# **YAMAHA**

# 

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

# Congratulations!

You are the proud owner of a Yamaha PortaTone. Your PortaTone is a high-quality musical instrument that incorporates advanced Yamaha digital technology and many versatile features. In order to obtain maximum performance and enjoyment from your PortaTone, we urge you to read this Owner's Manual thoroughly while trying out the various features described. Keep the Owner's Manual in a safe place for later reference.

## Herzlichen Glückwunsch

Vielen Dank für den Kauf eines Yamaha PortaTone. Bei Ihrem PortaTone handelt es sich um ein hochwertiges Keyboard, das auf der wegweisenden Yamaha Digitaltechnologie basiert und mit zahlreichen praktischen Funktionen aufwartet. Bitte lesen Sie sich zunächst diese Anleitung sorgfältig durch und probieren Sie gleichzeitig die beschriebenen Funktionen aus, damit Sie das großartige Potential dieses Instruments voll ausschöpfen können. Danach sollten Sie diese Anleitung zur späteren Bezugnahme an einem sicheren Ort aufbewahren.

## Félicitations!

Vous voilà à présent le fier propriétaire d'un PortaTone Yamaha. Votre PortaTone est un instrument de musique de très grande qualité incorporant les toutes dernières innovations de la technologie numérique de Yamaha et une très grande variété de fonctions diversifiées. Afin d'obtenir des performances maximales de votre PortaTone et d'en tirer le plus de satisfactions possibles, nous vous conseillons de lire très attentivement ce mode d'emploi tout en essayant les fonctions qui y sont décrites. Comservez le mode d'emploi en lieu sûr afin de pouvoir vous y reporter ultérieurement si besoin est.

# ¡Felicidades!

Usted es ahora un propietario orgulloso de un PortaTone Yamaha. Su PortaTone es un instrumento musical de gran calidad que incorpora la tecnología digital avanzada Yamaha y muchas características versátiles. Para obtener el máximo rendimiento y disfrutar de su PortaTone, le aconsejamos que lea completamente este manual de instrucciones mientras prueba las diversas características que se describen. Guarde el manual de instrucciones en un lugar seguro para futuras referencias.

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# **BEFORE YOU BEGIN**



# **Power Supply**

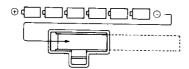
Your PSR-82 or PSR-83 will run either from batteries or an optional power adapter. Follow the instructions below according to the power source you intend to use.

#### Using Batteries (sold separately)

Six 1.5V D size (SUM-1 or R-20) or equivalent batteries must first be installed in the battery compartment.

- Before replacing the batteries, make sure that the power is turned off.
   During battery replacement the memory will be backed up for approximately 1 minute.
- Open the battery compartment cover located on the instrument's bottom panel.
- 2. Insert the six batteries, being careful to follow the polarity markings on the cabinet.
- 3. Replace the compartment cover, making sure that it locks firmly in place.





#### Caution:

- When the batteries run down, replace them with a complete set of six new batteries. NEVER mix old and new batteries.
- 2. Do not use different kinds of batteries at the same time.
- In case electrolyte has leaked into the battery compartment, wipe it off completely before installing new batteries.
- 4. To prevent possible damage due to battery leakage, remove the batteries from the instrument if it is not to be used for an extended period of time.

#### **Auto Power OFF**

To prevent unnecessary battery drainage, the PSR-82/PSR-83 features an Auto Power OFF function that automatically ms the power OFF if the instrument is not used for approximately 10 minutes.

The Auto Power OFF function does not operate when the PSR-82/PSR-83 is powered from an optional AC Power Adaptor, as described below.

## Using An Optional AC Power Adaptor

Plug the DC output cable from an optional Yamaha PA-3, PA-4, or PA-40 AC Power Adaptor into the DC IN jack on the rear panel of the PSR-82/PSR-83, then plug the AC Power Adaptor into a convenient wall AC power socket.

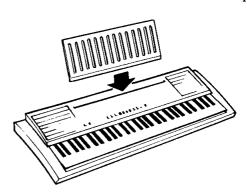
The internal batteries are automatically disconnected when an AC Power Adaptor is used. Disconnect the AC Power Adaptor when not using your PSR-82/PSR-83.



 Use ONLY a Yamaha PA-3, PA-4, or PA-40 AC Power Adaptor to power your instrument from the AC mains. Other adaptors may cause serious damage to your PSR-82/PSR-83.

# **Setting Up the Music Stand**

Insert the bottom edge of the music stand into the slot located at the rear of the PSR-82/PSR-83 control panel.



# Maintenance

#### Location

Avoid exposure to direct sunlight or other sources of heat. Never leave it inside a car where it can get very hot. It may cause discoloration or deformation. Vibration, excessive dust, cold, low or high humidity can also cause malfunction.

#### Handling

Avoid rough handling. Don't drop or jolt the PSR-82/83 as this can damage the internal circuitry. Pressing too hard on keys or controls may lead to malfunctions. When cords are plugged into the rear panel jacks, pay particular attention not to apply excessive force to them since this may damage the terminals.

#### Cleaning

Clean the exterior with a soft, dry cloth. Using chemical solvents will damage the finish.

• Interference Through Electromagnetic Fields
Do not use your PSR -82/83 close to television sets or
other equipment receiving electromagnetic signals as this
could cause interference noise in the other appliance.

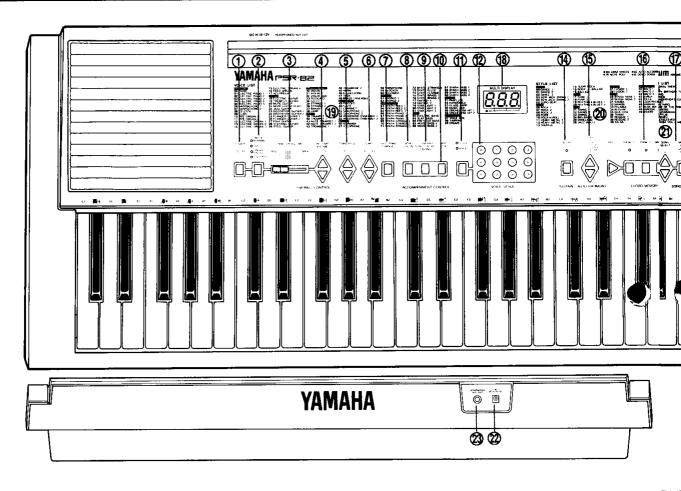
#### Service and Modifications

Your PSR-82/83 contains no user serviceable parts. Opening it or tampering with it in any way can lead to electrical shock as well as damage. Refer all servicing to qualified YAMAHA personnel.

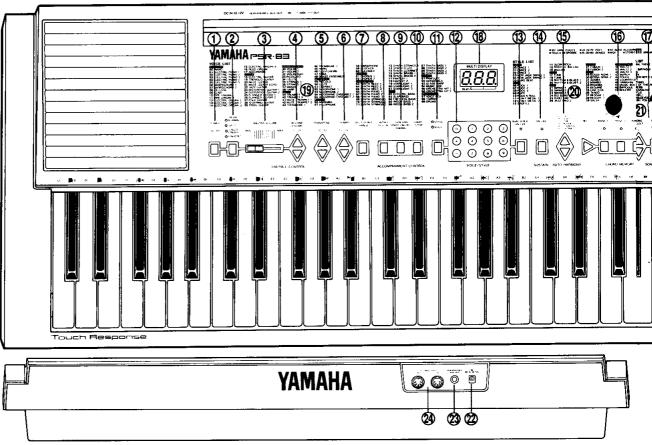
YAMAHA is NOT responsible for damage caused by improper use.

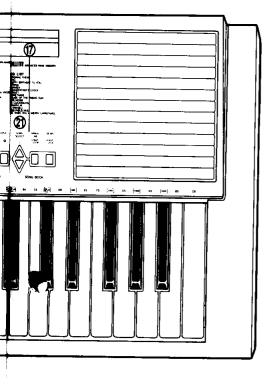
# **NOMENCLATURE**

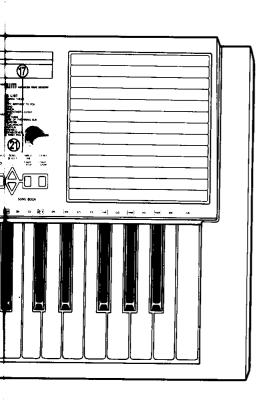
**PSR-82** 



**PSR-83** 







# **Top Panel Controls**

① [POWER] Button	page 4
② [MODE] Button	page 6, 9, 10
③ [MASTER VOLUME] Control	page 4
(4) [ACCOMPANIMENT VOLUME] Buttons	page 8, 10
(5) [TRANSPOSE] Buttons	page 5
(6) [TEMPO] Buttons	page 7, 10, 11
(1) [SPLIT POINT CHANGE] Button	page 6, 9, 10
(8) [INTRO/FILL IN] Button	page 8, 9, 10, 12
(9) [SYNCHRO START/ENDING] Button	page 7, 8, 9, 10, 12
(10) [START/STOP] Button	page 7, 8, 9, 10, 12
(1) [VOICE/STYLE] Button	page 4, 6, 7
12 Numeric VOICE/STYLE Buttons	page 4, 7
(13) [DUAL VOICE] Button (PSR-83 only)	page 5
(4) [SUSTAIN] Button	page 5
(5) [AUTO HARMONY] Buttons	page 11
(16) [CHORD MEMORY] Buttons	page 11, 12, 13
(f) [SONG BOOK] Buttons	page 13, 14
(18) MULTI DISPLAY	page 4 ~ 11, 13
(19) VOICE LIST	page 4
@ STYLE LIST	page 7
② SONG LIST	page 13

# **Rear Panel Connectors**

#### 22 DC IN Jack

The DC output cord from an optional Yamaha PA-3, PA-4, or PA-40 AC Power Adaptor should be plugged in here when the PSR-82 or PSR-83 is to be powered from the AC mains supply (refer to "Power Supply" on page 1 for more details).

