

KORG DIGITAL PIANO

**CONCERT**



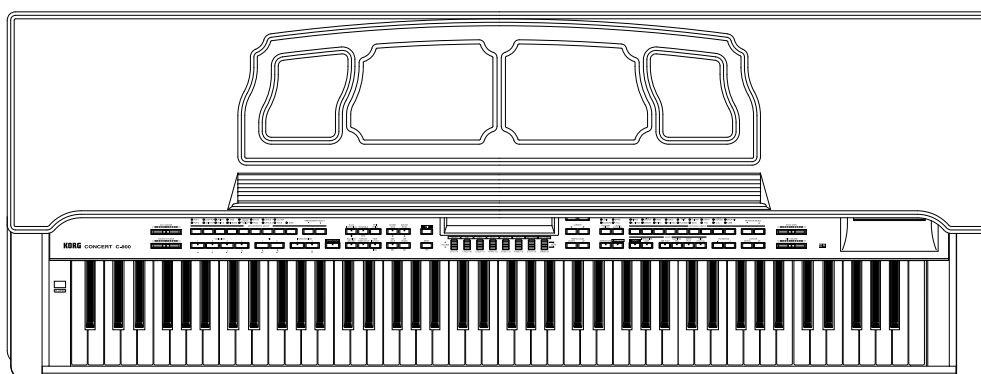
**C-900**

GENERAL  
**MIDI**  
INSTRUMENT

# Owner's Manual

Please read this manual first

PCI/F



**ai** AI<sup>2</sup> Synthesis System

**KORG**

# Introduction

## IMPORTANT SAFETY INSTRUCTIONS

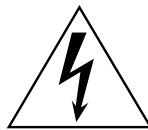
**WARNING** — When using electric products, basic precautions should always be followed, including the following.

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at 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.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
8. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Care should be taken so that objects do not fall and liquids are not spilled onto the enclosure through openings.
11. The product should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the product; or
  - C. The product has been exposed to rain; or
  - D. The product does not appear to operate normally or exhibits a marked change in performance; or
  - E. The product has been dropped, or the enclosure damaged.
12. 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.

## SAVE THESE INSTRUCTIONS



**WARNING:**  
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT  
EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



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.



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.

### CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION** – POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU’ AU FOND.

## **CE mark for European Harmonized Standards**

CE mark which is attached to our company's products of AC mains operated apparatus until December 31, 1996 means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

And, CE mark which is attached after January 1, 1997 means it conforms to EMC Directive (89/336/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (73/23/EEC).

Also, CE mark which is attached to our company's products of Battery operated apparatus means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

## **IMPORTANT NOTICE FOR THE UNITED KINGDOM**

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

## **THE FCC REGULATION WARNING**

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

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

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

## ***Back-up Battery***

The *C-900* uses a back-up battery to prevent memory loss when the power is turned off. If the display shows "Lo", the battery should be replaced. Consult the nearest Korg Service Center or dealer.

## ***Data handling***

Unforeseen malfunctions can result in the loss of memory contents. Please be sure to save important data on an external data flier (storage device). Korg can accept no responsibility for any loss or damage which you may incur as a result of data loss.

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# Introduction

Thank you for purchasing the Korg *C-900*.

The *C-900* is a versatile piano that goes far beyond previous automatic accompaniment electronic instruments. It provides high-quality stereo-sampled piano sounds and many other instrument sounds (a total of 327 programs), 16 drum kits, 192 types of automatic accompaniment data, and two stereo digital multi-effect processors with 48 types of effects.

In addition to a Piano mode that allows the *C-900* to be used in the same way as a conventional electronic piano, the *C-900* also provides an Arrangement Play function that lets you automatically add a sophisticated musical accompaniment simply by specifying easily fingered chords. It also provides a Backing Sequence function with recording and editing capabilities, an SMF Song Play function for playing back commercially available Standard MIDI File format music software, an Interactive Composition function that automatically adds chord progressions to the melody that you play and an interface that lets you connect the *C-900* to your computer. In addition, the *C-900* features a full complement of easily accessed functions that enhance your composition and performance, such as a karaoke function that lets you connect a microphone to sing along with your music.

In order to enjoy long and trouble-free use, please read this manual.

## Owner's Manual

This owner's manual begins with explanations of each section of the *C-900*. It also contains chapters which discuss basic procedures and concepts, and explains how to connect the *C-900* to external devices for even more possibilities.

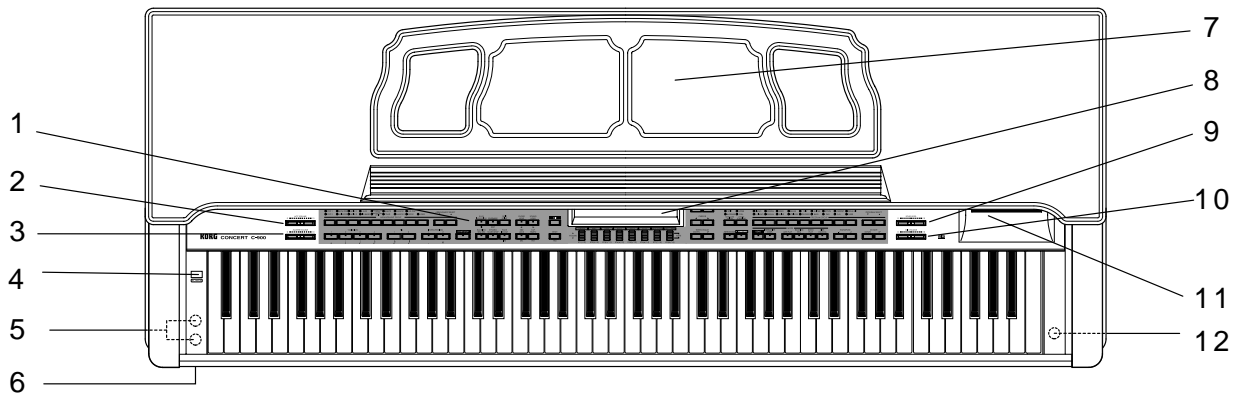
## Reference Guide

The Reference Guide explains the various functions and settings of the *C-900* organized by the displays that appear in the front panel LCD. Lists of the sounds and accompaniment data are also included at the end.

\* In the documentation for the *C-900*, the explanations often include diagrams of the LCD. The program or arrangement numbers and names, parameters and values shown in these LCDs are given only as examples. Please be aware that improvements in the specifications and voice programs may mean that the example displays printed in the documentation do not match the displays that actually appear on the *C-900*.

# 1. Controls and basic operation

## Front panel




### 1. Operating panel

The operating panel of the *C-900* contains numerous key switches which access a variety of functions. Some keys have two or more different functions.

For the names and general functions of each key, refer to "Operating panel" on the following page. Details on the function of each key are given in "Functions, operations and terminology" beginning on p.47.

### 2. ACC VOLUME (Accompaniment Volume)

In Arrangement Play mode, this adjusts the backing volume of tracks other than the keyboard track. When the selected part is muted in Song Play mode, the ACC VOLUME will adjust the volume of the other parts.

 The volume when muted will be the "10" setting regardless of the ACC VOLUME position. When you subsequently move ACC VOLUME, the setting will change to reflect the actual position of the control.

### 3. MASTER VOLUME

This adjusts the overall volume of the entire *C-900* (speakers, headphones, and outputs).

### 4. POWER switch p.8

This switch turns the power of the *C-900* on and off.

### 5. Headphone jack (located on the bottom of the instrument)

By connecting a pair of stereo headphones to this jack, you can play and listen to the *C-900* without being heard by others. Up to two pairs of headphones can be connected simultaneously. If you use commercially available headphones, select a set of stereo headphones with a phone plug connector.

### 6. POWER indicator

This will light when the *C-900* power is on. It will go out when the power is turned off.

### 7. Music stand p.8

### 8. LCD

This displays various messages which indicate the status of the *C-900*, and indicates the current settings.

Details on the displayed contents are given in the Reference Guide.

### 9. ECHO LEVEL

When a mic is connected to the mic input jack, this slider adjusts the amount of echo that is applied to the microphone's signal.

### 10. MIC VOLUME

When a mic is connected to the mic input jack, this slider adjusts the mic volume.

### 11. Floppy disk drive

A 3.5 inch double sided double density (2DD) or double sided high density (2HD) floppy disk can be inserted here.

For details on floppy disk handling, refer to "Floppy disks" beginning on p.9.

### 12. Mic input jack (located on the bottom of the instrument)

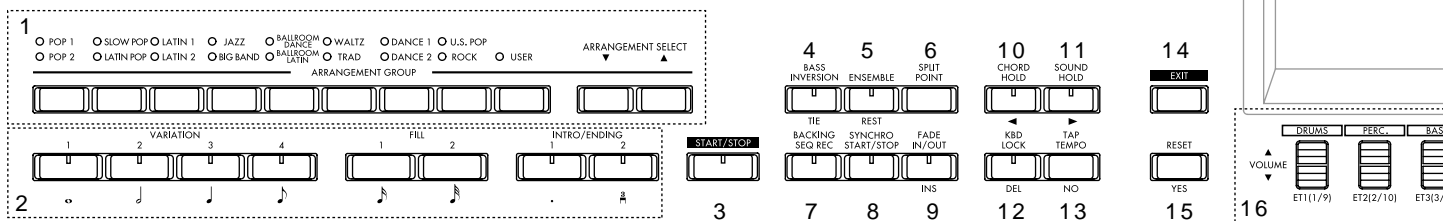
A microphone or a Korg Interactive Harmony "ih" unit can be connected here. If you are using an "ih," please also refer to the "ih" manual.

# Operating panel

The number of stars following the name of each key switch indicates the level of familiarity with the C-900 required for its use.

- ★ These keys are used for basic operations. In order to use the C-900 as a conventional electronic piano, it is necessary to understand how these keys work.
- ★★ You will use these keys after you become more familiar with using the C-900 as a conventional electronic piano, and wish to take advantage of the automatic accompaniment functions and to record your own playing.
- ★★★ These keys are used to add various adjustments to automatic accompaniment, or to make detailed settings for recording and other functions interactively with the display.

Many of the key switches perform functions in addition to those listed on this page. For details of the function and operation of each key, refer to "Functions, operations and terminology" beginning on p.47.



## 1. ARRANGEMENT GROUP/ARRANGEMENT SELECT ★★

Use these to select the type of automatic accompaniment.

## 2. Style element ★★★

(Variation 1–4, Fill 1&2, Intro/Ending 1&2) During automatic accompaniment, these keys let you add variety to your song by inserting introductions, fill-ins, and endings. In step recording, these key switches are used to specify the length of the note to be entered. Refer to the explanations of each key beginning in chapter 7.

## 3. START/STOP ★

This key starts or stops the automatic accompaniment and recording.

## 4. BASS INVERSION/TIE ★★★

When the Chord Scanning function is in use, you can press this key to specify a bass note other than the root of the chord. [p.49](#)

This key is also used in step recording to tie two notes together. [p.57](#)

## 5. ENSEMBLE/REST ★★

When the Chord Scanning function is in use, this lets you add harmony to the note being played, as determined by the detected chord. [p.51](#)

This key is also used in step recording to input a rest. [p.57](#)

## 6. SPLIT POINT ★★

When the Chord Scanning function or Keyboard Assign has been used to split the keyboard into left and right zones, this key lets you specify the point at which the keyboard will be divided. [p.57](#)

## 7. BACKING SEQ REC ★★

This is used for making various settings in the preparation of recording your own performance.

## 8. SYNCHRO START/STOP ★★

This allows automatic accompaniment to start the moment you touch a note on the keyboard. The accompaniment will be halted during the time that your hand is taken off the keyboard.

## 9. FADE IN/OUT/INS ★★

When you are playing with automatic accompaniment, this causes the sound to become gradually louder when the song begins, and to become gradually softer when the song ends.

In event editing, this is also used to insert an event. [p.51](#)

## 10. CHORD HOLD/◀ ★★

This key causes the automatic accompaniment chords to be held even after you release your hand from the keyboard. Since you only need to press the keyboard when the chord changes, this makes performance easier.

This key is also used in step recording to move through steps, and when modifying the name of an arrangement or backing sequence. [p.49](#)

## 11. SOUND HOLD/▶ ★★★

This key causes the sound played in the left hand to be held after you have released your hand from the keyboard, or lets you add a bass note. This will function differently depending on the Disk/Global mode settings.

[Reference Guide p.65](#)

This key is also used in step recording to move through steps, and when modifying the name of an arrangement or backing sequence. [p.56](#)

## 12. KEYBOARD LOCK/DEL ★★

This key lets you lock the keyboard so that the sound being played by the keyboard and the playback tempo will not change even if you change the arrangement (type of accompaniment).



In event editing, this is used to delete an event. [p.51](#)

### 13. TAP TEMPO/NO ★

This lets you adjust the tempo of the metronome, automatic accompaniment, or automatic playback by repeatedly tapping the key. [p.58](#)

When a confirmation display appears, this key can also be used to cancel the operation. [p.54](#)

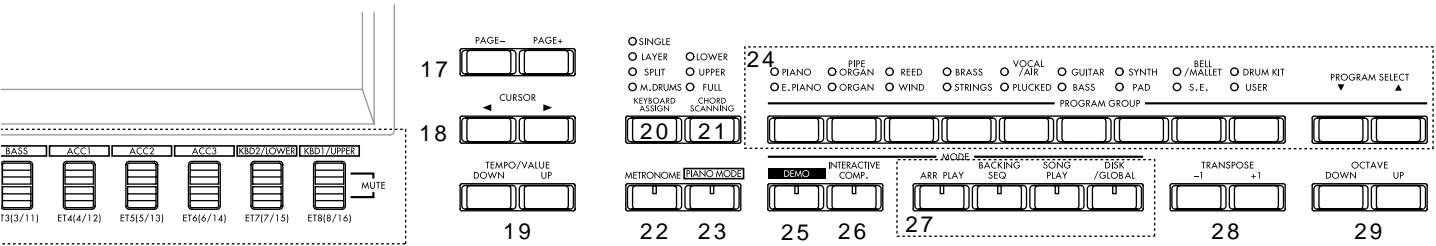
### 14. EXIT ★

Use this to return to the first page of the display.

### 15. RESET/YES ★

This key returns various settings to their original state. [p.55](#)

When a confirmation display appears, this key can also be used to execute the operation. [p.59](#)



### 16. VOLUME/MUTE/TRACK/CHANNEL ★★

These keys are used to adjust the volume of the instrument for each part of the keyboard, automatic accompaniment, or automatic playback. The Mute key temporarily mutes the sound. These keys are also used to specify the track whose settings you wish to modify, or a MIDI channel of 1–16.

### 17. PAGE ★★

These keys are used to select “pages” (display screens in which the functions of each mode are grouped) in the LCD.

### 18. CURSOR ★

Use these keys to select the desired item from the choices that appear in the LCD.

### 19. TEMPO/VALUE ★

Use these keys to modify the speed (tempo) of the metronome, automatic accompaniment, or automatic playback. These are also used to increase/decrease numerical values, or to select alternatives.

### 20. KEYBOARD ASSIGN ★★

This lets you select different keyboard assign modes such as layering sounds, playing split sounds, or playing different percussive instruments from each note, etc. [p.53](#)

### 21. CHORD SCANNING ★★

This lets you select the area of the keyboard in which the Chord Scanning function will be active, allowing you to use simple fingering to play complex chords. [p.49](#)

### 22. METRONOME ★

A metronome sound can be generated based on the tempo shown in the LCD.

### 23. PIANO MODE ★

Turn this key switch on when you wish to use the C-900 as a conventional electronic piano.

### 24. PROGRAM GROUP/PROGRAM SELECT ★

Use these to select the sound that you wish to play.

### 25. DEMO ★

By pressing this key switch, you can hear a demonstration of the C-900. [p.18](#)

### 26. INTERACTIVE COMP. ★★★

This key activates the Interactive Composition function. A melody that you are playing or had previously recorded is automatically analyzed by the C-900, and accompaniment chords appropriate for that melody are added. The chords which are added can be used for automatic accompaniment, and many different types of chords can be assigned to match the style of the song. [p.39](#)

### 27. MODE keys ★★

These keys are used to switch between the four major operating modes of the C-900. For piano playing or automatic accompaniment, use Arrangement Play mode ([p.48](#)). To record your own playing or to create automatic accompaniment data, use Backing Sequence mode ([p.49](#)). To playback Standard MIDI File format data from a floppy disk, use Song Play mode ([p.56](#)). To make settings for other functions such as MIDI applications and floppy disk management, use Disk/Global mode ([p.50](#)). When you press a mode key, the LED located at the left of the key will light, indicating the mode the C-900 is currently in.

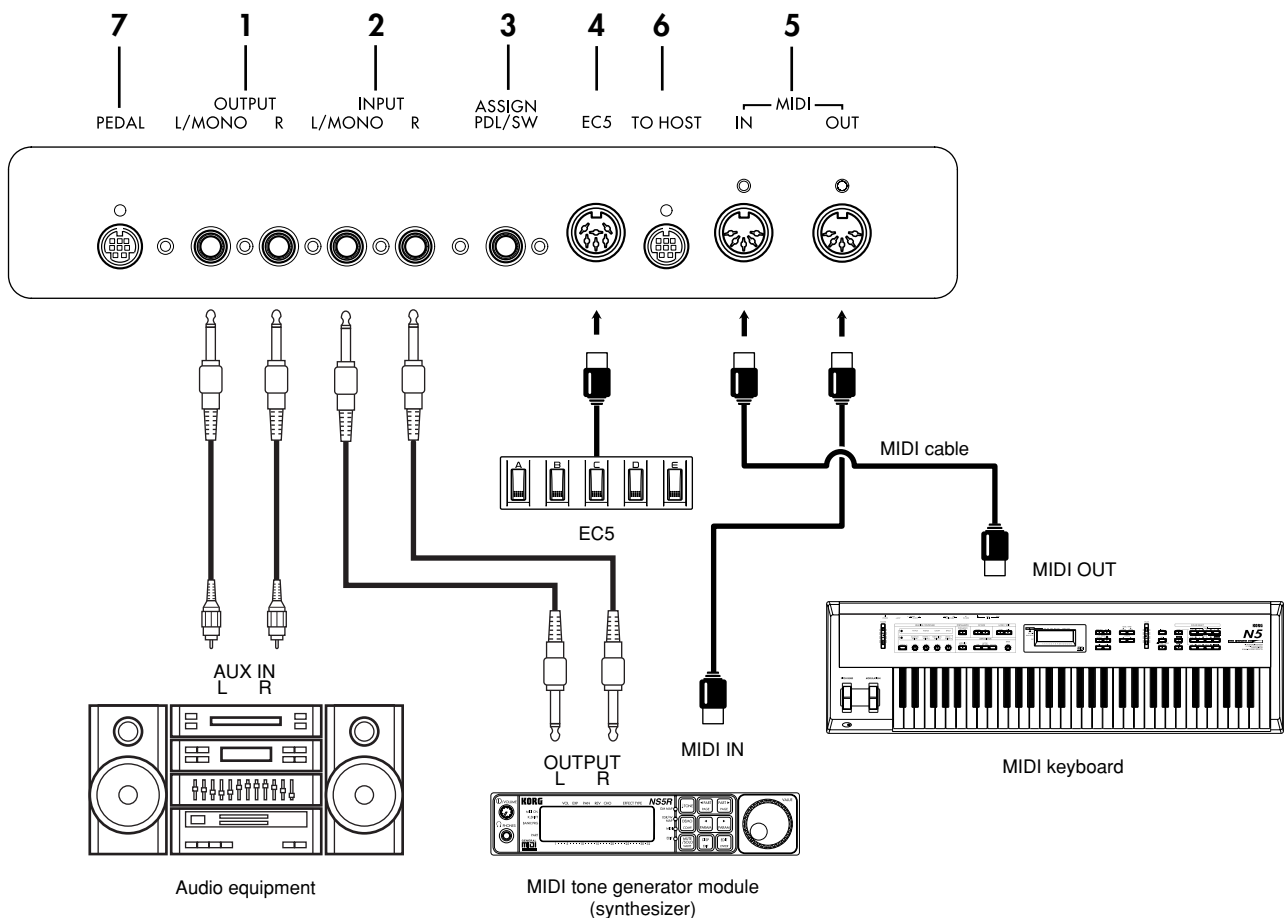
### 28. TRANSPOSE ★

Use these keys when you wish to transpose the pitch of the keyboard or the automatic accompaniment.

### 29. OCTAVE ★

These keys let you shift the pitch of the keyboard or the automatic accompaniment up or down in units of an octave.

# Rear panel



## 1. OUTPUT

External equipment such as your stereo or keyboard mixer can be connected here to listen to the sound of the *C-900* through these devices.

For stereo connections, the left and right signals will be output from the L/MONO jack and the R jack. For mono connections, use the L/MONO jack.

