellen.

Zur Stabilisierung sind unten am Pedalgestell (D) zwei Stützschrauben angebracht. Die Stützschrauben drehen, bis sie am Boden aufsitzen. Die beiden Stützschrauben gewährleisten Pedalstabilität und sorgen für akkurate Effektsteuerung.

* Falls die Stützschrauben nicht am Boden aufsitzen, kann es zu Klangverzerrungen kommen.



5 Poser le clavier

Poser le clavier de la manière illustrée, en l'abaissant avec précaution sur l'ensemble et en veillant à ce que les deux cônes noirs en plastique, qui sont situés sous le clavier, viennent se placer dans les gros orifices des ferrures, près du bord arrière des panneaux latéraux (E). Fixer le clavier à l'ensemble de support à l'aide de deux vis (4) introduites dans les ferrures arrière et de deux vis (3) introduites dans le support avant.

* Pour démonter le Clavinova, dévisser les cônes noirs à l'aide d'un tournevis cruciforme (Phillips).

* Pour abaisser le clavier sur l'ensemble de support, ne pas le tenir aux endroits marqués "Danger" sur l'illustration.

6 Poser le pédalier

Avant de poser définitivement le pédalier (D), veiller à brancher le connecteur du cordon de pédale, sortant de la partie supérieure du pédalier, au connecteur correspondant situé à la partie inférieure du clavier. Une fois que le cordon de pédale est branché, aligner le pédalier sur les trous de vis du clavier et du panneau central (A), en veillant à placer le cordon de pédale dans la rainure située à la partie supérieure du pédalier et poser les quatre vis (5) sur le panneau central (A) et les quatre vis (4) sur le clavier.

* Vérifier que toutes les vis sont serrées à fond.

7 Ne pas oublier de régler la hauteur du pédalier

Deux dispositifs de réglage sont prévus à la partie inférieure du pédalier (D) pour assurer sa stabilité. Les tourner jusqu'à ce qu'ils soient en contact ferme avec la surface du sol. Ces dispositifs assurent la stabilité du pédalier lors de son utilisation et facilitent la commande au pied des effets.

* Si ces dispositifs ne sont pas en contact ferme avec le sol, il peut se produire une distorsion du son.

5 Instale la unidad de teclado principal.

Coloque la unidad de teclado principal cuidadosamente sobre el conjunto de base de modo que los dos conos negros de plástico que salen de la base del teclado encajen en las aberturas grandes de las ménsulas cerca del borde trasero de los paneles laterales (E). Fije la unidad de teclado principal al conjunto de base con dos tornillos (4) pasados a través de las ménsulas traseras y otros dos (3) pasados a través de la ménsula delantera.

* Cuando desmonte la Clavinova, desenrosque los conos negros con un destornillador de cabeza en cruz "+".

* Cuando coloque la unidad de teclado principal sobre el conjunto de base, mantenga sus dedos fuera del área marcada "Zona de peligro" en la ilustración.

6 Monte el conjunto de los pedales

Antes de montar el conjunto de los pedales (D), asegúrese de enchufar el conector del cable de los pedales, proveniente de la parte superior del conjunto de los pedales, en el conector correspondiente debajo de la unidad de teclado principal. Una vez efectuada esta conexión, alinee el conjunto de los pedales con los orificios de tornillo de la unidad principal y del panel central (A), cuidando que la sección sobrante de cable quede dentro del hueco en la parte superior del conjunto de los pedales, y enrosque los cuatro tornillos (5) en el panel central (A), y los cuatro tornillos (4) en la unidad de teclado principal.

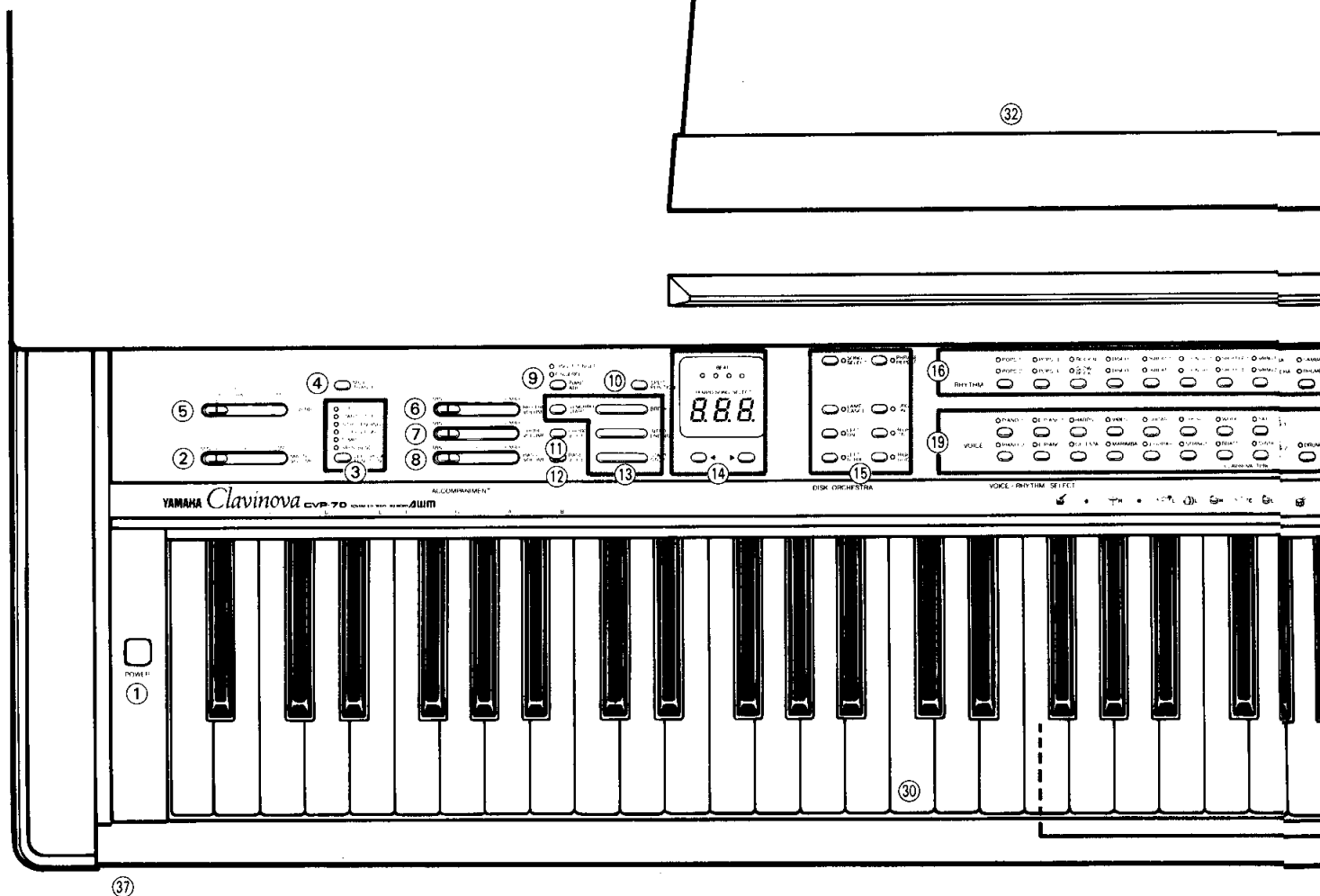
* Confirme que todos los tornillos estén bien apretados.

7 No olvide disponer los ajustadores de pedal.

Dos ajustadores han sido instalados debajo de la caja de pedales (D) para dar estabilidad a la misma. Gire los ajustadores hasta que queden en firme contacto con la superficie del piso. Los ajustadores aseguran una estable operación de los pedales y facilitan el control de sus efectos.

* Si los ajustadores no están en firme contacto con la superficie del piso, puede distorsionarse el sonido.

CVP-70 CONTROLS & CONNECTORS



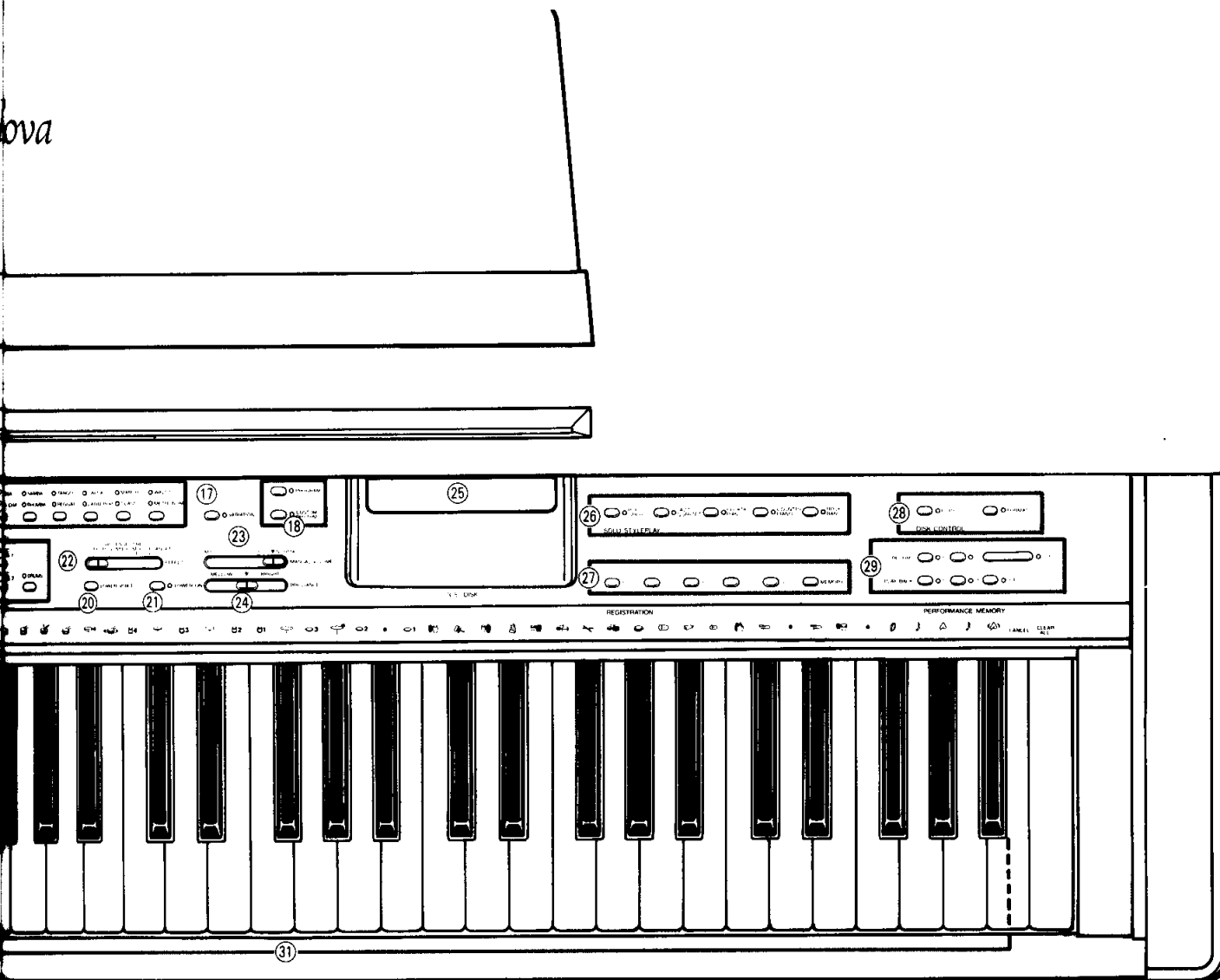
Control Panel

- ① POWER Switch [see page 14]
- ② MASTER VOLUME Control [see page 14]
- ③ LEFT PEDAL FUNCTION Button & Indicators [see page 16]
- ④ MIDI/TRANPOSE Button [see page 17]
- ⑤ REVERB Selector [see page 15]
- ⑥ RHYTHM VOLUME Control [see page 18, 22]
- ⑦ CHORD VOLUME Control [see page 21, 22]
- ⑧ BASS VOLUME Control [see page 21, 22]
- ⑨ PIANO ABC Button & Indicators [see page 21]
- ⑩ SPLIT POSITION Button [see page 16]
- ⑪ CHORD VOICE button [see page 22]
- ⑫ BASS VOICE Button [see page 22]
- ⑬ Rhythm Controls (START/STOP, SYNCHRO START, INTRO/ENDING, BREAK Buttons and FILL IN Bars) [see page 18]
- ⑭ Beat/Tempo/Song Number Display & Buttons (◀ and ▶) [see page 18, 23, 24]
- ⑮ DISK ORCHESTRA Controls (SONG SELECT, PHRASE REPEAT, LAMP CANCEL, ORCH ON, LEFT ON, RIGHT ON, LEFT GUIDE, RIGHT GUIDE Buttons).. [see page 23]
- ⑯ Rhythm Selectors & Indicators [see page 18, 20]
- ⑰ VARIATION Button [see page 18]
- ⑱ CUSTOM RHYTHM and PROGRAM Buttons [see page 20]
- ⑲ Voice Selectors & Indicators [see page 14]
- ⑳ LOWER VOICE Button [see page 16]
- ㉑ LOWER ON Button & Indicator [see page 16]
- ㉒ EFFECT Selector [see page 15]
- ㉓ MANUAL VOLUME Control [see page 16, 22]
- ㉔ BRILLIANCE Control [see page 15]
- ㉕ 3.5" Disk Drive Unit [see page 23]
- ㉖ SOLO STYLEPLAY Selectors [see page 22]
- ㉗ REGISTRATION Buttons..... [see page 27]

- ㉘ DISC CONTROL Buttons (COPY, FORMAT) [see page 24, 26]
- ㉙ Performance Memory Controls & Indicators (RECORD 1/2/3-10 and PLAYBACK 1/2/3-10) [see page 24]
- ㉚ Keyboard [see page 16, 17, 21]
- ㉛ Keyboard Percussion Keys [see page 19]
- ㉜ Music Stand [see page 14]

Rear/Bottom Panel

- ㉝ OPTIONAL IN L/R and OUT L/R Jacks
 These jacks are intended primarily for use with Yamaha EM-series Expander Modules such as the EME-1 Reverb Box, EMT-1 FM Sound Box, EMT-10 AWM Sound Box and EMR-1 Drum Box. In the case of the EME-1 Reverb Box, for example, the OPTIONAL OUT jacks connect to the EME-1 LINE IN jacks, and the EME-1 LINE OUT jacks connect back to the Clavinova OPTIONAL IN jacks. This allows application of a range of high-quality digital effects, including reverb and echo, to the Clavinova sound. Refer to the EM-series Expander Module device owner's manual for connection details.



34 AUX OUT L/R Jacks

The AUX OUT L and R jacks deliver the output of the Clavinova for connection to a stereo sound system, a mixing console or a tape recorder.

Note: The AUX OUT jack signal must never be returned to the OPTIONAL IN jacks, either directly or through external equipment. Always use the OPTIONAL IN and OUT jacks when connecting EM-series or other Yamaha peripheral equipment.

35 MIDI IN, THRU and OUT Connectors

The MIDI IN connector receives MIDI data from an external MIDI device (such as the EMQ-1 Memory Box) which can be used to control the Clavinova. The MIDI THRU connector re-transmits any data received at the MIDI IN connector, allowing "chaining" of several MIDI instruments or other devices. The MIDI OUT connector transmits MIDI data generated by the Clavinova (e.g. note and velocity data produced by playing the Clavinova keyboard).

More details on MIDI are given in "MIDI FUNCTIONS" on page 28.

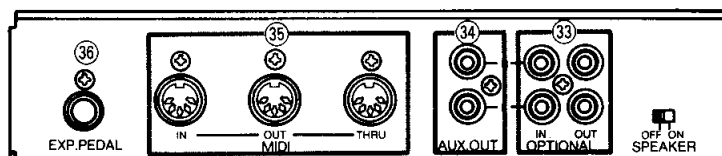
36 EXPRESSION PEDAL Jack

An optional Yamaha EP-1 Expression Pedal can be connected to this jack to allow foot expression (swell) control.

37 HEADPHONE Jack

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal speaker system is automatically shut off when a pair of headphones is plugged into the HEADPHONE jack.

