



ELECTRONIC PIANO

# P-80

Owner's Manual  
Bedienungsanleitung  
Mode d'emploi  
Manual de instrucciones



ENGLISH

DEUTSCH

FRANÇAIS

ESPAÑOL

# SPECIAL MESSAGE SECTION

This product utilizes batteries or an external power supply (adapter). DO NOT connect this product to any power supply or adapter other than one described in the manual, on the name plate, or specifically recommended by Yamaha.

**WARNING:** Do not place this product in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! IF you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. NOTE: The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by Yamaha. If a cart, etc., is used, please observe all safety markings and instructions that accompany the accessory product.

## **SPECIFICATIONS SUBJECT TO CHANGE:**

The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

**IMPORTANT:** The louder the sound, the shorter the time period before damage occurs.

Some Yamaha products may have benches and / or accessory mounting fixtures that are either supplied with the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

## **NOTICE:**

Service charges incurred due to a lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

## **ENVIRONMENTAL ISSUES:**

Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

## **Battery Notice:**

This product MAY contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

This product may also use "household" type batteries. Some of these may be rechargeable. Make sure that the battery being charged is a rechargeable type and that the charger is intended for the battery being charged.

When installing batteries, do not mix batteries with new, or with batteries of a different type. Batteries MUST be installed correctly. Mismatches or incorrect installation may result in overheating and battery case rupture.

## **Warning:**

Do not attempt to disassemble, or incinerate any battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by the laws in your area. Note: Check with any retailer of household type batteries in your area for battery disposal information.

## **Disposal Notice:**

Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc. If your dealer is unable to assist you, please contact Yamaha directly.

## **NAME PLATE LOCATION:**

The name plate is located on the bottom of the product. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.

**Model**

---

**Serial No.**

---

**Purchase Date**

---

# PLEASE KEEP THIS MANUAL

# PRECAUTIONS

## PLEASE READ CAREFULLY BEFORE PROCEEDING

\* Please keep these precautions in a safe place for future reference.

### **WARNING**

**Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:**

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the AC adaptor cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the adaptor plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Use the specified adaptor (PA-3B or an equivalent recommended by Yamaha) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

### **CAUTION**

**Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:**

- Do not place the AC adaptor cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord.
- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- Unplug the AC power adaptor when not using the instrument, or during electrical storms.
- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum. Also, be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the instrument near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected adaptor and other cables.
- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

#### ■ SAVING USER DATA

- Save all data to an external device such as the Yamaha MIDI Data Filer MDF3, in order to help prevent the loss of important data due to a malfunction or user operating error.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

# Introduction

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*Thank you for choosing the Yamaha Electronic Piano P-80. Your P-80 is a fine musical instrument that employs advanced Yamaha music technology. With the proper care, your P-80 will give you many years of musical pleasure.*

- Stereo sampling of the acoustic piano voices offers unmatched realism and expressive power, while the AWM (Advanced Wave Memory) tone generator system offers rich, realistic reproductions of all other voices.
- Piano-like touch response — adjustable in 4 stages — provides extensive expressive control and outstanding playability.
- Dual mode allows 2 voices to be played simultaneously.
- Split mode allows different voices to be played by the left and right hands.
- The sustain pedal includes a natural resonance effect for the piano voices, simulating the string and sound-board resonance of acoustic pianos.
- Metronome feature with variable tempo facilitates practice.
- 2-track digital recorder lets you record and play back anything you play on the keyboard.
- MIDI compatibility and a range of MIDI functions make the P-80 useful in a range of advanced MIDI music systems.
- Built-in computer interface for direct connection to personal computers running advanced music software.

In order to make the most of your P-80's performance potential and features, we urge you to read this Owner's Manual thoroughly, and keep it in a safe place for later reference.

## Included Accessories

- **Owner's Manual**
- **Music Stand**
- **Sustain Pedal**
- **PA-3B AC Adaptor (included or optional depending on locale)**

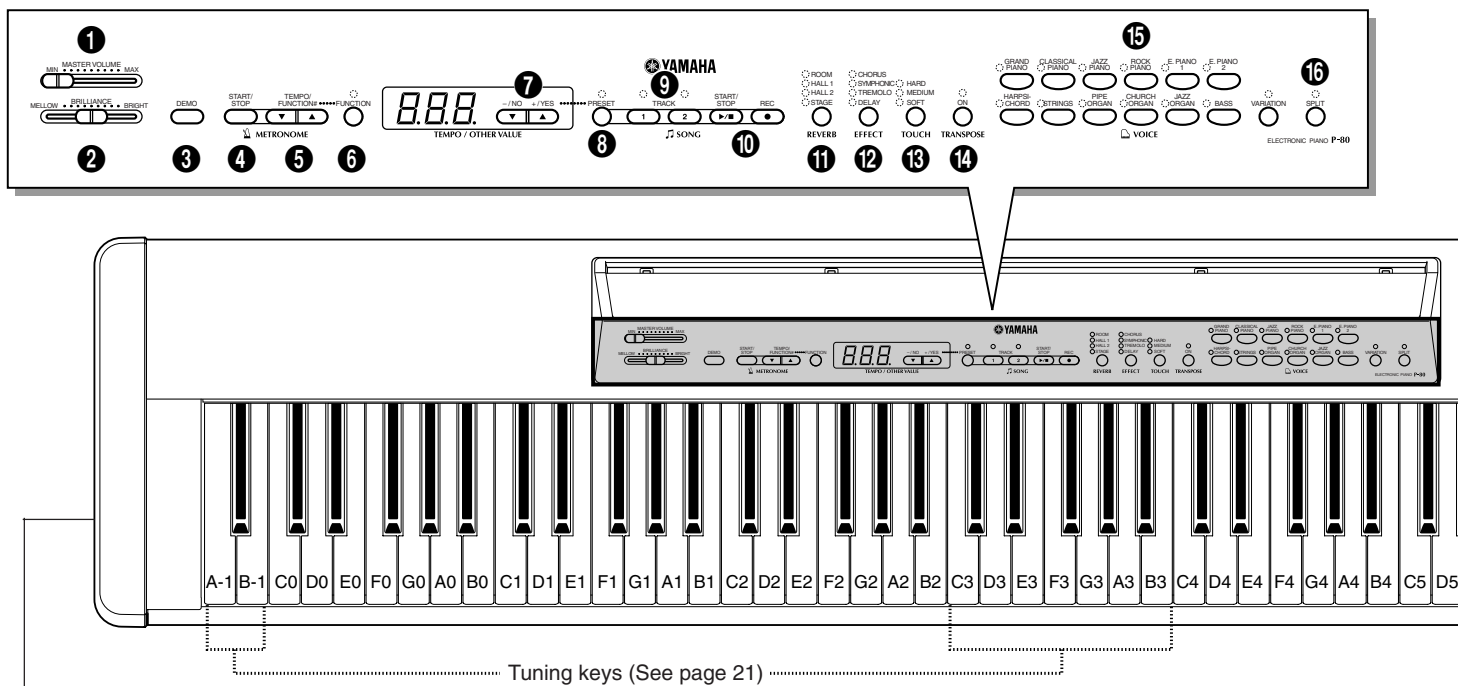
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# The Control Panel



PHONES Jacks (Left side panel) (See page 9)

## 1 [MASTER VOLUME] Control

The [MASTER VOLUME] control adjusts the P-80's output volume (level). The [MASTER VOLUME] control also adjusts headphone volume when a pair of headphones is plugged into the PHONES jack (page 9).

## 2 [BRILLIANCE] Control

The [BRILLIANCE] Control adjusts the tonality or “timbre” of the output sound from a mellow tone to a bright tone.

## 3 [DEMO] Button

Activates the demo playback mode in which you can select playback of different demonstration sequences for each of the P-80's voices. See page 11 for details.

## 4 METRONOME [START/STOP] Button

Turns the metronome sound on and off. The [TEMPO/FUNCTION# ▼, ▲] buttons, are used to set the tempo of the metronome sound. The [–/NO▼] and [+ /YES▲] buttons are used to change the time signature (beat) of the metronome, if used while the METRONOME [START/STOP] button is held — page 22.

## 5 The [TEMPO/FUNCTION# ▼, ▲] Buttons

These buttons adjust the tempo of the metronome function as well as the playback tempo of the song function. The tempo range is from 32 to 280 beats per minute — page 22. These same buttons are also used to select functions — page 26.

## 6 [FUNCTION] Button

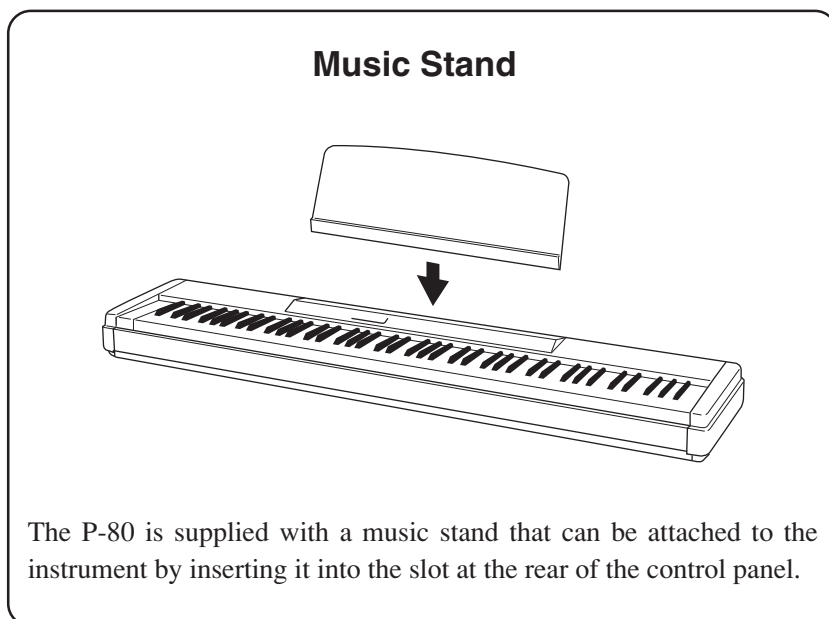
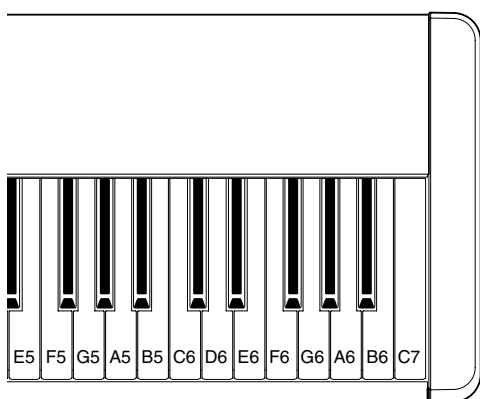
This button accesses a range of utility functions — including the MIDI functions — that significantly enhance versatility and playability. See page 26 for details.

## 7 [–/NO▼], [+ /YES▲] Buttons

These buttons select a preset song number for playback, and are also used to adjust a range of other parameters (i.e. their “–/NO” and “+ /YES” functions).

## 8 SONG [PRESET] Button

This button enters the preset song mode. While in this mode you can use the [–/NO▼], [+ /YES▲] buttons to select from 50 songs.



## 9 TRACK [1] and [2] Buttons

The P-80 has a 2-track recorder, and these buttons are used to select the track(s) to be recorded or played back. See page 23 for details.

## 10 SONG [START/STOP] and [REC] Buttons

These buttons control the P-80's user song recorder, letting you record and play back just about anything you play on the keyboard.

## 11 [REVERB] Button

The [REVERB] button selects a number of digital reverb effects that you can use for extra depth and expressive power. See page 17 for details.

## 12 [EFFECT] Button

This button selects a number of effects which can give your sound greater depth and animation.

## 13 [TOUCH] Button

The [TOUCH] button makes it easy to adjust the touch response of the P-80 to match your playing style. See page 20 for details.

## 14 [TRANSCOPE] Button

The [TRANSCOPE] button allows access to the P-80's TRANSCOPE function (to shift the pitch of the entire keyboard up or down in semitone intervals).

## 15 VOICE Buttons & [VARIATION] Button

Simply press any of the voice selectors to select the corresponding voice. The voice selector LED will light to indicate which voice is currently selected. Press the [VARIATION] button so that its indicator lights to select a variation of the currently selected voice.

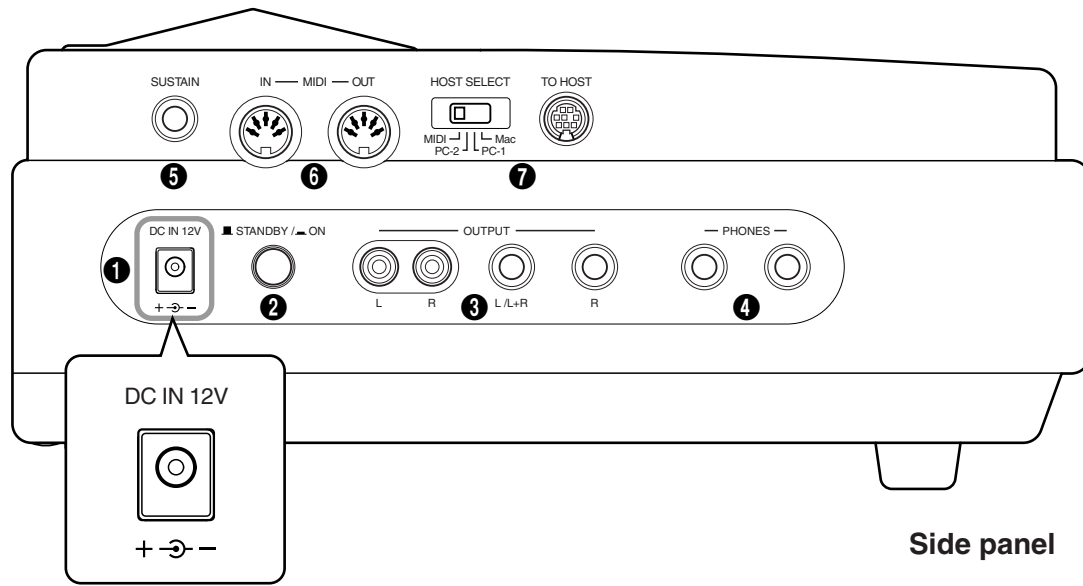
There is also a dual mode in which two voices can be played simultaneously across the full range of the keyboard (see page 15 for details), and a split mode which allows different voices to be played by the left and right hands (see page 16 for details).

