

Owner's Manual

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.

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Power Supply

Your PSR-200 or PSR-300 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

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.
- **1.** 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.



* The included batteries are for testing purposes. Their service life might be considerably shortened due to storage conditions, etc.

Caution:

- 1. 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.
- 3. 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-200/PSR-300 features an Auto Power OFF function that automatically turns the power OFF if the instrument is not used for approximately 10 minutes.

The Auto Power OFF function does not operate when the PSR-200/PSR-300 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-200/PSR-300, 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-200/PSR-300.

DC 9 12V IN

 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-200/PSR-300.

Setting Up the Music Stand

Insert the bottom edge of the music stand into the slot located at the rear of the PSR-200/PSR-300 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-200/300 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-200/300 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-200/300 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-300







Top Panel Controls

① [POWER] Button	····· page 4
② [MODE] Button	
③ [MASTER VOLUME] Control	page4
④ [ACCOMPANIMENT VOLUME] Buttons	page 8, 10
(5) [TRANSPOSE] Buttons	page 5
6 [TEMPO] Buttons	page 7, 10, 11
⑦ [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
(1) [START/STOP] Button	. page 7, 8, 9, 10, 12
(1) [VOICE/STYLE] Button	page 4, 6, 7
1 Numeric VOICE/STYLE Buttons	page 4, 7
(3) [DUAL VOICE] Button (PSR-300 only)	page 5
([SUSTAIN] Button	page 5
(5) [AUTO HARMONY] Buttons	
(6) [CHORD MEMORY] Buttons	page 11, 12, 13
() [SONG BOOK] Buttons	page 13, 14
(18) MULTI DISPLAY	page 4 ~ 11, 13
(19) VOICE LIST	page 4
Ø STYLE LIST	page 7
② SONG LIST	page 13

Rear Panel Connectors

2 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-200 or PSR-300 is to be powered from the AC mains supply (refer to "Power Supply" on page 1 for more details).

BADPHONES/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 HEADPHONFS/AUX. OUT jack can also be used to deliver the output of the PSR-200/PSR-300 to a keyboard amplifier, stereo sound system, mixing console or tape recorder.

2 MIDI IN and OUT Connectors (PSR-300 only)

The MIDI IN connector receives MIDI data from an external MIDI device which can be used to control the PSR-300. The MIDI OUT connector transmits MIDI data generated by the PSR-300 (e.g. note and velocity dam 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.

ON/OFF

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-200/PSR-300'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-300'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-200 and PSR-300 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.

ASSIGNMENTS Instrument Kev Symbol Key Instrument Symbol C#1 **BD** Reverb 21 G#3 Hi-Hat Foot D#1 Bass Drum Χz A#3 Crash Cymbal *****~ B B ***** F#1 Bass Tom C#4 Splash Cymbal E L R D#4 Lo Tom G#1 Ride Cymbal 2 M A#1 F#4 Synth Lo Tom Mid Tom H G#4 R2M C#2 Hi Tom Svnth Mid Tom D#2 Snare Reverb A#4 Synth Hi Tom ROH F#2 ₽₇s Snare Lo ۵۲ C#5 Synth Snare G#2 Snare Hi Вн D#5 Voice "One" ONE

DRUM & PERCUSSION INSTRUMENT KEY

Hi-Hat Open D#3

Snare Open Rim

Snare Closed Rim

Hi-Hat Closed

A#2

C#3

D#3

Adjusting the Volume

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

œ"

-

F#5

G#5

A#5

Voice "Two"

Voice "Three"

Voice "Four"

тwo

THREE

FOUR

<u>SUSTAIN</u>

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.



DUAL (PSR-300 only)

The PSR-300 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-300 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.

JAL VOICE ON/OFF O	

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.

