YAMAHA

HARMONY DIRECTOR™

HD-300

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

HARMONY DIRECTOR HD-300

For AC adaptor

CAUTION

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of Graphical Symbols

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

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.

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

(UL60065_03)

For AC adaptor and the instrument

Information for users on collection and disposal of old equipment and used batteries

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.
For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

For business users in the European Union:
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union:
These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Note for the battery symbol (bottom two symbol examples):
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the EU Battery Directive for the chemical involved.

Cd

(weee_battery_eu_en_02)

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe and handy place for future reference.

For AC adaptor

⚠ *WARNING*

- This AC adaptor is designed for use with only Yamaha electronic instruments. Do not use for any other purpose.
- Indoor use only. Do not use in any wet environments.

⚠ *CAUTION*

- When setting up, make sure that the AC outlet is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch of the instrument and disconnect the AC adaptor from the outlet. When the AC adaptor is connected to the AC outlet, keep in mind that electricity is flowing at the minimum level, even if the power switch is turned off. When you are not using the instrument for a long time, make sure to unplug the power cord from the wall AC outlet.

For the instrument

⚠ *WARNING*

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

Power supply/AC adaptor

- Do not place the power cord near heat sources such as heaters or radiators. Also, do not excessively bend or otherwise damage the cord, or place heavy objects on it.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Use the specified adaptor (page 40) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

Do not open

- This instrument contains no user-serviceable parts. Do not open the instrument or attempt to disassemble or modify the internal components in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

Water warning

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings. If any liquid such as water seeps into the instrument, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands.

Fire warning

- Do not put burning items, such as candles, on the unit. A burning item may fall over and cause a fire.

Influences on electro-medical devices

- Radio waves may affect electro-medical devices.
  - Do not use this product near medical devices or inside areas in which the use of radio waves is restricted.
  - Do not use this product within 15cm (6 in.) of persons with a heart pacemaker or defibrillator implant.

DMI-7 1/2

Battery

- Follow the precautions below. Failure to do so might result in explosion, fire, overheating or battery fluid leakage.
  - Do not tamper with or disassemble batteries.
  - Do not dispose of batteries in fire.
  - Do not attempt to recharge batteries that are not designed to be charged.
  - Keep the batteries separate from metallic objects such as necklaces, hairpins, coins, and keys.
  - Use the specified battery type (page 40) only.
  - Use new batteries, all of which are the same type, same model, and made by the same manufacturer.
  - Always make sure all batteries are inserted in conformity with the +/- polarity markings.
  - When the batteries run out, or if the instrument is not to be used for a long time, remove the batteries from the instrument.
  - When using Ni-MH batteries, follow the instructions that came with the batteries. Use only the specified charger device when charging.

- Keep batteries away from small children who might accidentally swallow them.
- If the batteries do leak, avoid contact with the leaked fluid. If the battery fluid should come in contact with your eyes, mouth, or skin, wash immediately with water and consult a doctor. Battery fluid is corrosive and may possibly cause loss of sight or chemical burns.

If you notice any abnormality

- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. (If you are using batteries, remove all batteries from the instrument.) Then have the device inspected by Yamaha service personnel.
  - The power cord or plug becomes frayed or damaged.
  - It emits unusual smells or smoke.
  - Some object has been dropped into the instrument.
  - There is a sudden loss of sound during use of the instrument.
  - If any cracks or breakages exist on the instrument.

⚠ CAUTION

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

Power supply/AC adaptor

- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.

Location

- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables, to prevent damage to the cables or injury to anyone who might trip over them.
- When setting up the product, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet. Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.

Connections

- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum.

- Be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

Handling

- Do not insert a finger or hand in any gaps on the instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. This could cause physical injury to you or others, damage to the instrument or other property, or operational failure.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not use the instrument/device or headphones for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

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

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

Even when the [⏻] (Standby/On) switch is in standby status (display is off), electricity is still flowing to the instrument at the minimum level.

When you are not using the instrument for a long time, make sure you unplug the power cord from the wall AC outlet.

Make sure to discard used batteries according to local regulations.

NOTICE

To avoid the possibility of malfunction/ damage to the product, damage to data, or damage to other property, follow the notices below.

■ Handling

- Do not use the instrument in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise. When you use the instrument along with an application on your smart device such as a smartphone or tablet, we recommend that you set Bluetooth to on after enabling "Airplane Mode" on that device in order to avoid noise caused by communication.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration, damage to the internal components or unstable operation.
- Do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.

■ Maintenance

- When cleaning the instrument, use a soft cloth. Do not use paint thinners, solvents, alcohol, or chemical-impregnated wiping cloths.

■ Saving data

- Some of settings of this instrument are retained when the power is turned off. However, the saved settings may be lost due to some failure, an operation mistake, etc.

Information

■ About copyrights

- Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.
- This product incorporates and bundles contents in which Yamaha owns copyrights or with respect to which Yamaha has license to use others' copyrights. Due to copyright laws and other relevant laws, you are NOT allowed to distribute media in which these contents are saved or recorded and remain virtually the same or very similar to those in the product.
  - * The contents described above include a computer program, MIDI data, WAVE data, voice recording data, a score, score data, etc.
  - * You are allowed to distribute medium in which your performance or music production using these contents is recorded, and the permission of Yamaha Corporation is not required in such cases.

■ About functions/data bundled with the instrument

- This device is capable of using various types/formats of music data by optimizing them to the proper format music data for use with the device in advance. As a result, this device may not play them back precisely as their producers or composers originally intended.

■ About this manual

- The illustrations and LCD screens as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- Windows is a registered trademark of Microsoft® Corporation in the United States and other countries.
- Mac, iPhone, and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Yamaha Corporation is under license.

  Bluetooth®

- Sound Back is trademark of Korg Inc.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Precautions when using the USB [TO DEVICE] terminal

This instrument features a built-in USB [TO DEVICE] terminal. When connecting a USB device to the USB [TO DEVICE] terminal, be sure to handle the USB device with care. Follow the important precautions below.

NOTE
For more information about the handling of USB devices, refer to the owner's manual of the USB device.

■ Compatible USB devices
• USB flash drive

Other USB devices such as a USB hub, computer keyboard or mouse cannot be used.
The instrument does not necessarily support all commercially available USB devices. Yamaha cannot guarantee operation of USB devices that you purchase. Before purchasing a USB device for use with this instrument, please visit the following web page:

https://download.yamaha.com/

Although USB devices 1.1 to 3.0 can be used on this instrument, the amount of time for saving to or loading from the USB device may differ depending on the type of data or the status of the instrument.

NOTICE
The rating of the USB [TO DEVICE] terminal is a maximum of 5V/500mA. Do not connect USB devices having a rating above this, since this can cause damage to the instrument itself.

■ Connecting a USB device
When connecting a USB device to the USB [TO DEVICE] terminal, make sure that the connector on the device is appropriate and that it is connected in the proper direction.

NOTICE
• **Avoid connecting or disconnecting the USB device during playback/recording and file management operations (such as Delete), or when accessing the USB device. Failure to observe this may result in "freezing" of the operation of the instrument or corruption of the USB device and the data.**
• **When connecting then disconnecting the USB device (and vice versa), make sure to wait a few seconds between the two operations.**
• **Do not use an extension cable when connecting a USB device.**

■ Using USB flash drives
By connecting the instrument to a USB flash drive, you can save data you've created to the connected device, as well as read data from the connected device.

• Number of USB flash drives that can be used
Only one USB flash drive can be connected to the [USB TO DEVICE] terminal.

■ Formatting a USB flash drive
A USB flash drive cannot be formatted with this instrument. If necessary, please format it on your computer to FAT32 format.

NOTICE
The format operation overwrites any previously existing data. Make sure that the drive you are formatting does not contain important data.

■ To protect your data (write-protect)
To prevent important data from being inadvertently erased, apply the write-protect provided with each USB flash drive. If you are saving data to the USB flash drive, make sure to disable write-protect.

■ Turning off the instrument
When turning off the instrument, make sure that the instrument is NOT accessing the USB flash drive by file management (such as during the Delete operation). Failure to do so may corrupt the USB flash drive and the data.

Precautions when using the USB [TO HOST] terminal

When connecting the computer to the USB [TO HOST] terminal, make sure to observe the following points to avoid freezing the computer and corrupting or losing the data.

