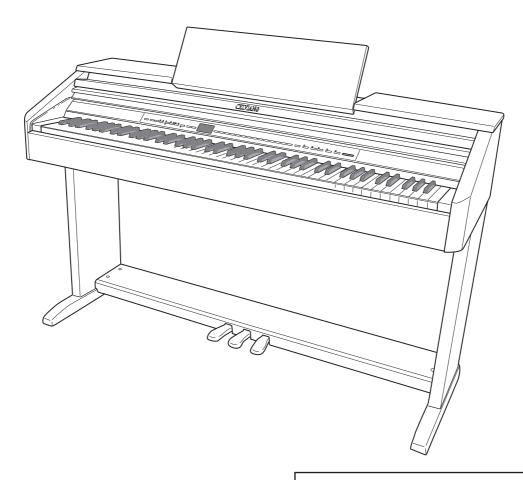
# CELVIANO AP-500 USER'S GUIDE GUÍA DEL USUARIO

Please keep all information for future reference. Guarde toda información para tener como referencia futura.



#### **Safety Precautions** Before trying to use the piano, be sure to read the separate "Safety Precautions".

#### **Precauciones de seguridad** Antes de intentar usar el piano, asegúrese de leer las "Precauciones de seguridad" separadas.



ES

#### **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



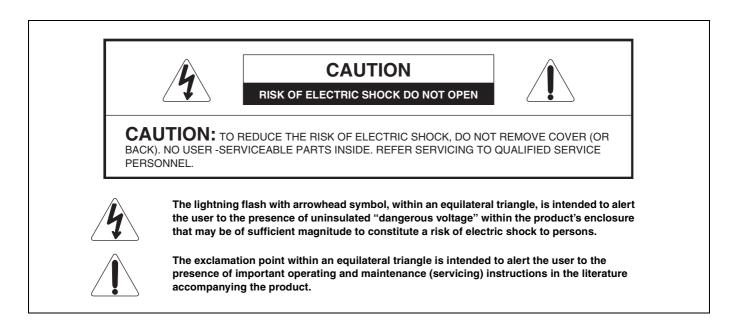
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

The power indicator being unlit does not mean the apparatus is completely disconnected from the MAINS. When you need to have the apparatus completely disconnected from the MAINS, you must unplug the power cord. For that purpose, locate the apparatus in a way that secures easy access to the power cord.

#### **Declaration of Conformity**

Model Number: AP-500 Trade Name: CASIO COMPUTER CO., LTD. Responsible party: CASIO, INC. Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801 Telephone number: 973-361-5400 This device complies with Part 15 of the FCC Rules, Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



#### NOTICE

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

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

#### **FCC WARNING**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Company and product names used in this manual may be registered trademarks of others.



This mark applies in EU countries only.



CASIO Europe GmbH Bornbarch 10, 22848 Norderstedt, Germany

This mark applies to the AP-500V only. Please keep all information for future reference.

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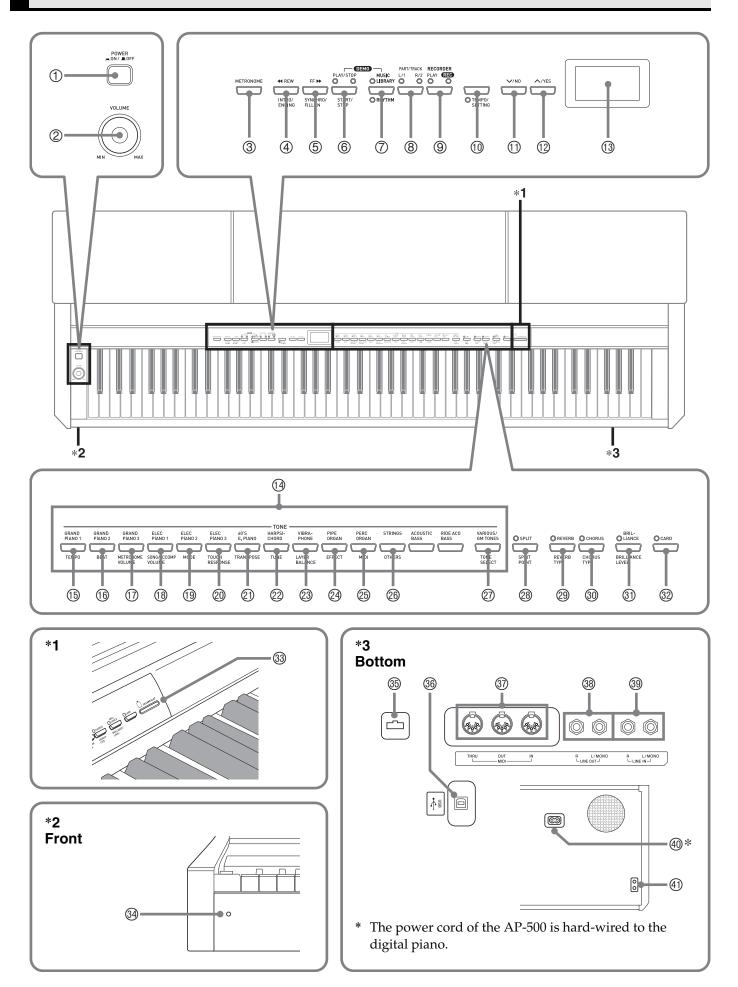
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### MIDI Implementation Chart

# **General Guide**



#### 

• Make sure that the cover is fully open whenever you are playing on the keyboard. A partially open cover can suddenly close unexpectedly and pinch.

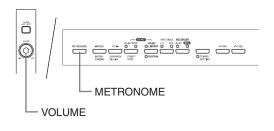
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- The names shown here are always indicated in bold when they appear within the text of this manual.
- ① POWER button
- ② VOLUME controller
- ③ METRONOME button
- ④ **◀₹REW, INTRO/ENDING** button
- ⑤ **FF**▶▶, **SYNCHRO/FILL-IN** button
- ⑥ PLAY/STOP, START/STOP button
- ⑦ MUSIC LIBRARY, RHYTHM button
- 8 PART/TRACK button
- In the second second
- 10 TEMPO/SETTING button
- ① V/NO button
- 12 **/YES** button
- 1 Display
- If TONE buttons
- 15 TEMPO button
- 16 BEAT button
- 1 METRONOME VOLUME button
- Image: Song/ACCOMP VOLUME button
- 19 MODE button
- TOUCH RESPONSE button
- ITRANSPOSE button

- 2 TUNE button
- IAYER BALANCE button
- eFFECT button
- (1) MIDI button
- <sup>(1)</sup> **OTHERS** button
- TONE SELECT button
- **SPLIT, SPLIT POINT** button
- REVERB, REVERB TYPE button
- OHORUS, CHORUS TYPE button
- ③ BRILLIANCE, BRILLIANCE LEVEL button
- ③ CARD button
- 3 SD memory card slot
- 3 Power lamp
- B Pedal connector
- 36 USB port
- IDI THRU/OUT/IN terminals
- 88 LINE OUT R, L/MONO jacks
- IINE IN R, L/MONO jacks
- AC power jack
- I PHONES jack

#### 

• Each chapter of this manual starts with an illustration of the digital piano's console, which shows the buttons and other controllers you need to operate.



# Using the TEMPO/SETTING Button

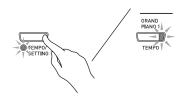
Normally when you press a button, it will change the setting or perform the operation marked above the button. Note that there also are secondary parameters (settings) marked below some buttons that you can select using the **TEMPO/SETTING** button.

• For details about the parameters you can configure using the **TEMPO/SETTING** button, see "Secondary Parameter Reference" on page E-27.

#### To select a secondary button parameter

#### Press the **TEMPO/SETTING** button.

- This will cause the lamp below the **TEMPO**/ **SETTING** button to flash.
- The **GRAND PIANO 1/TEMPO** button's lamp also will flash.



```
Example:
```



- 2. Press the button that corresponds to the parameter you want to select.
  - This will cause the button's lamp to flash.

*Example:* **TRANSPOSE** button



- If you want to adjust the tempo, you can skip this step because the **GRAND PIANO 1/TEMPO** button's lamp will flash already.
- Use the V/NO and V/YES buttons to change the setting of the selected parameter.
- **4** After you are finished, press the **TEMPO**/ **SETTING** button again.
  - This will cause the **TEMPO/SETTING** lamp and the lamp of the selected parameter button to go out.

## V/NO Button and /YES Button

Use the  $\checkmark$ /NO and  $\land$ /YES buttons to change a displayed setting.

• Holding down either button changes the value at high speed.

*Example:* See "Selecting a Various tone, GM tone, and Drum set" on page E-9.

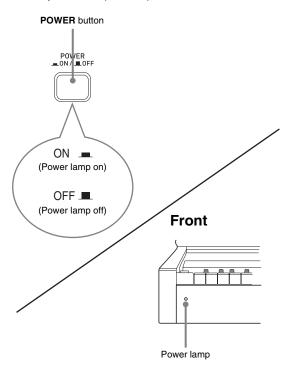
#### 

 Pressing the V/NO and /YES buttons at the same time will return the displayed setting to its default.

# **Power Supply**

Your digital piano runs on standard household power. Be sure to turn off power whenever you are not using the digital piano.

**1** Make sure that the **POWER** button is in the OFF position (raised).



- 2 Connect the power cord that comes with the digital piano to the AC power jack on the bottom of the digital piano.\*
  - \* AP-500V only
- Plug the power cord into a household power outlet.

#### MPORTANT!

- Always make sure that the **POWER** button is the OFF position before plugging in or unplugging the power cord.
- The shape of the power cord plug and household power outlet receptacle differ according to country and geographical area. The illustration shows just one example of the shapes that are available.
- The power cord of the AP-500 is hard-wired to the digital piano.
- Make sure the power lamp is completely turned off before unplugging the power cord from the power outlet. Be sure to read and observe all of the safety precautions concerning power supply.

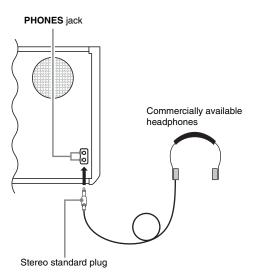
## Connections

#### MPORTANT!

• Whenever connecting something to the digital piano, first use the **VOLUME** controller to set the volume to a low level. After connecting, you can adjust the volume to the level you want.

## **Connecting Headphones**

#### Bottom



Connect commercially available headphones to the **PHONES** jack. Connecting headphones to the **PHONES** jack cuts off output to the speakers, which means you can practice even late at night without bothering others. To protect your hearing, make sure that you do not set the volume level too high when using headphones.

#### 

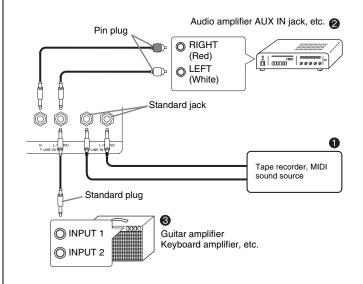
• Be sure to push the headphones plug into the **PHONES** jack as far as it will go. If you don't, you may hear sound from only one side of the headphones.

## Connecting Audio Equipment or an Amplifier

You can connect audio equipment or a music amplifier to the digital piano and then play through external speakers for more powerful volume and better sound quality.

#### IMPORTANT!

• The digital piano automatically adjusts sound output to optimize for headphone output (when headphones are connected) or built-in speaker output (when headphones are not connected). Note that this feature also affects the sound output from the LINE IN and LINE OUT jacks.



## Playing Output from External Equipment through the Piano's Speakers **0**

LINE IN R jack input sounds through the piano's right speaker, while LINE IN L/MONO jack input sounds through the left speaker. Connecting to the LINE IN L/ MONO jack only causes the same output to be produced from both speakers. It is up to you to purchase connecting cables that are compatible with the equipment you are connecting.

#### Connecting to Audio Equipment @

Use commercially available cables to connect the external audio equipment to the piano's LINE OUT jacks as shown in Figure **2**. LINE OUT R jack output is right channel sound, while LINE OUT L/MONO jack output is left channel sound. It is up to you to purchase connecting cables like the ones shown in the illustration for connection of audio equipment. Normally in this configuration you must set the audio equipment's input selector to the setting that specifies the terminal (such as AUX IN) to which the piano is connected. Use the piano's VOLUME controller to adjust the volume level.

## Connecting to a Musical Instrument Amplifier **©**

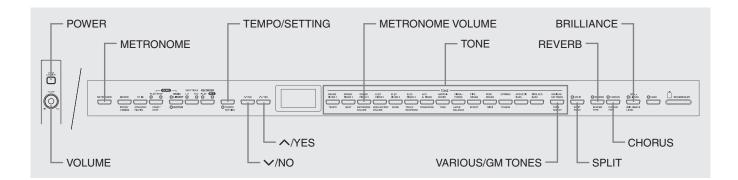
Use commercially available cables to connect the amplifier to the piano's LINE OUT jacks as shown in Figure **③**. LINE OUT R jack output is right channel sound, while LINE OUT L/MONO jack output is left channel sound. Connecting to the LINE OUT L/MONO jack only outputs a mixture of both channels. It is up to you to purchase connecting cable like the one shown in the illustration for connection of the amplifier. Use the piano's VOLUME controller to adjust the volume level.

# Bundled and Optional Accessories

Use only accessories that are specified for use with this digital piano.

Use of unauthorized accessories creates the risk of fire, electric shock, and personal injury.

# **Selecting and Playing a Tone**

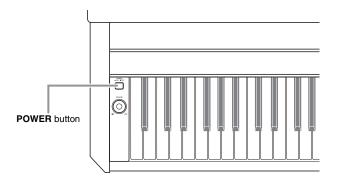


Your digital piano has the following types of tones built in.

Tone Numbers	Tone Type	Number of Tones
—	Main Tones	14
001 to 020	Various	20
021 to 148	GM (General MIDI)	128
149, 150	Drum Sets	2 sets

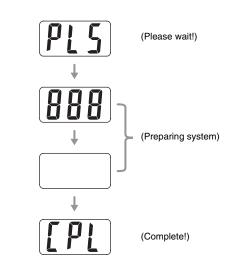
## **Selecting a Main Tone**

**1** Press the **POWER** button.



#### IMPORTANT!

• When you turn on the digital piano, it performs a power up operation in order to prepare its system. The power up operation takes about 10 seconds, and is indicated by the following messages appearing on the display.



- 2. Use the **VOLUME** controller to adjust the volume level.
- **3** Press one of the 14 **TONE** buttons to select the tone you want.
  - The names of the main tones are marked above the **TONE** buttons.
  - This will cause the lamp of the selected tone's button to light.

*Example:* GRAND PIANO 3



#### 

- The DSP effect (pages E-26 and E-28) will be applied if you select a tone with DSP.
- Note that the digital piano's DSP resources are limited. Because of this, selecting a tone with DSP can cause notes that are currently being played to cut off (if they are being played using a tone with DSP), or it can remove the DSP effect from an operation (layer, split, demo song) that was previously assigned a tone with DSP.

# Selecting a Various tone, GM tone, and Drum set

You can use the following procedure to assign one of the 20 Various tones, 128 GM tones, or 2 Drum sets to the **VARIOUS/GM TONES** button. After that you can select the assigned tone by pressing the **VARIOUS/ GM TONES** button.

 In the Tone List on page A-1, find the tone number of the Various tone, GM tone, and Drum set you want to assign to the VARIOUS/GM TONES button.

Example: 003 DANCE PIANO

#### 2 Press the VARIOUS/GM TONES button.

- This will cause the lamp above the button to light.
- To find out the tone that is currently assigned to the **VARIOUS/GM TONES** button, hold down the button. This will cause the number of its tone to appear on the display. Releasing the button will return to the song or rhythm number display.

Example: 001 MELLOW PIANO



3. To change the tone assigned to the VARIOUS/GM TONES button, hold down the button as you use the √/NO and ^/YES buttons to scroll through the tone numbers on the display. Display the number of the tone you want to assign to the button.



• Holding down either button changes the value at high speed.

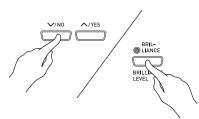
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- See "Other Settings" on page E-25 for information about another method you can use to assign a tone to the VARIOUS/GM TONES button.
- The tone you assign to the VARIOUS/GM TONES button is retained until you turn off the digital piano.
- If a drum set is assigned to the VARIOUS/GM TONES button, keyboard keys sound drum sounds when you press them while the lamp above the VARIOUS/GM TONES button is lit. See page A-2 for information about the drum sounds that are assigned to each of the keyboard keys.

# Adjusting the Brilliance of a Tone

Use the following procedure to adjust the brilliance of a tone.

- **1** Press the **BRILLIANCE** button.
  - This will cause the lamp above the button to light, indicating that the brilliance effect is being applied. This also will change the brilliance of the tone in accordance with the initial setting.



To do this:	Press this button:
Make the tone softer	<
Make the tone sharper	<b>^</b>



 To cancel the brilliance effect, press the BRILLIANCE button again so its lamp goes out.

#### 🗓 NOTE

- Pressing the **\/NO** and **^/YES** buttons at the same time will return the displayed setting to its default.
- See "Other Settings" on page E-25 for information about another method you can use to configure brilliance settings.

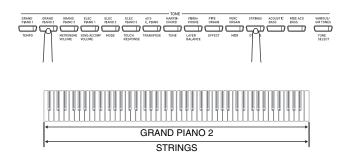
## **Layering Two Tones**

Use the following procedure to layer two tones, so they sound at the same time. The tone you specify first is called the "main tone", while the tone you specify second is called the "layered tone".

#### 

- To use a Various tone or GM tone as the main tone, you must first assign it to the **VARIOUS/GM TONES** button (page E-9).
- You can use a Various tone or GM tone assigned to the VARIOUS/GM TONES button as either the main tone or the layered tone. You cannot use Various/GM tones at the same time for both the main tone and layered tone.
- While holding down the **TONE** button of the tone that corresponds to the main tone, press the button that corresponds to the layered tone.

*Example:* While holding down the **GRAND PIANO 2** button, press the **STRINGS** button.



#### 

- If you press the VARIOUS/GM TONES button to assign its tone as the layered (second) tone, the number of the currently assigned tone will appear on the display when you hold down the VARIOUS/GM TONES button.
- While holding down the VARIOUS/GM TONES button, you can use the V/NO and /YES buttons to scroll through tone numbers and change the tone assignment.



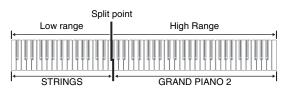
 To unlayer the keyboard, press any one of the TONE buttons.

#### 

• You can adjust the balance between the main tone and layered tone. See "Other Settings" on page E-25 for more information.

# Splitting the Keyboard between Two Tones

You can assign different tones to keys on the left side (low range) and the right side (high range) of the keyboard.



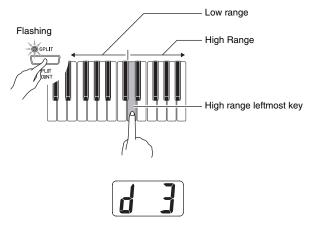
- Press the **TONE** button of the tone you want to select for the high range.
   *Example:* GRAND PIANO 2
- 2 Press the SPLIT button.
  - This will cause the SPLIT lamp to light.
- **3** Press the **TONE** button of the tone you want to select for the low range. *Example:* STRINGS
- 4 After you are finished using the split keyboard, press the SPLIT button again to unsplit it.
  - This will cause the SPLIT lamp to go out.

#### 🗍 ΝΟΤΕ

• You can configure the keyboard so it is layered with two tones in the high range. To do this, first perform the layer operation (page E-10). After that, split the keyboard as described above.

#### To specify the keyboard split point

**1** While holding down the **SPLIT** button, press the keyboard key where you want the left limit of the high range (right) tone to be.



#### 

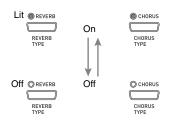
- The split point also is the boundary between the accompaniment keyboard range (pages E-15 to E-17) and the melody keyboard range. You can change the location of the split point, which also changes the sizes of the keyboards.
- See "Other Settings" on page E-25 for information about another method you can use to change the split point.

### **Using Effects**

Reverb.....Makes your notes resonate. Chorus ....Adds more breadth to your notes.

#### To turn effects on and off

- **1** Use the **REVERB** and **CHORUS** buttons to turn the effects on and off as shown below.
  - The lamps above the buttons show whether the effects are on or off.