## 16 [SPLIT] Button

Engages the split mode, in which different voices can be played on the left- and right-hand sections of the keyboard. See page 16 for details.



# Connections



Side panel

## 1 DC IN 12V Jack

Make sure that the STANDBY/ON switch of the P-80 is set to STANDBY.

Connect the AC adaptor (PA-3B or other adaptor specifically recommended by Yamaha) to the DC IN 12V jack.

Plug the AC adaptor into an AC outlet.

When turning the power OFF, simply reverse the procedure.

### **! WARNING**

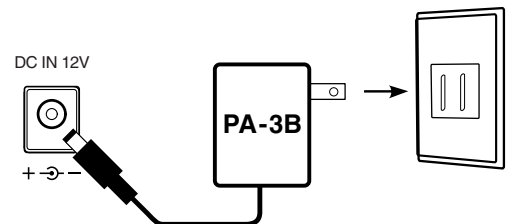
- Use **ONLY** a Yamaha PA-3B AC Power Adaptor (or other adaptor specifically recommended by Yamaha) to power your instrument from the AC mains. The use of other adaptors may result in irreparable damage to both the adaptor and the P-80.
- Unplug the AC Power Adaptor when not using the P-80, or during electrical storms.

## 2 [STANDBY/ON] Switch

Press the [STANDBY/ON] switch once to turn the power ON, a second time to turn the power OFF. When the power is initially turned ON, a voice selector LED will light.

### **! CAUTION**

- Even when the switch is in the "STANDBY" position, electricity is still flowing to the instrument at the minimum level. When you are not using the P-80 for a long time, make sure you unplug the AC power adaptor from the wall AC outlet.



■ STANDBY / ▲ ON



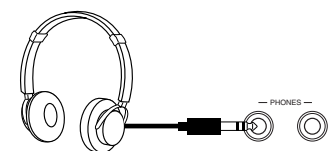
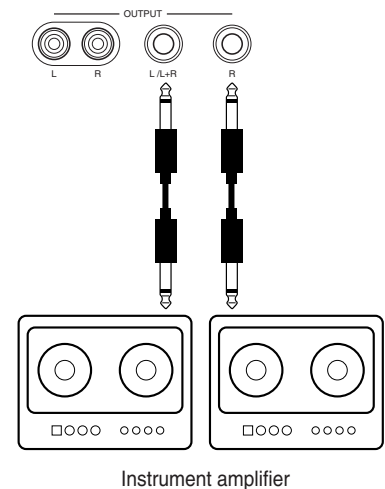
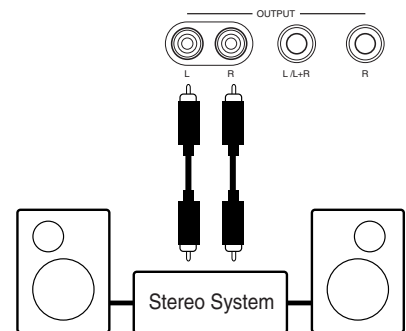


## 3 OUTPUT Jacks : L and R Pin jacks, L/L+R and R Phone Jacks

The P-80 is equipped with both Pin and Phone OUTPUT jacks to deliver the output of the P-80 for connection to an instrument amplifier, mixing console, PA system or recording equipment. The Pin connectors (L and R) provide easy connection to a home audio system, etc. The L/L+R Phone Jack allows connection of the P-80 to a monaural sound system. When a plug is inserted into the L/L+R jack only, the left- and right-channel signals are combined and delivered via the L/L+R jack so you don't lose any of the P-80's sound.

### ⚠ CAUTION

- **Before connecting the P-80 to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all-volume levels to minimum.**
- **When turning the power on, first turn the P-80's power on and then turn the power on of the external amplifier/speaker system. When turning the power off, simply reverse the order.**



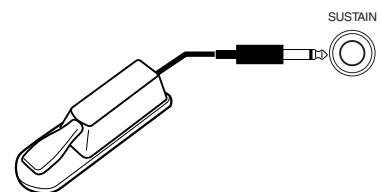
## 4 PHONES Jacks

Two sets of standard stereo headphones can be plugged in here for private practice or late-night playing.

## 5 SUSTAIN Jack

This terminal is for connecting the sustain pedal to the P-80. The pedal functions in the same way as a damper pedal on an acoustic piano.

- NOTE** • *Make sure that power is OFF when connecting or disconnecting the pedal.*



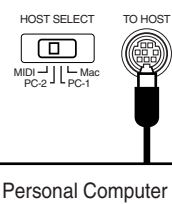
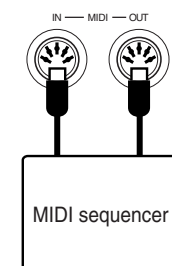
## 6 MIDI IN, and OUT Connectors

The MIDI IN connector receives MIDI data from an external MIDI device (such as a MIDI sequencer) which can be used to control the P-80. The MIDI OUT connector transmits MIDI data generated by the P-80 (e.g. note and velocity data produced by playing the P-80 keyboard).

More details on MIDI are given in "MIDI Functions" on page 32.

## 7 TO HOST Connector & HOST SELECT Switch

This jack and selector switch allow direct connection to a personal computer for sequencing and other music applications — without the need for a separate MIDI interface. See page 36 for details.





# Selecting & Playing Voices

Before turning the power ON or OFF for all components, set all volume levels to minimum. For instructions on connecting the P-80 to an amplifier/speaker system, see page 9.

## 1 Turn Power On .....

After making sure that the P-80's AC power adaptor is properly plugged into the P-80 itself and plugged into a convenient AC wall outlet, press the [STANDBY/ON] switch located on the left-side panel of the P-80.

When the power is turned ON, one of the voice selector LEDs will light.

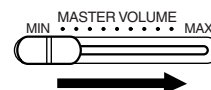
■ STANDBY / ON



## 2 Set the Volume .....

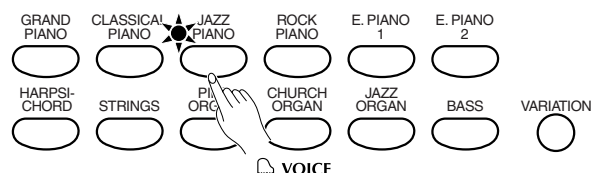
If you are using an amplifier/speaker system for sound reproduction, set the P-80's [MASTER VOLUME] control and the volume level on the amplifier/speaker system to the most comfortable listening level while playing the keyboard.

If you are using headphones, start with the [MASTER VOLUME] set to its minimum level, gradually increasing the level until a comfortable listening level is attained.



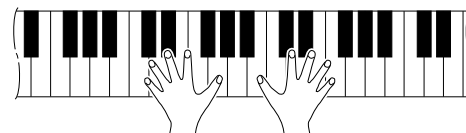
## 3 Select a Voice .....

Select the desired voice by pressing one of the VOICE buttons. Use the [VARIATION] button to select a variation of the current voice, as required.



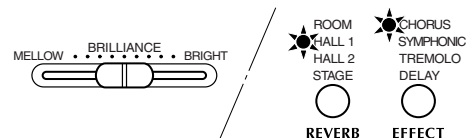
## 4 Play .....

The P-80 also offers keyboard touch response, so the volume and timbre of notes played can be controlled according to how "hard" you play the keys. The amount of variation available depends on the selected voice.



## 5 Add Effects As Required .....

You can add or change reverb, effects and brilliance as desired by using the [REVERB] button (page 17), [EFFECT] button (page 18) and the [BRILLIANCE] control (page 19).





# Playing the Demonstration Tunes

Demonstration tunes are provided that effectively demonstrate each of the P-80's voices. There are also 50 preset songs that you can play individually, all in sequence, or in random order. Here's how you can select and play the demo tunes.



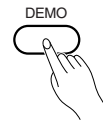
- The demo or preset song mode cannot be engaged while a user song (page 23) is being played back.
- No MIDI reception occurs in the demo/preset song mode.
- The demo/preset song data is not transmitted via the MIDI connectors.

\* See page 39 for a complete listing of the demo tunes and preset songs.

## Voice Demo

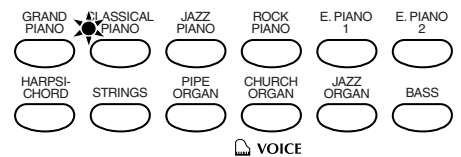
### 1 Engage the Demo Mode .....

Press the [DEMO] button to engage the demo mode — the voice selector indicators will flash in sequence.



### 2 Play a Voice Demo .....

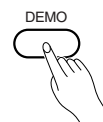
Press one of the voice selectors to start playback of all songs starting from the corresponding voice demo tune — featuring the voice normally selected by that voice selector button. (If you press the SONG [START/STOP] button instead of a voice selector button, the GRAND PIANO demo tune will begin playback.) The indicator of the selected voice selector button will flash during playback, and “- -” will appear on the LED display. You can start playback of any other voice demo tune during playback by simply pressing the corresponding voice selector. You can stop playback at any time by pressing the SONG [START/STOP] button or the voice selector of the currently playing demo.



- Use the [MASTER VOLUME] control to adjust the volume and the [BRILLIANCE] control to adjust the brilliance (page 19).

### 3 Exit From the Demo Mode .....

Press the [DEMO] button to exit from the demo mode and return to the normal play mode.

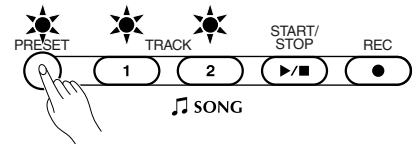


# Playing the Demonstration Tunes

## Preset Song

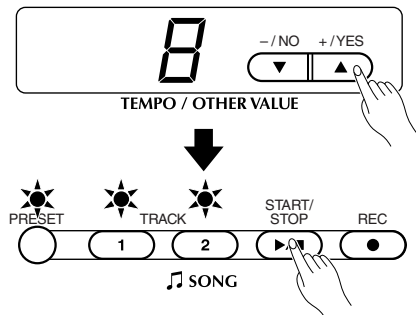
### 1 Engage the Preset Song Mode .....

Press the [PRESET] button to engage the preset song mode — the [PRESET], TRACK [1] and [2] indicators will light.



### 2 Play a Preset Song .....

To play any of the 50 preset songs provided, use the [-/NO▼], [+ /YES▲] buttons to select the number of the tune you want to play (the number will appear on the LED display), then press the SONG [START/STOP] button. Playback will stop automatically when playback of the selected preset song has finished.



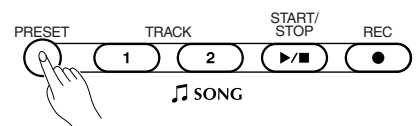
Select “ALL” instead of a number to play all preset songs in sequence, or select “rnd” to continuously play all preset songs in random order. Press the SONG [START/STOP] button to stop playback.

#### NOTE

- Use the [MASTER VOLUME] control to adjust the volume.
- You can use the [TEMPO/FUNCTION# ▼,▲] buttons to adjust the playback tempo as required. This produces a relative tempo variation, with a range from “-50” through “- - -” to “50” at maximum; the range will differ depending on the selected song.
- The default tempo “- - -” is automatically selected whenever a new preset song is selected, or playback of a new preset song begins during “ALL” or “rnd” playback.
- You can play the keyboard along with the preset song playback. The voice playing on the keyboard can be changed.
- You can change the Brilliance control and Reverb type that is applied to the voice you play on the keyboard and for the preset song playback. You can change the Effect type and Touch sensitivity that is applied to the voice you play on the keyboard. When a new preset song is selected or a new preset song is automatically started in continuous play, the HALL 1 reverb type will automatically be selected.

### 3 Exit From the Preset Song Mode .....

Press the [PRESET] button to exit from the preset song mode, the indicator will go off, and return to the normal play mode.



## Preset Song A-B Repeat

The A-B Repeat function can be used to continuously repeat a specified phrase within a preset song. Combined with the Part Cancel function described below, this provides an excellent way to practice difficult phrases.

### 1 Specify the Beginning (A) of the Phrase .....

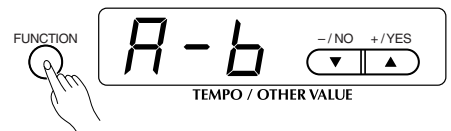
Select and play a preset song, then press the [FUNCTION] button at the beginning of the phrase you want to repeat. This sets the “A” point (“A -” will appear on the display).

To set the “A” point at the very beginning of the song, press the [FUNCTION] button before starting playback.



### 2 Specify the End (B) of the Phrase .....

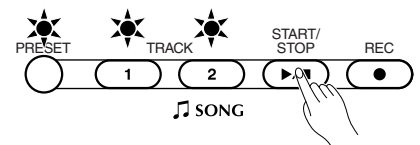
Press the [FUNCTION] button a second time at the end of the phrase. This sets the “B” point (“A - b” will appear on the display). At this point repeat playback will begin between the specified A and B points.



### 3 Stop Playback.....

Press the SONG [START/STOP] button to stop playback while retaining the specified A and B points. A-B repeat playback will resume if the SONG [START/STOP] button is then pressed again.

To cancel the A and B points press the [FUNCTION] button once.



**NOTE**

- The A and B points are automatically canceled when a new song is selected.
- The A-B Repeat function cannot be used during “RL L” or “r rd” playback.

# Playing the Demonstration Tunes

## Preset Song Part Cancel

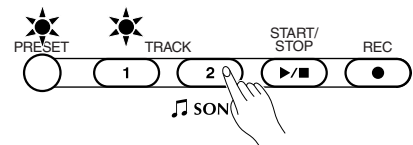
The 50 preset songs have separate left- and right-hand parts that can be turned on and off as required so you can practice the corresponding part on the keyboard. The right-hand part is played by **TRACK [1]**, and the left-hand part is played by track **[2]**. (Some of the songs are arrangements for four-hands, tracks **[1]** and **[2]** correspond to primo and secondo parts of the arrangement.)