NOTICE
• **Use an AB type USB cable of less than 3 meters. USB 3.0 cables cannot be used.**
• **Execute the following before turning the power to the instrument on/off or plugging/unplugging the USB cable to/from the USB [TO HOST] terminal.**
  - **Quit any open application software on the computer.**
  - **Make sure that data is not being transmitted from the instrument. (Data is transmitted only by playing notes on the keyboard.)**
• **While the computer is connected to the instrument, you should wait for six seconds or more between these operations: (1) when turning the power of the instrument off then on again, or (2) when alternately connecting/disconnecting the USB cable.**

If the computer or the instrument freezes, restart the application software or the computer OS, or turn the power to the instrument off and then on again.

Introduction

Thank you for purchasing the Yamaha Harmony Director.
The Harmony Director is a general training instrument that facilitates harmony and rhythm training by reproducing an accurate reference tone at a user-specified temperament and playing complex rhythms at any tempo. It also features the ability to record performances and play time-shifted recordings to help improve your playing. The Harmony Director is a powerful tool for anyone—from performers wanting to play in perfect tune with an ensemble of wind instruments or a group of singers, to instructors looking to train students within a limited time span.

Please read through the contents of this manual thoroughly to fully understand and make use of the features included on this instrument. After reading, carefully store this manual in a location where you can easily and quickly refer to it.

Included Accessories

- Owner's Manual (this manual) × 1
- Utilization Guide/Feature Introduction × 1
- AC adaptor × 1
- Warranty information × 1
- Online Member Product Registration × 1

About this Manual

This instrument comes with the following manuals.

Owner's Manual (This Manual)

This manual describes how to use the HD-300.

Use Guide/Feature Basics

Use Guide: This introduces features that aid a deeper level of self-directed learning.
Feature Basics: This introduces the HD-300 features suited for a range of learning situations.

These are also available from the "Manual Library" page on the following website.

Yamaha downloads
https://download.yamaha.com/

Harmony Director™ is a trademark or registered trademark of the Yamaha Corporation.

Contents

Component Names

Front Panel

❶ [⏻] (Standby/On) switch..............page 14

Switches the instrument between standby/on modes.

❷ [MAIN VOL] slider........................page 16

Adjusts the main volume of the instrument.

[BALANCE] slider........................page 16

Adjusts the volume balance between the sounds played with the keyboard and the rhythm style/metronome playback.

❸ LCD display.................................page 17

Shows the instrument status, settings, and other information.

❹ Internal microphone....................page 16

Used for recording and the Sound Back functions.

❺ Microphone volume LED ....page 16

Lights when the microphone input level is too high. This is used when adjusting the sensitivity of the microphone.

Bluetooth status LED...................page 35

Indicates the Bluetooth connection status. This is used when connecting to an iPhone or iPad.

❻ VOICE buttons ....page 18

Selects the Voice for use when playing the keyboard, or when playing back the contents for training.

❼ TEMPERAMENT buttons..... pages 18, 21

These set the temperament (equal/pure/individual) and lock/unlock the root key auto detection.

❽ TRANSPOSE buttons ....page 19

These configure the keyboard transpose settings and are used when playing a music score for a transposing instrument as notated.

❾ [OCTAVE] slider...........................page 19

Adjusts the keyboard octave.

❿ [HOLD] button ....page 19

Used to keep the played notes sounding even after the keys are released.

⓫ [SOUND BACK] button................page 29

Switches the Sound Back function on and off.

⓬ RECORDING buttons...................page 26

Used for recording and playback.
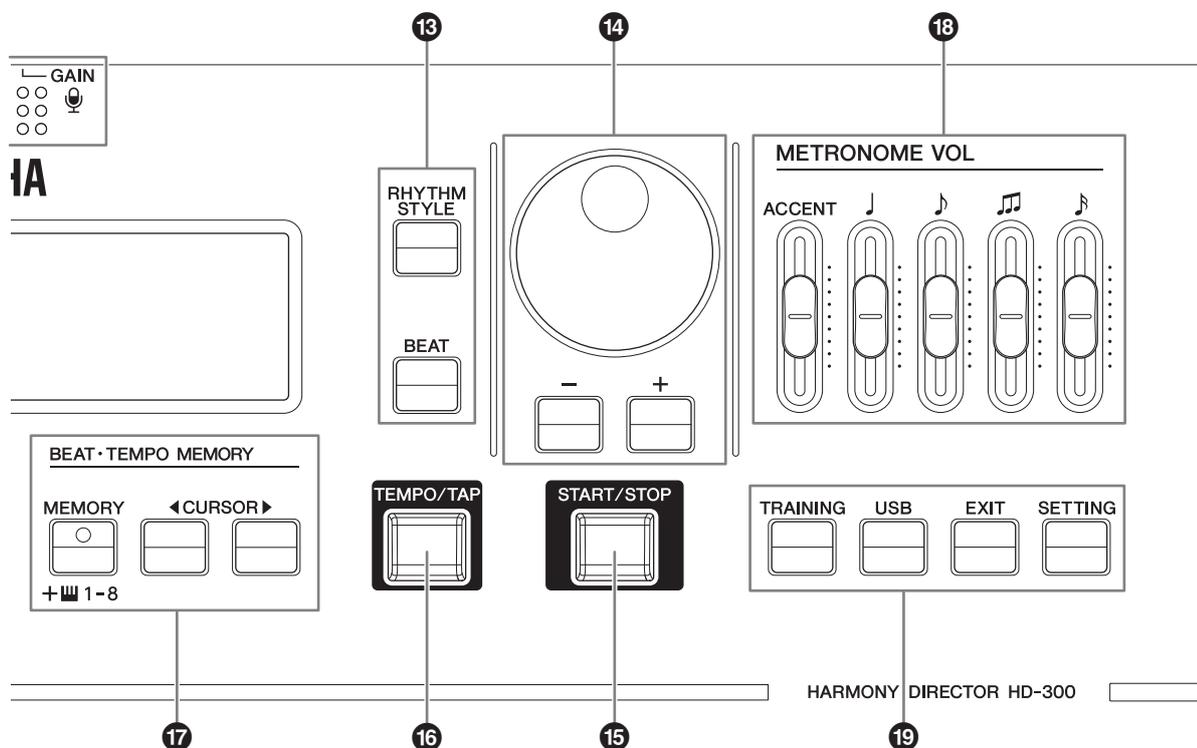
⓭ [RHYTHM STYLE] button.....pages 22, 25

Sets the rhythm playback to the Rhythm Style mode.

[BEAT] button ....pages 22, 23, 24

Sets the rhythm playback to the Metronome mode.

⓮ Dial, [-]/[+] buttons ....page 17

Used to change settings and select files.

⓯ [START/STOP] button ....pages 22, 28, 30

Starts/stops the rhythm style, metronome, training content playback, or playback of a file on a USB flash drive.

⓰ [TEMPO/TAP] button....................page 22

Adjusts the playback tempo.

⓱ BEAT • TEMPO MEMORY buttons

...pages 22, 24

Used to enter, store, and load special metronome beats.

NOTE
The CURSOR [◄][►] buttons are also used to move the cursor for other functions.

⓲ [METRONOME VOL] slider... pages 16, 23

Adjusts the volume for each metronome note type.

⓳ [TRAINING] button...................... page 30

This sets the instrument to the training content (JBS content) playback mode.

[USB] button................................ page 28

Sets the instrument to the USB file playback mode.

[EXIT] button .... pages 28, 30, 31

Moves up one hierarchy level on the screens, such as training, USB file playback, and advanced settings, or exits from it.

[SETTING] button......................... page 31

Enters the advanced settings screen.