#### (2) HEADPHONES/AUX. OUT Jack

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal speaker system is automatically shut off when a pair of headphones is plugged into the HEADPHONES jack. The HEADPHONES/AUX. OUT jack can also be used to deliver the output of the PSR-82/PSR-83 to a keyboard amplifier, stereo sound system, mixing console or tape recorder.

## 2 MIDI IN and OUT Connectors (PSR-83 only)

The MIDI IN connector receives MIDI data from an external MIDI device which can be used to control the PSR-83. The MIDI OUT connector transmits MIDI data generated by the PSR-83 (e.g. note and velocity data produced by playing the keyboard).

More details on MIDI are given in "MOVING UP TO MIDI" on page 14.

# **SELECTING AND PLAYING VOICES**

1. Press the [POWER] button to turn the power ON. The MULTI DISPLAY will light when the power is ON.



POWER

2. Slide the [MASTER VOLUME] control to a position about half way between the "MIN" and "MAX" setting. You can set this control for the most comfortable volume level after you begin playing.



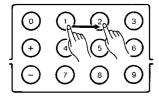
**3.** If the VOICE indicator is not lit, press the [VOICE/STYLE] button once so that it does light. The number of the currently selected voice will appear on the MULTI DISPLAY when the VOICE indicator is lit.



**4.** Select any of the PSR-82/PSR-83's 100 voices by using one of the following methods:

#### Voice Selection Method 1:

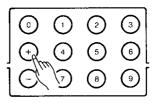
Choose one of the 100 voices — numbered "00" through "99" — shown on the VOICE LIST then enter its number using the numeric VOICE SELECT buttons. To select "ELECTRIC ORGAN 1" (number 12), for example, first press "1" and then "2." The number "12" should then appear on the MULTI DISPLAY.





#### **Voice Selection Method 2:**

The [+] and [-] buttons in the numeric button group can be used to increment (increase by one) or decrement (decrease by one) the current voice number. Press the [+] button briefly to select the voice one number higher than the current voice, or the [-] button to select the voice one number lower than the current voice. If you hold the [+] or [-] button down, the voice number will increment or decrement continuously — simply release the button when the desired voice number has been reached.





- **5.** The selected voice can now be played on the instrument's keyboard.
  - Note that the PSR-83's keyboard is "touch response" that is, you can control the loudness of the sound to a certain degree according to how hard you play the keys. The degree of touch sensitivity is different for each voice.
  - The PSR-82 and PSR-83 feature a maximum polyphony of 28-notes (depending in some cases on the selected voice), so up to 28 notes can be played simultaneously, including extra notes played when the automatic accompaniment, split, or dual voice features of this instrument are used. "Full" will appear on the MULTI DISPLAY if the 28-note limit is exceeded.
  - When the power is initially turned ON, the PIANO voice is automatically selected and its number ("00") is shown on the MULTI DISPLAY.

# **Keyboard Percussion**

When the DRUMS voice is selected (voice number 99), you can play 25 different drum and percussion instruments on the black keys. The percussion instruments played by the various keys are marked by symbols above the black keys (the white keys produce no sound).

 The TRANSPOSE function described on page 5 does not affect the DRUMS sound.

# DRUM & PERCUSSION INSTRUMENT KEY ASSIGNMENTS

Key	Instrument	Symbol	Key	Instrument	Symbol
C#1	BD Reverb	NZ4	G#3	Hi-Hat Foot	
D#1	Bass Drum	NZ.	A#3	Crash Cymbal	<b>1</b> 22
F#1	Bass Tom	В	C#4	Splash Cymbal	**\S
G#1	Lo Tom	<b>B</b> L	D#4	Ride Cymbal	₽¥R
A#1	Mid Tom	<b>3</b> M	F#4	Synth Lo Tom	₹?L
C#2	Hi Tom	<b>₽</b> H	G#4	Synth Mid Tom	R
D#2	Snare Reverb		A#4	Synth Hi Tom	₹æ
F#2	Snare Lo	<b>B</b> L	C#5	Synth Snare	₹∕s
G#2	Snare Hi	Вн	D#5	Voice "One"	ONE
A#2	Snare Open Rim		F#5	Voice "Two"	TWO
C#3	Snare Closed Rim		G#5	Voice "Three"	THREE
D#3	Hi-Hat Closed		A#5	Voice "Four"	FOUR
F#3	Hi-Hat Open				

# **Adjusting the Volume**

Adjust the [MASTER VOLUME] control while playing to set the desired overall volume level.

# **SUSTAIN**

Press the [SUSTAIN] button once (the indicator will light) and notes played on the keyboard will decay gradually after you lift your fingers from the keys. Press the [SUSTAIN] button a second time (the indicator will go out) to turn the sustain effect off.



SUSTAIN

- The SUSTAIN effect cannot be applied to accompaniment or rhythm.
- When the PSR-83 DUAL function is engaged, sustain is applied to both voices
- Sustain can be applied independently to the left- and right-hand voices in the split mode (see "The Split Mode" on page 6). Press a key to the right of the split point to select the right-hand voice, then turn sustain on or off for that voice. Press a key to the left of the split point to select the left-hand voice, then turn sustain on or off for that voice.
- Sustain can be turned on or off for the melody voice during DEMO playback.
- Sustain does not affect voice 97 (VOICE BOX) and voice 99 (DRUMS).

# DUAL (PSR-83 only)

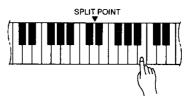
The PSR-83 DUAL feature makes it possible to select and play two different voices simultaneously.

To activate the DUAL feature press the [DUAL ON/OFF] button (the indicator will light). When ON, the voice selected prior to turning the DUAL feature ON will sound simultaneously with a second "dual" voice. When the PSR-83 is initially turned ON, the STAR LIGHT 2 voice (number 80) is assigned as the dual voice. Any other voice can be selected as the dual voice while the DUAL feature is ON.

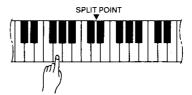
The DUAL feature can be turned OFF by pressing the [DUAL ON/OFF] button again.



• When the DUAL function is used with the SPLIT mode (see page 6) different dual voices can be assigned to the left- and right-hand sections of the keyboard. Press a key to the right of the split point to select the right-hand voice, then turn DUAL on and select the right-hand dual voice. Press a key to the left of the split point to select the left-hand voice, then turn DUAL on and select the left-hand dual voice.









 When the SINGLE FINGER or FINGERED accompaniment mode is selected, the DUAL feature applies only to the right-hand section of the keyboard.

# TRANSPOSE

The PSR-82/PSR-83 [TRANSPOSE] buttons makes it possible to shift the pitch of the entire keyboard up or down in semitone intervals up to a maximum of 12 semitones (one octave). Transposing the pitch of the PSR-82/PSR-83 keyboard makes it easier to play in difficult key signatures, and you can simply match the pitch of the keyboard to the range of a singer or other instrumentalist.

The TRANSPOSE [ $\blacktriangle$ ] and [ $\blacktriangledown$ ] buttons are used for transposition. The first time the TRANSPOSE [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] button is pressed the current transpose value will appear on the MULTI DISPLAY. While the current transpose value is still showing on the display, press the TRANSPOSE [ $\blacktriangle$ ] button to increase the pitch of the keyboard, or the [ $\blacktriangledown$ ] button to lower the pitch. The selected degree of transposition will be displayed on the MULTI DISPLAY while the TRANSPOSE [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] button is pressed, and for approximately 2 seconds after either TRANSPOSE button is released.

The transposition range is from -12 to +12, with -12 corresponding to downward transposition by 12 semitones (one octave, and +12 corresponding to upward transposition by 12 semitones. 0 is the "normal" keyboard pitch value. The normal transpose value (0) can be recalled at any time by pressing both the TRANSPOSE  $[\blacktriangle]$  and  $[\blacktriangledown]$  buttons at the same time.

-15.75







 The transpose value is automatically set to 0 whenever the power switch is turned ON.

# THE SPLIT MODE

The PSR-82/PSR-83 SPLIT mode allows you to play two voices at once — one with the left hand and one with the right. The left-hand voice can be played to the left of the "split point," set as described below, and the right-hand voice can be played to the right of the split point.

 Press the [MODE] button as many times as necessary until the SPLIT indicator lights — this selects the SPLIT mode.



**2.** If necessary, set the split point as described below:

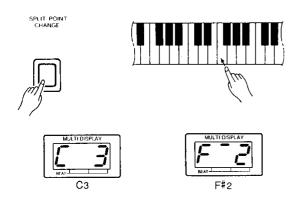
#### **Setting the SPLIT Mode Split Point:**

The split point for the SPLIT mode is initially set at the C3 key. It can be set to any other key by pressing the desired split-point key while holding the [SPLIT POINT CHANGE] button.

The split point is shown on the MULTI DISPLAY for as long as the [SPLIT POINT CHANGE] button is held. The C3 key, for example, would be displayed as "C 3". F#2 would be displayed as "F"2". The sharp is indicated by the lit bar between the "F" and the "2."