TRANSPOSE

The PSR-200/PSR-300 [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-200/PSR-300 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 $[\lor]$ buttons are used for transposition. The first time the TRANSPOSE $[\bigstar]$ or $[\lor]$ 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 $[\bigstar]$ button to increase the pitch of the keyboard, or the $[\lor]$ button to lower the pitch The selected degree of transposition will be displayed on the MULTI DISPLAY while the TRANSPOSE $[\bigstar]$ or $[\lor]$ button is pressed, and for approximately 2 seconds after either TRANSPOSE button is released.

- The SUSTAIN effect cannot be applied to accompaniment or rhythm,
- When the PSR-300 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).



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

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 $[\heartsuit]$ buttons at the same time.



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

THE SPLIT MODE

The PSR-200/PSR-300 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.

1. 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 "C3". F#2 would be displayed as "F2". 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-200/PSR-300 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-300 DUAL indicator flashes according to the left- and righthand section DUAL mode settings when the SPLIT and DUAL modes are used together.

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.

STYLE
OVOICE

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2. Select any of the PSR-200/PSR-300's 50 accompaniment styles by using one of the two following methods:

1: Choose one of the 50 accompaniment styles — numbered "00" through "49" — shown on the STYLE LIST then enter its number using the numeric VOICE/STYLE buttons. To select FUSION1 (number 27), for example, first press "2" and then "7." The number "27" should then be displayed on the MULTI DISPLAY.



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 [\checkmark] 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[\checkmark] button to decrease the tempo. The selected tempo will be displayed on the MULTI DISPLAY (in quarter-note beats per minute) while the TEMPO[\bigstar] or [\checkmark] 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 [\blacktriangle] and [\bigtriangledown] 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:

1st. Beat	● BEAT-	•	•
TSI. Deal	•	0	
2nd. Beat	BEAT		_
	0	•	0
3rd. Beat	BEAT-L		
4th. Beat	O BEAT-L	3 	.

- 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-200/PSR-300 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.

> INTRO/ FILL IN



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 VOL-UME $[\blacktriangle]$ and $[\checkmark]$ buttons can be used to adjust the volume of the selected accompaniment in relation to the right-hand melody voice. The fist time the ACCOMPANIMENT VOL-UME $[\blacktriangle]$ or $[\checkmark]$ 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 $[\bigstar]$ button to increase the volume, or the $[\checkmark]$ 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 VOL-UME 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 [\checkmark] buttons at the same time.





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

AUTO ACCOMPANIMENT

The PSR-200/PSR-300 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-200/PSR-300 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.

1. 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 "F2". 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 FIN-GER mode is selected. A method of initializing the SIN-GLE FINGER mode split point to its original default value is described on page 6.



- **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-200/PSR-300 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. 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-200/300 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-200/PSR-300 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-200/PSR-300 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-200/PSR-300 will accept the following chord types (see fingering chart on page 19):

Abbreviation	Normal Voicing
Μ	1-3-5
m	1-}3-5
M7	1-3-(5)-7
mM7	1-\3-(5)-7
m6	13-5-6
m7	1-\3-(5)-\7
m7-5	1-63-65-67
7	1-3-(5)-♭7
7-5	1-3-65-67
7sus4	1-4-5-67
sus4	1-4-5
aug	1-3-#5
dim	1-53-5-(6)
	M m M7 mM7 m6 m7 m7-5 7 7-5 7sus4 sus4 aug

• 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 $[\blacktriangle]$ or $[\lor]$ 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 $[\bigstar]$ button briefly to increment (increase by one) the harmony type number, or the $[\lor]$ 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 HAR-MONY] $[\bigstar]$ or $[\lor]$ button is pressed (the letter "H" will appear before the harmony type number).



AUTO HARMONY

PSR-200/PSR-300 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-200/PSR-300 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.

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 Rlayback

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.

BANK 1 BANK 2 BANK 3

- **2.** Play along on the PSR-200/PSR-300 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/END-ING] button.

Chain Playback

1. 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.