Use the master volume to adjust the level.

## 2. INPUT

Signals from an external device such as a tone generator module, cassette recorder, or CD player can be input to the *C-900*, and heard through the *C-900*'s built-in speakers, headphones, or an audio system connected to the external outputs.

For stereo connections, use the L/MONO and R jacks. For mono connections, use the L/MONO jack.

The volume of the external device connected to the INPUT jacks can be adjusted by the volume control of the external device.

## 3. ASSIGN PDL/SW (Assign pedal/switch)

A separately sold Korg XVP-10 or EXP-2 pedal controller or PS-1 foot switch can be connected here. The function of these pedals can be specified by settings in Disk/Global mode.

☞ Reference Guide p.63

## 4. EC5

A separately sold Korg EC5 external controller can be connected here. In Disk/Global mode, you can assign a different function to each of the five switches of the EC5. ☞ Reference Guide p.64

## 5. MIDI

These connectors are used to exchange data with other MIDI devices such as keyboards and computers. In order to make these connections, you will need separately sold MIDI cables. MIDI IN receives MIDI messages from other devices. MIDI OUT transmits MIDI messages to other devices. ☞ p.61 "8. MIDI Applications"

## 6. TO HOST

This interface connector allows the *C-900* to be directly connected to a computer which does not have a MIDI interface. To make this connection, you will need a separately sold connection cable that is compatible with your computer. ☞ p.63 "9. Connections with a computer"

## 7. PEDAL

Insert the pedal connector of the ST-900 stand here.

# Before you use the C-900

Please carefully read the sections "Safety," "Preventing fire, shock, and personal harm," "Precautions," and "Warnings" located in the beginning of this manual.

## Preparations

### Check the included items

---

Make sure that you have each of the following items included with the C-900.

- "Owner's Manual" (this book)
- "Reference Guide"
- Floppy disk CFD-01P..... This contains sounds and five types of automatic accompaniment data for the C-900.
- (Separate carton) stand ST-900 ..... This stand is specially designed for the C-900. Please refer to the assembly instructions for proper use.

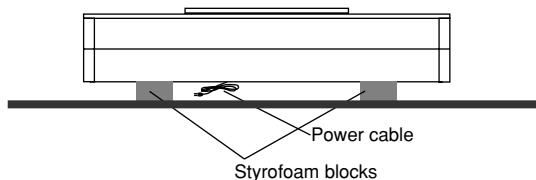
### Removing the instrument

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Remove the two styrofoam packing blocks from the carton, and place the instrument on the blocks.

Place the styrofoam blocks so as to protect the power cable located on the bottom of the instrument.

Leave it in this position until you are ready to attach it to the stand.



## Assembling the stand



### Caution

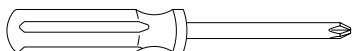
Two or more persons are required in order to assemble the instrument.

When placing the instrument on its stand, be careful not to pinch your hand.

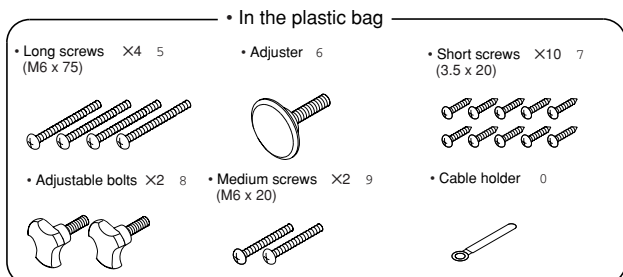
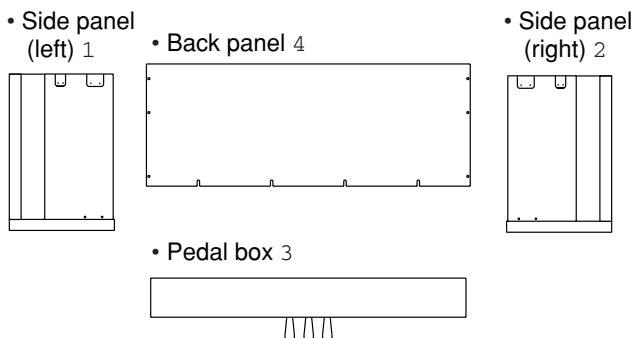
Carefully follow the assembly procedure, being careful to place the correct part in the correct orientation.

Be aware that if you apply excessive pressure to the front of the instrument before tightening the screws, the instrument may fall over.

1. You will need a Phillips (+) screwdriver (not included).

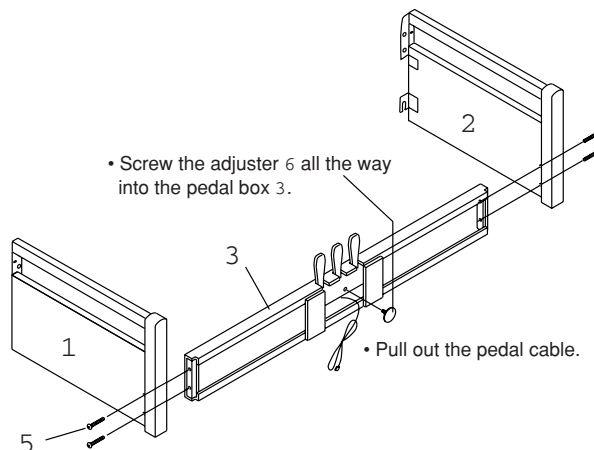


2. Make sure that you have all the parts.

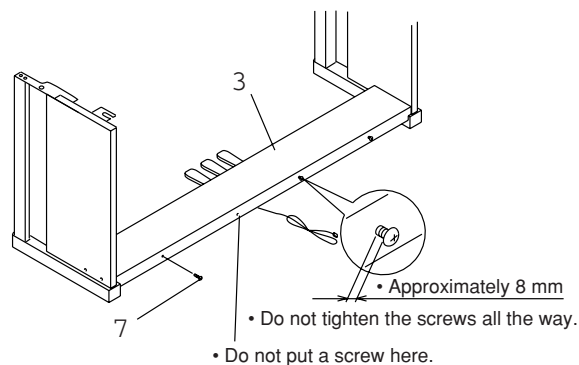


3. During assembly, be sure to place the back of the stand on a flat floor surface etc. as shown in the following diagram.

Align the left side panel 1 and the right side panel 2 to the pedal box 3, and use the four long screws 5 to fasten them together.

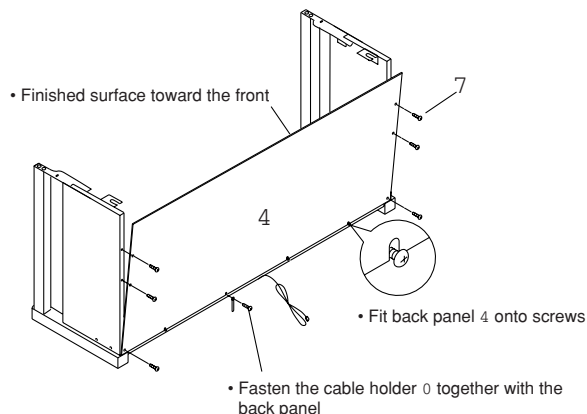


4. Partially screw three of the short screws 7 into the pedal box 3.



5. Attach the back panel 4.

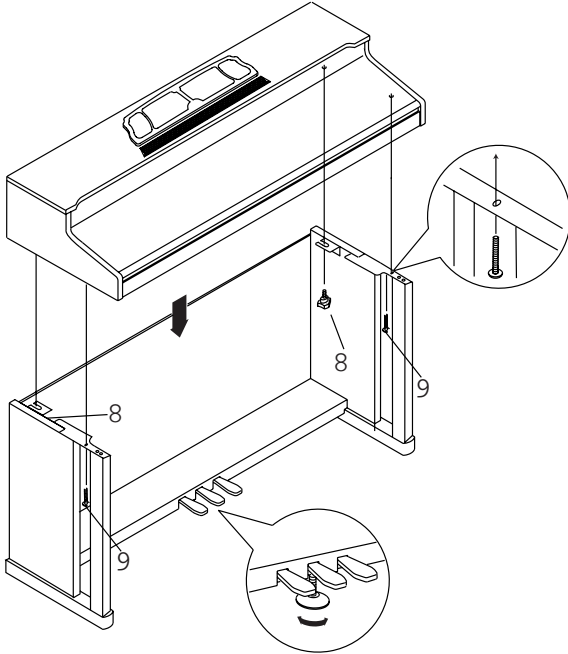
Slide the slots of the back panel 4 onto the screws 7 that were partially inserted. Use six more short screws 7 to fasten the back panel 4 using the pilot holes that are drilled in the side panels. Completely tighten the three short screws 7 which were left untightened. Use the last short screw 7 to attach the cable holder 0.



## 6. Attach the keyboard unit.

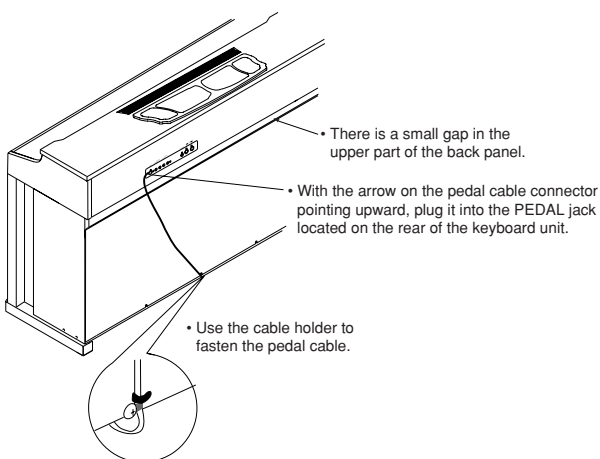
Place the keyboard unit so that the screw holes on the bottom of the keyboard unit are aligned with the screw holes on the stand.

Use the two adjustable bolts 8 and the two medium screws 9 to fasten the keyboard unit from the underside.



- Rotate the adjuster so that the bottom of the adjuster is firmly in contact with the floor. Unless the adjuster is firmly in contact with the floor, the pedal may become unsteady, or rattling may appear in the sound.

## 7. Connect and fasten the pedal cable.



## Check after assembly

### Are any parts left over?

If any parts are left over, refer to the diagrams to see where they should go.

Check that all screws are tightened correctly.

## Caution

### Cautions when moving the instrument

When moving the instrument, remove the keyboard unit from the stand and move them separately. After placing the instrument in its new location, refer to the above assembly instructions and re-assemble the instrument. Also, please take note of the following points when moving the instrument.

- Bundle the power cable. If the cable is left unbundled, it may catch on an object, which could produce broken connections, short circuits or other malfunctions.
- Be careful that the pedal cable does not catch on a doorknob or other object.

### If the screws loosen

As you continue using the piano for an extended period of time, the screws in various parts of the stand may gradually loosen, causing the stand to sway. If this occurs, re-tighten the screws.

### Disassembly

To disassemble the instrument, reverse the procedure for attaching the keyboard unit and assembling the stand. Then keep all screws and other parts in a safe place.

## Preparing for play

### 1. Plug in the power cable.

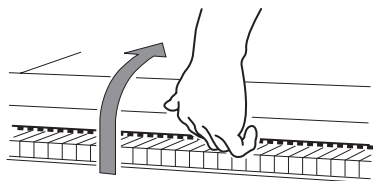
Plug the power cable into an AC outlet.

Be sure to use an AC outlet of the correct voltage for your instrument.

### 2. Open the key cover.

Carefully lift the center of the front edge, and slide it gently away from you.

To close the key cover, lift the center of the front edge and slide it toward you.



When opening or closing the key cover, be careful not to pinch your hands or fingers.

The cover may be damaged by excessive force, or if it is opened or closed roughly.

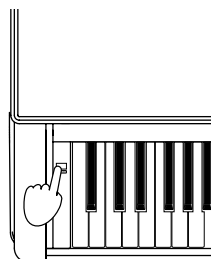
Do not open or close the key cover of the C-900 when a floppy disk is protruding part way from the disk drive.

### 3. Turn on the power.

1. Press the POWER switch to turn on the power.

When the power is turned on, the POWER indicator located on the left front of the instrument will light.

At this time, the pedals will be initialized, so do not press the pedals until a display appears in the LCD.



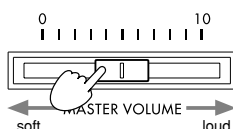
2. To turn the power off, press the POWER switch once again.

When the power is turned off, the POWER indicator located at the left front of the instrument will go dark.

### 4. Adjust the volume.

Raise the MASTER VOLUME slider to approximately the center position. Moving the slider toward the right will increase the volume, and moving it toward the left will decrease the volume.

At the "0" position there will be no sound. While you play the keyboard, adjust the volume to an appropriate level.



The MASTER VOLUME slider controls the volume of the internal speakers, the headphone jacks, and the rear panel OUTPUT jacks.

### ■ When using headphones

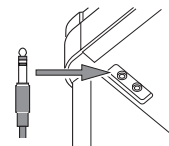
When headphones are connected, no sound will be heard from the internal speakers.

You can use headphones when you do not wish to be heard by other people, such as when practicing at night.

Since there are two headphone jacks, two people can listen to the instrument.

Connect the plug (phone plug) of the headphones to the headphone jack located under the instrument on the left side.

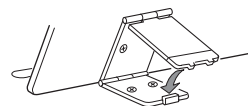
If you use headphones with a miniplug→phone plug adapter, be sure to grasp the base of the adapter plug when connecting or disconnecting the headphones.



When using headphones, protect your hearing by avoiding extended periods of listening at high volumes.

### ■ Using the music stand

Place the music stand upright, and use the two stoppers on the back of the stand to keep it from falling back down.



---

## 2. Floppy disks

The disk CFD-01P contains automatic accompaniment data and voice program data. The information on these disks can be read by the floppy disk drive of the **C-900**.

You can also use commercially available blank disks to store your own performances (including the automatic accompaniment) as data.

In addition, data that you recorded or Standard MIDI File format data from a commercially available music disk can be loaded into the **C-900** and played back.

When using floppy disks, please observe the cautions given below. Incorrect disk handling may result in loss of the recorded data.

### Floppy disk types and formats

The **C-900** can use two types of 3.5 inch floppy disk: 2DD or 2HD.

A new disk or one that has been used by a different device cannot be used by the **C-900**. Such disks must first be "formatted" before they can be used by the **C-900**.


For the formatting procedure, refer to the topic "FORMAT (Format Disk)" on p.58 of the Reference Guide.

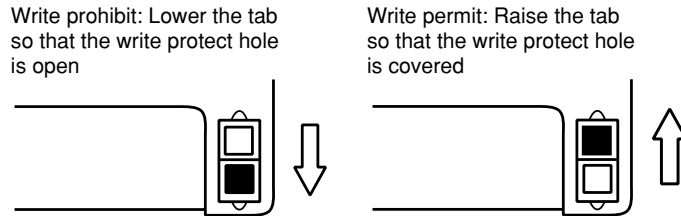
### Floppy disk handling

- Do not open the disk shutter or touch the magnetic surface inside the floppy disk. If the magnetic disk becomes soiled or scratched, it will be impossible to read or write data.
- Never transport the **C-900** with a floppy disk inserted in the floppy disk drive. Vibration may cause the disk drive heads to scratch the floppy disk, making it unusable.
- Do not put floppy disks near a magnetic field, such as televisions, computers, computer displays, speakers, or power transformers. Doing so may erase the data recorded on the disk.
- Avoid using or storing floppy disks in locations of high temperature or humidity, or locations with excessive dust or dirt.
- Do not place objects on top of a floppy disk.
- Floppy disks should be stored in an appropriate case.
- While the floppy disk drive is operating, do not move the piano.

## Floppy disk write protect slider

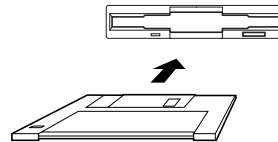
Floppy disks have a small window called a “write protect hole,” which helps prevent accidental erasure or rewriting of the data.

 In order to prevent erasure of the data on a disk, move the tab downward after saving, to the “write prohibit” position.



## Inserting floppy disks

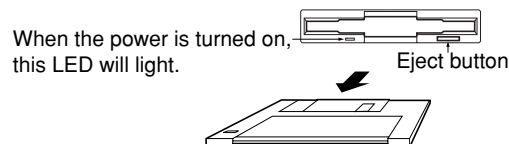
Insert a floppy disk into the disk drive with the label facing up. Push it all the way into the drive until it clicks into place. Forcing a disk in will cause malfunction. Disks must be inserted gently, and straight in.




## Removing floppy disks

To remove a floppy disk from the disk drive, first check to make sure that the drive is not operating (i.e., that the LED of DISK/GLOBAL key is not blinking, and that no message such as “Loading” or “Saving” is displayed). Then press the eject button to remove the disk.

If the disk does not come out when you press this button, do not attempt to remove the disk by force. Contact your dealer.




 Never remove a floppy disk from the disk drive when the LED of DISK/GLOBAL key is blink. Otherwise, the disk drive or data on the floppy disk may be destroyed.

## Cleaning the disk drive heads

If the heads of the disk drive are dirty, errors may occur when saving or loading. It is important to regularly clean the heads. To do so, use a commercially available wet-type 3.5 inch dual-sided head cleaning disk. Using a single-sided cleaning disk will damage the drive.

For the cleaning procedure, refer to the manual for your cleaning disk.

 Continuing the cleaning process for an extended period of time will damage the disk drive.



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## 3. Getting acquainted with the C-900

For those who are playing the *C-900* for the first time, this chapter provides a step by step introduction to its basic functionality.

Place this manual beside the *C-900*, and operate the controls to actually perform each step.

Don't worry if the displays are different

Numbers and program names etc. that appear in the LCD of your *C-900* will probably be somewhat different than those printed in this manual. There is no need to worry about this. The actual displays will depend on what you did in the previous step.

If things don't work as you expect

If you get lost in the displays and the *C-900* does not work as you expect, press the EXIT key located to the immediate left of the LCD. Or, you can press the START/STOP key to make the START/STOP LED is dark. The status to which you will return will depend on where you were, and this will let you continue working.

# 1. Play the keyboard of the C-900

Using the C-900 as a conventional electronic piano

Although the C-900 provides a wide variety of features, such as automatic playback and assisting you to compose, you can also enjoy it simply by playing the keyboard like a conventional electronic piano.

Take time to fully enjoy the sounds of the C-900 before proceeding to the next step.

## 1. Enter Piano mode


**If the ARR PLAY LED is red, the C-900 is in Arrangement Play mode.**

**Once you are in Arrangement Play mode, you can use the C-900 as a conventional electronic piano when the PIANO MODE LED is also red. This status is called Piano mode.**

In Piano mode,

- Selecting a program will automatically select the most suitable effect for that sound. Also, the Pedal Simulation (see Reference Guide p.51) will be turned on.
- Muting will be canceled for the right (KB1) and left (KB2) areas of the keyboard, so that both halves of the keyboard will produce sound.
- Keyboard Assign will be set to SINGLE.
- The upper line of the display will show the number of the sound program within the group, and the name of the sound. The lower line will show the metronome's tempo, time signature and volume.

When you turn the C-900 power on, it will automatically be in Piano mode.

 If a disk containing a Standard MIDI File (SMF) or other file that can be played in Song Play mode is already inserted when the power is turned on, the instrument will automatically be in Song Play mode.

**If you are not in Arrangement Play mode, press the ARR PLAY key located in the right on the operating panel.**

→1. The ARR PLAY LED and the PIANO MODE LED will light.

→2. The following display will appear.

Piano mode display

Group, number and name of the sound currently in use

```

KB1: Pf00 GrandPiano
      =120 METRO 4/4 L99
    
```

When this type of display appears, the C-900 is in Piano mode.

If you are in Arrangement Play mode and are not in Piano mode, the following display will appear.

Arrangement Play mode display

Number and name of the arrangement currently in use

```

          Number   Name
          |         |
ARR:    0 8 Beat 1
        =120
    
```

In this case, press the PIANO MODE key located in the right side of the operating panel.

→1. The PIANO MODE LED will light.

→2. The KBD LOCK LED will light.

→3. The Piano mode display will appear.

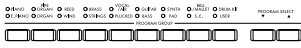


## 2. Once you are in Piano mode, play the keyboard.

You will hear the sound (program) that is currently displayed in the screen.

Changing the sound program

## Selecting a different sound



Here's how to temporarily change the sound (program) that is produced when you play the keyboard.

**1. Press one of the PROGRAM GROUP keys and one of the PROGRAM SELECT keys, which are located on the right side of the operating panel.**

→ The following display will appear. (The group, number and name of the sound will depend on the keys that you pressed, or the number of times that the keys were pressed.)

Group, number and name of the selected sound program

Group	Number	Name
KB1:	Be01	Glocken
=120	METRO	4/4 L99

The sounds of the C-900 are organized into 18 program groups. The PROGRAM SELECT keys select sounds from within each group.