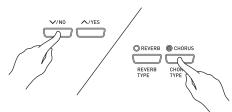
#### To change the effect type

- **1** Turn on **REVERB** or **CHORUS**.
- 2 While holding down the effect button (REVERB or CHORUS), use the √/NO and ∧/YES buttons to change the effect type as described below. [Reverb]

V/N0 //YES @ REVERB @ CHORUS REVER TYPE CHORUS

Reverb Value
1: Room
2: Small Hall
3: Large Hall
4: Stadium

[Chorus]



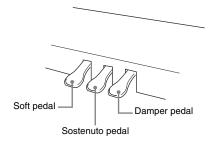
- Chorus Value
  - 1: Light Chorus
  - 2: Medium Chorus
  - 3: Deep Chorus
  - 4: Flanger (Whooshing effect)

#### 

• While the keyboard is layered, the chorus on/off setting affects the layered tone only. While the keyboard is split, the chorus on/off setting affects the low range tone only.

# Using the Digital Piano's Pedals

Your digital piano comes equipped with three pedals: damper, soft, and sostenuto



#### **Pedal Functions**

#### • Damper Pedal

Pressing the damper pedal while playing will cause the notes you play to reverberate for a very long time.

• When GRAND PIANO 1, GRAND PIANO 2, or GRAND PIANO 3 is selected as the tone, pressing this pedal will cause notes to reverberate just like the damper pedal on an acoustic grand piano. Half-pedal operation (pressing the pedal part way) is also supported.

#### • Soft Pedal

Pressing this pedal while playing suppresses notes played on the keyboard after the pedal was pressed, and makes them sound softer.

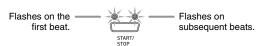
#### • Sostenuto Pedal

Only the notes that are played while this pedal are depressed are sustained until the pedal is released.

### **Using the Metronome**

#### **1** Press the **METRONOME** button.

- This will start the metronome.
- The two lamps above the **START/STOP** button will flash along with the metronome beats.



 To change the beat, hold down the METRONOME button as you press the /NO or /YES button.



• You can select a beat value in the range of 2 through 6. A chime sounds as the first beat of each measure, and the remaining beats sound as clicks. Specifying 0 as the setting plays a straight click, without any chime. This setting lets you practice with a steady beat.

#### **3** Press the **TEMPO/SETTING** button.

- This will cause the button's lamp to flash.
- 4. Use the √/NO and ^/YES buttons to adjust the tempo in a range of 20 to 255 beats per minute.



#### 5. Press the TEMPO/SETTING button again.

- This will cause the lamp above the button to go out.
- Press the METRONOME button again to stop the metronome.

#### 

• See "Other Settings" on page E-25 for information about another method you can use to configure the metronome setting.

#### To adjust the metronome volume

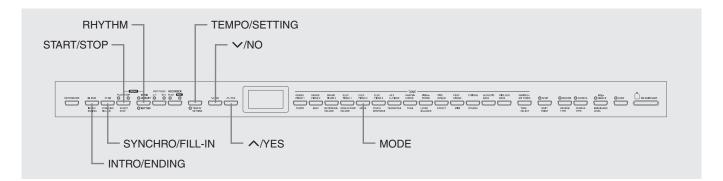
#### 

- You can perform the following procedure at any time, regardless of whether or not the metronome is sounding.
- Press the TEMPO/SETTING button.
   This will cause the lamp above the button to flash.
- 2 Press the METRONOME VOLUME button.This will cause the lamp above the button to flash.
- 3. Use the √/NO and ^/YES buttons to change the metronome volume in the range of 0 to 42.



- **4** Press the **TEMPO/SETTING** button again.
  - This will cause the lamp above the button to go out.

# **Playing a Rhythm**



## Selecting a Rhythm

You can select from among 20 built-in rhythms.

- **1** Press the **RHYTHM** button so the lamp below it is lit.
  - Each press of the button toggles between the upper lamp and lower lamp.



• This will cause the currently selected rhythm number to appear on the display.



- 2. Find the rhythm number of the rhythm you want to use in the Rhythm List on page A-3.
- 3 Use the V/NO and /YES buttons to scroll through the rhythm numbers until the one you want is displayed.



- **4** Press the **START/STOP** button.
  - This will start the rhythm.
- **5** Press the **START/STOP** button again to stop the rhythm.

#### To adjust playback tempo

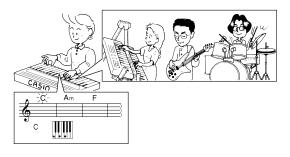
- **1** Press the **TEMPO/SETTING** button.
  - This will cause the button's lamp to flash.
- 2 Use the //NO and //YES buttons to change the tempo in the range of 20 to 255.



Press the TEMPO/SETTING button again.
This will cause the lamp above the button to go out.

## **Using Auto Accompaniment**

With Auto Accompaniment, the digital piano automatically plays rhythm, bass, and chord parts in accordance with chords you select using simplified keyboard fingerings, or chords you play. Auto Accompaniment makes it feel like you have your own private backup group with you all the time.



• With the rhythms listed below, make sure that CASIO CHORD, FINGERED, or FULL RANGE CHORD is selected before you try playing chords. The volume of percussion instruments is very low, and percussion is inserted in a way that does not interfere with the overall mood of the rhythm.

10	ROCK'N'ROLL
14	ARPEGGIO 1
15	ARPEGGIO 2
16	MARCH 1
17	MARCH 2
18	STRIDE PIANO
19	WALTZ 1
20	WALTZ 2

#### To play with Auto Accompaniment

#### PREPARATION

- Use the procedures under "Selecting a Rhythm" to select the rhythm you want to use and adjust the tempo.
- **1** Press the **TEMPO/SETTING** button.
  - This will cause the button's lamp to flash.
- 2. Press the MODE button.
- 3 Use the //NO and //YES buttons to select one of the Auto Accompaniment modes shown below.

Display Indicator	Meaning
oFF	NORMAL
C.C.	CASIO CHORD
FnG	FINGERED
FUL	FULL RANGE CHORD

• Here we will select the CASIO CHORD mode.



- See "How to Play Chords" on page E-16 for details about Auto Accompaniment modes and their chord fingerings.
- **4** Press the **TEMPO/SETTING** button again.
  - This will cause the lamp above the button to go out.

#### 5. Press the SYNCHRO/FILL-IN button.

- This configures the digital piano so rhythm and chord accompaniment will start automatically when you press any keys within the accompaniment keyboard range.
- This will cause the two lamps above the **START/ STOP** button to flash.

### **6** Press the **INTRO/ENDING** button.



- **7** Finger the first chord within the accompaniment keyboard range.
  - Playing a chord will cause the intro pattern for the selected rhythm to play, followed by the accompaniment rhythm and chord pattern.

#### 8. Finger other chords on the keyboard.

- See "How to Play Chords" on page E-16 for information about how to finger chords within the different Auto Accompaniment modes.
- The two lamps above the **START/STOP** button will flash along with the beat.



#### 🗍 NOTE

- You can insert a fill-in pattern while a rhythm pattern is playing by pressing the **SYNCHRO/FILL-IN** button. A fill-in helps to change the mood of the pattern.
- **9** To stop accompaniment, press the **INTRO**/ **ENDING** button.
  - This will play an ending pattern for the selected rhythm before stopping Auto Accompaniment play.

#### 🗓 NOTE

- You can stop accompaniment play without an intro and ending pattern by pressing the **START/STOP** button in place of steps 6 or 9.
- See "Other Settings" on page E-25 for information about adjusting accompaniment volume.

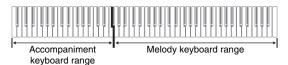
#### How to Play Chords

The way you finger chords depends on the current Auto Accompaniment mode. If you want to play without Auto Accompaniment, use the NORMAL mode.

#### ■ CASIO CHORD

Even if you do not know how to play chords normally, this mode lets you play four different types of chords using simplified fingerings in the accompaniment keyboard range of the keyboard. The following shows where the accompaniment keyboard range is located, and explains how to finger chords in the CASIO CHORD mode.

#### **CASIO CHORD Mode Keyboard**



#### IMPORTANT!

- In the CASIO CHORD mode, the keys in the accompaniment keyboard range of the keyboard operate as "chord switches" only. You cannot use the keys in this keyboard range to play notes.
- You can use the split point to change the size of the accompaniment keyboard range. See "To specify the keyboard split point" on page E-11 for more information.

Chord Types	Example:
Major Chords Pressing a single accompaniment keyboard range key in the CASIO CHORD mode will play the major chord whose name is marked above the key. All of the accompaniment keyboard range keys that are marked with the same chord name play exactly the same chord.	C (C Major) Note → names
Minor Chords To play a minor chord, press the accompaniment keyboard range key that corresponds to the major chord, while also pressing one other accompaniment keyboard range key to the right.	Cm (C Minor)
Seventh Chords To play a seventh chord, press the accompaniment keyboard range key that corresponds to the major chord, while also pressing two other accompaniment keyboard range keys to the right.	C7 (C Seventh)
Minor Seventh Chords To play a minor seventh chord, press the accompaniment keyboard range key that corresponds to the major chord, while also pressing three other accompaniment keyboard range keys to the right.	Cm7 (C Minor Seventh)

#### 

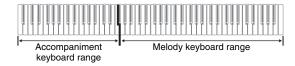
• When playing a minor, seventh, or minor seventh chord, it makes no different whether the additional keys you press are black or white.

в

#### FINGERED

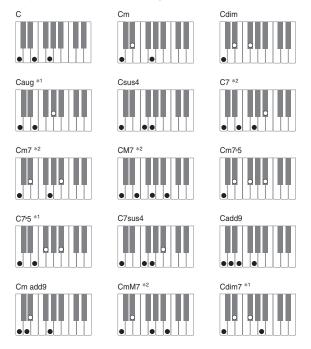
In the FINGERED mode, you play standard chord fingerings in the accompaniment keyboard range to play chords. To finger a C chord, for example, you would press the C-E-G keys.

#### FINGERED Mode Keyboard



#### MPORTANT!

- In the FINGERED mode, the keys in the accompaniment keyboard range of the keyboard operate as "chord switches" only. You cannot use the keys in this keyboard range to play notes.
- You can use the split point to change the size of the accompaniment keyboard range. See "To specify the keyboard split point" on page E-11 for more information.



#### 

- See the "Fingered Chord Chart" on page A-4 for information about fingering chords with other roots in the accompaniment keyboard range.
- \*1 Inverted fingerings (see "Fingered Chord Notes" on page E-17) are not supported for these chords. The lowest note fingered is used as the root.
- \*2 For these chords, the same chord is specified even if the G fifth is not fingered

#### **Fingered Chord Notes**

- Except for the chords whose names have<sup>\*1</sup> after them in the above examples, you also can use inverted fingerings. This means that fingering either E-G-C or G-C-E will produces a C chord.
- Except for the chords whose names have\*<sup>2</sup> after them in the above examples, you need to press all of the indicated keys in order to finger a chord. Failure to include even a single note may produce a chord that is different from the one you want.

#### FULL RANGE CHORD

The FULL RANGE CHORD mode lets you play a total of 38 different types of chords (the same chords available in the FINGERED mode plus 23 more). FULL RANGE CHORD recognizes the pressing of three or more keyboard keys anywhere on the keyboard as a chord fingering. Anything else (pressing one or two keys, or playing any group of notes that does not form a chord fingering that is recognized by the keyboard) is treated as melody notes.

#### FULL RANGE CHORD Mode Keyboard

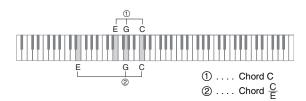


#### Accompaniment Keyboard/Melody Keyboard

#### • Recognized Chords

Туре	Chord Types
FINGERED Mode Chords	15 (See "FINGERED" on page E-17.)
Other Chords	23 For example, the following are chords that have C as the bass note. C6, Cm6, C69 $\frac{D^{\flat}}{C}, \frac{D}{C}, \frac{E}{C}, \frac{F}{C}, \frac{G}{C}, \frac{A^{\flat}}{C}, \frac{B^{\flat}}{C},$ $\frac{B}{C}, \frac{D^{\flat}m}{C}, \frac{Dm}{C}, \frac{Fm}{C}, \frac{Gm}{C}, \frac{Am}{C}, \frac{B^{\flat}m}{C},$ $\frac{Ddim}{C}, \frac{A^{\flat}7}{C}, \frac{F7}{C}, \frac{Fm7}{C}, \frac{Gm7}{C}, \frac{A^{\flat}add9}{C}$

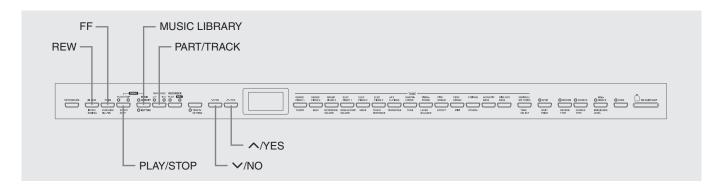
*Example:* C Major or  $\frac{C}{E}$  chord



#### NOTE

• When there are at least six semitones between the lowest note and the next note to the right, the lowest note is assumed to be the bass note.

# **Playing Back Built-in Songs**



#### IMPORTANT!

• After you select a built-in song, it can take a number of seconds for the song data to be loaded. While the data is being loaded, the song number will flash on the display, and the keyboard keys and button operations will be disabled. If you are playing something on the keyboard, the following operation will cause output to stop.

# Playing Back All of the Built-in Songs

Your digital piano has a total of 74 built-in songs. You can use the procedure below to play back all of the songs, one after the other.

Туре	Number of Songs	Display Indicator
Main Tone Demo Song	14	The <b>TONE</b> button of the main tone being used flashes, and the demo song number is on the display.
Music Library Song	60	The Music Library lamp flashes and the song number is displayed.

## **1** While holding down the **MUSIC LIBRARY** button, press the **PLAY/STOP** button.

- This will start playback of the 74 built-in songs in sequence, from t.01 through L.60.
- You can play along with a song on the keyboard during all-song playback. The tone assigned to the keyboard is the one that is preset for the song that is playing.
- You can use the V/NO and /YES buttons to skip sequentially between songs during all-song playback.
- If you press a **TONE** button, playback will jump to the demo song that uses that tone. If you press the **MUSIC LIBRARY** button during all-song playback, playback will jump to Music Library song L.01.
- Pressing the V/NO and /YES buttons at the same time will jump to main tone demo song t.01.
- Press the PLAY/STOP button to stop all-song playback.

## Playing Back a Specific Music Library Song

The Music Library includes both built-in songs (01 to 60), plus up to 10 songs (61 to 70) that have been saved to digital piano memory from a computer\* or SD memory card (page E-33). You can use the procedure below to select one of these songs and play it back.

- \* You can download music data from the Internet and then transfer it from your computer to digital piano memory. See "Expanding the Selections in the Music Library" on page E-32 for more information.
- **1** Press the **MUSIC LIBRARY** button so the lamp above the button is lit.



- Each press of the button toggles between the upper lamp and lower lamp.
- This will cause the currently selected song number to appear on the display.



- 2. Find the song number of the song you want to play in the Song Llist on page A-3.
- **3** Use the **//NO** and **//YES** buttons to select a song.



#### **4** Press the **PLAY/STOP** button.

- This starts the playback of the song.
  - The measure number appears on the display during playback.



#### 

- To view the song number during playback, hold down the **MUSIC LIBRARY** button.
- While playback is in progress, you can press the ✓/NO or ∧/YES button to change to another song.

- Press the PLAY/STOP button again to stop playback.
  - Playback will stop automatically when the end of the song is reached.

#### 🗓 NOTE

• Pressing the V/NO and /YES buttons at the same time will select Music Library song number 01.

## **Skipping Back through a Song**

- **1** While playback is in progress, hold down the **REW** button.
  - This skips back through the song measure-bymeasure.
  - The measure number appears on the display while you are skipping back.



 When you reach the point you want, release the **REW** button to resume playback.



• Depending on what is being played when you press the **REW** button, the skip back operation may not start right away when you press it.

# Skipping Forward through a Song

- While playback is in progress, hold down the FF button.
  - This skips forward through the song measure-bymeasure.
  - The measure number appears on the display while you are skipping forward.



2. When you reach the point you want, release the **FF** button to resume playback.

#### DOTE

• You can change tempo, volume, and pre-count settings for playback. See "Other Settings" on page E-25 for more information.

## Practicing with a Music Library Song

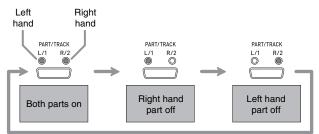
You can turn off the left hand part or right hand part of a Music Library song and play along on the digital piano.

#### **NOTE**

• The Music Library includes a number of duets. While a duet is selected, you can turn off the first piano <Primo> or second piano <Secondo> tone and play along with the song.

#### PREPARATION

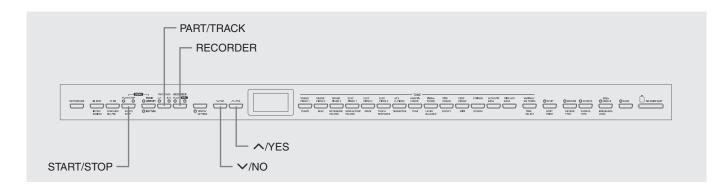
- Select the Music Library song you want to practice and adjust the tempo.
- A number of tunes have tempo changes part way through in order to produce specific musical effects.
- **1** Use the **PART/TRACK** button to turn off a part.
  - Each press of the **PART/TRACK** button cycles through the part settings as shown below. The lamps above the button show which part is turned off.



#### 2 Press the **PLAY/STOP** button.

- This starts playback, without the part you turned off in step 1.
- **3** Play the missing part on the keyboard.
- 4 Press the PLAY/STOP button again to stop playback.

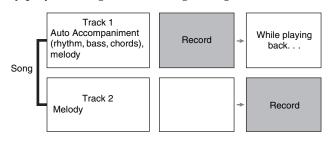
# **Recording and Play Back**



You can store the notes you play in digital piano memory for later playback. You can have up to five songs in memory at one time.

## **Songs and Tracks**

A track is a container of recorded data, and each song consists of two tracks: Track 1 and Track 2. You can record each track separately and then combine them so they play back together as a single song.



#### **Memory Capacity**

- Digital piano memory can hold about 50,000 notes total, for five songs. Each song can contain up to about 10,000 notes.
- Recording will stop automatically and the REC lamp will go out if the number of notes in memory exceeds the maximum.

#### **Recorded Data**

- Keyboard play
- Tone used
- Pedal operations

#### Track 1 only

- Tempo setting
- Layer and split settings
- Reverb and chorus settings
- Rhythm Patterns
- Chord fingering
- Intro, fill-in, ending operations

#### **Recording Data Storage**

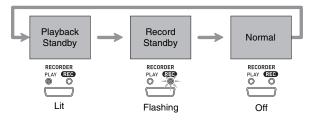
- Starting a new recording deletes any data that was previously recorded in memory.
- Should power fail during recording, all of the data in the track you are recording will be deleted.
- You can save memory data to external media, if you want. See "Using an SD Memory Card" on page E-33 for more information.

#### MPORTANT!

- CASIO COMPUTER CO., LTD. takes no responsibility for any damages, lost profits, or claims by third parties arising from the deletion of recorded data due to malfunction, repair, or for any other reason.
- After you select a song, it can take a number of seconds for the song data to be loaded. While the data is being loaded, the song number will flash on the display, and the keyboard keys and button operations will be disabled. If you are playing something on the keyboard, the following operation will cause output to stop.

#### Using the RECORDER Button

Each press of the **RECORDER** button cycles through the recording options in the sequence shown below.



## **Recording Your Keyboard Play**

After recording to either of the tracks of a song, you can record to the other track while listening to playback what you recorded in the first track.

## To record to a specific track of a specific song

**1** Press the **RECORDER** button so the PLAY lamp is lit.



2. Use the √/NO and ^/YES buttons to display a song number (1 to 5).



**3.** Press the **RECORDER** button so the REC lamp is flashing.



• At this time the L/1 lamp will flash to indicate that the digital piano is standing by for recording to Track 1.



- **4** Use the **PART/TRACK** button to select the track to which you want to record.
  - Make sure that the lamp for the record track is flashing. Track 1: L/1 lamp
    - Track 2: R/2 lamp

#### 

• If you want to record with rhythm or Auto Accompaniment, select Track 1 (L/1 lamp flashing).