The SPLIT mode split point is retained in memory and will be recalled whenever the SPLIT mode is selected.

Note that the split-point key is included in the <u>right-hand</u> section of the keyboard.



 To initialize the split point to its original default value, turn the [POWER] button on while holding the [SPLIT POINT CHANGE] button. The SINGLE FINGER and FINGERED split points (described later) are also initialized by this procedure.

- 3. Select the right-hand and left-hand voices as required.

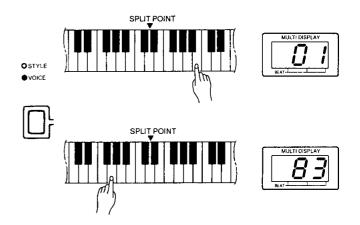
  When the SPLIT mode is first selected the current voice is assigned to the right-hand keys. If no other left-hand voice has been selected since the PSR-82/PSR-83 was turned ON, the ELECTRIC BASS voice (number 82) will be assigned to the left-hand keys.
  - The left-hand voice is octave-shifted to provide the best sound in the left-hand range.

# Changing the Right and Left-hand Voices:

Make sure the [VOICE/STYLE] button VOICE indicator is lit (press the [VOICE/STYLE] button once if it isn't).

To change the right-hand voice press a key to the right of the split point. The current right-hand voice number will be shown on the MULTI DISPLAY and a new righthand voice can be selected in the normal way.

To change the left-hand voice press a key to the left of the split point. The current left-hand voice number will be shown on the MULTI DISPLAY and a new left-hand voice can be selected in the normal way.



• When playing in the SPLIT mode, the MULTI DISPLAY will switch between the left- and right-hand voice numbers according to whether notes are played on the left- or right-hand section of the keyboard. The PSR-83 DUAL indicator flashes according to the left- and righthand section DUAL mode settings when the SPLIT and DUAL modes are used together.

# RHYTHM ACCOMPANIMENT

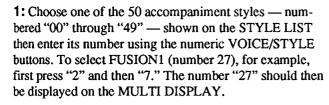
# Selecting an Accompaniment Style

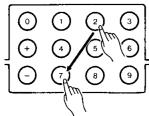
1. If the STYLE indicator is not lit, press the [VOICE/STYLE] button once so that it does light. The number of the currently selected style will appear on the MULTI DISPLAY when the STYLE indicator is lit.





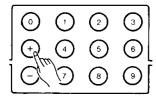
2. Select any of the PSR-82/PSR-83's 50 accompaniment styles by using one of the two following methods:







2: The [+] and [-] buttons in the VOICE/STYLE group can be used to increment (increase by one) or decrement (decrease by one) the current accompaniment style number. Press the [+] button briefly to select the accompaniment style one number higher than the current accompaniment style, or the [-] button to select the accompaniment style one number lower than the current accompaniment style. If you hold the [+] or [-] button down, the accompaniment style number will increment or decrement continuously — simply release the button when the desired accompaniment style number has been reached.



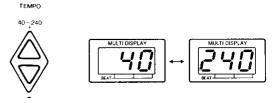


 When the power is initially turned ON, the 00 DANCE1 style is automatically selected.

# **Setting the Tempo**

The first time the TEMPO [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] button is pressed the current tempo will appear on the MULTI DISPLAY. While the current tempo value is still showing on the display, press the TEMPO [ $\blacktriangle$ ] button to increase the tempo, or the TEMPO [ $\blacktriangledown$ ] button to decrease the tempo. The selected tempo will be displayed on the MULTI DISPLAY (in quarter-note beats per minute) while the TEMPO [ $\blacktriangle$ ] or [ $\blacktriangledown$ ] button is pressed, and for approximately 2 seconds after either TEMPO button is released.

The available tempo range is from 40 to 240 beats per minute. Each accompaniment style has a different "default" tempo which is automatically set whenever a new style is selected (but not when a new style is selected while the accompaniment is playing). The default tempo for the currently selected accompaniment style can be recalled at any time by pressing both the TEMPO [▲] and [▼] buttons at the same time.



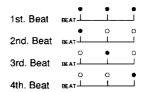
- The tempo is automatically set to the default value for the DANCE1 style whenever the power switch is turned ON.
- It is also possible to adjust the tempo after starting playback of the accompaniment. This allows you to set the optimum tempo by ear.

# Starting the Accompaniment

Press the [START/STOP] button to start the selected accompaniment immediately, or press the [SYNCHRO START/END-ING] button if you want the accompaniment to start when you play the first note on the keyboard. If you press the [SYNCHRO START/ENDING] button, the three dots along the bottom of the MULTI DISPLAY will flash at the selected tempo.



• The three LED dots at the bottom of the MULTI DISPLAY provide a visual indication of the selected tempo as follows:



- If neither the FINGERED or SINGLE FINGER mode is selected, the accompaniment will consist only of rhythm (drums & percussion) sounds. Operation of the AUTO ACCOMPANIMENT SINGLE FINGER and FINGERED modes is described on page 9 and 10.
- A different accompaniment style can be selected at any time while the accompaniment is playing. The style number display will change as soon as the selection is made, but the new style will begin playback from the top of the next measure. The tempo will not change when the new style begins playing.

# Starting the Accompaniment with an Introduction

Any of the PSR-82/PSR-83 accompaniment patterns can be started with an appropriate introduction by pressing the [INTRO/FILL IN] button. The intro pattern will repeat as long as the [INTRO/FILL IN] button is held. Once the button is released, the normal pattern will begin playing from the top of the next measure.



# **Adding Fill-ins**

To add a short fill-in (rhythm variation) at any time while the accompaniment is playing, press the [INTRO/FILL IN] button. If you hold the [INTRO/FILL IN] button, the fill-in pattern will repeat until the button is released, then the normal rhythm will begin from the beginning of the next measure.



 If the [INTRO/FILL IN] button is pressed within one 1/4 beat from the beginning of a beat, the fill in will begin immediately. If pressed at any other time the fill in will begin on the beginning of the next beat.

# Stopping the Accompaniment

An accompaniment in progress can be stopped immediately by pressing the [START/STOP] button, or it can be stopped with an appropriate ending by pressing the [SYNCHRO START/ENDING] button.



- If the [SYNCHRO START/ENDING] button is pressed within one 1/4 beat from the beginning of a measure, the ending will begin immediately. If pressed at any other time the ending will begin on the beginning of the next measure.
- If the [INTRO/FILL IN] button is pressed while the ending pattern is playing, a fill-in will be played, followed by a return to the normal pattern.

# Adjusting the Accompaniment Volume

Although the MASTER VOLUME control can be used to set the overall volume level, the ACCOMPANIMENT VOLUME [▲] and [▼] buttons can be used to adjust the volume of the selected accompaniment in relation to the right-hand melody voice. The first time the ACCOMPANIMENT VOLUME [▲] or [▼] button is pressed the current volume will appear on the MULTI DISPLAY. While the current volume is still showing on the display, press the ACCOMPANIMENT VOLUME [▲] button to increase the volume, or the [▼] button to decrease the volume. The selected volume level will be displayed on the MULTI DISPLAY while the volume is being adjusted, and for approximately 2 seconds after either VOLUME button is released.

The volume range is from 0 to 24, with 0 being the lowest volume and 24 the highest. The default accompaniment volume value (21) can be recalled at any time by pressing both the ACCOMPANIMENT VOLUME  $[\blacktriangle]$  and  $[\blacktriangledown]$  buttons at the same time.





 The accompaniment volume is automatically set to 21 whenever the power switch is turned ON.

# **AUTO ACCOMPANIMENT**

The PSR-82/PSR-83 includes a sophisticated Auto accompaniment system that can provide automated bass and chordal backing in a number of ways.

 The maximum number of notes that can be played simultaneously on the PSR-82/PSR-83 keyboard is reduced when the Auto Accompaniment feature is used.

# Single Finger Accompaniment

SINGLE FINGER accompaniment makes it simple to produce beautifully orchestrated accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys in the left-hand section of the keyboard. The bass and chord accompaniment produced is perfectly matched to the currently selected accompaniment style.

• Press the [MODE] button as many times as necessary until the SINGLE FINGER indicator lights — this selects the SINGLE FINGER mode.



**2.** If necessary, set the split point as described below:

Setting the SINGLE FINGER Mode Split Point:

The split point for the SINGLE FINGER mode is initially set at the D2 key. It can be set to any other key by pressing the desired split-point key while holding the [SPLIT POINT CHANGE] button.

The split point is shown on the MULTI DISPLAY for as long as the [SPLIT POINT CHANGE] button is held. The D2 key, for example, would be displayed as "d 2". F#2 would be displayed as "F-2". The sharp is indicated by the lit bar between the "F" and the "2."

The SINGLE FINGER mode split point is retained in memory and will be recalled whenever the SINGLE FINGER mode is selected. A method of initializing the SINGLE FINGER mode split point to its original default value is described on page 6.



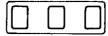




F#2

- **3.** Select the desired accompaniment style in the normal way. Although you can select the melody (upper keyboard) voice you intend to use, the PSR-82/PSR-83 automatically determines the voices to be used for the accompaniment part according the accompaniment style you select.
- 4. Press the [START/STOP] button, [SYNCHRO START/ENDING] button or the [INTRO/FILL IN] buttons to determine how the accompaniment will be started (see page 7). If you press the [START/STOP] button or the [INTRO/FILL IN] button, the rhythm will begin playing immediately without bass and chord accompaniment.