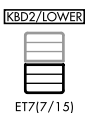
**2. Play the keyboard once again.**

You will hear a different sound.

## Splitting the keyboard in two

The C-900 lets you split the keyboard at any note, so that the low range (left hand) and high range (right hand) can be used separately. This lets you play different sounds in the left and right hands. The location of the split can be set freely.

Let's try it out.



### 1. Set KEYBOARD ASSIGN to SPLIT.

In the right side of the operating panel, press the KEYBOARD ASSIGN switch until the LED indicates SPLIT.

### 2. Change the sound of the left keyboard area.

Below the LCD, press the lower switch located under KBD2/LOWER once.

The following display will appear.

```
KB2: Pf00 GrandPiano
    =120 METRO 4/4 L99
```

Next, press the PROGRAM GROUP key GUITAR/BASS twice.

If the LED at the left of BASS is not lit, press it again.

The following display will appear.

```
KB2: Ba00 WoodBass
    =120 METRO 4/4 L99
```

An acoustic bass sound will now be played by the keyboard to the left of middle C4. The right half of the keyboard will play a piano sound.

To change the sound in the right half of the keyboard, press KBD1/UPPER, make sure that the LCD has changed from KB2 to KB1, and select a sound in the same way as you did for the left half of the keyboard.



### 3. Press and hold the SPLIT POINT key located to the left of the operating panel.

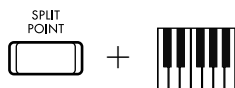
→ As long as you continue pressing the key, the following display will appear.

```
SPLIT:C4 XPOSE:0
    LOWER    UPPER
```

Split Point display

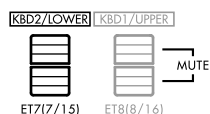
While this display appears, you can press any note on the keyboard and then release the SPLIT POINT key. This will cause the KB2 sound to be played by notes to the left of the note you pressed, and the KB1 sound by notes to the right.

After you try this, hold down the SPLIT POINT key and press the C4 note to restore the original setting.



### Muting

Simultaneously press the two keys located below KBD2/LOWER. The following display will appear. (The normal display will reappear after approximately 7 seconds.)



```
KB2: Ba00 WoodBass
Volume=127 ----- 0
```

Notice that the keyboard area to the left of the split point now makes no sound.

Repeat the operation, and the sound will reappear.

When Piano mode is turned off, the left keyboard area will be muted. (There may be sound in some cases, depending on the arrangement that is selected.) This is so that during automatic accompaniment, the notes you play to input chords are not sounded.

## Making it easier to play or sing

You can modify the pitch of the C-900 in steps of semitones or octaves.

When you wish to play a song that is too high or too low for a vocalist's range or other instruments, you can simply change the pitch of the C-900 to play the song in a different key using the same fingering.



Changing the octave

### 1. Press the OCTAVE UP key.

→1. The following display will appear

```
KB1: Pf00 GrandPiano
Volume=103 UPPER+1
```

Octave setting

→2. The pitch produced by the C-900 keyboard will be one octave higher.

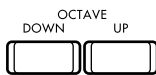
The OCTAVE UP and OCTAVE DOWN keys allow you to adjust the octave over a range of -2 to +2 octaves.

If no other keys are pressed, the previous LCD will reappear after approximately 7 seconds.

In the above display, if you press the OCTAVE UP or OCTAVE DOWN keys again, the octave setting will increase or decrease through the values

+2 / +1 / 0 / -1 / -2

and the pitch of the keyboard will change correspondingly.



### 2. Press the TRANSPOSE +1 key.

→1. The following display will appear.

```
SPLIT: C4 XPOSE: +1
LOWER UPPER
```

Transpose setting

→2. The pitch of the C-900 will raise one semitone.

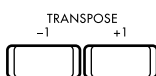
The -1/+1 keys allow you to adjust the transposition over a range of -11 to +11.

If no other keys are pressed, the previous LCD will reappear after approximately 7 seconds.

If you press the TRANSPOSE +1 or TRANSPOSE -1 keys again, the transpose value will change in semitone steps

XPOSE: +1 / XPOSE 0 / XPOSE -1 -----

and the pitch of the keyboard will change correspondingly.



Transpose

**Example 1)** Suppose that you wanted to play a song that contained the following chord progression. As you can see, all these chords use many black notes. The transpose function lets you play this song in a key that is easier to play.

(i) | G# | Fm | C# | D# | G# |

The diagrams show the following fingerings: G# (Finger 1 on G, 2 on A, 3 on B, 4 on C, 5 on D), Fm (Finger 1 on F, 2 on G, 3 on A, 4 on B, 5 on C), C# (Finger 1 on C, 2 on D, 3 on E, 4 on F, 5 on G), and D# (Finger 1 on D, 2 on E, 3 on F, 4 on G, 5 on A).

If the entire song were four semitones higher, the chord progression would be as follows.

(ii) | C | Am | F | G | C |

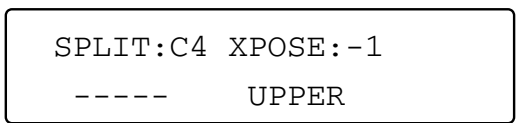
The diagrams show the following fingerings: C (Finger 1 on C, 2 on D, 3 on E, 4 on F, 5 on G), Am (Finger 1 on A, 2 on B, 3 on C, 4 on D, 5 on E), F (Finger 1 on F, 2 on G, 3 on A, 4 on B, 5 on C), and G (Finger 1 on G, 2 on A, 3 on B, 4 on C, 5 on D).

This is much easier to play, but of course the pitch would be four semitones higher than it should be.

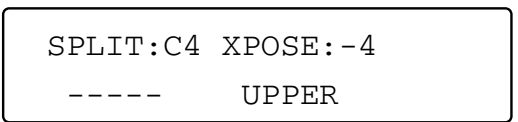
In this case, you simply need to lower the pitch of the piano by four semitones.



**1. Press the TRANSPOSE -1 key once.**



**2. Press the TRANSPOSE -1 key three more times.**



The pitch of the C-900 is now four semitones lower.

Now you can use the chords of figure (ii) to produce the pitches of figure (i).

**Example 2)** Suppose that this song is too low to sing comfortably, and you would like to sing it at a pitch three semitones higher.

(iii) | F | C | Dm | C | F |

The diagrams show the following fingerings: F (Finger 1 on F, 2 on G, 3 on A, 4 on B, 5 on C), C (Finger 1 on C, 2 on D, 3 on E, 4 on F, 5 on G), and Dm (Finger 1 on D, 2 on E, 3 on F, 4 on G, 5 on A).

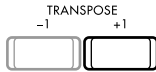
If the song were raised three semitones, the chords would be as follows.

( iv ) | G# | D# | Fm | D# | G# |

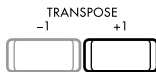
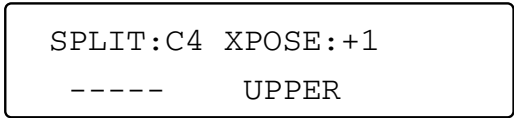
The diagram shows three piano keyboard diagrams. The first is labeled 'G#' and shows the G# chord with dots on the keys G#2, B2, and D#3. The second is labeled 'D#' and shows the D# chord with dots on the keys D#2, F#2, A2, and D#3. The third is labeled 'Fm' and shows the Fm chord with dots on the keys F2, A2, and C3.

These chords are a bit difficult to play.

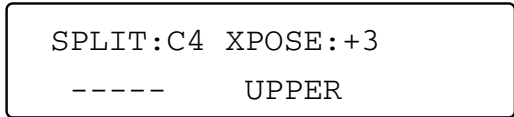
In this case, you can use the transpose function to simply raise the pitch of the piano by three semitones.



**1. Press the TRANSPOSE +1 key once.**



**2. Press the TRANSPOSE +1 key two more times.**



The pitch of the *C-900* is now three semitones higher.

Now you can use the chords of figure (iii) to produce the pitches of figure (iv).

## 2. Listening to the C-900's automatic playback

### Demo

The demonstration can be heard when in any mode.

Initially, the master volume should be set at about 1 or 2.

When playback begins, adjust the volume to a comfortable level.

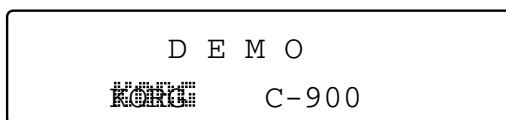


Start demo playback

#### 1. Press the DEMO key located at the right side of the operating panel.

→1. The DEMO LED will light, and the LED's of the ARRANGEMENT GROUP keys and the PROGRAM GROUP keys will light sequentially.

→2. The following display will appear.



→3. Press one of the ARRANGEMENT GROUP keys, the PROGRAM GROUP keys, or the START/STOP key. The C-900 will begin playing a demo song, and the START/STOP LED will blink. For details on the demo songs, refer to p.101 of the Reference Guide.

If you pressed one of the ARRANGEMENT GROUP keys, demo songs using Styles will playback consecutively. Two demo songs are assigned to each key. Pressing a key once will playback the song assigned to the upper arrangement group, and pressing the key twice will playback the song assigned to the lower arrangement group.

If you pressed one of the PROGRAM GROUP keys, classical demo songs will playback consecutively. Two demo songs are assigned to each key. Pressing a key once will playback the song assigned to the upper program group, and pressing the key twice will playback the song assigned to the lower program group.

If you press the START/STOP key, demo songs will be played back consecutively, from the demo songs which use Styles, to the classical demo songs.

#### 2. To stop automatic playback during the song, press the blinking ARRANGEMENT GROUP key or PROGRAM GROUP key.

You can also stop demo playback by pressing the START/STOP key. If you press a group key which is not lit, the demo song selected by that key will playback.



Stop demo playback

#### 3. To exit Demo mode, press the DEMO key once again.

Alternatively, you can press any other mode key to move to that mode.



## Song Play

The C-900 is able to load Standard MIDI File (SMF) format song data directly from a floppy disk and play it back conveniently.

### 1. Enter Song Play mode.

If the SONG PLAY LED is lit, the C-900 is in Song Play mode.

When a floppy disk is inserted in Arrangement Play mode, or when the power is turned on with a floppy disk already inserted, the C-900 will automatically enter Song Play mode.

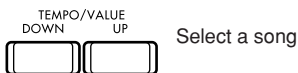
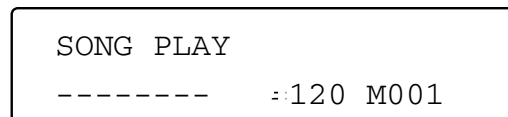
If the floppy disk is removed, the C-900 will automatically enter Arrangement Play mode.

If it is not in Song Play mode, press the SONG PLAY key located on the right on the operating panel.



→1. The SONG PLAY LED will light.

→2. The following display will appear.



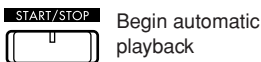
Select a song

### 2. Press either UP or DOWN of the TEMPO/VALUE keys located to the right on the display.

→1. The names of the data on disk will be read by the C-900.

→2. When the names have been read, the names (file names) of the songs on the disk will appear in the LCD.

The song names will be displayed successively each time you press the UP key.



Begin automatic playback

### 3. When the song that you wish to playback appears in the display, press the START/STOP key located in the left of the operating panel.

(For SMF format 0)

Playback will begin immediately when you press the START/STOP key.

(For SMF format 1)

- When you press the START/STOP key, the START/STOP LED will rapidly blink red, and data will be read from the disk. At this time, the backing sequence data will be erased. If you don't want to lose the backing sequence data, you should save it to a different disk beforehand. (☞Reference Guide p.57)
- When the data has been read, playback will begin.

⚠ While data is being read from the floppy disk, the START/STOP LED will rapidly blink red. During this time, never attempt to remove the floppy disk. If you remove the floppy disk while it is being read, the floppy disk or the disk drive will be damaged.

You can modify the tempo. ☞p.58 "Tap tempo," "Tempo/Value"

You can adjust the volume of each instrument. ☞p.59 "VOLUME/MUTE"



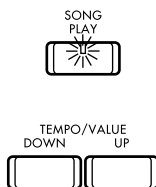
Stop automatic playback

### 4. To stop automatic playback during the song, press the START/STOP key.

## Connect a mic and sing

By connecting a mic to the C-900 you can add vocals to the music. Try singing along with songs from the separately sold Korg SMF/GM library, or commercially available SMF/GM data.

1. Lower the MIC VOLUME slider located at the right of the piano to "0."
2. Connect the mic to the mic input jack located under the piano at the right side.  
(If your mic has an on/off switch, turn it on.)
3. Use the MIC VOLUME slider to adjust the mic level.
4. Use the ECHO LEVEL slider to adjust the amount of echo.
5. Insert a floppy disk containing an SMF song file into the C-900's disk drive.




6. If you are not in Song Play mode, press the SONG PLAY key.

The SONG PLAY key LED will light.

7. Press the TEMPO/VALUE UP or DOWN key once.

The disk will be checked, and the names of the song files on the disk will be displayed.

8. Press the UP or DOWN key to select the desired song title.

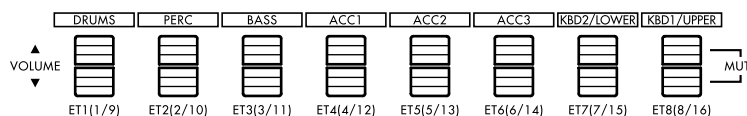
 The data of the separately sold Korg SMF/GM library disks is in format 0. Most commercially available SMF/GM data is also in format 0. Thus, we will assume that you are playing back a format 0 song file. If you are playing back a format 1 song file, refer to p.19.

9. Mute (silence) the vocal (melody) part.

If you don't know which is the vocal part, use the following procedure.



- 1 Press the START/STOP key to begin playback.
- 2 Press any of the VOLUME/MUTE keys located in the center of the operating panel to select the channel of a part.



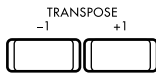
- 3 Simultaneously press the ▲ and ▼ keys of the selected channel to mute the part of that channel (refer to p.14). Was the vocal part silenced? If not, simultaneously press the ▲ and ▼ keys to un-mute that part.
- 4 Press a VOLUME/MUTE key to select the part of a different channel, and try muting it. Check each part in this way and mute the vocal part.
- 5 If you do not find the vocal part among channels 1–8, press the SONG PLAY key once again. The LED of the SONG PLAY key will blink, and now you can select the parts of channels 9–16. Use the same procedure to check each track, and mute the vocal part.
- 6 Press the START/STOP key to stop playback.



10. Press the RESET/YES key to return to the first measure.

11. Press the START/STOP key, and sing along with the playback.

The LED of the START/STOP key will blink in time with the tempo.




## 12. If the pitch is inappropriate, press the TRANSPOSE key to adjust the key.

The pitch will decrease by one semitone each time you press the -1 key, and increase by one semitone each time you press the +1 key.



## 13. When the song finishes playing back, press the START/STOP key.

 If you are not using this function, lower the MIC VOLUME slider and the ECHO LEVEL slider to "0," and unplug the mic from the MIC INPUT jack.

The volume of the device connected to the MIC INPUT jack is affected only by the MIC VOLUME slider. The MASTER VOLUME slider does not affect the volume of the INPUT jack.

The MIC INPUT jack is monaural. If you wish to connect a stereo output device such as a synthesizer to the C-900 and listen to it through the built-in speakers, use the INPUT (L/MONO, R) jacks located on the rear panel.

The following conditions may cause **feedback** (a squeal or whine). Make the appropriate adjustments.

The characteristics of the mic. / The mic is aimed at the C-900. / The mic is too close to the C-900. / The mic volume or echo level is too high.

## Playing along with song data (Minus-one Play)

### 1. Insert the floppy disk which contains the SMF song file into the disk drive of the C-900.

When a floppy disk is inserted in Arrangement Play mode, or when the power is turned on with a floppy disk already inserted, the C-900 will automatically enter Song Play mode.



### 2. If you are not already in Song Play mode, press the SONG PLAY key.

The SONG PLAY key LED will light.

### 3. Press the TEMPO/VALUE UP key or DOWN key once.

The disk will be detected, and the LCD will show the names of the song files on the floppy disk.



### 4. Press the UP or DOWN key to select the song file that you wish to playback.

 Songs of the optional Korg SMF/GM library are saved in format 0. If you wish to playback a song file in format 1, refer to p.19.

### 5. Mute (silence) the part that you wish to play by yourself.

For the muting procedure, refer to p.20 "9. Mute (silence) the vocal (melody) part."

### 6. Press the START/STOP key, and then play along with the song on the keyboard.

The LED of the START/STOP switch will blink in time with the tempo.

Use the ACC volume to adjust the volume of the parts which were not muted.



### 7. When playback finishes, press the START/STOP key.

# 3. Playing while adding automatic accompaniment

Adding an accompaniment is actually quite simple.

While listening to the automatic accompaniment (arrangement play) produced by the C-900, you can also play sounds from the keyboard at the same time.

You can also make changes to the arrangement to suit your playing.

Enter Arrangement Play mode



## 1. Enter Arrangement Play mode.

If the ARR PLAY LED is lit, the C-900 is in Arrangement Play mode.

If you are not in Arrangement Play mode, press the ARR PLAY key located to the right side on the operating panel.

Turn off Piano mode



## 2. Turn off Piano mode.

In order to play with automatic accompaniment, you must first turn off Piano mode.

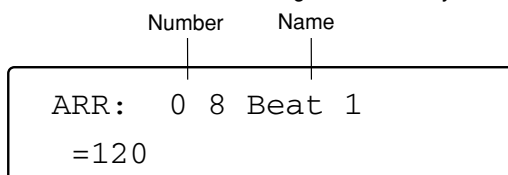
If the PIANO MODE LED is lit, the C-900 is in Piano mode.

If you are in Piano mode, press the PIANO MODE key located in the right side of the operating panel.

→1. The PIANO MODE LED will go out.

→2. The following display will appear.

Number and name of the arrangement currently in use



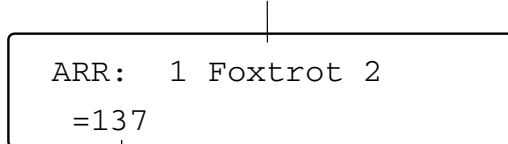
## 3. First select an arrangement.



Press one of the ARRANGEMENT GROUP and ARRANGEMENT SELECT keys located in the left side of the panel.

→ The following display will appear. (The number and name of the displayed arrangement will depend on the keys that you pressed and the number of times that they were pressed.)

Number and name of the currently selected arrangement



Tempo of the currently selected arrangement (playback speed)

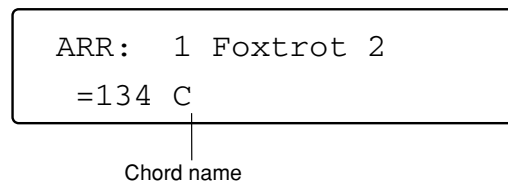
The arrangements of the C-900 are organized into 17 arrangement groups. Within each group, use the ARRANGEMENT SELECT keys to select arrangements.



Using the left hand to control the accompaniment

#### 4. Press one of the notes in the lower (left-hand) range of the keyboard.

→1. A chord name will appear in the display.



The above display is an example of a C major chord being detected. [p.49](#) "Chord Scanning"

The chord you play in the left hand can be abbreviated; simply press one note to indicate a major chord, or two notes simultaneously to indicate a minor chord or a sus4 chord. There is no need for all the notes of the chord to be pressed.

A complete list of how the C-900 will detect chords from various combinations of notes is given in the appendix of the Reference Guide, "List of detected chords." Please refer to this list.

[Reference Guide "Appendix C"](#)



#### 5. Press the START/STOP key located in the left of the panel.

→1. The rhythm, bass, and accompaniment will begin playing.

→2. The START/STOP LED will continue blinking at the time signature of the style, red on the first beat and green on other beats.



You can modify the tempo. [p.58](#) "Tap Tempo," "Tempo/Value"

The bass and accompaniment that started when you pressed a note(s) in the left hand are being played automatically. The C-900 analyzes the note(s) you played to determine the chord, and produces an automatic accompaniment for that chord based on the current arrangement.

Even if you take your hand away from the keyboard, that chord and bass will continue to play until the next note is pressed.

[p.49](#) "Chord Hold"



#### 6. While pressing various chords, play a melody in the upper (right hand) range of the keyboard.

You can change the sound of the instrument. [p.55](#) "Program Group," [p.55](#) "Program Select"

You can adjust the volume of each instrument. [p.59](#) "Volume/Mute"

You can use the ACC volume to adjust the overall volume of the entire accompaniment.

How does it sound? This example shows you how the C-900 can add an automatic accompaniment to your playing.



#### 7. To stop the accompaniment, press the START/STOP key once again.

## Synchro start

Instead of pressing the START/STOP key before you begin playing, this setting will make the arrangement begin playing at the moment that you touch the keyboard.