- 5. Select the tone and effects you want to use in your recording, and set the tempo you want. If you are recording to Track 1, you also can select a rhythm and accompaniment mode.
  - Tone (page E-8)
  - Effect (page E-11)
  - Tempo (page E-14)
  - Track 1 only
  - Rhythm (page E-14)
  - Mode (page E-16)

#### NOTE

- It is a good idea to use a relatively slow tempo when recording.
- If you want the metronome to sound during recording, press the **METRONOME** button.
- 6. Start playing something on the keyboard.
  - Recording will start automatically.

#### 

- When recording to Track 1 with rhythm or Auto Accompaniment: Press the **START/STOP** button to start recording. You also can start recording by pressing the **SYNCHRO/FILL-IN** button and/or the **INTRO/ ENDING** button, and then play a chord.
- When recording to Track 1 without rhythm or Auto Accompaniment: Recording will start as soon as you play anything on the keyboard.
- When you are finished, press the START/ STOP button to stop recording.
  - To stop recording with a rhythm/Auto Accompaniment ending pattern, press the **INTRO**/ **ENDING** button.
  - This will cause the REC lamp to go out and the PLAY lamp to light.
  - To play back the track you just recorded, press the **START/STOP** button again.

в

8 After you are finished recording or playing back, press the RECORDER button so the PLAY lamp and REC lamp are off.

#### To record to one track of a song while listening to the playback of the other track

Press the **RECORDER** button so the PLAY lamp is lit.



2 Use the √/NO and ^/YES buttons to display a song number (1 to 5).



This indicator appears when the track contains recorded data already.

- **3.** Press the **RECORDER** button so the REC lamp is flashing.
  - This will cause the L/1 lamp to flash.
- **4** Use the **PART/TRACK** button to select the track to which you want to record.
  - Make sure that the lamp for the record track is flashing.

*Example:* To listen to playback of Track 1 as you record to Track 2



Lit: Playback standby Flashing: Record standby

- **5** Select the tone and effects you want to use for your recording.
- 6 Press the **START/STOP** button or play something on the keyboard to start simultaneous playback from Track 1 and recording to Track 2.
  - This will start both playback of the recorded track and recording to the other track.
- When you are finished, press the START/STOP button again to stop recording.

### Playing Back from Digital Piano Memory

**1** Press the **RECORDER** button so the PLAY lamp is lit.



2 Use the //NO and //YES buttons to display a song number (1 to 5).



#### 

• When a song has something recorded in both tracks, you can turn off one track and play back just the other track, if you want. Whether a track is on or off is indicated by the lamps above the **PART/TRACK** button. Each press of the **PART/TRACK** button cycles through the different possible track on/off settings.

#### **3** Press the **START/STOP** button.

• This starts playback of the song and/or track you selected.

#### 

- You can change the tempo setting as a track is playing.
- You cannot change the tone setting during playback.
- Press the START/STOP button again to stop playback.

### **Deleting Recorded Data**

The following procedure deletes a specific track of a song.

#### MPORTANT!

- The procedure below deletes all of the data of the selected song. Note that the delete operation cannot be undone. Check to make sure you really do not need the data in digital piano memory before you perform the following steps.
- Press the **RECORDER** button so the PLAY lamp is lit.
- 2. Use the √/NO and ∧/YES buttons to display a song number (1 to 5).
- **3** Press the **RECORDER** button so the REC lamp is flashing.



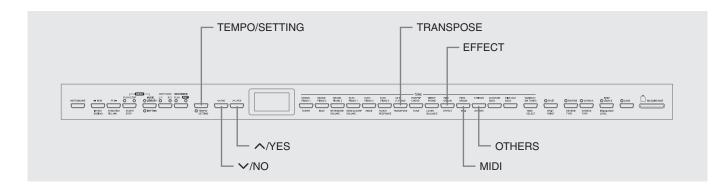
- **4** Use the **PART/TRACK** button to select the track you want to delete.
  - This will cause the lamp of the selected track to flash.
- Hold down the RECORDER button until "dEL" (dELete) appears on the display.



#### 6 Press the **/YES** button.

- This will delete the selected track and enter record standby.
- To cancel the operation, press the ✓/NO button in place of the ∧/YES button.

# **Other Settings**



This section explains how to configure key, touch, MIDI, and other settings.

- The basic procedure below is used for configuring all settings. The only difference is the button that you press to select a parameter.
- See the "Secondary Parameter Reference" on page E-27 for details about the settings you can configure using this procedure.

## **Configuring Settings**

 Use the "Secondary Parameter Reference" on page E-27 to find the parameter whose setting you want to configure, and note the applicable parameter button name.

*Example:* To change key, you would need to use the **TRANSPOSE** button.

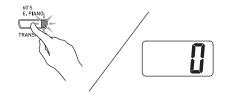
- 2. Press the TEMPO/SETTING button.
  - This will cause the button's lamp to flash.



#### **3** Press the button you looked up in step 1.

• The button's lamp will flash and the current setting of the parameter you are configuring will appear on the display.

Example: TRANSPOSE button



• If the button has multiple parameters assigned to it, keep pressing the button until the parameter you want to configure is displayed. See "Multiple Parameter Buttons" below for more information. **4** Use the **√/NO** and **∧/YES** buttons to change the setting of the displayed parameter.

*Example:* Lower the transpose setting by one semitone by changing the displayed value to -1.



- **5** Press the **TEMPO/SETTING** button to complete the procedure.
  - This will cause the button's lamp to go out.

#### 🗓 NOTE

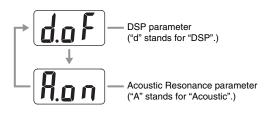
• Pressing the ✓/NO and ∧/YES buttons at the same time will change the displayed parameter to its default setting.

#### **Multiple Parameter Buttons**

The EFFECT, MIDI, and OTHERS buttons have more than one parameter assigned to them. Use the procedures below to select the parameter whose setting you want to change.

## To change the setting of one of the EFFECT button parameters

Pressing the **EFFECT** button in step 3 of the "Configuring settings" procedure will toggle between the two parameters shown below.

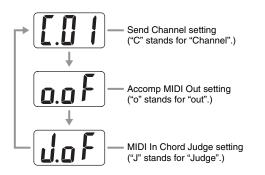


### 

- While the keyboard is layered, the DSP on/off setting affects the layered tone only. While the keyboard is split, the DSP on/off setting affects the low range tone only.
- Turning on DSP will apply the DSP effect to tones with DSP only. It will not be applied to any other type of tone.
- Turning on Acoustic Resonance will apply the Acoustic Resonance effect to tones that support Acoustic Resonance only. It will not be applied to any other type of tone.

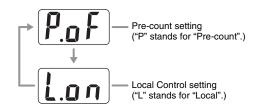
## To change the setting of one of the MIDI button parameters

Pressing the **MIDI** button in step 3 of the "Configuring settings" procedure will cycle between the parameters shown below.



## To change the setting of one of the OTHERS button parameters

Pressing the **OTHERS** button in step 3 of the "Configuring settings" procedure will cycle between the parameters shown below.



## Secondary Parameter Reference

#### Keyboard

Setting	Parameter Name	Settings	Description
Keyboard touch response	TOUCH RESPONSE	oFF : Off 1 : Strong sound is produced even when relatively light pressure is applied. 2 : Normal 3 : Normal sound is produced even when relatively strong pressure is applied.	Specifies the relative touch of the keyboard keys.
Key	TRANSPOSE	-6 to 0 to 5	<ul> <li>Raises or lowers the tuning of the digital piano in semitone steps.</li> <li><b>NOTE</b></li> <li>Using TRANSPOSE to raise the key of the digital piano can cause notes at the highest range of a tone to become distorted.</li> </ul>
Keyboard tuning	TUNE	-50 to 0 to 50	Raises or lowers the overall pitch of the digital piano to match another instrument. The setting range is plus or minus 50 cents (100 cents = 1 semitone) from the standard pitch of A4 = $440.0$ Hz.

#### Tones

Setting	Parameter Name	Settings	Description
VARIOUS/GM TONES button assignment	TONE SELECT	See "Tone List" on page A-1.	Assigns one of the digital piano's Various tone, GM tone, or Drum set to the <b>VARIOUS/GM TONES</b> button.
Layered tone volume balance	LAYER BALANCE	-24 to 0 to 24	Specifies the volume balance between layered tones. A lower value reduces the volume level of the layered tone.
Split point	SPLIT POINT	A0 to C8*	See page E-10.
Reverb type	REVERB TYPE	1 to 4	See page E-11.
Chorus type	CHORUS TYPE	1 to 4	See page E-11.
Brilliance level	BRILLIANCE LEVEL	-3 to -1, 1 to 3	See page E-9.
Acoustic Resonance	EFFECT	A.oF: Off A.on: On	■ GRAND PIANO 1, GRAND PIANO 2, and GRAND PIANO 3 tones only When the damper pedal is pressed, acoustic resonance reproduces the harmonic resonance similar to that of a grand piano. This parameter turns acoustic resonance on or off. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the EFFECT button parameters" on page E-26.
DSP	EFFECT	d.oF: Off d.on: On	<ul> <li>Certain Tones Only         DSP applies sophisticated acoustic effects to a tone.     </li> <li>For example, it applies a rotary speaker effect to the drawbar organ tone. This parameter turns the DSP effect on or off. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the EFFECT button parameters" on page E-26.     <li>NOTE         • See the tone list on page A-1 for information about whether or not a tone is a tone with DSP, and for DSP types.     </li> </li></ul>

#### \*Display Indicator

Display	R	Ь		d	E	F	Ĺ	<b>[-</b> ]	6-5
Settings	А	В	С	D	Е	F	G	F <sup>#</sup> 3	B <sup>⊧</sup> 5

### ■ Song, Rhythm, and Metronome

Setting	Parameter Name	Settings	Description
Tempo	ТЕМРО	20 to 255	Specifies the tempo of Music Library songs, the metronome, Auto Accompaniment playback, recording and playback, etc.
Metronome beat	BEAT	0, 2 to 6	Turns the metronome on or off.
Metronome volume	METRONOME VOLUME	0 to 42	Specifies the metronome volume.
Song, Auto Accompaniment volume	SONG/ACCOMP VOLUME	0 to 42	Specifies the volume of rhythm and chord accompaniment and built-in songs, independent of overall volume control.

Setting	Parameter Name	Settings	Description
Pre-count	OTHERS	P.oF: Off P.on: On	<ul> <li>Turns the pre-count before playback of a Music Library song on or off. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the OTHERS button parameters" on page E-26.</li> <li><b>NOTE</b></li> <li>When playing a song from the user area or from an SD memory card, the pre-count may not sound, even though the pre-count setting is turned on.</li> </ul>
Auto Accompaniment mode	MODE	oFF : NORMAL C.C. : CASIO CHORD FnG : FINGERED FUL : FULL RANGE CHORD	Specifies the Auto Accompaniment mode.

#### ■ MIDI

Setting	Parameter Name	Settings	Description
Send channel	MIDI	C.01 to C.16	Specifies one of the MIDI channels (1 through 16) as the Send Channel, which is used for sending MIDI messages to an external device. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the MIDI button parameters" on page E-26.
Accomp MIDI out	MIDI	o.oF: Off o.on: On	Use this parameter to specify whether or not MIDI messages should be sent in accordance with the digital piano's Auto Accompaniment and recording function playback. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the MIDI button parameters" on page E-26.
MIDI In Chord judge	MIDI	J.oF: Off J.on: On	Specifies whether chord judge should be performed on accompaniment range MIDI Note On messages received from an external device. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the MIDI button parameters" on page E-26.
Local control	OTHERS	L.oF: Off L.on: On	When Local Control is turned on, pressing the keyboard's keys plays the notes using the currently selected built-in tone, and also sends the applicable MIDI messages out the MIDI OUT port. Turning off Local Control cuts off the digital piano's sound source, so no sound is produced by the digital piano when keys are pressed. This capability comes in handy when you want to turn off the digital piano's keyboard and play on an external sequencer or other device. When configuring the setting of this parameter, use the procedure under "To change the setting of one of the OTHERS button parameters" on page E-26.

## Connecting to the MIDI Terminal

#### What is MIDI?

MIDI is a standard for digital signals and connectors that allows musical instruments, computers, and other devices, regardless of manufacturer, to exchange data with each other.

#### 

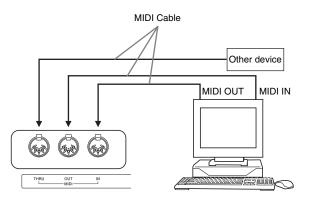
• For details about MIDI implementation, visit: http://world.casio.com/

#### **MIDI Connections**

Connecting your computer or other external MIDI device to the digital piano's **MIDI THRU/OUT/IN** terminals makes it possible for them to exchange MIDI messages. You also can playback notes you play on the digital piano on the connected device.

There is a third MIDI terminal named **MIDI THRU**, which passes any MIDI messages received by the **MIDI IN** terminal on to another device.

#### Bottom



#### **MIDI Settings**

You can use the procedure in "Other Settings" (page E-25) to configure MIDI settings. See page E-27 for a description of the settings and information about how to configure them.

## **Connecting to the USB Port**

The digital piano's **USB** port makes it quick and simple to connect to a computer.

You can install a USB MIDI driver from the CD-ROM that comes bundled with the digital piano onto a computer equipped with a USB port. After that, you can connect the digital piano to your computer and run commercially available MIDI software on your computer to exchange MIDI data with the digital piano. You also can use the USB connection to transfer files you downloaded from the CASIO MUSIC SITE from your computer to the digital piano. You will need a commercially available USB cable to connect a computer to the digital piano's **USB** port.

## To connect to a computer using the USB port

 On the computer to which you plan to connect, install the USB MIDI driver from the CD-ROM that comes bundled with the digital piano.

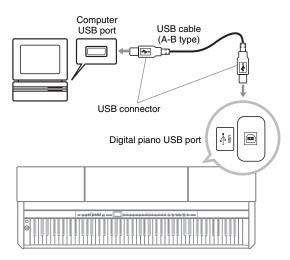
#### 

- Before installing the USB MIDI driver, be sure to read the contents of the "readme.txt" file in the "English" folder on the bundled CD-ROM.
- For details about how to install the USB MIDI driver, see the "CASIO USB MIDI Driver User's Guide" (manual\_e.pdf)<sup>\*1</sup> that also is on the bundled CD-ROM.

2. Use a commercially available USB cable (A-B type) to connect the digital piano to the computer.

#### MPORTANT!

• Make sure that the digital piano is turned off before connecting or disconnecting the USB cable to it.



\*1 You need to have Adobe Reader or Acrobat Reader installed on your computer in order to view the contents of the "CASIO USB MIDI Driver User's <u>Guide" (manual\_e.pdf)</u>. If your computer does not have Adobe Reader or Acrobat Reader installed already, use the procedure below to install it.

#### To install Adobe Reader (Acrobat Reader\*2)

- **1** Place the CD-ROM that comes with the digital piano into your computer's CD-ROM drive.
- On the CD-ROM, navigate to the "Adobe"/ "English" folder and double-click "ar601enu.exe" (or "ar505enu.exe\*2"). Follow the instructions that appear on your computer screen to install the driver.
- \*2 Adobe Reader cannot be installed using the "ar601enu.exe" file on a computer running Windows 98. If your computer is running Windows 98, click "ar505enu.exe" to install Acrobat Reader.

#### Minimum Computer System Requirements

#### Supported Operating Systems

Windows® XP Professional, Windows® XP Home Edition, Windows® 2000 Professional, Windows® Me, Windows® 98SE, Windows® 98

#### Driver Minimum Computer System Requirements

The following are the minimum computer system requirements for running the USB MIDI driver.

- Universal
  - IBM AT or compatible computer
  - USB port that provides normal operation under Windows
  - CD-ROM drive (for installation)
  - At least 2MB of free hard disk space (not including space required for Acrobat Reader)
- Windows XP
  - Pentium 300MHz or higher
  - 128MB minimum memory
- Windows 2000
  - Pentium 166MHz or higher
  - 64MB minimum memory
- Windows Me, Windows 98SE, Windows 98
  - Pentium 166MHz or higher
  - 32MB minimum memory

### **USB Mode and MIDI Mode**

Your digital piano has two data communication modes: a USB mode and a MIDI mode. The digital piano will enter the USB mode automatically whenever a connection is established between it and the USB driver running on a connected computer. If there is no computer connected to the USB port, the digital piano will enter the MIDI mode.

• USB Mode



The above indicator appears for about three seconds after a USB connection is established. For details about using the MIDI device functions in the USB mode, see the "CASIO USB MIDI Driver User's Guide" (manual\_e.pdf) on the bundled CD-ROM.

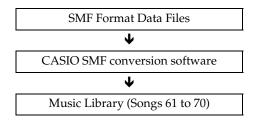
#### • MIDI Mode



The above indicator appears for about three seconds after a USB connection terminated. The MIDI mode is used when sending and receiving data over the digital piano's MIDI terminals.

# Expanding the Selections in the Music Library

You can store up to 10 songs you have downloaded with your computer as songs 61 through 70 of the Music Library and practice along with them as they play, just as you do with the built-in songs. You also can use the CASIO SMF conversion software (SMF Converter) to convert SMF data files you have purchased or created, and transfer them to the digital piano's Music Library.



#### 

• You will not be able to transfer data from a computer to the digital piano during playback or recording of song data, during a data save or recall operation, etc. Wait until the current operation is complete before transferring data.

## To install the SMF conversion software (SMF Converter)

- Place the CD-ROM that comes with the digital piano into the CD-ROM drive of a computer that is equipped with a USB port.
- 2. Navigate to the CD-ROM and then doubleclick the "SMFConv-e.exe" file. Next, follow the instructions that appear on your computer screen to install the software.
  - Before installing SMF Converter, be sure to read the contents of the "smfreadme.txt" file. A version of this file is provided in each language folder on the CD-ROM.

For information about using SMF Converter, doubleclick [index.html] in the [help] folder, which was created when you installed SMF Converter. You also can access user documentation from the Windows [Start] menu by clicking [Programs] – [CASIO] – [SMF Converter] – [manual].

A browser that supports frames (like Internet Explorer 4 or Netscape Navigator 4.04 or higher) is required to view the SMF Converter manual.

#### **Minimum Computer System Requirements**

• Operating System Windows 98SE Windows Me Windows XP Professional Windows XP Home Edition

Storage

At least 10 MB of available disk space

• USB Interface

You also can download the SMF conversion software from the CASIO Website.

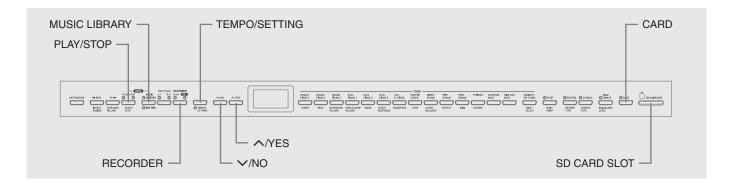
CASIO MUSIC SITE http://music.casio.com/

In addition to the software itself, the CASIO MUSIC SITE also will provide you with information about its installation and use. You also can find out the latest news about your digital piano and other CASIO musical instruments, and much more.

#### 

• Your digital piano supports SMF Format 0 and Format 1.

# **Using an SD Memory Card**



Your digital piano's SD memory card slot makes it possible for you to store song data on a commercially available SD memory card.



The digital piano also can read SMF song data and CASIO format song data from an SD memory card.

## • Supported SD Memory Cards

The maximum supported SD memory card size is 1 GB. Use of any SD memory card with greater capacity is not supported.

• Supported Data File Types and SD Memory Card Operations

Data File Type	Display Indicator <sup>*1</sup>	File Name Extension	Supported SD Memory Card Operations
SMF Data (Format 0)	U (v)	.MID	Playback, transfer to user area, save to SD memory card <sup>*2</sup>
SMF Data (Format 1)* <sup>3</sup>	U (v)	.MID	Playback, transfer to user area
Song data converted to CASIO format using CASIO SMF conversion software (CASIO format)	C (d)	.CM2	Playback, transfer to user area
Song data recorded on the digital piano (CASIO format)	r (q)	.CSR	Transfer to recorder area, save to SD memory card

- \*1 If the first two characters of the filename of song data is not a two-digit number from 01 to 99, the corresponding letter (according to data type) shown in the parentheses will be displayed as the data type indicator.
- \*2 <u>Song data recorded with the digital piano can be</u> <u>saved as SMF Format 0 data.</u>
- \*3 The digital piano will not be able to correctly play a file that has more than 17 tracks.
- Data File Display



Data File Type File Number (01 to 99)

#### MPORTANT!

• Use only SD memory cards. Operation is not guaranteed when any other type of memory card is used.