CHAIN



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-200/300 is initially shipped, the Chord Memory BANKs contain the following data:

Initial bank data

BANK 1 St <u></u>	yle 01 F7	C7	F7 (Fill in)
BANK 2 Sty B⊧7 .	le 21 %	<i>7.</i>	<i>%</i>
E⊧7	×.	B⊧7	<i>7</i> .
F7	E⊧7	B⊧7	אריע (Fill in)
BANK 3 St	yle 05	Am7	<i>%</i>
Dm7	<i></i>	G7	✔(Fill in)

The CHAIN is initial set up as follows:

Initial chain data

| BANK1| BANK2| BANK3|

The BANK dam 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.

Enjoy the Demonstration

To give you an idea of the PSR-200/PSR-300'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 $[\blacktriangle]$ or $[\lor]$ 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 $[\bigstar]$ button briefly to increment (increase by one) the song number, or the $[\lor]$ 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 $[\bigstar]$ or $[\lor]$ button is pressed — "d" appears before the demonstration song number.



PSR-200/PSR-300 Demo Song List

00	ORIGINAL THEME
01	SING
02	HAPPY BIRTHDAY TO YOU
03	SPRING
04	CARMEN
05	GRANDFATHERS 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-300) 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 $[\lor]$ 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 DIS-PLAY while the SONG SELECT $[\bigstar]$ or $[\lor]$ 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 worldstandard 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-300 MIDI Connectors

The PSR-300 MIDI IN connector receives MIDI data from an external MIDI device which can be used to control the PSR-300. The MIDI OUT connector transmits MIDI data generated by the PSR-300 (e.g. note and velocity data produced by playing the keyboard).

Simple MIDI Control

Most MIDI keyboards (including the PSR-300, 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-300 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-300.



The PSR-300 is capable of receiving the same MIDI data, so a second MIDI keyboard connected to the PSR-300 MIDI IN connector can be used to remotely play the PSR-300 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-300, for example. When the recorded data is played back, the PSR-300 automatically "plays" the recorded performance in precise detail.



PSR-300 MIDI Settings & Functions

The Remote Control Mode

The Remote Control mode should be used when the PSR-300 is to be connected to a second keyboard which it is to control. If the PSR-300 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-300 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-300 in the Remote Control mode.

- MIDI start messages control PSR-300 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-300 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 34 for more details.

■ Remote Control Mode Transmission

The following points apply to MIDI data transmitted by the PSR-300 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





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

- 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 34 for more details.

The Multi Mode

The Multi mode should be used when the PSR-300 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-300 can receive on multiple MIDI channels, each channel corresponding to a different voice. The PSR-300 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 l" will appear on the display.



Multi Mode Reception

In the Multi mode the PSR-300 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-300 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 35 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 instruments 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" on page 35 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 Receive 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... $E \triangleright 2$), 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.

TROUBLESHOOTING

• 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. 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-200/PSR-300 is faulty, please check the following points.

1. PROBLEM

• The PSR-200/PSR-300 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-200/PSR-300 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-200/PSR-300 can recognize (see fingering chart on page 19)?

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.

CHECK

• 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-300 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-300 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(9-12V) IN, MIDI IN/OUT (PSR-300 only)

Main Amplifiers:

2.0W x 2

Speakers:

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

Rated Voltage:

DC 9V

Batteries:

Six SUM-1, "D" size, R-20 or equivalent batteries

AC Power Adaptor:

PA-3, PA-4 or PA-40

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.) excluding batteries

Supplied Accessory:

- Music Stand
- Six SUM-1 Batteries
- Owner's Manual

FINGERING CHART

* All fingerings shown are simple root-position types.