### 1 Turn the Desired Part Off .....

Press the **TRACK [1]** or **[2]** button to turn the corresponding part off — the corresponding indicator will go out (these buttons alternately toggle the corresponding part on and off).

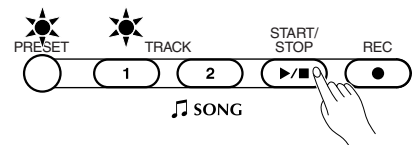


- The parts can be turned on or off even during playback.
- The Preset Song Part Cancel function cannot be used during "RL L" or "r rd" playback.
- The "Preset Song Part Cancel Volume" function described on page 31 can be used to set the canceled part so that it plays at a volume from "0" (no sound) to "20". The default setting is "5".
- Both parts are automatically turned ON whenever a new song is selected.



### 2 Start/Stop Playback .....

Press the **SONG [START/STOP]** button to start and stop playback as required.



### ☐ Synchro Start .....

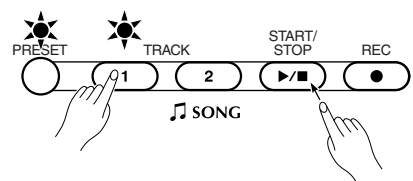
When the Synchro Start function is engaged, playback of the selected preset song will begin automatically as soon as you start playing on the keyboard.

To engage the Synchro Start function press the **SONG [START/STOP]** button while holding the part button corresponding to the part which is ON. A dot will appear in the lower right corner of the display.

Playback will then start as soon as you begin playing on the keyboard.



- If you hold a track button which is OFF while pressing the SONG [START/STOP] button, that track will be turned ON and the Synchro Start mode will be engaged.







# The Dual Mode

The dual mode makes it possible to play two voices simultaneously across the entire range of the keyboard.

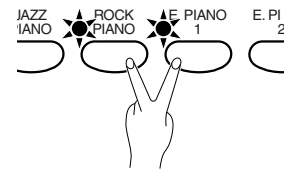
To activate the dual mode simply press two voice selectors at the same time (or press one voice selector while holding another). The voice indicators of both selected voices will light when the dual mode is active. To return to the normal single-voice play mode, press any single voice selector.

According to the voice numbering priority as shown in the diagram on the right, lower valued voice numbers will be designated as the 1st Voice (the other voice will be designated as the 2nd Voice).

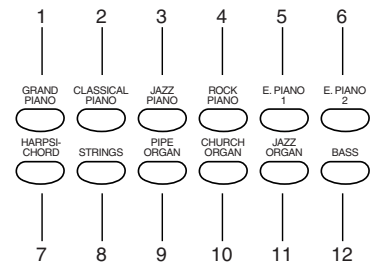
The [STRINGS] [VARIATION] voice has a slow attack. This voice can sometimes be used with another voice in the Dual Mode to produce a better “blend”.



- *The dual and split modes cannot be engaged at the same time.*
- *The [VARIATION] button indicator will light if the variation is engaged for either or both of the dual-mode voices. While the dual mode is engaged the [VARIATION] button can be used to turn the variation for both voices on or off. To use the variation for only one of the voices the setting must be made prior to engaging the dual mode.*
- **[EFFECT] in the Dual Mode**  
*Depending upon the conditions one effect type will take priority over the other. Depth will be decided according to the depth default value of the voice combination. However, using function F3 (see page 28) you can change the depth value for each voice as you like.*  
*Effect depth setting via the panel controls the [-/NO▼] or [+ /YES▲] buttons while holding the [EFFECT] button — see page 18) will be applied to the 1st Voice only.*
- **[REVERB] in the Dual Mode**  
*The reverb type assigned to the 1st Voice will take priority over the other. (If the reverb is set to OFF, the 2nd Voice's reverb type will be in affect.)*  
*Reverb depth setting via the panel controls (i.e. pressing the [-/NO▼] or [+ /YES▲] buttons while holding the [REVERB] button — see page 17) will be applied to the 1st Voice only.*



Voice numbering priority



## Other Dual Mode Functions .....

The P-80 Function mode provides access to a number of other dual-mode functions, listed below. See the corresponding pages for details.

- Dual Balance ..... 28
- Dual Detune ..... 28
- 1st Voice Octave Shift ..... 28
- 2nd Voice Octave Shift ..... 28
- 1st Voice Effect Depth ..... 29
- 2nd Voice Effect Depth ..... 29
- Reset ..... 29



# The Split Mode

The split mode makes it possible to play two different voices on the keyboard — one with the left hand and another with the right hand. The Left Voice is played on all keys to the left of (and including) a specified “split point” key, while the Right Voice is played on all keys to the right of the split point key.

To activate the split mode simply press the [SPLIT] button so that its indicator lights. The split mode can be turned off at any time by pressing the [SPLIT] button again so that its indicator goes out.

**NOTE** • The dual and split modes cannot be engaged at the same time.

## Selecting the Right and Left Voices .....

The voice that was selected before the split mode was engaged becomes the Right Voice in the split mode. (The Right Voice can also be changed while in the split mode, by simply pressing the corresponding voice selector.)

To select a Left Voice press the corresponding voice selector while holding the [SPLIT] button (default: [BASS]). The indicator of the Left Voice selector will light while the [SPLIT] button is pressed, then only the Right Voice selector and [SPLIT] button indicators will remain lit.

**NOTE** • The variation can be individually turned on and off for the split mode voices. Normally the voice indicator of the Right Voice lights in the split mode. The [VARIATION] can be used to turn the variation for the Right Voice on or off as required. While the [SPLIT] button is held, however, the voice indicator of the Left Voice lights, and in this state the [VARIATION] button can be used to turn the variation for the Left Voice on or off as required.

### • [EFFECT] in the Split Mode

Depending upon the conditions, one effect type will take priority over the other. Depth will be decided according to the depth default value of the voice combination. However, using function F4 (see page 29) you can change the depth value for each voice as you like.

Effect depth setting via the panel controls (i.e. pressing the [-/NO▼] or [+ / YES▲] buttons while holding the [EFFECT] button — see page 18) will be applied to the Right Voice only.

### • [REVERB] in the Split Mode

The reverb type assigned to the Right Voice will take priority over the other. (If the reverb is set to OFF, the Left Voice's reverb type will be in affect.)

Reverb depth setting via the panel controls (i.e. pressing the [-/NO▼] or [+ / YES▲] buttons while holding the [REVERB] button — see page 17) will be applied to the Right Voice only.

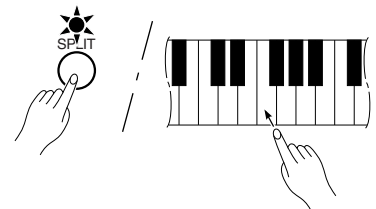
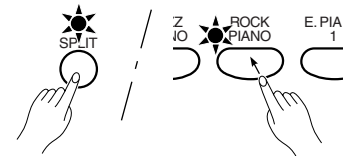
## Setting the Split Point .....

The split point is initially set at the F#2 key by default. You can change the split point to any other key by pressing the key while holding the [SPLIT] button (the name of the current split-point key appears on the LED display while the [SPLIT] button is held). The split point can also be set via the Function mode (see below).

## Other Split Mode Functions .....

The P-80 Function mode provides access to a number of other split-mode functions, listed below. See the corresponding pages for details.

- Split Point ..... 29
- Split Balance ..... 29
- Right Voice Octave Shift ..... 30
- Left Voice Octave Shift ..... 30
- Right Voice Effect Depth ..... 30
- Left Voice Effect Depth ..... 30
- Damper Range ..... 30
- Reset ..... 30



Example:

A-1	b-1	C2	F#2
A-1	Bb-1	C2	F#2

- “b” is indicated with a lower “-”.
- “#” is indicated with an upper “#”.



# Reverb

The **[REVERB]** button selects a number of digital reverb effects that you can use for extra depth and expressive power.

To select a reverb type press the **[REVERB]** button a few times until the indicator corresponding to the desired type lights (the indicators light in sequence each time the **[REVERB]** button is pressed). No reverb is produced when all indicators are off.

## OFF

No reverb effect is selected when no REVERB indicator is lit.

## ROOM

This setting add a continuous reverb effect to the sound that is similar to the type of acoustic reverberation you would hear in a room.

## HALL 1

For a “bigger” reverb sound, use the HALL 1 setting. This effect simulates the natural reverberation of a small-size concert hall.

## HALL 2

For a really spacious reverb sound, use the HALL 2 setting. This effect simulates the natural reverberation of a large concert hall.

## STAGE

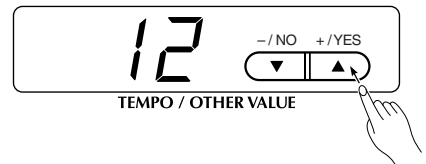
A simulation of the type of reverb produced in a stage environment.



• *The default reverb type (including OFF) and depth settings are different for each voice.*

## Adjusting Reverb Depth .....

Adjust the reverb depth for the selected voice by using the **[-/NO▼]** and **[+/YES▲]** buttons while holding the **[REVERB]** button. The depth range is from 0 through 20 (the current depth setting appears on the LED display while the **[REVERB]** button is held). A setting of “0” produces no effect, while a setting of “20” produces maximum reverb depth. Press the **[-/NO▼]** and **[+/YES▲]** buttons simultaneously while holding the **[REVERB]** button to recall the default setting for the current voice (default depth settings are different for each voice).





# The Effect

The [EFFECT] button allows you to select one of the effects that can give your sound greater depth and animation.

To select an effect type press the [EFFECT] button a few times until the indicator corresponding to the desired type lights (the indicators light in sequence each time the [EFFECT] button is pressed). No effect is produced when all indicators are off.

### OFF

No effect is selected when no EFFECT indicator is lit.

### CHORUS

Shimmering, broadening effect

### SYMPHONIC

Adds a deep, symphonic backdrop

### TREMOLO

Tremolo effect

### DELAY

Echo effect

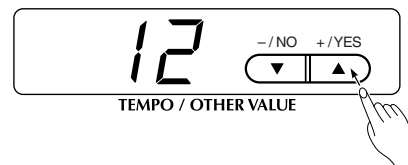


NOTE

- The default effect type (including OFF) and depth settings are different for each voice.

## Adjusting Effect Depth.....

Effect depth can be individually adjusted for the selected voice by using the [-/NO▼] and [+ /YES▲] buttons while holding the [EFFECT] button. The depth range is from 0 through 20 (the current depth setting appears on the LED display while the [EFFECT] button is held). A setting of “0” produces no effect, while a setting of “20” produces maximum effect depth. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously while holding the [EFFECT] button to recall the default setting for the current voice (the default depth settings are different for each voice).





# Brilliance

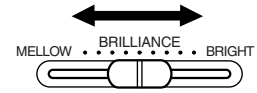
This control can be used to change the tonality or “timbre” of the sound output. The control range is from MELLOW to BRIGHT.

For a brighter or “sharper” tone, slide the control towards the BRIGHT position. For a “rounder” more mellow tone, slide the control towards the MELLOW position.



NOTE

- When the BRILLIANCE is set to BRIGHT, the overall sound will be slightly louder. If the MASTER VOLUME is set at a high level the sound may become distorted. If so, lower the MASTER VOLUME level.



# Transposition

The P-80’s TRANSPOSE function makes it possible to shift the pitch of the entire keyboard up or down in semitone intervals up to a maximum of 12 semitones (i.e. a maximum of one octave up or down). “Transposing” the pitch of the P-80 keyboard facilitates playing in difficult key signatures, and you can easily match the pitch of the keyboard to the range of a singer or other instrumentalist.

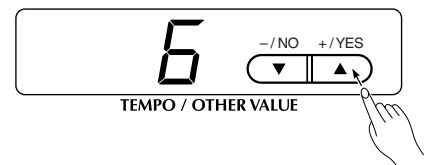
Use the [-/NO▼] and [+ /YES▲] button while holding the [TRANSPOSE] button to transpose down or up as required. The transposition range is from “-12” (down one octave) through “0” (normal pitch) to “12” (up one octave). The amount of transposition appears on the LED display while the [TRANSPOSE] button is held. The default transpose setting is “0”.

The [TRANSPOSE] button indicator remains lit when a transpose setting other than “0” is selected. Every time the [TRANSPOSE] button is pressed after that switches the transpose ON/OFF.



NOTE

- Notes below and above the A-1 ... C7 range of the P-80 sound one octave higher and lower, respectively.





# Touch Sensitivity

Four different types of keyboard touch sensitivity — **HARD**, **MEDIUM**, **SOFT** or **FIXED** — can be selected to match different playing styles and preferences.

To select a touch sensitivity type press the [**TOUCH**] button a few times until the indicator corresponding to the desired type lights (the indicators light in sequence each time the [**TOUCH**] button is pressed).

## **HARD**

The **HARD** setting requires the keys to be played quite hard to produce maximum loudness.

## **MEDIUM**

The **MEDIUM** setting produces a fairly “standard” keyboard response. This is the initial factory default setting.

## **SOFT**

The **SOFT** setting allows maximum loudness to be produced with relatively light key pressure.

## **FIXED** (no indicator lit)

All notes are produced at the same volume no matter how hard the keyboard is played.

When the **FIXED** type is selected, the volume of notes played in the **FIXED** mode can be set by using the [**-/NO**▼] and [**+/YES**▲] buttons while the [**TOUCH**] button is held (the current volume level appears on the display). The volume range is from 1 through 127. The default setting is 64.



- *This setting does not change the weight of the keyboard.*
- *The touch sensitivity type and volume set in the **FIXED** mode will become the common setting for all voices.*



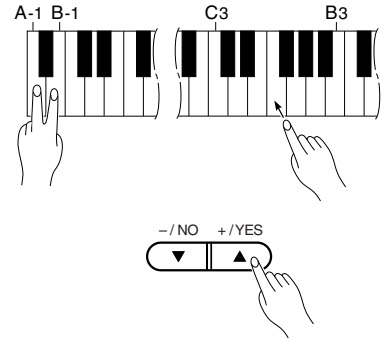


# Tuning

Tuning makes it possible to adjust the pitch of the P-80 over a 427.0 Hz ... 453.0 Hz (corresponding to the A3 note's Hz) range in approximately 0.2 Hertz intervals. Pitch control is useful for tuning the P-80 to match other instruments or recorded music.