INTRO/ SYNCHRO START
FILL IN START ON-OFF/ STOP
ENDING



**5.** Press any key to the left of the split point to start the automatic accompaniment. If you press a "C" key, for example, a C-major accompaniment will be played. Press another key in the left-hand section of the keyboard to select a new chord. The key you press will always determine the "root" of the chord played (i.e. "C" for a C chord).



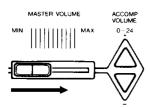
Playing Minor, Seventh, and Minor-seventh Chords in the Single-finger Mode



- For a minor chord, press the root key and a black key to its left.
- For a seventh chord, press the root key and a white key to its left.
- For a minor-seventh chord, press the root key and both a white and black key to its left.
- The automatic accompaniment will continue playing even if you lift your fingers from the Auto Accompaniment keys. You only need to press the Auto Accompaniment keys when changing cords.
- **6.** Press the [START/STOP] button or the [SYNCHRO START/ENDING] button to stop the Accompaniment.

# Setting the Accompaniment Volume

Set the volume of the Auto Accompaniment sound using the ACCOMPANIMENT VOLUME buttons. The MASTER VOLUME control can be used to set the overall volume level.



# **Setting the Tempo**

Use the TEMPO buttons to set the desired accompaniment tempo (see "Setting the Tempo" on page 7 for details).

The [INTRO/FILL IN] button can be used in the Auto Accompaniment mode to create pattern variations in the same way that it is with rhythm accompaniment patterns (refer to "Adding Fill-ins" on page 8 for details).

# **Fingered Accompaniment**

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

1. Press the [MODE] button as many times as necessary until the FINGERED indicator lights — this selects the FINGERED mode.



**2.** If necessary, set the split point as described below:

## **Setting the FINGERED Mode Split Point:**

The split point for the FINGERED mode is initially set at the G2 key. It can be set to any other key by pressing the desired split-point key while holding the [SPLIT POINT CHANGE] button.

The split point is shown on the MULTI DISPLAY for as long as the [SPLIT POINT CHANGE] button is held. The G2 key, for example, would be displayed as "g 2". F#2 would be displayed as "F-2". The sharp is indicated by the lit bar between the "F" and the "2."

The FINGERED mode split point is retained in memory and will be recalled whenever the FINGERED mode is selected. A method of initializing the FINGERED mode split point to its original default value is described on page 6.



- The PSR-82/83 memorizes separate SINGLE FINGER, FIN-GERED, and SPLIT mode split points. The corresponding split point is automatically recalled when one of these modes is selected.
- 3. Select the desired accompaniment style in the normal way. Although you can select the melody (upper keyboard) voice you intend to use, the PSR-82/PSR-83 automatically determines the voices to be used for the accompaniment part according the accompaniment style you select.
- **4.** Press the [START/STOP] button, [SYNCHRO START/ENDING] button or the [INTRO/FILL IN] buttons to determine how the accompaniment will be started (see page 7). If you press the [START/STOP] button or the [INTRO/FILL IN] button, the rhythm will begin playing immediately without bass and chord accompaniment.
- 5. As soon as you play any chord in the Auto Accompaniment section of the keyboard, the PSR-82/PSR-83 will automatically begin to play the chord along with the selected rhythm and an appropriate bass line. The accompaniment will continue playing even if you release the Auto Accompaniment keys.

The PSR-82/PSR-83 will accept the following chord types (see fingering chart on page 73):

Chord	<b>Abbreviation</b>	Normal Voicing
Major	М	1-3-5
Minor	m	1-▶3-5
Major seventh	M7	1-3-(5)-7
Minor major seventh	mM7	1-43-(5)-7
Minor sixth	m6	1-b3-5-6
Minor seventh	m7	1-63-(5)-67
Minor seventh flatted fifth	m7-5	1-63-65-67
Seventh	7	1-3-(5)-47
Seventh flatted fifth	7-5	1-3-65-67
Seventh suspended fourth	7sus4	1-4-5-67
Suspended fourth	sus4	1-4-5
Augmented	aug	1-3-#5
Diminished	dim	1-43-45-(6)

· Notes in parentheses may be omitted.

Minor sixth chords will only be properly detected if they are played in "root position". Seventh flatted fifth chords will only be recognized if either the root or flatted seventh is the lowest note. For diminished and augmented chords, the lowest key pressed is assumed to be the root.

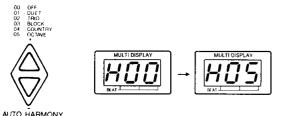
- An octave i.e. two notes played exactly one octave apart will be detected as a chord suitable for major or minor, with the note played as the root note.
- All other FINGERED mode operations are the same as in the SINGLE FINGER mode.

# **AUTO HARMONY**

This sophisticated feature automatically adds appropriate harmony notes to a melody you play on the keyboard. You can choose from 5 different types of harmony.

- Only a single note can be played at a time on the keyboard (or the right-hand section of the keyboard when in the SPLIT mode) when the AUTO HARMONY feature is used.
- 1. Use the [AUTO HARMONY] buttons to select a harmony type between "01" and "05."

The first time the AUTO HARMONY  $[ \Delta ]$  or  $[ \nabla ]$  button is pressed the current harmony type number will appear on the MULTI DISPLAY. While the current harmony type is still showing on the display, press the AUTO HARMONY  $[ \Delta ]$  button briefly to increment (increase by one) the harmony type number, or the  $[ \nabla ]$  button to decrement (decrease by one) the harmony type number. Holding either button causes continuous incrementing or decrementing. The selected harmony type number will be shown on the MULTI DISPLAY while the [AUTO HARMONY]  $[ \Delta ]$  or  $[ \nabla ]$  button is pressed (the letter "H" will appear before the harmony type number).



## PSR-82/PSR-83 Harmony Types

- 00 OFF
- 01 DUET
- 02 TRIO
- 03 BLOCK
- 04 COUNTRY
- 05 OCTAVE
- The OFF setting can be selected at any time by pressing both the [AUTO HARMONY] buttons simultaneously.

# **2.** Play.

- In the SINGLE FINGER or FINGERED mode, the left-hand chords determine the harmony notes that will be applied to the right-hand melody.
- In the NORMAL mode, all harmony is based on a C major chord.
- If AUTO HARMONY is used at the same time as the SPLIT feature (see page 6), harmony will be not be applied to the lefthand voice. Left-hand chord fingerings are used to determine the harmony applied to the right-hand voice. Usable fingerings are the same as for the FINGERED mode.
- If AUTO HARMONY is used at the same time as the DUAL feature (see page 5), harmony will be not be applied to the second "dual" voice.
- If the synchro start mode is turned off by pressing the {SYNCHRO START/ENDING} button prior to playing, right-hand melody and harmony without accompaniment can be produced but the left-hand chords will still have to be fingered to produce the appropriate harmony.

# THE CHORD MEMORY

The PSR-82/PSR-83 CHORD MEMORY allows you to "record" and play back chord sequences created using the Auto Accompaniment feature. You can record a complete accompaniment part, for example, and then play along with it using both hands — you're free to use the entire keyboard for your performance rather than being limited to only the upper keyboard area.

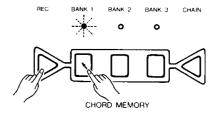
The CHORD MEMORY also has three separate "banks" that can be used to record different accompaniments. The banks can be "chained" — i.e. they will play back in any specified order. This allows you to record a verse and chorus in different banks, for example, then "chain" them in the desired order for playback.

- Chord sequences containing a maximum of 60 different chords can be recorded in each bank.
- Material recorded using the CHORD MEMORY is retained in memory even when the POWER switch is turned OFF (if batteries are present).

# Recording

- 1. Pick out an accompaniment style that is appropriate for the type of music you want to record.
- 2. Press the [BANK 1], [BANK 2], or [BANK 3] button while holding the CHORD MEMORY [REC] button. This engages the "record ready" mode for the selected bank. The bank indicator will flash, the metronome will sound, and the three dots along the bottom of the MULTI DIS-PLAY will flash at the currently selected tempo. Press the [REC] button again if you want to disengage the record ready mode and perform some other function.

If the NORMAL or SPLIT mode is selected, the FIN-GERED mode is automatically selected when the record ready mode is engaged. If the FINGERED or SINGLE FINGER mode is selected, no change occurs.



**3.** Before actually beginning to record, you should set a tempo that will be easy to record at using the [TEMPO] buttons.

## THE CHORD MEMORY

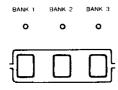
**4.** Recording will begin as soon as you play a chord on the left-hand section of the keyboard (SYNCHRO START operation).

Recording can also be started by pressing the [START/STOP] or [INTRO/FILL IN] button. In this case on the rhythm will begin without bass and chord accompaniment until you play the first chord on the left-hand section of the keyboard.

- **5.** Play the required chords.
- **6.** Press either the [START/STOP] button or the [SYNCHRO START/ENDING] button to stop recording.
- Events recorded by the chord memory are: Style Number, Chord Timing, Chords, Intro, Fill In, Ending.
- Whenever you record using the CHORD MEMORY, any previously recorded material in the same bank will be erased.
- If you make a mistake while recording, simply press the [START/ STOP] button and begin again from step 2, above.
- If the AC power adaptor is disconnected with no batteries inserted, the contents of the memory will be lost.
- If the chord memory becomes full while recording, "End" will appear on the MULTI DISPLAY.