1. With arrangement play stopped, press the SYNCHRO START/STOP key located in the left side of the panel.



→ The SYNCHRO START/STOP LED will light.



2. Play a chord in the lower the lower hand range.

→1. Arrangement play will begin at the instant that you touch the keyboard.

→2. When play begins, the SYNCHRO START/STOP LED will go out.

## Synchro stop

This setting will make the arrangement stop playing at the moment that you release the keyboard.

1. While arrangement play continues, press the SYNCHRO START/STOP key.



→ The SYNCHRO START/STOP LED will light, and play will stop.



2. While the SYNCHRO START/STOP LED is lit, play a chord in the lower hand keyboard range.

→ Arrangement play will begin according to the chord that you played.

3. Take your hand off the lower hand keyboard range.

→1. Play will stop immediately.

→2. The SYNCHRO START/STOP LED will stay lit.

In this situation, if you play a note in the left hand keyboard range, arrangement play will begin again (Synchro Start). When you take your hand off the keyboard area, play will stop immediately (Synchro Stop).

4. To turn off Synchro Stop, press the SYNCHRO START/STOP key once again.



→ The SYNCHRO START/STOP LED will go out.

Now you can use the START/STOP key to start/stop arrangement play as before.

## Tap tempo

☞ p.58

The tempo of arrangement play can be adjusted using the TEMPO/VALUE UP and DOWN keys located in the right side of the LCD. However, a more musical way to set the tempo is to press the TAP TEMPO key at the desired tempo.

It is also possible to set the tempo by pressing a separately sold assignable pedal/switch or an EC5 external controller, instead of the TAP TEMPO key.

☞ Reference Guide p.63 "Pedal Parameters"

Automatic play at the speed you tap



## Keyboard lock

▶ p.53

Prevent the tempo or sound from changing



The instrumental sounds and tempo used in arrangement play are set to the most appropriate settings for each arrangement. This means that if you switch to a different arrangement while playing, the tempo and the sounds being played by the keyboard will also change to match the newly selected arrangement.

If you wish to select various arrangements without changing the tempo or the sound of the keyboard, press the KBD LOCK key located at the left on the operating panel to make the KBD LOCK LED light.

## 4. Recording your own playing on the C-900

Record your playing with tape recorder-like operation

The C-900 can record your playing (including the accompaniment) in a way similar to using a tape recorder. Using the following procedure, try recording and playing back your own performance.

### 1. Enter BACKING SEQ (backing sequence) mode.

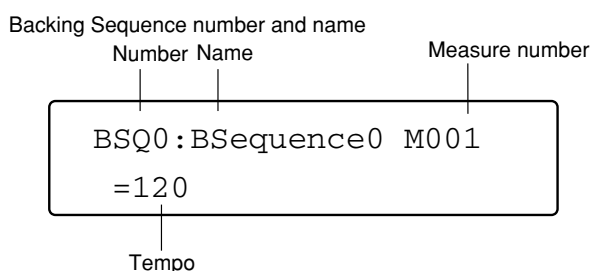
If the BACKING SEQ LED is lit, the C-900 is in Backing Sequence mode.

If you are not in Backing Sequence mode, press the BACKING SEQ key located to the right on the operating panel.



→1. The BACKING SEQ LED will light.

→2. The following display will appear.



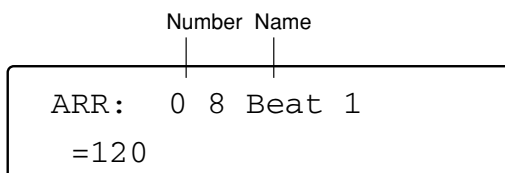
Select an arrangement

### 2. Use the ARRANGEMENT GROUP keys and ARRANGEMENT SELECT keys located to the left on the operating panel to select the arrangement you wish to use.

→ The arrangement display will appear.



Arrangement number and name



#### < To record without automatic accompaniment >

If at this point you press the PIANO MODE key, you will be able to record your own playing without automatic accompaniment. In this case, the PIANO MODE LED will blink, and the ARR GROUP LED will go out. (The previous setting will reappear if you press the PIANO MODE key once again.) The display will show an arrangement name of "Acc Mute." To cancel this status, select another variation.

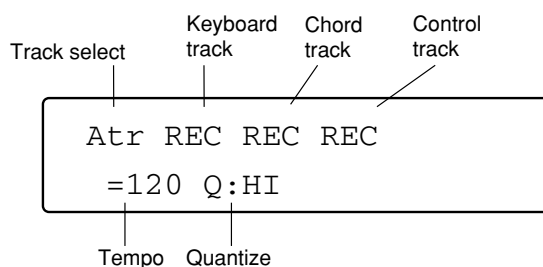
Prepare for recording



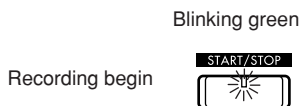
### 3. Press the BACKING SEQ REC key located on the left of the panel.

→ The BACKING SEQ REC LED will light.

→ The following display will appear.







#### 4. Now we are ready to begin recording. Press the **START/STOP** key.

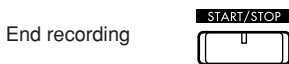
→1. The following display will appear.

BSQ0 : BSequence0 M-2  
=120

→2. After a two-measure metronome count, the arrangement will start.

When you begin playing, your performance will be recorded just as you hear it. If automatic accompaniment is being added, the automatic accompaniment will also be recorded.

→ The **START/STOP** LED will blink in synchronization with the time signature of the arrangement: red on the first beat, and green on other beats.



#### 5. To stop recording, press the **START/STOP** key once again.

→ The **BACKING SEQ REC** LED will go out.

→ The measure number will return to 001.

#### 6. Now let's playback the performance that you just recorded.



Simply press the **START/STOP** key once again, and the recorded performance will be played back from the beginning.

When playback reaches the end, it will automatically stop, and you will return to measure 001.

#### 7. If you wish to redo the recording, press the **BACKING SEQ REC** key to return to the beginning of the recording procedures.

Simply repeat the procedure from step 4 to re-record as many times as you wish.

## Saving your recorded performance

If you now turn off the power of the *C-900*, the performance you just recorded in Backing Sequence mode will be lost.



If you wish to keep your recorded performance, you will need to save the musical data to floppy disk.

☞ Reference Guide p.57 "Page 1-2 Save"

## 5. Editing your performances

Very detailed editing is possible

Musical data can be edited as many times as you wish after it has been recorded into the C-900.

This means that if necessary, you can even make very fine adjustments to the pitch or timing of individual notes without having to re-record anything.

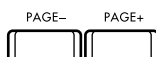
These functions can be used to edit your performance data to perfection.

Looking at data events

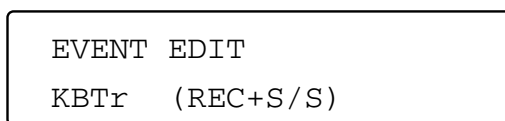
It may be difficult to take full advantage of these complex functions in the beginning. So first, let's take a look at how the individual notes you played are kept in memory.

### 1. In Backing Sequence mode, record a performance into the C-900. p.26

Of course, if the data you recorded in "4. Record your own playing on the C-900" is still in memory, you may use that performance.

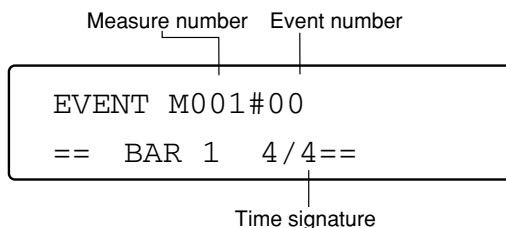


### 2. Use the PAGE + or - key to get to the following display.



### 3. Press the BACKING SEQ REC key, and then press the START/STOP key.

→ The following display will appear.

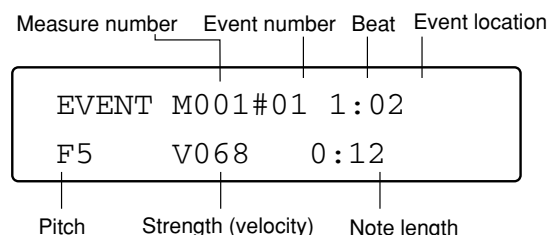


BAR 1 is a marker indicating that this is where measure 1 begins.




### 4. Move the cursor to the measure number, and press the TEMPO/VALUE UP key once.

→ The following display will appear.



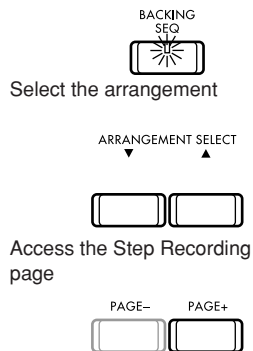
This is the data for the first note in the musical performance that you recorded. Even if notes were played simultaneously, such as for chords, they are stored as individual notes as shown here. By modifying the various numbers that appear in this display you can adjust individual notes, change their pitch, note length or strength, and correct minute inaccuracies in timing.

For details on modifying data, refer to the Event Edit page in the Reference Guide.

 Reference Guide p.32 "Page 8 Event Edit"

## 6. You can input notes one by one to create musical data

Input notes one by one



This section explains step recording: the process by which you can enter individual notes, specifying the pitch, length, and force of each one without recording from the keyboard.

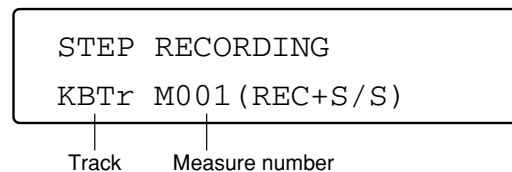
Of course, this is more time-consuming than directly playing the keyboard, but it is a way in which people unfamiliar with the keyboard can enter musical data accurately without having to worry about inaccuracies in timing or wrong notes.

### 1. Enter Backing Sequence mode.

### 2. Use the Arrangement Group and Arrangement Select keys located to the left on the panel to select the arrangement that you wish to use.

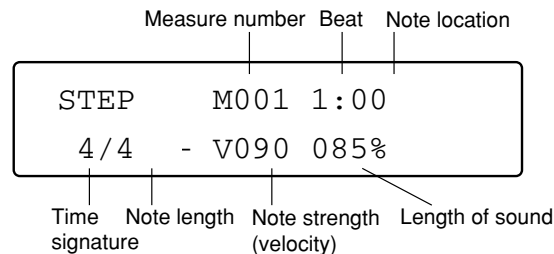
### 3. Use the PAGE + keys to access the Step Recording page.

→ The following display will appear.



### 4. Press the BACKING SEQ REC key, and then press the START/STOP key.

→ The following display will appear.



This LCD is telling you that a quarter note with a velocity of 90 and a length of 85% of a quarter note can now be entered at the beginning of the first beat of measure 1.

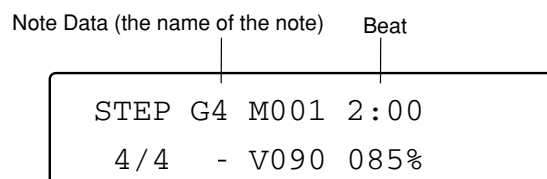
Begin input



### 5. Now input a note into the first beat.

Play the keyboard once. You may play either a single note or a chord.

→ When you release your hand from the keyboard, the following display will appear.



The display shows the note you just played. (If you played a chord, one note in that chord.)

In the above display, a G4 note was played.

You will notice that at the same time, the beat has advanced by one. This means that you are now ready to enter the next note at the second beat.



### 6. Continue playing notes.

Notice that each time you press and release the keyboard, the beat number advances by one.

Although this will depend on the time signature of the arrangement that you selected, the time signature in this example is 4/4, meaning that each measure consists of four beats. This means that when you have input the fourth beat, the measure number will then advance by one, taking you to the first beat of the next measure.

Finish input



### 7. When you have input enough notes, press the START/STOP key.

### 8. Now let's hear what you have input so far.

Press the EXIT key.

→ The following display will reappear.

```
BSQ0 : BSequence0 M001
      =120
```

Playback



Press the START/STOP key once more to playback from the beginning.

When playback is complete, it will automatically stop, and the measure number will return to 001.

In this example, all of the notes that you input were quarter notes, and the velocity and note length were all input with the same value.

You can input more complex melodies

Obviously, it would be possible to modify these settings for note length and velocity etc. each time that you enter a note. Inputting notes in this way would allow you to create more complex rhythms and dynamics.

Also, using the same simple procedure as in Arrangement Play, you can input chords into the chord track to determine the bass and accompaniment.

For details on these procedures, refer to the Step Recording page in the Reference Guide.

☞ Reference Guide p.21 "Page 2 Step Recording"

Interactive composition

## 7. Playing a melody and letting the C-900 automatically add an accompaniment

Just play the melody and an accompaniment will be added automatically



Select an arrangement



The Interactive Composition function allows you to play any melody, and the C-900 will analyze the melody, automatically determine the chords, and play the appropriate bass and accompaniment.

### 1. Enter ARR PLAY (Arrangement Play) mode.

If you are in Piano mode, you will need to turn Piano mode off.

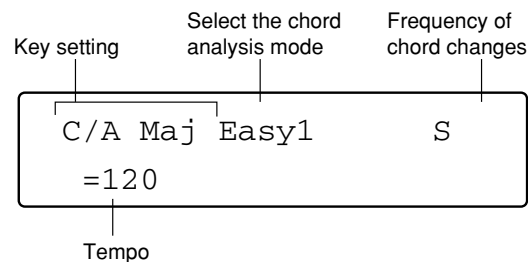
If you are in Piano mode, press the PIANO MODE key to make the indicator go dark.

### 2. Before you begin playing, select an arrangement. Set the tempo to a speed that is comfortable for you to play.

### 3. Press the INTERACTIVE COMP. key located to the right on the operating panel.

→ The INTERACTIVE COMP. LED will light.

→ The following display will appear.



Start



### 4. Press the START/STOP key located in the left of the operating panel.

→ Arrangement play will begin.



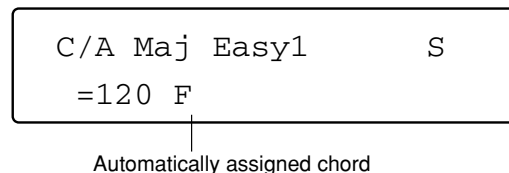
### 5. Play a melody in the right hand range of the keyboard.

For now, play only the white keys.

The secret to helping the C-900 analyze your melody is to play short, precise notes.

→ Chords will automatically be assigned to the melody, and an automatic accompaniment will play.

→ The display will show the chords assigned by the Interactive Composition function.



By specifying the mood or key of the song, you can modify the way in which chords are assigned. [p.40 "Key," "Major/Minor"](#)

You can select the type of chords from among several different patterns.

[p.40 "IC Type"](#)

You can specify the frequency at which chords will change during the song.

[p.40 "Chord Follow"](#)

By first recording the melody into the C-900 and performing the melody analysis later, you can help the C-900 to assign more appropriate chords.

[p.42 "Backing Sequence IC"](#)



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# 4. Basic concepts of the C-900

## 1. Modes and pages

### What is a Mode?

What is a Mode?

You have probably noticed that the word “mode” appears throughout our explanations of the *C-900*.

Look up the word “mode” in the dictionary, and it will tell you that it means “style” or “method.”

In the context of the *C-900*, a mode is “a condition in which certain operations can be performed” or “a condition in which certain functions are active.” To simplify further, you might just think of a mode as a “condition.”

For example, Arrangement Play mode is the “condition” in which you can use the *C-900*’s keyboard to play melody and chords. Backing Sequence mode is the “condition” in which functions determining the sound, pitch, and note length etc. are active so that you can construct your own song or arrangement.

When reference is made simply to the *C-900*’s modes, this is talking about the four modes selected by pressing the mode keys: **Arrangement Play mode**, **Backing Sequence mode**, **Disk/Global mode**, and **Song Play mode**. Another use of the word appears in Arrangement Play, where a condition especially suited to piano playing is called **Piano mode**.

When you are in a certain mode, the LED of that mode key will light, indicating that the *C-900* is now in that mode (condition).

Entering a mode

The act of pressing a mode key to select a mode is referred to as “entering” the mode.

The act of moving from a mode to another condition (perhaps by pressing a different mode key) is referred to as “leaving” the mode.

## What is a Page?

Each of the C-900's modes (Arrangement Play, Backing Sequence, Song Play, Global) contain many functions.

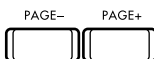
The functions in each mode are organized into a number of display screens which appear in the LCD.

Within each mode, each display screen for a function is called a "display page."

When you want to use a specific function that is found in a certain mode, you must first select the page within that mode that displays the desired function.

What is a Page?

Using the PAGE keys to flip pages



### 1. Each time you press the PAGE + (plus) or - (minus) keys located at the lower right of the LCD, you will step sequentially through the display pages.

Continue using the PAGE keys until you reach the page that contains the desired function.

Directly specifying the page number

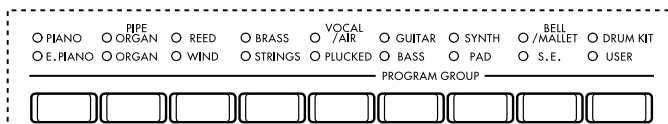
If you press the key of the currently selected mode, the display will indicate the number of the page that is currently accessed.

### 2. If you already know which page of the mode is the one you want, you can specify the page number and jump directly to that page.

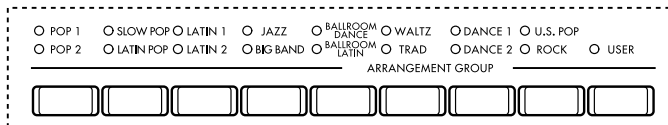
The eight PROGRAM GROUP keys correspond to page numbers 1, 2, 3, ... 8.

The eight ARRANGEMENT GROUP keys correspond to page numbers 9, 10, 11, ... 16.

PROGRAM GROUP  
PAGE 1~8



ARRANGEMENT GROUP  
PAGE 9~16

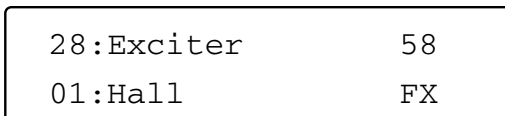


To display the desired page, simultaneously press the key for that mode, and the ARRANGEMENT GROUP key or PROGRAM GROUP key that corresponds to that page number.

To display a page in this way is referred to as "opening" the page.

\* The number of the page last selected in a mode is remembered for each mode as long as the C-900's power remains on.

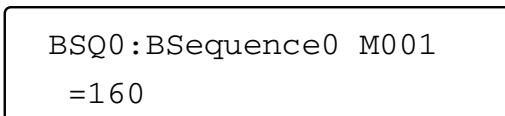
For example, suppose that from page 7 of Arrangement Play mode,



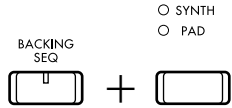
"Opening" a page

When you move to another mode

you press the BACKING SEQ key to move to Backing Sequence mode.







Open page 7 of Backing Sequence mode,

```
SHIFT NOTE
KBTr 001 (01 Sh=+00
```



and then press ARR PLAY key to return to Arrangement Play mode. Notice which page appears.

```
28:Exciter      58
01:Hall         FX
```

Just as it was before moving to Backing Sequence mode, page 7 is still selected.

If you now return to Backing Sequence mode,



```
SHIFT NOTE
KBTr 001 (01 Sh=+00
```

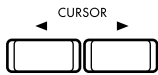
you will see that page 7 is still selected here as well. The page number for each mode is maintained even if you move to a different mode.

Returning immediately to the first page

\* In any page of any mode, you can press the EXIT key located at the left of the LCD to jump instantly to the first page of that mode. [p.51 "Exit"](#)

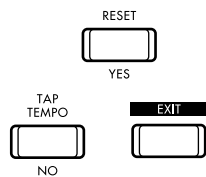
Sub pages

In some cases, a page will allow you to select additional displays within that page. Such pages are called "sub pages."



```
EDIT 1 (Press Yes)
(DEL) (INS) (ERASE)
```

Delete measure    Insert measure    Erase measure



In the above display, the characters in parentheses indicate sub pages. You can open these sub pages by moving the cursor to the corresponding area and pressing RESET/YES. To return from a sub page to the original page, press the EXIT key or the TAP TEMPO/NO key.

## 2. Styles/Arrangements/Programs

### What is an Arrangement?

Arrangement

The combination of a Style and two keyboard timbre settings (single, layer, split etc.) is referred to as an Arrangement.

The *C-900* has 128 preset arrangements organized in 16 groups, and 64 arrangements contained in 1 user group.

Each arrangement contains a variety of settings, such as program (instrumental sound), volume, pan, effect, tempo, and mute.