	Minor
Cm	
C#m (D♭m)	
Dm	
D‡m (E⊦m)	
Em	
Fm	
F#m (G♭m)	
Gm	
G⋕m (A♭m)	
Am	
A#m (B♭m)	
Bm	

Seventh		
C7		
C#7 (DF7)		
D7		
D#7 (EP7)		
F7		
F#7 (Gb7)		
G7		
G#7 (A ^L 7)		
A7		
A#7 (B ¹ 7)		
B7		





I	Minor major seventh
mM7	
#mM7 D⊧mM7)	
mM7	
#mM7 5⊁mM7)	
mM7	
mM7	
#mM⁊ G♭mM⁊)	
amM7	
a≇mM⁊ A♭mM⁊)	
mM7	
\#mM7 B♭mM7)	
mM7	

Augmented					
Caug					
C#aug (D⊧aug)					
Daug.					
D‡aug (E⊦aug)					
Eaug					
Faug					
F#aug (G⊧aug)					
Gaug					
G#aug (A [↓] aug)					
Aaug					
A‡aug (B⊧aug)					
Baug					

Diminished

Cdim





inor seventh flatted fiftl	n I
	Cm ₆
> -	C#m ₆ (D♭m ₆)
	Dm ₆
»	D#m ₆ (E♭m ₆)
	Em ₆
	Fm ₆
5)	F#m ₆ (G⊦m ₆) [
	Gm ₆
	G#m6 (A♭m6)
	Am ₆
	A#m ₆ (B♭m ₆)
	Bm ₆

	Minor sixth
6	
n ₆ m ₆)	
6	
n ₆ m6)	
6	
6	
n ₆ m ₆)	
6	
n6 m6)	
6	
¹⁶ m ₆)	

Seventh suspended fourth





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Model PSR-300 Remote control mode MIDI Implementation Chart

Version: 1.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 1-16	OMNI 1-16, OMNI	
Mode	Default Messages Altered	3 X ********	1 X X	
Note Number	: True voice	36-96 ******	24-127 24-127	
Velocity	Note ON Note OFF	$ \begin{array}{ll} O & 9nH, v = 1-127 \\ X & 9nH, v = 0 \end{array} $	$\begin{array}{ll} O & 9nH, v = 1\text{-}127 \\ X & 9nH, v = 0, 8nH \end{array}$	
After Touch	Key's Ch's	X X	X X	
Pitch Bende	r	Х	Х	
Control Change	64	Х	Ο	SUSTAIN ON/OFF
Program Change	: True #	O 0-99 *******	O 0-99 0-99	
System Exc	lusive	Х	Х	
	: Song Pos : Song Sel : Tune	X X X	X X X	
	: Clock : Commands	0 0	O (*1) O	START/STOP
: All	cal ON/OFF Notes OFF : Active Sense	X X O	X X O	
Notes : *1 : Ex	xternal clock sync	selected when external clock s	signal received.	
	NI ON, POLY INI OFF, POLY	Mode 2 : OMNI ON, MONO Mode 4 : OMNI OFF, MONO		O:Yes X:No

YAMAHA [Portatone]

Date : 03/07, 1991

YAMAHA [Portatone]

MIDI Implementation Chart

Model PSR-300 Multi mode MIDI Implementation Chart			Version : 1.0
Function	Transmitted	Recognized	Remarks
Basic Default	1	1-16	
Channel Changed	1-16	1-16	
Mode Default	1	1(*1)	
Messages	X	X	
Altered	*******	X	
Note	36-96	24-127	
Number : True voice	*******	24-127	
Velocity Note ON Note OFF	$ \begin{array}{ll} O & 9nH, \ v = 1{\text{-}}127 \\ X & 9nH, \ v = 0 \end{array} $	$ \begin{array}{ll} O & 9nH, \ v = 1\text{-}127 \\ X & 9nH, \ v = 0, \ 8nH \end{array} $	
After Key's	X	X	
Touch Ch's	X	X	
Pitch Bender	Х	Х	
Control Change	Х	Х	
Program	O 0-99	O 0-99 (*2)	
Change : True #	********	0-99	
System Exclusive	Х	Х	
System : Song Pos	X	X	
: Song Sel	X	X	
Common : Tune	X	X	
System : Clock	X	X	
Real Time : Commands	X	X	
Aux : Local ON/OFF	X	X	
: All Notes OFF	X	X	
Messages : Active Sense	O	O	

Notes:

*1 : 16-channel multi-timbre. Dynamic Voice Allocation.