## SD Memory Card and SD Memory Card Slot Precautions

## MPORTANT!

- Whenever handling an SD memory card, be sure to observe the instructions and precautions in the user documentation that comes with it.
- SD memory cards have a write-protect switch that protects against accidental deletion of data.
- Avoid using an SD memory card in the following types of areas. Such conditions can corrupt data stored on the memory card.
  - Areas subjected to high temperature, high humidity, and corrosive gas
  - Areas subjected to strong electrostatic charge and digital noise
- Never touch the contacts of an SD memory card when loading it or removing it from the digital piano.
- Never remove the SD memory card from the digital piano or turn off the digital piano while it is reading data from or writing data to the memory card. Doing so can corrupt the data on the memory card and damage the SD memory card slot.

- Never insert anything besides an SD memory card into the SD memory card slot. Doing so creates the risk of malfunction.
- Inserting an SD memory card that carries an electrostatic charge into the SD memory card slot can cause malfunction of the digital piano. If this happens, turn the digital piano off and then back on again.
- An SD memory card can become quite warm after very long use in the SD memory card slot. This is normal and does not indicate malfunction.
- An SD memory card has a limited service life. After very long use, you may start to experience problems with storing data to, or reading or deleting data from the memory card. When this happens, you need to purchase a new SD memory card.

Note that CASIO COMPUTER CO., LTD. shall not be held liable for any loss of data stored on an SD memory card.

## Using an SD Memory Card with the Digital Piano

When using an SD Memory card, first be sure to format the memory card on the digital piano. For details, see "Formatting an SD Memory Card" on page E-38.

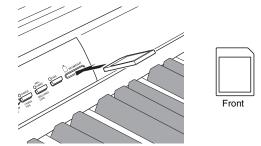
## Inserting and Removing an SD Memory Card

## MPORTANT!

- Note that the SD memory card must be oriented correctly when you insert it into the SD memory card slot. Trying to force the memory card into the slot can damage the card and the slot.
- Never remove the SD memory card from the card slot or turn off the digital piano while any data access operation (save, recall, format) is being performed. Doing so can corrupt the data on the memory card and damage the SD memory card slot.

#### ■ To insert an SD memory card

- With the SD memory card facing upwards as shown in the illustration, angle the card downwards as you insert it into the SD memory card slot.
  - Push the card into the slot until you hear it click into place.



## ■ To remove an SD memory card

#### MPORTANT!

- Before removing the SD memory card, check to make sure that the lamp above the CARD button is not lit. If the lamp is lit or flashing, it means that the card is being accessed, and that you should not remove it.
- **1** Press the memory card into the slot slightly and then release it.
  - This will cause the memory card to disengage and eject partially.
- **2** Pull the memory card out of the slot.

## Playing Back a File Stored on an SD Memory Card

Playback of SMF format data and song data converted using SMF conversion software to CASIO CM2 format.

### IMPORTANT!

 Note the following important precautions whenever playing back a data file you copied to a memory card with a computer.

To perform the procedure below, you must have an SD memory card to which an SMF data file has been copied from a computer. Insert an SD memory card that has been formatted on the digital piano into the memory card slot of your computer, and copy the data file you want to play back from your computer into the memory card folder named "MUSICDAT". Note that you will not be able to play back the data on the digital piano if it is not located inside the "MUSICDAT" folder. If you create a sub-folder inside of the "MUSICDAT" folder, the digital piano will not be able to load any data file inside the sub-folder.

• After you select a song data, it can take a number of seconds for the song data to be loaded. While the data is being loaded, the song number will flash on the display, and the keyboard keys and button operations will be disabled. If you are playing something on the keyboard, the following operation will cause output to stop.

## **1** Press the **CARD** button.

• The **CARD** button lamp will light and a file number will appear on the display.



CASIO format song

- 2. Use the ✓/NO and ∧/YES buttons to display the song number of the song you want to play.
- 3. Press the PLAY/STOP button.
- **4** Press the **PLAY/STOP** button again to stop playback.
- **5** After you are finished using the SD memory card, press the **CARD** button so its lamp turns off.

## 

• You can change tempo, volume, and pre-count settings for playback. See "Other Settings" on page E-25 for more information.

## Transferring Song Data from an SD Memory Card to Digital Piano Memory

You can use the procedures in this section to transfer song data from an SD memory card to the digital piano user area<sup>\*1</sup> or recorder area.<sup>\*2</sup>

- \*1 Music Library Songs 61 to 70
- \*2 Memory area where songs recorded on the digital piano are stored.

## Supported Data

User Area ..... SMF format data and song data converted using SMF conversion software (CASIO CM2 format) Recorder Area . . Song data recorded on the digital piano (CASIO CSR format)

#### PREPARATION

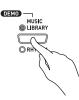
• Insert the SD memory card that contains the song data you want to transfer into the digital piano's SD memory card slot.

#### MPORTANT!

• Never turn off the digital piano or perform any other operation while data is being recalled from an SD memory card. Doing so can cause SD memory card data to be deleted or damaged, making transfer of the data impossible. It also can cause deletion of data stored in the user area or recorder area to which you are saving the data.

## To transfer song data from an SD memory card to the digital piano user area

**1** Press the **MUSIC LIBRARY** button so the lamp above the button is lit.



2 Use the √/NO and ^/YES buttons to display the number of the user area song (Music Library song number 61 through 70) to which you want to transfer the song data.



This mark indicates that the currently displayed user area song number has data stored already.

- Hold down the CARD button until its lamp starts to flash slowly and "LdU" (Load User area) appears on the display.
- 4. Use the √/NO and ^/YES buttons to display the file number of the song data you want to transfer to digital piano memory.



- **5**. When everything is the way you want, press the **TEMPO/SETTING** button to begin data transfer.
  - The message "CPL" (ComPLete) will appear on the display to let you know when data transfer is complete. The number of the user area song to which the data was transferred will be shown on the display.
  - To interrupt an ongoing data transfer operation, press the **CARD** button.
  - If the user area song number you select contains data already, pressing the **TEMPO/SETTING** button in step 5 will display "rEP" (rEPlace) to confirm that you want to replace the existing data with the data you are transferring. Press the **//YES** button to overwrite the data or the **//NO** button to cancel.

# To transfer song data from an SD memory card to the recorder area

**1** Press the **RECORDER** button so the PLAY lamp is lit.



 Use the V/NO and VYES buttons to display the number of the recorder area song (1 through 5) to which you want to transfer the song data.



This mark indicates that the currently displayed song number has data stored already.

- Hold down the CARD button until its lamp starts to flash slowly and "Ldr" (Load recorder area) appears on the display.
- 4. Use the √/NO and ^/YES buttons to display the file number of the song data you want to transfer to digital piano memory.



- **5** When everything is the way you want, press the **TEMPO/SETTING** button to begin data transfer.
  - The message "CPL" (ComPLete) will appear on the display to let you know when data transfer is complete. The number of the recorder area song to which the data was transferred will be shown on the display.
  - To interrupt an ongoing data transfer operation, press the **CARD** button.
  - If the recorder area song number you select contains data already, pressing the **TEMPO/SETTING** button in step 5 will display "rEP" (rEPlace) to confirm that you want to replace the existing data with the data you are transferring. Press the **∧/YES** button to overwrite the data or the **∨/NO** button to cancel.

## Saving Song Data Recorded on the Digital Piano to an SD Memory Card

You can save song data that you recorded to the digital piano's recorder area to an SD memory card as an SMF Format 0 file or a CASIO CSR file.

#### PREPARATION

• Insert an SD memory card that has been formatted on the digital piano into the digital piano's SD memory card slot. Make sure that the write-protect switch of the SD memory card is not in the write-protect position.

#### IMPORTANT!

- Never turn off the digital piano or perform any other operation while data is being saved to an SD memory card. Doing so can cause SD memory card data to be deleted and make impossible to store data to the card.
- Press the **RECORDER** button so the PLAY lamp is lit.



2 Use the V/NO and /YES buttons to select the song data (song number 1 through 5) you want to save.



- **3** Hold down the **CARD** button until its lamp starts to flash slowly and "Ldr" (Load recorder area) appears on the display.
- **4** Press the **CARD** button again.
  - This will cause the **CARD** button lamp to flash at a higher speed and "SvC" (Save as CSR file) to appear on the display. This setting will save song data in CASIO CSR format.
  - If you want to save the song data in SMF Format 0, press the **CARD** button again. This will cause "SvS" (Save as SMF0 file) to appear on the display.

5. Use the //NO and //YES buttons to select the file number where you want to save the song data.



This mark indicates that the currently displayed file number on the SD memory card has data stored already.

- 6 When everything is the way you want, press the **TEMPO/SETTING** button to begin saving data.
  - The message "CPL" (ComPLete) will appear on the display to let you know when the save operation is complete. After that, the digital piano will return to playback standby.
  - To cancel the save operation, press the **CARD** button.
  - If the SD memory card already contains a data file with the same file number, pressing the TEMPO/SETTING button in step 6 will display "rEP" (rEPlace) to confirm that you want to replace the existing file with the file you are saving. Press the ∧/YES button to overwrite the existing data file or the √/NO button to cancel.

# Formatting an SD Memory Card

Use the procedures in this section to format an SD memory card.

#### MPORTANT!

- Before performing the procedure below, check to make sure that the SD memory card does not contain any data you might need.
- The SD memory card format performed by your digital piano is a "quick format". If you want to completely delete all of the data on the card, format it on you computer or using some other device.

#### PREPARATION

• Insert the SD memory card you want to format into the digital piano's SD memory card slot. Make sure that the write-protect switch of the SD memory card is not in the write-protect position.

## To format an SD memory card

### **1** Press the **TEMPO/SETTING** button.

• This will cause the button's lamp to flash.

#### 2 Press the CARD button.

• This will cause "For" (Format) to flash on the display.

#### Press the /YES button to start formatting.

- "PLS" (PLeaSe wait) remains on the display while the formatting operation is performed. Never try to perform any other operation on the digital piano while the memory card is being formatted. The message "CPL" (ComPLete) will appear on the display to let you know when the format operation is complete.
- To cancel the format operation, press the V/NO button in place of the //YES button in step 3.

## SD Memory Card Errors

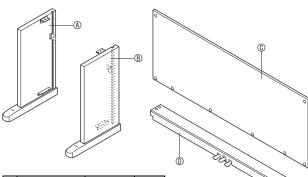
Display Message	Cause	Action
no[	No SD memory card loaded in the SD memory card slot or the card is not loaded correctly.	Correctly insert the SD memory card into the SD memory card slot. (Page E-34)
noF	You are trying to load data from an SD memory card that does not contain any data that is supported by this digital piano.	<ol> <li>Change to an SD memory card that contains data saved by or supported by this digital piano.</li> <li>When copying data to an SD memory card from a computer, copy it to the "MUSICDAT" folder. (Page E-35)</li> </ol>
Er 1	The SD memory card is damaged or the card was removed while it was being accessed.	<ol> <li>Use an SD memory card that was formatted on the digital piano. (Page E-38)</li> <li>Use a different SD memory card.</li> </ol>
[-2]	The SD memory card is full.	Use a different SD memory card.
<u>[r]</u>	An SD memory card was removed while some operation was in progress.	Never remove a card from the card slot while a card access operation is in progress.
[ry]	Attempt to overwrite the song data file that is read-only.	Save the file to a different SD memory card or under a different number.
[rs]	The data file you are trying to transfer to the digital piano is too large.	When playing back a file stored on an SD memory card or loading data to the user area, select a data file that is no larger than about 318 KB. When loading song data to the recorder area, you only can select song data that was recorded on this model of digital piano.
[[6]	You are trying to load SMF (Standard MIDI File) data that is not Format 0 or Format 1.	Use only Format 0 or Format 1 SMF data.
[Er]	You are trying to store data to an SD memory card that is write-protected.	<ol> <li>Use a different SD memory card.</li> <li>If you want to write to the SD memory card, change the write-protect position to enable writing. (Page E-33)</li> </ol>
<u>[r</u> ]	There is a problem with the SD memory card data format or the data is corrupted.	Use different data or a different SD memory card.

# **Assembling the Stand**

## Unpacking

#### PREPARATION

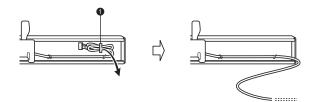
- Before starting assembly, check to make sure that you have all the parts shown below. You can find the screws in a plastic bag inside of the polystyrene foam packing material.
- This stand does not include any of the tools required for assembly. It is up to you to prepare a large Philips head (+) screwdriver for assembly.



	Part	Size (mm)	Qty
®		6 × 20	4
Ð	()IIII>	3.5 × 16	6
G		_	1
$^{(\!\!\!\!)}$		6 × 14	2
0		4 × 16	2
9			1
ĸ		6 × 20	1
$\mathbb{O}$	0	_	4

## MPORTANT!

- If anything is missing or damaged, contact your local CASIO service provider.
- Note that use of any unauthorized parts or components can cause damage to the stand and/or the digital piano.
- Before starting stand assembly, unfasten the band ① that bundles the pedal cable in the back of crosspiece ①, and extend the cable.

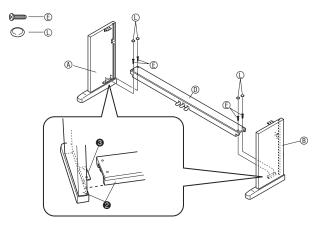


## 

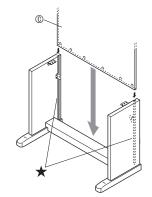
- This stand should be assembled by two people working together.
- This stand should be assembled on a flat surface.
- Do not remove the tape securing the keyboard cover in place until assembly is complete. Removing the tape can cause the keyboard cover to open and close during assembly, creating the risk of personal injury to your hands and fingers.
- Take care that you do not pinch your fingers between parts when assembling them.

## To assemble the stand

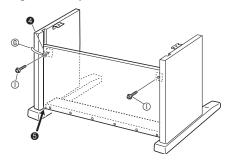
- **1** Attach side panels (a) and (b) to crosspiece (c). Secure the side panels using four (c) screws.
  - When installing part ②, slide the brackets ③ into the slots in either end crosspiece <sup>①</sup>. If the brackets ④ are not inserted into the ends of the crosspiece <sup>①</sup> as far as they will go, the <sup>ℂ</sup> screws will not be able to enter into the screw holes of the brackets ⑤, which can strip the threads of the screws.
  - Cover the screw heads with the caps  $\mathbb{O}.$



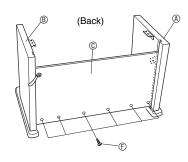
 Slide back panel © into the grooves of the side panels (★).



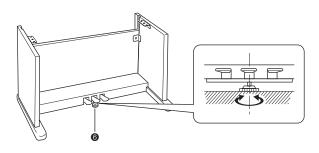
- **3** First secure the sides of the back panel with the two ① screws on the left and right.
  - At location **④**, slip the **⑤** clip onto to the **①** screw before installing the screw.
  - With back panel © resting on top of the feet **③** of side panels <sup>®</sup> and <sup>®</sup>, press the back panel against crosspiece <sup>®</sup> as you install the <sup>®</sup> screws.



**4** Next, secure the bottom of the back panel © with the six © screws.



5. Adjust the height adjustment screw lot to provide support so crosspiece lot does not bow downwards when the pedals are pressed.

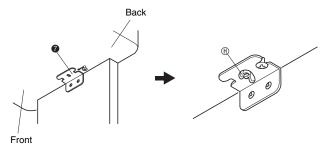


IMPORTANT!

- 6 Mound the piano onto the stand.
  - Use the <sup>®</sup> butterfly bolts to secure the piano to the stand.



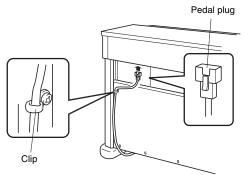
 After ensuring that the screws on the bottom of the piano hook into the cut outs in the stand brackets *a*, secure the piano with the <sup>®</sup> butterfly bolts.



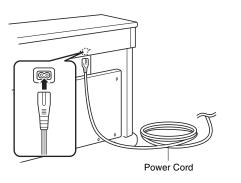
• The butterfly bolts keep the piano from slipping off the stand. Never use the piano without the butterfly bolts installed.

## To connect cables

- Orienting the pedal plug as shown in the illustration, plug it into the pedal connector on the bottom of the piano.
  - Secure the pedal cord with the clip.



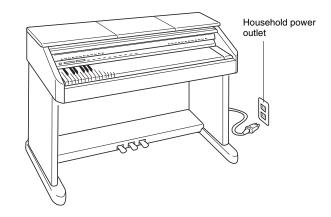
- 2. Check to make sure that the **POWER** button is in the OFF position (raised). If power is on, press the **POWER** button to turn it off.
- **3** Plug the power cord that comes with the digital piano into the AC power jack on the bottom of the digital piano.\*
  - \* AP-500V only



### IMPORTANT!

- The shape of the power cord plug and household power outlet receptacle differ according to country and geographical area. The illustration shows just one example of the shapes that are available.
- The power cord of the AP-500 is hard-wired to the digital piano.

**4** Plug the power cord into a household power outlet.



### **CAUTION**

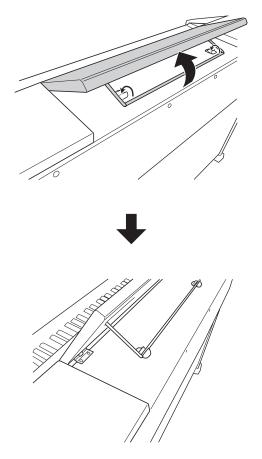
- The screws of the stand can work loose due to the effects of temperature and humidity changes, vibration, etc. Because of this, you need to periodically check the screws for proper tightness. Retighten any loose screws you find.
- To power the digital piano, use a power outlet that allows easy access when plugging in or unplugging the power cord.

## To raise the music stand

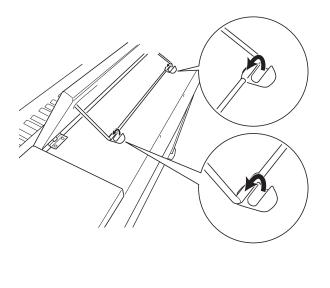
**1** Raise the music stand and insert its support bar into the two grooves behind it.

### **CAUTION**

• Take care to make sure that the support bar engages securely into one of the two grooves. If you raise the music stand too hastily, the support bar may not engage correctly and make the music stand unsteady.

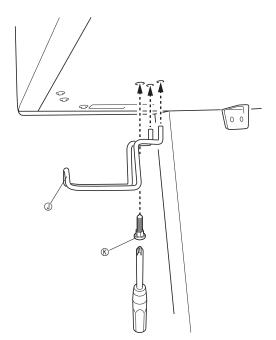


2 You can adjust the angle of the music stand as shown in the illustration below.



# To install the headphones hook

- **1** Insert the headphones hook (1) into the two holes on the bottom of the piano.
- 2. Use screw ® to secure the headphones hook in place.