The 64 arrangements in the user group can hold modified versions of these settings, or they can be loaded with completely new data from a separately sold sound/song library floppy disk (XIP series, IFD series).

Style

On the *C-900*, a “style” refers to musical source material from which a song or accompaniment is created.

A style is a collection of standard patterns from a wide variety of musics such as rock and pop or ethnic music, ancient and modern, eastern and western.

Each style contains four variations, two intros (introductions), two endings, and two fill-ins.

In other words, a style is not simply a fragment of an accompaniment pattern or a rhythm pattern — selecting a style will provide you with all the ingredients you need to put together an entire song.

In addition, styles have the flexibility of receiving chord information from the keyboard of the *C-900*, and changing their accompaniment pattern to be most suitable for the chord at any given moment.

Style elements

The ingredients such as variations, intros, fill-ins, and endings that make up a style are referred to as “style elements.”

Styles consist of a total of six musical tracks: drums (the standard drum set widely used in popular music), percussion (all percussion instruments other than drums), bass (the lowest instrument), accompaniment 1 (a standard accompaniment instrument), accompaniment 2, and accompaniment 3.

Backing tracks

These musical tracks are referred to as backing tracks, since they provide the accompaniment.

### What is a Program?

Program

Each of the instrumental sounds that can be played on the *C-900* is referred to as a program.

The *C-900* contains 407 programs, organized into 18 groups (including 1 user group).

Of these, program data from separately sold disks can be loaded into the 64 programs of the user group and into Dr 19 and Dr 20.

# 5. Operating the C-900 while looking at the display

As you have seen, the C-900 has a variety of keys arrayed across its operating panel that let you add various effects and modifications as you play. But in addition to the functions directly controlled by these keys, many more functions can be utilized by adjusting the various settings that appear in the LCD.

This chapter explains how to set and select items that appear in the LCD.

## 1. Moving the cursor

What the cursor does

A single screen in the LCD will contain settings for two or more numerical or on/off items.

In such cases, you will notice that a small horizontal line (the cursor) will appear below one of the displayed items.

The item indicated by the cursor is the setting that can be adjusted at the present time.

If you press the CURSOR keys located in the right side of the LCD, the cursor will step through the different settings.

Pressing CURSOR key ► moves the cursor from left to right.

Pressing CURSOR key ◀ moves the cursor from right to left.

Moving the cursor



Cursor

EVENT	M001#01	1:14
D5	V094	0:80



When the cursor has moved to the item that you wish to adjust, press the TEMPO/VALUE UP key or DOWN key located to the right of the LCD. Each time you press one of these keys, the setting of the item selected by the cursor will step through its possible settings. [p.38](#) "2. Adjusting "loudness" or "speed"

For some items, settings can be made by using keys other than the TEMPO/VALUE keys, or by using the keyboard. For details, refer to the explanations for the mode and display of each item.

By using the cursor to specify an item that appears in the display, you can modify many different settings that control the C-900's functionality.

In other words, **any item in the display to which the cursor can be moved can be adjusted using the TEMPO/VALUE keys.**

## 2. Adjusting “loudness” or “speed”

Selecting/setting values or items

There will be times that you want to make adjustments to the numerical values that appear in the display, for example to make the drums a bit louder or to slow down the tempo of the automatic playback.

Or, there will be times when you want to select one of several possible settings, for example to select an effect in the effect select page, or specify the recording track in the recording page.

The TEMPO/VALUE keys are used to modify the values of the various settings that are selected by the cursor in the display, such as arrangement playback tempo.

Each time you press the DOWN key, the value of the selected item will decrease by 1. If you continue pressing the DOWN key, the value of the selected item will continue to decrease.

Each time you press the UP key, the value of the selected item will increase by 1. If you continue pressing the UP key, the value of the selected item will continue to increase.

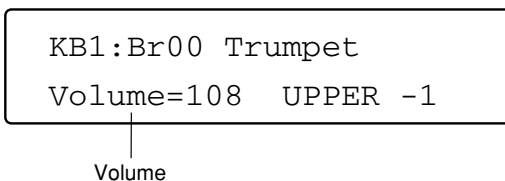
If you simultaneously press both the DOWN key and the UP key together, the selected item will be reset to the original value (i.e., when the cursor was moved to that item). (Some items, such as the backing sequence tempo, will not be reset.)

When playing an arrangement, a backing sequence, or SMF song data, you may want to adjust the volume of each track or channel. You can do so by using the eight pairs of VOLUME/MUTE keys. These keys raise or lower the volume of the corresponding track or channel, and function essentially in the same way as the TEMPO/VALUE keys.

For example when you press the KB1 ▲ key, the following display will appear.



Keys that adjust the volume



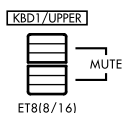
If you continue pressing the ▲ key, the value of `Volume=` will increase, and the volume of KB1 will also increase.

The same display will appear when you press the ▼ key.

If you continue pressing the ▼ key, the value of `Volume=` will decrease, and the volume of KB1 will also decrease.

The operation of the VOLUME/MUTE keys differs from that of the TEMPO/VALUE keys in what happens when you press both up and down keys simultaneously. When the TEMPO/VALUE keys are pressed simultaneously, the value is reset. However when the VOLUME/MUTE keys are pressed simultaneously, the corresponding track (channel) will be muted or un-muted.

The TEMPO/VALUE keys and VOLUME/MUTE keys are not the only way to adjust or modify settings. For example in step recording of Backing Sequence mode, you can use the style element keys and the keyboard to more efficiently specify the type of chords or notes. For details on these operations, refer to the explanations for each key or for each mode in the Reference Guide.



## 6. Interactive composition

What does it mean to “assign chords”?

If you have no particular knowledge of chords, how do you go about adding appropriate chords to a melody that you’ve created?

There is actually a close relationship between chords and melody. However there is no hard and fast rule that things must be done in a certain way.

It is true that in each musical style or genre, there are many rules and forms that direct how chords will be assigned to a given melody, or how chords follow each other. But not all music is created in this way.

And now we come to the *C-900*’s **Interactive Composition** function. **When you play a melody, this function will:**

1. **Analyze that melody, and according to a previously-selected style and various patterns, determine “appropriate” chords for that melody.**
2. **According to the chords that were determined, the *C-900* will automatically play an accompaniment to that melody.**

This accompaniment can be played at the same time that you are playing the melody on the keyboard. It is also possible to record the melody into the *C-900* in Backing Sequence mode and add the accompaniment during playback.

Generating the accompaniment while the melody is being played (**Realtime IC**) may result in different chords than when the accompaniment is generated from a previously-recorded melody (**Backing Sequence IC**).

More appropriate chords will be generated if the melody is previously recorded.

We have been speaking about determining chords that are “appropriate” for the melody, but the *C-900*’s Interactive Composition function determines the “appropriate” chords by analyzing the melody based on generally-known harmonization and chord progressions. However, not all music is created in this nature.

This means that the chords that the *C-900* has determined to be “appropriate” may not be the “right” chords for your melody.

You should think of the *C-900*’s Interactive Composition function as a means to provide a choice for the chord progression when you are creating a song.

IC settings.

# 1. Settings for the Interactive Composition function

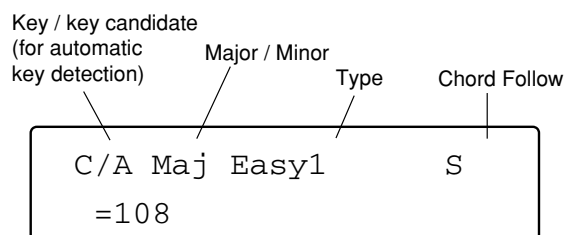
First let's look at the settings for using Interactive Composition.

In Arrangement Play mode, press the INTERACTIVE COMP. key located at the right on the operating panel.



→1. The INTERACTIVE COMP. LED will light.

→2. If you are in the first page, the following display will appear.



**Key** **[ANL, C/A, C#/A#, D/B, ... B/G#]**

Specify the key of the song you wish to play.

The tonic of the major key is shown to the left of the slash, and that of the minor key to the right.

If this is set to AUTO, the C-900 will automatically determine the key. You can use this setting if you are not sure of the key. [p.41](#) "Automatic key detection"

**Major/Minor** **[Maj, Mm, min, mM]**

Specify whether the song you wish to play is in a major or minor key.

Maj..... The song is in a major key. Chords will be mostly major.

Mm..... The song is in a major key. Some minor chords will appear.

min ..... The song is in a minor key. Chords will be mostly minor.

mM..... The song is in a minor key. Some major chords will appear.

**IC type** **[Easy 1-2, General 1-4, Special 1-2]**

Specify the types of chords that will be assigned by the Interactive Composition function.

Easy ..... The most common and safe chords will be assigned. 2 will tend to assign somewhat more complex chords than 1.

General ..... Common chords will be assigned. The settings from 1 to 4 will assign chords with slightly different types. Try them out, and use the one most suitable for your song.

Special..... Distinctive chords will be assigned. 1 and 2 will tend to assign chords differently depending on the major/minor setting. Try them out, and use the one most suitable for your song.

**Chord follow** **[S, F]**

Specify how frequently the chords assigned to the melody by the Interactive Composition function are switched.

Normally there will be no problem leaving this at "S." If you are playing a song with many notes at a slow tempo, try the "F" setting.

S..... A chord will be assigned at the beginning of each measure; i.e., one type of chord will be assigned for each measure.

F..... A chord will be assigned at the beginning and in the middle of each measure; i.e., up to two types of chords will be assigned for each measure.

Adding chords while you play the melody

## 2. Adding chords to the melody that you play

Now let's use the Interactive Composition function to add chords to a melody that you play.

### ● Realtime IC

i) **First, in Arrangement Play mode, select any desired arrangement.**

Use the ARRANGEMENT GROUP keys and the ARRANGEMENT SELECT keys to select an arrangement that you think would match the melody you are about to play.

ii) **With the first display page showing in the LCD, press the INTERACTIVE COMP. key located at the right of the operating panel.**

→ The INTERACTIVE COMP. LED will light.

→ The following display will appear.

C/A Maj Easy1 S  
=106

iii) **Referring to the explanations in the preceding section 1, make settings for the key, major/minor, IC type, and chord follow parameters in the display.**

iv) **Press the START/STOP key located at the left on the panel.**

→ Arrangement play will begin.

v) **Play a melody in the right hand range of the keyboard.**

→ Chords will automatically be assigned to the melody, and will be played as an accompaniment and bass.

→ The display will show the chords that have been assigned by the Interactive Composition function.



When using Realtime IC, the secret to helping the C-900 analyze your melody is to play short, clean notes.

### ● The keyboard range used by Interactive Composition

The range of the keyboard used to play the analyzed melody will depend on the chord scanning setting.

With a setting of OFF or FULL ..... The melody will be analyzed over the entire keyboard.

With a setting of LOWER or UPPER ..... The melody will be analyzed in the range above (to the right of) the split point.

### ● Automatic key detection

If you select AUTO as the key setting, automatic key detection will operate.

If you are not sure of the key of the song you are playing, you can use automatic key detection to determine the key.

i) **In Arrangement Play mode, select the desired arrangement.**

ii) **Press the INTERACTIVE COMP. key located in the right of the operating panel.**

iii) **In the display, set the key parameter to AUTO.**

For the remaining parameters (major/minor, IC type, and chord follow), refer to the explanation on p.40 and make appropriate settings.

iv) **Press the START/STOP key.**

→ Play will begin. However, only the rhythm will playback automatically.

Select an arrangement.

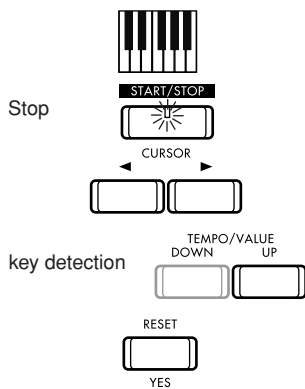


Start



Start





v) **Play a melody in the right hand area of the keyboard.**

At this time, Chord Scanning and Interactive Composition will not operate.

vi) **When you finish playing, press the START/STOP key once again.**

vii) **Use the CURSOR ◀ or ▶ key to move the cursor in the display to the Key parameter.**

viii) **Press the TEMPO/VALUE UP key.**

→ Each time you press the UP key, the possible choices for the key of the melody you just played will appear in the order of their probability.

If while playback is stopped you press the RESET/YES key, the order of the detected choices will be canceled.

ix) **When you have decided on the key, begin playback once again.**

Press the START/STOP key.

→ Playback will begin. If you now play the melody, accompaniment and bass will be played using the chords for the determined key.

### ● Backing sequence IC

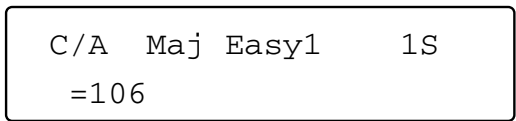
i) **In Backing Sequence mode, select any desired arrangement.**

Use the ARRANGEMENT GROUP keys and the ARRANGEMENT SELECT keys to select an arrangement that you think would match the melody you are about to play.

ii) **Press the INTERACTIVE COMP. key.**

→ The INTERACTIVE COMP. LED will light.

→ The following display will appear.



Assigning chords to a recorded melody

Specify the arrangement



### Replay type (only for Backing Sequence IC)

[1, 2, 3, 4]

This setting determines how the melody will be analyzed and processed when the interactive composition function assigns chords to the melody you recorded in Backing Sequence mode.

This parameter is not used when chords are assigned at the time that the melody is played (Arrangement Play mode).

- 1 ..... This is basically the same processing as Arrangement Play mode, but inaccuracies in timing will be corrected before analysis. This means that chord processing can be carried out more accurately than in realtime, even if the timing of the performance was somewhat inaccurate.
- 2 ..... Chords will be assigned after the melody has been analyzed for the entire measure. This method produces more natural chord assignments than the realtime method, where it is only possible to analyze the melody that was played up to the point of the chord. ★
- 3 ..... Chords will be assigned in basically the same way as method 2. However, for some melodies it is possible that uncommon chords may appear.
- 4 ..... Chords will be assigned in basically the same way as method 2. However the way in which chords change (the chord progression) will be analyzed further, producing a richer and more natural chord progression. ★

★Note: In the case of these settings, the chord may change twice within a single measure even if the Chord Follow setting is set to "S." p.40 "Chord Follow"

iii) **In the display, make appropriate settings for the key, major/minor, IC type, and chord follow parameters, referring to the explanation on p.40.**

iv) **Press the BACKING SEQ REC key, and then press the START/STOP key.**

→ Play will begin.







v) **Play a melody in the right hand range of the keyboard.**

→ Chords will be automatically assigned to the melody, and will be played as accompaniment and bass.

→ The chords assigned by the interactive composition function will be shown at the right of the tempo in the display.



When Backing Sequence IC is used, playing very quick notes may cause the C-900 to think that these notes were pressed accidentally, which will result in the melody not being analyzed correctly.

Stop



vi) **When you finish playing, press the START/STOP key once again.**

→ The following display will appear.

```
C/A  Maj  Easy1    1S
Replay (Yes/No)?
```



vii) **If you wish to listen to your performance with the assigned chords, press RESET/YES key.**

Pressing TAP TEMPO/NO will stop playback.

```
C/A  Maj  Easy1    1S
=106
```

viii) **You can modify the settings for key, major/minor, IC type, replay type, and chord follow.**

```
C/A  Maj  Easy1    1S
=106
```

Use the CURSOR ◀ and ▶ keys to select the item you wish to change, and use the TEMPO/VALUE UP and DOWN keys to modify the settings of the item.

When you finish making changes, press the START/STOP key.

```
G/E  Mm  Generall  3S
Replay (Yes/No)?
```

If you now press the RESET/YES key, playback will begin with the chords re-assigned according to the new settings that you have made. However, be aware that when you press RESET/YES key, the chord progression that was recorded will be lost.

Pressing the TAP TEMPO/NO key in the above display will stop playback, and the settings in the display will remain as you set them.



### ● Assigning chords to a previously recorded performance

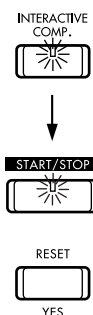
The Interactive Composition function can be used to assign chords to a musical performance that was previously recorded in Backing Sequence mode.

i) In Backing Sequence mode, record a musical performance into the C-900.

ii) Press the INTERACTIVE COMP. key located at the right on the operating panel, and then press the START/STOP key.

→ The INTERACTIVE COMP. LED will light.

→ The following display will appear.



```
C/A  Maj  Easy1    1S
Replay (Yes/No) ?
```

iii) If you wish to hear the performance with the assigned chords, press the RESET/YES key.

→ Playback will begin in accordance to the chords assigned by the Interactive Composition function.

In the above display, pressing the TAP TEMPO/NO key will stop playback without any further operation.

iv) You can modify the settings of key, major/minor, IC type, and chord follow.

```
C/A  Maj  Easy1    1S
=106
```

Use the CURSOR ◀ and ▶ keys to select the item you wish to modify, and use the TEMPO/VALUE UP and DOWN keys to modify the value of each item.

When you have finished making changes, press the START/STOP key.

```
G/E  Mm  Generall  3S
Replay (Yes/No) ?
```

If you press the RESET/YES key, chords will be re-assigned to the musical performance data in accordance with the modified settings.

If you press the TAP TEMPO/NO key in the above display, the modified settings will remain.

If the key setting is set to AUTO, key detection of the musical data will be performed as on p.41. In this case, chords will not be re-assigned.

If you wish to use automatic key detection in Backing Sequence mode, record the melody to be analyzed on the keyboard track. Automatic key detection cannot be executed if the melody is recorded on an extra track (the display will indicate Keyboard Track Empty). If you have already recorded the melody on an extra track, use the Copy Measure function (Reference Guide p.30) or the Bounce function (Reference Guide p.31) to transfer the data to the keyboard track before executing automatic key detection.

There may be times when you would like to try out several different ways of assigning chords to a given melody, and later compare the results.

By saving the backing sequence each time you modify the settings and change the chord assignments, you can later switch between backing sequences and compare them.

In such cases, use the backing sequence Copy function.

By copying the backing sequence with the assigned chords to a different backing sequence and then repeatedly re-assigning chords, you can create a number of alternative chord assignments. ☞ Reference Guide p.27 "Copy Backing Sequence"

Automatic key detection in Backing Sequence mode

Comparing chord assignments

In the pages that follow, we will be introducing several songs as examples that will help you understand how Interactive Composition works. Each song is a simple one, but you will see the way in which chords are assigned. The way that the *C-900* analyses the melody will change depending on when you press and release the keys. Examples of parameter settings are given for each song, and you can try out various ways of playing with various settings, at tempo speeds that are comfortable for you. Once you get the feeling of the appropriate playing technique, you will be able to take advantage of the Interactive Composition function.

# Little Brown Jug

Arrangement	BALLROOM DANCE 1 Foxtrot 2
Key	C/A
Major/Minor	Maj
Chord Follow	S
IC Type	General 1, 2, 3

Traditional

Musical score for 'Little Brown Jug' in C major, 4/4 time. The score consists of five staves of music. The first staff shows the melody starting with a whole rest, followed by a series of quarter notes. The second staff shows the accompaniment with chords G7, C, C, and F. The third staff continues the accompaniment with chords G7, C, C, F, and G7. The fourth staff shows the melody with chords C, C, F, G7, and C. The fifth staff shows the melody with chords C, C, F, G7, and C.

# I've Been Working

Arrangement	POP 2 1 Motown
Key	F/D
Major/Minor	Maj
Chord Follow	S
IC Type	Easy 1, 2 General 1, 2, 3

Traditional

Musical score for 'I've Been Working' in F major, 4/4 time. The score consists of five staves of music. The first staff shows the melody starting with a whole rest, followed by a series of quarter notes. The second staff shows the accompaniment with chords Bb, F, F, and F. The third staff continues the accompaniment with chords C7, C, C, and F. The fourth staff shows the melody with chords Bb, F, and Bb. The fifth staff shows the melody with chords F, F, and F.

# 7. Functions, operations and terminology

The pages that follow contain alphabetically arranged explanations of the functions and basic terms that you will need to understand to take full advantage of the *C-900*. Each of the keys on the *C-900*'s operating panel is also explained in detail.

- Headings in boldface indicate explanations of basic terms or concepts.

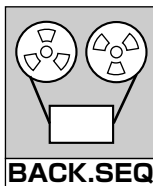
## Example) ARRANGEMENT

- Boxed headings    indicate explanations of the function of an operating panel key.

## Example) ARRANGEMENT GROUP



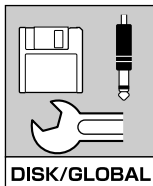
A function effective in Arrangement Play mode



A function effective in Backing Sequence mode



A function effective in Song Play mode



A function effective in Disk/Global mode



The status of this key is indicated by an LED. In most cases, the LED will alternate between lit and dark each time the switch is pressed, and the function of that key is in effect when the LED is lit. For some keys, the LED will sometimes blink to indicate a special status.