# Bank Playback

1. Press the [BANK 1], [BANK 2], or [BANK 3] button to begin playback of that bank. If you press a different BANK button during playback, playback of the newly selected bank will begin from the top of the next measure.



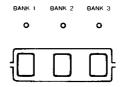
- **2.** Play along on the PSR-82/PSR-83 keyboard if you like. You can also add fill-ins using the [INTRO/FILL IN] button, or change the tempo during playback.
- 3. Playback will stop automatically when the end of the recorded sequence is reached if the [SYNCHRO START/ENDING] button was used to stop recording, otherwise the chord sequence will be repeated until stopped by either the [START/STOP] or [SYNCHRO START/ENDING] button.

# Chain Playback

 Press the [CHAIN] button while playback is stopped to engage the "chain ready mode." You can disengage the chain ready mode by pressing the [CHAIN] button again.



2. Press the [BANK 1], [BANK 2], and [BANK 3] buttons in the order that you want them to play back — up to 8 steps can be programmed. A synthesized voice will announce the order of the programmed banks each time a BANK button is pressed. The voice will stop if you attempt to program more than 8 steps.

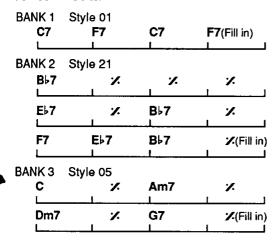


- **3.** Press the [START/STOP] button to begin chain playback.
- **4.** Playback will stop automatically when an ending is encountered (i.e. the [SYNCHRO START/ENDING] button was used to stop recording), otherwise the entire chain will be repeated until stopped by either the [START/STOP] or [SYNCHRO START/ENDING] button.
- A previously recorded chain can be played simply by pressing the [CHAIN] button and then the [START/STOP] button.
- The contents of the CHAIN memory is retained even when the power is turned off.

## **Initial Data**

When the PSR-82/83 is initially shipped, the Chord Memory BANKs contain the following data:

#### Initial bank data



The CHAIN is initial set up as follows:

#### Initial chain data

| BANK 1 | BANK 2 | BANK 3 |

The BANK data can be recalled at any time by turning the [POWER] button on while holding the button of the desired [BANK]. The CHAIN data can be recalled by turning the [POWER] button on while holding the [CHAIN] button.

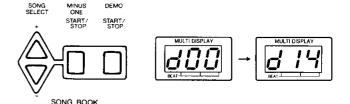
# **SONG BOOK**

# **Enjoy the Demonstration**

To give you an idea of the PSR-82/PSR-83's sophisticated capabilities, it is programmed with 15 demonstration songs that you can select and play.

1. Use the [SONG SELECT] buttons to select a song number between "00" and "14."

The first time the [▲] or [▼] button is pressed the current song number will appear on the MULTI DISPLAY. While the current song number is still showing on the display, press the SONG SELECT [▲] button briefly to increment (increase by one) the song number, or the [▼] button to decrement (decrease by one) the song number. Holding either button causes continuous incrementing or decrementing. The selected song number will be shown on the MULTI DISPLAY while the SONG SELECT [▲] or [▼] button is pressed — "d" appears before the demonstration song number.



#### PSR-82/PSR-83 Demo Song List

00	ORIGINAL THEME
01	SING
02	HAPPY BIRTHDAY TO YOU
03	SPRING
04	CARMEN
05	GRANDFATHER'S CLOCK
06	MINUET
07	SOMETHING
08	HOUSE OF THE RISING SUN
09	EDELWEISS
10	LA CUCARACHA
11	AMARYLIS
12	O,VRENELI
13	GREENSLEEVES
14	WE WISH YOU A MERRY CHRISTMAS

**2.** Press the [DEMO START/STOP] button to start demo playback.

The demonstration will play continuously until the [DEMO START/STOP] button is pressed again.

 A different melody voice, tempo, transposition, or melody effect parameter (sustain, harmony, or dual on the PSR-83) can be selected at any time while the demonstration is playing. Refer to the appropriate sections of this manual for instructions.

## Music-minus-one

This is a feature that plays the accompaniment to a selected tune while you play a melody or ad-lib phrases on the keyboard. The tunes are the same as the demo tunes, and are selected in the same way.

1. Use the [SONG SELECT] buttons to select a song number between "00" and "14."

Press the  $[\blacktriangle]$  button briefly to increment (increase by one) the song number, or the  $[\blacktriangledown]$  button to decrement (decrease by one) the song number. Holding either button causes continuous incrementing or decrementing. The selected song number will be shown on the MULTI DISPLAY while the SONG SELECT  $[\blacktriangle]$  or  $[\blacktriangledown]$  button is pressed.

- 2. Press the [MINUS ONE START/STOP] button to start playback of the selected song without the melody line.
  - When Minus One playback begins, the same voice as for the corresponding demo melody is selected. The DUAL setting and harmony type are also the same.
- **3.** Play along on the keyboard.
  - Only the NORMAL and SPLIT modes can be used during minus-one playback. The NORMAL mode will automatically be selected if FINGERED or SINGLE FINGER is engaged when minus-one playback is started.
- **4.** Playback will continue until the [MINUS ONE START/ STOP] button is pressed again.
  - If you press the [DEMO START/STOP] button during minus-one playback, the melody part will reappear and playback will continue in the DEMO mode.

On the other hand, if you press the [MINUS ONE START/ STOP] button during demo playback, the melody part will be muted and playback will continue in the MINUS ONE mode.

 The following functions can be used during minus-one playback:

SPLIT
DUAL
VOICE selection
SUSTAIN
TEMPO
ACCOMPANIMENT VOLUME
TRANSPOSE
SPLIT POINT CHANGE
AUTO HARMONY (applies to notes played on the keyboard)

 The "Demo Tunes" of this keyboard are "Demonstration" purposes only. It may not be possible to reproduce the "Demo Tunes" 100% manually.

# **MOVING UP TO MIDI**

# A Brief Introduction to MIDI

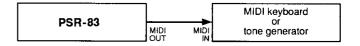
MIDI, the Musical Instrument Digital Interface, is a world-standard communication interface that allows MIDI-compatible musical instruments and equipment to share musical information and control one another. This makes it possible to create "systems" of MIDI instruments and equipment that offer far greater versatility and control than is available with isolated instruments.

# The PSR-83 MIDI Connectors

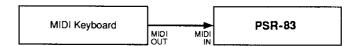
The PSR-83 MIDI IN connector receives MIDI data from an external MIDI device which can be used to control the PSR-83. The MIDI OUT connector transmits MIDI data generated by the PSR-83 (e.g. note and velocity data produced by playing the keyboard).

# Simple MIDI Control

Most MIDI keyboards (including the PSR-83, 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 PSR-83 also transmits "program change" data when one of its voices is selected. Depending on how the receiving device is set up, the corresponding voice will be automatically selected on the receiving keyboard or tone generator whenever a voice is selected on the PSR-83.

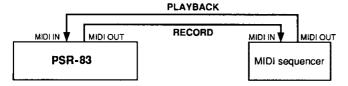


The PSR-83 is capable of receiving the same MIDI data, so a second MIDI keyboard connected to the PSR-83 MIDI IN connector can be used to remotely play the PSR-83 and select voices as required.



# **MIDI Sequence Recording**

The same type of musical information transfer described above is used for MIDI sequence recording. A MIDI sequence recorder can be used to "record" MIDI data received from a PSR-83, for example. When the recorded data is played back, the PSR-83 automatically "plays" the recorded performance in precise detail.





## The Remote Control Mode

The Remote Control mode should be used when the PSR-83 is to be connected to a second keyboard which it is to control. If the PSR-83 is being used as the receiving device, it can be played from an external keyboard while the panel controls — including auto accompaniment — operate normally.

#### ■ Remote Control Mode Selection

The Remote Control mode is automatically selected whenever the PSR-83 is turned ON. If the Multi Voice Mode has been selected (see below), however, the Remote Control mode can be re-selected by pressing the numeric VOICE/STYLE [0] button while holding the CHORD MEMORY [REC] button. "rc" will appear on the display.



#### ■ Remote Control Mode Reception

The following points apply to MIDI data received by the PSR-83 in the Remote Control mode.

- MIDI start messages control PSR-83 rhythm, chord memory record start, and chain play start in the same way as the panel [START/STOP] button.
- MIDI stop messages have the same effect as pressing the panel [START/STOP] button when a function is running.
- OMNI ON means that reception can occur simultaneously on all available channels (1 through 16). When a single receive channel is selected, reception only occurs on the specified channel.
- In addition to note and velocity data, the PSR-83 responds to program change, sustain ON/OFF, start, stop, and MIDI clock messages.
- Transpose settings affect received MIDI note numbers.

- If the TEMPO [▲] or [▼] button is pressed during external sync mode is engaged, "EC" (External Clock) will appear on the display.
- External synchronization is automatically selected when MIDI clock is received. If the external MIDI clock data is not received, internal clock operation is automatically resumed.
- · Velocity sensitivity is dependent on the selected voice.
- \*Refer to the Remote Control Mode "MIDI Implementation Chart" on page 88 for more details.

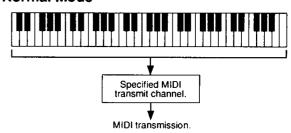
#### ■ Remote Control Mode Transmission

The following points apply to MIDI data transmitted by the PSR-83 in the Remote Control mode.