## Troubleshooting

Problem	Cause	Action	See Page
No sound is produced when I press a keyboard key.		<ol> <li>Rotate the VOLUME controller more towards "MAX".</li> <li>Unplug the headphones from the</li> </ol>	☞ E-8 ☞ E-6
	<ul> <li>digital piano.</li> <li>3. MIDI Local Control is turned off.</li> <li>4. Check the current accompaniment mode setting. Normally, the accompaniment keyboard range will not produce any note while CASIO CHORD or FINGERED is selected as the Auto Accompaniment mode.</li> </ul>	digital piano. 3. Turn on the Local Control setting. 4. Change the accompaniment mode to NORMAL.	☞ E-29 ☞ E-14
No rhythm.	Accompaniment volume is set to 0.	Use the <b>TEMPO/SETTING</b> button and <b>SONG/ACCOMP VOLUME</b> button to increase the volume.	☞ E-28
The pitch of the digital piano is off.	<ol> <li>The digital piano's key setting is something other than "0".</li> <li>Digital piano tuning is incorrect.</li> </ol>	<ol> <li>Change the key setting to "0", or turn digital piano power off and then back on again.</li> <li>Adjust digital piane tuning, or turn the</li> </ol>	☞ E-27 ☞ E-27
	2. Digital piano tuning is incorrect.	2. Adjust digital piano tuning, or turn the piano off and then back on again.	≝ <b>⊑-</b> 27
No sound is produced when I try to play back a built-in song or a recorded	<ol> <li>The VOLUME controller is set to "MIN".</li> <li>Headphones are connected to the digital piano.</li> </ol>	<ol> <li>Rotate the VOLUME controller more towards "MAX".</li> <li>Unplug the headphones from the digital piano.</li> </ol>	☞ E-8 ☞ E-6
song. When I play something on the digital piano, my connected external MIDI sound source does not sound.	<ol> <li>The digital piano's send channel is different from the send channel of the external MIDI sound source.</li> <li>The volume or expression setting of the external sound source is "0".</li> </ol>	<ol> <li>Change the send channel settings of the digital piano and/or the external MIDI sound source so they are the same.</li> <li>Adjust the volume and expression settings of the external sound source.</li> </ol>	<ul> <li>E-29</li> <li>External sound source user's guide</li> </ul>
No sound is produced when playing MIDI data from a computer.	The USB cable is not connected correctly.	Check to make sure that the USB cable is connected correctly.	☞ E-30
When connected to a computer over a USB connection, playing on the keyboard produces unnatural sounds.	The computer's MIDI THRU function is turned on.	Turn off MIDI THRU on the computer, or turn off digital piano Local Control.	☞ E-29
I can't record chord accompaniment data on my computer.	Accomp MIDI out is turned off.	Turn on Accomp MIDI out.	☞ E-29
I can't store data to an SD memory card.	<ol> <li>The SD memory card is write- protected.</li> <li>The card is not inserted properly into the SD memory card slot.</li> <li>There is not enough room available on the SD memory card.</li> </ol>	<ol> <li>Change the write-protect position to enable writing.</li> <li>Insert the card properly.</li> <li>Use a different SD memory card.</li> </ol>	☞ E-33 ☞ E-34 ☞ E-34
	<ol> <li>The capacity of the SD memory card is not supported by the digital piano.</li> <li>The SD memory card is damaged.</li> </ol>	<ol> <li>Use an SD memory card with a supported capacity.</li> <li>Use a different SD memory card.</li> </ol>	☞ E-33

Problem	Cause	Action	See Page
I can't load data from an SD memory card.	<ol> <li>The card is not inserted properly into the SD memory card slot.</li> </ol>	1. Insert the card properly.	☞ E-34
	<ol> <li>The capacity of the SD memory card is not supported by the digital piano.</li> <li>The SD memory card is damaged.</li> </ol>	<ol> <li>Use an SD memory card with a supported capacity.</li> <li>Use a different SD memory card.</li> </ol>	☞ E-33
	<ol> <li>When the data was copied to the SD memory card from a computer, it was copied to a folder other than "MUSICDAT".</li> </ol>	<ol> <li>Move the data to the "MUSICDAT" folder.</li> </ol>	☞ E-35
Playback stops part way through while transferring song data from my computer.	Digital noise from the USB cable or power cord caused data communication your computer and digital piano to be interrupted.	Stop song playback, disconnect the USB cable from the digital piano, and then reconnect it. Next, try playing back the song again. If this does not solve the problem, quit the MIDI software you are using, disconnect the USB cable from the digital piano, and then reconnect it. Next, restart the MIDI software and then try playing back the song again.	☞ E-30
"E-A" appears on the display immediately after power is turned on.	Built-in flash memory is corrupted.	Contact your nearest CASIO Service Center.	—
A tone's quality and volume sounds slightly different depending where it is played on the keyboard.	* Multiple digital samples are taken for the	sampling process,* and does not indicate n e low range, middle range, and high range c re may be a very slight difference in tonal qu	of the original

## **Product Specifications**

All of the items in these specifications apply to the AP-500 and AP-500V, unless specifically noted otherwise.

Model	AP-500/AP-500V		
Keyboard	88-key piano keyboard, with Touch Response		
Maximum Polyphony	128 notes		
Tones	164 (with Layer and Split)		
Effects	DSP, Reverb (4 types), chorus (4 types), Acoustic Resonance, Brilliance (-3 to -1, 1 to 3)		
Metronome	<ul> <li>Beats: 0, 2, 3, 4, 5, 6</li> <li>Tempo Range: 20 to 255</li> </ul>		
Demo Songs	Number of Songs: 74 songs (All-song repeat play)		
Music Library	<ul> <li>Number of Songs: 60 User Songs: Up to 10 (Up to approximately 3.1 MB; up to approximately 318 KB per song)* * Based on 1 KB = 1024 bytes, 1 MB = 1024<sup>2</sup> bytes.</li> <li>Song volume: Adjustable</li> <li>Part On/Off: L, R</li> </ul>		
Recorder	<ul> <li>Functions: Real-time recording, playback</li> <li>Number of Songs: 5</li> <li>Number of Tracks: 2</li> <li>Capacity: Approximately 50,000 notes total (Up to approximately 10,000 notes per song)</li> <li>Recorded Data Protection: Built-in flash memory</li> </ul>		
Pedals	Damper, soft, sostenuto		
Other Functions	<ul> <li>Touch Select: 3 types, Off</li> <li>Transpose: 1 octave (-6 to 0 to 5)</li> <li>Tuning: A4 = 440.0 Hz ±50 cents (variable)</li> </ul>		
MIDI	16-channel multi-timbre receive		
SD Memory Card	<ul> <li>SD memory card slot</li> <li>Supported SD Memory Cards: Up to 1 GB (Larger capacity cards not supported.)</li> <li>Functions: SMF playback, data storage, data recall, card format</li> </ul>		
Inputs/Outputs	<ul> <li>PHONES jack: Stereo standard jacks × 2</li> <li>MIDI THRU/OUT/IN terminals</li> <li>LINE IN R, L/MONO jacks: Standard jacks × 2 Input impedance: 7.0KΩ Input Voltage: 290mV (RMS)</li> <li>LINE OUT R, L/MONO jacks: Standard jacks × 2 Output impedance: 1.1KΩ Output Voltage: 2.3V (RMS) MAX</li> <li>USB port: Type B</li> <li>Pedal connector</li> </ul>		
Speakers	$\phi$ 16cm × 2 + $\phi$ 5cm × 2 (Output 30W + 30W)		
Power Requirements	AP-500: 120V AP-500V: 220-240V		
Power Consumption	AP-500: 78W AP-500V: 78W		
Dimensions	Digital Piano and Stand: 138.1 (W) × 47.3 (D) × 87.4 (H) cm (54 $^{7}$ / <sub>16</sub> × 18 $^{10}$ / <sub>16</sub> × 34 $^{7}$ / <sub>16</sub> inch)		
Weight	Digital Piano and Stand: approximately 53.0kg (116.8 lbs)		

Specifications and designs are subject to change without notice.The power cord of the AP-500 is hard-wired to the digital piano.

• The power cord of the AP-500V is detachable.

## **Operating Precautions**

Be sure to read and observe the following operating precautions.

## Location

Avoid the following locations for this product.

- Areas exposed to direct sunlight and high humidity
- Areas subjected to temperature extremes
- Near a radio, TV, video deck, or tuner The above devices will not cause malfunction of the product, but interference from the product can cause audio or video interference of a nearby device.

### User Maintenance

- Never use benzene, alcohol, thinner, or other chemical agents to clean the product.
- To clean the product or its keyboard, wipe with a soft cloth moistened in a weak solution of water and a mild neutral detergent. Wring all excess moisture from the cloth before wiping.

### Included and Optional Accessories

Use only accessories that are specified for use with this product. Use of unauthorized accessories creates the risk of fire, electric shock, and personal injury.

#### Weld Lines

Lines may be visible on the exterior of the product. These are "weld lines" that result from the plastic molding process. They are not cracks or scratches.

## Musical Instrument Etiquette

Always be aware of others around you whenever using this product. Be especially careful when playing late at night to keep the volume at levels that do not disturb others. Other steps you can take when playing late at night are closing the window and using headphones.

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# **Appendix/Apéndice**

## Tone List/Lista de tonos

No./ Nº	Tone Name/ Nombre de tonos	Program Change/ Cambio de programa	Bank Select MSB/ MSB de selección de banco	Maximum Polyphony /Polifonía máxima	DSP
_	GRAND PIANO 1	0	48	64	—
_	GRAND PIANO 2	0	49	128	—
_	GRAND PIANO 3	1	48	64	_
—	ELEC PIANO 1	4	48	128	Enhancer
_	ELEC PIANO 2 ELEC PIANO 3	5	49	64	3Band EQ
_	60'S E. PIANO	4	48 51	128 128	Enhancer Tremolo
	HARPSICHORD	6	48	128	3Band EO
_	VIBRAPHONE	11	48	128	Tremolo
_	PIPE ORGAN	19	49	128	
_	PERC ORGAN	17	48	64	Rotary
—	STRINGS	49	48	128	3Band EQ
—	ACOUSTIC BASS	32	48	128	3Band EQ
_	RIDE ACO BASS	32	49	64	3Band EQ
	Various				
001	MELLOW PIANO	0	50	64	—
002	ROCK PIANO	1	49	128	—
003	DANCE PIANO	1	50	128	—
004	MODERN PIANO	1	51	64	—
005	PIANO PAD	0	51	64	—
006	HONKY-TONK OCTAVE PIANO	3	48 49	64 64	
007	DYNO ELEC.PIANO	4	49	128	— Auto Pan
008	POP ELEC.PIANO	4	50	64	Tremolo
010	E.GRAND 80	2	48	128	
011	CLAVI	7	48	128	Enhancer
012	CHURCH ORGAN	19	48	64	_
013	DRAWBAR ORGAN	16	48	128	Rotary
014	ROCK ORGAN	16	49	128	Drive Rotary
015	STEEL STR.GUITAR	25	48	128	—
016	SYNTH-STRINGS	50	48	128	3Band EQ
017	CHOIR	52	48	64	—
018	SYNTH-PAD	90	48	64	_
019	FANTASY	88	48	64	-
020	NEW AGE GM	88	49	64	3Band EQ
021	GM PIANO 1	8			
-			0	128	_
022		0	0	128	_
022 023	GM PIANO 2 GM PIANO 3	0 1 2	0 0 0 0	128 128 128	-
	GM PIANO 2	1	0	128	
023	GM PIANO 2 GM PIANO 3	1 2	0	128 128	
023 024	GM PIANO 2 GM PIANO 3 GM HONKY-TONK	1 2 3	0 0 0 0	128 128 64	
023 024 025	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1	1 2 3 4	0 0 0 0	128 128 64 128	
023 024 025 026	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2	1 2 3 4 5	0 0 0 0 0	128 128 64 128 128	
023 024 025 026 027 028 029	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA	1 2 3 4 5 6 7 8	0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128	
023 024 025 026 027 028 029 030	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL	1 2 3 4 5 6 7 8 9	0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 128	
023 024 025 026 027 028 029 030 031	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX	1 2 3 4 5 6 7 8 9 10	0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 128 64	  
023 024 025 026 027 028 029 030 031 032	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE	1 2 3 4 5 6 7 8 9 10 11	0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 64 128	  
023 024 025 026 027 028 029 030 031 032 033	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MARIMBA	1 2 3 4 5 6 7 8 9 10 11 12	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 64 128 64 128 128	  
023 024 025 026 027 028 029 030 031 032 033 034	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MARIMBA GM XYLOPHONE	1 2 3 4 5 6 7 8 9 10 11 12 13	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 64 128 128 128 128	  
023 024 025 026 027 028 029 030 031 032 033 034 035	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MARIMBA GM XYLOPHONE GM TUBULAR BELL	1 2 3 4 5 6 7 8 9 10 11 12 13 14	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 64 128 128 128 128 128 128	
023 024 025 026 027 028 029 030 031 032 033 034 035 036	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 64 128 128 128 128 128 128 64	  
023 024 025 026 027 028 029 030 031 032 033 034 035 036 037	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER GM ORGAN 1	$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ \end{array} $	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 64 128 128 128 128 128 128 64 128	
023 024 025 026 027 028 029 030 031 032 033 034 035 036	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 64 128 128 128 128 128 128 64	
023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM MIBRAPHONE GM XYLOPHONE GM TUBULAR BELL GM DULCIMER GM ORGAN 1 GM ORGAN 2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 64 128 128 128 128 128 128 64 128 64 128 64	
023           024           025           026           027           028           029           030           031           032           033           034           035           036           037           038           039	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM ARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER GM ORGAN 1 GM ORGAN 2 GM ORGAN 3	$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ \end{array} $	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 64 128 128 128 128 128 128 64 128 64 64 64 64	
023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM ARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER GM ORGAN 1 GM ORGAN 2 GM ORGAN 3 GM PIPE ORGAN	$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19\\ \end{array} $	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 128 128 128	
023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM VIBRAPHONE GM ARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER GM ORGAN 1 GM ORGAN 2 GM ORGAN 3 GM PIPE ORGAN GM REED ORGAN	$\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ \end{array}$	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 128 128 128	
023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042	GM PIANO 2 GM PIANO 3 GM HONKY-TONK GM E.PIANO 1 GM E.PIANO 2 GM HARPSICHORD GM CLAVI GM CELESTA GM GLOCKENSPIEL GM MUSIC BOX GM VIBRAPHONE GM VIBRAPHONE GM ARIMBA GM XYLOPHONE GM TUBULAR BELL GM DULCIMER GM ORGAN 1 GM ORGAN 2 GM ORGAN 3 GM PIPE ORGAN GM REED ORGAN GM ACCORDION	1           2           3           4           5           6           7           8           9           10           11           12           13           14           15           16           17           18           19           20           21	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128 128 64 128 128 128 128 128 128 128 128 128 128	