Rear Panel

Microphone

USB flash drive

AC adaptor

FC7

Keyboard amplifier or monitor speaker

Computer

Power outlet
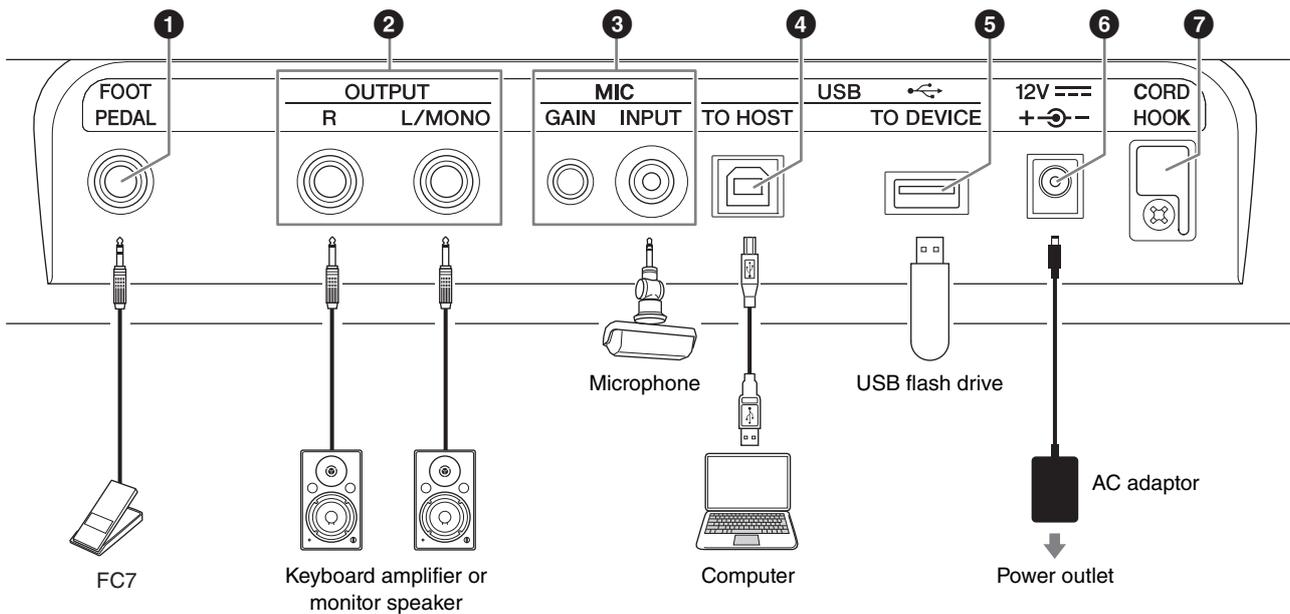
❶ **[FOOT PEDAL] jack.............pages 31, 33**

For connecting the Foot Controller FC7 (sold separately). You can control the function with your foot, by assigning either the main volume, hold, start/stop or record/stop function to the FC7.

❷ **OUTPUT [L/MONO]/[R] jack.........page 32**

This is a standard phone jack that outputs audio signals. Connect these to an external amplifier or speaker for outputting the audio at loud levels.
To use with and mono amplifier, only connect to the [L/MONO] jack.

❸ **MIC [INPUT] jack, MIC [GAIN] knob**
..pages 16, 32

For connecting a commercially available microphone (with a stereo mini-phone jack and plug-in power compatibility). When an external microphone is connected, the internal microphone will be disabled. Turn the [GAIN] knob to adjust the sensitivity of the internal microphone and the external microphone.

❹ **USB [TO HOST] terminal....... pages 7, 33**

For connecting to a computer using a commercially available USB cable. When connected, you can send and receive MIDI and audio data.

❺ **USB [TO DEVICE] terminal ... pages 7, 33**

For connecting a USB flash drive required to use the recording and file playback functions.

❻ **DC IN jack.................................... page 13**

For connecting the power adaptor that comes with this instrument, or one sold separately.

❼ **Cord hook.................................... page 13**

Used to prevent damage to the cord of the AC adaptor.

Setting Up

Power Requirements

This instrument can be operated either from an AC adaptor or batteries. Yamaha recommends use of an AC adaptor whenever possible, since an AC adaptor is more environmentally friendly than batteries and does not deplete resources.

NOTICE
You should use an AC adaptor when using a USB flash memory drive. Using battery power could cause the power to go out during operation, resulting in data loss.

Using an AC Adaptor

Connect the AC adaptor in the order shown in the illustration.

DC IN jack (page 12)

AC adaptor

AC outlet
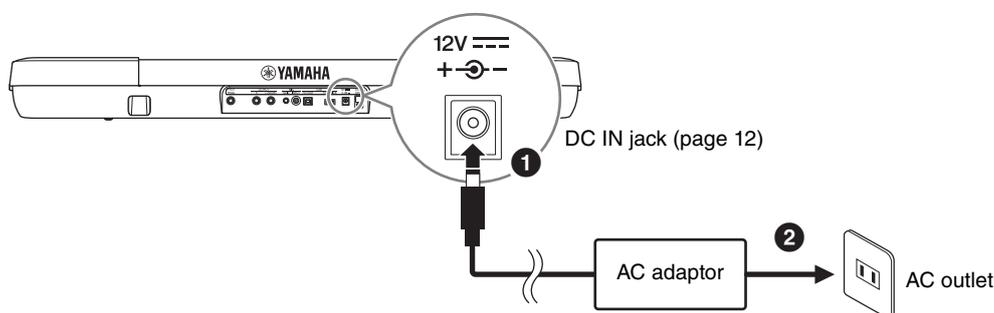
⚠ WARNING
- **Only use the specified AC adaptor (page 40). Using the wrong AC adaptor can result in damage to the instrument, overheating, or fire accidents. Note that an accident caused by incorrect usage may void the warranty even if the instrument is still within the warranty period.**
- **When using an AC adaptor with a removable plug, make sure to keep the plug attached to the AC adaptor during use or storage. Inserting the plug alone into the AC outlet can cause electric shock or fire.**
- **If the plug is accidentally removed from the AC adaptor, insert the plug all the way in until you hear a click, taking care to avoid touching any internal metal parts. To avoid electric shock, short circuit, or damage to the instrument, also be careful that there is no dust between the AC adaptor and plug.**

Plug

Slide in the plug as indicated
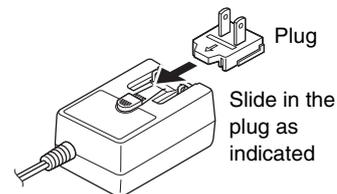
⚠ CAUTION
When setting up the product, make sure that the power outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn the power off and disconnect the plug from the outlet.

NOTICE
Hook the cable of the AC adaptor on the cord hook to prevent damage to the cable.
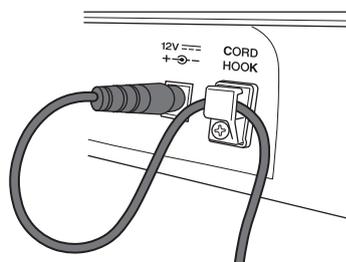
NOTE
To remove the AC adaptor, turn the power off first, and then follow the above instructions in reverse order.

Using Batteries

This instrument accepts AA alkaline batteries and rechargeable Ni-MH (Nickel-Metal Hydride) batteries.

1. Make sure that the power of the instrument is off.

2. Turn the instrument over and place it on a soft cloth. Open the battery compartment cover located on the instrument's bottom panel.

3. Insert six new batteries. Make sure that they are orientated correctly according to the illustration.

4. Close the battery compartment with the cover.

NOTICE
- **Do not connect or disconnect the DC plug of the AC adaptor while the power is on, even if the batteries are installed. Doing so, the power will suddenly turned off and this result in the loss of data being recorded or transferred at the time.**
- **When battery power becomes low, a message saying "Low Battery" will appear on the screen. When this happens, either replace or recharge all batteries. If you continue to use the instrument in this condition, it may not work properly, or the power will suddenly and automatically turn off because of insufficient power.**

NOTE
- Use only the specified charger device for charging rechargeable batteries. This instrument cannot be used to recharge batteries.
- Power will be automatically drawn from the AC adaptor when an AC adaptor is connected even if batteries are installed in the instrument.