Rear Panel

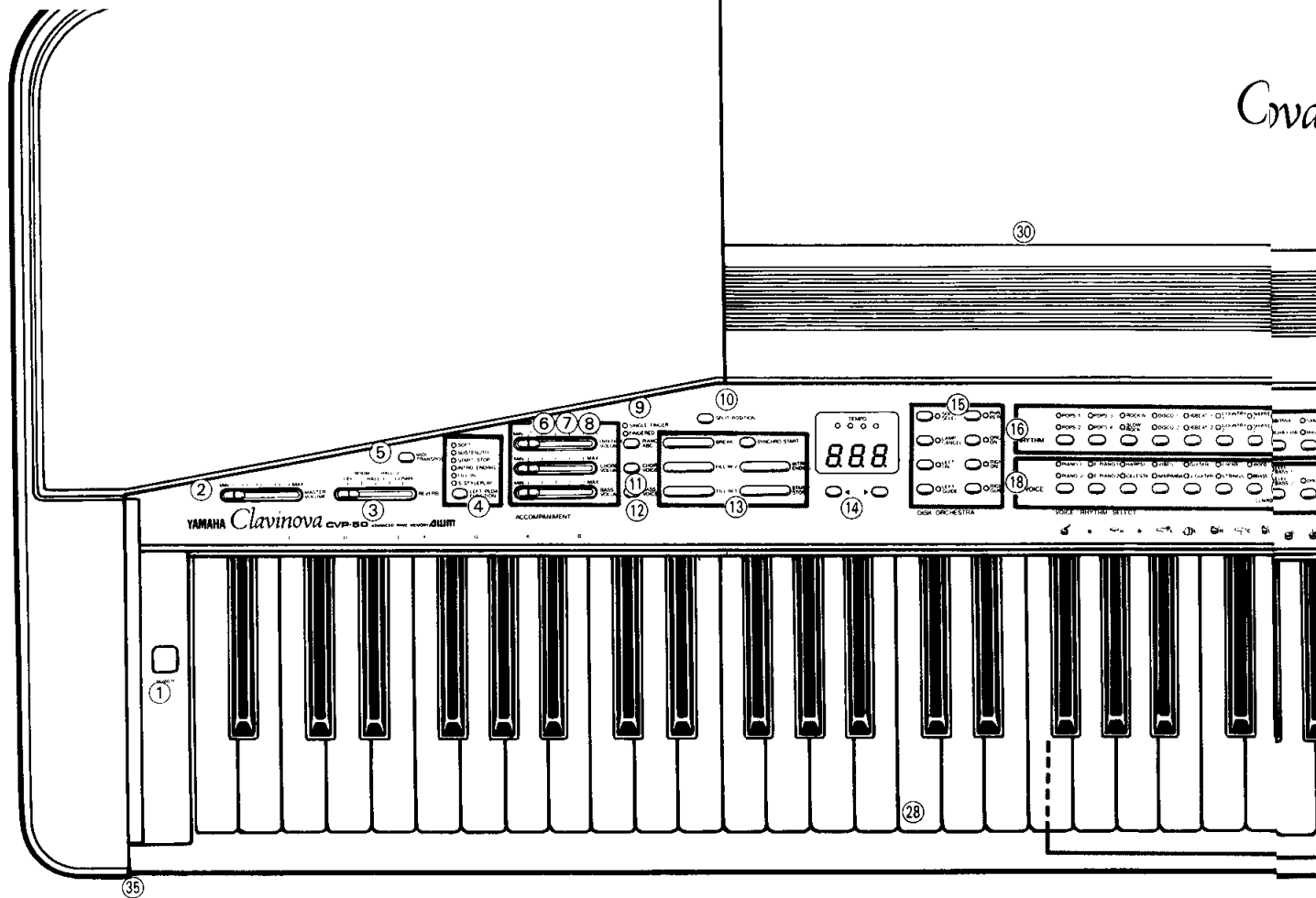


Internal

Stereo Amplifier & Speaker System

The CVP-70 features a powerful stereo amplifier delivering 50 watts per channel, driving a unique new Yamaha speaker system that puts out exceptionally rich sound with natural response from powerful lows to shimmering highs.

CVP-50 CONTROLS & CONNECTORS



Control Panel

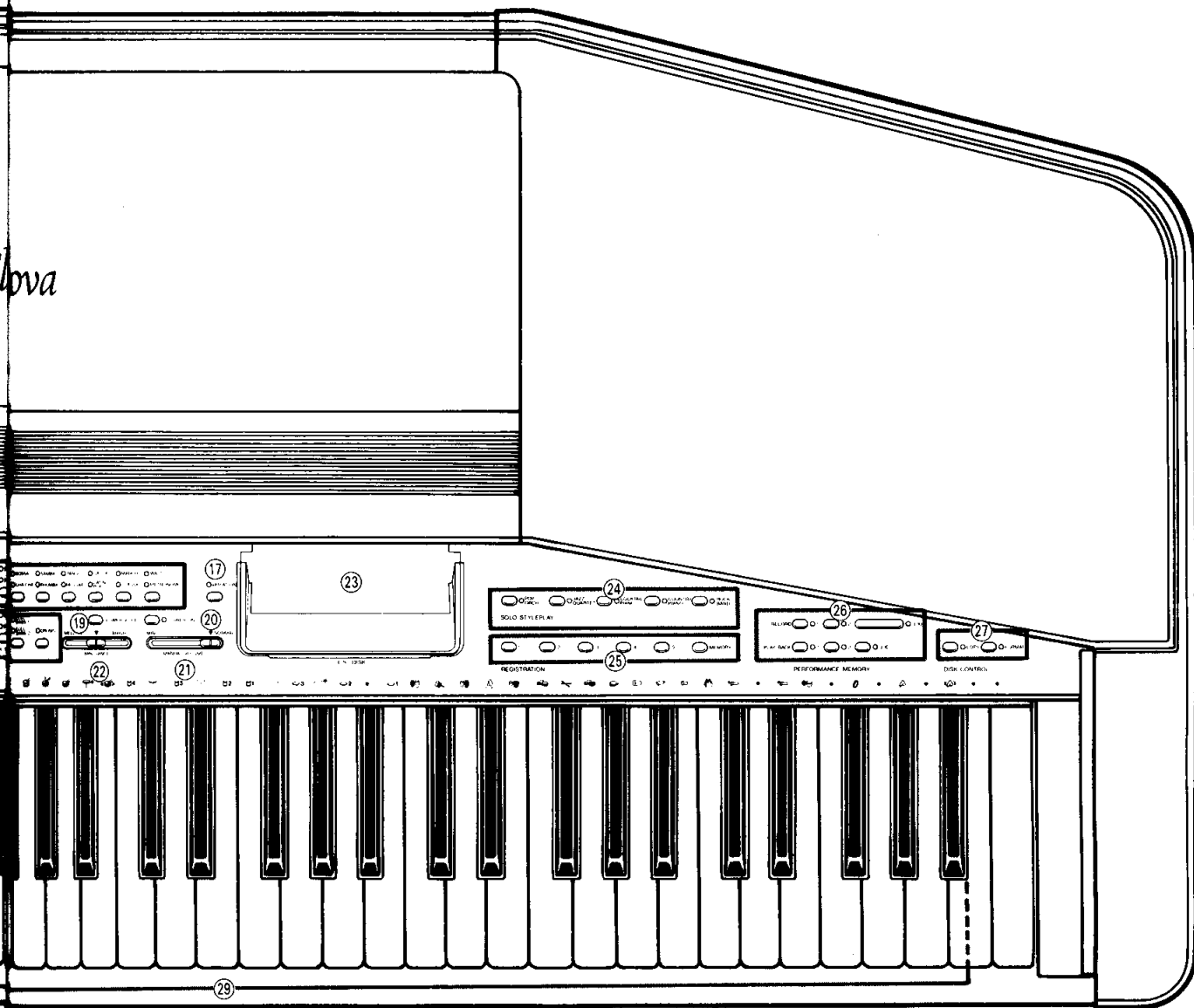
- ① POWER Switch [see page 14]
- ② MASTER VOLUME Control [see page 14]
- ③ REVERB Selector [see page 15]
- ④ LEFT PEDAL FUNCTION Button & Indicators [see page 15]
- ⑤ MIDI/TRANPOSE Button [see page 17]
- ⑥ RHYTHM VOLUME Control [see page 18, 22]
- ⑦ CHORD VOLUME Control [see page 21, 22]
- ⑧ BASS VOLUME Control [see page 21, 22]
- ⑨ PIANO ABC Button & Indicators [see page 21]
- ⑩ SPLIT POSITION Button [see page 16]
- ⑪ CHORD VOICE Button [see page 22]
- ⑫ BASS VOICE Button [see page 22]
- ⑬ Rhythm Controls (START/STOP, SYNCHRO START, INTRO/ENDING, BREAK, FILL IN 1 and FILL IN 2 Buttons) [see page 18]
- ⑭ Beat/Tempo/Song Number Display & Buttons (◀ and ▶) [see page 18, 23, 24]
- ⑮ DISK ORCHESTRA Controls (SONG SELECT, PHRASE REPEAT, LAMP CANCEL, ORCH ON, LEFT ON, RIGHT ON, LEFT GUIDE, RIGHT GUIDE Buttons).. [see page 23]
- ⑯ Rhythm Selectors & Indicators [see page 18]
- ⑰ VARIATION Button [see page 18]
- ⑱ Voice Selectors & Indicators [see page 14]
- ⑲ LOWER VOICE Button [see page 16]
- ⑳ LOWER ON Button & Indicator [see page 16]
- ㉑ MANUAL VOLUME Control [see page 16, 22]
- ㉒ BRILLIANCE Control [see page 15]
- ㉓ 3.5" Disk Drive Unit [see page 23]
- ㉔ SOLO STYLEPLAY Selectors [see page 22]
- ㉕ REGISTRATION Buttons [see page 27]
- ㉖ Performance Memory Controls & Indicators (RECORD 1/2/3-10 and PLAYBACK 1/2/3-10) [see page 24]

- ㉗ DISC CONTROL Buttons (COPY, FORMAT) [see page 24, 26]
- ㉘ Keyboard [see page 16, 17, 21]
- ㉙ Keyboard Percussion Keys [see page 19]
- ㉚ Music Stand [see page 14]

Rear/Front Panel

- ③① OPTIONAL IN L/R and OUT L/R Jacks
These jacks are intended primarily for use with Yamaha EM-series Expander Modules such as the EME-1 Reverb Box, EMT-1 FM Sound Box, EMT-10 AWM Sound Box and EMR-1 Drum Box. In the case of the EME-1 Reverb Box, for example, the OPTIONAL OUT jacks connect to the EME-1 LINE IN jacks, and the EME-1 LINE OUT jacks connect back to the Clavinova OPTIONAL IN jacks. This allows application of a range of high-quality digital effects, including reverb and echo, to the Clavinova sound. Refer to the EM-series Expander Module device owner's manual for connection details.

Clavinova



32 AUX OUT L/R Jacks

The AUX OUT L and R jacks deliver the output of the Clavinova for connection to a stereo sound system, a mixing console or a tape recorder.

Note: The AUX OUT jack signal must never be returned to the OPTIONAL IN jacks, either directly or through external equipment. Always use the OPTIONAL IN and OUT jacks when connecting EM-series or other Yamaha peripheral equipment.

33 MIDI IN, THRU and OUT Connectors

The MIDI IN connector receives MIDI data from an external MIDI device (such as the EMQ-1 Memory Box) which can be used to control the Clavinova. The MIDI THRU connector re-transmits any data received at the MIDI IN connector, allowing "chaining" of several MIDI instruments or other devices. The MIDI OUT connector transmits MIDI data generated by the Clavinova (e.g. note and velocity data produced by playing the Clavinova keyboard).

More details on MIDI are given in "MIDI FUNCTIONS" on page 28.

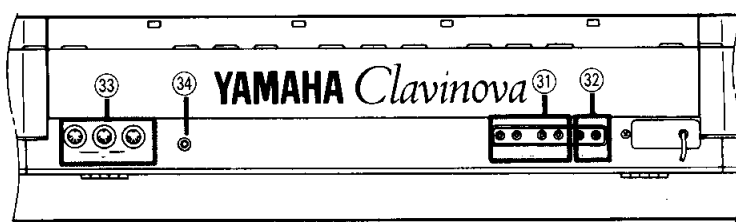
34 EXPRESSION PEDAL Jack

An optional Yamaha EP-1 Expression Pedal can be connected to this jack to allow foot expression (swell) control.

35 HEADPHONE Jack

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal speaker system is automatically shut off when a pair of headphones is plugged into the HEADPHONE jack.

Rear Panel



Internal

Stereo Amplifier & Speaker System

The CVP-50 features a powerful stereo amplifier delivering 30 watts per channel, driving a unique new Yamaha speaker system that puts out exceptionally rich sound with natural response from powerful lows to shimmering highs.

PRECAUTIONS

Your Clavinova is a fine musical instrument, and deserves the most careful treatment. Observe the following points and your Clavinova will sound and look great for many years.

1. Never open the case and touch or tamper with the internal circuitry.
2. Always turn the POWER switch OFF after use, and cover the keyboard with the built-in key cover.
3. Clean the cabinet and keys of your Clavinova only with a clean, slightly damp cloth. A neutral cleanser may be used if desired. Never use abrasive cleansers, waxes, solvents or chemical dust cloths since these can dull or damage the finish.
4. Never place any vinyl products on your Clavinova. Contact with vinyl can cause irreversible damage to the finish.
5. Install your Clavinova in a place that is away from direct sunlight, excessive humidity or heat.
6. Never apply excessive force to the controls, connectors or other parts of your Clavinova, and avoid scratching or bumping it with hard objects.
7. To avoid fire and shock hazards, never place the Clavinova or its bench directly on or over power cords of any type.
8. Never place objects on the Clavinova power cord, or place the cord where it may be accidentally tripped over or stepped on.

PREPARATION

Check your power supply

Make sure that your local AC mains voltage matches the voltage specified on the name plate. In both the CVP-70 and CVP-50 the nameplate is on the bottom panel. In some areas a voltage selector may be provided—on the bottom panel of the CVP-70 or on the rear panel of the CVP-50. Make sure that the voltage selector is set for the voltage in your area.

The music stand

If you will be using sheet music with your Clavinova, raise the music stand built into it's top panel by lifting the rear edge of the music stand until it clicks into place. The music stand can be lowered after slightly lifting the stand and pressing the two brackets which support it inward.

Name Plate Location

The nameplate is located on the bottom panel.

PLAYING THE CLAVINOVA

After making sure that the Clavinova's AC plug is properly inserted into a convenient AC wall outlet:

1. Turn Power ON

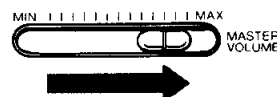
Press the POWER switch located to the left of the keyboard to turn the power ON. When the power is turned ON, the PIANO 1 voice selector LED will light (the PIANO 1 voice is automatically selected whenever the power is turned ON). Press the POWER switch again when you want to turn the Clavinova OFF.



POWER

2. Set Volume

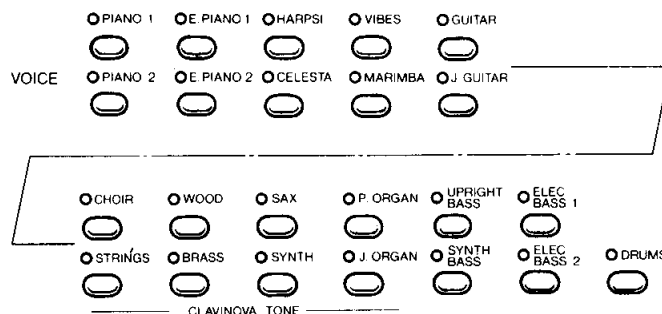
Initially set the MASTER VOLUME control about three quarters of the way towards the "MAX" setting. Then, when you start playing, adjust the MASTER VOLUME control for the most comfortable listening level.



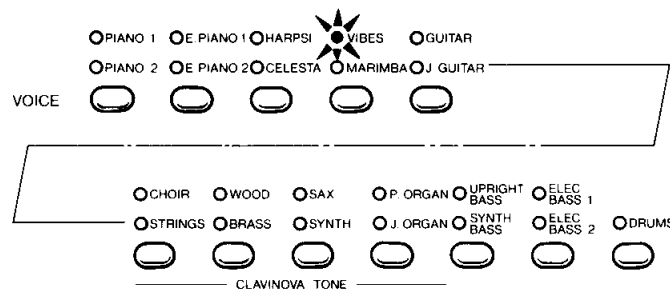
The MASTER VOLUME control adjusts the volume (level) of sound produced by the Clavinova. It also adjusts headphone volume when a pair of headphones is plugged into the HEADPHONE jack.

3. Select a Voice

CVP-70: Press the voice selector corresponding to the voice you wish to play. The LED indicator for the selected voice will light.



CVP-50: Select the desired voice by pressing one of the voice selectors. The 22 CVP-50 voices are selected using 11 voice selectors. Note that each voice selector has two LED indicators and voice labels above it. The voices indicated by the upper and lower indicators are selected alternately each time the corresponding selector is pressed. For example, if the PIANO 1 voice is selected and you press the same selector a second time, the PIANO 2 voice will be selected. Each press on the PIANO 1/PIANO 2 selector alternately selects the PIANO 1 and PIANO 2 voices.