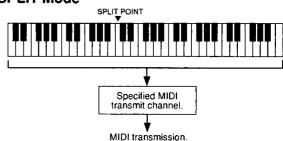
- Transmitted note numbers are not affected by the Transpose setting.
- In the NORMAL or SPLIT mode, all keyboard data is transmitted via the specified MIDI transmit channel. When the FINGERED or SINGLE FINGER mode is used, only MIDI data corresponding to notes played on the right-hand section of the keyboard is transmitted via the MIDI OUT connector on the specified MIDI transmit channel

#### Remote Control Mode MIDI Transmission

Normal Mode

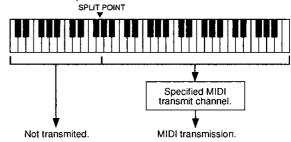


SPLIT Mode



Data from the left- and right-hand sections of the keyboard is mixed and transmitted over the same MIDI channel.

# • FINGERED, SINGLE FINGER Mode



Data from the left-hand section of the keyboard is not transmitted.

# MOVING UP TO MIDI (PSR-83 only)

- The MIDI program change number corresponding to the number of the selected voice is transmitted when a voice is selected.
- A MIDI START message is transmitted whenever the rhythm or accompaniment is started, and a MIDI STOP message is transmitted whenever the rhythm or accompaniment is stopped. The same applies to demo and chord memory start/stop operations.
- Accompaniment style, demo, chord memory, and transpose data is not transmitted.
- \*Refer to the Remote Control Mode "MIDI Implementation Chart" on page 88 for more details.

## The Multi Mode

The Multi mode should be used when the PSR-83 is to be used as a tone generator, for example, receiving data from a second MIDI device (such as a sequencer). In this mode the PSR-83 can receive on multiple MIDI channels, each channel corresponding to a different voice. The PSR-83 panel controls will not function when the Multi mode is selected.

#### **■** Multi Mode Selection

If the Remote Control mode is currently selected, the Multi mode can be re-selected by pressing the numeric VOICE/STYLE [0] button while holding the CHORD MEMORY [REC] button. "|\_I" will appear on the display.



#### ■ Multi Mode Reception

In the Multi mode the PSR-83 functions as a multitimbre tone generator, allowing different voices to played on all 16 MIDI channels (channel 16 is reserved for rhythm only). Since the PSR-83 employs the Yamaha Dynamic Voice Allocation system, it is not necessary to specify the number of notes that can be played via each channel. A maximum of 28 notes can be played simultaneously via all channels.

- MIDI note and velocity messages received on a MIDI channel will affect only the voice selected for that channel.
- Velocity sensitivity for each voice is set to a dynamic range of 48 dB linear.
- SUSTAIN ON/OFF messages are ignored.
- A program change number will select the voice controlled via the channel on which it is received. The new voice number is shown on the display for approximately 2 seconds. The program change number is the same as the voice number (00 — 99).
- · Program change messages on channel 16 are ignored.
- · MIDI start, stop, and clock data will be ignored.
- \*Refer to the Multi Mode "MIDI Implementation Chart" on page 89 for more details.

#### **■ Multi Mode Transmission**

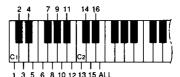
The default transmit channel in the Multi mode is the same as that in the Remote Control mode, and can be set via the same procedure (see below). The transmitted data is also the same as in the Remote Control mode, except that no MIDI start/stop message transmission occurs.

- Keyboard note ON/OFF data is transmitted via the specified MIDI transmit channel, but the internal tone generator does not sound (LOCAL OFF).
- The transmitted note numbers are not affected by the instrument's TRANSPOSE setting.
- When a new voice is selected, the corresponding MIDI program change message is transmitted on the specified MIDI transmit channel. The internal voice assigned to that transmit channel will also change accordingly. The program change number is the same as the voice number.
- The channel-16 program change number will not be transmitted.
- \* Refer to the Multi-mode MIDI Implementation Chart" or page 89 for more details.

# MIDI Receive Channel Selection

Press the numeric VOICE/STYLE [2] button while holding the CHORD MEMORY [REC] button. The current MIDI receive channel number or "ALL" will appear on the display. While still holding the [REC] button press the key corresponding to the desired receive channel (C1 ... E2), confirm that the desired channel has been selected on the MULTI DISPLAY, then release the [REC] button. The E2 key selects the OMNI ON mode — "ALL" appears on the display.

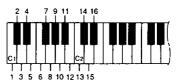
The receive channel setting only applies in the remote control mode.



# MIDI Transmit Channel Selection

Press the numeric VOICE/STYLE [1] button while holding the CHORD MEMORY [REC] button. The current MIDI transmit channel number will appear on the display. While still holding the [REC] button press the key corresponding to the desired transmit channel (C1 ... Eb2), confirm that the desired channel has been selected on the MULTI DISPLAY, then release the [REC] button.

The transmit channel is automatically set to channel 1 and the receive channel is automatically set to OMNI ON when the power is initially turned ON.



## If MIDI note numbers higher than C#6 are received when the DRUMS voice is selected (in either the Remote Control or Multi mode), the corresponding percussion sounds are produced.

C#6 = Voice "Five" D#6 = Voice "Six" F#6 = Voice "Seven" G#6 = Voice "Eight" A#6 = Click Lo

C#7 = Click Hi

 Data received via the MIDI IN connector is not retransmitted via the MIDI OUT connector (i.e, no echo-back) in either the Remote Control or Multi mode.

# **TROUBLESHOOTING**

Something not working as it should? In many cases what appears to be a malfunction can be traced to a simple error that can be remedied immediately. Before assuming that your PSR-82/PSR-83 is faulty, please check the following points.

## 1. PROBLEM

 The PSR-82/PSR-83 speakers produce a "pop" sound whenever the power is turned ON or OFF.

#### CHECK

· This is normal and is no cause for alarm.

## 2. PROBLEM

· No sound.

#### CHECK

 Are the MASTER VOLUME control and accompaniment volume levels turned up high enough?

## 3. PROBLEM

· Rhythm won't start or no rhythm sound.

#### CHECK

- · Is the accompaniment volume turned up high enough?
- · Are you sure you pressed the START button?
- Perhaps the PSR-82/PSR-83 is in the SYNCHRO START mode, so all you have to do is start playing.

## 4. PROBLEM

 Auto accompaniment won't function. No lower keyboard sound.

#### CHECK

- Auto accompaniment won't function if the FINGERED mode is selected and you're using SINGLE FINGER type fingering or improper chord fingering.
- Are you sure you're playing in the left-hand section of the keyboard when the FINGERED or SINGLE FIN-GER mode is selected?
- The left-hand section of the keyboard will produce no sound if synchro start is disengaged in the FINGERED or SINGLE FINGER mode.

### 5. PROBLEM

· The accompaniment key changes while you're playing.

#### CHECK

 Perhaps you accidentally pressed a key in the left-hand range.

# 6. PROBLEM

Auto accompaniment chords don't seem to change properly.

#### CHECK

 Are you playing chords that the PSR-82/PSR-83 can recognize (see fingering chart on page 73)?

### 7. PROBLEM

The sound is distorted or intermittent.

#### CHECK

 In this case, your batteries are probably flat and need replacement.

# TROUBLESHOOTING

#### 8. PROBLEM

· Sustain produces little or no effect.

• The sustain effect may not sound as deep as it normally does when used during accompaniment or demo playback. This is normal.

### 9. PROBLEM

· Abnormal operation not listed above. Complete lack of control.

#### **CHECK**

- The internal microprocessor may have been "locked up" due to static electricity or other causes. Turn the instrument OFF for a minute or so, then turn it ON again.
- If the power can not be turned off by using the [POWER] button, remove the batteries and/or unplug the AC power adaptor.

# **SPECIFICATIONS**

## Keyboard:

61 keys (C1-C6). PSR-83 has touch response.

#### Voices:

100 voices

#### Accompaniment styles:

50 styles

#### Song Book:

15 songs

#### Other Controls:

OVERALL CONTROL; POWER (ON/OFF), MODE (NORMAL/ SPLIT/SINGLE FINGER/FINGERED), MASTER VOLUME, ACCOMP. VOLUME (+/-), TRANSPOSE (+/-), TEMPO (+/-), SPLIT POINT CHANGE

ACCOMPANIMENT CONTROL; INTRO/FILL IN, SYNCHRO START ON OFF/ENDING, START/STOP



VOICE/STYLE; STYLE/VOICE, 0~9, +, -, DUAL VOICE ON/OFF (PSR-83 only)

SUSTAIN; ON/OFF

**AUTO HARMONY; +/-**

CHORD MEMORY; REC., BANK 1, BANK 2, BANK 3, CHAIN SONG BOOK; SONG SELECT (+/-), MINUS ONE (START/STOP),

DEMO (START/STOP)

# Auxiliary Jacks:

HEADPHONES/AUX. OUT, DC IN 10-12V, MIDI IN/OUT (PSR-83 only)

## **Main Amplifiers:**

2.0W x 2

#### Speakers:

10cm (3-15/16") x 2

# **Power Supply:**

Batteries: Six SUM-1, "D" size, R-20 or equivalent batteries DC 10-12V: PA-3, PA-4, or PA-40 Power Adaptor

## Dimensions (W x D x H):

931mm x 347mm x 137mm (36-5/8" x 13-11/16" x 5-3/8")

#### Weight:

4.7kg (10.4lbs.)

## Supplied Accessory:

- Music Stand
- Owner's Manual

# FINGERING CHART/AKKORDLISTE/ TABLATURE/GRAFICA DE DIGITADO

- \* All fingerings shown are simple root-position types.
- \* Die hier gezeigten Akkorde sind jeweils die Grundakkorde.
- \* Tous les doigtés indiqués sont du type à position fondamentale simple.
- \* Todos los digitados se muestran como tipos de posición de raíz sencilla.