Battery compartment cover
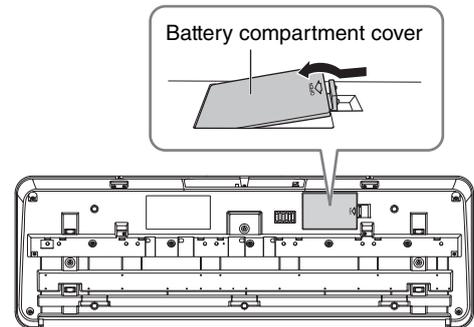
Bottom of the instrument
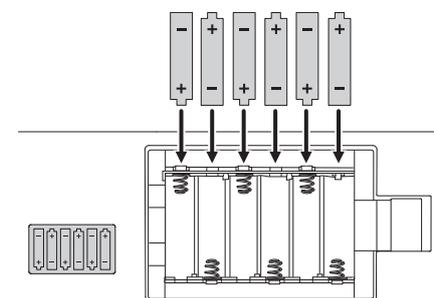
Turning the Power On/Off

Turning the Power On

1. Move the [MAIN VOL] slider to the left to reduce the volume to the minimum setting.

2. If necessary, connect any external devices (amplifiers for digital instrument, etc.) to the instrument.
For details on how to connect these devices, refer to "Connecting External Devices" (page 32).

3. Press the [⏻] (Standby/On) switch to turn the power on.
The screen on the instrument will appear.

4. Turn the power on to any external devices, and then adjust the volume and other settings on the external device.

5. Adjust the volume on the instrument.

5-1. Center the [BALANCE] slider.

5-2. Gradually shift the [MAIN VOL] slider to the right to raise the volume while playing the keyboard.
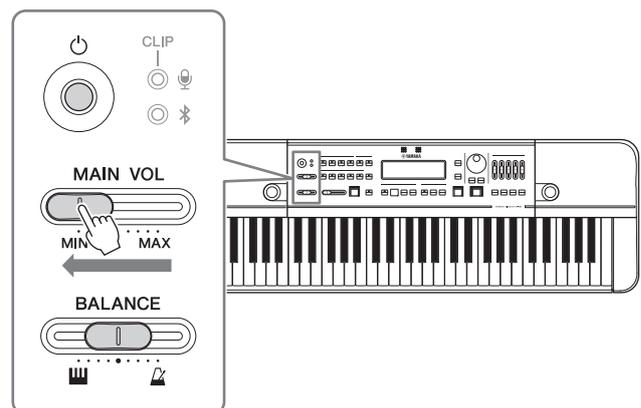
NOTICE
Do not attempt to use the instrument (press any keys or buttons, or step on pedals, etc.) after turning on the power until the instrument has completely started up (the Home screen appears). Doing so may cause the instrument to malfunction.

Turning the Power Off

1. **When an external device is connected, first turn the volume down on the external device and then turn off the power of the external device.**

2. **Move the [MAIN VOL] slider to the minimum setting.**

3. **Press and hold the [⏻] (Standby/On) switch for one second, and then release it.**
A message will appear on the display, and the power will be turned off after a few seconds.

⚠ *CAUTION*
Even when the power is off, a small amount of electricity is still flowing through the instrument. Make sure to unplug the AC adaptor from the power outlet when you intend not to use the instrument for an extended period of time or during electrical storms. When using batteries, remove the batteries from the instrument.

Auto Power Off Function

To prevent unnecessary power consumption, this instrument features an Auto Power Off function that automatically turns the power off if the instrument is not operated for a specific period of time. The amount of time that elapses before the power is automatically turned off depends on the type of power being used. This is set to 30 minutes for battery power, and two hours when using an AC adaptor.
The Auto Power Off function can be enabled/disabled on the Settings screen (page 31).

■ Disabling Auto Power Off

• **When the power is off**
Turn the power on while holding down the lowest key on the keyboard.
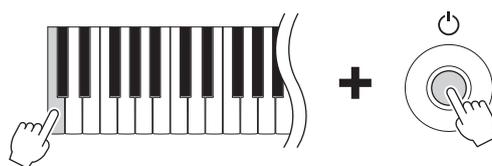
• **When the power is on**
Press the [SETTING] button to call up the Settings screen, and then set "AutoPowerOff" to "Disable."
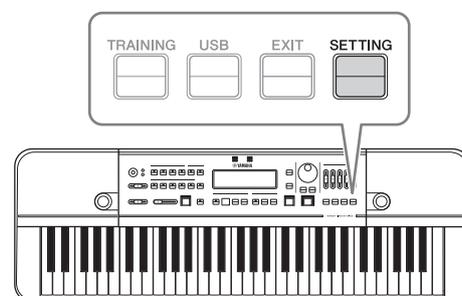
■ Enabling Auto Power Off

Press the [SETTING] button to call up the Settings screen, and then set "AutoPowerOff" to "Enable."

NOTICE
When you intend not to operate this instrument for a specific period of time while connecting to an external device such as an amplifier, speaker, or computer, make sure to follow the instructions in the Owner's Manual to turn off the power to the instrument and the connected external devices in order to protect the devices from damage. If you do not want the power to turn off automatically when a device is connected, disable the Auto Power Off function.

NOTE
To move the cursor on the Settings screen, use the BEAT • TEMPO MEMORY CURSOR [◄][►] buttons. To change values, use the [-]/[+] buttons.

Adjusting the Volume and Screen Contrast

Adjusting the Volume

To adjust the volume of the entire sound of this instrument, use the **[MAIN VOL] slider** while playing the keyboard.

In addition, the following volume sliders are also available.

- **[BALANCE] slider:** Adjusts the volume balance between the keyboard and rhythm playback.
  Turn this left to increase the volume of the keyboard.
  Turn this right to increase the volume of the rhythm playback (metronome, Rhythm Style, etc.).

- **[METRONOME VOL] slider:** Adjusts the volume of each metronome note type individually.

⚠ **CAUTION**

Do not use the instrument at a high volume level for a long period of time. Doing so can cause hearing loss.
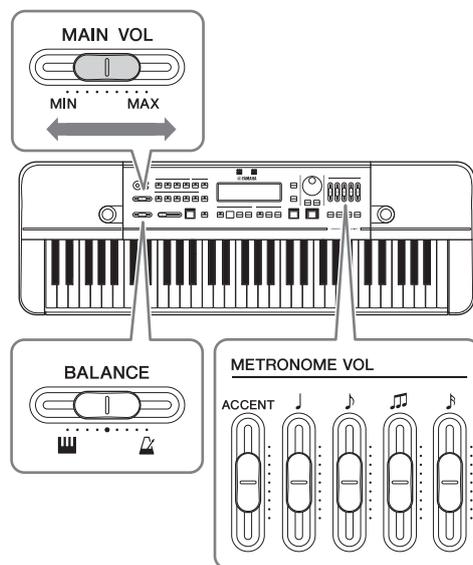
Adjusting the Sensitivity of the Microphone

Use the **MIC [GAIN] knob** on the rear panel to adjust the microphone sensitivity while speaking or singing into the microphone. Configure this so the microphone volume (CLIP) LED at the top left of the panel does not light up even when the sound you want to record is at maximum volume.

NOTE

- You can also check the volume of input sounds on the input level meter on the bottom left of the LCD display. When using this to adjust settings, adjust the sensitivity until "Clip!" no longer appears on the screen.
- If the microphone volume indicator (CLIP) LED lights even when the MIC [GAIN] knob is turned down, adjust by increasing the distance between this unit and the sound source.
- Sound input from the microphone is used only for recording and the Sound Back function. It will not be output from the line output or speaker.
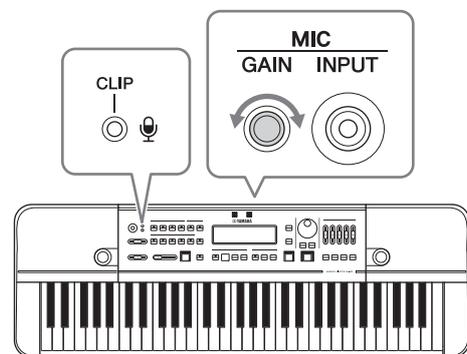
Adjusting the Screen Contrast

Press the **[SETTING] button** to call up the Settings screen, and then change the "LCD Contrast" value.

NOTE

To move the cursor on the Settings screen, use the BEAT • TEMPO MEMORY CURSOR [◀][▶] buttons. To change values, use the [-]/[+] buttons.
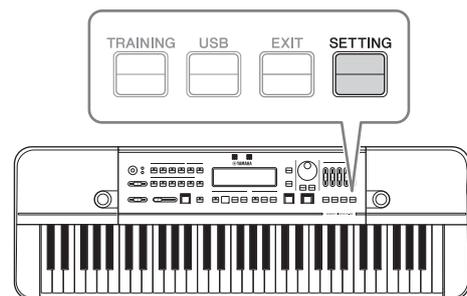
Screen Configuration and Basic Operation

Turn the power on to display the Home screen.