*2 : Not received on channel 16 (rhythm only).

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

FCC INFORMATION (U.S.A.)

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

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

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

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 chm 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, CA 90620 The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

For details of products, please contact your nearest Yamaha or the authorized distributor listed below.

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante.

NORTH AMERICA

CANADA

Yamaha Canada Music Ltd. 135 Milner Avenue, Scarborough, Ontario, M1S 3R1, Canada Tel: 416-298-1311

U.S.A.

Yamaha Corporation of America 6600 Orangethorpe Ave., Buena Park, Calif. 90620, U.S.A. Tel: 714-522-9011

MIDDLE & SOUTH AMERICA

MEXICO

Yamaha De Mexico S.A. De C.V., Departamento de ventas Javier Rojo Gomez No.1149, Col. Gpe Del Moral, Deleg. Iztapalapa, 09300 Mexico, D.F. Tel: 686-00-33

BRASIL

Yamaha Musical Do Brasil LTDA. Ave. Reboucas 2636, São Paulo, Brasil Tel: 55-11 853-1377

PANAMA

Yamaha De Panama S.A. Edificio Interseco, Calle Elvira Mendez no.10, Piso 3, Oficina #105, Ciudad de Panama, Panama Tel: 507-69-5311

OTHER LATIN AMERICAN COUNTRIES AND CARIBBEAN COUNTRIES

Yamaha Music Latin America Corp. 6101 Blue Lagoon Drive, Miami, Florida 33126, U.S.A. Tel: 305-261-4111

EUROPE

THE UNITED KINGDOM Yamaha-Kemble Music(U.K.) Ltd.

Sherbourne Drive, Tilbrook, Milton Keynes, MK7 8BL England Tel: 0908-366700

IRELAND

Danfay Ltd. 61D, Sallynoggin Road, Dun Laoghaire, Co. Dublin Tel: 01-2859177

GERMANY/SWITZERLAND

Yamaha Europa GmbH. Siemensstraße 22-34, D-2084 Rellingen, F.R. of Germany Tel: 04101-3030

AUSTRIA/HUNGARY/SLOVENIA/ ROMANIA/BULGARIA

Yamaha Music Austria Ges m b H. Schleiergasse 20, A-1100 Wien Austria Tel: 0222-60203900

THE NETHERLANDS Yamaha Music Benelux B.V., Verkoop Administratie Kanaalwee 18G, 3526 KL Utrecht. The Neth

Kanaalweg 18G, 3526 KL Utrecht, The Netherlands Tel: 030-828411 BELGIUM/LUXEMBOURG

Yamaha Music Benelux B.V., Brussels-office Keiberg Imperiastraat 8, 1930 Zaventem, Belgium Tel: 02-7258220

FRANCE

Yamaha Musique France, Division

Instruments Electroniques et de Scène BP 70-77312 Marne-la-Valée Cedex 2, France Tel: 01-64-61-4000

ITALY

Yamaha Musica Italia S.P.A., Home Keyboard Division Viale Italia 88, 20020 Lainate(Milano), Italy Tel: 02-935-771

SPAIN

Yamaha-Hazen Electronica Musical, S.A. Jorge Juan 30, 28001, Madrid, Spain Tel: 91-577-7270

PORTUGAL

Valentim de Carvalho CI SA Estrada de Porto Salvo, Paço de Arcos 2780 Oeiras, Portugal Tel: 01-443-3398/4030/1823

GREECE

Philippe Nakas S.A. Navarinou Street 13, P.Code 10680, Athens, Greece Tel: 01-364-7111

SWEDEN

Yamaha Scandinavia AB J. A. Wettergrens gata 1, Box 30053, 400 43 Göteborg, Sweden Tel: 031-496090

DENMARK YS Copenhagen Liaison Office Finsensvej 86, DK-2000 Frederiksberg, Denmark Tel: 31-87 30 88