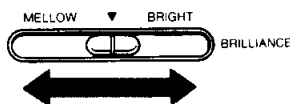
In this example the indicator LEDs show that the VIBES voice is selected.

4. Play

The CVP-70 has "32-note polyphony" which means you can play up to 32 notes at once. The CVP-50 offers 16-note polyphony. The Clavinova also offers keyboard touch response, so the volume and timbre of notes played can be controlled according to how "hard" you play the keys. The amount of variation available depends on the selected voice.

Using the Brilliance Control

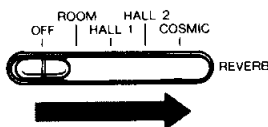
The BRILLIANCE control can be used to change the tonality or "timbre" of the selected voice. It has three settings: MELLOW, center (NORMAL) and BRIGHT. The center setting produces the "normal" tone of the selected voice. If you want a brighter or "sharper" tone, slide the control to the BRIGHT position. For a "rounder" more mellow tone, slide the control to the MELLOW position.



- The BRILLIANCE control has no intermediate settings. If you slide the control to a position between one of its three settings, the sound of the last setting will be retained.

Using the Digital Reverb Effects

The REVERB control provides a number of digital effects that you can use for extra depth and expressive power. Simply slide the REVERB control to the required position:



OFF

No effect is produced.

ROOM

This setting adds a reverb effect to the sound that is similar to the type of acoustic reverberation you would hear in a medium-size room.

HALL 1

For a more spacious reverb sound, use the HALL setting. This effect simulates the natural reverberation of a medium-size concert hall.

HALL 2

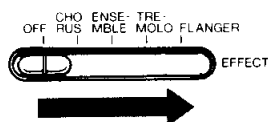
HALL 2 simulates the reverb of a very large concert hall.

COSMIC

"COSMIC" is an echo effect in which the sound seems to "bounce" around in the stereo sound field.

Using the Effect Selector (CVP-70 only)

The CVP-70 EFFECT control provides a range of four effects that you can use in addition to the REVERB effects. Simply slide the EFFECT control to the required position:



OFF

No effect is produced.

CHORUS

This setting produces a gentle "swirling" effect that gives the sound extra vibrance.

ENSEMBLE

The ENSEMBLE effect "thickens" the sound, producing the illusion of several instruments playing at once.

TREMOLO

TREMOLO is a gentle variation in volume that gives the sound a more dynamic feel.

FLANGER

This effect produces a very noticeable cyclic variation in the sound—similar to the effect produced by a rotating speaker.

Using the Pedals

Right Pedal (Damper Pedal)

The damper pedal functions in the same way as a damper pedal on an acoustic piano. When the damper pedal is pressed notes played have a long sustain. Releasing the pedal immediately stops (damps) any sustained notes.

- When the keyboard is split (see "Selecting a Separate Lower Keyboard Voice" on page 16), the damper pedal affects only the upper section of the keyboard.

CVP-70 Center Pedal

Normally, the CVP-70 functions as a sostenuto pedal. If you play a note or chord on the keyboard and press the sostenuto pedal while the note(s) are held, those notes will be sustained as long as the pedal is held (as if the damper pedal had been pressed) but all subsequently played notes will not be sustained. This makes it possible to sustain a chord, for example, while other notes are played "staccato." If, however, the LEFT PEDAL FUNCTION button is used to select the TEMPO or BASS BEND left-pedal functions, the center pedal is used to produce increased tempo or upward bend, respectively (See "CVP-70 Left Pedal," below).

- The CVP-70 center pedal is automatically set for sostenuto operation when the power is initially turned on.

CVP-50 Left Pedal (Multi-function)

The left CVP-50 pedal has a number of functions which can be selected using the LEFT PEDAL FUNCTION button and indicators. Each time the LEFT PEDAL FUNCTION button is pressed the next function on the LEFT PEDAL function "list" is selected and the corresponding indicator will light. The SOFT and SOSTENUTO functions are described below. For details on the STOP/START, INTRO/ENDING and FILL IN functions refer to the "RHYTHM" section on page 18. For details on the S.STYLEPLAY function see "SOLO STYLEPLAY" on page 22 (the S.STYLEPLAY pedal function can only be selected when the SOLO STYLE PLAY feature is in use).

- SOFT
- SOSTENUTO
- START/STOP
- INTRO/ENDING
- FILL IN
- S.STYLEPLAY
- LEFT PEDAL FUNCTION

SOFT Pedal

Pressing the soft pedal reduces the volume and slightly changes the timbre of notes played. The SOFT left-pedal function is automatically selected when the power is initially turned on.

SOSTENUTO Pedal

If you play a note or chord on the keyboard and press the sostenuto pedal while the note(s) are held, those notes will be sustained as long as the pedal is held (as if the damper pedal had been pressed) but all subsequently played notes will not be sustained. This makes it possible to sustain a chord, for example, while other notes are played "staccato."

CVP-70 Left Pedal (Multi-function)

The left CVP-70 pedal has a number of functions which can be selected using the LEFT PEDAL FUNCTION button and indicators. Each time the LEFT PEDAL FUNCTION button is pressed the next function on the LEFT PEDAL function "list" is selected and the corresponding indicator will light. The SOFT, TEMPO and BASS BEND functions are described below. For details on the STOP/START and INTRO/ENDING functions refer to the "RHYTHM" section on page 18. For details on the S.STYLEPLAY function see "SOLO STYLE-PLAY" on page 22 (the S.STYLEPLAY pedal function can only be selected when the SOLO STYLE PLAY feature is in use).

- SOFT
- START/STOP
- INTRO/ENDING
- S STYLEPLAY
- TEMPO
- BASS BEND
- LEFT PEDAL FUNCTION

SOFT Pedal

Pressing the soft pedal reduces the volume and slightly changes the timbre of notes played. The SOFT left-pedal function is automatically selected when the power is initially turned on.

TEMPO Change

Pressing the left pedal causes the tempo of the currently selected RHYTHM to decrease, and pressing the center pedal causes the tempo to increase. The amount of tempo increase or decrease depends on how hard the left or center pedal is pressed. The tempo can be decreased by a maximum of one-half, or increased by a maximum of two times the currently set tempo. The minimum tempo of the Clavinova is 32 and the maximum tempo is 280. The tempo cannot be changed above or below these limits. The Beat/Tempo/Song Number display does not show tempo changes produced by this function.

BASS BEND

Pressing the left pedal produces a downward pitch bend of the currently selected BASS voice, and pressing the center pedal causes an upward pitch bend. The amount of pitch bend produced depends on how hard the left or center pedal is pressed. The maximum BASS BEND range is ± 200 cents (a cent is approximately 100th of a semitone). In addition to the four BASS voices provided, the BASS BEND function can be used to bend the following voices: J.GUITAR, BRASS, SAX and SYNTH.

- If the keyboard is split and a lower voice is selected (see below), the BASS BEND function applies only to the lower keyboard section, and only if a "bendable" lower voice is selected.

Selecting a Separate Lower Keyboard Voice

The Clavinova allows you to play two voices at once—one with the left hand and one with the right. The lower voice can be played on the lowest keys, up to the "split position" set using the SPLIT POSITION button.

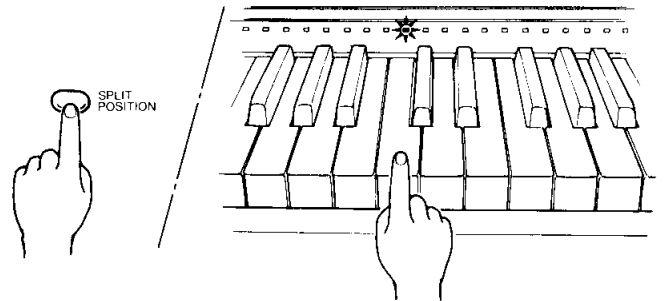
1. Press the LOWER ON Button

This turns the LOWER VOICE ON and automatically selects STRINGS as the lower voice.



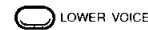
2. Set the Split Position

Hold down the SPLIT POSITION button and press the key on the Clavinova keyboard at which you want the split position to be set. The split position is now set, and you can release the SPLIT POSITION button and key. If you do not specifically select a split position, the split position is automatically set to F#2. An LED indicator will light above the selected split position key.



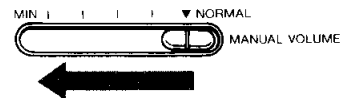
3. Select the LOWER VOICE

Press and hold the LOWER VOICE button while selecting a voice in the normal way.



4. Adjust the MANUAL VOLUME Control

The MANUAL VOLUME control is used to adjust the volume of the melody voice in relation to the lower voice. At the "NORMAL" position maximum melody voice volume is produced. By sliding the MANUAL VOLUME control toward the MIN position, the volume of the melody voice can be reduced in relation to the lower voice.



- The SPLIT POSITION can be changed at any time while the LOWER VOICE is ON.
- A lower voice cannot be assigned when the SOLO STYLE-PLAY function is in use.
- When LOWER ON is selected, lower voices other than the four bass voices will be transposed up one octave.

TRANSPOSITION

The Clavinova's TRANSPOSE function makes it possible to shift the pitch of the entire keyboard up or down in semitone intervals up to a maximum of six semitones. "Transposing" the pitch of the Clavinova keyboard makes it easier to play in difficult key signatures, and you can simply match the pitch of the keyboard to the range of a singer or other instrumentalist. The MIDI/TRANSPOSE button is used in conjunction with the ◀ and ▶ buttons (below the tempo display) for transposition.

MIDI/TRANSPOSE



1. Press and hold the TRANSPOSER/MIDI button.
2. Press either the ◀ or ▶ button, according to the desired direction of transposition (◀ transposes down and ▶ transposes up). The pitch is transposed by one semitone (100 cents) each time the ◀ or ▶ button is pressed.*
3. Release the TRANSPOSER/MIDI button.

The amount of transposition selected is shown on the Beat/Tempo/Song Number display as follows:

Display	Transposition	Display	Transposition
-6	-6 semitones	1	+1 semitone
-5	-5 semitones	2	+2 semitones
-4	-4 semitones	3	+3 semitones
-3	-3 semitones	4	+4 semitones
-2	-2 semitones	5	+5 semitones
-1	-1 semitone	6	+6 semitones

* Pressing the ◀ and ▶ buttons simultaneously while holding the MIDI/TRANSPOSE button produces normal keyboard pitch.

PITCH CONTROL

Pitch control makes it possible to tune the Clavinova over a ± 50 -cent range in approximately 3-cent intervals. A hundred "cents" equals one semitone, so the tuning range provided allows fine tuning of overall pitch over a range of approximately a semitone. Tuning values are shown on the Beat/Tempo/Song Number display in Hertz (cycles per second), where the standard "concert pitch" of the A₃ key is 440 hertz. The tuning range of the A₃ key is from 427 to 452 Hertz. Pitch control is useful for tuning the Clavinova to match other instruments or recorded music.

Tuning Up

1. To tune up (raise pitch), hold the A-1 and B-1 keys simultaneously (A-1 and B-1 are the two lowest white keys on the keyboard).
2. Press any key between C₃ and B₃. Each time a key in this range is pressed the pitch is increased by approximately 3 cents, up to a maximum of 50 cents above standard pitch.
3. Release the A-1 and B-1 keys.

Tuning Down

1. To tune down (lower pitch), hold the A-1 and A[#]-1 keys simultaneously.
2. Press any key between C₃ and B₃. Each time a key in this range is pressed the pitch is decreased by approximately 3 cents, up to a maximum of 50 cents below standard pitch.
3. Release the A-1 and A[#]-1 keys.

To Restore Standard Pitch*

1. To restore standard pitch (A₃ = 440 Hz), hold the A-1, A[#]-1 and B-1 keys simultaneously.
2. Press any key between C₃ and B₃.
3. Release the A-1, A[#]-1 and B-1 keys.

* Standard pitch (A₃ = 440 Hz) is automatically set whenever the POWER switch is initially turned ON.

● The pitch control function has no effect when the ABC mode is active or the keyboard is split (i.e. LOWER VOICE ON).



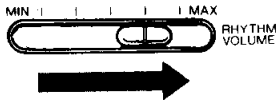
For Pitch Control (A-1 + B-1/A-1 + A[#]-1)

For Pitch Control (C₃ ~ B₃)

RHYTHM

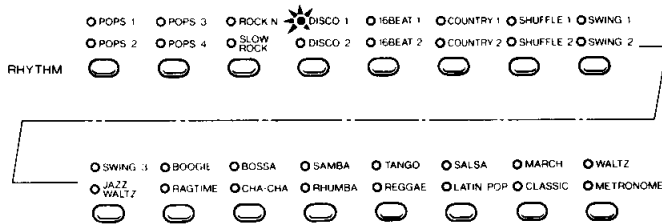
The RHYTHM VOLUME Control

Begin by setting the RHYTHM VOLUME control to a position about three-quarters of the way toward the "MAX" end of the scale. Then, when you actually begin playing the rhythm, you can set the best VOLUME control level "by ear."



Selecting Rhythm Patterns

The 32 rhythm patterns are selected using 16 rhythm selectors. Note that each rhythm selector has two LEDs and rhythm labels above it. The rhythm patterns indicated by the upper and lower labels are selected alternately each time the corresponding selector is pressed. For example, if the DISCO 1 rhythm is selected and you press the same selector a second time, the DISCO 2 rhythm will be selected. Each press on the DISCO 1/DISCO 2 selector alternately selects the DISCO 1 and DISCO 2 rhythm patterns.



In this example the indicator LEDs show that the DISCO 1 rhythm is selected.

Each rhythm pattern also has a variation which can be selected by pressing the VARIATION button. When the VARIATION button LED is off, the standard rhythm pattern will play, and when the VARIATION LED is on, the variation will play.

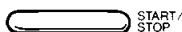


- The POPS 1 rhythm is automatically selected when the power is initially turned ON.

Starting and Stopping the Selected Rhythm

Using the START/STOP Button

The most straightforward way to start and stop the selected rhythm is to use the START/STOP button. Simply press the START/STOP button to start the rhythm, then press the STOP/STOP button again when you want to stop the rhythm. Different rhythms can be selected at any time during playback.



- If the CVP-50/70 left pedal is switched to START/STOP operation, it performs the same function as the panel START/STOP button (press to START, press again to STOP).

Using the INTRO/ENDING Button

This button can be used to both start and stop the selected rhythm, with a little more "style" than the START/STOP button provides. If you press the INTRO/ENDING button while rhythm playback is stopped, the selected rhythm will start after an appropriate 2-measure introduction. When you're ready to end rhythm, press the INTRO/ENDING button again—the Clavinova will create an appropriate 2-measure rhythmic ending for the currently selected rhythm pattern.

If you press the INTRO/ENDING button during the first half of a measure, the ending pattern will begin during that measure. If you press the INTRO/ENDING button during the second half of a measure, the ending pattern will begin on the first beat of the next measure.

Rhythm playback started by pressing the START/STOP button can be ended by pressing the INTRO/ENDING button. In the same way, rhythm playback started by pressing the INTRO/ENDING button can be ended at any time by pressing the START/STOP button.



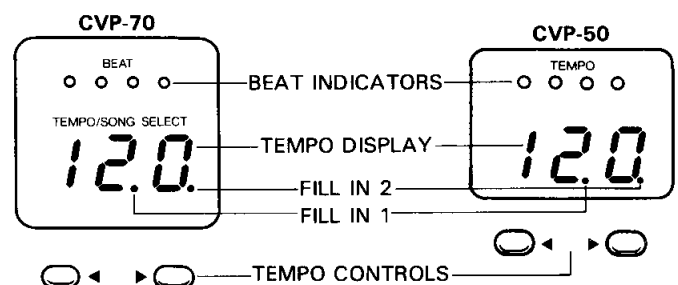
- If the CVP-50/70 left pedal is switched to INTRO/ENDING operation, it performs the same function as the panel INTRO/ENDING button.
- Only the metronome sound will be produced if the INTRO/ENDING button is used to start the METRONOME rhythm. No change in the METRONOME rhythm occurs if the INTRO/ENDING button is used to stop the rhythm..

Tempo Control

The ◀ and ▶ buttons located below the Beat/Tempo/Song Number display can be used to modify the tempo of the selected rhythm. Tempo can be varied from 32 beats per minute up to 280 beats per minute. When the power is initially turned ON a tempo of 120 is automatically selected. A "normal" tempo for the currently selected rhythm can be recalled by pressing the tempo ◀ and ▶ buttons simultaneously. The set tempo does not change when switching between different rhythms.