046         CM STEEL STRUCUTAR         25         0         128            047         CM JAZZ GUITAR         26         0         128            048         CM CLENA GUITAR         27         0         128            049         CM OVERAN UTE CT         29         0         64            050         CM DISTORTION CT         31         0         128            053         CM ACOUSTIC BASS         32         0         128            055         CM FINCERED BASS         34         0         128            056         CM FINCERED BASS         35         0         128            057         CM SLAP BASS 1         36         0         128            056         CM SYNTH-BASS 1         38         0         64            056         CM SUNTH-BASS 1         38         0         128            056         CM TUDA         41         0         128            056         CM TUDA         41         0         128            056         CM TUNN	No./ N°	Tone Name/ Nombre de tonos	Program Change/ Cambiode programa	Bank Select MSB/ MSB de selección de banco	Maximum Polyphony /Polifonía máxima	DSP
048         CMCLEAN GUITAR         27         0         128            049         CM MUTE GUITAR         28         0         128            050         CM OVERDRUE T         29         0         64            051         CM DISTORTION GT         30         0         64            053         CM ACOUSTIC BASS         32         0         128            054         CM FINCERED BASS         34         0         128            056         CM FICKED BASS         34         0         128            056         CM FICKED BASS         35         0         128            057         CM SLAP BASS 1         36         0         128            056         CM STITH-BASS 1         38         0         128            056         CM STLO         41         0         128            066         CM TYNTH-BASS         43         0         128            066         CM TYRINCS         44         0         128            066         CM TYRINCS         48 <td>046</td> <td>GM STEEL STR.GUITAR</td> <td>25</td> <td>0</td> <td>128</td> <td>—</td>	046	GM STEEL STR.GUITAR	25	0	128	—
049         CM MUTE GUITAR         28         0         128            050         CM DERORIVE GT         29         0         64            051         CM DISTORTION GT         30         0         64            053         CM GTHARMONICS         31         0         128            053         CM FICKED BASS         32         0         128            055         CM FICKED BASS         34         0         128            056         CM SLAP BASS 1         36         0         128            058         CM SLAP BASS 2         37         0         128            056         CM SLAP BASS 1         38         0         64            060         CM VIOLN         40         0         128            061         CM VIOLN         42         0         128            064         CM CONTRABASS         43         0         128            065         CM TREMOLO STRINCS         44         0         128            066         CM TRP         46	047	GM JAZZ GUITAR	26	0	128	—
050         CM OVERDRIVE GT         29         0         64            051         CM DISTORTION GT         30         0         128            052         CM FI HARMONICS         31         0         128            053         CM FINCERED BASS         32         0         128            055         CM FINCERED BASS         33         0         128            056         CM FRETLESS BASS         35         0         128            057         CM SLAP BASS 1         36         0         128            056         CM FYNTH-BASS 1         38         0         64            060         CM SYNTH-BASS 1         38         0         128            061         CM VIDIA         40         0         128            066         CM VIDIA         41         0         128            066         CM TIRABASS         43         0         128            066         CM TIRAPA         46         0         128            066         CM TIRAMANT         47 <td>048</td> <td></td> <td>27</td> <td>0</td> <td>128</td> <td>_</td>	048		27	0	128	_
051         CM DISTORTION GT         30         0         64            053         CM ACOUSTIC BASS         32         0         128            054         CM FINCERED BASS         33         0         128            055         CM PICKED BASS         34         0         128            056         CM FICKED BASS         34         0         128            057         CM SLAP BASS 1         36         0         128            059         CM SUAP BASS 1         38         0         64            060         CM SYNTH-BASS 1         38         0         128            061         CM VIOLA         41         0         128            064         CM CONTRABASS         43         0         128            064         CM ONTRABASS         43         0         128            065         CM TRAP         46         0         128            066         CM PIZICATO         45         0         128            070         CM STRINCS 1         48						-
052         GM CT HARMONICS         31         0         128            053         GM FINCERED BASS         32         0         128            055         GM FINCERD BASS         33         0         128            056         GM FRETLESS BASS         35         0         128            057         CM SLAP BASS 1         36         0         128            058         GM SLAP BASS 2         37         0         128            050         CM SYNTH-BASS 1         38         0         64            061         GM VIOLN         40         0         128            062         GM VIOLA         41         0         128            064         GM CONTRABAS         43         0         128            065         GM TREMOLO STRINCS 44         0         128            066         GM TIRANCS 1         48         0         128            070         GM STRINCS 1         48         0         128            077         GM STRINCS 1         50						—
053         CM ACOUSTIC BASS         32         0         128            054         CM FINCERED BASS         33         0         128            055         CM FRETLESS BASS         35         0         128            056         CM FRETLESS BASS         35         0         128            057         CM SLAP BASS 1         36         0         44             059         CM SYNTH-BASS 1         38         0         64             060         GM SYNTH-BASS 1         38         0         128             061         CM VIOLIN         40         0         128             062         GM VIOLA         41         0         128             063         CM CELLO         42         0         128             064         GM TRMOLO STRINGS         44         0         128             066         CM TRINCS 1         48         0         128          -           070         GM STRINCS 2						_
054         CM FINCERED BASS         33         0         128            055         CM PICKED BASS         34         0         128            056         CM FRETLESS BASS         35         0         128            057         CM SLAP BASS 1         36         0         128            059         CM SIAP BASS 1         38         0         64            050         CM SYNTH-BASS 1         39         0         128            061         CM VIOLA         41         0         128            062         CM VIOLA         41         0         128            064         CM CONTRABASS         43         0         128            065         CM TREMOLO STRINCS         44         0         128            066         CM ONTRABASS         43         0         128            066         CM CONTRABAS         44         0         128            067         GM HARP         46         0         128            071         GM STRINCS 1         50						_
055         CM PICKED BASS         34         0         128            057         CM SLAP BASS         35         0         128            057         CM SLAP BASS         36         0         128            058         CM SLAP BASS         37         0         128            059         CM SYNTH-BASS         38         0         64            060         CM VIOLA         41         0         128            061         CM VIOLA         41         0         128            062         CM VIOLA         41         0         128            064         CM CONTRABASS         43         0         128            065         CM TREMOLO STRINCS         44         0         128            066         GM PIZZICATO         45         0         128            070         GM STRINCS 1         48         0         128            071         GM STRINCS 2         51         0         128            073         CM CHOR AAHS         52         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td>						_
056         CM FRETLESS BASS         35         0         128            057         CM SLAP BASS 1         36         0         128            058         GM SLAP BASS 2         37         0         128            059         CM SYNTH-BASS 1         38         0         64            060         GM SYNTH-BASS 2         39         0         128            061         CM VIOLIN         40         0         128            062         GM VIOLA         41         0         128            064         GM CELLO         42         0         128            065         GM TREMOLO STRINCS         44         0         128            066         GM PZZICATO         45         0         128            070         GM STRINCS 1         48         0         128            070         GM STRINCS 2         51         0         128            071         GM SYNTH-FIRINCS 1         50         0         128            077         GM TROMEDT         57						_
057         CM SLAP BASS 1         36         0         128            058         CM SLAP BASS 2         37         0         128            059         CM SINTH-BASS 1         38         0         64            050         CM SYNTH-BASS 2         39         0         128            061         GM VIOLA         40         0         128            062         CM VIOLA         41         0         128            063         GM CONTRABASS         43         0         128            064         CM CONTRABASS         43         0         128            065         GM TREMOLO STRINCS         44         0         128            066         CM TRIPANI         47         0         128            066         GM STRINCS 1         48         0         128            070         CM STRINCS 2         51         0         128            071         GM STRINCS 2         51         0         128            075         GM SYNTH-MINCS 1         50						
058         GM SLAP BASS 2         37         0         128            059         GM SYNTH-BASS 1         38         0         64            060         GM SYNTH-BASS 2         39         0         128            061         GM VIOLA         41         0         128            062         GM VIOLA         41         0         128            064         GM CELLO         42         0         128            065         GM TREMOLO STRINCS         44         0         128            066         GM PIZZICATO         45         0         128            066         GM TRINCS 1         48         0         128            070         GM STRINCS 2         49         0         128            071         GM STRINCS 1         52         0         128            073         GM CHOIR AAHS         52         0         128            073         GM CHOIR AAHS         52         0         128            076         GM ORCHESTRA HIT         55						
059         CM SYNTH-BASS 1         38         0         64            060         CM SYNTH-BASS 2         39         0         128            061         CM VIOLIN         40         0         128            062         CM VIOLA         41         0         128            063         CM CELLO         42         0         128            064         GM CONTRABASS         43         0         128            065         CM TREMOLO STRINGS         44         0         128            066         GM FIZZICATO         45         0         128            067         GM HARP         46         0         128            070         GM STRINCS 1         48         0         128            071         GM SYNTH-STRINCS 1         50         0         128            073         GM CHORA AHS         52         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM SYNTH-WOICE         54						_
061         GM VIOLN         40         0         128            062         GM VIOLA         41         0         128            063         GM CELLO         42         0         128            064         GM CONTRABASS         43         0         128            065         GM TREMOLO STRINGS         44         0         128            066         GM PIZZICATO         45         0         128            066         GM TRINGS 1         48         0         128            070         GM STRINGS 1         48         0         128            071         GM STRINGS 1         50         0         128            071         GM STRINGS 2         51         0         128            073         GM CHOR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM TROMBONE         57         0         128            078         GM TROMBONE         57         0	-				64	_
062         CM VIOLA         41         0         128            063         GM CELLO         42         0         128            064         GM CONTRABASS         43         0         128            065         GM TEMOLO STRINGS         44         0         128            066         GM PIZZICATO         45         0         128            066         GM TIMPANI         47         0         128            067         GM STRINCS 1         48         0         128            070         GM SYNTH-STRINCS 2         49         0         128            071         GM SYNTH-STRINCS 2         51         0         128            073         GM CHOR AAHS         52         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            079         GM TROMBONE         57         0         128            080         GM MUTE TRUMPET         59	060	GM SYNTH-BASS 2	39	0	128	_
063         GM CELLO         42         0         128            064         GM CONTRABASS         43         0         128            065         GM TREMOLO STRINGS         44         0         128            066         GM PIZZICATO         45         0         128            066         GM TIMPANI         47         0         128            068         GM TIMPANI         47         0         128            070         GM STRINGS 1         48         0         128            071         GM STRINGS 2         49         0         128            071         GM STRINGS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            073         GM CHOIR AAHS         52         0         128            075         GM SYNTH-STRINGS 2         56         0         128            075         GM SYNTH-STRINCS 2         50         64            076         GM VOICE DOO         53         0	061	GM VIOLIN	40	0	128	_
064         GM CONTRABASS         43         0         128            065         GM TREMOLO STRINCS         44         0         128            066         GM PIZZICATO         45         0         128            066         GM INPANI         47         0         128            069         GM STRINCS 1         48         0         128            070         GM STRINCS 2         49         0         128            071         GM SYNTH-STRINCS 1         50         0         128            071         GM SYNTH-STRINCS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ROMBE         57         0         128            076         GM TRUMPET         56         0         128            0775         GM TROMBONE         57	062	GM VIOLA	41	0	128	_
Intermedia         Intermedia         Intermedia         Intermedia         Intermedia           065         GM TREMOLO STRINGS         44         0         128            066         GM PIZZICATO         45         0         128            067         GM HARP         46         0         128            068         GM TIMPANI         47         0         128            070         GM STRINGS 1         48         0         128            071         GM SYNTH-STRINGS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            075         GM SYNTH-STRINGS 2         51         0         128            075         GM CHOIR AAHS         52         0         128            076         GM ORCHESTRA HIT         55         0         64            076         GM TROMBONE         57         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN	063	GM CELLO	42	0	128	_
066         GM PIZZICATO         45         0         128            067         GM HARP         46         0         128            068         GM TIMPANI         47         0         128            069         GM STRINCS 1         48         0         128            070         GM STRINCS 2         49         0         128            071         GM SYNTH-STRINCS 1         50         0         128            072         GM SYNTH-STRINCS 2         51         0         128            074         GM VOICE DOO         53         0         128            076         GM ORCHESTRA HIT         55         0         64            076         GM TROMBONE         57         0         128            078         GM TROMBONE         57         0         128            078         GM RENCH HORN         60         0         64            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60	064	GM CONTRABASS	43	0	128	_
067         GM HARP         46         0         128            068         GM TIMPANI         47         0         128            069         GM STRINCS 1         48         0         128            070         GM STRINCS 2         49         0         128            071         GM SYNTH-STRINCS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-STRINCS 2         51         0         128            075         GM SYNTH-STRINCS 5         0         128            076         GM SYNTH-VOICE         54         0         128            076         GM TRUMPET         56         0         128            078         GM TRUMPET         59         0         128            080         GM SYNTH-BRASS 1         62         0         64         -           081         GM FRENCH HORN         60         128 <td>065</td> <td>GM TREMOLO STRINGS</td> <td>44</td> <td>0</td> <td>128</td> <td>_</td>	065	GM TREMOLO STRINGS	44	0	128	_
068         CM TIMPANI         47         0         128            069         GM STRINCS 1         48         0         128            070         GM STRINCS 2         49         0         128            071         GM SYNTH-STRINCS 1         50         0         128            072         GM SYNTH-STRINCS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            077         GM TROMBONE         57         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BASS         61         0         128            083         GM SYNTH-BASS 1         62 <td>066</td> <td>GM PIZZICATO</td> <td>45</td> <td>0</td> <td>128</td> <td>—</td>	066	GM PIZZICATO	45	0	128	—
069         CM STRINCS 1         48         0         128            070         GM STRINCS 2         49         0         128            071         GM SYNTH-STRINCS 2         51         0         128            072         GM SYNTH-STRINCS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            076         GM TRUMPET         56         0         128            079         GM TUBA         58         0         128            080         GM RONBONE         57         0         128            081         GM FRENCH HORN         60         0         64            082         GM SYNTH-BRASS 1         62         0         64            083         GM SYNTH-BRASS 2         63 <td>067</td> <td>GM HARP</td> <td></td> <td>0</td> <td>128</td> <td>_</td>	067	GM HARP		0	128	_
070         GM STRINCS 2         49         0         128            071         GM SYNTH-STRINGS 1         50         0         128            072         GM SYNTH-STRINGS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            076         GM TRUMPET         56         0         128            075         GM TROMBONE         57         0         128            076         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 1         62         0         128            085         GM SOPRANO SAX	068			0		—
071         CM SYNTH-STRINGS 1         50         0         128            072         CM SYNTH-STRINGS 2         51         0         128            073         CM CHOIR AAHS         52         0         128            074         CM VOICE DOO         53         0         128            075         CM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         644            076         GM TRUMPET         56         0         128            078         GM TROMBONE         57         0         128            076         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SORANO SAX         64         0         128            084         GM SORANO SAX         65						-
072         GM SYNTH-STRINGS 2         51         0         128            073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            076         GM TRUMPET         56         0         128            077         GM TROMBONE         57         0         128            078         GM TROMBONE         57         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         128            085         GM TENOR SAX         66	-					—
073         GM CHOIR AAHS         52         0         128            074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            077         GM TRUMPET         56         0         128            078         GM TROMBONE         57         0         128            078         GM TROMBONE         57         0         128            078         GM TROMBONE         57         0         128            081         GM FRENCH HORN         60         0         64            082         GM BASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SOPRANO SAX         64         0         128            085         GM ALTO SAX         65         0         128            086         GM ALTO SAX         66         0<						_
074         GM VOICE DOO         53         0         128            075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            077         GM TRUMPET         56         0         128            078         GM TROMBONE         57         0         128            079         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM SASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>_</td></td<>						_
075         GM SYNTH-VOICE         54         0         128            076         GM ORCHESTRA HIT         55         0         64            077         GM TRUMPET         56         0         128            078         GM TROMBONE         57         0         128            079         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            086         GM BARITONE SAX         67         0         128            089         GM OBOE         68						_
076         GM ORCHESTRA HIT         55         0         64            077         GM TRUMPET         56         0         128            078         GM TROMBONE         57         0         128            079         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SOPRANO SAX         64         0         128            085         GM ALTO SAX         65         0         128            086         GM ALTO SAX         66         0         128            086         GM BARITONE SAX         67         0         128            087         GM CBOE         68         0         128            090         GM ENCLISH HORN         69         0 </td <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>_</td>	-					_
077         GM TRUMPET         56         0         128            078         GM TROMBONE         57         0         128            079         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ELISH HORN         69         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td>						_
078         GM TROMBONE         57         0         128            079         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            088         GM BARTONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENCLISH HORN         69         0         128            091         GM BASSOON         70         0 </td <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>_</td>	-					_
079         GM TUBA         58         0         128            080         GM MUTE TRUMPET         59         0         128            081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            087         GM ALTO SAX         67         0         128            088         GM BASTIONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0	078					_
081         GM FRENCH HORN         60         0         64            082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PLUTE         73         0 <td>079</td> <td>GM TUBA</td> <td>58</td> <td>0</td> <td>128</td> <td>_</td>	079	GM TUBA	58	0	128	_
082         GM BRASS         61         0         128            083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PLOCOLO         72         0         128            094         GM FLUTE         73         0	080	GM MUTE TRUMPET	59	0	128	_
083         GM SYNTH-BRASS 1         62         0         64            084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            086         GM ALTO SAX         66         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0 <td>081</td> <td>GM FRENCH HORN</td> <td>60</td> <td>0</td> <td>64</td> <td>_</td>	081	GM FRENCH HORN	60	0	64	_
084         GM SYNTH-BRASS 2         63         0         64            085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0	082	GM BRASS	61	0	128	—
085         GM SOPRANO SAX         64         0         128            086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0	083	GM SYNTH-BRASS 1	62	0	64	—
086         GM ALTO SAX         65         0         128            087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            100         GM OCARINA         79         0	084		63	0	64	—
087         GM TENOR SAX         66         0         128            088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM SHAKUHACHI         77         0         64            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            100         GM OCARINA         79         0				-		-
088         GM BARITONE SAX         67         0         128            089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM SHAKUHACHI         77         0         64            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0						_
089         GM OBOE         68         0         128            090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM SHAKUHACHI         77         0         64            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SAWTOOTH LEAD         81         0						_
090         GM ENGLISH HORN         69         0         128            091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM SHAKUHACHI         77         0         64            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td>						_
091         GM BASSOON         70         0         128            092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0						_
092         GM CLARINET         71         0         128            093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0						_
093         GM PICCOLO         72         0         128            094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0						_
094         GM FLUTE         73         0         128            095         GM RECORDER         74         0         128            096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0         128            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0						
096         GM PAN FLUTE         75         0         128            097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64						_
097         GM BOTTLE BLOW         76         0         128            098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            105         GM CHARANG         85         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	095		74	0	128	_
098         GM SHAKUHACHI         77         0         64            099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	096	GM PAN FLUTE	75	0	128	_
099         GM WHISTLE         78         0         128            100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	097	GM BOTTLE BLOW	76	0	128	_
100         GM OCARINA         79         0         128            101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	098	GM SHAKUHACHI	77	0	64	—
101         GM SQUARE LEAD         80         0         64            102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLOPE         82         0         64            104         GM CALLOPE         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	099	GM WHISTLE	78	0	128	_
102         GM SAWTOOTH LEAD         81         0         64            103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	100	GM OCARINA	79	0	128	-
103         GM CALLIOPE         82         0         64            104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64		-				-
104         GM CHIFF LEAD         83         0         64            105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	-					—
105         GM CHARANG         84         0         64            106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	_					_
106         GM VOICE LEAD         85         0         64            107         GM FIFTH LEAD         86         0         64	-					—
107 GM FIFTH LEAD 86 0 64 —						_
						_
	107	GM BASS+LEAD	87	0	64	_

No./ Nº	Tone Name/ Nombre de tonos	Program Change/ Cambiode programa	Bank Select MSB/ MSB de selección de banco	Maximum Polyphony /Polifonía máxima	DSP
109	GM FANTASY	88	0	64	_
110	GM WARM PAD	89	0	128	_
111	GM POLYSYNTH	90	0	64	_
112	GM SPACE CHOIR	91	0	64	_
113	GM BOWED GLASS	92	0	64	_
114	GM METAL PAD	93	0	64	—
115	GM HALO PAD	94	0	64	_
116	GM SWEEP PAD	95	0	128	—
117	GM RAIN DROP	96	0	64	_
118	GM SOUND TRACK	97	0	64	-
119	GM CRYSTAL	98	0	64	_
120	GM ATMOSPHERE	99	0	64	_
121	GM BRIGHTNESS	100	0	64	_
122	GM GOBLINS	101	0	64	_
123	GM ECHOES	102	0	128	_
124	GM SF	103	0	64	_
125	GM SITAR	104	0	128	-
126	GM BANJO	105	0	128	—
127	GM SHAMISEN	106	0	128	_
128	GM KOTO	107	0	128	_
129	GM THUMB PIANO	108	0	128	—
130	GM BAGPIPE	109	0	64	—
131	GM FIDDLE	110	0	128	—
132	GM SHANAI	111	0	128	—
133	GM TINKLE BELL	112	0	128	_
134	GM AGOGO	113	0	128	-
135	GM STEEL DRUMS	114	0	64	-
136	GM WOOD BLOCK	115	0	128	-
137	GM TAIKO	116	0	128	-
138	GM MELODIC TOM	117	0	128	—
139	GM SYNTH-DRUM	118	0	128	—
140	GM REVERSE CYMBAL	119	0	128	—
141	GM GT FRET NOISE	120	0	128	—
142	GM BREATH NOISE	121	0	128	—
143	GM SEASHORE	122	0	64	—
144	GM BIRD	123	0	64	—
145	GM TELEPHONE	124	0	128	_
146	GM HELICOPTER	125	0	128	—
147	GM APPLAUSE	126	0	64	_
148	GM GUNSHOT	127	0	128	-
	Drum Sets	1			
149	STANDARD SET	0	120	128	-
150	BRUSH SET	40	120	128	—