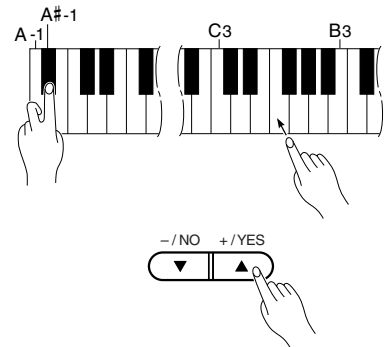
## Tuning Up .....

- 1** To tune up (raise pitch), hold the A-1 and B-1 keys simultaneously.
- 2** Press any key between C3 and B3. Each time a key in this range is pressed the pitch is increased by approximately 0.2 Hz. The [-/NO▼] and [+ /YES▲] buttons can also be used to tune down or up, respectively, in approximately 1 Hz increments. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall standard tuning (A3 = 440 Hz).
- 3** Release the A-1 and B-1 keys.



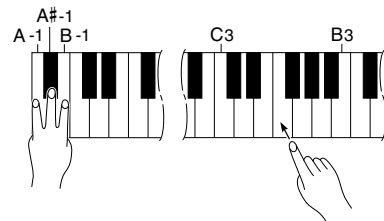
## Tuning Down .....

- 1** To tune down (lower pitch), hold the A-1 and A#-1 keys simultaneously.
- 2** Press any key between C3 and B3. Each time a key in this range is pressed the pitch is decreased by approximately 0.2 Hz. The [-/NO▼] and [+ /YES▲] buttons can also be used to tune down or up, respectively, in approximately 1 Hz increments. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall standard tuning (A3 = 440 Hz).
- 3** Release the A-1 and A#-1 keys.



## To Restore Standard Pitch .....

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



In terms of “Hertz”, the overall tuning range is from 427.0 Hz to 453.0 Hz. The current tuning setting is shown on the LED display while the tuning is being adjusted. Tenths of a Hertz are indicated on the LED display by the appearance and position of one or two dots, as in the following example:

Display	Value
440	440.0
440.	440.2
440.	440.4
440.	440.6
440.	440.8

**NOTE** • An alternative tuning method is available in the Function mode — page 27.

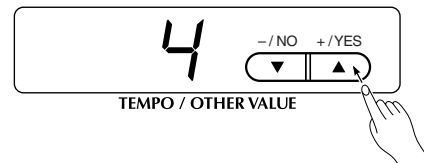
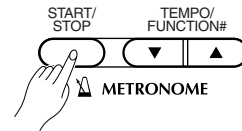
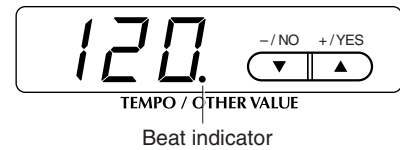
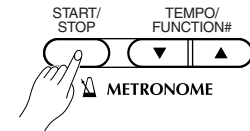


# The Metronome & Tempo Control

The P-80 built-in metronome is a convenient feature for practice, and it can also provide a solid rhythmic guide when recording with the User Song Recorder feature, described in the next section.

## The Metronome

The metronome sound is alternately turned on and off by pressing the **METRONOME [START/STOP]** button. When on, the beat indicator flashes at the current tempo.



### Metronome Time Signature .....

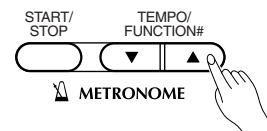
The time signature (beat) of the metronome can be set by using the [-/NO▼] and [+ /YES▲] buttons while holding the **METRONOME [START/STOP]** button. You can set the beat to 0, 2, 3, 4 or 6 (the current setting appears on the LED display while the **METRONOME [START/STOP]** button is held). Press the [-/NO▼] and [+ /YES▲] buttons simultaneously while holding the **METRONOME [START/STOP]** button to recall the default setting “0” (no accent).

### Metronome Volume Function .....

The volume of the metronome sound can be adjusted via the Metronome Volume function in the Function mode—page 31.

## Tempo Control

The tempo of the metronome and user song recorder playback (the recorder is described in the next section) can be set from 32 to 280 beats per minute by using the [**TEMPO/FUNCTION# ▼,▲**] buttons. The selected tempo will appear on the LED display while in the normal play mode and while the [**TEMPO/FUNCTION# ▼,▲**] buttons are being used to adjust the tempo in the recording/playback mode. The default tempo (120 or the recorded song tempo when the recorder contains data and the playback track indicator is lit) can be recalled by simultaneously pressing the [**▼**] and [**▲**] buttons.





# Using the User Song Recorder

The P-80 features a two-track user song recorder that lets you record what you play on the keyboard and then play it back. Two tracks mean that you can “over-dub” one part on top of another, using a different voice if you like. The user song recorder feature is a useful adjunct to any keyboard study program, since it lets you hear exactly how you sound from the listener’s perspective. It can also be just plain fun.

The user song recorder actually records the following data:

### ■ Entire Song

- Tempo
- Time signature (beat)
- Reverb type (including OFF)
- Effect type

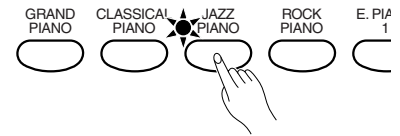
### ■ Individual Tracks

- Notes played
- Dual mode voices
- Sustain pedal
- Dual balance (F3)
- Split balance (F4)
- Voice selection
- Split mode voices
- Effect depth
- Dual detune (F3)
- Split octave shift (F4)
- Voice variation
- Reverb depth
- Dual octave shift (F3)

## Recording

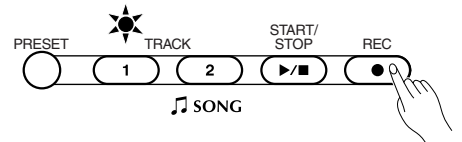
### 1 Make All Necessary Initial Settings .....

Before actually beginning to record, select the voice you want to record with (or voices if you will be using the dual or split mode). You might also want to set the volume and tempo controls.



### 2 Engage the Record Ready Mode .....

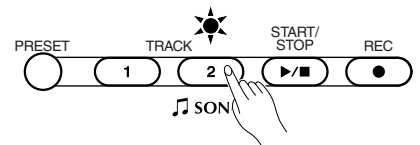
Press the [REC] button to engage the record ready mode (recording does not actually start yet). The record ready mode can be disengaged before recording by pressing the [REC] button a second time.



• The record ready mode cannot be engaged while the demo/preset song mode is engaged.

### 3 Select the Record Track .....

When the record mode is engaged in the previous step, the last-recorded track will automatically be selected for recording and its indicator — i.e. the **TRACK [1]** or **[2]** button indicator — will glow red. If you want to record on a different track, press the appropriate track button so that its indicator glows red.



- The track button indicators of tracks which contain previously recorded data will glow green (unless the track is turned off as described below). The previously-recorded data on the non-record track will normally be played back as you record, so you can play along with a previously-recorded track. If you don't want to hear the previously recorded track as you record (when you want to record a song different from what you recorded on the previous track etc.), press the playback track button before pressing the [REC] button (step 1, above) so that its indicator goes out.
- Recording on a track which already contains data will erase all previous data on that track.
- When the record mode is engaged the amount of memory available for recording will be shown on the LED display in approximate kilobytes (starting at “50”), and the rightmost dot on the LED display will flash at the current METRONOME tempo setting.



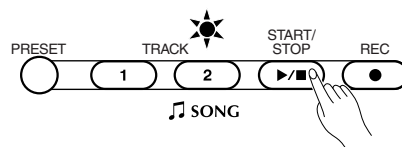
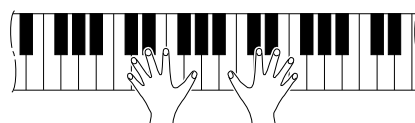
# Using the User Song Recorder

## 4 Start Recording

Recording will begin automatically as soon as you play a note on the keyboard or press the **SONG [START/STOP]** button. The current measure number will appear on the display while recording.



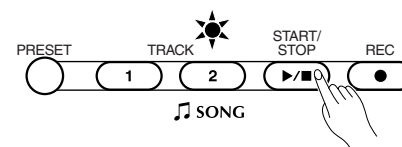
- If the metronome was on when you started recording, you'll be able to keep time with the metronome while recording, but the metronome sound will not be recorded.
- You can record up to a maximum of about 10,000 notes on the P-80 depending on pedal usage and other factors. The record track indicator will begin to flash when recorder memory is almost full. If the memory becomes full during recording, "FUL" will appear on the display and recording will stop automatically. (All recorded data up to that point will be retained.)



## 5 Stop Recording

Press either the **[REC]** or **SONG [START/STOP]** button to stop recording.

The indicator of the recorded track will glow green to indicate that it now contains data.



## Changing the Initial Settings

The initial voice, tempo, reverb type, reverb depth, and effect settings made in step 1 of the recording procedure are actually recorded by the P-80.

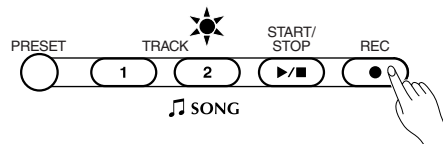
These initial settings can be changed after the recording is finished by pressing the **[REC]** button to engage the record ready mode, pressing the appropriate track button, making the required changes, and then pressing the **[REC]** button again to exit from the record ready mode and register the changes.

If you do this, be careful not to press the **SONG [START/STOP]** button or a key on the keyboard, either of which will start recording and erase all previous recorded data on the selected track.

It is possible to cancel the operation even after changes have been made: change tracks and then press the **[REC]** button to exit from the record mode (this also cancels data for the entire song).

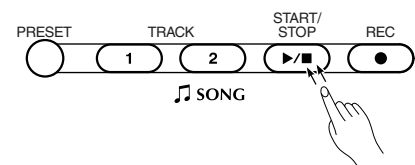


- The following data for initial settings cannot be changed: "Dual balance (F3)", "Dual detune (F3)", "Dual octave shift (F3)", "Split balance (F4)" or "Split octave shift (F4)".



## Erasing a Single Track

All data can be erased from either of the recorder's tracks by engaging the record mode, selecting the track you want to erase, and then pressing the **SONG [START/STOP]** button twice without recording any data.



Press twice.

## Playback

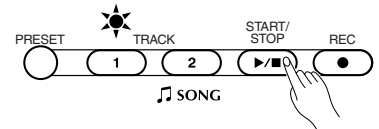
To play back what you've recorded, first make sure that the green track indicators of the tracks you want to play are lit. If not, press the corresponding track button(s) so that they are lit. Then press the **SONG [START/STOP]** button. Playback starts from the beginning of the recorded data, and will stop automatically at the end of the recorded data. You can also stop playback at any time by pressing the **SONG [START/STOP]** button.

To mute a track so that it doesn't play back, press the corresponding track button so that its indicator goes out (press again to turn the track back on).

The current measure number appears on the display during playback.

### NOTE

- It is possible to play along on the keyboard during playback. In this case, the playback voice and the voice you play on the keyboard are not the same. The playback voice is the voice that was set when the data was recorded. The voice you play on the keyboard is the voice that is selected on the panel.
- The playback volume and tempo can be adjusted by using the [MASTER VOLUME] control and [TEMPO/FUNCTION# ▼,▲] buttons (press both [TEMPO/FUNCTION# ▼,▲] buttons simultaneously to recall the default tempo).
- All user song recorder data will be retained in memory for about one week after the power is turned off. If you want to keep your recorded data for longer periods, turn the power on for a few minutes at least once a week. It is also possible to store it to an external MIDI storage device such as the Yamaha MIDI Data Filer MDF3 by using the Bulk Data Dump function described on page 34.
- The track indicators will not light automatically when the power is turned on even if the user song recorder contains data. It is therefore necessary to press the track buttons so that the corresponding green indicators light before starting recorder playback. It is also a good idea to press the track buttons to check if the tracks contain data before recording. If the green indicator lights when the corresponding track button is pressed, that track contains data which will be erased and replaced by the newly-recorded data.
- If the metronome is being used during playback, the metronome will automatically stop when playback is stopped.
- During recorder playback, the volume of a track which is turned off will always be "0" (i.e. the "Preset Song Part Cancel Volume" function — page 31 — only affects preset song playback).
- The playback data is not transmitted via the MIDI OUT connector.
- Playback cannot be started when the demo/preset song mode is engaged.
- Playback cannot be started when the recorder contains no data, or when both track buttons are off.
- When using REVERB or EFFECT during playback, depending upon the conditions one reverb type and one effect type will take priority.

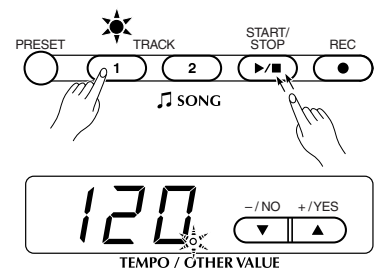


### □ Synchro Start .....

When the Synchro Start function is engaged, recorder playback will begin automatically as soon as you start playing on the keyboard.

To engage the Synchro Start function press the **SONG [START/STOP]** button while holding a track button which is ON. The rightmost dot on the display will flash at the current tempo. (Repeat the previous operation to disengage the Synchro Start function.) Playback will then start as soon as you begin playing on the keyboard.

If you hold a track button which is OFF while pressing the **SONG [START/STOP]** button, that track will be turned ON and the Synchro Start mode will be engaged.





# The Function Mode

The [FUNCTION] button provides access to a range of functions that give the P-80 extraordinary versatility. The functions are categorized in groups as follows:

F1	Tuning	27
F2	Scale	27
F3	Dual Mode Functions	28
F4	Split Mode Functions	29
F5	Sound Board Depth	30
F6	Metronome Volume	31
F7	Preset Song Part Cancel Volume	31
F8	MIDI Functions	32
F9	Backup Functions	35

## To Select a Function

**1** Press the [FUNCTION] button so that its indicator lights.



• Functions cannot be selected during demo/preset song playback or when the user song recorder is in operation.