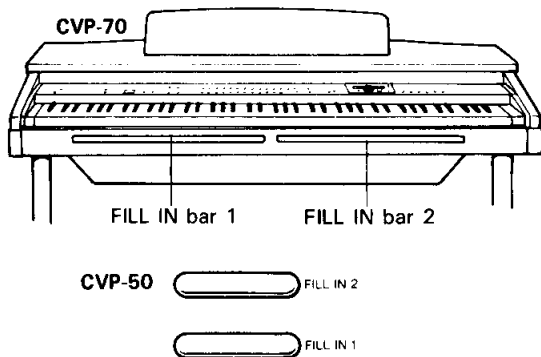
Pressing the ◀ button decreases the tempo, while pressing the ▶ button increases the tempo. Holding either of these buttons down causes a continuous increase or decrease in the tempo setting. The current tempo setting is displayed on the Beat/Tempo/Song Number display while either the ◀ or ▶ button is pressed during rhythm playback, and the display reverts to measure number display about one second after either the ◀ or ▶ button is released. The tempo setting is also displayed, and can be changed, while rhythm playback is stopped.

- The selected tempo can be decreased by a maximum of one-half or increased by a maximum of two times by using the CVP-70 left and center pedals if the TEMPO LEFT PEDAL FUNCTION is selected (see "Using the Pedals" on page 15).
- The beat indicators at the top of the Beat/Tempo display flash in sequence to indicate the current beat. The left-most indicator flashes on the first beat of each measure, the second indicator flashes on the second beat, and so on. When a 3/4-time rhythm is selected, only the first three beat indicators will flash.



Adding Fill-ins

Simply touch the CVP-70 FILL IN bar 1 (left) or FILL IN bar 2 (right), or the CVP-50 FILL IN 1 or FILL IN 2 button at any time during rhythm playback to insert a rhythm variation that lasts until the end of the current measure. If the FILL IN bar or button is pressed at the end of the last beat of a measure, however, the fill in will start at the next measure. The fill-in can be terminated at any time during the same measure by pressing the FILL IN bar or button a second time. For example, if you press FILL IN on the first beat of a measure and then again on the third beat, the fill-in will last from the first until the third beat of the measure. Further, the selected fill-in pattern will play as long as the FILL IN button or bar is held.



Fill-in Start

You can start a rhythm pattern with a fill-in on the very first measure by first pressing either of the FILL IN bars or buttons while rhythm playback is stopped, and then pressing the START/STOP button. If FILL IN bar or button 1 is pressed (while rhythm playback is stopped), the second LED dot from the left at the bottom of the Beat/Tempo/Song Number display will light, and if FILL IN bar or button 2 is pressed, the third LED dot will light, indicating that the first measure of the rhythm pattern will be the selected fill-in.

- If the CVP-50 left pedal is switched to FILL IN operation, it performs the same function as the panel FILL IN buttons. FILL IN 1 or FILL IN 2 can be assigned to the left pedal by pressing the left pedal while holding the desired FILL IN button. FILL IN 1 is automatically selected if no fill in is specifically assigned.
- The FILL IN bars or buttons produce no change in the METRONOME rhythm.
- The LATIN POP FILL IN 2 variation (i.e. the fill in produced when the VARIATION button LED is lit) and the 16 BEAT FILL IN 2 variation are one-measure breaks.

SYNCHRO START Operation

This function causes the selected rhythm to be started automatically when you play the first note on your keyboard, thus synchronizing the beginning of the rhythm to your performance. After selecting the desired rhythm, press the SYNCHRO START button. The first LED of the Beat Display will begin to flash, indicating that the SYNCHRO START mode is READY. Then, as soon as you play a key on your keyboard (on the lower keyboard when ABC is active or the keyboard is split), playback of the selected rhythm will begin.



You can have the rhythm begin with a fill-in in the SYNCHRO START mode by pressing the SYNCHRO START button and then the FILL IN buttons before playing on the keyboard.

KEYBOARD PERCUSSION

This function allows you to directly play a range of different percussion instruments on the highest notes of the keyboard. Simply press the DRUMS button (the DRUMS indicator will light), and play the appropriate keys. The percussion instruments played by the various keys are marked by symbols above the keys.

○ DRUMS



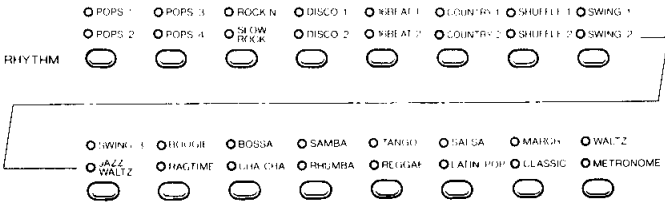
PERCUSSION INSTRUMENT/KEY ASSIGNMENTS

Key	Instrument
F#2	BRUSH ROLL
G#2	HI-HAT CLOSED HEAVY
A#2	CRASH CYMBAL LIGHT
B2	BASS DRUM LIGHT
C3	SNARE DRUM + RIM HEAVY
C#3	RIDE CYMBAL CUP
D3	SNARE DRUM + RIM LIGHT
F3	BASS DRUM
F#3	RIM SHOT
G3	SNARE DRUM HEAVY
G#3	BRUSH SHOT
A3	SNARE DRUM LIGHT
A#3	HI-HAT PEDAL
B3	SNARE DRUM ECHO
C4	TOM 4
C#4	HI-HAT CLOSED
D4	TOM 3
D#4	HI-HAT OPEN
E4	TOM 2
F4	TOM 1
F#4	RIDE CYMBAL
G4	ELECTRONIC TOM 3
G#4	CRASH CYMBAL
A4	ELECTRONIC TOM 2
B4	ELECTRONIC TOM 1
C5	CONGA LOW
C#5	CABASA
D5	CONGA HIGH
D#5	METRONOME
E5	BONGO
F5	TIMBALE LOW
F#5	CLAVES
G5	TIMBALE HIGH
G#5	CASTANETS
A5	CUICA LOW
A#5	COWBELL
B5	CUICA HIGH
C6	HAND CLAPS
C#6	AGOGO LOW
D#6	AGOGO HIGH
E6	BONGO LOW
F#6	TAMBOURINE
G#6	TRIANGLE CLOSED
A#6	TRIANGLE OPEN

- When Keyboard Percussion is in use, notes to the left of F#2 will not sound unless the LOWER VOICE or PIANO ABC feature is used. In this case, notes between the selected SPLIT POSITION and F#2 will not sound if the SPLIT POSITION is set at a key lower than F#2.

CUSTOM RHYTHM (CVP-70 only)

The CVP-70 CUSTOM RHYTHM feature allows you to create 16 original rhythm patterns that can be later recalled and played at any time, just like the presets. Each custom rhythm pattern can be "stored" in any of the 16 rhythm selector buttons.



Creating an Original Rhythm Pattern

1. Select a Suitable Rhythm

Begin by selecting one of the preset rhythms that is close to the rhythm you want to create. For example, select a WALTZ rhythm if you want to program a rhythm pattern in 3/4 time. You cannot program a 3/4 rhythm when a 4/4 rhythm is selected, and vice versa.

2. Engage the Program Mode

Press the CUSTOM RHYTHM PROGRAM button so that its LED indicator lights. The selected rhythm will begin playing.



- When the PROGRAM mode is engaged, the LED indicators for all rhythm selectors that currently contain custom rhythm data will light. Any previously programmed and stored custom rhythm pattern can be erased from memory by pressing the corresponding rhythm button while holding the CANCEL key.

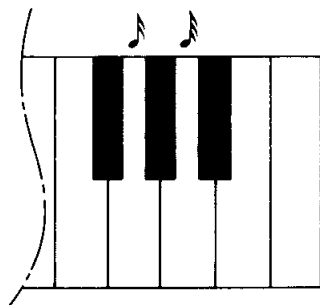
3. Set the Appropriate Tempo

To make programming as easy as possible, set up an appropriate tempo and volume before you begin. It might be easier to program your rhythm pattern if you set a relatively slow tempo.



4. Set the Rhythm Resolution If Necessary

The initial resolution for custom rhythm programming is 16th notes. This means that 16th notes are the shortest that can be entered, and that all entered notes will be adjusted to fall on the nearest 16th beat. If you need greater resolution, switch to 32nd-note resolution by pressing the A6 key. You can return to 16th note resolution at any time by pressing the G6 key.



5. Begin Programming

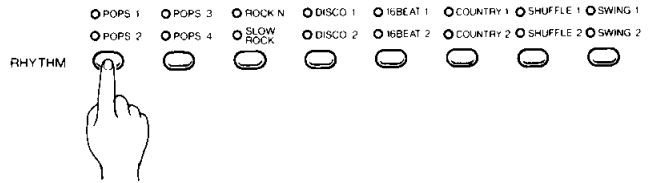
You can now add new notes to the selected rhythm accompaniment by playing the keyboard percussion keys at the appropriate timing. If you want to create a totally new rhythm from scratch, press the CLEAR ALL key while holding the CANCEL key before beginning to program. This cancels all the instruments in the original accompaniment, leaving only a metronome sound. The rhythm pattern is two measures long, and the pattern will continue to repeat so you can add new instruments during each repeat, if necessary.

6. If You Want to Cancel A Single Instrument

Although you can cancel all instruments in a pattern by pressing the CLEAR ALL and CANCEL keys, it is also possible to cancel a single instrument to eradicate a mistake or simply eliminate an unwanted instrument. While holding the CANCEL key, press the key corresponding to the instrument you want to cancel. The selected instrument should now be cleared from the pattern.

7. Store Your Original Rhythm and Stop Programming

When your custom rhythm is complete, press the rhythm selector with which you want the new rhythm to be associated. This saves the custom rhythm in the selected rhythm button. Then press the PROGRAM button to exit the custom rhythm programming mode. If you want to stop programming without saving the rhythm pattern, simply press the CUSTOM RHYTHM PROGRAM button so that its LED indicator goes out.



- If a FILL IN bar or button is pressed prior to programming, it is possible to program a custom fill in. It is not possible to program custom INTRO/ENDING patterns.

Playing Back Your Custom Rhythm Pattern

Once created, your original rhythm pattern can be played back by pressing the CUSTOM RHYTHM button (its LED will light), the rhythm selector button into which it was stored, and then the START/STOP button. Press the START/STOP button to stop playback. Your CUSTOM RHYTHM can also be used as the basis for PIANO ABC accompaniment.



PIANO ABC

The Clavinova includes a sophisticated auto-accompaniment system that can provide automated rhythm, bass and chord backing in a number of ways.

- Although the CVP-70 has 32-note polyphony and the CVP-50 has 16-note polyphony, the total number of notes that can be played simultaneously is actually less when the PIANO ABC feature is used.

Single-finger Accompaniment

SINGLE FINGER accompaniment makes it simple to produce accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys in the Auto Accompaniment Keys section of the keyboard. The automatic accompaniment consists of rhythm, bass and chords.

1. Select the SINGLE FINGER Mode

Press the PIANO ABC button to select the SINGLE FINGER mode (the SINGLE FINGER indicator will light).

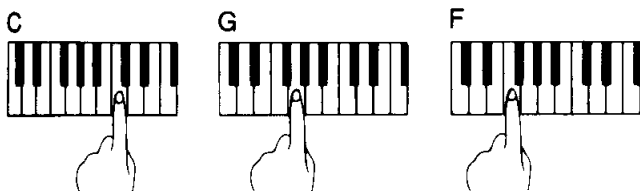


2. Select a Rhythm

Select the desired rhythm pattern (except METRONOME) using the rhythm selectors.

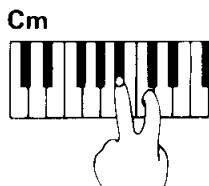
3. Press a Key in the Lower Keyboard

Pressing any key on the lower keyboard (up to the selected SPLIT POSITION) will cause the automatic chord and bass accompaniment to begin. If you press a "C" key, for example, a C-major accompaniment will be played. Press another key in the Auto Accompaniment Keys section to select a new chord. The key you press will always determine the "root" of the chord played (i.e. "C" for a C chord).

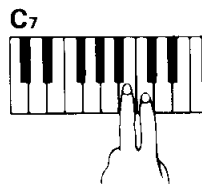


Playing Minor, Seventh, and Minor-seventh Chords in the Single-finger Mode

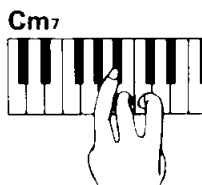
- For a minor chord, press the root key and the first black key to its left.



- For a seventh chord, press the root key and the next white key to its left.

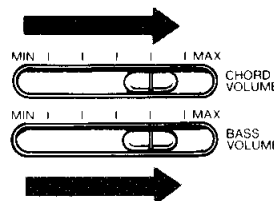


- For a minor-seventh chord, press the root key and both the next white and black keys to its left.



4. Adjust the BASS VOLUME and CHORD VOLUME Controls

Set the ideal balance between the bass and chord volume using these controls.



5. Set the Tempo

Use the ◀ and ▶ tempo controls to set the desired accompaniment tempo (see "Tempo Control" on page for more details).

6. Stop the Auto Accompaniment

Press the START/STOP button to stop the Auto Accompaniment.

Fingered Accompaniment

The FINGERED mode is ideal if you already know how to play chords on a keyboard, since it allows you to supply your own chords for the Auto Accompaniment feature.

1. Select the FINGERED Mode

Press the PIANO ABC button to select the FINGERED mode (the FINGERED indicator will light).

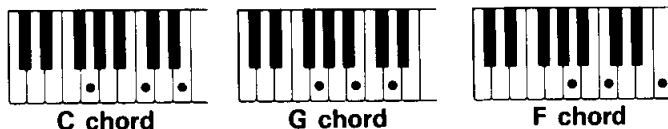


2. Select a Rhythm

Select the desired rhythm pattern (except METRONOME) using the rhythm selectors.

3. Play a Chord on the Lower Keyboard

As soon as you play any chord on the lower keyboard (up to the selected SPLIT POSITION button), the Clavinova will automatically begin to play the chord along with the selected rhythm and an appropriate bass line.



The Clavinova will accept the following chord types:

- Major
- Minor
- Major seventh
- Sixth
- Minor sixth
- Minor seventh
- Minor seventh flat five
- Seventh
- Seventh flat five
- Seventh suspended fourth
- Suspended fourth
- Augmented
- Diminished

- The INTRO/ENDING and FILL IN buttons can be used in the PIANO ABC mode to create pattern variations in exactly the same way that they are used with rhythm patterns (refer to the "RHYTHM" section on page 18 for details).
- The LATIN POP FILL IN 2 variation (i.e. the fill in produced when the VARIATION button LED is lit) and the 16 BEAT FILL IN 2 variation are one-measure breaks (no ABC sound will be produced).

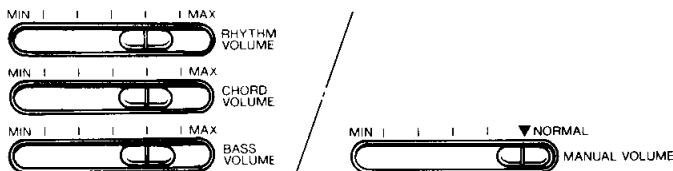
Selecting Different Bass and Chord Voices

The bass and chord voices used for PIANO ABC accompaniment can be changed by selecting the desired voice in the normal way while holding either the BASS VOICE or CHORD VOICE button, as required. The current bass or chord voice can be confirmed by simply pressing the BASS VOICE or CHORD VOICE button (the appropriate voice indicator will light as long as the button is held).



"Normal" Piano ABC Volume Balance

Although the ideal balance between the melody, rhythm, chord and bass volume depends on your personal preferences, the following settings provide a "normal balance" reference point.



SOLO STYLEPLAY

This sophisticated feature automatically adds appropriate harmony notes and effects to a melody you play on the upper keyboard according to the selected accompaniment style.

- Only a single note can be played at a time on the upper keyboard section when the SOLO STYLEPLAY feature is used.

1. Select the Desired SOLO STYLEPLAY Style

Press the SOLO STYLEPLAY button corresponding to the desired style. The LED of the selected style button will light indicating that the SOLO STYLEPLAY feature is ON. The SINGLE FINGER Auto Bass Chord mode will be automatically selected when one of the SOLO STYLEPLAY buttons is pressed. If you want to use the FINGERED mode instead of the SINGLE FINGER mode, select it using the PIANO ABC button.



2. Play

The SYNCHRO START mode is automatically selected when a SOLO STYLEPLAY style is selected, so all you have to do is play the required chords (SINGLE FINGER or FINGERED) on the lower keyboard while playing a single-note melody line on the upper keyboard. The SOLO STYLEPLAY feature automatically selects the appropriate rhythm pattern as well as chord and bass voices for the style you select.