## Drum Assignment List/ Lista de sonidos de batería

E1         27         HIGH Q         ←           F1         29         F1         30         SCRATCH PUSH         ←           G1         31         A1         32         SCRATCH PULL         ←           G1         31         A1         32         SCRATCH PULL         ←           A1         33         B1         34         METRONOME CLICK         ←           B1         35         B1         34         METRONOME BELL         ←           B1         35         STANDARD 1 KICK 2         BRUSH KICK 1         BRUSH SIDE STICK           D2         38         STANDARD 1 SNARE 1         BRUSH SWIRL         LOW TOM 2           F2         41         F12         42         CLOSED HI-HAT         ←           G2         43         STANDARD 1 SNARE 2         BRUSH SWIRL         LOW TOM 1         ←           G2         43         MD TOM 2         ←         ←         MD TOM 2         ←           G3         44         PEDAL HI-HAT         ←         ←         MD TOM 2         ←           G3         50         B3         S1         RIDE CYMBAL 1         BRUSH SWIRL 1         BRUSH SWIRL 1           G3	Key/Note Num Número de clave/		BRUSH SET
E1       28       SLAP       ←         F1       29       F1       30       SCRATCH PULL       ←         G1       31       A <sup>1</sup> 32       SCRATCH PULL       ←         A1       33       B <sup>1</sup> 34       METRONOME CLICK       ←         B1       35       B <sup>1</sup> 34       METRONOME BELL       ←         B1       35       B <sup>1</sup> 34       METRONOME BELL       ←         C2       36       C <sup>1</sup> 2       37       SIDE STICK       BRUSH KICK 1       BRUSH SULP         D2       38       E <sup>1</sup> 2       39       HAND CLAP 1       BRUSH SLAP       BRUSH SLAP         STANDARD 1 SNARE 2       BRUSH SLAP       STANDARD 1 SNARE 2       BRUSH SLAP         Clow TOM 2       ←       CLOW TOM 1       ←         G2       43       A <sup>1</sup> 2       44       PEDAL HLAT       ←         G2       43       A <sup>1</sup> 2       43       PEDAL HLAT       ←         G2       43       A <sup>1</sup> 2       44       PEDAL HLAT       ←         G3       50       E <sup>1</sup> 3       51       RIDE CYMBAL 1       BRUSH CRASH CYMBAL 1         D3       50       E <sup>1</sup> 3       51	Eb1	27 4164 0	
F129F/130SCRATCH PUSH $\leftarrow$ G131A <sup>1</sup> 132SQUARE CLICK $\leftarrow$ A133B <sup>1</sup> 134METRONOME CLICK $\leftarrow$ B135B <sup>1</sup> 134METRONOME BELL $\leftarrow$ B135STANDARD 1 KICK 2BRUSH KICK 2C236C <sup>1</sup> 237D238E <sup>1</sup> 2E240STANDARD 1 SNARE 1B240STANDARD 1 SNARE 1B241CLOSED HI-HATC1CloSED HI-HATC244P244P244P244P245MID TOM 1C348C <sup>13</sup> 49CRASH CYMBAL 1D350E1351F1353F1354CHANCK CYMBAL 1BRUSH RIDE CYMBAL 1C355A <sup>13</sup> A1455A15A15A15A15A16A17C14C15C15C15C14C15C16C16 <t< td=""><td>E1 28</td><td></td><td></td></t<>	E1 28		
Fi 30SCRATCH PULLG1 31A <sup>1</sup> 32STICKS $\leftarrow$ A1 33B <sup>1</sup> 34METRONOME CLICK $\leftarrow$ B1 35B <sup>1</sup> 34METRONOME CLICK $\leftarrow$ B1 35B <sup>1</sup> 34METRONOME BELL $\leftarrow$ C2 36C'2 37SIDE STICKBRUSH KICK 1D2 38E'2 39STANDARD 1 KICK 1BRUSH SLOE STICKD2 38E'2 39STANDARD 1 SNARE 1BRUSH SLAPE2 40E'2 39STANDARD 1 SNARE 2BRUSH SUPS STICKF2 41F'2 42CLOSED HI-HAT $\leftarrow$ G2 43A'2 44PEDAL HI-HAT $\leftarrow$ A2 45B <sup>2</sup> 46OPEN HI-HAT $\leftarrow$ B2 47CLOSED HI-HAT $\leftarrow$ C3 48C'3 49OPEN HI-HAT $\leftarrow$ F3 53F13 54GHARUMAL 1BRUSH CRASH CYMBAL 1C3 55A*3 56COWBAL 1BRUSH RIDE CYMBAL 1C4 F3 59F'3 54F'3 54RIDE CYMBAL 1G3 55A*3 56COWBELL $\leftarrow$ A3 57B <sup>3</sup> 358BrUSH CRASH CYMBAL 2B'3 59B'3 58RIDE CYMBAL 2B'3 59B'3 58CRASH CYMBAL 2C4 60C'4 61D4 62HIGH TIMBALEC4 64LOW CONGAF4 65F'4 66C 72 C'5 73SHORT HI WHISTLEC4 64LOW KIMBALEC5 72C'5 75C15 74E'5 76E'5 76HIGH WOOD BLOCK	E1 20		
A <sup>1</sup> 32SQUARE CLICK←A133B <sup>1</sup> 34METRONOME CLICK←B135STANDARD 1KICK 2BRUSH KICK 2C236C <sup>1</sup> 237STANDARD 1KICK 1D238C <sup>1</sup> 237SIDE STICKBRUSH KICK 1D238E <sup>1</sup> 239STANDARD 1SNARE 1BRUSH SLAPE240STANDARD 1SNARE 1BRUSH SUED STICKBRUSH SUED STICKC348C <sup>1</sup> 237STANDARD 1SNARE 2BRUSH SWIRLC440STANDARD 1SNARE 2ERUSH SWIRL←C1CUOSED HI-HAT←CLOSED HI-HAT←C243A <sup>1</sup> 244PEDAL HI-HAT←MID TOM 2←HIGH TOM 1←C348C <sup>1</sup> 349CHASH CYMBAL 1BRUSH RIDE CYMBAL 1D350E <sup>1</sup> 351RIDE CYMBAL 1BRUSH RIDE CYMBAL 1C348C <sup>1</sup> 349CHINE'S CYMBAL←F353F <sup>1</sup> 354SPLASH CYMBAL 2BRUSH RIDE BELLF353F <sup>1</sup> 354SPLASH CYMBAL 2BRUSH RIDE CYMBAL 2G355A <sup>1</sup> 356COWBELL←A357B <sup>1</sup> 358SPLASH CYMBAL 2BRUSH RIDE CYMBAL 2G359S1RIDE CYMBAL 2BRUSH SIDE CYMBAL 2G467C <sup>4</sup> 463CPEN HIGH CONGAC460C <sup>4</sup> 464LOW CONGA<	F#1	30 SCRATCH PULL	←
A133METRONOME CLICK←B135B134METRONOME BELL←B135STANDARD 1 KICK 2BRUSH KICK 2C236STANDARD 1 KICK 1BRUSH KICK 1D238E1237E240STANDARD 1 SNARE 1BRUSH SLAPF241E1239HAND CLAP 1E240STANDARD 1 SNARE 2BRUSH SLAPF241E1242CLOSED HI-HATG243A <sup>1</sup> 244PEDAL HI-HAT←A245MID TOM 2B247MID TOM 2C1348C13C348C13C348C13C348CRASH CYMBAL 1D350E13E1352C73F1353F13F1354G355A356COWBELL←A357B358A356COWBELL←A357B4358A4356COWBELL←A4357B4358A4356COWBELL←A4357B4358A4356COWBELL←A4357B4358A5954A4465B471B4359C460<			←
B135EP134METRONOME BELL STANDARD 1 KICK 2←C236Ci237SIDE STICKBRUSH KICK 1BRUSH SIDE STICKD238Ei239STANDARD 1 KICK 1BRUSH SIDE STICKBRUSH SIDE STICKD238Ei239HAND CLAP 1BRUSH SIDE STICKE240Ei239STANDARD 1 SNARE 1BRUSH SLAPF241Fi242CLOSED HI-HAT←G243A/244PEDAL HI-HAT←G243A/244PEDAL HI-HAT←A245B/246OPEN HI-HAT←MID TOM 2←MID TOM 1←C348C'349CRASH CYMBAL 1BRUSH CRASH CYMBAL 1C348C'349CHINESE CYMBAL 1BRUSH RIDE CYMBAL 1E352E'351RIDE CYMBAL 1BRUSH RIDE CYMBAL 1F353Fi354TAMBOURINE 1TAMBOURINE 2G355A'356CYMBAL 2BRUSH SPLASH CYMBAL 2G355A'356VIBRA-SLAP←G462E'461CONGA←A4'357B'358RIDE CYMBAL 2BRUSH RIDE CYMBAL 2G464COUNELL←CRASH CYMBAL 2BRUSH RIDE CYMBAL 2G463CPEN HIGH CONGA←A4'356Fi466LOW TIMBALE←G467 <td></td> <td></td> <td>←</td>			←
B135STANDARD 1 KICK 2BRUSH KICK 2C236Ci237STANDARD 1 KICK 1BRUSH KICK 1D238Ci237SIDE STICKBRUSH SLDE STICKD238Ei239STANDARD 1 SNARE 1BRUSH SLDE STICKE240STANDARD 1 SNARE 2BRUSH SUPSTANDARD 1 SNARE 2BRUSH SUPF241CLOSED HI-HAT $\leftarrow$ $\leftarrow$ G243A <sup>2</sup> 44PEDAL HI-HAT $\leftarrow$ A245B <sup>2</sup> 46OPEN HI-HAT $\leftarrow$ B247MID TOM 1 $\leftarrow$ $\leftarrow$ C348Ci349CRASH CYMBAL 1BRUSH RIDE CYMBAL 1D350HIGH TOM 1 $\leftarrow$ E352CiMBAL 1BRUSH RIDE CYMBAL 1C353Fi354RIDE CYMBAL 1BRUSH SIDE STICKSPLASH CYMBAL $\leftarrow$ F353Fi354CHNESE CYMBAL $\leftarrow$ G355AV356COWBELL $\leftarrow$ BRUSH RIDE CYMBAL 2A357BA'358B1358S9RIDE CYMBAL 2BRUSH RIDE CYMBAL 2B359S9RIDE CYMBAL 2BRUSH RIDE CYMBAL 2C460Ci4D466D4GOPEN HIGH CONGAC466C4GOPEN HIGH CONGAC466C4GONGOC466B471C4CABASA			
C236Ci237Diabon Kick 1BRUSH Kick 1D238STANDARD 1 Kick 1BRUSH SIDE STICKBRUSH SIDE STICKD238Ei239HAND CLAP 1BRUSH SULPE240STANDARD 1 SNARE 2BRUSH SULPF241Fi242CLOSED HI-HAT $\leftarrow$ G243A/244PEDAL HI-HAT $\leftarrow$ A245Bi246OPEN HI-HAT $\leftarrow$ B247Bi246OPEN HI-HAT $\leftarrow$ C348C'349CRASH CYMBAL 1BRUSH CRASH CYMBAL 1D350E'351RIDE CYMBAL 1BRUSH RIDE CYMBAL 1C348C'349CHASH CYMBAL 1BRUSH RIDE CYMBAL 1C1F353Fi354RIDE CYMBAL 1BRUSH SPLASH CYMBAL 1C355F354COWBELL $\leftarrow$ FG355A'356COWBELL $\leftarrow$ BRUSH SPLASH CYMBAL 2C460C'461CYMBAL 2BRUSH CRASH CYMBAL 2C460C'461COMBCO $\leftarrow$ D462E'463COPEN HIGH CONGA $\leftarrow$ C466CABASA $\leftarrow$ LOW TIMBALE $\leftarrow$ C467A/468LOW CONGA $\leftarrow$ C467A/468LOW TIMBALE $\leftarrow$ C572C'573SHORT HI WHISTLE $\leftarrow$ C467A/468LOW C	B1 35		
C-2 00C-2 00C-2 00C-2 00D2 38E-2 37SIDE STICKBRUSH SIDE STICKD2 38E-2 37SIDE STICKBRUSH SIDE STICKD2 38E-2 37SIDE STICKBRUSH SIDE STICKE2 40STANDARD 1 SNARE 1BRUSH SWIRLCCG2 43AU2 00 FOR HI-HAT $\leftarrow$ CLOSED HI-HAT $\leftarrow$ CLOSED HI-HAT $\leftarrow$ A2 44PEDA HI-HAT $\leftarrow$ A2 45OPEN HI-HAT $\leftarrow$ CLOSED HI-HAT $\leftarrow$ CLOSED HI-HAT $\leftarrow$ A2 45DEPA 244PEDA HI-HAT $\leftarrow$ CLOSED HI-HAT<			
D238STANDARD 1 SNARE 1BRUSH TAPE240EV239STANDARD 1 SNARE 2BRUSH SLAPF241FV242CLOSED HI-HAT $\leftarrow$ G243AV244PEDAL HI-HAT $\leftarrow$ A245BV244PEDAL HI-HAT $\leftarrow$ B247BV244PEDAL HI-HAT $\leftarrow$ C348C'349OPEN HI-HAT $\leftarrow$ C348C'349CRASH CYMBAL 1BRUSH CRASH CYMBAL 1D350EV351RIDE CYMBAL 1BRUSH RIDE CYMBAL 1C353FV354CHINESE CYMBAL 1BRUSH RIDE CYMBAL 1C460EV355AV356C7C0WBELLCRASH CYMBAL 2BRUSH SPLASH CYMBAL 2G355AV356COWBELLA357BV358SPLASH CYMBAL 2B359RIDE CYMBAL 2BRUSH SPLASH CYMBAL 2C460C'461D462MUTE HIGH CONGAE464LOW CONGAF465FV4G466CABASA $\leftarrow$ C467AV4B471SHORT HI WHISTLE $\leftarrow$ C4573SHORT GUIRO $\leftarrow$ C4574C460C4574C460C572C4573SHORT GUIRO $\leftarrow$ C46L			
E240STANDARD 1 SNARE 2BRUSH SWIRLF241F/242LOW TOM 2 $\leftarrow$ G243A/244PEDAL HI-HAT $\leftarrow$ A245B/244PEDAL HI-HAT $\leftarrow$ A245B/246OPEN HI-HAT $\leftarrow$ B247MID TOM 2 $\leftarrow$ $\leftarrow$ C348C'349CRASH CYMBAL 1BRUSH CRASH CYMBAL 1D350E'351RIDE CYMBAL 1BRUSH RIDE CYMBAL 1E352E'351RIDE CYMBAL $\leftarrow$ F353F/354TAMBOURINE 1BRUSH RIDE BELLG355A'355SPLASH CYMBAL $\leftarrow$ CASH CYMBALCRASH CYMBAL 2BRUSH SPLASH CYMBAL 2BRUSH SPLASH CYMBAL 2G357B'358VIBRA-SLAP $\leftarrow$ B359RIDE CYMBAL 2BRUSH RIDE CYMBAL 2EB4357B'358VIBRA-SLAP $\leftarrow$ HIGH HGNGO $\leftarrow$ HIGH HGNGO $\leftarrow$ HIGH HGNGOC461LOW BONGO $\leftarrow$ LOW CONGA $\leftarrow$ F465HIGH AGOGO $\leftarrow$ HIGH TIMBALE $\leftarrow$ G467A'468LOW AGOGO $\leftarrow$ A469LONG GUIRO $\leftarrow$ LONG GUIRO $\leftarrow$ B471SHORT GUIRO $\leftarrow$ LONG GUIRO $\leftarrow$ C572C'573SHORT GUIRO $\leftarrow$ D574E+576 <td< td=""><td></td><td></td><td></td></td<>			
F211CANDALDINOM 12F241F242CLOSED HI-HAT $\leftarrow$ G243A*244PEDAL HI-HAT $\leftarrow$ A245MID TOM 2 $\leftarrow$ $\leftarrow$ B247B*246OPEN HI-HAT $\leftarrow$ MID TOM 2 $\leftarrow$ MID TOM 1 $\leftarrow$ C348C'349CRASH CYMBAL 1BRUSH CRASH CYMBAL 1D350E'351HIGH TOM 1 $\leftarrow$ F353F'354RIDE CYMBAL 1BRUSH RIDE CYMBAL 1C355A*356COWBELLBRUSH RIDE BELLG355A*356COWBELLBRUSH SPLASH CYMBALG357B*358CRASH CYMBAL 2BRUSH RIDE CYMBAL 2B359S9RIDE CYMBAL 2BRUSH RIDE CYMBAL 2C460C*461HIGH BONGO $\leftarrow$ LOW BONGO $\leftarrow$ LOW CONGA $\leftarrow$ E46463CPEN HIGH CONGA $\leftarrow$ F465F*466LOW TIMBALE $\leftarrow$ G467A*468LOW CONGA $\leftarrow$ A469B*470MARACAS $\leftarrow$ B471SHORT HI WHISTLE $\leftarrow$ CLONG GUIRO $\leftarrow$ C4576HIGH WOOD BLOCK $\leftarrow$ HIGH WOOD BLOCK $\leftarrow$	E•2		
F2 41F2 42CLOSED HI-HAT $\leftarrow$ G2 43A/2 44PEDAL H-HAT $\leftarrow$ A2 45B/2 46OPEN HI-HAT $\leftarrow$ B2 47B/2 46OPEN HI-HAT $\leftarrow$ C3 48C'3 49CRASH CYMBAL 1BRUSH CRASH CYMBAL 1D3 50E/3 51RIDE CYMBAL 1BRUSH RIDE CYMBAL 1E3 52E/3 51RIDE CYMBAL 1BRUSH RIDE CYMBAL 1G3 55F3 54GASH CYMBAL $\leftarrow$ RIDE BELLBRUSH RIDE BELLBRUSH SPLASH CYMBALG3 55F3 54COWBELL $\leftarrow$ A3 57B/3 56COWBELL $\leftarrow$ B3 59RIDE CYMBAL 2BRUSH SPLASH CYMBAL 2C4 60C*4 61LOW BONGO $\leftarrow$ D4 62D2PK HIGH CONGA $\leftarrow$ LOW BONGO $\leftarrow$ LOW CONGA $\leftarrow$ F4 65F14 66G4 67A/4 68A/4 68LOW TIMBALEG4 67A/4 68A/4 69LOM GOOB4 71SHORT HI WHISTLEC15 72C'5 73C15 74ELOM COURDE5 76HIGH WOOD BLOCKE5 76HIGH WOOD BLOCK	E2 40		
G243LOW TOM 1 $\leftarrow$ A245PEDAL HI-HAT $\leftarrow$ MID TOM 2 $\leftarrow$ B247BP2 46OPEN HI-HAT $\leftarrow$ C348CPASH CYMBAL 1D350C'3E'351RIDE CYMBAL $\leftarrow$ F353F354G355A'355A'357B'3S3F354CASH CYMBALCASH CYMBALCHINESE CYMBALCHINESE CYMBALCASH CYMBALBRUSH RIDE BELLBRUSH RIDE BELLBRUSH SPLASH CYMBALCASH CYMBAL 2BRUSH SPLASH CYMBAL 2BRUSH RIDE CYMBAL 2C4 60C'4 61LOW CONGACF4 65G4 67AV4 68LONG COMA4 69BV4 70BVA 70MARACASCIS 72C'5 73CHONG GUIROCLONG GUIROCLONG GUIROCLONG CUROCLONG GUIRO <tr< td=""><td>F2 41</td><td></td><td></td></tr<>	F2 41		
AA44PEDAL HI-HAT←A245BMID TOM 2←B247OPEN HI-HAT←C348C'349C348C'349C7350FGRASH CYMBAL 1B350FFE352CCRASH CYMBAL 1C73BS1C13FS1C13FS1C13FS1C14FFC3S2CC15FS1C15FS1C15FS1C15FS1C15FS1C15S1SPLASH CYMBALC15S1SPLASH CYMBALC15S1SPLASH CYMBALC15S1SPLASH CYMBAL 2C16B13S6C74G1G0C14G3G1C14G3G1G3S5HIGH CONGAC14G3G1C14G3G1C14G3G2G14G3S5F4G6G4G7AHIGH AGOGOC4G3G3S4G3G3G3G3G3G3G3G3G4G7G4G3G4G7G4G3G5COWORAC4G			
A245MID TOM 2←B247B <sup>1</sup> / <sub>2</sub> 46OPEN HI-HAT←MID TOM 1←MID TOM 1←C348HIGH TOM 2←C348HIGH TOM 1←D350E <sup>1</sup> / <sub>3</sub> 49CRASH CYMBAL 1BRUSH CRASH CYMBAL 1C3E <sup>1</sup> / <sub>3</sub> 51HIGH TOM 1←E352E <sup>1</sup> / <sub>3</sub> 51RIDE CYMBAL 1BRUSH RIDE CYMBAL 1C1E <sup>1</sup> / <sub>3</sub> 55F <sup>2</sup> / <sub>4</sub> 54CHINESE CYMBAL←G35554SPLASH CYMBALBRUSH SPLASH CYMBALG355S9S9COWBELL←A357B <sup>1</sup> / <sub>3</sub> 56COWBELL←B359B <sup>1</sup> / <sub>4</sub> 55CMASH CYMBAL 2BRUSH SPLASH CYMBAL 2C460C <sup>2</sup> / <sub>4</sub> 61LOW BONGO←D462MUTE HIGH CONGA←E464E <sup>1</sup> / <sub>4</sub> 66LOW CONGAE464LOW CONGA←HIGH TIMBALE←G467A <sup>1</sup> / <sub>4</sub> 66A <sup>1</sup> / <sub>4</sub> 67LOW GOGO←A <sup>1</sup> / <sub>4</sub> 67LOW AGOGO←A <sup>1</sup> / <sub>4</sub> 67LOW AGOGO←A <sup>1</sup> / <sub>4</sub> 67LONG LOW WHISTLE←C572C <sup>15</sup> / <sub>4</sub> 73SHORT GUIROC1574LONG GUIRO←LONG GUIRO←E576HIGH WOOD BLOCKHIGH WOOD BLOCK←			
B247GPEN HI-HAT←HIGH TOM 1HIGH TOM 2←C348C'349CRASH CYMBAL 1BRUSH CRASH CYMBAL 1D350HIGH TOM 1E352F3F353F43F353F43F354CHINESE CYMBALG355AV3A356COWBELLCRASH CYMBAL 2B359B1358VIBRA-SLAP←C460C461LOW CONGAF465F466G467A4468LOW CONGAF465F466C4467LOW GOGOA4F3F470MARACASC45F468LOW GOROC45F4C45F4F4F5F4F4F5F4F5F4F4F5F4F4F5F4F5F4F5F5F4F5F5F4F5F4F4F4F5F4F5F4F5<			←
Image: Case of the second s	B•2		←
Ci3       49       CRASH CYMBAL 1       BRUSH CRASH CYMBAL 1         D3       50       Fi3       Fi3       Fi16H TOM 1       ←         Fi3       52       Fi3       51       CHINESE CYMBAL 1       BRUSH RIDE CYMBAL 1         Fi3       53       Fi3       54       CHINESE CYMBAL 1       BRUSH RIDE CYMBAL 1         G3       55       Af3       56       CHINESE CYMBAL 2       BRUSH RIDE BELL         G3       55       Af3       56       COWBELL       BRUSH SPLASH CYMBAL 2         A3       57       EV3       58       VIBRA-SLAP       ←         C4       60       Ci4       61       LOW BONGO       ←         D4       62       EV4       63       CPEN HIGH CONGA       ←         E4       64       EV4       66       COW GONGA       ←         F4       65       F44       66       COW GONGA       ←         G4       67       AV4       68       COW GONGA       ←         G4       67       AV4       68       COW GONGA       ←         G4       67       AV4       68       COW AGOGO       ←         G4       67       AV4	B2 47		
D350HiGH TOM 1←E352E4351RIDE CYMBAL 1BRUSH RIDE CYMBAL 1CHINESE CYMBAL←F353F7354G355A4356COWBELLBRUSH SPLASH CYMBAL 2A357B4356COWBELLERUSH SPLASH CYMBAL 2B359S9S8RIDE CYMBAL 2BRUSH SPLASH CYMBAL 2C460C4461LOW BONGO←D462E4463OPEN HIGH CONGA←C464LOW CONGA←LOW CONGA←F465F1466LOW TIMBALE←G467A4468LOW GOGO←A469B4470MARACAS←B471SHORT HI WHISTLE←CABASAC1572C1573SHORT GUIRO←C104CUW OD BLOCK←CHORG DECK←E576HIGH WOOD BLOCK←HIGH WOOD BLOCK	C3 48		
E3       52       E43       51       RIDE CYMBAL 1       BRUSH RIDE CYMBAL 1         F3       53       F13       54       CHINESE CYMBAL       E         F3       53       F13       54       TAMBOURINE 1       TAMBOURINE 2         G3       55       A13       56       COWBELL       BRUSH SPLASH CYMBAL 2         A3       57       B13       58       SPLASH CYMBAL 2       BRUSH SPLASH CYMBAL 2         B3       59       B13       58       VIBRA-SLAP       ←         C4       60       C14       61       LOW BONGO       ←         D4       62       E44       63       OPEN HIGH CONGA       ←         F4       65       F14       66       OPEN HIGH CONGA       ←         F4       65       F14       66       CABASA       ←         HIGH HIMBALE       ←       HIGH AGOGO       ←       ←         G4       67       A44       68       LOW AGOGO       ←         G4       67       A44       68       CABASA       ←         G4       67       AABASA       ←       CABASA       ←         G4       67       G1       MAR			
E352CHINESE CYMBAL $\leftarrow$ F353F354RIDE BELLBRUSH RIDE BELLG355A356SPLASH CYMBALBRUSH SPLASH CYMBALA357EV358VIBRA-SLAP $\leftarrow$ C460CH461LOW BONGO $\leftarrow$ D462EV463OPEN HIGH CONGA $\leftarrow$ E464E466HIGH GONGA $\leftarrow$ F465F4466LOW CONGA $\leftarrow$ G467AV468CASASA $\leftarrow$ G467AV466CABASA $\leftarrow$ C572C4573SHORT GUIRO $\leftarrow$ LONG GUIRO $\leftarrow$ LONG GUIRO $\leftarrow$ LONG GUIROC4576HIGH WOOD BLOCK $\leftarrow$ HIGH WOOD BLOCK $\leftarrow$ LONG GUIRO $\leftarrow$			
F3 53RIDE BELLBRUSH RIDE BELLG3 55F3 54TAMBOURINE 1TAMBOURINE 2G3 55A*3 56SPLASH CYMBALBRUSH SPLASH CYMBALA3 57B*3 58COMBELL $\leftarrow$ B3 59CASH CYMBAL 2BRUSH SPLASH CYMBAL 2C4 60C*4 61HIGH BONGOD4 62HIGH BONGOE4 64CONGAF4 65F*4 66G4 67A*4 66A4 69B*4 70B4 71SHORT HI WHISTLEC5 72C*5 73C45 74CLOW WODB BLOCKC47 64HIGH WOOD BLOCKC47 65CHIGH WOOD BLOCK	E3 52		
Fi3       54       TAMBOURINE 1       TAMBOURINE 2         G3       SPLASH CYMBAL       BRUSH SPLASH CYMBAL         A3       57       COWBELL       ←         B3       59       CRASH CYMBAL 2       BRUSH CRASH CYMBAL 2         B3       59       RIDE CYMBAL 2       BRUSH CRASH CYMBAL 2         C4       60       Cf4       61         D4       62       HIGH BONGO       ←         E4       64       LOW BONGO       ←         E4       64       LOW CNGA       ←         F4       65       Ff4       66       LOW TIMBALE         GA       67       A44       68       LOW CNGA       ←         A4       69       B/4       70       MARACAS       ←         B4       71       SHORT HI WHISTLE       ←          C5       72       C15       73       SHORT GUIRO       ←         D5       74       E15       CLAVES       ←          LONG GUIRO       ←       LONG GUIRO       ←          LONG GUIRO       €       CLAVES       ←          E5       76       HIGH WOOD BLOCK       ←	F3 53		BRUSH RIDE BELL
A3       57       B43       56       COWBELL       ←         B3       57       B43       58       CRASH CYMBAL 2       BRUSH CRASH CYMBAL 2         B3       59       FiDE CYMBAL 2       BRUSH RIDE CYMBAL 2       BRUSH RIDE CYMBAL 2         C4       60       C44       61       HIGH CONGO       ←         D4       62       HIGH CONGA       ←       ←         LOW BONGO       ←       CMUTE HIGH CONGA       ←         E4       64       LOW CONGA       ←         F4       65       HIGH TIMBALE       ←         G4       67       A/4 66       LOW TIMBALE       ←         A4       69       CABASA       ←       CABASA       ←         B4       71       SHORT HI WHISTLE       ←       CLONG GUIRO       ←         LONG CLUW WODD BLOCK       ←       LONG GUIRO       ←       ↓       ↓         D5       74       Eb5       75       CLAVES       ←       ↓         HIGH WOOD BLOCK       ←       ↓       ↓       ↓       ↓	F <sup>‡</sup> 3		TAMBOURINE 2
A3       57       CRASH CYMBAL 2       BRUSH CRASH CYMBAL 2         B3       59       RIDE CYMBAL 2       BRUSH RIDE CYMBAL 2         C4       60       C44       61         D4       62       HIGH BONGO       ←         D4       62       HIGH CONGA       ←         E4       64       LOW BONGO       ←         F4       63       OPEN HIGH CONGA       ←         F4       65       F44       66       LOW CONGA         G4       67       HIGH TIMBALE       ←         HIGH AGOGO       ←       HIGH AGOGO       ←         G4       67       Abd 68       LOW AGOGO       ←         B4       71       ShORT HI WHISTLE       ←         C5       72       LONG LOW WHISTLE       ←         LONG CUIRO       ←       LONG GUIRO       ←         D5       74       Eb5       75       SHORT GUIRO       ←         E5       76       HIGH WOOD BLOCK       ←       ←			BRUSH SPLASH CYMBAL
B3 59       B3 58       VIBRA-SLAP       ←         RIDE CYMBAL 2       BRUSH RIDE CYMBAL 2       C4 60       ←         C4 60       C44 61       LOW BONGO       ←         D4 62       E4 63       OPEN HIGH CONGA       ←         E4 64       E4 63       OPEN HIGH CONGA       ←         F4 65       F4 66       HIGH TIMBALE       ←         G4 67       AV4 68       LOW GOGO       ←         A4 69       CABASA       ←         B4 71       SHORT HI WHISTLE       ←         C5 72       C45 73       SHORT GUIRO       ←         LONG GUIRO       ←       LONG GUIRO       ←         E5 76       HIGH WOOD BLOCK       ←       ←			
B3         59         RIDE CYMBAL 2         BRUSH RIDE CYMBAL 2           C4         60         C <sup>4</sup> 4         61         BONGO         ←           D4         62         HIGH BONGO         ←         ←           D4         62         MUTE HIGH CONGA         ←           E4         64         DOPEN HIGH CONGA         ←           E4         64         LOW CONGA         ←           F4         65         HIGH TIMBALE         ←           G4         67         AV4         68         LOW TIMBALE         ←           G4         67         AV4         68         LOW TIMBALE         ←           GABASA         ←         CABASA         ←         CABASA         ←           B4         71         SHORT HI WHISTLE         ←         CLONG GUIRO         ←           D5         74         EIO GUIRO         ←         LONG GUIRO         ←           E5         76         HIGH WOOD BLOCK         ←         ←			
C4       60       C <sup>4</sup> 4       61       LOW BONGO       ←         D4       62       LOW BONGO       ←       MUTE HIGH CONGA       ←         E4       64       DPEN HIGH CONGA       ←       HIGH TIMBALE       ←         F4       65       F <sup>4</sup> 4       66       LOW TIMBALE       ←         G4       67       HIGH AGOGO       ←       ←         HIGH AGOGO       ←       CABASA       ←         B4       71       B <sup>4</sup> 4       68       LOW WHISTLE       ←         C5       72       C <sup>4</sup> 5       73       SHORT GUIRO       ←         D5       74       E <sup>1</sup> 5       75       CLAVES       ←         E5       76       HIGH WOOD BLOCK       ←       ←	B3 59		
Ci4       61       LOW BONGO       ←         D4       62       MUTE HIGH CONGA       ←         E4       63       OPEN HIGH CONGA       ←         F4       65       F4       66       ←         F4       65       F4       68       LOW AGOGO       ←         G4       67       A <sup>1</sup> 4       68       LOW AGOGO       ←         A4       69       CABASA       ←       ●         B4       71       SHORT HI WHISTLE       ←         C5       72       Ci5       73       SHORT GUIRO       ←         LONG GUIRO       ←       LONG GUIRO       ←       ●       ●         E5       76       HIGH WOOD BLOCK       ←       ●       ●	C4 60		
E4       64       GPEN HIGH CONGA       ←         E4       64       LOW CONGA       ←         F4       65       F4       66       LOW TIMBALE       ←         G4       67       HIGH TIMBALE       ←       ←         G4       67       HIGH AGOGO       ←         LOW AGOGO       ←       CABASA       ←         B4       71       BH4       70       MARACAS       ←         B4       71       SHORT HI WHISTLE       ←         C5       72       C15       73       SHORT GUIRO       ←         D5       74       E45       75       CLAVES       ←         E5       76       HIGH WOOD BLOCK       ←       ←	C#4		
E4       64       LOW CONGA       ←         F4       65       F44       66       HIGH TIMBALE       ←         G4       67       A <sup>1</sup> 4       66       LOW TIMBALE       ←         G4       67       A <sup>1</sup> 4       68       LOW MBALE       ←         C4       69       CABASA       ←       CABASA       ←         B4       71       B <sup>1</sup> 4       70       MARACAS       ←         C5       72       C <sup>4</sup> 5       73       SHORT HI WHISTLE       ←         D5       74       E <sup>1</sup> 5       75       CLAVES       ←         E5       76       HIGH WOOD BLOCK       ←       ←			
F4       65       Fi4       66       LOW TIMBALE       ←         G4       67       At4       68       LOW TIMBALE       ←         HIGH TIMBALE       ←       HIGH AGOGO       ←         A4       69       CABASA       ←         B4       71       SHORT HI WHISTLE       ←         C5       72       LONG LOW WHISTLE       ←         D5       74       E45       75       CLAVES       ←         E5       76       HIGH WOOD BLOCK       ←       ←	E4 64		
F4       66       LOW TIMBALE       ←         G4       67       HIGH AGOGO       ←         HIGH AGOGO       ←       CABASA       ←         A4       69       B4       70       MARACAS       ←         B4       71       SHORT HI WHISTLE       ←       C5       72       LONG LOW WHISTLE       ←         D5       74       E45       75       SHORT GUIRO       ←       LONG GUIRO       ←         E5       76       HIGH WOOD BLOCK       ←       HIGH WOOD BLOCK       ←			
G4       67       HiGH AGOGO       ←         A4       69       LOW AGOGO       ←         CABASA       ←       CABASA       ←         B4       71       B <sup>1</sup> 4       70       MARACAS       ←         C5       72       LONG LOW WHISTLE       ←         D5       74       LONG GUIRO       ←         E5       76       HIGH WOOD BLOCK       ←	F4 65		←
A4         69         CABASA         ←           B4         71         B4         70         MARACAS         ←           SHORT HI WHISTLE         ←         C         SHORT HI WHISTLE         ←           C5         72         LONG LOW WHISTLE         ←         LONG GUIRO         ←           D5         74         LONG GUIRO         ←         CLAVES         ←           E5         76         HIGH WOOD BLOCK         ←         HIGH WOOD BLOCK         ←			←
B4         70         MARACAS         ←           B4         71         SHORT HI WHISTLE         ←           C5         72         LONG LOW WHISTLE         ←           D5         74         EIS         CCLAVES         ←           E5         76         HIGH WOOD BLOCK         ←         ←			
B4         71         SHORT HI WHISTLE         ←           C5         72         LONG LOW WHISTLE         ←           D5         74         LONG GUIRO         ←           E5         76         CLAVES         ←			
C5         72         Cf5         73         SHORT GUIRO         ←           D5         74         LONG GUIRO         ←         LONG GUIRO         ←           E5         76         HIGH WOOD BLOCK         ←         ←         ↓	B4 71 B≯4		
C45         73         SHORT GUIRO         ←           D5         74         LONG GUIRO         ←           E5         76         HIGH WOOD BLOCK         ←			← ←
D5         74         LONG GUIRO         ←           E5         75         CLAVES         ←           E5         76         HIGH WOOD BLOCK         ←	C <sup>#</sup> 5		←
E5 76 HIGH WOOD BLOCK	D5 74	LONG GUIRO	←
	E 70 E5		
			←
F5 77 F <sup>2</sup> 5 78 MUTE CUICA ←	F5 77		← 
G5 79 OPEN CUICA ←			
A <sup>5</sup> 80 MUTE TRIANGLE ←			<i>←</i>
A5 81 OPEN TRIANGLE ←	A5 81	OPEN TRIANGLE	←
B5 83 HAKER ←	B5 82 B•5		
JINGLE BELL			
C6 84 BELL TREE ← C <sup>2</sup> 6 85 CASTANETS ←	C6 84		
D6 86 MUTE SURDO ←			·
E <sup>1</sup> 6 87 OPEN SURDO ←	E•6		
E6 88 APPLAUSE ←	E6 88		←
F6 89 APPLAUSE 2 ←	F6 89	APPLAUSE 2	←