Home Screen

Screen Elements
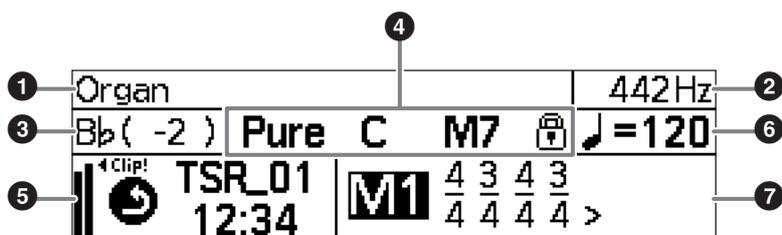
Items ❶ – ❹ relate to tuning, ❺ to recording, and ❻ and ❼ relate to rhythm playback.

❶ Voice

Shows the voice option currently selected. (Page 18)

❷ Standard pitch

Shows the standard pitch. (Pages 20, 31)

❸ Transpose

Shows the transpose settings. (Page 19)

❹ Temperament, root key, chord

Shows the current temperament settings (temperament and root key), and the chord detected. (Pages 18 – 21)

❺ Recording, microphone input

Shows the recording status, and the microphone input level. (Pages 16, 26, 29)

❻ Tempo, reference note

Shows the tempo, and the tempo reference note. (Page 22)

❼ Beat, memory number

Shows the beat, or the beat • tempo memory (irregular meter). (Pages 22 – 25)

Basic Operation

- The location of the cursor is highlighted, and the cursor can be controlled with the [-]/[+] buttons and the dial. In the image above, the cursor is on "M1."
- Press the panel buttons (CURSOR [◄][►] buttons, etc.) to move the cursor and change items/settings in the screen display.
- Press the [INDIVIDUAL VOL/PITCH] button (page 21), [TRAINING] button (page 30), [USB] button (page 28), or the [SETTING] button (page 31) to call up their respective screens. Each screen is described in greater detail in the above pages.

NOTE

When the [-] and [+] buttons are pressed simultaneously, the value currently focused will reset to the default value.
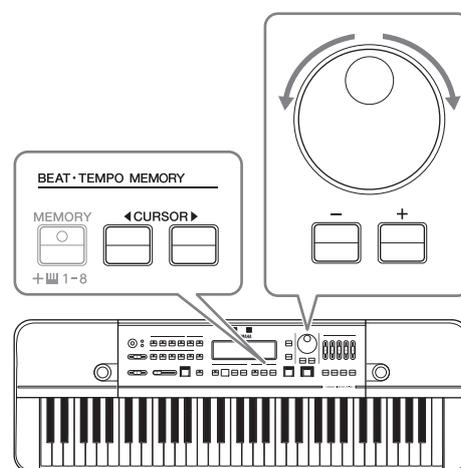
Producing Reference Tones for Playing Harmony (Voice, Temperament, Hold, Octave, Transpose)

Basic Operation

The HD-300 can be used to produce reference tones to play along with as a way of developing your sense for playing your instrument in the correct pitch.
This chapter provides detailed instructions for the necessary operations shown below:

Preparation

- Selecting a Voice
- Setting the temperament
- Setting hold on/off
- Selecting an octave
- Setting transpose

Producing the reference tone(s)

Playing the keyboard

Playing the instrument(s)

Playing wind instrument(s) etc. to match the reference tone

Selecting a Voice

You can select the sounds produced when playing the keyboard.
Press one of the VOICE buttons to select a category, and then select the desired Voice within the category by using the dial, or the [-]/[+] buttons.
Available Voices are divided into two types: one using FM tone generation and the other using the PCM tone generation. The VOICE buttons correspond to the following tone generation systems.

- **[WOOD]/[BRASS]/[ORGAN] buttons:** FM tone generation
- **[PIANO/OTHERS] button:** PCM tone generation
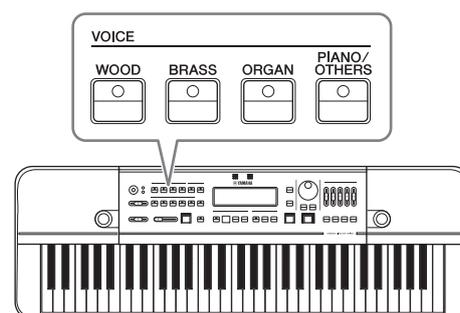
FM tone generation Voices are compatible with the Equal, Pure, and Individual temperaments in the temperament setting function, and so are suitable for producing reference tones for harmony. PCM tone generation Voices can only be used Equal temperament, but are useful since there are a variety of available sounds.
For details on the Voices of each category, refer to page 41.

Voice settings for tuning

While there is no specific rule-of-thumb on which reference sound to use, you should select a Voice that is easily recognizable for both the conductor and performers. (Generally, organ or string-type sounds are ideal for distinguishing slight differences in pitch, due to their rich harmonic tone.)

Setting the Temperament

You can configure advanced settings, such as the root key and temperament (Equal/Pure/Individual temperament) of the song.

- **Setting the root key:** See the page 20.
- **Setting the temperament:** Use the TEMPERAMENT [EQUAL]/[PURE]/[INDIVIDUAL VOL/PITCH] buttons to select a temperament mode out of the three available. The lamp of the selected temperament mode will light. The corresponding screen displays are listed below.

Button	[EQUAL]	[PURE]	[INDIVIDUAL VOL/PITCH]
Display on screen	Equal	Pure	User
Temperament mode	Equal temperament	Pure temperament	Individual (custom) temperament
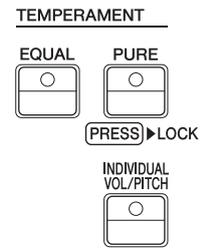
NOTE
- When the [PIANO/OTHERS] button is pressed, Equal temperament is automatically selected.
- When you select Pure or Individual temperament mode, the Voice type using the FM tone generator is automatically selected.
- For details on setting the Individual temperament (individual volume/pitch), see page 21.

Setting Hold On/Off

Turn the hold function on to continue playing a note even after your finger leaves the keyboard.
Press the **[HOLD] button** to have the lamp light up and turn the hold function on. When a note is continually played with the hold function, pressing a different note on the keyboard will stop the previous sound and start to continually play the sound for the newly pressed note.
To stop the sound being produced, press the [HOLD] button again and turn the hold function off.
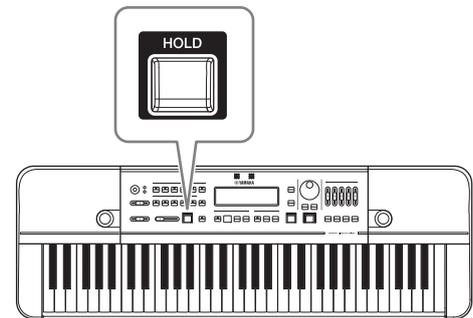
Selecting an Octave

Use the **[OCTAVE] slider** to select the octave of notes played with the keyboard.
The relationship between the slider position and octave is as follows.

Slider position	LOW1	LOW2	MID	HI
Octave	C-1 – C4	C0 – C5	C1 – C6	C2 – C7
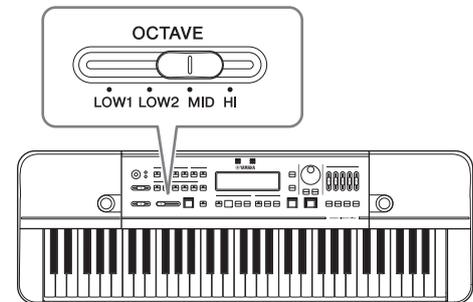
Setting Transpose

This function is used to match the keyboard sound to a transposing instrument. With this function, you can play the sounds at the same pitch as the transposing instrument by playing the keyboard, while using the musical score written for the transposing instrument, without having to transpose it to the score for the keyboard.

Press the [C]/[B♭]/[E♭]/[F] buttons to set the transpose value directly without moving the cursor.