**2** Use the [TEMPO/FUNCTION# ▼,▲] buttons to select the desired function from F1 through F9.

**3** In the case of the Scale (F2), Dual Mode (F3), Split Mode (F4), MIDI (F8), and Backup (F9) functions, you will have to press the [+ / YES ▲] button once to enter the respective sub-mode after the function has been selected, and then use the [TEMPO/FUNCTION# ▼,▲] buttons again to select the desired sub-function.



• The Dual or Split mode must be engaged before the F3 and F4 functions can be selected, respectively. If the corresponding mode is not engaged, "F3.-" or "F4.-" will appear on the display and the corresponding sub-mode will not be available.

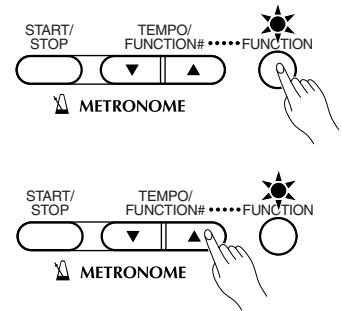
• The Dual mode can be engaged while in the Function mode, but the Function mode must be exited before the Split mode can be engaged.

**4** Set the function as required by using the [- / NO ▼] and [+ / YES ▲] buttons (see the individual function descriptions, below).



• After selecting the function, the current setting will be displayed when [- / NO ▼] or [+ / YES ▲] button is pressed for the first time.

**5** Press the [FUNCTION] button so that its indicator goes out to exit from the function mode.



## ● Operation Example

F3.4

↓ Press [+ / YES ▲]

F3.1 ... F3.7 (sub-mode)

↓ Use [TEMPO/FUNCTION# ▼, ▲]

F3.2

↓ Press [- / NO ▼] or [+ / YES ▲] once

-10 ... 0 ... 10

↓ Use [- / NO ▼], [+ / YES ▲]

5



## F1 Tuning

In addition to the tuning method described on page 21, overall tuning can also be accomplished via the F1 function.

After selecting “F1”, use the [-/NO▼] and [+ /YES▲] buttons to lower or raise the pitch in approximately 0.2 Hz increments (the first time the [-/NO▼] or [+ /YES▲] button is pressed simply switches to the tuning value display without actually changing the tuning). The overall tuning range is from 427.0 Hz to 453.0 Hz (corresponding to the A3 note’s Hz). Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default value “440.0 Hz”.

Tenths of a Hertz are indicated on the LED display by the appearance and position of one or two dots, as in the following example:

Display	Value
440	440.0
440.	440.2
440.	440.4
440.	440.6
440.	440.8

## F2 Scale

After selecting “F2”, press the [+ /YES▲] button to engage the scale function sub-mode, then use the [TEMPO/FUNCTION# ▼,▲] buttons to select the desired scale function, as listed below.

### F2.1: Scale .....

In addition to the standard Equal Temperament tuning, the P-80 includes 6 classic tunings that you can select and use to play music of the corresponding period, or experiment with in a more modern context. The tunings are:


- |                      |                 |
|----------------------|-----------------|
| 1: Equal Temperament | 5: Mean Tone    |
| 2: Pure Major        | 6: Werckmeister |
| 3: Pure Minor        | 7: Kirnberger   |
| 4: Pythagorean       |                 |

Use the [-/NO▼] and [+ /YES▲] buttons to select the number of the desired tuning. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default settings (Equal Temperament tuning).

### F2.2: Base Note .....

Unlike Equal Temperament tuning, these classic tunings must be tuned to a specific key. Use the [-/NO▼] and [+ /YES▲] buttons to select the key you want the previously selected tuning to be based. The selected key will appear on the display, followed by a low bar if flat (e.g. “F<sub>b</sub>”) or a high bar if sharp (e.g. “F<sub>#</sub>”).

Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default settings “C”.

 **NOTE** • The base note setting is effective for tunings other than the Equal Temperament tuning.

## F3 Dual Mode Functions

After selecting “F 3.3”, press the [+/**YES▲**] button to engage the dual-mode function sub-mode, then use the [**TEMPO/FUNCTION# ▼,▲**] buttons to select the desired dual mode function, as listed below.

If the Dual mode is not engaged “F 3.-” will appear instead of “F 3.3” and the Dual mode functions cannot be selected. If this happens engage the Dual mode and proceed.

■ **SHORTCUT:** You can jump directly to the dual-mode functions (F3) by pressing the [**FUNCTION**] button while holding the two dual-mode voice selectors.



NOTE

• Dual mode function settings are set individually for each voice combination.

### F3.1: Dual Balance .....

The volume levels of the two voices combined in the dual mode can be adjusted as required by using this function. Use the [**-/NO▼**] and [+/**YES▲**] buttons to adjust the balance as required. The balance range is from 0 through 20. A setting of “10” produces equal balance between the two dual-mode voices. Settings below “10” increase the volume of the 2nd Voice in relation to the 1st Voice, and settings above “10” increase the volume of the 1st Voice in relation to the 2nd Voice (“1st” and “2nd” is explained on page 15). Press the [**-/NO▼**] and [+/**YES▲**] buttons simultaneously to recall the default setting (different for each voice combination).

You can set one voice as the main voice, and another voice as a softer, mixed voice.

### F3.2: Dual Detune .....

This function makes it possible to detune the 1st and 2nd dual-mode Voices to create a thicker sound. Use the [**-/NO▼**] and [+/**YES▲**] buttons to set the amount of detuning as required. The detune range is from -10 through 10. A setting of “0” sets both voices to the same pitch. Settings below “0” increase the pitch of the 2nd Voice in relation to the 1st Voice, and settings above “0” increase the pitch of the 1st Voice in relation to the 2nd Voice (“1st” and “2nd” is explained on page 15). Press the [**-/NO▼**] and [+/**YES▲**] buttons simultaneously to recall the default setting (different for each voice combination).

### F3.3: 1st Voice Octave Shift .....

### F3.4: 2nd Voice Octave Shift .....

Depending on which voices you combine using the dual mode, the combination may sound better if one of the voices is shifted up or down an octave. Use the [**-/NO▼**] and [+/**YES▲**] buttons to set the octave of the 1st or 2nd Voice as required (“1st” and “2nd” is explained on page 15). The available settings are “0” for normal pitch, “-1” to shift the pitch down one octave, and “1” to shift the pitch up one octave. Press the [**-/NO▼**] and [+/**YES▲**] buttons simultaneously to recall the default setting (different for each voice combination).

## **F3.5: 1st Voice Effect Depth** .....

## **F3.6: 2nd Voice Effect Depth** .....

These functions make it possible to individually set the depth of the effect for the 1st and 2nd dual-mode Voices (“1st” and “2nd” is explained on page 15). Use the [-/NO▼] and [+ /YES▲] buttons to set the effect depth for the corresponding voice as required. The depth range is from 0 through 20. A setting of “0” produces no effect, while a setting of “20” produces maximum effect depth. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting (different for each voice combination).

 **NOTE** • The effect depth settings cannot be changed unless the EFFECT is ON. The Function mode must be exited before EFFECT can be turned ON.

## **F3.7: Reset** .....


This function resets all dual-mode functions to their default values. Press the [+ /YES▲] button to reset the values. “End” will appear on the display when all functions have been reset.

## **F4** Split Mode Functions

After selecting “F 4.5”, press the [+ /YES▲] button to engage the split-mode function sub-mode, then use the [TEMPO/FUNCTION# ▼,▲] buttons to select the desired split mode function, as listed below.

If the Split mode is not engaged “F 4.-” will appear instead of “F 4.5” and the Split mode functions cannot be selected. Also note that you must exit from the Function mode before the Split mode can be engaged.

**■ SHORTCUT:** You can jump directly to the split-mode functions (F4) by pressing the [FUNCTION] button while holding the [SPLIT] button.

 **NOTE** • Split mode function settings are set individually for each voice combination.

## **F4.1: Split Point** .....

In addition to the split point setting method described on page 16, the split point can be set via this function. Use the [-/NO▼] and [+ /YES▲] buttons to set the split point as required, or simply press the appropriate key on the keyboard: from “F - 1” to “F 7”. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “F#2”.

## **F4.2: Split Balance** .....

The volume levels of the two voices combined in the split mode can be adjusted as required by using this function. Use the [-/NO▼] and [+ /YES▲] buttons to adjust the balance as required. The balance range is from 0 through 20. A setting of “10” produces equal balance between the two split-mode voices. Settings below “10” increase the volume of the Left Voice in relation to the Right Voice, and settings above “10” increase the volume of the Right Voice in relation to the Left Voice. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting (different for each voice combination).

## **F4.3: Right Voice Octave Shift** .....

## **F4.4: Left Voice Octave Shift** .....

Depending on which voices you combine using the split mode, the combination may sound better if one of the voices is shifted up or down an octave. Use the [-/NO▼] and [+ /YES▲] buttons to set the octave of the Left or Right Voice as required. The available settings are “0” for normal pitch, “-1” to shift the pitch down one octave, and “1” to shift the pitch up one octave. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting (different for each voice combination).

Set according to the pitch extent for the song you want to play.

## **F4.5: Right Voice Effect Depth** .....

## **F4.6: Left Voice Effect Depth** .....

These functions make it possible to individually set the depth of the effect for the Left and Right split-mode Voices. Use the [-/NO▼] and [+ /YES▲] buttons to set the effect depth for the corresponding voice as required. The depth range is from 0 through 20. A setting of “0” produces no effect, while a setting of “20” produces maximum effect depth. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting (different for each voice combination).



• *The effect depth settings cannot be changed unless the EFFECT is ON. The Function mode must be exited before EFFECT can be turned ON.*

## **F4.7: Damper Range** .....

The Damper Range function determines whether the damper pedal affects the Right Voice, the Left Voice, or both the Left and Right Voices in the split mode. Use the [-/NO▼] and [+ /YES▲] buttons to select “2” for the Left Voice, “1” for the Right Voice, or “ALL” for both voices. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “ALL”.

## **F4.8: Reset** .....

This function resets all split-mode functions to their default values. Press the [+ /YES▲] button to reset the values. “E n d” will appear on the display when all functions have been reset.

## **F5** Soundboard Depth

---

Certain piano voices (GRAND PIANO, CLASSICAL PIANO, and JAZZ PIANO) feature a special effect which recreates the ring of the strings and the soundboard resonance of an actual acoustic piano when the sustain pedal is pressed. This function lets you adjust the depth of this effect. After selecting “F 5” use the [-/NO▼] and [+ /YES▲] buttons to set the effect depth as required. The effect depth range is from 0 through 20. A setting of “0” produces no effect, while a setting of “20” produces maximum effect depth. Press the [-/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “12”.

## F6 Metronome Volume

■ **SHORTCUT:** You can jump directly to the metronome functions by pressing the **[FUNCTION]** button while holding the **METRONOME [START/STOP]** button.

The volume of the metronome sound can be changed. After selecting “F5”, use the **[-/NO▼]** and **[+/YES▲]** buttons to set the metronome volume as required. The volume range is from 1 through 20. A setting of “1” produces minimum sound, while a setting of “20” produces maximum metronome volume. Press the **[-/NO▼]** and **[+/YES▲]** buttons simultaneously to recall the default setting “10”.

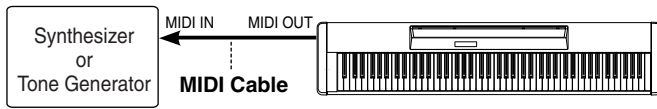
## F7 Preset Song Part Cancel Volume

This function sets the volume at which a “canceled” part is played during preset song playback (see page 14 for information on the “preset song part cancel” function). Use the **[-/NO▼]** and **[+/YES▲]** buttons to set the volume as required. The volume range is from 0 through 20. A setting of “0” produces no sound, while a setting of “20” produces maximum volume. Press the **[-/NO▼]** and **[+/YES▲]** buttons simultaneously to recall the default setting “5”.

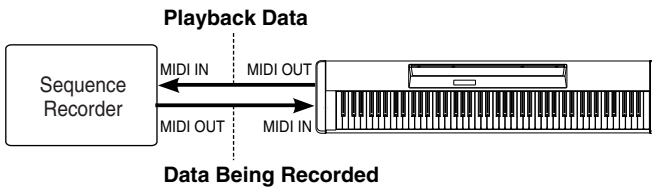
Adjust the part volume to a comfortable level to use the “canceled” part as a guide to play along with. Set to “0” if you don’t want to hear the part.

## F8 MIDI Functions

### ● A Brief Introduction to MIDI



MIDI, the Musical Instrument Digital Interface, is a world-standard communication interface that allows MIDI-compatible musical instruments and equipment to share musical information and control one another. This makes it possible to create “systems” of MIDI instruments and equipment that offer far greater versatility and control than is available with isolated instruments. For example, most MIDI keyboards (including the P-80, of course) transmit note and velocity (touch response) information via the MIDI OUT connector whenever a note is played on the keyboard. If the MIDI OUT connector is connected to the MIDI IN connector of a second keyboard (synthesizer, etc.) or a tone generator (essentially a synthesizer with no keyboard), the second keyboard or tone generator will respond precisely to notes played on the original transmitting keyboard. The result is that you can effectively play two instruments at once, providing thick multi-instrument sounds.



The examples given above really only scratch the surface. MIDI can do much, much more. The P-80 MIDI functions allow it to be used in fairly sophisticated MIDI systems.

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control one another. This makes it possible to create “systems” of MIDI instruments and equipment that offer far greater versatility and control than is available with isolated instruments. For example, most MIDI keyboards (including the P-80, of course) transmit note and velocity (touch response) information via the MIDI OUT connector whenever a note is played on the keyboard. If the MIDI OUT connector is connected to the MIDI IN connector of a second keyboard (synthesizer, etc.) or a tone generator (essentially a synthesizer with no keyboard), the second keyboard or tone generator will respond precisely to notes played on the original transmitting keyboard. The result is that you can effectively play two instruments at once, providing thick multi-instrument sounds.