## ΝΟΤΕ

• "←" : indicates the same sound as STANDARD SET.

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• "←" : indica el mismo sonido que STANDARD SET.

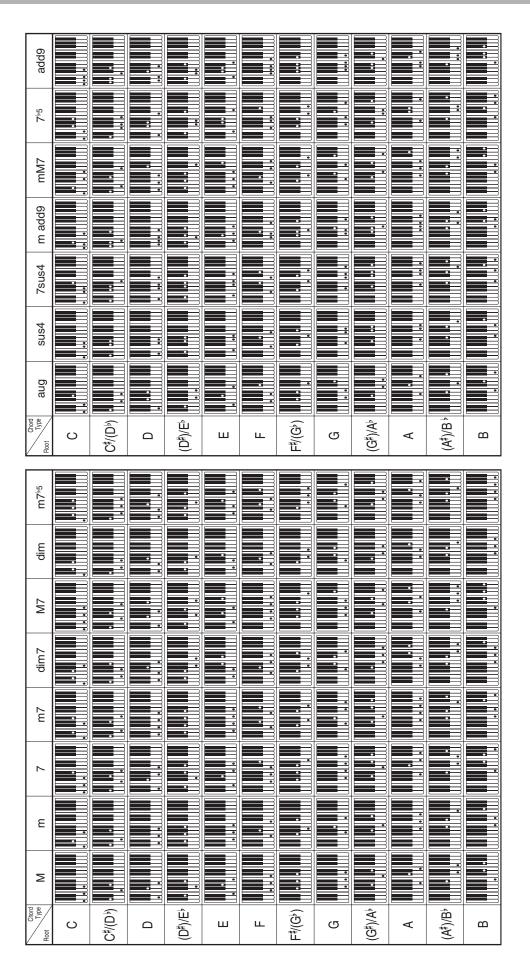
## Rhythm List/Lista de ritmos

No./N°	Rhythm Name/Nombre de ritmo
01	8 BEAT
02	PIANO BALLAD 1
03	PIANO BALLAD 2
04	EP BALLAD 1
05	EP BALLAD 2
06	BLUES BALLAD
07	JAZZ COMBO 1
08	JAZZ COMBO 2
09	RAGTIME
10	ROCK'N'ROLL
11	BOOGIE WOOGIE
12	BOSSA NOVA
13	GOSPEL
14	ARPEGGIO 1
15	ARPEGGIO 2
16	MARCH 1
17	MARCH 2
18	STRIDE PIANO
19	WALTZ 1
20	WALTZ 2

## Song List/Lista de canciones

No./N°	Song Name/Nombre de canciones
01	Nocturne Op.9-2
02	Fantaisie-Impromptu Op.66
03	Étude Op.10-3 "Chanson de l'adieu"
04	Étude Op.10-5 "Black Keys"
05	Étude Op.10-12 "Revolutionary"
06	Étude Op.25-9 "Butterflies"
07	Prélude Op.28-7
08	Valse Op.64-1 "Petit Chien"
09	Valse Op.64-2
10	Moments Musicaux 3
11	Impromptu Op.90-2
12	Marche Militaire 1 (Duet)
13	Frühlingslied [Lieder Ohne Worte Heft 5]
14	Fröhlicher Landmann [Album für die Jugend]
15	Von fremden Ländern und Menschen [Kinderszenen]
16	Träumerei [Kinderszenen]
17	Tambourin
18	Menuet BWV Anh.114 [Clavierbüchlein der Anna Magdalena Bach]
19	Inventio 1 BWV 772
20	Inventio 8 BWV 779
21	Inventio 13 BWV 784
22	Praeludium 1 BWV 846 [Das Wohltemperierte Klavier 1]
23	Le Coucou
24	Gavotte
25	Sonatina Op.36-1 1st Mov.
26	Sonatine Op.20-1 1st Mov.
27	Sonate K.545 1st Mov.
28	Sonate K.331 3rd Mov. "Turkish March"
29	Rondo K.485
30	Für Elise
31	Marcia alla Turca
32	Sonate Op.13 "Pathétique" 1st Mov.
33	Sonate Op.13 "Pathétique" 2nd Mov.
34	Sonate Op.13 "Pathétique" 3rd Mov.
35	Sonate Op.27-2 "Moonlight" 1st Mov.
36	Rhapsodie 2
37	Waltz Op.39-15 (Duet)
38	Liebesträume 3
39	Blumenlied
40	La Prière d'une Vierge
41	Csikos Post
42	Humoresque Op.101-7
43	Melodie [Lyrische Stücke Heft 2]
44	Sicilienne Op.78
45	Berceuse [Dolly] (Duet)
46	Arabesque 1
47	La Fille aux Cheveux de Lin [Préludes]
48	Passepied [Suite bergamasque]
49	Gymnopédie 1
50	Je Te Veux
51	Salut d'Amour
52	The Entertainer
53	Maple Leaf Rag
54	L'arabesque [25 Etüden Op.100]
55	La Styrienne [25 Etüden Op.100]
56	Ave Maria [25 Etüden Op.100]
57	Le retour [25 Etüden Op.100]
58	La chevaleresque [25 Etüden Op.100]
59	No.13 [Études de Mécanisme Op.849]
60	No.26 [Études de Mécanisme Op.849]
61-70	User area songs/Canciones del área de usuario
	<b>S</b>

## Fingered Chord Chart/Cuadro de acordes digitados (Fingered)



## **MIDI Implementation Chart**

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 - 16 1 - 16	1 - 16 1 - 16	
Mode	Default Messages Altered	Mode 3 X * * * * * * *	Mode 3 X * * * * * * *	
Note Number	True voice	21 - 108 * * * * * * *	0 - 127 0 - 127*1	*1: Depends on tone *1: Depende del tono.
Velocity	Note ON Note OFF	O 9nH v = 1 - 127 X 8nH v = 64	O 9nH v = 1 - 127 X 9nH v = 0.8nH V =**	**: no relation **: sin relación
After Touch	Key's Ch's	X X	X O	
Pitch Bender		х	0	
Control Change	0,32 1 6,38 7 10 11 16 17 18 19 64 66 67 76 77 78 80 81 82 83 91 100, 101 120 121	0 X 0 X X X X X X X X X X X X X	000000000000000000000000000000000000000	Bank select Modulation Data entry Volume Pan Expression DSP Parameter0*2 DSP Parameter1*2 DSP Parameter3*2 DSP Parameter3*2 DSP Parameter3*2 DSP parameter3*2 DSP parameter3*2 DSP Parameter4*2 DSP Parameter5*2 DSP Parameter5*2 DSP Parameter5*2 DSP Parameter5*2 AsP Parameter5*3 DSP Parameter5*3 All sound off Reset all controller
Program Change	:True #	O 0 - 127 * * * * * * *	O 0 - 127 * * * * * * *	
System Exclusive		0	0	*4, *5
System Common	: Song Pos : Song Sel : Tune	X X X	X X X	
System Real Time	: Clock : Commands	0 0	x x	
Aux Messages	: Local ON/OFF : All notes OFF : Active Sense : Reset	X X X X	x o o x	
Remarks		<ul> <li>*2 : For details, see MIDI Implementation at http://world.casio.com/.</li> <li>*2 : Si desea más información, vea Implementación MIDI en http://world.casio.com/.</li> <li>*3 : Pitch Bend Sensitivity, Fine Tune, Coarse Tune, Modulation Depth, Null</li> <li>*3 : Sensibilidad de inflexión de tono, afinación precisa, afinación poco precisa, profundidad de modulación, nulo</li> <li>*4 : Universal Real-time Exclusive Messages: Master Volume, Master Balance, Master Fine Tuning, Master Coarse Tuning, Reverb Parameter, Chorus Parameter, GM System Message</li> <li>*4 : Mensajes exclusivos de sistemas universales en tiempo real: Volumen maestro, balance maestro, afinación proco precisa maestra, parámetro de reverberación, parámetro de coro, mensaje de sistema GM</li> <li>*5 : This model's System Exclusive Message</li> <li>For details about footnotes 3 through 5, see MIDI Implementation at http://world.casio.com/.</li> <li>*5 : Mensaje exclusivo del sistema de este modelo</li> <li>Si desea más información sobre los pies de página, vea Implementación MIDI en http://world.casio.com/.</li> </ul>		



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