

Safety Precautions

Before trying to use the keyboard, be sure to read the separate "Safety Precautions".

## CASIO

O MA0312-A Printed in China

Be sure to read this User's Guide and keep it on hand for future reference. Parents or guardians should make sure that young children using this instrument are familiar with the contents of this User's Guide.

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A. (not applicable to other areas

#### 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

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

#### Important Information for Parents!

Parents should please note the following important information before letting children use this produc

- · Before using the optional AD-1 Adaptor to power the unit, be sure to check the AC Adaptor for any damage first. Carefully check the power cord for breakage, cuts, exposed wire and other serious damage. Never let children use an AC adaptor that is seriously damaged.
- · Never attempt to recharge batteries.
- Do not use rechargeable batteries.
- Never mix batteries of different types Never mix old batteries with new ones
- Use only the batteries recommended in this manual or equivalent batteries.
- Always make sure that positive (+) and negative (-) poles are facing correctly as indicated near the battery compartment.
- · Remove batteries as soon as they show any sign of going dead. Do not short-circuit the battery terminals.
- The product is not intended for children under 3 years
- . The AC adaptor is not a toy Be sure to disconnect the AC adaptor before cleaning the product.





This recycle mark indicates that the packaging conforms to Esta marca de reciclaje indica que el empaquetado se ajusta a la legislación de protección ambiental en Alemania.

# CASIO COMPUTER CO.,LTD.

☐ Connecting the accompanying headset mike

□ Play along with Song Bank tune

☐ Tempo and beat display indicators, plus staff

Avoid use in areas subjected to

Extremely high or low temperature can cause figures on the

LCD screen to become dim and difficult to read. This

condition should correct itself when the keyboard is brought

You may notice lines in the finish of the case of this keyboard.

These lines are a result of the molding process used to shape the plastic of the case. They are not cracks or breaks in the

to the MIC jack on the back of the keyboard

makes it possible for you to sing along with

Shibuya-ku, Tokyo 151-8543, Japan

**Features** 

□ 100 built-in tones

built-in tunes.

accompaniments

temperature extremes.

back to normal temperature.

**Alkaline Batteries** 

plastic, and are no cause for concern

notation of notes played

**□** 30 built-in rhythm patterns

□ 10 built-in Song Bank tunes

## Low Batteries

Any of the symptoms listed below can indicate that battery power is too low. Replace batteries as soon as possible whenever you experience any of the following.

- Dim power indicator · Low sound volume
- · Loss of output when playing at loud volume
- Sudden power loss when playing at loud volume
- Sudden output of sound when no keyboard key is pressed Output of a tone different from the one that is selected
- Incorrect play of patterns or built-in tunes
- Dim display figures
- Dimming of display figures when playing at loud volume

# Care of your keyboard

#### Avoid heat, humidity or direct sunlight. Do not overexpose the instrument to direct sunlight, or place

# it near an air conditioner, or in any extremely hot place.

Do not use near a TV or radio.

#### This instrument can cause video or audio interference with TV and radio reception. If this happens, move the instrument away from the TV or radio.

Do not use lacquer, thinner or similar chemicals for cleaning.

Clean the keyboard with a soft cloth dampened in a weak

### solution of water and a neutral detergent. Soak the cloth in the solution and squeeze until it is almost dry. **Power Supply**

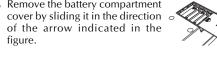
The two-way power supply of this keyboard lets you use either batteries or household AC power. Always be sure to turn off power whenever you are not using the keyboard.

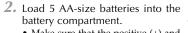
# **Battery Power**

Be sure to turn keyboard power off before loading batteries.

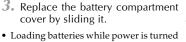
## **Battery Replacement**

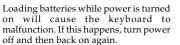
**1.** Remove the battery compartment





• Make sure that the positive (+) and negative (-) ends are facing correctly.





### **Battery Life**

322A-E-001A

Approximately six hours with R6P (SUM-3) manganese patteries (normal temperature and optimum volume setting). Note that battery life can be shortened by playing at high volume or by very cold temperatures.