	Major Durakkord Majeur Mayor		Minor Mollakkord Mineur Menor		Seventh Septime Septième Séptima		Minor seventh Moll-Septakkord Septième mineure Menor de séptima
С		Cm		C <sub>7</sub>		Cm <sub>7</sub>	
C# (Db)		C#m (D♭m)		C# <sub>7</sub> (D♭ <sub>7</sub> )		C#m <sub>7</sub> (D⊩m <sub>7</sub>	, <b></b>
D		Dm		D <sub>7</sub>		Dm <sub>7</sub>	
D# (Eb)		D#m (E <sup> </sup> m)		D# <sub>7</sub> (E♭ <sub>7</sub> )		D#m <sub>7</sub> (E♭m <sub>7</sub> )	,
E		Em		E <sub>7</sub>		Em <sub>7</sub>	
F		Fm		F <sub>7</sub>		Fm <sub>7</sub>	
F# (Gb)		F#m (G♭m)		F# <sub>7</sub> (G♭7)		F#m <sub>7</sub> (G⊮m <sub>7</sub> )	
G		Gm		G <sub>7</sub>		Gm <sub>7</sub>	
G# (Ab)		G#m (A♭m)		G#7 (A <sup>1</sup> 7)		G#m <sub>7</sub> (A♭m <sub>7</sub> )	
A		Am		A <sub>7</sub>		Am <sub>7</sub>	
А# (ВЫ)		A#m (B♭m)		A# <sub>7</sub> (B♭7)		A#m <sub>7</sub> (B♭m <sub>7</sub> )	
В		Bm		В7		Bm <sub>7</sub>	

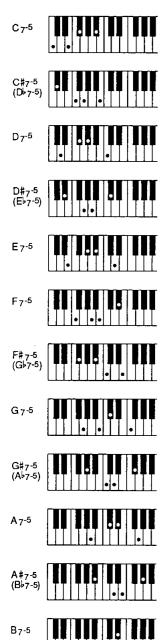
# FINGERING CHART/AKKORDLISTE/TABLATURE/GRAFICA DE DIGITADO

Major seventh Durakkord mit großer Septime Septième majeure Mayor de séptima	Minor major seventh Mollakkord mit großer Septime Septième majeure mineure Menor de séptima mayor	Augmented Übermäßig Augmenté Aumentado	Diminished Vermindert Diminué Disminuido
CM <sub>7</sub>	CmM <sub>7</sub>	Caug	Cdim
C#M <sub>7</sub> (DFM <sub>7</sub> )	C#mM <sub>7</sub> (DbmM <sub>7</sub> )	C#aug (Dhaug)	C#dim (Dbdim)
DM <sub>7</sub>	DmM <sub>7</sub>	Daug	Ddim • • •
D#M <sub>7</sub> (E <sup>b</sup> M <sub>7</sub> )	D#mM <sub>7</sub> (E♭mM <sub>7</sub> )	D#aug (E-aug)	D#dim (Eb dim)
EM <sub>7</sub>	EmM <sub>7</sub>	Eaug	Edim
FM <sub>7</sub>	FmM <sub>7</sub>	Faug	Fdim
F#M <sub>7</sub> (GbM <sub>7</sub> )	F#mM <sub>7</sub> (G♭mM <sub>7</sub> )	F#aug (G⊳aug)	F#dim (Gi-dim)
GM <sub>7</sub>	GmM <sub>7</sub>	Gaug	Gdim
G#M <sub>7</sub> (A <sup>b</sup> M <sub>7</sub> )	G#mM <sub>7</sub> (A♭mM <sub>7</sub> )	G#aug (A <sup>♭</sup> aug)	G#dim (A <sup>b</sup> dim)
AM <sub>7</sub>	AmM <sub>7</sub>	Aaug	Adim
A#M7 (Bb M7)	A#mM <sub>7</sub> (Bb mM <sub>7</sub> )	A#aug (B♭aug)	A#dim (B♭dim)
ВМ7	BmM <sub>7</sub>	Baug	Bdim

	Suspended fourth Vorgehaltene Quarte Quarte suspendue Cuarta suspendida	Minor seventh flatted fifth Moll-Septakkord mit verminderter Quinte Quinte bémol septième mineure Menor de séptima quinta bemol		Minor sixth Mollakkord mit hinzugefügter Sexte Sixième mineure Menor de sexta		Seventh suspended fourth Septakkord mit vorgehaltener Quarte Quarte suspendue septième Séptima cuarta suspendida	
Csus <sub>4</sub>		Cm <sub>7</sub> -5		Cm <sub>6</sub>		C <sub>7</sub> sus <sub>4</sub>	
C#sus <sub>4</sub> (Dbsus <sub>4</sub> )		C#m <sub>7</sub> - (D⊬m <sub>7</sub> -	5)	C#m <sub>6</sub> (D♭m <sub>6</sub> )		C# <sub>7</sub> sus. (D <sup>5</sup> 7sus	44)
Dsus <sub>4</sub>		Dm <sub>7</sub> -5		Dm <sub>6</sub>		D <sub>7</sub> sus <sub>4</sub>	
D#sus 4 (E♭sus 4)		D#m <sub>7</sub> - (E♭m <sub>7</sub> -	5)	D#m <sub>6</sub> (E♭m <sub>6</sub> )		D# <sub>7</sub> sus (E♭ <sub>7</sub> sus	44)
Esus 4		Em <sub>7</sub> -5		Em <sub>6</sub>		E <sub>7</sub> sus <sub>4</sub>	
Fsus <sub>4</sub>		Fm <sub>7</sub> -5		Fm <sub>6</sub>		F <sub>7</sub> sus <sub>4</sub>	
F#sus4 (G♭sus4)		F#m <sub>7</sub> -5 (G♭m <sub>7</sub> -	5)	F#m <sub>6</sub> (G♭m <sub>6</sub> )		F# <sub>7</sub> sus (G♭ <sub>7</sub> sus	4
Gsus <sub>4</sub>		Gm <sub>7</sub> -5		Gm <sub>6</sub>		G <sub>7</sub> sus <sub>4</sub>	
G#sus₄ (A♭sus₄)		G#m <sub>7</sub> - (A♭m <sub>7</sub> -	55)	G#m <sub>6</sub> (A♭m <sub>6</sub> )		G# <sub>7</sub> sus (A♭ <sub>7</sub> sus	4 4
Asus <sub>4</sub>		Am <sub>7</sub> -5		Am <sub>6</sub>		A <sub>7</sub> sus <sub>4</sub>	
A #sus ₄ (B♭sus₄)		A#m <sub>7</sub> -{ (B♭m <sub>7</sub> -	5)	A#m <sub>6</sub> (B♭m <sub>6</sub> )		A# <sub>7</sub> sus (B♭ <sub>7</sub> sus	4,4)
Bsus 4		Bm <sub>7</sub> -5		Bm <sub>6</sub>		B <sub>7</sub> sus <sub>4</sub>	

# FINGERING CHART/AKKORDLISTE/TABLATURE/GRAFICA DE DIGITADO

Seventh flatted fifth Septakkord mit verminderter Quinte Quinte bémol septième Séptima quinta bemol



# "SONG BOOK" SCORES NOTEN ZUM "SONG BOOK" PARTITIONS DU "SONG BOOK" PARTITURAS DEL "SONG BOOK"



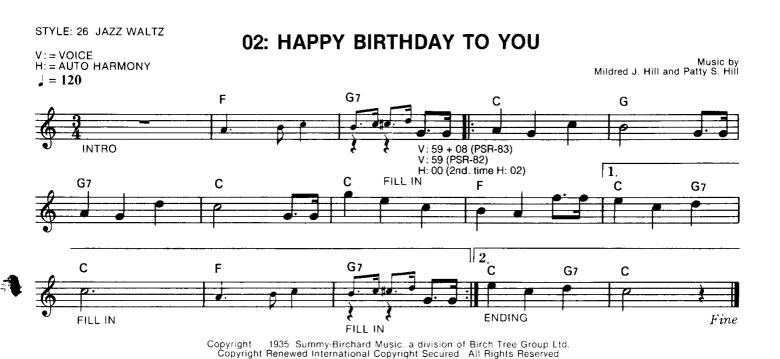
\* Repetition is also performed when returned by the D.S.

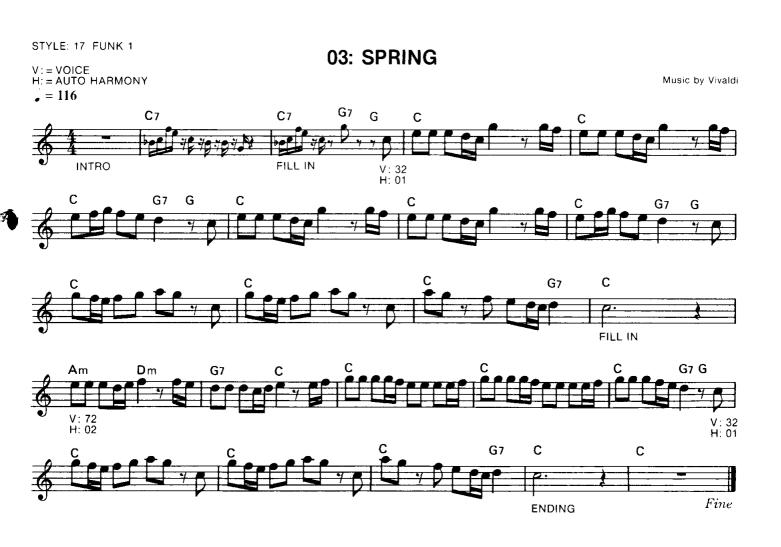
\* La répétition est également exécuté en cas de retour par D.S.