Button	[C]	[B♭]	[E♭]	[F]
Transpose value	0	-2 semitones	+3 semitones	+5 semitones
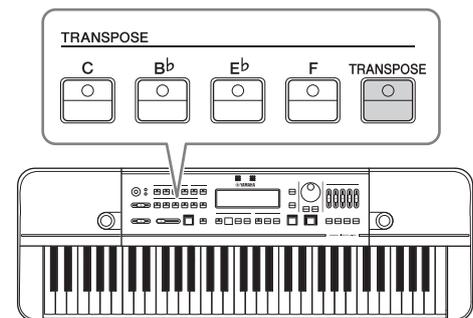
You can also press the [TRANSPOSE] button and move the cursor to the transpose area to adjust the transpose value. Adjust the transpose value using the dial or the [-]/[+] buttons. The transpose value range is -2 – +12 semitones. Press both [-]/[+] buttons simultaneously to return the transpose value to 0.

Changing the standard pitch

To change the standard pitch from 442Hz, call up the Settings screen by pressing the [SETTING] button, and change the "Standard Pitch" value.

NOTE

To move the cursor on the Settings screen, use the BEAT • TEMPO MEMORY CURSOR [◄][►] buttons. To change values, use the dial or [-][+] buttons. To exit from the menu, press the [EXIT] button.


Temperaments

Users can configure advanced settings, such as the root key and temperament (Equal/Pure/Individual temperament) settings, using this function.

Setting the Root Key

The root key is primarily used to determine the keynote for the "Pure" and "Individual" settings.
To set the root key, play a chord on the keyboard.
The instrument will recognize the chord pressed and change the root key accordingly. For major chords this will be set to major (displayed in upper case letter), and for minor chords this will be set to minor (displayed in lower case letter). The recognized chord and the root key will appear on the screen.

Name of the recognized chord
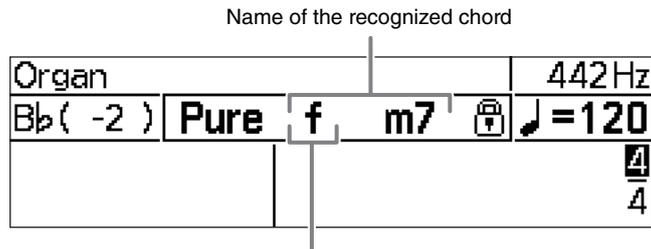
Name of the current root key. Upper case letter means major, and lower case letter means minor.

NOTE
If the chord cannot be determined, the root key will not change.

Chord detection and root key changes continue with each key pressed on the keyboard. To lock (fix) the current root key, press and hold the [PURE] button.
When a root key is locked, a 🔒 icon will appear to the right of the chord name on the screen. Additionally, if a pure temperament is selected, the [PURE] button lamp will light up in green.

NOTE
Chord detection will stop when the root key is locked.
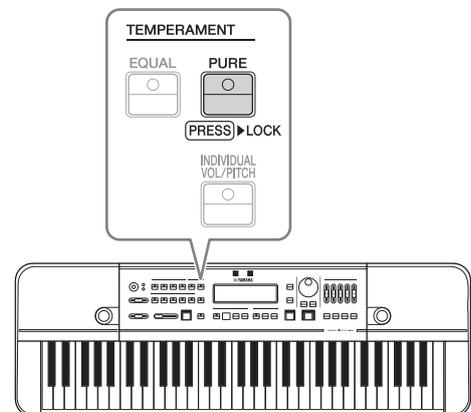
For details on what chords can be recognized, refer to the chart below.

Chord types recognized

These shows examples in case of the root key "C." The inversion of each fingering is also recognized.

● : Required notes
○ : Optional notes

Selecting and Setting a Temperament

Use the TEMPERAMENT [EQUAL]/[PURE]/[INDIVIDUAL VOL/PITCH] buttons to select a temperament mode out of the three available (pages 18-19).
This section covers about the detailed setting in the Individual temperament mode.

Setting the Individual Volume and Pitch (for each of 12 notes in an octave)

In the Individual temperament mode, you can set the volume and pitch for all 12 notes ("C"–"B") in an octave. While in Individual temperament mode, each press of the [INDIVIDUAL VOL/PITCH] button alternates among the three screens in order (as below).
Home screen → Individual Volume screen → Individual Pitch screen → Home screen → ...

- **Individual Volume screen:**
  This screen is used to set the volume of each of the 12 notes individually.
  The volume setting range is -15 – +5.

- **Individual Pitch screen:**
  This screen is used to set the pitch of each of the 12 notes individually.
  The pitch setting range is -55 – +55 cents (0.1 cent increments).

Select the note with the CURSOR [◄][►] buttons. Use the dial or [-]/[+] buttons to change the setting for the selected note. Press both [-]/[+] buttons simultaneously to return the set value to 0.

NOTE
- While on the Individual Volume screen and Individual Pitch screen, certain functions not relating to the temperament will be unavailable. Return to the Home screen when you are no longer adjusting individual temperament settings.
- The settings of the Individual temperament mode will be saved to the instrument and kept in memory even after the power is turned off.
- By using the "HD-300 Assistant" iPhone/iPad app, you can create and switch between multiple individual temperament setting configurations. For details, refer to page 35.

Demonstrating Tempo and Rhythm (Metronome, Rhythm Style)

Basic Operation

You can practice alongside a rhythm played by the HD-300 as a way of developing your sense of rhythm. Rhythm playback is divided broadly into two separate modes: **Metronome** and **Rhythm Style**. Moreover, the metronome includes two sub modes — a "Simple" mode for playing a simple beat, and a "Beat • Tempo Memory" for creating and playing complex beats. To switch between these modes, operate the buttons as shown below.

Rhythm playback modes
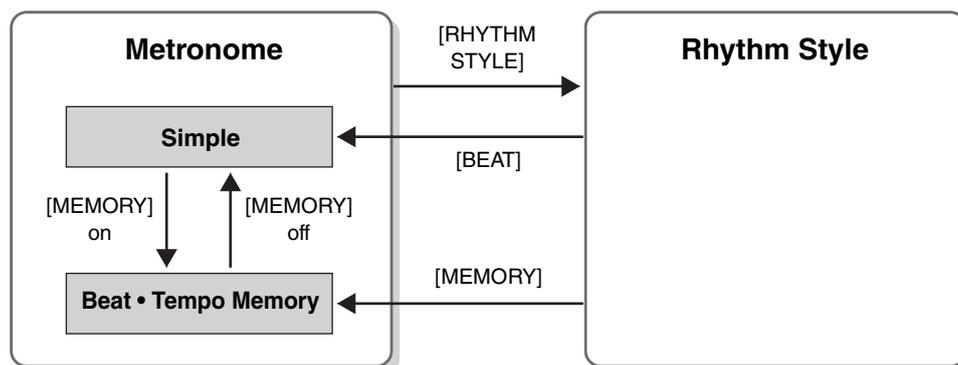
Starting and Stopping

Press the **[START/STOP] button** to start and stop rhythm playback.
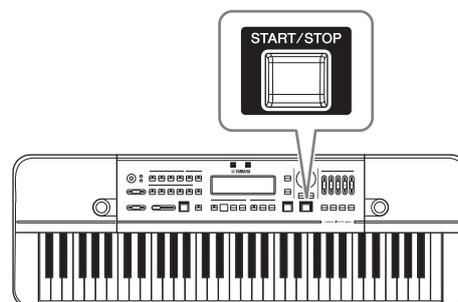
Changing the Tempo

Press the **[TEMPO/TAP] button** to move the cursor to the tempo area. Enter a tempo for the reference note using the dial or the [-]/[+] buttons. The tempo range is 32 – 280 (for quarter notes). Press both [-]/[+] buttons simultaneously to return the value to 120.

You can also change the reference note length for displaying tempo. To do this, press the CURSOR [◄] button while the cursor is over the tempo value to move the cursor, and then press the [-]/[+] buttons. When the reference note length is changed, the tempo value will be converted automatically to represent the same actual speed as before changing the note length.
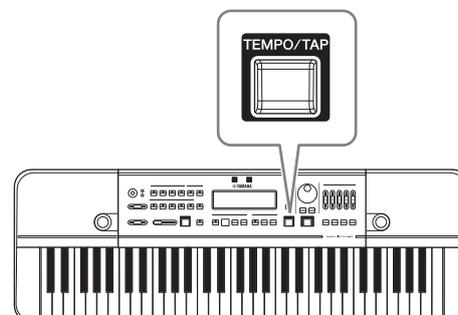
NOTE
Pressing keys B♭5 – C6 on the keyboard while the cursor is over the tempo display area (tempo, reference note length) will trigger the sound of the Claves, Side Stick, or Cowbell.