# /!\ DANGER

Perform the following steps immediately if fluid leaking from alkaline batteries ever gets into your

1. Do not rub your eyes! Rinse them with water.

Contact your physician immediately.
 Leaving alkaline battery fluid in your eyes can lead to loss

# ∠!\ CAUTION

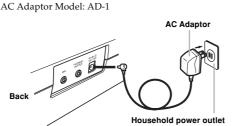
Misuse of batteries can cause them to burst and leak fluid, creating the danger of personal injury, or damage to or discoloration of clothing, furniture, etc. Be sure to note the following important precautions whenever handling

• Make sure that the (+) and (-) ends of the batteries are facing as indicated by the markings on the keyboard.

- Be sure to remove batteries from the keyboard whenever you do not plan to use it for a long time, such as before
- going on a trip, etc. Never mix batteries of different types.
- Never mix old batteries with new ones.
  Never dispose of batteries by burning them. Never allow the (+) and (-) ends of batteries to become connected to each other, do not try to take batteries apart, and do not expose batteries to heat.
- Remove batteries from the keyboard immediately after they show signs of losing power.
- Never recharge batteries.

#### AC Power

Use only the AC adaptor model specified for this keyboard.



## ✓! WARNING

Polyphony

**Digitally Sampled Tones** 

Display Indicators

Shows "‡" for sharps and "\" for flats.

Black key indicator

Staff Notation

part of the display.

Staff Notation Notes

• Pressing Two or More Keys

White keys only

olay on the keyboard.

hows the pitch of sounds you

ee "Staff Notation Notes

how volume, tempo, tone, Patter

and Song Bank tune numbers and

Keys pressed

Including one or more black key

OFF button, the length of each melody note is indicated

elow for details about thi

• Take care to avoid damage to the power cord. Never place heavy objects on the cord and keep it away from heat. A damaged power cord creates the danger of fire and electrical shock.

Use only the AC adaptor model specified for this keyboard. Use of any other AC adaptor model creates the danger of fire and electrical shock.

## ∠!\ CAUTION

- · Always unplug the AC adaptor from the power outlet if you do not plan to use the keyboard for a long time, such as when leaving on a trip, etc When not using the keyboard, turn off power and unplug
- the AC adaptor from the power outlet.

#### IMPORTANT!

- Be sure that keyboard power is turned off before connecting or disconnecting the AC adaptor to it.
- The AC adaptor may become warm to the touch after long. term use. This is normal and does not indicate

Connecting headphones cuts off output from the keyboard's

built-in speakers, so you can play even late at night without

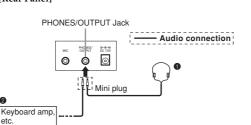
Use a commercially available connecting cord to connect the

### Connections

#### Using the Phones/Output Jack

Before connecting headphones or other external equipment, be sure to first turn down the volume settings of the keyboard and the connected equipment. You can then adjust volume to the desired level after connections are complete. Connecting Headphones (Figure 1)

disturbing anyone.



## Using the Headset Mike

**General Guide** 

• POWER Switch

[Side Panel]

strap.

6

**■** NOTE

Attach the optiona

shoulder strap here

For details, see the

nstructions that com

with the shoulder

\*\*\*\*\*

**6.** Play on the keyboard.

The notes you play appear in th

staff notation on the display.

VOLUME

PATTERN

on where the key is located, as illustrated below.

The tone "00 PIANO" is always selected whenever you turn on power

buttons while the current setting is displayed to actually change the volume setting.

TEMPO TONE

Turn on power.

ON: Turns power on

OFF: Turns power off.

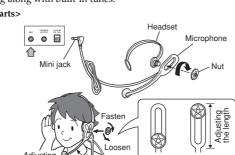
[Back Panel]

DC 7.5V jac

PHONES/ ⊕ ⊢ ⊝

indicator

Connecting the accompanying headset mike to the MIC jack on the back of the keyboard makes it possible for you to sing along with built-in tunes. <Parts>



## 1. Install the microphone onto the headset as shown

To assemble the headset mike

Musical Instrument Amplifier (Figure 2)

keyboard to a musical instrument amplifier.

- in the illustration.
- 2. After adjusting the length and angle of the microphone so that it is positioned in front of your mouth, secure it in place with the nut.

#### To use the headset mike

1. Plug the connector of the mike into the MIC jack.

Tone List

Find the tone yo

want to use.