3. Stop the Accompaniment

Stop the accompaniment using the STOP or INTRO/ENDING button (and turn SOLO STYLEPLAY OFF, if necessary, by pressing the SOLO STYLEPLAY button again so that its LED goes out).

- PIANO ABC cannot be turned OFF while any of the SOLO STYLEPLAY styles is selected.
- If the SOLO STYLEPLAY function of the CVP-70 left pedal (LEFT PEDAL FUNCTION) is selected, the SOLO STYLEPLAY sound will only be produced while the left pedal is pressed. Please also note that the SOLO STYLEPLAY function of the CVP-70 left pedal cannot be selected (its LED will not light) unless a SOLO STYLEPLAY button has been pressed.

DISK ORCHESTRA

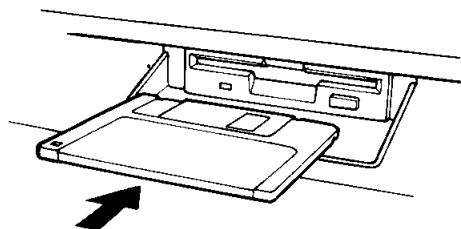
Using special DISK ORCHESTRA disks (available from Yamaha), the CVP-50/70 will let you enjoy listening to automated performances, or function as your "private music tutor," allowing you to practice various parts of a piece while the others are played automatically. The CVP-50/70 even shows you which keys to play with guide lamps that light up above each key.

- In addition to Disk Orchestra Collection disks, the following disks can be played back.
* Some Yamaha Disklavier disks (PianoSoft) — refer to the Yamaha Disk Orchestra Collection catalogue for details.

Automatic Performance

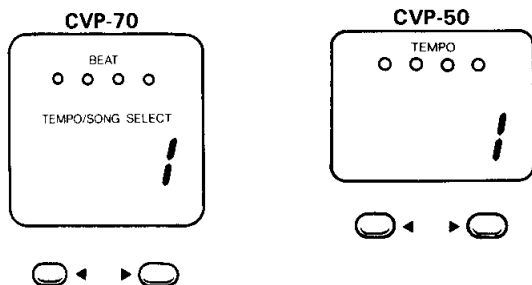
1. Load the Disk

Insert the DISK ORCHESTRA disk into the CVP-50/70 disk drive with the metallic door facing the drive slot and the label side facing upward. The disk should click into place and the disk lamp will light briefly while the CVP-50/70 reads and identifies the disk.



2. Select the Desired Song

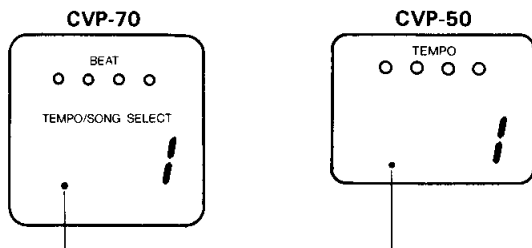
Press the SONG SELECT button to activate the CVP-50/70 DISK ORCHESTRA mode. When this is done the SONG SELECT, RIGHT ON, LEFT ON and ORCHESTRA ON indicators will light, and the Beat/Tempo/Song Number display will function as the song number display. Use the ◀ and ▶ buttons below the display to select the desired song number. If you select song number "0" all songs on the disk will be played and repeated until playback is stopped.



3. Begin Playback

Start playback of the selected song by pressing either the START/STOP button or the INTRO/ENDING button. Unless song number "0" is selected, the selected song will play through to the end and playback will stop automatically. Playback can be stopped at any time by pressing the START/STOP button.

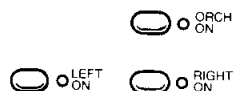
- Please note that playback cannot be started while the leftmost dot in the display is lit.



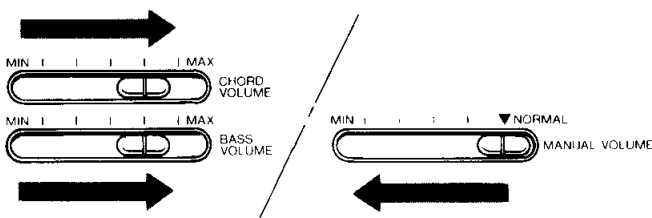
PLAYBACK WILL NOT START WHILE THIS DOT IS LIT (SEARCHING FOR SELECTED SONG).

4. Playing Back only Specific Parts

The LEFT ON, RIGHT ON and ORCHESTRA ON buttons can be used to select playback of specific parts. The LEFT ON button turns the left-hand part on or off, the RIGHT ON button turns the right-hand part on or off, and the ORCHESTRA ON button turns the ORCHESTRA part on or off. When a part is ON, the corresponding LED indicator lights. Use the LEFT ON, RIGHT ON and ORCHESTRA ON buttons to select the parts you want to play back. You can, for example, turn OFF a part you want to practice on the keyboard. When a part is turned ON, the guide lamps for that part are turned OFF, and when a part is turned OFF, the guide lamps for that part are turned ON and will appear above the keyboard.



- In some Disk Orchestra Collection and Disklavier (Piano-Soft) disks, both the left and right-hand piano parts are recorded together on the right track. In such a case the left track cannot be turned ON.
- Use the MANUAL VOLUME control to adjust the volume of the right-hand part in relation to the left-hand part, the CHORD VOLUME control to adjust the level of the orchestra sound, and the RHYTHM VOLUME control to adjust the volume of the rhythm part if one is included.



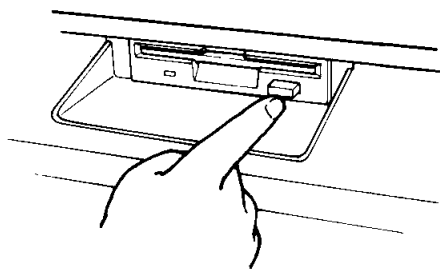
5. Cancel the Guide Lamps if Desired

If the guide lamps flashing above the keyboard distract you, or you want to try playing along without them, simply press the LAMP CANCEL button causing its indicator LED to light. Press the LAMP CANCEL button again (its indicator will go out) when you want to see the guide lamps.



6. Remove the Disk

When you've finished with the currently loaded disk, simply press the disk drive EJECT button to remove it.



CAUTION: NEVER eject a disk or turn the power off while:
1) the disk drive lamp is ON.
2) the DISK ORCHESTRA function is playing.

- The positions of the guide lamps do not change if the transpose function is used to transpose the pitch of the keyboard.
- Some Disk Orchestra software does not produce a tempo display (e.g. free-tempo phrases, etc.). In this case, three lit bars appear along the bottom of the tempo display area.

Guided Right- and Left-hand Practice

With this feature, the CVP-50/70 waits for you to play the appropriate keys before playing ahead, so you can learn to play the piece at your own pace. To practice the right-hand part, for example, press the RIGHT GUIDE button (its indicator LED will light) before starting playback. When you press the START/STOP button to begin playback, the introduction will play automatically but then the CVP-50/70 will stop and wait for you to play the key(s) indicated by the guide lamps above the keyboard. As you play the indicated keys, the piece will continue, pausing until you play the right keys each time. You can practice the left-hand part using the LEFT GUIDE button in the same way. As with automated performance, the song will stop automatically when the end is reached, or it can be stopped at any time by pressing the STOP/START button.

- Disk Orchestra playback tempo can be set to any desired value after a song has been selected by using the ◀ and ▶ buttons while holding the SPLIT POSITION button.

○ LEFT GUIDE ○ RIGHT GUIDE



Phrase Repeat

Use this function if you want to practice a specific phrase within a song.

1. Select the Desired Song

Press the SONG SELECT button and select the desired song as described in "Automated Performance," above.

2. Select the Desired Phrase

Press the PHRASE REPEAT button (its LED indicator will light). When this is done the Beat/Tempo/Song Number display will function as the phrase number display. Use the ◀ and ▶ buttons below the display to select the desired phrase number (refer to the DISK MUSIC BOOK that comes with the DISK MUSIC disk).

○ PHRASE REPEAT

3. Start Playback

Press the START/STOP button to begin playback of the selected phrase. Phrase playback will repeat until the START/STOP button is pressed a second time.

Special Pedal Functions

Pause/Continue

If the left pedal is set for START/STOP operation using the LEFT PEDAL FUNCTION button, and RIGHT GUIDE and LEFT GUIDE are both OFF, the left pedal functions as a pause/continue control: press once to pause, and again to continue from the same point.

Pause/Cue

If the left pedal is set for INTRO/ENDING operation using the LEFT PEDAL FUNCTION button, and RIGHT GUIDE and LEFT GUIDE are both OFF, the left pedal functions as a pause/cue control: press once to pause, and again to continue from the beginning of the next phrase (refer to the DISK MUSIC BOOK that comes with the DISK MUSIC disk for phrase locations). There may be a slight delay after the pedal is pressed to "cue" to the beginning of the next phrase.

- The tempo display may not be accurate after the Pause/Continue or Pause/Cue function is used.

PERFORMANCE MEMORY

The CVP-50 and CVP-70 feature a built-in "sequencer" which can be used to independently record up to ten separate parts of a single musical composition. The Performance Memory has three RECORD and three PLAYBACK buttons, corresponding to track 1, track 2, and tracks 3 through 10. The music data that you record is stored on a 3.5" floppy disk loaded into the Clavinova's disk drive unit. Before you can record, however, you must "format" a new disk, as described below.

RECORD ○ 1 ○ 2 ○ 3-10

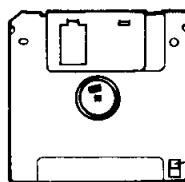
PLAY BACK ○ 1 ○ 2 ○ 3-10

Formatting a New Disk

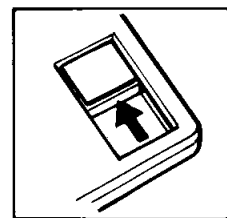
The Clavinova uses only 3.5" 2DD 9-sector format type floppy disks. We recommend that you use Yamaha 2DD disks. Before you can use a new disk for recording, the disk must be "formatted" so that the Clavinova can recognize it and correctly write the music data onto it.

1. Insert the New Blank Disk

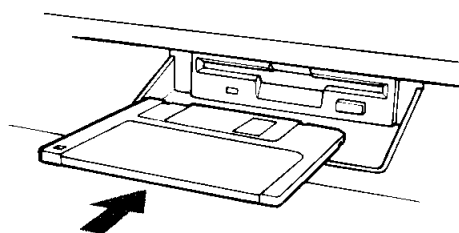
Make sure that the disk's write protect tab is set to the "write" position (tab closed), and insert the new disk into the disc drive unit with the metallic door facing the drive slot and the label side of the disk facing upward. The disk should click securely into place, and the disk drive lamp should light briefly.



Write Protect tab



Write Protect OFF



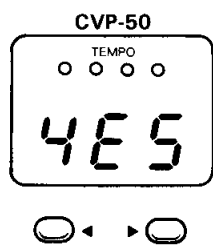
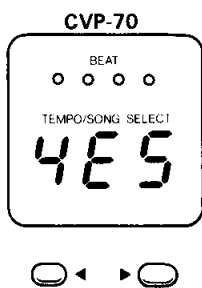
2. Press the DISK CONTROL FORMAT Button

The FORMAT button LED will light.

○ FORMAT

3. Confirm the Format Operation

Use the Tempo ◀ and ▶ buttons to select either "Y" (YES) or "N" (NO) on the display. "Y" if you intend to execute the format operation or "N" if you wish to cancel the operation. This step is necessary because formatting completely erases any data that is already on the disk—make sure that the disk you're about to format does not contain any important data!



4. Begin Formatting

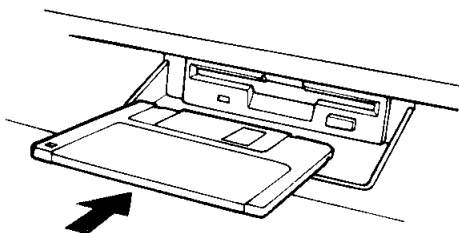
Press the **FORMAT** button again and formatting will begin. The number of each "track" on the disk will be shown on the display as the format process continues. When formatting is complete (the **Beat/Tempo/Song Number** display will revert to the normal tempo display), you can go ahead and record.

- The format operation can be aborted at any time by pressing the **START/STOP** button. In this case, the disk will only be partly formatted and will have to be properly formatted again before use.
- When using the floppy disk format function, a write protect error (Er 2) will be generated with the following three disk types regardless of the disk's write protect status. This has been done to ensure that the music software cannot be accidentally erased.
 1. YAMAHA Disklavier software (PianoSoft).
 2. Disks formatted on the YAMAHA Disklavier.
 3. Clavinova software (Disk Orchestra Collection).

Recording

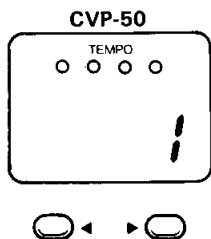
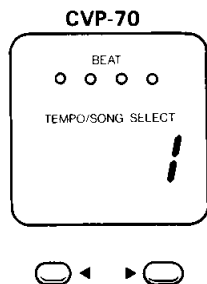
1. Load Formatted Disk

If you haven't already done so, make sure that a properly formatted disk is loaded into the Clavinova disk drive, and that the disk's write protect tab is set to the "write" position (tab closed).



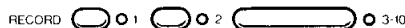
2. Select a Song Number

Press the **SONG SELECT** button and select a **SONG NUMBER** between 1 and 60 for the piece you are about to record (up to 60 different songs, each with a different song number, can be recorded on a single disk). Make sure the song number you select has not already been used for a song previously recorded on the disk you are using.



3. Press One of the RECORD Buttons

Only one track can be recorded at a time. If you press **RECORD 1** you will record on track number 1. If you press **RECORD 2** you will record on track number 2. If you press **RECORD 3**, you can choose to record on track 3, 4, 5, 6, 7, 8, 9, or 10 by selecting the desired track number using the **◀** and **▶** buttons below the **Beat/Tempo/Song Number** display while holding the **RECORD 3** button (the selected track number will appear on the **Beat/Tempo/Song Number** display).



4. Select a Voice

Select a voice (and a **LOWER VOICE** is desired) in the normal way.

5. Select the Required Performance Features, Tempo, etc.

The **Performance Memory** feature is capable of recording rhythms or **PIANO ABC** accompaniment with any bass and chord voices you select. If you want to record without rhythm accompaniment, turn the **RHYTHM VOLUME** control all the way down. Set a tempo at which you can comfortably record the piece. The tempo can be confirmed visually by watching the flashing beat indicator.

- If you intend to use **PIANO ABC** and/or a **LOWER** voice, the necessary **ABC** and **LOWER** functions must be selected after pressing the desired **RECORD** button.
- If you will be using **PIANO ABC**, it's probably best to record the **ABC** accompaniment on the first track you record. Then you can record subsequent tracks while listening to playback of the **ABC** sound you recorded on the first track. If you attempt to record **ABC** on more than one track, the two **ABC** tracks will compete with each other and you may not get the sound you expected.

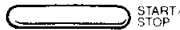
6. Play

The **SYNCHRO START** mode is automatically selected when a **RECORD** button is pressed, so recording will begin automatically as soon as a key is pressed or the **START** or **INTRO/ENDING** button is pressed. The current measure number is shown on the **Beat/Tempo** display as you record. Changes in the following parameters will be recorded in addition to notes you play:

- Keys Played (note & velocity)
- Voice
- Brilliance Control
- Reverb
- Effect (CVP-70 only)
- Rhythm Pattern
- Rhythm Pattern Variation
- Lower ON/OFF
- Fill In
- Intro/Ending
- Rhythm Volume
- Tempo
- Piano ABC Mode
- Split Position
- Manual/Lower Volume
- Bass Voice
- Chord Voice
- Bass Volume
- Expression (pedal)
- Bass Bend
- Registration Memory Number
- Chord Volume or Lower Volume
- Damper, Sostenuato and Soft Pedal

7. Stop Recording

Press the RECORD button a second time, or the START/STOP button to stop recording. Recording will stop automatically if the disk memory capacity is reached (see "Memory Capacity and Display," below).



Recording a New Track

When you've finished recording the first track, you can simply play it back as described in "playback," below, or record a new track. To record a new track, press a RECORD button other than the one you used to record the previous track (and select a new track between 3 and 10 if you press RECORD 3), and start recording (if you press the same RECORD button again, the previously recorded material will be erased and the new material will be recorded in its place). If you press the PLAYBACK button of the previously recorded track, you'll be able to record the new track while listening to the previously recorded track (for tracks 3 through 10, all previously recorded tracks will play back while a new track is being recorded).