# A

## ACCOMPANIMENT

The word “accompaniment” means something that is “played along with” a musical part.

On the *C-900*, accompaniment refers to the instrumental sounds other than drums, percussion and bass, and to the tracks used by these sounds.

## ARRANGEMENT

The combination of a style and two keyboard timbre settings (single, layer, split etc.) is referred to as an arrangement.

The *C-900* provides a total of 128 preset arrangements organized into 16 groups, and 64 user arrangements.

Each arrangement contains a variety of settings such as program (instrumental sound), volume, pan, effect, tempo, and mute. Of the arrangements, the settings of the 64 user arrangements can be freely modified, or replaced by completely new settings that are loaded from a separately sold sound/song library floppy disk.

### ARRANGEMENT GROUP







1. These keys are used to select the arrangement group.  
 Arrangements are organized by musical genre into 16 preset arrangement groups and 1 user arrangement group. When you press one of these keys, the upper of the two LEDs will light, indicating that the upper group is selected.  
 If you press the same key again, the upper and lower LEDs will light alternately, switching between the upper and lower groups.
2. These keys are used to select page displays.  
 By holding down a mode key and pressing one of these keys, you can jump directly to the page (9–16) within that mode corresponding to the key that you pressed.

○ POP 1 ○ SLOW POP ○ LATIN 1 ○ JAZZ ○ BALLROOM ○ DANCE ○ WALTZ ○ DANCE 1 ○ U.S. POP  
○ POP 2 ○ LATIN POP ○ LATIN 2 ○ BIG BAND ○ BALLROOM ○ TRAD ○ DANCE 2 ○ ROCK ○ USER

ARRANGEMENT GROUP

9

10

11

12

13

14

15

16

## ARR. PLAY (arrangement play)



When this key is pressed, you will enter Arrangement Play mode.

Select this mode when you wish to play the *C-900*'s keyboard by itself, or to add automatic accompaniment while you play.

## ARRANGEMENT PLAY MODE

This is the most basic mode of the *C-900*, used when you wish to play the keyboard by itself or to add automatic accompaniment while you play.

This is also the mode in which you can temporarily modify arrangement settings, or store a modified arrangement in the user bank.

## ARRANGEMENT SELECT



Use these keys to select an arrangement from the group that you selected using the arrangement group keys.

Press the up/down keys to select the desired arrangement from the selected group. Each group contains 8 arrangements.

The arrangements contained in each arrangement group are listed in appendix D at the end of the Reference Guide.

## ARRANGEMENT TRACK

The six tracks for accompaniment together with the two keyboard tracks for performance (KBD1/UPPER, KBD2/LOWER) are collectively referred to as the arrangement tracks.

- ☞ Keyboard tracks
- ☞ Backing tracks

# B

## BACKING SEQ (backing sequence)



1. When this key is pressed you will enter Backing Sequence mode.

Select this mode when you want a performance you play on the *C-900* to be recorded together with the accompaniment, or when you want to modify or create new musical data.

2. By pressing this key in Backing Sequence mode, you can switch the LED between lit and blinking. This allows you to select the tracks whose volume

will be set by the VOLUME/MUTE keys: either the arrangement tracks (KBD, ACC, PERC, DRUMS, etc.), or the extra tracks (ETr1–ETr8).

The LEDs will blink to indicate that the volume of the extra tracks can now be set.

However, volume or mute settings can be made only when the realtime record/playback page (the first page) is open.

## BACKING SEQUENCE MODE

In this mode, a performance you play on the *C-900* can be recorded together with the accompaniment, and you can modify the data in various ways or create completely new musical data.

This mode is also where the data you create can be converted into Standard MIDI File format.

### BACKING SEQ REC (backing sequence recording)



1. When this key is pressed, the *C-900* will be ready to record. Use the key in the same way for either realtime recording or step recording.
2. If this key is pressed when a user bank is selected in Arrangement mode, data will be written to the selected arrangement. A message of "Write to ARR\_?" will appear, so if you wish to write the data, press the RESET/YES key.

## BACKING TRACK

The six tracks that make up a style (three accompaniment tracks, and the three tracks for bass, percussion and drums) are collectively referred to as backing tracks, since they provide the backing for the melody.

### BASS INVERSION



When this key has been pressed, the *C-900* will use the lowest note that you press on the keyboard as the bass note, and will detect this separately from the chord form. This allows you to specify chords such as Am7/G or F/C, in which the bass note is independent.

If you take your finger off the bass note when Chord Scanning is set to FULL, the previous bass note will remain in effect until the next bass note is specified.

## C

### CHORD

Chords (chord names) are one way of indicating a group of harmonically related notes.

In the context of the *C-900*, the word is used in this usual sense unless otherwise specified.

### CHORD HOLD/◀ 1. Chord hold



When playing an arrangement, you can press this key so that when you release your left hand from the keyboard, the current chord and bass will continue to sound until you press the keyboard again. Since this lets you avoid having to rapidly change your fingering to play the next chord, it is convenient for those who may not be accustomed to playing the keyboard.

### 2. ◀



Each time you press this key when in Backing Sequence step recording, the displayed step (the step being edited) will move backwards one position. [☞Reference Guide p.24](#)

In the Arrangement Play mode function Rename Arrangement ([☞Reference Guide p.9](#)) and the Backing Sequence mode function Rename Backing Sequence ([☞Reference Guide p.37](#)), this key moves the cursor which specifies the character to be changed.

## CHORD SCANNING

Chord scanning is the function that monitors the keyboard (the entire keyboard or part of it), and detects a chord from the notes that are being pressed.

You can select one of three possibilities for chord scanning: Upper Chord Scanning detects in the range to the right of the split point, Lower Chord Scanning in the range to the left of the split point, and Full Chord Scanning over the entire keyboard.

### CHORD SCANNING



This key determines the area in which chord scanning (the function that detects chords from the notes you press) will be active.

Each time you press the key, the mode will step through the choices: LOWER/UPPER/FULL/off (chords will not be detected from the keyboard).

Upper Chord Scanning detects in the range to the right of the split point, Lower Chord Scanning in the range to the left of the split point, and Full Chord Scanning over the entire keyboard.

If Upper Chord Scanning or Full Chord Scanning are selected, chords will be detected when you simultaneously press 3 or more notes.

Chords played in the left hand (Lower Chord Scanning) may be abbreviated, with one finger indicating a major chord and two fingers indicating a minor or sus4 chord. You do not need to press all the component notes of the chord.

For details on which chord will be detected from each combination of notes, refer to appendix C at the end of the Reference Guide, "List of detected chords."

## CURSOR

The cursor is the blinking horizontal line that appears below the item in the LCD that is selected for modification.

The CURSOR keys located immediately right of the LCD can be used to move the cursor to left/right or up/down.

The setting of the item indicated by the cursor can be modified using the TEMPO/VALUE keys.

**CURSOR** (◀, ▶)



Use these keys to move the cursor to select the item in the display that you wish to set.

When you press these keys, the cursor will cycle through the settable items in the display.

Pressing the ▶ key will move the cursor from left to right.

Pressing the ◀ key will move the cursor from right to left.

If you press the ▶ key to move the cursor to the last item in that display, the cursor will then "wrap around" to the first item.

## D

**DEL (delete)**



In Backing Sequence event editing, press this key to delete the currently displayed step.

☞ Reference Guide p.32 "Event Edit"

During the procedures for Rename Arrangement (☞ Reference Guide p.9), Rename Backing Sequence (☞ Reference Guide p.37), Save (☞ Reference Guide p.57), and Convert to SMF (☞ Reference Guide

p.37), pressing this key will delete the character where the cursor is located in the arrangement name, backing sequence name, or filename.

## DEMO



When this key is pressed, a demonstration of the C-900's automatic playback will begin. You may listen to the demonstration from any mode.

## DISK/GLOBAL



When this key is pressed you will enter Disk/Disk/Global mode.

Press this key when you wish to save and load the C-900 musical data to and from floppy disk, to specify the pitch or scale of the entire C-900, make settings for various basic functions, set the function of external foot switches or pedals, or make MIDI settings.

## DISK/GLOBAL MODE

This is the mode in which you can make various settings that affect the entire C-900. Data management operations related to the floppy disk or MIDI are also performed here.

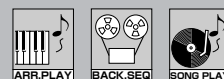
## E

### EDIT

The word "edit" is probably most familiar to you in the meaning of making changes to a piece of writing. On the C-900, the process of using various functions in Backing Sequence mode to change or transform musical data is referred to as editing.

☞ Event edit

## EFFECT

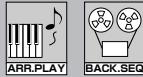


The C-900 has two independent "effect systems" which can add "effects" such as reverb or echo to the sound, adding richness and finish to your music.

The type of effect can be selected in the effect pages of Arrangement Play mode, Backing Sequence mode, and Sequence Play mode.



## ENDING



This refers to the last part of a song. On the *C-900*, each style has two endings; ENDING 1 and ENDING 2.

ENDING1 is an ending with a chord progression.

ENDING2 is an ending without a chord progression. Thus, this ending can be used when you wish to change chords yourself during the ending.

The two operating panel keys INTRO/ENDING 1 and 2 let you add an ending to your song.

During arrangement play, pressing an ENDING key will cause an ending to be played, and then play will stop automatically.

## ENSEMBLE



If this key has been pressed, a harmony as determined by the current chord scanning will be added to the melody that you play on the keyboard.

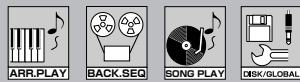
## EVENT EDIT

Musical data recorded in Backing Sequence mode consists of a large number of instructions which are used to control the *C-900*. Such instructions might be to play a particular note at beat number 'x' of measure 'y' and hold it for so long, or to switch to another program at measure 'z.' Each of the instructions is referred to as an event.

In Backing Sequence mode you can perform very detailed editing by modifying individual events, adding new events, or deleting existing events.

The process of editing these events is referred to as event editing.

## EXIT



1. In all modes, when any page is open, pressing this key will return you to the first page.
2. When you are in a sub-page of Backing Sequence mode (a page related to an editing operation), or a sub-page of Disk/Global mode (a disk-related page), pressing this key will return you to the highest page. [p.35](#)
3. In display screens (pop-up displays) such as the Octave or Transpose settings which appear only for a specific interval of time, or in a display which allows you to select a program (a bank or number selection display), pressing this key will immediately return you to the previous display.

In addition to these cases, you can press this key

during a sequence of key operations to cancel that function.

If you press this key in the first page of Backing Sequence mode, the currently selected arrangement will be displayed. After approximately 7 seconds the previous display will reappear.

[Reference Guide p.15](#)

## EXTENSION

The extension (filename extension) is the period and three characters which are added to the end of a filename in order to distinguish between different types of data, such as *C-900* arrangements, programs, and backing sequences.

[File](#)

[Reference Guide p.54 "Data saved on disk"](#)

## F

### FADE IN/OUT



If you begin play by pressing this key instead of the START/STOP key, the playback volume will start from silence and gradually grow louder.

If you end play by pressing this key instead of the START/STOP key, the playback volume will gradually diminish and finally disappear.

## FILE

Data used by the *C-900* such as programs, arrangements, and backing sequences can be assigned a name and saved on floppy disk for convenient management.

In the context of computers, a collection of data which has been assigned a name in this way is called a "file."

## FILL (fill-in)

A fill-in is a short phrase that is added (often improvised) between melodic sections to "spice up" the song.

The *C-900* has two fill-ins for each style: FILL 1 and FILL 2. The FILL 1 and 2 keys on the operating panel let you insert fill-ins into your playing.

For some styles, a fill-in can also be used in place of an intro.

The Arrangement Play mode's Fill setting can be set so that when a fill-in is inserted into the playback of a variation, a different variation will be automatically selected after the fill-in finishes playing.

**FILL (1, 2)****1. Fill-in**

By pressing one of these keys during arrangement play, you can insert two types of fill-in.

When a fill is inserted, the LED of the variation that had been playing will blink.

For some styles, a fill-in can also be used in place of an intro.

**2. Step input**

In Backing Sequence mode Step Recording, these keys let you directly specify the step (note value).

☞ Reference Guide p.21 “Page 2 Step Recording”

FILL 1 = (16th note) ♪

FILL 2 = (32nd note) ♪

**G****GM (General MIDI)**

General MIDI (GM) is a standard specification that defines a common set of instrumental sounds (programs) and ways to control the sound (volume settings etc.). Musical data that was created for a GM-compatible MIDI instrument can be played back on any GM device to produce essentially the same musical result.

☞ p.62 “What is General MIDI?”

**I****INS (insert)**

During event editing, you can press this key to insert a new note or event after the currently-displayed step.

☞ Reference Guide p.32 “Event Edit”

During the Rename Arrangement (☞ Reference Guide p.9), Rename Backing Sequence (☞ Reference Guide p.37), Save (☞ Reference Guide p.57) and Convert to SMF (☞ Reference Guide p.37) operations, pressing this key will insert a character into the arrangement name, backing sequence name, or filename at the location of the cursor.

**INTERACTIVE COMPOSITION**

This is the function that automatically analyses the melody you play on the keyboard, and adds appropriate chords or chord progressions.

**INTERACTIVE COMP.  
(interactive composition)**

When this key is pressed, the *C-900* will analyze the melody you play on the keyboard, automatically determine chords, and play an automatic bass and accompaniment according to these chords.

There are two ways to use this function: one is in Arrangement Play mode, where the accompaniment will be added simultaneously as you play, and the other is in Backing Sequence mode, where you will first record a melody and then have the accompaniment added to it. These two methods may assign chords differently, even to the same melody.

☞ p.31, p.39 “Interactive Composition”

**INTRO**

This refers to the introduction of a song. The *C-900* provides two intros, INTRO 1 and INTRO 2, for each style.

INTRO1 contains a chord progression.

INTRO2 does not contain a chord progression.

The two INTRO/ENDING 1 and 2 keys located on the operating panel of the *C-900* allow you to add an intro to your playing.

By pressing an INTRO key before you begin arrangement play, you can specify whether or not an intro will be played before variation play begins.

**INTRO/ENDING (1, 2)****1. Intro/Ending**

1. By pressing one of these keys before you begin arrangement play, you can specify whether or not an intro will be played before variation play begins.

The LED of the selected intro will light while the intro is playing, and will go out when variation play begins. Each style has two intros.

If you press the same INTRO key while the intro is being played, that intro will continue repeating. This will be canceled when you press another INTRO key, VARIATION key or a FILL key.

2. If you press one of these keys during arrangement play, the ending will begin, and play will stop automatically. Each style has two endings.

The LED of the selected ending will continue blinking until play switches to that ending. Once the ending begins, the LED will stay lit until play ends.

## 2. Step input



In Backing Sequence mode Step Recording, you can press this key to directly specify the step (note value).

- ☞ Reference Guide p.21 “Page 2 Step Recording”
- INTRO/ENDING 1 = dotted ...the specified note value will be multiplied by 1.5
- INTRO/ENDING 2 = triplet...the specified note value will be cut to 2/3

## K

### Key

- In this manual, the switch buttons on the operating panel of the *C-900* are referred to as keys; e.g., “the START/STOP key” or “a PROGRAM NUMBER key.”
- In the context of musical theory, key refers to the key signature.

Keys can be classified as major or minor.

Depending on the position of the tonic, there are 12 major keys (C major, C# major, D major etc.) and 12 minor keys (C minor, C# minor, D minor, etc.).

If the key of a song is too low or too high for you to sing or for another instrument to accompany, the *C-900* provides a Transpose function that lets you raise or lower the key in semitone steps. ☞p.58 “Transpose”

Also, when you need to specify the key for the Interactive Composition function, you can use the automatic key detection function if you are not sure of the key. ☞p.41

## KEYBOARD

In general, this refers to the set of black and white notes on a keyboard instrument, or to the instrument itself. In the context of the *C-900*, “keyboard” refers to the black and white notes.

## KEYBOARD ASSIGN



Keyboard Assign is the function which lets you specify how the two keyboard timbres of the *C-900* will be assigned to the keyboard. Split mode lets you assign different timbres to the right hand (upper) and left hand (lower) ranges of the keyboard (bounded by the split point), and Layer mode lets you assign two timbres to each note of the keyboard.

## KEYBOARD ASSIGN

Use this key to specify how the two keyboard timbres of the *C-900* will be assigned to the keyboard.

Single mode assigns the same sound to the entire keyboard. Split mode lets you assign different timbres to the right hand (upper) and left hand (lower) ranges of the keyboard, bounded by the split point. Layer mode lets you assign two timbres to each note of the keyboard. Manual Drum mode lets you play a different percussion instrument sound from each note of the keyboard.

Each time you press this key, the mode will cycle through the choices: SINGLE, LAYER, SPLIT, and M.DRUMS (manual drums).

## KBD LOCK (keyboard lock)



By pressing this key, you can keep the tempo and keyboard sound of the current arrangement even when you switch to a different arrangement.

When this key is pressed, the tempo, program, octave, keyboard track mute/unmute status, bass inversion, keyboard assign, split point, transpose, chord scan, volume, pan, send, and effect parameters will all be locked.

☞p.25

## KEYBOARD TIMBRE

The basic components of the sound that is heard when you play the keyboard are called keyboard timbres. Keyboard timbres produce various sounds according to the programs that are selected.

The *C-900* has two keyboard timbres, and these two can be sounded in combination. The way in which these are combined is determined by the KEYBOARD ASSIGN key.

## Keyboard tracks

The areas of the *C-900* sequence which record melodies you play on the keyboard are referred to as keyboard tracks. In addition to these tracks, there is also a chord track which records chord data, and a control track which records operations of the panel switches.

## L

### LAYER (Layer mode)

The *C-900* can be set to produce two different sounds simultaneously when you press a single note. The two sounds are normally determined by the arrangement, but you may change them if you wish.

When Keyboard Assign is set to LAYER, two sounds will be layered in this way. This condition is referred to as Layer mode.

☞ Keyboard assign

## LOAD

The process of copying C-900 arrangement, program, backing sequence, or other data from a floppy disk into the C-900 memory is referred to as "loading" data from a floppy disk.

The loading procedure is performed in the Data Load page of Disk/Global mode. (☞ Reference Guide p.55)

☞ Disk/Global mode

## M

### M.DRUMS (manual drums)

The C-900 lets you play different percussion instruments from each note of the keyboard, just as if you were playing a set of percussion instruments (a drum kit).

When Keyboard Assign is set to M.DRUMS, you can play a drum kit from the keyboard in this way. This condition is referred to as Manual Drum mode.

Chord scanning is not performed in Manual Drum Mode.

☞ p.53 "Keyboard assign"

### METRO (metronome)



When this key is pressed the metronome will sound.

However, Song Play mode and Disk/Global mode are exceptions.

## MODE

On the C-900, "mode" generally refers to the four conditions which are selected by pressing one of the mode keys: Arrangement Play, Backing Sequence, Disk/Global, and Song Play. Each of these conditions or "modes" provides a different set of procedures or functions.

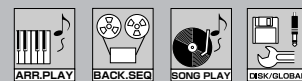
In addition to these modes, mention is also made of "Piano mode," and the various Keyboard Assign modes. For details on these, refer to the explanations of each item.

☞ p.55 "Piano mode"

☞ p.53 "Keyboard Assign"

## N

### NO



Press this key when you wish to select "no" in response to a confirmation display asking you whether or not to execute an operation or continue a process.

When a sub-page is open, pressing this key will return to the previous display.

☞ p.35

## O

### OCTAVE (DOWN/UP)



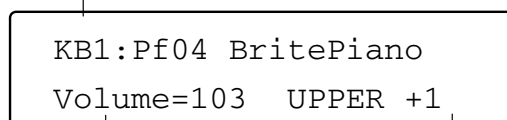
By pressing these keys, you can raise or lower the pitch range of the C-900's keyboard and the backing tracks (Bass, Acc1, Acc2, Acc3) of the automatic accompaniment, in one-octave steps over a range of  $\pm 2$  octaves.

The octave setting can be viewed in the LCD.

When you press the UP or DOWN key, the following display will appear.

The normal display will reappear approximately 7 seconds after you take your hand off the key.

Keyboard timbre 1 setting



Volume

Octave setting

Each time you press the UP or DOWN key, the octave setting will rise or fall by 1.

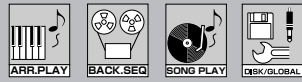
If you press the UP and DOWN keys simultaneously, the octave setting will immediately be reset to 0.

## P

### PAGE

The functions within each of the four modes of the C-900 (Arrangement Play, Backing Sequence, Song Play, and Disk/Global) are organized into display screens called "pages."

If you wish to use a certain function within a mode, you must first select the page of that mode that contains the desired function.

**PAGE (-, +)**

In any mode, use these keys to select the desired page.

Each time you press the + key, the next page will appear.

Each time you press the – key, the previous page will appear.