SONG BANK list

Press the TONE Button

1

E III PATTERN

6

VOLUME

TEMPO

TONE

SONG BANK

#### **I** NOTE · The volume level setting of the microphone is fixed. Adjusting

overall volume using the VOLUME buttons does not affect the nicrophone volume level

#### IMPORTANT:

**6** 9:

START/STOP button TEMPO buttons

**6** 9:

Volume can be set to a value from 1 to 5. The volume level is always set to 5 whenever you turn on power

Use the number buttons to input the

The above display shows "23 FLUTE" i

Whenever you first press either the  $\triangle$  or  $\nabla$  VOLUME button the current setting value appears on the display. Press one of the

Some tones actually assign two or more different sounds to the keyboard. The sound produced when you press a key depends

\_ TONE

PATTERN

SONG BANK

two-digit tone number.

• If the microphone gets too close to the speaker, you may experience a howling noise called "feedback". When this happens move the microphone away from the speaker

VOLUME Buttons

Adjust the volume

∴ Raises volume

1

TEMPO

TONE

PATTERN

SONG BANK

# **Playing Patterns**

This keyboard features a total of 30 built-in patterns. There are 10 patterns each under three categories: RHYTHM, FREE SESSION, FUNNY.

This keyboard can play up to four notes at the same time when there is no pattern or Song Bank tune being played. Even if

This keyboard features a number of digitally sampled tones, which are digital recordings of musical instruments. Actually,

three recordings are made for each tone, covering the low range, middle range, and high range.

• The point where the key to the left falls in one range and the key to the right falls in a different range is called a "split point."

This is an unavoidable result of the sampling process, and does not indicate malfunction of the keyboard.

Note Indicator

outton on/off status

When you press one keyboard key, the note you play appears in the staff notation.

Indicates the MELODY OFF

How notes appear on the display depends on how many keys you press when playing on the keyboard, and whether the MELODY OFF button is on or off when playing a Song Bank tune.

Maximum Number of Notes

Displayed

Melody notes appear on the display as Song Bank tunes play. Even when the melody is turned on or off using the MELODY

• The sounds of some tones do not change pitch no matter which keyboard key you press.

With some tones, you may notice a very slight difference in tone quality or volume between the two keys at a split point.

Appears when a pattern or Song

Bank tune is playing. Notes

change to indicate a change i

Moves left and right in time

with Pattern and Song Bank

**Beat Indicator** 

nted.

attern, Song Bank.

Sequence

All notes appear when played.

One-by-one starting from lowest note and progressing to highest

Pointer

SONG BANK

Ouring Pattern and Song

nk tune play, "○" marks

ndicate the number of beats

per measure. Each mark

oints to the function being

performed: volume, tempo, tone

rns black as the beat is

tune play.

you press more than four keys, only four notes will sound at the same time.

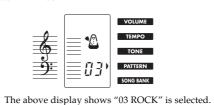
FREE SESSION:

Percussion instrument rhythm patterns Automatic chord progressions to match rhythms Unique sound effects

**1.** Find the pattern you want to use in the **Pattern** 



3. Use the **number buttons** to input the two-digit pattern number



SONG BANK

4. Press the **START/STOP** button to start play of the

VOLUME

TEMPO

TONE

PATTERN

5. Use the **TEMPO** buttons to adjust the tempo.

∧ : Faster



6. Press the **START/STOP** button to stop play.

**■** NOTE • The tone "00 16BEAT" is always selected whenever you turn on power.

## Tempo Settings

· Input of any value greater than 29 is ignored.

You can change to a different pattern while a previously selected pattern is playing

#### $\bullet \ \ \text{Whenever you first press either the } \triangle \ \text{or} \ \nabla \ \text{TEMPO button the current setting value appears on the display. Press one of the}$ TEMPO buttons while the current setting is displayed to actually change the tempo setting

Each press of a TEMPO button changes the setting one step within the range of 1 ( = 40) to 16 ( = 249).

### • The tempo is always set to 8 ( = 132) whenever you turn on power.

You can enjoy simply listening to the 10 built-in Song Bank tunes or you can turn off the melody part and play along on the

#### To listen to a Song Bank tune

Using the Song Bank

**1.** Find the tune you want to listen to in the **Song** 

2. Press the **SONG BANK** button.



3. Use the **number buttons** to input the two-digit tune



The above display shows "06 SILENT NIGHT" is

**4.** Press the **START/STOP** button to start play of the **■** NOTE

Inputting a single digit number (from 1 to 9) in step 3 of the above procedure causes all of the Song Bank tunes to play

- back in sequence. The indicator "AL" (all) appears on the display to indicate that all tunes will be played.
- All Song Bank tune play "AL" is the default whenever you turn
- on keyboard power. Only values in the range of 00 to 09 can be input.
- With the above procedure, playing along on the keyboard does Three circles indicate not produce any sound.
- TONE three beats to a
  - You can change to a different Song Bank tune while a

  - previously selected tune is playing. See "Staff Notation Notes" in the General Guide for details on
  - how melody notes appear on the display after you start play in

## Changing the Melody Tone of a Song Bank Tune

→The tune continues to repeat until you stop it.