- The guide lamps above the keyboard provide a recorded-track display while any of the RECORD (1, 2 or 3-10) buttons are held. The guide lamps above the keys E^b6 through C7 correspond to tracks 1 through 10. When a guide lamp is on, the corresponding tracks contains recorded data. Guide lamps that are off represent empty tracks.
- The initial settings of the parameters listed below will be automatically applied to all tracks from the beginning of the recording. Changes made to these parameters during recording will be recorded and reproduced when the piece is played back. It is also possible to change the settings of the initial parameters (listed below) after one or more tracks have been recorded by pressing a RECORD button, changing the settings, and then turning the RECORD button OFF again.
 - Tempo
 - Reverb
 - Voice (Lower, Bass, Chord)
 - Rhythm/Variation
 - Fill In/Break/Intro
 - Volume (Lower, Bass Chord, Rhythm)
- Tempo changes made during recording apply to all tracks, and cancel all tempo changes previously made at any point following the new tempo change.

Memory Capacity and Display

A single disk can record a total of approximately 688 kilobytes (a kilobyte is 1,024 bytes) of data—sufficient for many long and complicated performances. In terms of notes, approximately 50,000 notes can be recorded continuously if no other Clavinova functions are used. If you actually bothered to sit down and record this many notes without stopping, however, there wouldn't be enough room left on the disk for any more tracks. The remaining memory capacity is shown in kilobytes on the Beat/Tempo display immediately after the RECORD button is pressed. Due to the way that the Clavinova stores the music data, however, the display will show less than the actual memory usage when the second track is recorded. This is because the original track 1 data is temporarily retained in addition to the new track 1 + 2 data. The display is designed to work this way so you can judge (roughly) whether you have enough capacity left to record a subsequent track. Recording will stop automatically if the disk and internal Clavinova memory become full.

- The Clavinova has enough internal RAM memory to allow recording for a while even if a disk is not loaded. If accidentally record without loading a disk, make sure you use the COPY function (described later) to copy the

recorded data to disk if you want to keep the recorded data (the internal RAM memory is not backed up). This is necessary because the internal RAM memory is cleared automatically when a new performance disk is loaded.

- Custom Rhythm and Registration Memory data to be used in a recording must be stored to the disk prior to recording by pressing a REC button while holding the SPLIT button. This data must then be recalled (if the Custom Rhythm and/or Registration memory has subsequently been altered) prior to playback by pressing a PLAY button while holding the SPLIT button. Recalled Custom Rhythm and Registration Memory data will overwrite any current data.

Playback

1. Select the Desired Song Number

Make sure that the disk containing the song you wish to play is properly loaded in the Clavinova disk drive. Press the SONG SELECT button and use the ◀ and ▶ buttons below the Beat/Tempo/Song Number display to select the song number (1-60) you wish to play.

2. Press the PLAYBACK Button(s)

Press the PLAYBACK buttons corresponding to the track or tracks you want to play back. If the PLAYBACK 3 button is pressed, all material that was recorded on tracks 3 through 10 will be played back.

3. Press the START Button

Playback of the selected tracks begins as soon as the START button is pressed.

4. Adjust the Playback Volume

Use the MASTER VOLUME, RHYTHM VOLUME, BASS VOLUME and CHORD VOLUME controls to set the desired playback volume and balance.

5. Stop Playback

Press the STOP button to stop playback. Playback will stop automatically when the end of the recording is reached. Playback will also stop if a RECORD button is pressed during playback.

- PIANO ABC and SPLIT POSITION settings can not be changed during playback.
- You can play along with Performance Memory playback on the Clavinova keyboard, using any voice you select in the normal way.
- If Registration Memory changes are included in the piece being played back, Solo Styleplay and Left Pedal Function data included in the Registration Memory setting will not be reproduced.

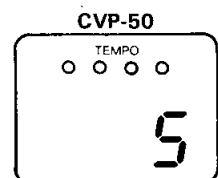
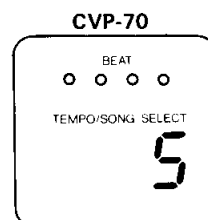
Disks recorded on the Yamaha DOM-30 Disk Orchestra Module and piano solo disks recorded on the Yamaha DRC-20 Disk Recorder can be reproduced in the same way as the performance memory. (DOM-30 disks recorded with voices other than piano can generally be reproduced on the CVP-50/70 with the same voices if a special DOM-30 format conversion function is used. Refer to the DOM-30 operation manual for details.)

Copying Songs

Song data can "backed up" by copying to a new song number or a different disk, as follows:

1. Select the Song Number to be Copied.

Press the SONG SELECT button and use the ◀ and ▶ buttons below the Beat/Tempo/Song Number display to select the number of the song you wish to copy.



2. Press the SONG SELECT Button Again.

This exits the SONG SELECT mode, causing the display to revert to its normal tempo display function.

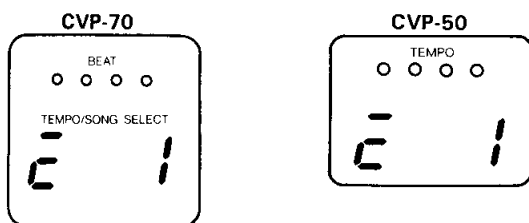
3. Press the COPY Button.

The COPY button LED will flash.



4. Select the Destination Song Number.

Use the ◀ and ▶ buttons below the Beat/Tempo/Song Number display to select the song number you wish to copy to (i.e. the destination song number). If you select a song number that already contains data, that data will be overwritten by the new song data. If you select a song number greater than 60, the copy will be made to a different disk.

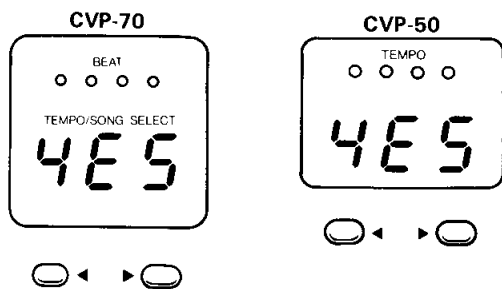


5. Start the Copy Operation.

Press the COPY button again to begin the actual copy operation (the COPY LED will light continuously during the copy operation). If you chose to copy to a different disk, you may have to exchange the source and destination disks a few times if the song being copied is long and complex. In this case, the Clavinova will prompt you to insert the source and destination disks with the following displays:

- d 1 Insert source disk.
- d 2 Insert destination disk.

- If you copy to a song number that already contains data, or to another disk, the Clavinova will ask you to confirm the copy operation. Use the Tempo ◀ and ▶ buttons to select either "Y" (YES) or "N" (NO) on the display. "Y" if you intend to execute the copy operation or "N" if you wish to cancel the operation. The copy operation will begin automatically if you select "Y."



- The copy operation can be aborted at any time by pressing the START/STOP button.

Deleting a Song

You can delete any song from a loaded disk as follows:

1. Press the COPY button while holding the MIDI/TRANSCOPE button.

The COPY LED will flash.



2. Select the Song to Delete.

Use the ◀ and ▶ buttons below the Beat/Tempo/Song Number display to select the song number you wish to delete.

3. Start the Delete Operation.

Press the COPY button a second time to actually delete the selected song.

Error Messages

If an error related to the disk occurs, one of the following messages may appear. If this happens, try the operation that caused the error message again. If the error persists, you may be attempting to use a write-protected disk, a disk that has not been properly formatted, or the disk itself may be at fault. If all else fails, try a different disk. If this doesn't clear up the problem, contact your Yamaha dealer.

Er1: Disk read or write error (e.g. unformatted disk)

Er2: Disk write-protected.

Er3: Attempt to record to song number 0.

REGISTRATION MEMORY

The CVP-70/50 Registration Memory feature can be used to memorize 5 complete control-panel setups that you can recall whenever needed.



Memory Store

1. Set Up the Controls as Required

Make the desired control settings: voice, lower voice, rhythm, rhythm variation, Brilliance, Reverb mode, Effect (CVP-70 only), Keyboard Percussion, Piano ABC, bass and chord voices, split position, left pedal function, tempo, Solo Style-play, rhythm volume, chord volume, bass volume and manual volume.

2. Store in Memory

Press and hold the MEMORY button, then press one of the REGISTRATION buttons (1—5).

Recall

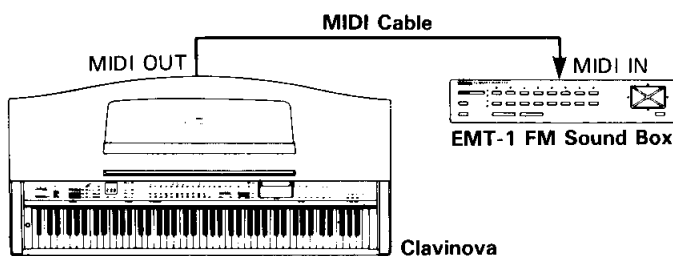
Simply press the desired REGISTRATION button (1—5) at any time to recall the memorized settings.

- Only one set of control settings can be stored in each REGISTRATION button at a time.
- Registration data is retained in the Clavinova memory for about one week even if the POWER is not turned on. To keep the data in memory for longer periods, turn the POWER switch ON briefly at least once a week.

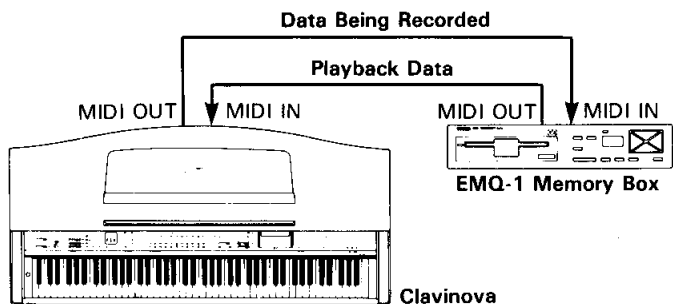
MIDI FUNCTIONS

A Brief Introduction to MIDI

MIDI, the Musical Instrument Digital Interface, is a world-standard communication interface that allows MIDI-compatible musical instruments and equipment to share musical information and control one another. This makes it possible to create "systems" of MIDI instruments and equipment that offer far greater versatility and control than is available with isolated instruments. For example, most MIDI keyboards (including the Clavinova, of course) transmit note and velocity (touch response) information via the MIDI OUT connector whenever a note is played on the keyboard. If the MIDI OUT connector is connected to the MIDI IN connector of a second keyboard (synthesizer, etc.) or a tone generator such as the Yamaha EMT-1 FM Sound Box (essentially a synthesizer with no keyboard), the second keyboard or tone generator will respond precisely to notes played on the original transmitting keyboard. The result is that you can effectively play two instruments at once, providing thick multi-instrument sounds.



This same type of musical information transfer is used for MIDI sequence recording. A sequence recorder such as the Yamaha EMQ-1 Memory Box can be used to "record" MIDI data received from a Clavinova, for example. When the recorded data is played back, the Clavinova automatically "plays" the recorded performance in precise detail.



The examples given above really only scratch the surface. MIDI can do much, much more. The CVP-50 and CVP-70 offer a number of MIDI functions that allow them to be used in fairly sophisticated MIDI systems.

- Always use a high-quality MIDI cable to connect MIDI OUT to MIDI IN terminals. Never use MIDI cables longer than about 15 meters, since cables longer than this can pick up noise which can cause data errors.

MIDI "Messages" Transmitted & Received by the Clavinova

The most important MIDI information (messages) transmitted and received by the Clavinova are as follows:

Note and Velocity Data

This information tells the receiving keyboard or tone generator to play a certain note (specified by the MIDI note number) at a certain dynamic level (specified by the MIDI velocity value). Note and velocity data is transmitted by the Clavinova whenever a key is pressed, and the Clavinova's internal AWM tone generator will "play" the corresponding note(s) whenever note and velocity data is received from an external MIDI device.

Program Change Numbers

The Clavinova transmits a MIDI program number between 0 and 22 when one of its voice selectors is pressed. This normally causes the correspondingly numbered voice or program to be selected on a receiving MIDI device. The Clavinova will respond in the same way, automatically selecting the appropriate voice when a MIDI program change number is received. See "Program Change ON/OFF" on page 29 for information on turning program change number reception and transmission ON or OFF.

Control Change Numbers

Control Change data representing Soft, Sostenuto, Damper, volume and other operations is transmitted by the Clavinova whenever one of these pedals is used. If the receiving device is a tone generator or another keyboard, it will respond in the same way as the Clavinova's internal tone generator when one of the pedals is used. The Clavinova also receives and responds to the appropriate control change data. See "Control Change ON/OFF" on page 30 for information on turning control change number reception and transmission ON or OFF.

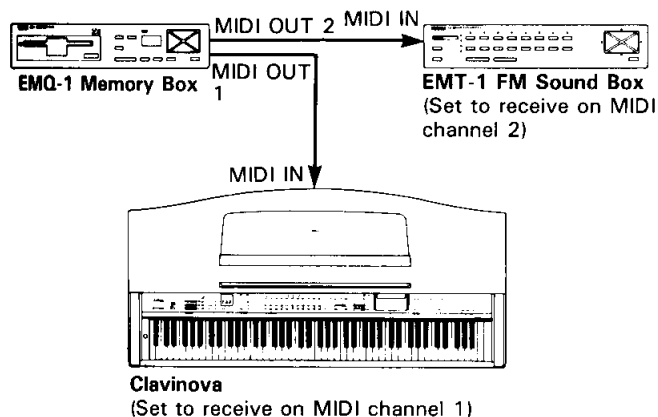
AVAILABLE MIDI FUNCTIONS

Function	CVP-50 Selector*	CVP-70 Selector*
Send Channel Select	PIANO 1/2	PIANO 1
Receive Channel Select	E.PIANO 1/2	E.PIANO 1
Local ON/OFF	HARPSI/CELESTA	HARPSI
Program Change ON/OFF	VIBES/MARIMBA	VIBES
Control Change ON/OFF	GUITAR/J.GUITAR	GUITAR
Multi-Timbre Mode ON/OFF	CHOIR/STRINGS	CHOIR
Split Send Mode	WOOD/BRASS	WOOD
MIDI Clock Select	SAX/SYNTH	SAX
Panel Data Transmit	P.ORGAN/J.ORGAN	P.ORGAN

* The MIDI functions listed above are engaged by holding down the MIDI/TRANPOSE button and pressing the corresponding voice selector. Full details are given in the following pages. A special MIDI mode that is currently intended for internal Yamaha use only is accessed by holding MIDI/TRANPOSE and pressing the ELEC BASS 1 selector on the CVP-70 or the ELEC BASS 1/2 selector on the CVP-50. If you accidentally turn this mode ON (the ELEC BASS 1 or ELEC BASS 1/2 LED is lit when the ELEC BASS 1 or ELEC BASS 1/2 selector is pressed while MIDI/TRANPOSE is held), turn it OFF by holding MIDI/TRANPOSE and pressing the ELEC BASS 1 (ELEC BASS 1/2) selector again (the ELEC BASS 1 or ELEC BASS 1/2 LED should go out).

MIDI Transmit & Receive Channel Selection

The MIDI system allows transmission and reception of MIDI data on 16 different channels. Multiple channels have been implemented to allow selective control of certain instruments or devices connected in series. For example, a single MIDI sequence recorder could be used to "play" two different instruments or tone generators. One of the instruments or tone generators could be set to receive only on channel 1, while the other is set to receive on channel 2. In this situation the first instrument or tone generator will respond only to channel-1 information transmitted by the sequence recorder, while the second instrument or tone generator will respond only to channel-2 information. This allows the sequence recorder to "play" two completely different parts on the receiving instruments or tone generators.



In any MIDI control setup, the MIDI channels of the transmitting and receiving equipment must be matched for proper data transfer. An "OMNI" receive mode is also available, which allows reception on all 16 MIDI channels. In the OMNI mode it is not necessary to match the receive channel of the receiving device to the transmit channel of the transmitting device (except when receiving mode messages).

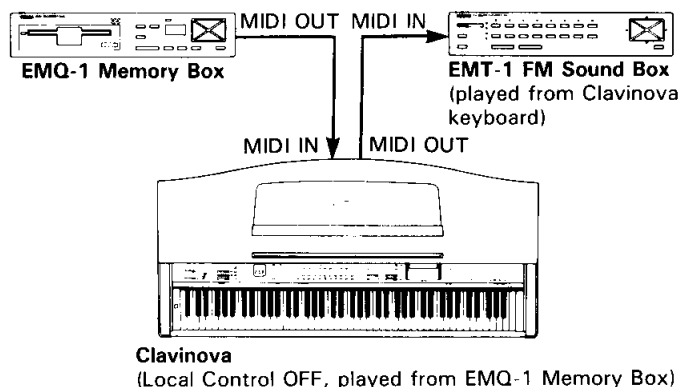
Setting the Clavinova MIDI Channels

1. Press and hold the MIDI/TRANPOSE button, then press the PIANO 1/2 (PIANO 1) voice selector to set the send channel or the E.PIANO 1/2 (E.PIANO 1) voice selector to set the receive channel.
 2. Use the tempo ◀ and ▶ buttons to select the desired channel (the selected channel number is shown on the Beat/Tempo display—the OMNI receive mode is indicated by "ALL" on the display).
- When the power is initially turned ON, MIDI receive is set to the OMNI mode and the transmit channel is set to 1.