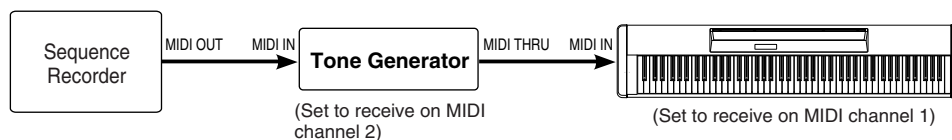
This same type of musical information transfer is used for MIDI sequence recording. A sequence recorder can be used to “record” MIDI data received from a P-80, for example. When the recorded data is played back, the P-80 automatically “plays” the recorded performance in precise detail.

After selecting “F8.4”, press the [+ / YES ▲] button to engage the MIDI function sub-mode, then use the [TEMPO / FUNCTION# ▼, ▲] buttons to select the desired MIDI function, as listed below.



- The rear-panel HOST SELECT switch must be set to “MIDI” in order to use the MIDI connectors. When you use the TO HOST connector, set the HOST SELECT switch to the appropriate position for the type of computer you are using (see page 36). In this situation, all MIDI settings described below will have affect on the MIDI signal in and out of the TO HOST connector.
- Always use a high-quality MIDI cable to connect MIDI OUT to MIDI IN terminals. Never use MIDI cables longer than about 15 meters, since cables longer than this can pick up noise which can cause data errors.

- F8.1: MIDI Transmit Channel Selection .....
- F8.2: MIDI Receive Channel Selection .....



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



In any MIDI control setup, the MIDI channels of the transmitting and receiving equipment must be matched for proper data transfer. A “Multi-timbre” receive mode is also available, which allows simultaneous reception of different parts on all 16 MIDI channels, allowing the P-80 to play multi-channel song data received from a music computer or sequencer. There’s also a “1-2” mode which allows simultaneous reception on channels 1 and 2.

Use the [–/NO▼] and [+ /YES▲] buttons to select the desired transmit or receive channel. The transmit channel parameter can also be turned “OFF” if you don’t want the P-80 to transmit any MIDI data. To select the multi-timbre receive mode, set the receive channel to “ALL”. Select “1-2” for multi-timbre reception on channels 1 and 2 only.

Press the [–/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting: transmit = “1”; receive = “ALL”.



- In the dual mode first voice data is transmitted on its set channel, and in the split mode right voice data is transmitted on its set channel. In the dual mode second voice data is transmitted on the next greater channel number of the set channel, and in the split mode left voice data is transmitted on the next greater channel number of the set channel. In either mode, no data is transmitted if the transmit channel is set to “OFF”.
- Demo/preset song data and recorder playback data are not transmitted via MIDI.
- No MIDI reception occurs when the demo/preset song mode is engaged.
- Program change and other like channel messages received will not affect the P-80’s panel settings or what is being played on the keyboard.

## F8.3: Local Control ON/OFF .....

“Local Control” refers to the fact that, normally, the P-80 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is “Local Control On” since the internal tone generator is controlled locally by its own keyboard.

Local control can be turned OFF, however, so that the P-80 keyboard does not play the internal voices, but the appropriate MIDI information is still transmitted via the MIDI OUT connector when notes are played on the keyboard. At the same time, the internal tone generator responds to MIDI information received via the MIDI IN connector.

Use the [–/NO▼] and [+ /YES▲] buttons to turn local control “On” or “OFF”.

Press [–/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “On”.

## F8.4: Program Change ON/OFF .....

Normally the P-80 will respond to MIDI program change numbers received from an external keyboard or other MIDI device, causing the correspondingly numbered voice to be selected on the corresponding channel (the keyboard voice does not change). The P-80 will normally also send a MIDI program change number whenever one of its voices is selected, causing the correspondingly numbered voice or program to be selected on the external MIDI device if the device is set up to receive and respond to MIDI program change numbers.

This function makes it possible to cancel program change number reception and transmission so that voices can be selected on the P-80 without affecting the external MIDI device.

Use the [–/NO▼] and [+ /YES▲] buttons to turn program change transmission and reception “On” or “OFF”.

Press the [–/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “On”.



- For information on program change numbers for each of the P-80’s voices, refer to page 42 in the MIDI Data Format section.

## **F8.5: Control Change ON/OFF** .....

Normally the P-80 will respond to MIDI control change data received from an external MIDI device or keyboard, causing the voice on the corresponding channel to be affected by pedal and other “control” settings received from the controlling device (the keyboard voice is not affected). The P-80 also transmits MIDI control change information when the pedal or other appropriate controls are operated.

This function makes it possible to cancel control change data reception and transmission so that, for example, the P-80’s pedal and other controls can be operated without affecting an external MIDI device.

Use the [–/NO▼] and [+ /YES▲] buttons to turn control change transmission and reception “On” or “OFF”.

Press the [–/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “On”.



- For information on control changes that can be used with the P-80, refer to the MIDI Data Format on page 41.

## **F8.6: MIDI Transmit Transpose** .....

This function allows the MIDI note data transmitted by the P-80 to be transposed up or down in semitone increments by up to plus or minus 12 semitones. The pitch of the P-80 itself is not affected.

Use the [–/NO▼] and [+ /YES▲] buttons to set the desired amount of MIDI transmit transposition. The range is from “–12” (down one octave) through “0” (no transposition) to “12” (up one octave).

Press the [–/NO▼] and [+ /YES▲] buttons simultaneously to recall the default setting “0”.

## **F8.7: Panel/Status Transmit** .....

This function causes all the current P-80 panel settings (selected voice, etc.) to be transmitted via the MIDI OUT terminal. This is particularly useful if you will be recording performances to a MIDI sequence recorder such as the Yamaha MIDI Data Filer MDF3 which will be used to control the P-80 on playback. By transmitting the P-80 panel settings and recording them on the MIDI sequence recorder prior to the actual performance data, the P-80 will be automatically restored to the same settings when the performance is played back.

Press the [+ /YES▲] button to transmit the panel/status data. “END” will appear on the LED display when the data has been successfully transmitted.



- Panel setting data that is transmitted to an external device can only be reloaded on another P-80. Panel setting data can also be directly transferred to or from another P-80.

## **F8.8: Bulk Data Dump** .....

This function is used to transmit all data stored in the User Song Recorder memory to a MIDI data storage device such as the Yamaha MIDI Data Filer MDF3, other sequence recorders, or MIDI compatible computers.

Press the [+ /YES▲] button to begin bulk transmission. “END” will appear on the LED display when the data has been successfully transmitted.



- Bulk data dump will not function when the user song recorder is in operation.
- User song recorder data that is transmitted to an external device can only be reloaded on another P-80. Recorder data can also be directly transferred to or from another P-80.
- The reload operation cannot be executed when the user song recorder is in operation or the Function mode is engaged.
- No MIDI note/panel data transmission or data reception occurs during a bulk data dump transmit operation.

## F9 Backup Functions

After selecting “F9.4”, press the [+ / YES ▲] button to engage the backup function sub-mode, then use the [TEMPO / FUNCTION# ▼, ▲] buttons to select the desired backup function, as listed below.



- The backup settings themselves, and the contents of the user song recorder memory, are always backed up.
- Even if the Backup is turned on, factory presets can be recalled at any time (see page 38). The factory setting list is found on page 40.

Even if backup is turned on via one of the functions described below, the data will only be retained in memory for about 1 week if the power is not turned on during this time. If the backup period is exceeded, all settings will be reset to their default values. If you want to retain the backup settings for longer periods, be sure to turn the power switch on for a few minutes at least once a week.

### F9.1: Voice .....

Turns backup of the voice functions listed below on or off. Use the [- / NO ▼] and [+ / YES ▲] buttons to turn backup “On” or “OFF”.

The default backup mode is “OFF”.

- Voice (Keyboard, Dual, and Split)
- Dual (ON/OFF, Voice, and Dual Functions for each voice combination)
- Split (ON/OFF, Voice, and Split Functions for each voice combination)
- Reverb (ON/OFF, Type, and Depth for each voice)
- Effect (ON/OFF, Type, and Depth for each voice)
- Variation (for each voice)
- Touch Sensitivity (including the FIXED volume)
- Metronome (Beat, Volume)
- Preset Song Part Cancel Volume

### F9.2: MIDI .....

Turns backup of the MIDI functions listed below on or off. Use the [- / NO ▼] and [+ / YES ▲] buttons to turn backup “On” or “OFF”.

The default backup mode is “OFF”.

- Channel (Transmit, Receive)
- Program Change ON/OFF
- MIDI Transmit Transpose
- Local ON/OFF
- Control Change ON/OFF

### F9.3: Tuning .....

Turns backup of the tuning functions listed below on or off. Use the [- / NO ▼] and [+ / YES ▲] buttons to turn backup “On” or “OFF”.

The default backup mode is “OFF”.

- Transpose
- Tuning
- Scale (including base note)

### F9.4: Soundboard Depth .....

Turns the soundboard depth function on or off. Use the [- / NO ▼] and [+ / YES ▲] buttons to turn backup “On” or “OFF”.

The default backup mode is “OFF”.



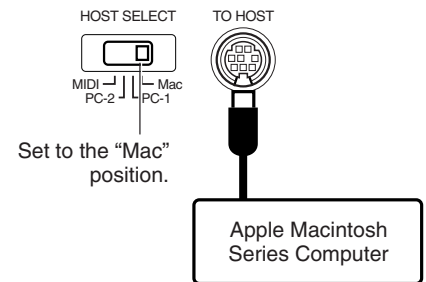
# Connecting to a Personal Computer

Although the P-80 can be connected to a personal computer via the MIDI IN/OUT connectors and a MIDI interface, the TO HOST connector and HOST SELECT switch allow direct connection to Apple Macintosh or IBM-PC/AT personal computers for sequencing and other music applications without the need for a separate MIDI interface.

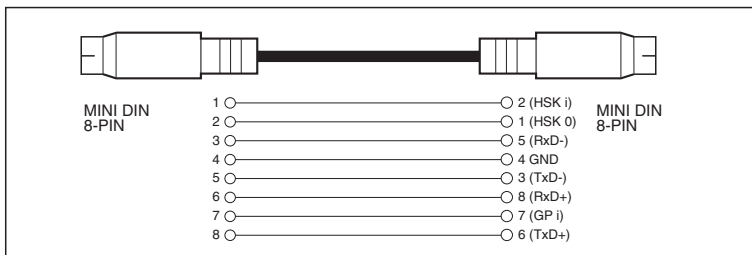
## Connecting to an Apple Macintosh Series Computer

Connect the TO HOST connector of the P-80 to the modem or printer port on your Macintosh, depending on which port your MIDI software is using for MIDI data communication, using a standard Macintosh 8-pin system peripheral cable. Set the HOST SELECT switch to the “Mac” position.

You may also have to make other MIDI interface settings on the computer side, depending on the type of software you use (refer to your software owner’s manual). In any case the clock speed should be set to 1 MHz.



## “Mac” Cable Connections



- 8-pin system peripheral cable.
- Data transfer rate: 31,250 bps.

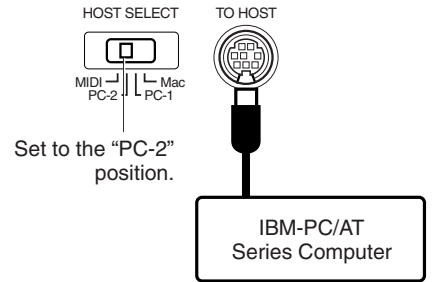
### NOTE

- When using the [TO HOST] terminal of the P-80, first turn the power off on both the P-80 and the computer before connecting the cable. After connecting the cable, turn the power of the computer on first, then the P-80.
- When not using the [TO HOST] terminal of the P-80, make sure the cable is disconnected from the [TO HOST] terminal. If the cable is left connected, the P-80 may not function properly.
- “H5Γ” will appear in the display if the host computer is not turned on, the connecting cable is not properly connected, the HOST SELECT switch is not in the proper position, or the MIDI driver or MIDI application is not active. In this case, turn the power off on both the P-80 and the computer, and check the cable connection and the position of the HOST SELECT switch. Once the connection and HOST SELECT switch position is verified, turn the power of the computer on first, then the P-80, to check if the MIDI driver and MIDI application function properly.
- When the HOST SELECT switch is set to “Mac”, “PC-1”, or “PC-2”, no data transfer occurs via the MIDI connectors. To use the MIDI connectors for connection via a standard MIDI interface, set the HOST SELECT switch to “MIDI”.

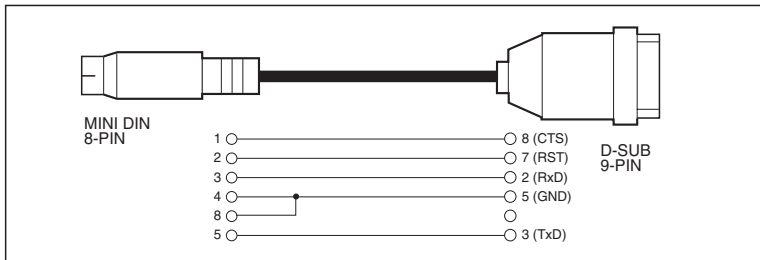
## Connecting to an IBM-PC/AT Series Computer .....

Connect the TO HOST connector of the P-80 to the RS-232C port on your IBM computer, using a standard 8-pin MINI DIN → 9-pin D-SUB cross cable. Set the HOST SELECT switch to the “PC-2” position.

Refer to your software owner’s manual for information on any settings you might have to make on the computer side.



### ● “PC-2” Cable Connections



- 8-pin mini DIN → 9-pin D-SUB cable.
- Data transfer rate: 38,400 bps.

#### NOTE

- If your system doesn't work properly with the connections and settings listed above, your software may require different settings. Check your software operation manual and if it requires a 31,250 bps. data transfer rate, set the HOST SELECT switch to “PC-1”.
- When using the TO HOST terminal to connect to a personal computer using Windows, a Yamaha MIDI driver must be installed in the personal computer. The Yamaha MIDI driver can be obtained at Yamaha's home page on the World Wide Web, <<http://www.yamaha.co.jp/english/xg/>>.