<sup>\*</sup> Eine Wiederholung wird auch bei Rückführung durch D.S. (dal s'egno) ausgeführt.

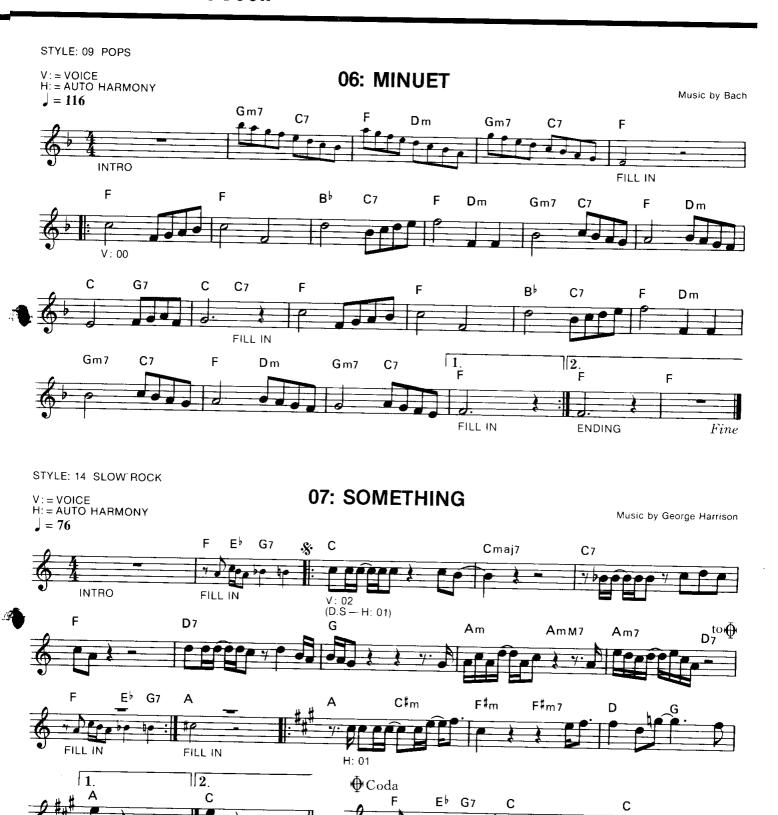
<sup>\*</sup> La repetición también se efectúa cuando se retorna con D.S.











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FILL IN

**ENDING** 

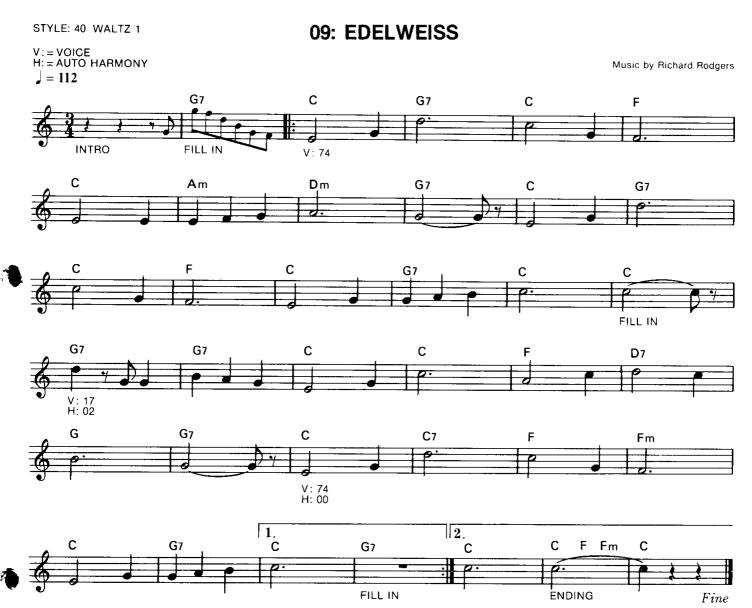
D.S.

FILL IN

FILL IN

Fine

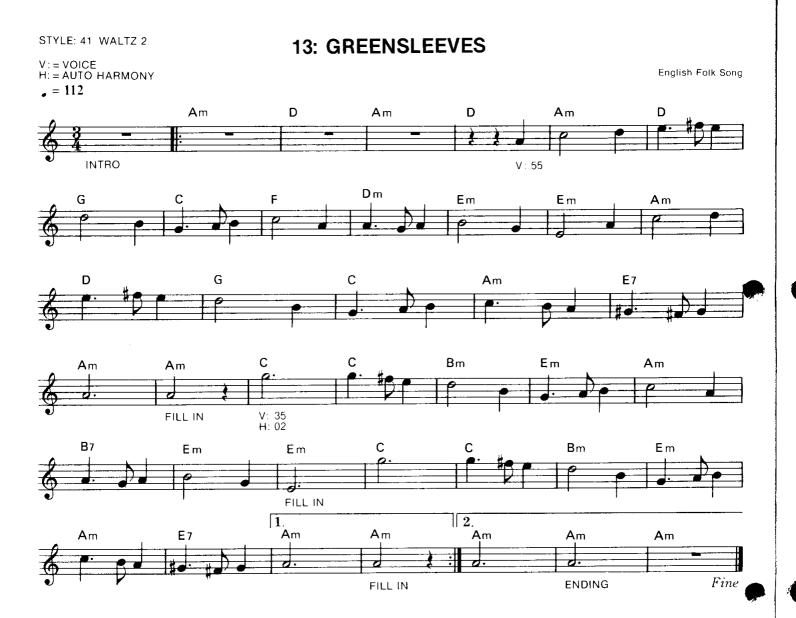




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G7

STYLE: 42 WALTZ 3 14: WE WISH YOU A MERRY CHRISTMAS V:=VOICE H:=AUTO HARMONY English Folk Song J = 136С G7 С С F INTRO V: 73 D7 G E7  $\mathsf{Am}$  $\mathsf{Dm}$ G7 С FILL IN D7 **E**7 Am DmG7 Ç С G D7 G V: 77 H: 02 FILL IN С DmG7 to ⊕ C С **⊕** Coda

С

D.S.

V: 73 H: 00 С

**ENDING** 

С

Fine

Model PSR-83

Remote control mode MIDI Implementation Chart

Date: 12/01, 1993

Version: 1.0

Function	Transmitted	Recognized	Remarks
Function			
Basic Default Channel Changed	1 1-16	OMNI 1-16, OMNI	
Default Mode Messages Altered	3 × *******	1 × ×	
Note Number : True voice	36-96 ******	24-127 24-127	
Velocity Note ON Note OFF	O 9nH, v = 1-127 × 9nH, v = 0	O 9nH, v = 1-127 × 9nH, v = 0, 8nH	
After Key's Touch Ch's	××	× ×	
Pitch Bender	×	×	
Control 6 Change	× ×	0	SUSTAIN ON/OFF
Program Change : True #	O ()-99 *******	O 0-99 0-99	
System Exclusive	×	×	
System : Song Pos : Song Scl Common : Tune	× × ×	× × ×	
System : Clock Real Time : Commands	0 0	O (*1) O	START/STOP
Aux : Local ON/OFF : All Notes OFF Messages : Active Sens	se ×	× × O	

Notes:

Mode 1: OMNI ON, POLY

Mode 2: OMNI ON, MONO

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO

O: Yes X:No

<sup>\*1 :</sup> External clock sync selected when external clock signal received.

Model PSR-83 Multi mode

# MIDI Implementation Chart

Date: 12/01, 1993

Version: 1.0

Function		Transmitted	Recognized	Remarks	
	Default Changed	1 1-16	1-16 1-16		
Mode 1	Default Messages Altered	1 × ******	1 (*1) × ×		
Note Number : 7	True voice	36-96 ******	24-127 24-127		
	Note ON Note OFF	O 9nH, v = 1-127 × 9nH, v = 0	O 9nH, v = 1-127 × 9nH, v = 0, 8nH		
	Key's Ch's	× ×	××		
Pitch Bender		×	×		
Control Change		×	×		
Program Change : T	Γrue #	O 0-99 ******	O 0-99 (*2) 0-99		
System Exclusi	ive	×	×		
: S	Song Pos Song Sel Tune	× × ×	× × ×		
System : C Real Time : C	Clock Commands	× ×	×		
	ON/OFF otes OFF Active Sense	X X O	× × O		

Notes:

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

Mode 2: OMNI ON, MONO

Mode 4: OMNI OFF, MONO

O: Yes X:No

<sup>\*1: 16-</sup>channel multi-timbre. Dynamic Voice Allocation. \*2: Not received on channel 16 (rhythm only).

# 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.

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 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 head-phones 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.

#### 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, the 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		

# FCC INFORMATION (U.S.A.)

- 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!
  - This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.
- 2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
- 3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

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

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

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

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620 The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.



#### **IMPORTANT**

PLEASE RECORD THE SERIAL NUMBER OF YOUR UNIT IN THE SPACE BELOW.

MODEL: PSR-82

MODEL: PSR-83

SERIAL NO:

THE SERIAL NUMBER IS LOCATED ON THE BOTTOM OF THE UNIT. RETAIN THIS OWNER'S MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.