Local Control ON/OFF

"Local Control" refers to the fact that, normally, the Clavinova keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is "Local Control ON" since the internal tone generator is controlled locally by its own keyboard.

Local control can be turned OFF, however, so that the Clavinova keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone generator responds to MIDI information received via the MIDI IN connector. This means that while an external MIDI sequence recorder such as the Yamaha EMQ-1 Memory Box, for example, plays the Clavinova's internal voices, an external tone generator such as the EMT-1 can be played from the Clavinova keyboard. Local Control is automatically turned ON when the power is initially turned ON.



Turning Local Control ON or OFF

1. Hold down the MIDI/TRANPOSE button.
2. Press the HARPSI/CELESTA (HARPSI) voice selector. If the HARPSI/CELESTA (HARPSI) LED is lit when the voice selector is pressed, you have turned local control OFF. If the HARPSI/CELESTA (HARPSI) LED is not lit when the voice selector is pressed, you have turned local control ON.
3. Release the MIDI/TRANPOSE button.

Program Change ON/OFF

Normally the Clavinova will respond to MIDI program change numbers received from an external keyboard or other MIDI device, causing the correspondingly numbered Clavinova voice to be selected. The Clavinova will normally also send a MIDI program change number whenever one of its voices is selected, causing the correspondingly numbered voice or program to be selected on the external MIDI device if the device is set up to receive and respond to MIDI program change numbers. This function makes it possible to cancel program change number reception and transmission so that voices can be selected on the Clavinova without affecting the external MIDI device, and vice versa. Program Change is automatically turned ON when the power is initially turned ON.

1. Hold down the MIDI/TRANPOSE button.
2. Press the VIBES/MARIMBA (GUITAR) voice selector. If the VIBES/MARIMBA (GUITAR) LED is lit when the voice selector is pressed, you have turned program change reception/transmission OFF. If the VIBES/MARIMBA (GUITAR) LED is not lit when the voice selector is pressed, you have turned program change reception/transmission ON.
3. Release the MIDI/TRANPOSE button.

Control Change ON/OFF

Normally the Clavinova will respond to MIDI control change data received from an external MIDI device or keyboard, causing the selected Clavinova voice to be affected by pedal and other "control" settings received from the controlling device. The Clavinova also transmits MIDI control change information when either of its pedals are operated.

This function makes it possible to cancel control change data reception and transmission if you do not want the Clavinova voices to be affected by control change data received from an external device or vice versa. Control Change is automatically turned ON when the power is initially turned ON.

1. Hold down the MIDI/TRANSCOPE button.
2. Press the GUITAR/J.GUITAR (CHOIR) voice selector. If the GUITAR/J.GUITAR (CHOIR) LED is lit when the voice selector is pressed, you have turned control change reception/transmission OFF. If the GUITAR/J.GUITAR (CHOIR) LED is not lit when the voice selector is pressed, you have turned control change reception/transmission ON.
3. Release the MIDI/TRANSCOPE button.

The Multi-Timbre Mode

The Multi-Timbre mode is a special mode in which the Clavinova voices can be independently controlled on different MIDI channel numbers (1 through 10 and 15) by an external MIDI device such as the Yamaha EMQ-1 Memory Box. The Multi-Timbre mode is automatically turned OFF when the power is initially turned ON. The Multi-Timbre mode can be activated as follows:

1. Hold down the MIDI/TRANSCOPE button.
2. Press the CHOIR/STRINGS (WOOD) voice selector. If the CHOIR/STRINGS (WOOD) LED is lit when the voice selector is pressed, you have turned the Multi-Timbre mode ON. If the CHOIR/STRINGS (WOOD) LED is not lit when the voice selector is pressed, you have turned the Multi-Timbre mode OFF.
3. Release the MIDI/TRANSCOPE button.

- The Clavinova's rhythm instruments are controlled via MIDI channel 15. The note assignments for the various rhythm instruments are given below:

RHYTHM INSTRUMENT NOTE ASSIGNMENTS

Note (MIDI Note No.)	Instrument
F#2 (54)	BRUSH ROLL
G#2 (56)	HI-HAT CLOSED HEAVY
A#2 (58)	CRASH CYMBAL LIGHT
B2 (59)	BASS DRUM LIGHT
C3 (60)	SNARE DRUM + RIM HEAVY
C#3 (61)	RIDE CYMBAL CUP
D3 (62)	SNARE DRUM + RIM LIGHT
F3 (65)	BASS DRUM
F#3 (66)	RIM SHOT
G3 (67)	SNARE DRUM HEAVY
G#3 (68)	BRUSH SHOT
A3 (69)	SNARE DRUM LIGHT
A#3 (70)	HI-HAT PEDAL
B3 (71)	SNARE DRUM ECHO
C4 (72)	TOM 4
C#4 (73)	HI-HAT CLOSED
D4 (74)	TOM 3
D#4 (75)	HI-HAT OPEN
E4 (76)	TOM 2
F4 (77)	TOM 1
F#4 (78)	RIDE CYMBAL
G4 (79)	ELECTRONIC TOM 3
G#4 (80)	CRASH CYMBAL
A4 (81)	ELECTRONIC TOM 2
B4 (83)	ELECTRONIC TOM 1
C5 (84)	CONGA LOW
C#5 (85)	CABASA
D5 (86)	CONGA HIGH
D#5 (87)	METRONOME
E5 (88)	BONGO
F5 (89)	TIMBALE LOW
F#5 (90)	CLAVES
G5 (91)	TIMBALE HIGH
G#5 (92)	CASTANETS
A5 (93)	CUICA LOW
A#5 (94)	COWBELL
B5 (95)	CUICA HIGH
C6 (96)	HAND CLAPS
C#6 (97)	AGOGO LOW
D#6 (99)	AGOGO HIGH
E6 (100)	BONGO LOW
F#6 (102)	TAMBOURINE
G#6 (104)	TRIANGLE CLOSED
A#6 (106)	TRIANGLE OPEN

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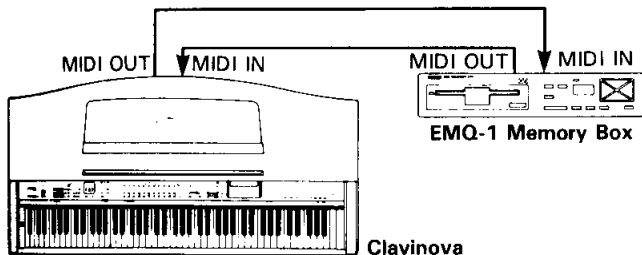
OF



A Multi-Timbre Mode Example

Here's an example of how you could use the Multi-Timbre mode to record three different parts on the EMQ-1 Memory Box that will play different voices on the Clavinova when played back.

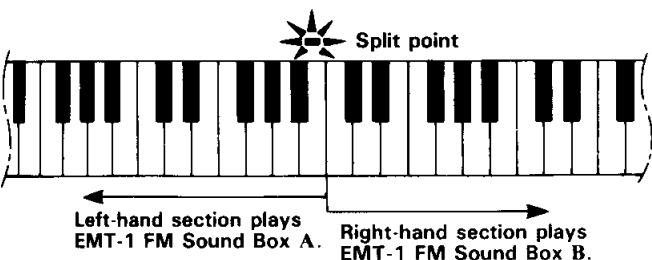
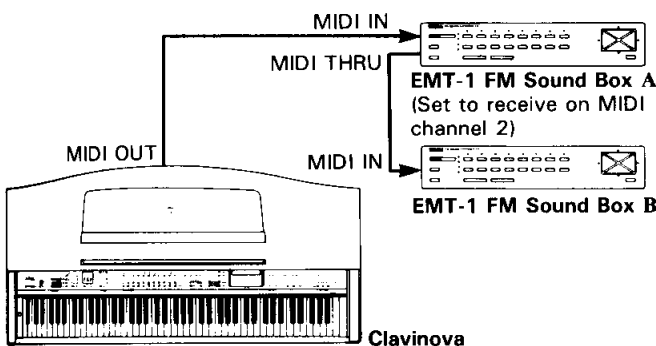
1. Connect the EMQ-1 to the Clavinova as shown below.



2. Select the first voice and MIDI transmit channel number, then record the first part on the EMQ-1.
3. Activate the Clavinova Multi-Timbre mode, then select a new MIDI transmit channel and voice and record the second part on the EMQ-1 using its overdubbing function.
4. While still in the Multi-Timbre mode, select the third MIDI transmit channel and voice and record the third part on the EMQ-1 using its overdubbing function.
5. Still in the Multi-Timbre mode, play back the EMQ-1. The recorded parts will be played back using the individual voices selected during recording, providing a full ensemble sound.

The Split Send Mode

In the split send mode note played on the lower section of the Clavinova keyboard are transmitted on MIDI channel 2, while the upper keyboard section transmits on the MIDI channel set using the Send Channel Select function described earlier. In this mode the left- and right-hand sections of the keyboard can be used to play separate external keyboards or tone generators set to receive on the appropriate channels. The split position (the key that divides the left- and right-hand sections of the keyboard) is determined by the SPLIT POSITION button in the normal way. The Split Send Mode is automatically turned OFF when the power is initially turned ON.



Activating the Split Send Mode

1. Hold down the MIDI/TRANPOSE button.
2. Press the WOOD/BRASS (SAX) voice selector. If the WOOD/BRASS (SAX) LED is lit when the voice selector is pressed, you have turned the Split Send Mode ON. If the WOOD/BRASS (SAX) LED is not lit when the voice selector is pressed, you have turned the Split Send Mode OFF.
3. Release the MIDI/TRANPOSE button.

MIDI Clock Select

This function determines whether the Clavinova's rhythm and PIANO ABC timing is controlled by the Clavinova's own internal clock or an external MIDI clock signal received from external equipment connected to the MIDI IN connector. The Clock Mode is automatically set to INTERNAL when the power is initially turned ON.

1. Hold down the MIDI/TRANPOSE button.
 2. Press the SAX/SYNTH (P.ORGAN) voice selector. If the SAX/SYNTH (P.ORGAN) LED is lit when the voice selector is pressed, you have set the Clock Mode to EXTERNAL. If the SAX/SYNTH (P.ORGAN) LED is not lit when the voice selector is pressed, you have set the Clock Mode to INTERNAL.
 3. Release the MIDI/TRANPOSE button.
- If the Clock Mode is set to EXTERNAL and a MIDI clock signal is not being received from an external source, the Clavinova rhythm, PIANO ABC and other clock-dependent features will not operate.

Panel Data Send

This function causes all the current Clavinova control settings (selected voice, etc) to be transmitted via the MIDI OUT terminal. This is particularly useful if you will be recording performances to a MIDI sequence recorder* which will be used to control the Clavinova on playback. By transmitting the Clavinova panel settings and recording them on the MIDI sequence recorder prior to the actual performance data, the Clavinova will be automatically restored to the same settings when the performance is played back.

* The Yamaha EMQ-1 Memory Box automatically receives and records the Clavinova panel settings when a recording is begun, so this function is most useful with MIDI sequence recorders other than the EMQ-1.

1. Hold down the MIDI/TRANPOSE button.
 2. Press the P.ORGAN/J.ORGAN (UPRIGHT) voice selector.
 3. Release the MIDI/TRANPOSE button.
- The WOOD 1/2 voice selector LED remains lit while the data is being sent.

MIDI Specifications for Other Equipment

When using the Clavinova with other MIDI equipment, always refer to the MIDI specifications (implementation chart and MIDI data format) of the equipment used to ensure compatibility.

TROUBLESHOOTING

If you encounter what appears to be a malfunction, please check the following points before assuming that your Clavinova is faulty.

1. No Sound When the Power is Turned ON

Is the AC plug properly connected to an AC wall outlet? Check the AC connection carefully. Is the MASTER VOLUME control turned up to a reasonable listening level?

2. The Clavinova Reproduces Radio or TV Sound

This can occur if there is a high-power transmitter in your vicinity. Contact your Yamaha dealer.

3. Intermittent Static Noise

This is usually due to turning ON or OFF a household appliance or other electronic equipment which is fed by the same AC mains line as your Clavinova.

4. Interference Appears On Radio or TV Sets Located Near the Clavinova

The Clavinova contains digital circuitry which can generate radio-frequency noise. The solution is to move the Clavinova further away from the affected equipment, or vice versa.

5. Distorted Sound When the Clavinova is Connected to An External Amplifier/Speaker System

If the Clavinova is connected to a stereo system or instrument amplifier and the sound is distorted, reduce the setting of the Clavinova volume control to a level at which the distortion ceases.

OPTIONS & EXPANDER MODULES

OPTIONS

BC-7 Bench

A stable, comfortable bench styled to match your Yamaha Clavinova.

HPE-5 Stereo Headphones

High-performance lightweight dynamic headphones with extra-soft ear pads.

EP-1 Expression Pedal

Connects to the Clavinova EXPRESSION jack for foot expression control.

PCS-3 Connecting Cord

For connecting the Clavinova to a stereo system or other audio equipment.

EXPANDER MODULES

Sound Box EMT-10 AWM Sound Expander

Sound Box EMT-1 FM Sound Expander

Memory Box EMQ-1 Disk Recorder

Drum Box EMR-1 Digital Drummer

Reverb Box EME-1 Digital Reverb

These state-of-the-art Expander Modules can dramatically expand the musical scope of your Clavinova.

NOTE: Some items may not be available in certain areas.

MIDI DATA FORMAT

If you're already very familiar with MIDI, or are using a computer to control your music hardware with computer-generated MIDI messages, the data provided in this section can help you to control the Clavinova.

1. NOTE ON/OFF

Data format: [9 × H] → [kk] → [vv]

9 × H = Note ON/OFF event (x = channel number)

kk = Note number (21 ~ 108 = A-1 ~ C7)

vv = Velocity (Key ON = 1 ~ 127. Key OFF = 0)

* Note OFF event format [8 × H] → [kk] → [vv] also recognized (reception only, vv = 0 ~ 127).

2. CONTROL CHANGE & MODE MESSAGES

Data format: [B × H] → [cc] → [dd]

B × H = Control event (x = channel number)

cc = Control number (or mode message number)

dd = Control value

cc	PARAMETER	dd
01H	Modulation/ Vibrato (Receive only)	0 ~ 0FH = OFF 0 (OFF) ~ 7FH (MAX), 8 steps (LFO speed fixed for each voice)
07H	Volume (Manual Volume)	00000000 = -∞ 01101111 = -3 dB 01111111 = ±0 dB
0BH	Expression	00000000 = -∞ 01101111 = -3 dB 01111111 = ±0 dB
40H	Damper pedal	0 ~ 7FH, maximum 8 steps.
42H	Sostenuto pedal	0 ~ 3FH = OFF; 40H ~ 7FH = ON
43H	Soft pedal	0 ~ 3FH = OFF; 40H ~ 7FH = ON
5CH	Tremolo	0 ~ 3FH = OFF; 40H ~ 7FH = ON
5DH	Chorus	0 ~ 3FH = OFF; 40H ~ 7FH = ON
5EH	Ensemble	0 ~ 3FH = OFF; 40H ~ 7FH = ON
5FH	Flanger	0 ~ 3FH = OFF; 40H ~ 7FH = ON
79H	Reset all controllers	0
7AH	Local ON/OFF	0 = OFF; 7FH = ON
7BH	All notes OFF	0
7CH	OMNI OFF/All notes OFF	0
7DH	OMNI ON/All notes OFF	0

* 79H, 7AH, 7BH, 7CH and 7DH are receive only.