TEMPO

PATTERN

SONG BANK

5. Press the **START/STOP** button to stop play

Staff notation (shows melody notes)

**6 9**:

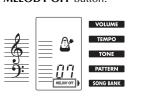
Indicates beat 2

• You can change the melody tone of a Song Bank tune after you start playing it (in step 4 of the above procedure). To do so, press the TONE button and then use the number buttons to input the two-digit number for the tone you want to change to.

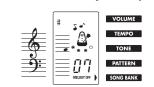
### To play along with a Song Bank tune

1. Perform steps 1 through 3 under "To listen to a | 3. Press the START/STOP button. Song Bank tune" to select the tune you want.





→The keyboard will play an introductory count and then start play the accompaniment part of the tune. The tune continues to repeat until you stop it.



The staff notation shows melody notes.

4. Press the **START/STOP** button to stop play

## **■** NOTE

- Notes you play on the keyboard along with Song Bank tune accompaniment do not appear on the display.
- The MELODY OFF button is operational only while Song Bank tune play is stopped.
   Pressing the MELODY OFF button while the "ℜL" (all) indicator is on the display turns off the melody part for all the Song Bank
- See "Staff Notation Notes" in the General Guide for details on how melody notes appear on the display after you start play in step 3.

#### Changing the Melody Tone of a Song Bank Tune You can change the melody tone of a Song Bank tune after you start playing it (in step 2 of the above procedure).

About the pre-tune count Note that the pre-tune count sounds only when the MELODY OFF button is on (melody part is turned off).
An audible count sounds for a number of beats before a Song Bank tune starts to play.

- The final beat of the count (the last beat before the tune starts to play) is a higher pitch than the other beats. It is indicated in the following example by " $\triangle$ ".
- The lengths of the pre-tune counts are also indicated in the musical scores that come with this keyboard. Example:  $\nabla \nabla \nabla \Delta = 0$ . Indicates a 3-beat count.

# **Troubleshooting**

Problem **Possible Cause** Action No sound 1. Power supply . Check the following points. Make sure the (+) and (-) ends of problem batteries are facing correctly. Check for dead batteries. · Make sure the AC adaptor is connected correctly. 2. Headphones 2. Disconnect the headphones from the connected to the keyboard. keyboard Any of the following symptoms Dead batteries Replace batteries with new ones or change while batteries are being used. to AC power · Dim power indicator Low sound volume Distorted sound Loss of output when playing at loud volume
Sudden power loss when playing at loud volume

 Dim display figures Dimming of display figures when playing at loud volume

Sudden output of sound when no keyboard key is pressed

Output of a tone different from the one that is selected

Incorrect play of patterns or built-in tunes

Staff notation notes appear one- | Simultaneous play of | No action necessary by-one when keyboard keys are | white and black keys

# **Specifications**

Keyboard:

Polyphony: 4 notes maximum Tones: 30 (RHYTHM, FREE SESSION, FUNNY) Patterns: 10 tunes; melody off Song Bank: Tuning: Fixed; A4 = approx. 442Hz

37 keys, 3 octaves (mini-size)

Speakers: Two; ø8.0cm (output: 1.2W + 1.2W) I/O Terminals: • Power Supply: DC 7.5V jack • Headphones/Output: Stereo mini jack (Output is monaural.) (output impedance:  $100\Omega$ ,

output voltage: 4.6V (RMS) MAX) • Microphone In: Mini jack (Input is monaural.) Input impedance:  $1.0k\Omega$ 

 $(25^5/_8 \times 8^5/_{16} \times 3^1/_{16} \text{ inch})$ 

• Design and specifications are subject to change without notice.

batteries)

Sudden loss of sound output

Approximately 1.4kg (3.1lbs) (without

• AC Adaptor (AD-1)