■ Tap Function

With this function, you can set the metronome tempo by tapping the button rhythmically. Press (tap) the [TEMPO/TAP] button three times according to the desired tempo, and the tempo is automatically changed to match your tapped tempo. When rhythm playback is stopped, rhythm playback will automatically start at the newly set tempo.

Metronome (Simple)

Using a Simple Metronome

Press the **[BEAT] button** to change rhythm playback to metronome mode.
When in "Beat • Tempo Memory" mode, press the BEAT • TEMPO MEMORY [MEMORY] button to turn Beat • Tempo Memory off.
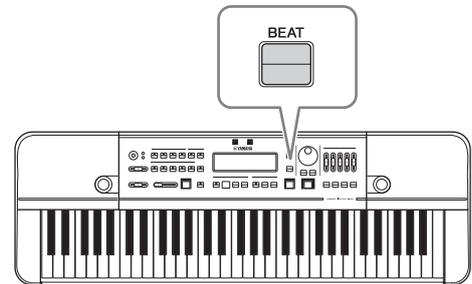
Setting the Beat

Press the [BEAT] button to move the cursor to the beat area.
Use the CURSOR [◄][►] buttons to move the cursor to the value you want to change. Change the value with the [-]/[+] buttons, or the dial. The numerator can be set from 1 – 9, while the denominator can be set to 4 or 8.

Adjusting the Metronome Volume

You can adjust the volume of each note type of the metronome, by using the [ACCENT], [♩], [♪], [♫], and [♪] sliders.

■ Sounding Timing Chart (4/4)

Notes marked ○ are not played when the "Metronome Pattern" (page 31) is set to "Alternate."

■ Sounding Timing Chart (6/8)

The quarter notes do not sound and the triplets sound at a double tempo of the triplet.
Notes marked ○ are not played when the "Metronome Pattern" (page 31) is set to "Alternate."
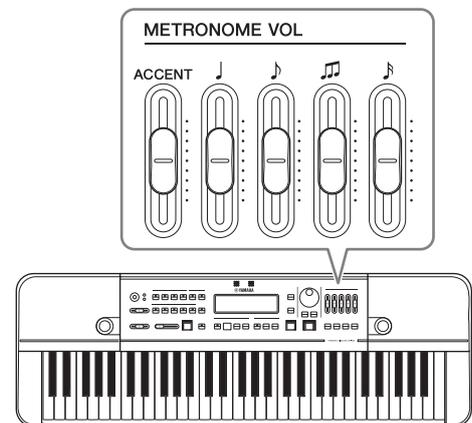
Metronome (Beat • Tempo Memory)

You can create and save irregular meters by using Beat • Tempo Memory function.

Using Beat • Tempo Memory

Press the **BEAT • TEMPO MEMORY [MEMORY] button** to set the rhythm style to the "Beat • Tempo Memory" metronome mode. This will move the cursor to the memory number.
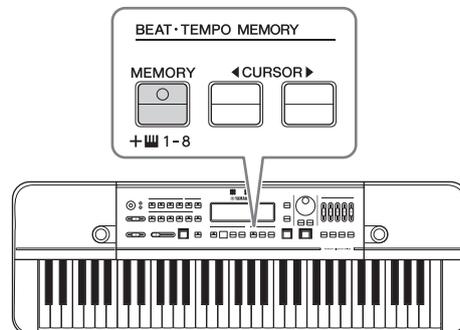
Setting the Beat (Irregular Meter)

Press the **[BEAT] button** to move the cursor to the beat area.
Use the CURSOR [◀][▶] buttons to move the cursor and edit the memory.

Memory number   Playback position
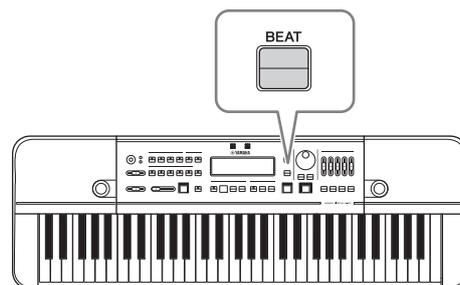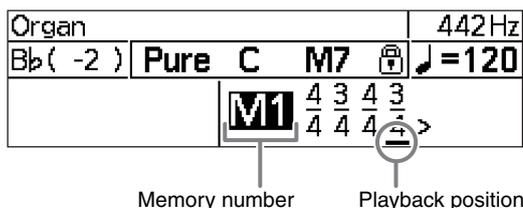
- "M1"–"M8": Selects between memory numbers while the cursor is on this. Either change this with the [-]/[+] buttons, or select the number directly by pressing one of the keys (D5 – A5) corresponding to the numbers.
- A single memory can contain irregular meters with up to eight measures. The variable range for the numerator is 1 – 9 for the first measure, and 0 – 9 for the second and subsequent measures. If the numerator is 0, the metronome will not proceed to the next measure. The variable value for the denominator is 4 or 8.
- There are no special operations required to save or load memories. A memory being edited will be saved automatically. Selecting a memory number will load it automatically.
- To initialize the contents of the selected memory number, press the [DELETE] button while during editing.

NOTE
- When using Beat • Tempo Memory, the playback position will be underlined.
- Use the "HD-300 Assistant" iOS app (page 35) to create and send irregular meters using the touch screen on the smart device.

Adjusting the Metronome Volume

Operation is the same as in the simple metronome mode (page 23).

Rhythm Style

With Rhythm Style, you can select and play back eight-beat, swing, and other popular rhythms.

Using Rhythm Style

Press the **[RHYTHM STYLE] button** to switch rhythm playback to
Rhythm Style mode.
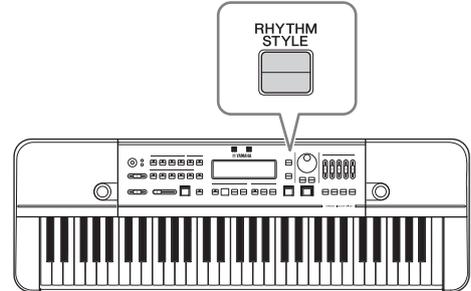
Selecting the Type of Rhythm Style

Press the [RHYTHM STYLE] button to move the cursor to the Rhythm Style name.
Use the [-]/[+] buttons, or the dial to change the Rhythm Style.
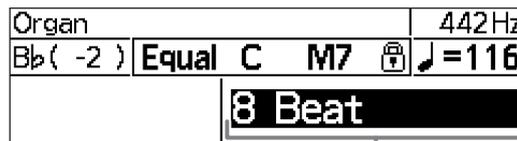
Rhythm Style name

NOTE
- The operation for starting/stopping playback and changing the tempo is the same as for the metronome. For details, see page 23.
- If you select "Custom" as the type of Rhythm Style, you can set the tempo, time signature, and number of measures using the dedicated app "HD-300 Assistant" for iPhone and iPad.

Sharing Performances (Recording/Playback)

Basic Operation

You can record a performance using the internal/external microphone to a commercially available USB flash drive and immediately play it back. In addition to conventional recording capability, the instrument has a convenient Time Shift Recording function that allows you to capture up to 10 seconds of your performance before you actually started recording (by pressing the [REC] button). Both recording options save the recording results as a file that can be later played back from the [USB] button menu.

Important

- **Connect an AC adaptor to use the recording function.**
- **A USB flash drive should be connected to use the recording function. For details on how to connect a USB flash drive, refer to page 33.**

NOTE
Adjust the microphone sensitivity (page 16) before recording.