FINLAND Fazer Music Inc. Aleksanterinkatu 11, SF 00100 Helsinki, Finland Tel: 0435 011

NORWAY

Narud Yamaha AS Østerndalen 29, 1345 Østerås Tel: 02-24 47 90

ICELAND

Páll H. Pálsson P.O. Box 85, 121 Reykjavik, Iceland Tel: 01-19440

OTHER EUROPEAN COUNTRIES Yamaha Europa GmbH. Siemensstraße 22-34, D-2084 Rellingen, F.R. of Germany Tel: 04101-3030

AFRICA

Yamaha Corporation, International Marketing Division Nakazawa-cho 10-1, Hamamatsu, Japan 430 Tel: 053-460-2311

MIDDLE EAST

TURKEY/CYPRUS Yamaha Musique France, Division Export BP70-77312 Marne-la-Valée Cedex 2, France Tel: 01-64-61-4000

OTHER COUNTRIES Yamaha Corporation, International Marketing Division Nakazawa-cho 10-1, Hamamatsu, Japan 430 Tel: 053-460-2311

Die Einzelheiten zu Produkten sind bei Ihrer unten aufgeführten Niederlassung und bei Yamaha Vertragshändlern in den jeweiligen Bestimmungsländern erhältlich.

Para detalles sobre productos, contacte su tienda Yamaha más cercana o el distribuidor autorizado que se lista debajo.

ASIA

HONG KONG

Tom Lee Music Co., Ltd. 11/F., Silvercord Tower 1, 30 Canton Road, Tsimshatsui, Kowloon, Hong Kong Tel: 730-1098

INDONESIA

PT. Yamaha Music Indonesia (Distributor) PT. Nusantik

Gedung Yamaha Music Center, Jalan Jend. Gatot Subroto Kav. 4, Jakarta 12930, Indonesia Tel: 21-520-2577

KOREA

Cosmos Corporation #131-31, Neung-Dong, Sungdong-Ku, Seoul Korea Tel: 02-466-0021 ~ 5

MALAYSIA

Yamaha Music Malaysia Sdn., Bhd. 16-28, Jalan SS 2/72, Petaling Jaya, Selangor, Malaysia Tel: 3-717-8977

PHILIPPINES

Yupangco Music Corporation 339 Gil J. Puyat Avenue, P.O. Box 885 MCPO, Makati, Metro Manila, Philippines Tel: 819-7551

SINGAPORE

Yamaha Music Asia Pte., Ltd. Blk 17A Toa Payoh #01-190 Lorong 7 Singapore 1231 Tel: 354-0133

TAIWAN

Kung Hsue She Trading Co., Ltd. No. 322, Section 1, Fu Hsing S. Road, Taipei 106, Taiwan. R.O.C. Tel: 02-709-1266

THAILAND

Siam Music Yamaha Co., Ltd. 933/1-7 Rama I Road, Patumwan, Bangkok, Thailand Tel: 2-215-0030

THE PEOPLE'S REPUBLIC OF CHINA AND OTHER ASIAN COUNTRIES

Yamaha Corporation, International Marketing Division Nakazawa-cho 10-1, Hamamatsu, Japan 430 Tel: 053-460-2311

OCEANIA

AUSTRALIA

Yamaha Music Australia Pty. Ltd. 17-33 Market Street, South Melbourne, Vic. 3205, Australia Tel: 3-699-2388

NEW ZEALAND

Music Houses of N.Z. Ltd. 146/148 Captain Springs Road, Te Papapa, Auckland, New Zealand Tel: 9-634-0099

COUNTRIES AND TRUST TERRITORIES IN PACIFIC OCEAN Yamaha Corporation.

International Marketing Division Nakazawa-cho 10-1, Hamamatsu, Japan 430 Tel: 053-460-2311

YAMAHA

IMPORTANT

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

MODEL: PSR-200

MODEL: PSR-300

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.