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- Windows is the registered trademark of Microsoft® Corporation.

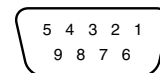
All other trademarks are the property of their respective holders.

### ● Connector Pin Numbers

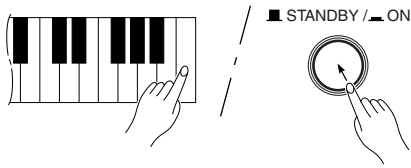
MINI DIN 8-PIN



D-SUB 9-PIN



# Factory Preset Recall



All dual mode, split mode, reverb, effect, touch sensitivity, tuning settings, and the settings affected by the Backup Functions can be restored to their original factory preset values by holding the C7 key (rightmost key on the keyboard) while turning the [STANDBY/ON] switch ON. This also erases all user song recorder data, and sets all Backup on/off settings (F9) to “OFF”.



• The factory setting list is found on page 40.

## Troubleshooting

If you encounter what appears to be a malfunction, please check the following points before assuming that your P-80 is faulty.

### 1. No Sound When the Power is Turned ON

Is the external audio device's power switched ON?  
Is the MASTER VOLUME control turned up to a reasonable listening level?  
Also make sure that the Local Control (page 33) is ON.

### 2. The P-80 Reproduces Radio or TV Sound

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

### 3. Intermittent Static Noise

This is usually due to turning ON or OFF a household appliance or other electronic equipment which is fed by the same AC mains line as your P-80.

### 4. Interference Appears On Radio or TV Sets Located Near the P-80

The P-80 contains digital circuitry which can generate radio-frequency noise. The solution is to move the P-80 further away from the affected equipment, or vice versa.

### 5. Distorted Sound When the P-80 is Connected to An External Amplifier/Speaker System

If the P-80 is connected to a stereo system or instrument amplifier and the sound is distorted, reduce the P-80's [MASTER VOLUME], and/or the volume of the external equipment to a level at which the distortion ceases.

### 6. Noise is heard from the speakers or headphones.

The noise may be due to interference caused by the use of a mobile phone in close proximity to the P-80. Turn off the mobile phone, or use it further away from the P-80.

- If “5c n” appears on the display an internal malfunction has occurred. In this case, contact your Yamaha dealer.

# Demo and Preset Song List/Verzeichnis der Demo- und Preset-Songs/ Liste des morceaux de démonstration et preset/ Lista de canciones de demostración y canciones preajustadas

## Voice Demo Tune Titles

Voice Name	Title	Composer
GRAND PIANO	Fantaisie Impromptu	F.F.Chopin
CLASSICAL PIANO	Für Elise	L.v.Beethoven
JAZZ PIANO	Original	–
ROCK PIANO	Original	–
E.PIANO 1	Original	–
E.PIANO 2	Original	–
HARPSICHORD	Gavotte (French Suite)	J.S.Bach
STRINGS	Eine Kleine Nachtmusik 3rd Mov.	W.A.Mozart
PIPE ORGAN	Trio Sonata 2	J.S.Bach
CHURCH ORGAN	Noël 3	L.C.d'Aquin
JAZZ ORGAN	Original	–
BASS	Original	–

- Some of the demonstration pieces listed above are short excerpts from the original compositions. Original songs are all rights reserved (© 1999 YAMAHA CORPORATION).
- Certains morceaux de démonstration énumérés ci-dessus sont de courts extraits des compositions originales. Les morceaux originaux sont protégés par la loi sur les droits d'auteur (© 1999 YAMAHA CORPORATION).
- Bei manchen der oben aufgeführten Demo-Stücke handelt es sich um kurze Auszüge aus den Originalkompositionen. Originalkompositionen sind urheberrechtlich geschützt (© 1999 YAMAHA CORPORATION).
- Algunas de las piezas de demostración arriba mencionadas son pasajes cortos de las composiciones originales. Las canciones originales tienen derechos reservados (© 1999 YAMAHA CORPORATION).

## Preset Song Titles

No.	Title	Composer	No.	Title	Composer
1	Prelude (Wohltemperierte Klavier I No.1)	J.S.Bach	26	Dolly's Dreaming and Awakening	T.Oesten
2	Menuett G dur BWV. Anh.114	J.S.Bach	27	Alpenglow	T.Oesten
3	Le Coucou	L.C.Daquin	28	Arabesque (25 Etüden)	J.F.Burgmüller
4	Piano Sonate No.15 K.545 1st mov.	W.A.Mozart	29	La chevaleresque (25 Etüden)	J.F.Burgmüller
5	Turkish March (Piano Sonate No.11 K.331)	W.A.Mozart	30	Rondo alla Turca op.68-3	J.F.Burgmüller
6	12 Variationen über ein französisches Lied "Ah, vous dirai-je, maman"	W.A.Mozart	31	La candeur (25 Etüden)	J.F.Burgmüller
7	Piano Concerto K.467	W.A.Mozart	32	Innocence (25 Etüden)	J.F.Burgmüller
8	Menuett G dur	W.A.Mozart	33	Progrès (25 Etüden)	J.F.Burgmüller
9	Little Serenade	J.Haydn	34	Pastorale (25 Etüden)	J.F.Burgmüller
10	Perpetuum mobile	C.M.v.Weber	35	Liebesträume Nr.3	F.Liszt
11	Ecosseise	L.v.Beethoven	36	La Violette op.99-1	L.Streabbog
12	Marcia alla Turca	L.v.Beethoven	37	Blumenlied	G.Lange
13	Sonatine	L.v.Beethoven	38	Heidenröslein	G.Lange
14	Romanze in F	L.v.Beethoven	39	The harvest time	G.Lange
15	Impromptu op.90-2	F.Schubert	40	Barcarolle (Les Saisons)	P.I.Tchaikovsky
16	Moments Musicaux op.94-3	F.Schubert	41	Melody in F	A.G.Rubinstein
17	Frühlingslied op.62-2	F.Mendelssohn	42	Spinnerlied	A.Ellmenreich
18	Etude op.10-5 "Black keys"	F.F.Chopin	43	Tango (España)	I.Albéniz
19	Etude op.10-3 "Chanson de l'adieu"	F.F.Chopin	44	La Fille aux Cheveux de Lin	C.A.Debussy
20	Etude op.10-12 "Revolutionary"	F.F.Chopin	45	Arabesque 1	C.A.Debussy
21	Nocturne op.9-2	F.F.Chopin	46	Clair de lune	C.A.Debussy
22	Valse op.64-1 "Petit chien"	F.F.Chopin	47	The Entertainer	S.Joplin
23	Valse op.64-2	F.F.Chopin	48	Maple leaf rag	S.Joplin
24	Träumerei (Kinderszenen)	R.Schumann	49	Radetzky Marsch*	J.B.Strauss
25	La prière d'une Vierge	T.Badarzewska	50	American Patrol*	F.W.Meacham

\* Arranged for 4-hands.



# Factory Setting List/Liste der Vorgabeeinstellungen/ Liste des réglages/Lista de ajustes de fábrica

		Backup Group
Voice	GRAND PIANO	F9.1
Dual Mode	OFF	
Split Mode	OFF	
Split Mode Left Voice	BASS	
Reverb Type	Preset for each voice	
Reverb Depth	Preset for each voice	
Effect Type	Preset for each voice	
Effect Depth	Preset for each voice	
Touch Sensitivity	MEDIUM	
Volume in the FIXED Mode	64	
Metronome	OFF	—
Metronome Time Signature	0 (no accent)	F9.1
Tempo	120	—
Transpose	0	F9.3

“—”: Not memorized

## Function

	Function	Default	Backup Group
F1	Tuning	A3=440Hz	F9.3
F2.1	Scale	1 (Equal Temperament)	
F2.2	Base Note	C	
F3.1	Dual Balance	Preset for each voice combination	F9.1
F3.2	Dual Detune	Preset for each voice combination	
F3.3, F3.4	Dual Octave Shift	Preset for each voice combination	
F3.5, F3.6	Dual Effect Depth	Preset for each voice combination	
F4.1	Split Point	F#2	
F4.2	Split Balance	Preset for each voice combination	
F4.3, F4.4	Split Octave Shift	Preset for each voice combination	
F4.5, F4.6	Split Effect Depth	Preset for each voice combination	F9.4
F4.7	Damper Range	ALL	
F5	Soundboard Depth	12	F9.1
F6	Metronome Volume	10	
F7	Preset Song Part Cancel Volume	5	F9.2
F8.1	MIDI Transmit Channel	1	
F8.2	MIDI Receive Channel	ALL	
F8.3	Local Control	ON	
F8.4	Program Change Send & Receive	ON	
F8.5	Control Change Send & Receive	ON	
F8.6	MIDI Transmit Transpose	0	Always backed up
F9	Backup	All OFF	

# MIDI Data Format / MIDI-Datenformat / Format des données MIDI / Formato de datos MIDI

If you're already very familiar with MIDI, or are using a computer to control your music hardware with computer-generated MIDI messages, the data provided in this section can help you to control the P-80.

Falls Sie bereits mit MIDI vertraut sind oder einen Computer zur Erzeugung von MIDI-Steuermeldungen für die Instrumente verwenden, können Sie sich zur Steuerung des P-80 nach den im folgenden Abschnitt aufgeführten Spezifikationen richten.

## 1. NOTE ON/OFF

Data format: [9nH] -> [kk] -> [vv]

9nH = Note ON/OFF event (n = channel number)  
kk = Note number (Transmit: 09H ~ 78H = A-2 ~ C8 /  
Receive: 00H ~ 7FH = C-2 ~ G8)\*  
vv = Velocity (Key ON = 01H ~ 7FH, Key OFF = 00H)

Data format: [8nH] -> [kk] -> [vv] (reception only)

8nH = Note OFF event (n = channel number)  
kk = Note number: 00H ~ 7FH = C-2 ~ G8  
vv = Velocity

\* If received value exceeds the supported range for the selected voice, the note is adjusted by the necessary number of octaves.

## 2. CONTROL CHANGE

Data format: [BnH] -> [cc] -> [vv]

BnH = Control change (n = channel number)  
cc = Control number  
vv = Data Range

### (1) Bank Select

ccH	Parameter	Data Range (vvH)
00H	Bank Select MSB	00H:Normal
20H	Bank Select LSB	00H...7FH

Bank selection processing does not occur until receipt of next Program Change message.

### (2) Main Volume (reception only)

ccH	Parameter	Data Range (vvH)
07H	Volume MSB	00H...7FH

### (3) Expression

ccH	Parameter	Data Range (vvH)
0BH	Expression MSB	00H...7FH

### (4) Damper

ccH	Parameter	Data Range (vvH)
40H	Damper MSB	00H...7FH

### (5) Sostenuto (reception only)

ccH	Parameter	Data Range (vvH)
42H	Sostenuto	00H-3FH:off, 40H-7FH:on

### (6) Soft Pedal (reception only)

ccH	Parameter	Data Range (vvH)
43H	Soft Pedal	00H-3FH:off, 40H-7FH:on

### (7) Effect1 Depth ( Reverb Send Level )

ccH	Parameter	Data Range (vvH)
5BH	Effect1 Depth	00H...7FH

Adjusts the reverb send level.

### (8) Effect4 Depth ( Variation Effect Send Level )

ccH	Parameter	Data Range (vvH)
5EH	Effect4 Depth	00H...7FH

Si vous êtes très familier avec l'interface MIDI ou si vous utilisez un ordinateur pour commander votre matériel de musique au moyen de messages MIDI générés par ordinateur, les données suivantes vous seront utiles et vous aideront à commander le P-80.

Si usted está ya familiarizado con MIDI, o si emplea una computadora para controlar sus aparatos musicales con mensajes MIDI generados por computadora, los datos proporcionados en esta sección le ayudarán a controlar la P-80.

## 3. MODE MESSAGES

Data format: [BnH] -> [cc] -> [vv]

BnH = Control event (n = channel number)  
cc = Control number  
vv = Data Range

### (1) All Sound Off

ccH	Parameter	Data Range (vvH)
78H	All Sound Off	00H

Switches off all sound from the channel. Does not reset Note On and Hold On conditions established by Channel Messages.

### (2) Reset All Controllers

ccH	Parameter	Data Range (vvH)
79H	Reset All Controllers	00H

Resets controllers as follows.

Controller	Value
Expression	127 (max)
Damper Pedal	0 (off)
Sostenuto	0 (off)
Soft Pedal	0 (off)

### (3) Local Control (reception only)

ccH	Parameter	Data Range (vvH)
7AH	Local Control	00H (off), 7FH (on)

### (4) All Notes Off

ccH	Parameter	Data Range (vvH)
7BH	All Notes Off	00H

Switches OFF all the notes that are currently ON on the specified channel. Any notes being held by the damper or sostenuto pedal will continue to sound until the pedal is released.

### (5) Omni Off (reception only)

ccH	Parameter	Data Range (vvH)
7CH	Omni Off	00H

Same processing as for All Notes Off.

### (6) Omni On (reception only)

ccH	Parameter	Data Range (vvH)
7DH	Omni On	00H

Same processing as for All Notes Off.

### (7) Mono (reception only)

ccH	Parameter	Data Range (vvH)
7EH	Mono	00H

Same processing as for All Sound Off.

### (8) Poly (reception only)

ccH	Parameter	Data Range (vvH)
7FH	Poly	00H

Same processing as for All Sound Off.

- When control change reception is turned OFF in the Function mode, control change data will not be transmitted or received except for Bank Select and Mode messages.
- Local on/off, OMNI on/off are not transmitted. (The appropriate note off number is supplied with "All Note Off" transmission).
- When a voice bank MSB/LSB is received, the number is stored in the internal buffer regardless of the received order, then the stored value is used to select the appropriate voice when a program change message is received.
- The Multi-timbre and Poly modes are always active. No change occurs when OMNI ON, OMNI OFF, MONO, or POLY mode messages are received.