3. PROGRAM CHANGE

Data format: [C × H] → [dd]

C × H = program event (x = channel number)

dd = Program number

Panel Voices

dd	VOICE	dd	VOICE
00H	PIANO 1	0CH	WOOD
01H	PIANO 2	0DH	BRASS
02H	E.PIANO 1	0EH	SAX
03H	E.PIANO 2	0FH	SYNTH
04H	HARPSICHORD	10H	P.ORGAN
05H	CELESTA	11H	J.ORGAN
06H	VIBES	12H	UP.BASS
07H	MARIMBA	13H	SY.BASS
08H	GUITAR	14H	EL.BASS 1
09H	J.GUITAR	15H	EL.BASS 2
0AH	CHOIR	16H	DRUMS
0BH	STRINGS		

Accompaniment Voices

dd	VOICE	RANGE
17H	SOLO STRINGS	C0 ~ C6
18H	PIZZICATO	C3 ~ C6
19H	TIMPANI & STEEL.DR	C0 ~ F#2
1AH	OBOE	A#2 ~ G6
1BH	CLARINET	G2 ~ A#5
1CH	ROCK GUITAR 1	D2 ~ A5
1DH	ROCK GUITAR 2	D2 ~ A5
1EH	MUTE TRUMPET	F#2 ~ A5
1FH	ACCORDION	F2 ~ A5
20H	HORN	A#0 ~ F4
21H	SY.PIANO	A-1 ~ C7
22H	SY.VOCAL	C2 ~ E5
23H	SY.CRYSTAL	C2 ~ C6

24H SY.LEAD C2~F#6
 25H HARMONICA C3~C6
 26H BANJO C3~A5
 27H BASSOON A0~F#4
 28H HARP A0~C7

Special Sustained Voices Selected when Expression Pedal Pressed

29H CHOIR 2DH SAX
 2AH STRINGS 2EH SYNTH
 2BH WOOD 2FH P.ORGAN
 2CH BRASS 30H J.ORGAN

* No voice change is made when dd > 30H.
 * When the Multi-Timbre mode is ON, program change numbers received on channel 15 select the following rhythm patterns rather than voices:

Multi-Timbre Mode Rhythms

dd	VOICE	dd	VOICE
00H	POPS 1	12H	BOOGIE
01H	POPS 2	13H	RAGTIME
02H	POPS 3	14H	BOSSANOVA
03H	POPS 4	15H	CHA-CHA
04H	ROCK' N ROLL	16H	SAMBA
05H	SLOW ROCK	17H	RHUMBA
06H	DISCO 1	18H	TANGO
07H	DISCO 2	19H	REGGAE
08H	16 BEAT 1	1AH	SALSA
09H	16 BEAT 2	1BH	LATIN POP
0AH	COUNTRY 1	1CH	MARCH
0BH	COUNTRY 2	1DH	CLASSIC
0CH	SHUFFLE 1	1EH	WALTZ
0DH	SHUFFLE 2	1FH	METRONOME
0EH	SWING 1	62H	3/4 time, no rhythm
0FH	SWING 2	63H	4/4 time, no rhythm
10H	SWING 3		
11H	JAZZ WALTZ		

4. BASS BENDER CHANGE DATA

Data format: [E x H] → [cc] → [dd]
 E x H = Bender event (x = channel number)
 cc = LSB
 dd = MSB

	MSB	LSB
MAX:	01111111	01111110
	01111110	01111100
	01111101	01111010
	01000001	00000010
CENTER:	01000000	00000000
	00111111	00000000
	00000001	00000000
MIN:	00000000	00000000

5. SYSTEM REALTIME MESSAGES

Active Sensing (FEH)
 Transmitted every 200 milliseconds. If no data received for more than 400 milliseconds after FE received a NOTE OFF occurs.

Timing Clock (F8H)
 Start (FAH)
 Stop (FBH)

6. SYSTEM EXCLUSIVE MESSAGES

(1) Clavinova Messages
 DATA FORMAT: [F0H] → [43H] → [73H] → [ID CODE] → [nn] → [F7H]

43H = YAMAHA ID
 73H = Clavinova ID
 ID CODE = 01H (All Clavinova), or 1FH/1EH (CVP-70/CVP-50)
 nn = Substatus

nn SEND/RECEIVE DATA
 02H Internal Clock (receive only)
 03H External Clock (receive only)
 13H Multi-Timbre mode OFF
 15H Multi-Timbre mode ON
 7nH Receive channel change (receive only, n = channel number)

(2) Special Control Messages
 DATA FORMAT: [F0H] → [43H] → [73H] → [xx] → [11H] → [0 x H] → [cc] → [dd] → [F7H]

43H = YAMAHA ID
 73H = Clavinova ID
 xx = CVP-70 or CVP-50 ID (1FH or 1EH)
 11H = Clavinova special control code
 0 x H = MIDI channel number
 cc = Control number
 dd = Control value

cc	SEND/RECEIVE DATA	dd
10H	ABC Mode	00H = OFF 01H = ABC Single Finger 02H = ABC Fingered 00H = OFF 01H = Variation ON 40H = Custom (CVP-70) 00H = OFF Event 01H ~ 02H = Fill in switch ON event 00H = INTRO/ENDING OFF 01H = Intro switch on 02H = Ending switch on 03H = Break switch off 04H = Break switch on [dd] = Split key [dd] = Rhythm number 00H = OFF 01H = Lower on [dd] = Voice number [dd] = Volume value (0 x H: x = 1 for LOWER, x = 2 for BASS, x = 4 for CHORD)
11H	Rhythm Variation	[dd] = Volume value 00H ~ 04H = Registrati-on number 01H ~ 05H = Style number 00H = Normal 01H = Mellow 02H = Bright 00H = OFF 01H = Room 02H = Hall 1 03H = Hall 2 04H = Cosmic [dd] = Function number 20H = Rec on 21H = Rec off 22H = Play on 23H = Play off (0 x H: x = 0 for track 1, x = 1 for track 2, x = 2 for track 3 - 10)
12H	Fill In Switch Event	
13H	Intro/Ending Switch Event	
14H	Split	
15H	Rhythm Number	
17H	Lower Voice Mode	
18H	Voice Number	
19H	Volume	
1AH	Rhythm Volume	
20H	Registration Number	
21H	Solo Styleplay Number	
58H	Brilliance	
59H	Reverb	
5BH	Pedal Function	
7FH	Performance Memory	

(3) Panel Dump

a) Panel Dump Request
 DATA FORMAT: [F0H] → [43H] → [2nH] → [7CH] → [F7H]

Panel data is transmitted when the above data is received.
 2nH = Panel dump request ("n" is channel number).

b) Panel Dump
 DATA FORMAT: [F0H] → [43H] → [0nH] → [7CH] → [F7H]
 0nH = Panel dump ("n" is channel number).
 7CH = Format code.

Panel Data Transmitted

Manual Voice	Manual Volume
Brilliance Control	Effect
Rhythm Number	Rhythm Variation
Rhythm Volume	Tempo (Absolute, LSB)
Tempo (Absolute, MSB)	Lower Voice
Chord Voice	Bass Voice
Chord/Lower Volume	Bass Volume
ABC (OFF/SF/FC)	Lower ON/OFF
Solo Styleplay Number	Split Point
Pedal Function	Reverb
Foot Fill In Number	

• All MIDI data available for general use are given above.

SPECIFICATIONS

TECHNISCHE DATEN

SPECIFICATIONS

ESPECIFICACIONES

- * Specifications subject to change without notice.
- * Änderungen ohne Vorankündigung vorbehalten.
- * Sous toute réserve de modification des caractéristiques sans préavis.
- * Especificaciones sujetas a cambio sin previo aviso.

	CVP-70	CVP-50	
KEYBOARD	88 KEYS (A-1 ~ C7)		
TONE GENERATOR	AWM (Advanced Wave Memory)		
VOICE SELECTORS & CONTROLS	PIANO 1/2, E.PIANO 1/2, HARPSI, CELESTA, VIBES, MARIMBA, GUITAR, J.GUITAR, CHOIR, STRINGS, WOOD, BRASS, SAX, SYNTH, P.ORGAN, J.ORGAN, UPRIGHT BASS, SYNTH BASS, ELEC BASS 1/2, DRUMS, LOWER VOICE, LOWER ON		
PIANO ABC & SELECTORS	SINGLE FINGER, FINGERED, CHORD VOICE, CHORD VOLUME, BASS VOICE, BASS VOLUME, SPRIT POSITION		
RHYTHM SELECTORS & CONTROLS	POPS 1/2/3/4, ROCK'N, SLOW ROCK, DISCO 1/2, 16BEAT 1/2, COUNTRY 1/2, SHUFFLE 1/2, SWING 1/2/3, JAZZ WALTZ, BOOGIE, RAGTIME, BOSSA, CHA-CHA, SAMBA, RHUMBA, TANGO, REGGAE, SALSA, LATIN POP, MARCH, CLASSIC, WALTZ, METRONOME, VARIATION, RHYTHM VOLUME, START/STOP, SYNCHRO START, INTRO/ENDING, BREAK, FILL IN BAR 1/2 (CVP-70), FILL IN 1/2 (CVP-50), ◀, ▶, Beat/Tempo/Song Number Display		
KEYBOARD PERCUSSION	BRUSH ROLL, HI-HAT CLOSED HEAVY, CRASH CYMBAL LIGHT, BASS DRUM LIGHT, SNARE DRUM + RIM HEAVY, RIDE CYMBAL CUP, SNARE DRUM + RIM LIGHT, BASS DRUM, RIM SHOT, SNARE DRUM HEAVY, BRUSH SHOT, SNARE DRUM LIGHT, HI-HAT PEDAL, SNARE DRUM ECHO, TOM 4, HI-HAT CLOSED, TOM 3, HI-HAT OPEN, TOM 2, TOM 1, RIDE CYMBAL, ELECTRONIC TOM 3, CRASH CYMBAL, ELECTRONIC TOM 2, ELECTRONIC TOM 1, CONGA LOW, CABASA, CONGA HIGH, METRONOME, BONGO, TIMBALE HIGH, CASTANETS, CUICA LOW, COWBELL, CUICA HIGH, HAND CLAPS, AGOGO LOW, AGOGO HIGH, BONGO LOW, TAMBOURINE, TRIANGLE CLOSED, TRIANGLE OPEN		
SOLO STYLEPLAY	POP ORCH, JAZZ QUARTET, COCKTAIL PIANO, COUNTRY PIANO, ROCK BAND		
CUSTOM RHYTHM	CUSTOM RHYTHM, PROGRAM	—	
REVERB	ROOM, HALL 1/2, COSMIC		
EFFECT	CHORUS, ENSEMBLE, TREMOLO, FLANGER	—	
PERFORMANCE MEMORY	RECORD 1/2/3-10, PLAY BACK 1/2/3-10		
REGISTRATION MEMORY	MEMORY, RECALL 1/2/3/4/5		
DISK ORCHESTRA	SONG SELECT, PHRASE REPEAT, LAMP CANCEL, ORCH ON, LEFT ON, RIGHT ON, LEFT GUIDE, RIGHT GUIDE		
DISK DRIVE & CONTROLS	3.5" Micro Floppy Disk, built-in. 2DD 1M. COPY, FORMAT		
PEDAL CONTROLS	RIGHT	DAMPER	
	CENTER	SOSTENUTO, TEMPO, BASS BEND	—
	LEFT	SOFT, START/STOP, INTRO/ENDING, S.STYLEPLAY, TEMPO, BASS BEND	SOFT, SOSTENUTO, START/STOP, INTRO/ENDING, FILL IN, S.STYLEPLAY
OTHER CONTROLS	MASTER VOLUME, MANUAL VOLUME, BRILLIANCE, MIDI/TRANPOSE, POWER, SPEAKER ON/OFF (CVP-70)		
JACKS & CONNECTORS	HEADPHONES, AUX OUT L/R, OPTIONAL IN L/R, OPTIONAL OUT L/R, MIDI IN/OUT/THRU, EXP.PEDAL		
INPUT & OUTPUT LEVEL/IMPEDANCE	OPTIONAL IN: 22kΩ/ - 10dB nominal. AUX OUT: 600Ω/ - 7dB when OPTIONAL IN level is - 10dB. OPTIONAL OUT: 600Ω/1 ~ 4Vpp (normal output level).		
MAIN AMPLIFIER	100W (50W × 2)	60W (30W × 2)	
SPEAKERS	16cm (6-2/7") × 2, 5cm (1-8/9") × 2, 9cm (3-5/9") × 2	13cm (5-1/8") × 2, 5cm (1-8/9") × 2	
DIMENSIONS	139.0cm (W) × 66.0cm (D) × 81.0cm (H) (54-5/7" × 26" × 31-8/9")	141.6cm (W) × 56.2cm (D) × 79.5cm (H) (55-3/4" × 22-1/8" × 31-1/3")	
WEIGHT	72.5kg (159.8 lbs)	59.0kg (130.1 lbs)	

Function	Transmitted	Recognized	Remarks
Basic Default	: 1	: 1	
Channel Changed	: 1-16	: 1-16	
Mode Default	: 3	: 1	
Mode Messages	: X	: OMNIon,OMNIoff	
	: *****	: X	
Note Number : True voice	: 21-108	: 21-108	
	: *****	: 21-108	
Velocity Note on	: 0 9nH,v=1-127	: 0 v=1-127	
Note off	: X 9nH,v=0	: X	
After Key's	: X	: X	
Touch Ch's	: X	: X	
Pitch Bender	: 0	: 0	
Control Change			
01	: 0	: 0	:Modulation
07	: 0	: 0	:Volume
11	: 0	: 0	:Expression
64	: 0	: 0	:Damper
66	: 0	: 0	:Sostenuto
67	: 0	: 0	:Soft Pedal
92	: 0	: 0	:Tremolo
93	: 0	: 0	:Chorus
94	: 0	: 0	:Ensemble
95	: 0	: 0	:Flanger
121	: X	: 0	:Reset All : Controllers
Program Change : True #	: 0 0-22	: 0 0-48	
	: *****	: 0-48	
System Exclusive	: 0	: 0	
System : Song Pos	: X	: X	
: Song Sel	: X	: X	
Common : Tune	: X	: X	
System :Clock	: 0	: 0	
Real Time:Commands	: 0	: 0	
Aux :Local ON/OFF	: X	: 0	
:All Notes OFF	: X	: 0 (123-125) *1	
Mes- :Active Sense	: 0	: 0	
sages:Reset	: X	: X	
Notes : *1 = receive (123) if omni off or multi-timbre on			

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO 0 : Yes
 Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO X : No

Function	Transmitted	Recognized	Remarks
Basic Default	: 1	: 1	
Channel Changed	: 1-16	: 1-16	
Mode Default	: 3	: 1	
Mode Messages	: X	: OMNion,OMNIoff	
	: *****	: X	
Note Number : True voice	: 21-108	: 21-108	
	: *****	: 21-108	
Velocity Note on	: 0 9nH, v=1-127	: 0 v=1-127	
Velocity Note off	: X 9nH, v=0	: X	
After Touch Key's	: X	: X	
After Touch Ch's	: X	: X	
Pitch Bender	: 0	: 0	
Control Change	01 : 0	: 0	: Modulation
	07 : 0	: 0	: Volume
	11 : 0	: 0	: Expression
	64 : 0	: 0	: Damper
	66 : 0	: 0	: Sostenuato
	67 : 0	: 0	: Soft Pedal
	121 : X	: 0	: Reset All : Controllers
Program Change : True #	: 0 0-22	: 0 0-48	
	: *****	: 0-48	
System Exclusive	: 0	: 0	
System : Song Pos	: X	: X	
System : Song Sel	: X	: X	
Common : Tune	: X	: X	
System : Clock	: 0	: 0	
Real Time:Commands	: 0	: 0	
Aux : Local ON/OFF	: X	: 0	
Aux : All Notes OFF	: X	: 0 (123-125) *1	
Mes- : Active Sense	: 0	: 0	
sages:Reset	: X	: X	
Notes : *1 = receive (123) if omni off or multi-timbre on			

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO 0 : Yes
 Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO X : No

FCC INFORMATION (U.S.A.)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

Wichtiger Hinweis für die Benutzung in der Bundesrepublik Deutschland.

Bescheinigung des Importeurs

Hiermit wird bescheinigt, daß der/die/das
Electronic Piano Typ: CVP-70

(Gerät, Typ, Bezeichnung)

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.

Yamaha Europa GmbH

Name des Importeurs

• Dies bezieht sich nur auf die von der Yamaha Europa GmbH vertriebenen Produkte.

Wichtiger Hinweis für die Benutzung in der Bundesrepublik Deutschland.

Bescheinigung des Importeurs

Hiermit wird bescheinigt, daß der/die/das
Electronic Piano Typ: CVP-50

(Gerät, Typ, Bezeichnung)

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.

Yamaha Europa GmbH

Name des Importeurs

• Dies bezieht sich nur auf die von der Yamaha Europa GmbH vertriebenen Produkte.

CANADA

THIS DIGITAL APPARATUS DOES NOT EXCEED THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATION OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA "CLASSE B" PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.

• This applies only to products distributed by Yamaha Canada Music Ltd.
• Ceci ne s'applique qu'aux produits distribués par Yamaha Canada Musique Ltée.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

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

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

• This applies only to products distributed by Yamaha-Kemble Music (U.K.) Ltd.

YAMAHA