By simultaneously pressing the key of the current mode together with one of the ARRANGEMENT GROUP keys or PROGRAM GROUP keys, you can jump directly to a specific page of that mode. Refer to the explanation of “Selecting pages” found on the first page of the explanation of the various modes in the Reference Guide. p.34

**PIANO MODE**

Press this key when you wish to play the *C-900* simply as a conventional electronic piano without using functions such as automatic accompaniment.

- In Arrangement Play mode,** pressing this key will ...
  - Automatically assign the effect most suitable for that sound when you select a program. Pedal Simulation ( Reference Guide p.51) will also be set.
  - Cancel muting for the areas to the right (KB1) and left (KB2) of the center of the keyboard, so that playing the keyboard will produce sound.
  - Keyboard Assign will set to SINGLE.
  - Display the sound program group number and sound name in the upper line of the LCD, and the tempo and metronome time signature and volume in the lower line of the display.
- In Backing Sequence mode ...**

Press this key when you wish to record without automatic accompaniment.

An arrangement “Acc Mute” will be selected, and you can record without automatic accompaniment.

The entire keyboard will produce sound.

**PROGRAM**

The instrumental sounds that you can play on the *C-900* are referred to as “programs.”

The programs provided by the *C-900* consist of a total of 327 instrumental sounds organized into 16 groups, and 16 types of drum kit.

Of these programs, program data from separately sold disks (Korg IFD series) can be loaded into the 64 user programs and two drum kits, and the contents of the data can be modified.

**PROGRAM GROUP**

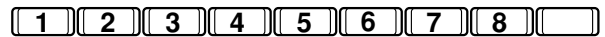
- Use these keys to select the program group.
 

Programs are organized into 17 preset program groups (including 1 drum program), and 1 user program group. When you press one of these keys, the upper of the two LEDs above the key will light, indicating that the upper group has been selected.

If you then press the same key again, the lower and upper LEDs will light alternately, letting you switch between the upper and lower groups.
- Use these keys to select page displays.
 

By holding down a mode key and pressing one of these keys, you can jump directly to the corresponding page display 1–8.

PIANO    PIPE    ORGAN    REED    BRASS    VOCAL    GUITAR    SYNTH    BELL    DRUM KIT  
 E.PIANO    ORGAN    WIND    STRINGS    PLUCKED    BASS    PAD    S.E.    USER



To jump to page displays 9–16, use the ARRANGEMENT GROUP keys. p.47

**PROGRAM SELECT**

- Use these keys to choose programs from within the group selected by the program group keys.
- By pressing the up/down keys, you can choose the desired program from the selected program group. A list of the programs in each program group is given in appendix D at the end of the Reference Guide.
- The number of programs included in each program group differs by the group.

**R****RESET**

By pressing this key, you can

- Reset a sound selection that was modified in Arrangement Play to its original setting.
- Return immediately to the first measure of a backing sequence.
- Return to a condition in which a chord has not been specified (the condition in which notes are not being played in the chord scanning area of the keyboard).

In addition to these, you can also use this key to turn off any “stuck notes” that may occur due to MIDI connections.

**REST**

When step recording a backing sequence, press this key to insert a rest for the currently displayed step. [Reference Guide p.21](#)

**S****SAVE**

The process of writing *C-900* data for an arrangement, program, or backing sequence etc. to a floppy disk is referred to as “saving” the data.

The save procedure is performed in the Data Save page of Disk/Global mode.

[Reference Guide p.57](#)

[Reference Guide p.57](#)

Unlike other types of data, backing sequence data is erased from the *C-900* memory when the power is turned off. This means that if you create backing sequence data on the *C-900*, you should be sure to save the data to disk. It is also a good idea to make a habit of periodically saving data to disk as you are creating the data.

**SCALE**

In general, the sequence of notes C-D-E-F-G-A-B-C is referred to as the scale, but on the *C-900*, you can set the Disk/Global mode parameter Scale to use not only the conventional equal tempered scale, but also scales of ancient music or ethnic music. In addition, you can adjust the pitch of each of the 12 notes in the octave over a range of  $\pm 50$  cents. [Reference Guide p.67 “Page 12 User Scale”](#)

**SEQUENCER**

A sequencer is a device (or a function within a device) that stores the performance of a MIDI instrument as a sequence of data indicating the pitch, length, and velocity of notes, and plays back this data on demand.

Sequencers perform a function somewhat similar to a tape recorder, but instead of recording the “sound,” they digitally record the “performance.” This makes it possible to make very detailed changes that would be difficult or impossible on a tape recorder, such as modifying the pitch or timing of an individual note, or re-recording or cutting and replacing a specific portion of the data.

In Backing Sequence mode, the *C-900* provides not only tracks to record your performance, but also a chord track to record and playback the chords of the accompaniment, a control track that records panel operations, an arrangement track, and 8 extra tracks that can be used to temporarily hold portions of a

performance that you wish to switch between.

**SONG PLAY**

When this key is pressed you will enter Song Play mode.

Press this key when you wish to load and play Standard MIDI File (SMF) format song data directly from disk.

Each time you press this key in Song Play mode, you will alternate between selecting channels 1–8 or channels 9–16 as the channels whose volume or mute settings will be controlled by the VOLUME/MUTE keys.

When the volume/mute settings for channels 9–16 are available, the LED will blink.

**SONG PLAY MODE**

The *C-900* is able to directly load and playback Standard MIDI File (SMF) format data from a floppy disk.

If you have a SMF format data disk, you can insert it into the *C-900* and easily enjoy automatic playback.

**SOUND HOLD/**  
**1. Sound hold**

If this key and the Chord Hold have both been pressed, the note (or chord) and bass note you press in the left hand will continue to sound until the next time the keyboard is pressed.

This differs from the case in which Chord Hold is used alone in that the left hand sound and bass note will sound even when arrangement play is stopped. This can be very effective when you wish to play an intro without rhythm before starting the song.

When arrangement play starts, the bass note will be replaced by the automatic playback of the accompaniment track, but the left hand notes will continue to sound. This is a useful way to add richness to arrangement play.

The Disk/Global mode parameter Sound Hold allows you to specify whether the keyboard notes that you press will sound together with the bass note, whether the notes you press will also be chord-scanned and play the chord sound, or whether the notes you press will play only the bass sound.

[Reference Guide p.65](#)

When using this function, ...

1. Set Chord Scanning to LOWER.
2. If KBD2/LOWER is muted, simultaneously press the ▲ and ▼ keys to cancel muting.

3. Since the chord changes are fixed for INTRO 1 and ENDING 1, this function cannot be used.

## 2. ►



In Backing Sequence step recording, pressing this key will advance the displayed step (the step that can be edited). (Reference Guide p.21)

In the Arrangement Play mode function Rename Arrangement (Reference Guide p.9) and the Backing Sequence mode function Rename Backing Sequence (Reference Guide p.37), this key is used to move the cursor to specify the character you wish to change.

## SPLIT (Split mode)

The *C-900* allows you to divide the 88 notes of the keyboard into right hand (higher) and left hand (lower) ranges, and play different sounds in each hand. The sounds of the left and right hands are normally determined for each arrangement, but you can change these later if you wish.

If Keyboard Assign is set to SPLIT, the keyboard will be split between the left and right hands. This condition is referred to as Split mode.

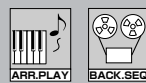
Reference p.53 "Keyboard Assign"

## SPLIT POINT

When the keyboard assign mode is set to Split or Chord Scanning, the division between high and low ranges is referred to as the Split Point.

The Split Point is indicated as the lowest note of the right half of the divided keyboard.

## SPLIT POINT



If you hold down this key and press a note on the *C-900*'s keyboard, that note will become the Split Point.

Use this key to divide the two keyboard timbres of the *C-900* to left and right in Split mode, or to specify the range in which chord scanning will take place.

The Split Point setting can be viewed in the LCD.

While you continue to press this key, the following display will appear.

In the above example, the upper range is the C4 note and notes to the right (higher), and the lower range is the B3 note and notes to the left (lower).

## Standard MIDI File (SMF)

Standard MIDI File format (SMF) is a data format for sequencer (recorder) music data, which allows data to be exchanged via floppy disk between any device, regardless of its manufacturer or model.

Standard MIDI Files include three types of formats. Of these, the *C-900* can use format 0 and format 1. Commercially available data disks can be inserted into the *C-900* and played if they are in either format 0 or format 1. Also, backing sequence data that you create on the *C-900* can also be saved to disk as a Standard MIDI File.

## START/STOP



This key is used to start or stop playback of an arrangement or SMF song, or recording or playback of a backing sequence. Demonstration playback can also be stopped by this key.

When playback or recording begins, the LED will blink in the time signature of the data, red on the first beat and green on other beats.

Also, this LED will rapidly blink red while format 1 SMF data is being loaded from floppy disk.

## STEP RECORDING

This is one of the methods of recording musical data into the *C-900*, in which individual notes are entered by specifying the pitch, length, and velocity etc. of each note. This allows you to create accurate data even if you are unfamiliar with the keyboard.

In contrast to this, the method in which your playing on the keyboard is recorded just as you play it is referred to as Realtime Recording.

## STYLE

Styles refer to collections of standard patterns of a variety of types of music, which are the basic ingredients for constructing a song or accompaniment on the *C-900*.

Reference p.48 "Arrangement"

## Style element

Each element included in a style, such as variation, intro, fill-in, and ending, is referred to as a Style Element.

## SYNCHRO START/STOP



If you begin playback by pressing this key instead of the START/STOP key, arrangement play will begin the instant you play the keyboard, and arrangement play will stop when you take your hand off the keyboard.

☞ p.24

## T

## TAP TEMPO



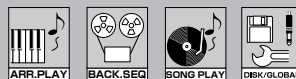
By tapping this key at the desired tempo, you can set the playback tempo in the range of 40–240.

When you successively tap the TAP TEMPO key several times, the playback tempo will be automatically set to the timing of your taps. At the same time, that tempo will be shown in the LCD.

The TAP TEMPO can be used to specify the tempo during playback or when playback is stopped.

☞ p.24

## TEMPO/VALUE (DOWN, UP)



1. During playback in each mode, use these keys to temporarily modify the tempo.

Pressing the DOWN key will slow down the tempo, and pressing the UP key will speed up the tempo.

If you simultaneously press both the DOWN and UP keys, the tempo will be set to AUT if a backing sequence is being played back, or to REC if you are recording. ☞ Reference Guide p.20

\* By using the KBD LOCK function, you can continue playing at the same tempo even when a different arrangement is selected. ☞ p.53 “KBD LOCK”

2. Use these keys to increase or decrease the value of the setting selected by the cursor, or to select possible settings.

Pressing the DOWN key will decrease the value, or move backward through the list of possible settings.

Pressing the UP key will increase the value, or move forward through the list of possible settings.

If you simultaneously press both the DOWN and UP keys, the selected item will be reset to the value it had when you selected it (when the cursor was moved to that item).

## TRACK/CHANNEL



Use these keys to specify the track or channel when you are making settings such as volume, instrumental sound, damper pedal operation, stereo position, octave etc. for the part that you wish to play from the keyboard or a part (track or channel) such as bass, percussion, or drums.

For volume settings, refer to “Volume/Mute” (p.59). For other settings, refer to the explanations for “Track settings” of Arrangement Play mode or Backing Sequence mode in the Reference Guide.

## TIE



During backing sequence step recording, pressing this key will connect (tie) the currently-displayed step to the previous step (even across a bar line).

☞ Reference Guide p.21

## TRANSPOSE (-1/+1)

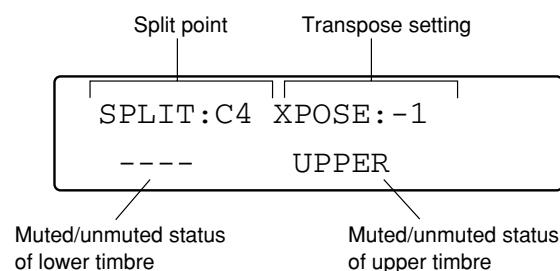


By pressing these keys, you can shift the pitch of the C-900’s keyboard or automatic playback in semitone steps over a range of 11 semitones.

The transpose settings can be viewed in the LCD.

When you press the -1 or +1 key, the following display will appear.

The normal display will reappear approximately 7 seconds after you release this key.



If you simultaneously press both the -1 and +1 keys, the transpose setting will be immediately reset to 0.



## V

## VARIATION (1, 2, 3, 4)

### 1. Variation



These keys let you select 4 variations to the styles of the *C-900*.

While an arrangement is playing, pressing one of these keys to select a different variation will switch playback to the selected variation either immediately, or from the next beat (depending on the type of variation).

By setting the Fill parameter of Arrangement Play mode, you can add variety to the development of the song by causing a different variation to be selected automatically after a Fill has been played.

☞ Reference Guide p.8 "Variation Change"

The LED of the selected variation will continue blinking until playback switches to that variation.

### 2. Step input



In step recording of Backing Sequence mode, you can press these keys to directly specify the step (note value). ☞ Reference Guide p.21 "Page 2 Step Recording"

VARIATION 1 = (whole note) ◦

VARIATION 2 = (half note) ♩

VARIATION 3 = (quarter note) ♪

VARIATION 4 = (eighth note) ♫

## VOLUME/MUTE



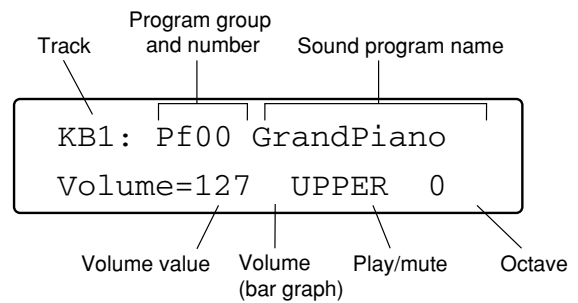
Use these keys to adjust the volume or muting for the program selected for each track (or channel, in the case of Song Play mode). However in Backing Sequence mode, volume and mute settings can be made only if the Realtime Recording/Playback page (the first page) is open.

For any track or channel, pressing the ▲ key will raise the volume of the program, and pressing the ▼ key will lower the volume of the program. If you continue to hold these keys, the value will change continuously.

In addition, by simultaneously pressing both the ▲ and ▼ keys, you can toggle between muting and unmuting the sound.

Change in the volume and play/muted status are indicated in the LCD as numerical values and bar graphs.

When either a ▲ or ▼ key is pressed, the following display will appear.



The upper line of the display shows the arrangement track or extra track (for backing sequence mode) corresponding to the key that you pressed, and the sound program that is assigned to that track. However in Song Play mode, not the track, but the MIDI channel and the sound program assigned to that MIDI channel will be displayed.

The left side of the lower line shows the volume of the channel as a number from 000 (minimum) to 127 (maximum) and as a small bar graph.

The right side of the lower line shows whether that track can be played (PLAY) or is muted (----), and a number indicating the octave setting. However if a KBD1/UPPER or KBD2/LOWER key was pressed, this area will indicate whether the right hand range (UPPER) or the left hand range (LOWER) can be played (instead of an indication of PLAY).

If no other keys are pressed, this display will return to the normal display after approximately 7 seconds.

## Y

## YES



Press this key to reply Yes to a confirmation message in the LCD that asks you whether to execute an operation or continue a process. In Backing Sequence mode step recording, this key can be pressed to finalize a chord you have input.

In displays that allow you to select a sub-page, you can press this key to open the sub-page indicated by the cursor. ☞ p.35



# 8. MIDI Applications

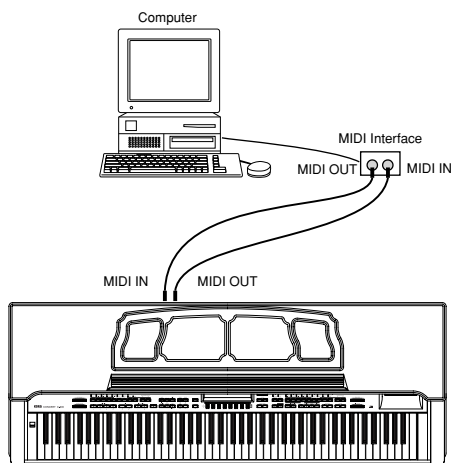
MIDI (Musical Instrument Digital Interface) is the standard interface used to link electronic musical instruments together.

This chapter deals with possible applications of MIDI and the *C-900*. For those interested in the details of MIDI, there are many well-written books available on the subject.

## Using the *C-900* with an external sequencer

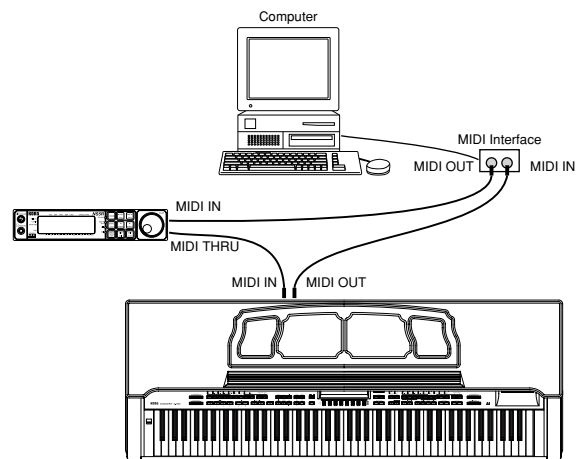
As you know, you can use the *C-900* Backing Sequence mode for recording sequences, and the Song Play mode to play back Standard MIDI File sequences. However, you may want to use a computer software sequencer to record your compositions. Usually, these sequencers offer advanced editing capabilities, but no interactive functions.

If you will be using the *C-900* keyboard to enter note data into the computer sequencer, make the following connections:



In this setup, data from the *C-900* keyboard is sent from the *C-900* MIDI OUT jack, and is received by the MIDI IN jack of the computer's MIDI interface. When playing back sequences, MIDI data from the computer is sent via the MIDI interface's MIDI OUT jack, and is received by the *C-900* MIDI IN jack.

If you want to use additional keyboards or sound modules:



In this setup, data from the *C-900* keyboard is sent from the *C-900* MIDI OUT jack, and is received by the MIDI IN jack of the computer's MIDI interface. When playing back sequences, MIDI data from the computer is sent via the MIDI interface's MIDI OUT jack, and is received by the sound module's MIDI IN jack. This data is then passed on from the sound module's MIDI THRU jack to the *C-900* MIDI IN jack.

The Global channel for Backing Sequence mode and the MIDI channels for each track can be set in Disk/Global mode. When receiving SMF data from an external device to play the *C-900*, set the MIDI channel configuration of the *C-900* in Song Play mode. You can specify initial program, volume, panpot, and effect send values in the song itself, or you can send these messages from the computer via MIDI.

For a list of the *C-900*'s programs and the MIDI bank number and MIDI program number that corresponds to each program, refer to the "Program list" in appendix D of the Reference Guide.

When using the above setup, it is recommended to set the *C-900* Local Control parameter to OFF. (This parameter can be found in Disk/Global mode.) Set the computer sequencer to echo the data it receives from the MIDI IN jack, back to the MIDI OUT jack. The parameter that controls this function has a different name depending on the software you use. Some common names are echo back, patch thru, echo on, etc.

By turning Local Control off, you break the connection between the *C-900* keyboard and its tone generator. This way, the *C-900* acts as a separate MIDI keyboard and independent tone generator. The sequencer's echoing function allows you to play the *C-900* tone generator, as well as the MIDI sound module's tone generator, from the *C-900* keyboard. If the sequencer's echoing function is turned on, and the *C-900* Local Control parameter is also set to ON, two notes will be played by the *C-900* tone generator for every one note sent out from its keyboard.

## Using the C-900 to control other MIDI instruments

You can use other MIDI instruments to play the C-900 arrangements and backing sequences. Just make sure to match the MIDI channels to the correct tracks. Also, use the Track Status parameter of each mode to determine whether the C-900 will play its own sounds in addition to those of the other MIDI device.

You can find the Track Status parameter on Page 4 of Arrangement Play mode.

When this parameter is set to OFF, the corresponding track will not play at all. When set to INT, only internal C-900 sounds will be played. When set to EXT, signals will be sent to external MIDI instruments only. When set to BOTH, both internal C-900 and external MIDI instrument sounds will play.

Be aware that playback results will vary depending on the MIDI instruments used. For example, the C-900 drum mapping feature may not produce the sounds you expect if the external MIDI instrument does not have the same drum kit layout.

## What is General MIDI?

The C-900 is compatible with the GM system.

GM (General MIDI System Level 1) is a world-wide standard which standardizes the sound map of tone generators etc. to ensure basic consistency that goes beyond individual manufacturers and specific models.

MIDI tone generators and song data which are compatible with GM will carry the "GM" logo. Song data carrying this logo can be played back on any tone generator which carries the "GM" logo to produce essentially the same musical result.