## 4. PROGRAM CHANGE

Data format: [CnH] -> [ppH]

CnH = Program event (n = channel number)

ppH = Program change number

P.C.#=Program Change number

	Normal Voice			VARIATION Voice		
	MSB	LSB	P.C.#	MSB	LSB	P.C.#
GRAND PIANO	0	112	0	0	113	0
CLASSICAL PIANO	0	114	0	0	115	0
JAZZ PIANO	0	112	1	0	113	1
ROCK PIANO	0	114	1	0	115	1
E.PIANO 1	0	112	5	0	112	88
E.PIANO 2	0	112	4	0	118	4
HARPSICHORD	0	112	6	0	115	6
STRINGS	0	112	48	0	113	49
PIPE ORGAN	0	112	19	0	113	19
CHURCH ORGAN	0	115	19	0	114	19
JAZZ ORGAN	0	112	16	0	113	16
BASS	0	112	32	0	114	32

- When program change reception is turned OFF in the Function mode, no program change data is transmitted or received. Also, Bank MSB/LSB is not transmitted or received.

## 5. SYSTEM REALTIME MESSAGES

[rrH]

F8H: Timing clock

FAH: Start

FCH: Stop

FEH: Active sensing

Data	Transmission	Reception
F8H	Transmitted every 96 clocks	Received as 96-clock tempo timing when MIDI clock is set to External
FAH	Recorder start	Recorder start Not received when the MIDI clock is set to Internal.
FCH	Recorder stop	Recorder stop Not received when the MIDI clock is set to Internal.
FEH	Transmitted every 200 milliseconds	If a signal is not received via MIDI for more than 400 milliseconds, the same processing will take place for All Sound Off, All Notes Off and Reset All Controllers as when those signals are received.

- Caution: If an error occurs during MIDI reception, the Damper, Sostenuto, and Soft effects for all channels are turned off and an All Note Off occurs.

## 6. SYSTEM EXCLUSIVE MESSAGES (Yamaha MIDI Format)

Panel Data Transmit

Data format: [F0H] -> [43H] -> [0nH] -> [7CH] -> ... -> [F7H]

F0H, 43H, 0nH, 7CH (n: channel number)

00H, 2CH (data length)

43H, 4CH, 20H, 20H (CL)

43H, 4CH, 50H, 27H, 39H, 38H (P-80)

30H, 30H (version x, y)

[PANEL DATA]

[CHECK SUM (1byte)] = 0-(43H+4CH+20H+.....+Data end)

F7H

- Panel data send requests cannot be received.

## 7. SYSTEM EXCLUSIVE MESSAGES (Universal System Exclusive)

### (1) Universal Realtime Message

Data format: [F0H] -> [7FH] -> [XnH] -> [04H] -> [01H] -> [//H] -> [mmH] -> [F7H]

### MIDI Master Volume

- Simultaneously changes the volume of all channels.
- When a MIDI master volume message is received, the volume only has affect on the MIDI receive channel, not the panel master volume.

F0H = Exclusive status  
 7FH = Universal Realtime  
 7FH = ID of target device  
 04H = Sub-ID #1=Device Control Message  
 01H = Sub-ID #2=Master Volume  
 //H = Volume LSB  
 mmH = Volume MSB  
 F7H = End of Exclusive

or

F0H = Exclusive status  
 7FH = Universal Realtime  
 XnH = When n is received n=0-F, whichever is received.  
 X = don't care  
 04H = Sub-ID #1=Device Control Message  
 01H = Sub-ID #2=Master Volume  
 //H = Volume LSB  
 mmH = Volume MSB  
 F7H = End of Exclusive

### (2) Universal Non-Realtime Message (GM On)

General MIDI Mode On

Data format: [F0H] -> [7EH] -> [XnH] -> [09H] -> [01H] -> [F7H]

F0H = Exclusive status  
 7EH = Universal Non-Realtime  
 7FH = ID of target device  
 09H = Sub-ID #1=General MIDI Message  
 01H = Sub-ID #2=General MIDI On  
 F7H = End of Exclusive

or

F0H = Exclusive status  
 7EH = Universal Non-Realtime  
 XnH = When received, n=0-F.  
 X = don't care  
 09H = Sub-ID #1=General MIDI Message  
 01H = Sub-ID #2=General MIDI On  
 F7H = End of Exclusive

When the General MIDI mode ON message is received, the MIDI system will be reset to its default settings. This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

## 8. SYSTEM EXCLUSIVE MESSAGES (XG Standard)

### (1) XG Native Parameter Change

Data format: [F0H] -> [43H] -> [1nH] -> [4CH] -> [hhH] -> [mmH] -> [//H] -> [ddH] -> [F7H]

F0H = Exclusive status  
 43H = YAMAHA ID  
 1nH = When received, n=0~F.  
       When transmitted, n=0.  
 4CH = Model ID of XG  
 hhH = Address High  
 mmH = Address Mid  
 //H = Address Low  
 ddH = Data  
 F7H = End of Exclusive

Data size must match parameter size (2 or 4 bytes).  
 When the XG System On message is received, the MIDI system will be reset to its default settings.  
 The message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

### (2) XG Native Bulk Data (reception only)

Data format: [F0H] -> [43H] -> [0nH] -> [4CH] -> [aaH] -> [bbH] -> [hhH] -> [mmH] -> [//H] -> [ddH] ->...-> [ccH] -> [F7H]

F0H Exclusive status  
 43H YAMAHA ID  
 0nH When received, n=0~F.  
       When transmitted, n=0.  
 4CH Model ID of XG  
 aaH ByteCount  
 bbH ByteCount  
 hhH Address High  
 mmH Address Mid  
 //H Address Low  
 ddH Data  
 ccH Check sum  
 F7H End of Exclusive

- For information about the related XG parameters, refer to Tables 1, 2 and 3 below.
- Receipt of the XG SYSTEM ON message causes reinitialization of relevant parameters and Control Change values. Allow sufficient time for processing to execute (about 50 msec) before sending the P-80 another message.
- XG Native Parameter Change message may contain two or four bytes of parameter data (depending on the parameter size).
- For information about the Address and Byte Count values, refer to Table 1 below. Note that the table's Total Size value gives the size of a bulk block. Only the top address of the block (00H, 00H, 00H) is valid as a bulk data address.

## 9. SYSTEM EXCLUSIVE MESSAGES (Clavinova MIDI Format)

Data format: [F0H] -> [43H] -> [73H] -> [xxH] -> [nnH] -> [F7H]

F0H = Exclusive status  
 43H = Yamaha ID  
 73H = Clavinova ID  
 xxH = Product ID (P-80 ID: 66H or CLP common ID: 01H)  
 nnH = Substatus  
       nn Control  
       02H Internal MIDI clock  
       03H External MIDI clock  
       06H Bulk Data (the bulk data follows 06H)  
 F7H = End of Exclusive  
 \* When nn=02H or 03H, Clavinova common ID (01H) is recognized as well as 66H or 01H.

### BULK DUMP FORMAT

F0H, 43H, 73H  
 66H =P-80 ID  
 06H =Bulk ID  
 05H =Sequence data  
 0nH, 0nH, 0nH, 0nH, 0nH, 0nH, 0nH, 0nH =Data length  
 [BULK DATA] =  
 [CHECK SUM (1byte)] = 0-sum (BULK DATA)  
 F7H = End of Exclusive

## 10. SYSTEM EXCLUSIVE MESSAGES (Special Control)

Data format: [F0H] -> [43H] -> [73H] -> [66H] -> [11H] -> [0nH] -> [ccH] -> [vvH] -> [F7H]

F0H = Exclusive status  
 43H = Yamaha ID  
 73H = Clavinova ID  
 66H = P-80 ID  
 11H = Special control  
 0nH = Control MIDI change (n=channel number)  
 cc = Control number  
 vv = Value  
 F7H = End of Exclusive

Control	0n	ccH	vvH
Split Point	Always 00H	14H	14H : Split Key Number
Metronome	Always 00H	1BH	00H : off 01H : - 02H : 2/4 03H : 3/4 04H : 4/4 06H : 6/4 7FH : No accent
Damper Level	ch: 00H-0FH	3DH	(Sets the Damper Level for each channel) 00H-7FH
Channel Detune	ch: 00H-0FH	43H	(Sets the Detune value for each channel) 00H-7FH
Voice Reserve	ch: 00H-0FH	45H	00H : Reserve off 7FH : on*

\* When Volume, Expression is received for Reserve On, they will be effective from the next Key On. Reserve Off is normal.

## 11. SYSTEM EXCLUSIVE MESSAGES (Others)

Data format: [F0H] -> [43H] -> [1nH] -> [27H] -> [30H] -> [00H] -> [00H] -> [mmH] -> [//H] -> [ccH] -> [F7H]

Master Tuning (XG and last message priority) simultaneously changes the pitch of all channels.

F0H = Exclusive Status  
 43H = Yamaha ID  
 1nH = When received, n=0~F.  
       When transmitted, n=0.  
 27H = Model ID of TG100  
 30H = Sub ID  
 00H =  
 00H =  
 mmH = Master Tune MSB  
 //H = Master Tune LSB  
 ccH = don't care (under 7FH)  
 F7H = End of Exclusive

- This data will not be reset by GM SYSTEM ON or XG SYSTEM ON message.

<Table 1>

**MIDI Parameter Change table ( SYSTEM )**

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
00 00 00	4	020C - 05F4(*1)	MASTER TUNE	-50 - +50[cent]	00 04 00 00
01				1st bit 3 - 0 → bit 15 - 12	400
02				2nd bit 3 - 0 → bit 11 - 8	
03				3rd bit 3 - 0 → bit 7 - 4	
04	1	00 - 7F	MASTER VOLUME	0 - 127	7F
05	1	—	—	—	—
06	1	34 - 4C(*2)	TRANSPOSE	-12 - +12[semitones]	40
7E		00	XG SYSTEM ON	00=XG sytem ON	
7F		00	RESET ALL PARAMETERS	00=ON (receive only)	
TOTAL SIZE	07				

\*1: Values lower than 020CH select -50 cents. Values higher than 05F4H select +50 cents.

\*2: Values from 28H through 33H are interpreted as -12 through -1. Values from 4DH through 58H are interpreted as +1 through +12.

<Table 2>

**MIDI Parameter Change table ( EFFECT 1)**

Refer to the "Effect MIDI Map" for a complete list of Reverb, Chorus and Variation type numbers.

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 01 00	2	00-7F	REVERB TYPE MSB	Refer to Effect MIDI Map	01(=HALL1)
		00-7F	REVERB TYPE LSB		
02 01 40	2	00-7F	VARIATION TYPE MSB	Refer to Effect MIDI Map	00(=Effect off)
		00-7F	VARIATION TYPE LSB		

• "VARIATION" refers to the EFFECT on the panel.

<Table 3>

**MIDI Parameter Change table ( MULTI PART )**

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
08 nn 11	1	00 - 7F	DRY LEVEL	0 - 127	7F

nn = Part Number

## ● Effect MIDI Map

### REVERB

	MSB	LSB
ROOM	02H	10H
HALL 1	01H	10H
HALL 2	01H	11H
STAGE	03H	10H

### EFFECT

	MSB	LSB
CHORUS	42H	10H
SYMPHONIC	44H	10H
TREMOLO	46H	10H
DELAY	05H	10H

MIDI Implementation Chart

Function	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 1~16	1 1~16	
Mode Default Messages Altered	3 × *****	1 × ×	*1 Poly Mode only
Note Number : True voice	9~120 *****	0~127 21~108	
Velocity Note on Note off	○ 9nH, v=1~127 × 9nH, v=0	○ v=1~127 ×	
After key's Touch Ch's	× ×	× ×	
Pitch Bender	×	×	
Control Change	0, 32 ○ 07 × 11 × 64 ○ 66 × 67 × 91 ○ 94 ○  120 × 121 ×	○ ○ ○ ○ ○ ○ ○ ○  ○ ○	Bank Select Volume Expression Damper Sostenuto Soft pedal Reverb Depth Effect Depth  All sounds off Reset All Controllers
Program Change : True #	○ *****	○	
System Exclusive	○	○	
System : Song Position : Song Select Common : Tune	× × ×	× × ×	
System : Clock Real Time : Commands	○ ○	○ ○	
Aux : Local ON/OFF : All Notes Off Messages : Active Sense : Reset	× ○ ○ ×	○ ○ (123~127) ○ ×	
Notes : *1 = Recieve Mode is always multi timbre and Poly mode.			

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

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

○: Yes  
×: No

# Specifications/Technische Daten/Caractéristiques techniques/Especificaciones

<b>KEYBOARD</b>	88 KEYS (A-1 ~ C7)
<b>POLYPHONY</b>	64 NOTES MAX.
<b>VOICE SELECTORS</b>	12 voices + Variation for each voice
<b>REVERB</b>	ROOM, HALL 1, HALL 2, STAGE
<b>EFFECT</b>	CHORUS, SYMPHONIC, TREMOLO, DELAY
<b>TOUCH SENSITIVITY</b>	HARD, MEDIUM, SOFT, FIXED
<b>SONG CONTROLS</b>	PRESET, TRACK 1, 2, START/STOP, REC
<b>PEDAL CONTROL</b>	SUSTAIN
<b>OTHER CONTROLS</b>	MASTER VOLUME, BRILLIANCE, DEMO, TRANSPOSE, SPLIT, METRONOME START/STOP, TEMPO/FUNCTION# ▼/▲, FUNCTION, -/NO▼, +/YES▲, LED Display
<b>JACKS/CONNECTORS</b>	OUT PUT: L and R Pin Jacks, L/L+R and R Phone Jacks (Output impedance 600Ω), MIDI IN/OUT, HOST SELECT, TO HOST, PHONES x 2, SUSTAIN, DC IN 12V
<b>POWER SUPPLY</b>	Yamaha PA-3B power adaptor Rated Voltage DC12V Rated Current 700mA
<b>DIMENSIONS (W x D x H)</b>	1347 x 285 x 128 mm (53" x 11-1/4" x 5")
<b>WEIGHT</b>	16.8 kg (37 lbs.)

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### 2. IMPORTANT:

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### 3. NOTE:

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(class B)

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