On the C-900, the 128 GM sounds and DRUM KIT "01" (GM Kit) correspond to these sounds.

On the C-900, MIDI bank number 0 contains GM compatible sounds. (MIDI bank numbers 1, 3, and 4 contain C-900 original programs, and bank number 2 contains drum kits.) For a list of these sounds, refer to "Program list" in appendix D.

### ★ Playing GM sequence data

You can use Song Play mode to play GM sequences directly from the C-900 disk drive, as long as the sequences have been saved as format 0 Standard MIDI Files.

You can also use the C-900 Song Play mode to play GM sequence data from an external sequencer.

## About Standard MIDI Files

Refer to "Functions, operations and terminology" p.57.

Standard MIDI files can be played back in Song Play mode.

☞ Reference Guide p.39 "Song Play Mode"

Use the Song Play mode to play a standard MIDI file.

Use the Convert to SMF function to convert and save a backing sequence into a format 0 Standard MIDI File.

☞ Reference Guide p.37 "Page 14 Converting to a Standard MIDI File"

# 9. Connections with a computer

If a special cable is used to connect the *C-900* to a computer, you can play the *C-900* from the computer or record keyboard playing from the *C-900* into the computer.

## IBM PC (compatible):

Connection kit AG-001B (connection cable and "Korg MIDI Driver" driver software)

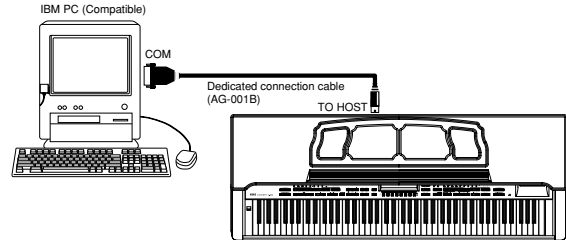
## Apple Macintosh series:

Connection kit AG-002B (connection cable and "Korg MIDI Driver" driver software)

- \* Depending on the type of computer and the application software, such use may not be possible.
- \* Do not connect both the MIDI OUT and the TO HOST connectors of the *C-900* to the same external device. Be sure to connect only one or the other.

## Connection to an IBM PC (compatible) via the AG-001B

Use the special connection cable (AG-001B) to connect the serial port (COM port) of the IBM PC (compatible) to the TO HOST connector of the *C-900*.



- \* Be aware that such use may not be possible, depending on the type of computer or application (sequencer). Applications which are not compatible with Windows cannot be used with this method of connection.

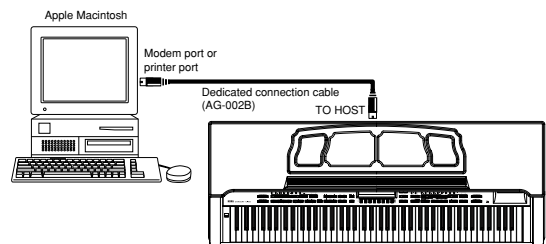
- \* If the serial port of your computer has a 25 pin connector, you will need to use a 9 pin–25 pin adapter.

When connecting the *C-900* to an IBM PC (compatible), set the Disk/Global mode Host BR parameter to "38.4 k" (☞ Reference Guide p.60).

If you are using Windows, you will need to install the Korg MIDI Driver. For the installation procedure, refer to p.64.

## Connection to an Apple Macintosh via the AG-002B

Use the special cable (AG-002B) to connect the modem port or printer port of the Apple Macintosh to the TO HOST connector of the *C-900*.



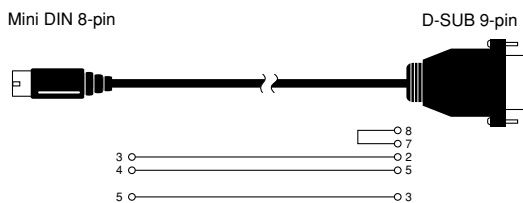
When connecting the *C-900* to an Apple Macintosh, set the Disk/Global mode Host BR parameter to "31.25 k" (☞ Reference Guide p.60).

## HOST BR settings

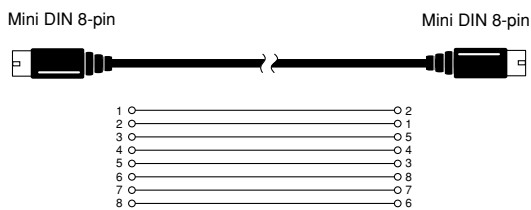
1. Press the DISK/GLOBAL key to enter Disk/Global mode.
  2. Use the PAGE +/- keys to access the Local/Clock/Host BR display.
  3. Use the CURSOR ◀/▶ keys to select Host BR.
  4. Use the VALUE UP/DOWN keys to set the value.
- 31.25k: Connection to an Apple Macintosh  
 38.4k: Connection to an IBM PC (compatible)

## Wiring diagrams for special connection cables

### (1) AG-001B (for IBM PC or Compatible)



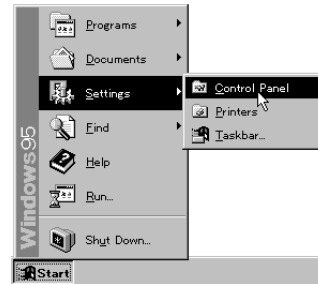
### (2) AG-002B (for Macintosh)



## Korg MIDI Driver installation and setup

### 1. Installing the Korg MIDI Driver into Windows 95

1. Click the [Start] button in the taskbar, and in [Settings], click [Control Panel].



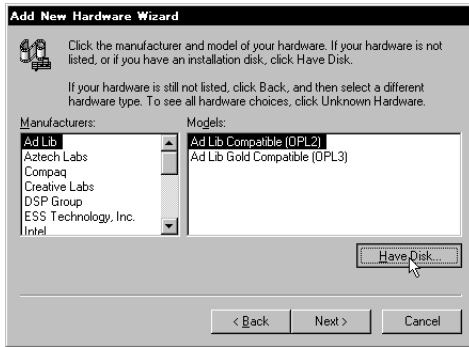
2. In the control panel, double-click the [Hardware] icon to start up the hardware wizard, and then click [Next>].
3. In response to the question "Automatically detect new hardware?" be sure to reply "No," and then click the [Next>] button.



4. Select [Sound, video and game controllers], and click the [Next>] button.

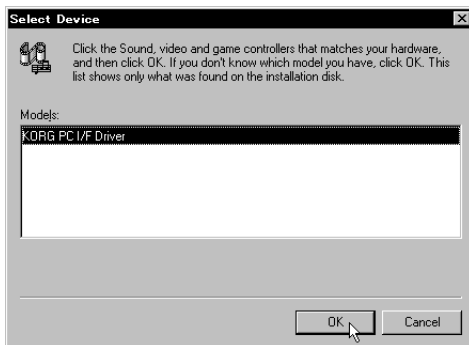


- 5 Click [Have Disk].

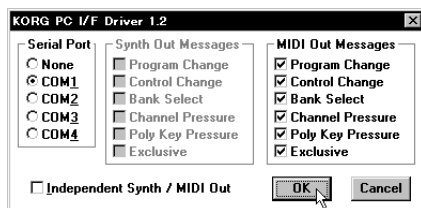


A dialog box will appear, allowing you to specify the drive and directory.

- 6 Insert the disk included with the AG-001B into the disk drive of the computer. If the disk was inserted into drive A, type "A:\\" (or if drive B, type "B:\\" ) and click the [OK] button.
- 7 Click the [OK] button and click [OK].



- 8 Perform the setup as directed in "Setting up the Korg MIDI Driver (Windows)" (refer to p.66) and click the [OK] button.

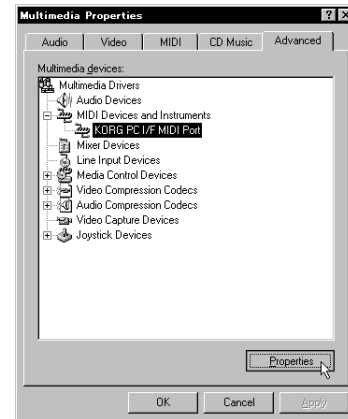


- 9 Be sure to restart your computer so that the driver will take effect.

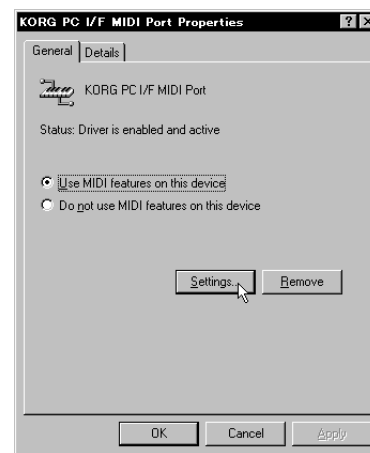


## Modifying the Korg MIDI Driver setup for Windows 95

- 1 In the control panel, double-click the [Multimedia] icon, and the multimedia properties dialog box will appear.



- 2 Click the [Advanced] tab located at the upper right.
- 3 Click the [+] for [MIDI Devices] (the display will change to [-]), and click [KORG PC I/F MIDI Port].
- 4 Click the [Properties] button. The KORG PC I/F MIDI Port properties will be displayed.
- 5 Click the [Settings] button.

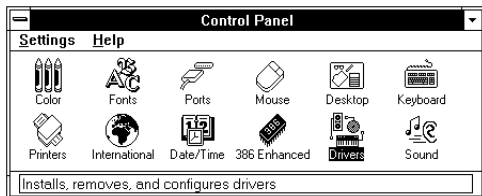


Perform the setup as directed in "Setting up the Korg MIDI Driver (Windows)," and click the [OK] button.

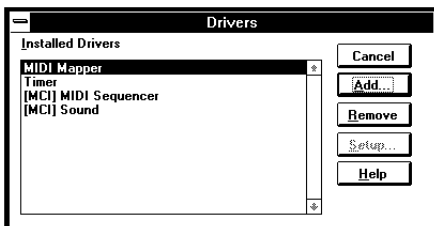
If you have modified the settings, you must re-start Windows.

## 2. Installing the Korg MIDI Driver into Windows 3.1

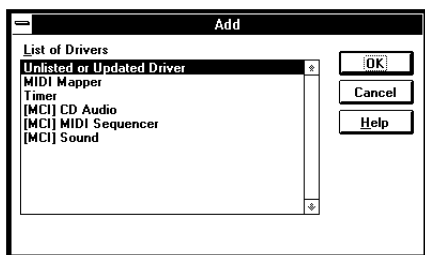
- 1 In the control panel, double-click the Driver icon.



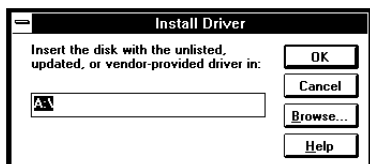
- 2 Click the [Add...] button.



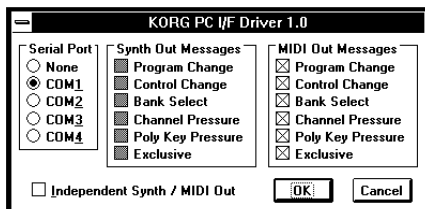
- 3 In the driver list, select [Unlisted or updated driver] and click the [OK] button.



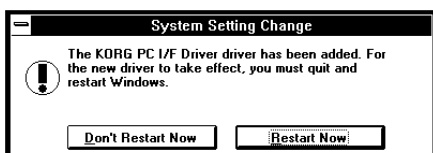
- 4 Insert the disk included with the AG-001B into the disk drive of the computer. If you inserted the disk into drive A, type "A:\\" (for drive B, type "B:\\"), and click the [OK] button.



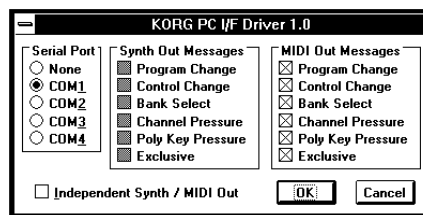
- 5 Select Korg PC I/F Driver, and click the [OK] button. The setup window will appear. Follow the directions in "Setting up the Korg MIDI Driver (Windows)" to perform the setup.



- 6 After setup is complete, remove the disk and select [Restart] to make the newly installed driver available.




## Setting up the Korg MIDI Driver (Windows)



- 1 For the Serial Port setting, select the serial port to which the C-900 is connected ([COM1]–[COM4]). If you wish to use the serial port for another purpose after installing the Korg MIDI Driver, select [None] to disable the driver.
- 2 If [Independent Synth/MIDI Out] box is checked, uncheck it. If this box is checked, malfunctions will occur.
- 3 [MIDI Out Messages] allows you to select the types of message that will be transmitted to the C-900.
- 4 When you finish making settings, click the [OK] button. If you wish to cancel your settings, click [Cancel].

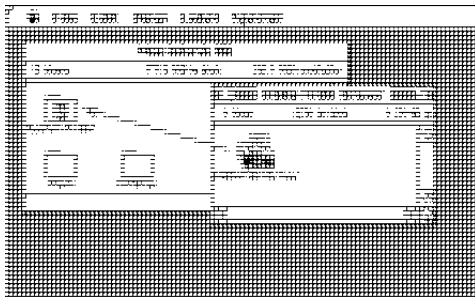


### 3. Installing the Korg MIDI Driver into a Macintosh

 In order to use the Korg MIDI Driver, the Apple MIDI Manager and PatchBay must already be installed. Use the versions of Apple MIDI Manager and PatchBay that are included with your MIDI application. They are not included with the AG-002B.

When the Korg MIDI Driver is used, the "Modem MIDI Out/Port setting" dialog box will allow you to specify the MIDI channels and types of messages which will be transmitted to the C-900. If you do not need this functionality, you can simply use the Apple MIDI Driver without the Korg MIDI Driver. When using the Apple MIDI Driver, or when using a MIDI application (sequencer) which does not use the Apple MIDI Manager.

- 1 Copy the Korg MIDI Driver from the disk included with the AG-002B into the system folder of your startup disk.



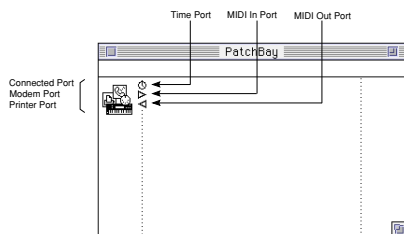
- 2 If there is a copy of Apple MIDI Driver in your system folder, either delete it, or move it to another folder. Be careful not to delete or move the Apple MIDI Manager.

 The Korg MIDI Driver includes the functionality of the Apple MIDI Driver.

- 3 From the Special menu, select "Restart."

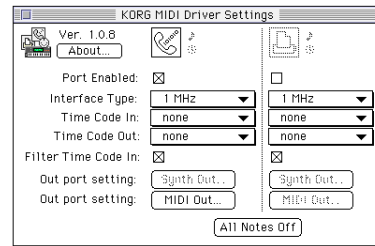
#### Setting up the Korg MIDI Driver (Macintosh)

- 1 Start up PatchBay.

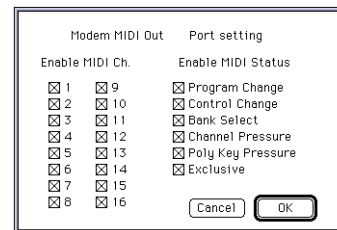


If installation has been performed correctly, the KORG MIDI Driver icon shown above will appear in the PatchBay window when PatchBay is started up. (The modem and printer ports will be displayed differently depending on the setup condition.)

- 2 In PatchBay, double-click the KORG MIDI Driver icon. The setup dialog box will appear.



- 3 Check the Port Enable box for the port to which the C-900 is connected, and specify [1 MHz]. Since the C-900 does not contain a KORG PC IF, do not select [KORG PCIF].
- 4 Press the [Out Port Setting] button. The following dialog box will appear. Here you can select the MIDI channels/messages which will be output to each port. Only those channels/messages whose box is checked will be output.



- 5 When you have finished making settings, click the [OK] button.
- 6 Start up your MIDI application (sequencer), and drag the mouse from the "<" of your MIDI application's Out Port to connect it to the MIDI Out of the MIDI Driver.

 For details on using PatchBay, refer to "About PatchBay..." etc. in the Apple menu.

**To use the Apple MIDI Driver**, you must first delete or move the Korg MIDI Driver if it exists in your system folder. Then start up PatchBay, double-click the Apple MIDI Driver icon that appears, check Enabled for the Port to which the C-900 is connected, set Interface Type to [1 MHz], and close the dialog box. In PatchBay, drag the mouse from the OutPort "<" of the MIDI application (sequencer) to connect it to MIDI Out.

**If you are using a MIDI application (sequencer) which does not use Apple MIDI Manager**, select the Port to which the C-900 is connected, and set the Clock setting to [1 MHz].

### Using PC Exchange to convert SMF data

Most commercially available Standard MIDI File (SMF) song data is saved in MS-DOS format.

You can use PC Exchange to make MS-DOS format SMF song files recognizable by the Macintosh.

- 1 In the control panel, open PC Exchange.  
The PC Exchange control panel will appear.
- 2 Press the [Add...] button.  
The [Specify application associated with DOS extension] window will appear.
- 3 Input ".MID" into the DOS extension field.  
In order to distinguish different types of file, MS-DOS adds an extension consisting of a period and three characters to the end of the filename. It is customary for SMF data to have an extension of ".MID"
- 4 From the list that appears in the lower part of the dialog box, select your SMF-compatible MIDI application (sequencer).  
The selected icon will appear in the Application field.
- 5 From the [Document type] popup menu, choose [Midi], and click the [OK] button.  
The item which was added to the PC Exchange window will appear, and has now been registered.

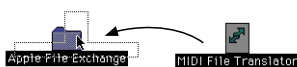
Now when an MS-DOS SMF disk is inserted into the disk drive, it can be used immediately.

For details refer to the documentation for "Macintosh PC Exchange."

### About the MIDI File Translator included with the AG-002B

If the Macintosh you are using does not have PC Exchange but does have Apple File Exchange, you can use the MIDI File Translator included with the AG-002B to convert MS-DOS SMF data.

- 1 Put the MIDI File Translator into the same folder as Apple File Exchange.



- 2 Double-click Apple File Exchange to start it up.
- 3 Insert the MS-DOS disk that you wish to convert into the disk drive.  
Be sure to insert the MS-DOS format disk into the disk drive only after Apple File Exchange has already started up.
- 4 Select the song file that you wish to convert.
- 5 Press the "<<Convert<<" (or ">>Convert>>") button located in the center.  
Conversion will begin. When the bar graph reaches 100%, conversion is complete. The converted file will appear in the left-hand box.
- 6 Exit Apple File Exchange.

# 10. Specifications and options

<b>Tone generation method</b>	AI <sup>2</sup> synthesis (full digital processing)
<b>Tone generator</b>	32 voice, 32 oscillator (single mode) 16 voice, 32 oscillator (double mode)
<b>Keyboard</b>	88 note (velocity sensitive)
<b>Waveform memory</b>	14 Mbytes of PCM ROM
<b>Effects</b>	Two stereo digital multi-effect systems, 48 effect types
<b>Programs</b>	128 GM programs and 1 GM drum program built into ROM 199 programs and 13 drum programs in ROM 64 user programs and 2 user drum programs in RAM
<b>Arrangements</b>	128 types in ROM 64 user arrangements in RAM
<b>Backing sequences</b>	10 sequences in RAM
<b>Backing sequence capacity</b>	40,000 events
<b>Song data</b>	16 channels, 16 timbres (dynamic voice allocation)
<b>Controllers</b>	Assignable pedal/switch, EC5
<b>Audio output</b>	OUTPUT (L/MONO, R) * <sup>1</sup> , Headphones × 2 * <sup>1</sup>
<b>Audio input</b>	INPUT (L/MONO, R), MIC INPUT * <sup>1</sup>
<b>MIDI</b>	IN, OUT
<b>PC interface</b>	TO HOST
<b>Floppy disk drive</b>	3.5 inch 2DD/3.5 inch 2HD (IBM PC 1.44 MB)
<b>LCD</b>	Backlit LCD, 20 characters × 2 lines
<b>Main amp</b>	40 W × 2
<b>Speakers</b>	20 cm × 2, 5 cm × 2
<b>Power supply</b>	117 V          220~240 V
<b>Power consumption</b>	100 W          95 W
<b>Included items</b>	Preloaded program data disk CFD-01P, Special stand
<b>Dimensions</b>	1,412 (width) × 528 (depth) × 906 (height) mm
<b>Weight</b>	62.0 kg (including stand)
<b>Optional items</b>	EC5 external controller, DS-1H damper pedal, PS-1 pedal switch, EXP-2 expression pedal, XVP-10 expression pedal

\*1: Phone plug

Specifications are subject to change without notice.

#### NOTICE

KORG products are manufactured under strict specifications and voltages required by each country. These products are warranted by the KORG distributor only in each country. Any KORG product not sold with a warranty card or carrying a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

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