Recording/Playback

Recording

Level meter   Recording display
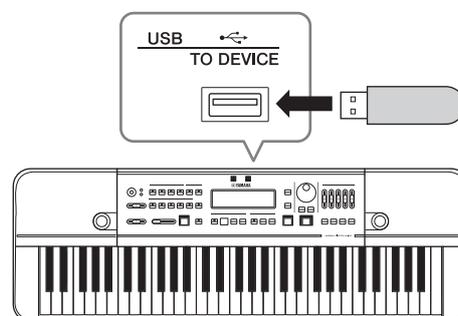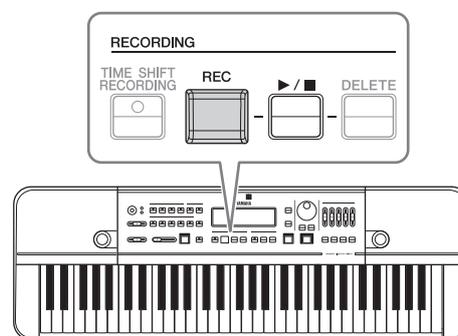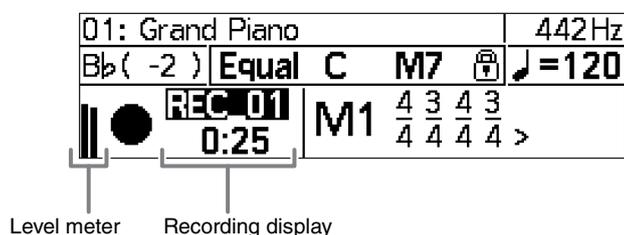
Press the **[REC] button** to start recording. Recording will start automatically under a new file name.
Press the [REC] or [▶/■] button to stop recording.

Playing Back the Most Recent Recordings

You can easily play back a recording immediately after the recording stops.
Use the [-]/[+] buttons to select a file, and then press the **[▶/■] button** to play/stop the recording.

NOTE

- If the cursor has moved away from the recording number, you can move the cursor back to the file name with the [▶/■] button.
- Note that once the recording number has been reset (when the recording folder has changed due to switching in and out of Time Shift Recording mode, or when turning the power off and on), you will no longer be able to select and play back recordings in this way. To play back previous recordings, enter the USB File Selection mode by pressing the [USB] button, and select the file (page 28).

Deleting the Most Recent Recording Results

You can delete an unwanted recording result immediately after the recording stops. Use the [-]/[+] buttons to select the file, and then press the **[DELETE] button**. Follow the confirmation prompt that appears to either cancel or delete the recording result.

NOTE
- If the cursor has moved away from the recording number, you can move the cursor back to the file name with the [▶/■] button.
- If the recording number has disappeared due to transitioning between screens or turning the power off and on, the recording result files are treated as past recorded data and can no longer be deleted on the instrument itself. Past files can be deleted on a computer or other devices that allows access to the USB flash drive.
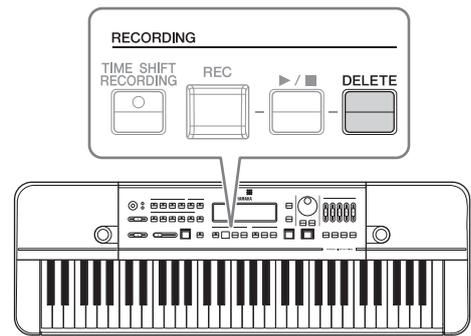
Recording a Particular Section (Time Shift Recording)

You can capture an "unrecorded" part with the Time Shift Recording function; in other words, the instrument has the capability of recording your performance, including even up to 10 seconds before you press the [REC] button.

■ Example of Time Shift Recording
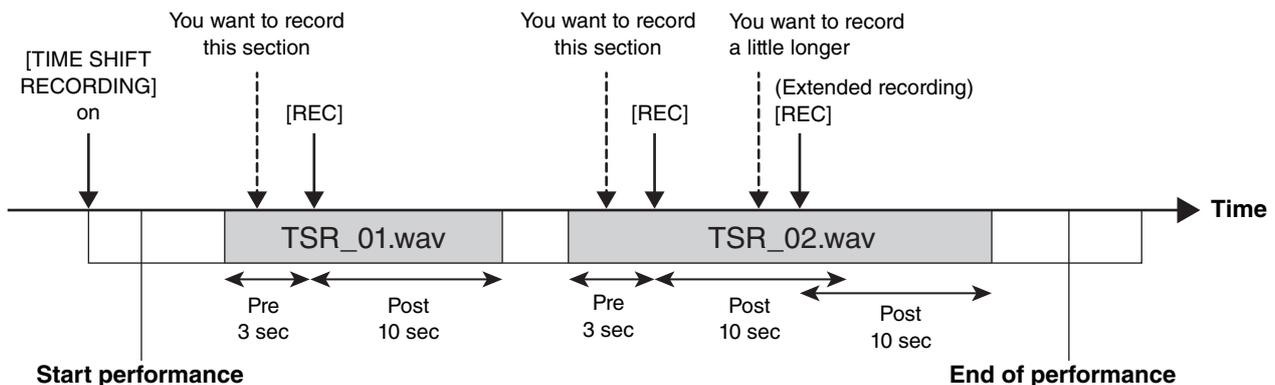
■ How to use Time Shift Recording

1. Press the [TIME SHIFT RECORDING] button to put the HD-300 into Time Shift Recording standby mode.
A "Ready" message will appear on the screen.

2. Start performing.

3. When you feel like you want to record the section during a performance, press the [REC] button.
This will start recording at the specified number of seconds (3 – 10 seconds) before the [REC] button is pressed.

4. To extend the recording time, press the [REC] button again.

5. Without further operation for the specified number of seconds (5 – 20 sec) after the [REC] button is pressed, the recording will automatically stop.
You can also stop the recording immediately by pressing the [▶/■] button, without waiting for the recording time to run out.
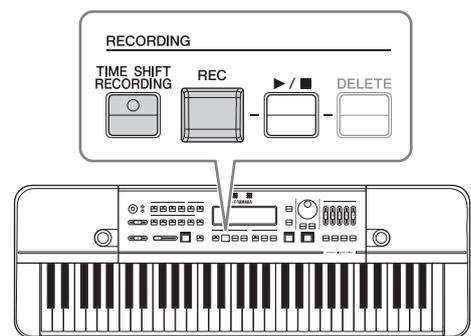
NOTE
- You can change the length of the following times on the Settings screen.
  "Pre Time Shift Rec": number of seconds recorded before the [REC] button is pressed in step 3
  "Post Time Shift Rec": number of seconds until the recording ends automatically in step 5
  For details, refer to page 31.
- The operation for playing back the result of Time Shift Recording is the same as for regular recording. For details, see the "Playing Back the Most Recent Recordings" (page 26).

Playing Back Previously Recorded Files and Files Created on a Computer (USB)

You can select and play back previously recorded performances saved to a USB flash drive, as well as audio files and MIDI files created on a computer.

Using the USB File Selection mode

Press the **[USB] button** to enter the USB File Selection mode.
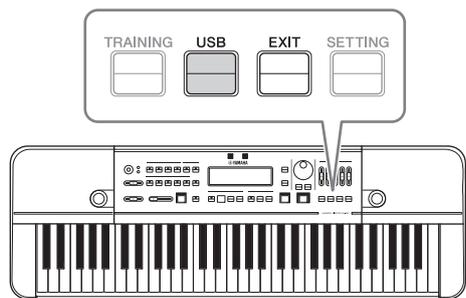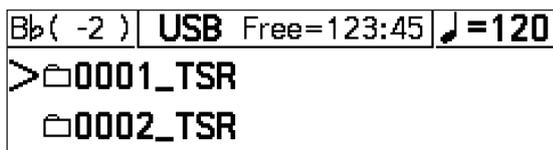
■ Operation method when using USB File Selection mode

Selecting folders and files	[-]/[+] buttons, dial
Confirming folders (descending a level)	[START/STOP] button, CURSOR [▶] button
Ascending a level	[EXIT] button, CURSOR [◀] button
Playing and stopping files	[START/STOP] button

NOTE
- Past files recorded with the HD-300 are saved in ascending order by time as "****_REC/TSR" folder names immediately below the root directory of the USB flash drive. "****" denotes a number from 0001 – 9999, "REC" is used for regular recordings, and "TSR" for time shift recordings.
- Supported formats include WAV (44.1 kHz, Stereo/Mono), and MIDI (GM, XG Lite).
- Past data cannot be deleted on the HD-300. All file operations besides playback must be performed on a computer.

To exit the USB File Selection mode, press the [EXIT] button when at the uppermost level.
You can also stop playback, exit the USB File Selection mode and then return to the Home screen, by pressing one of these buttons: [BEAT], [RHYTHM STYLE], [REC], or [TIME SHIFT RECORDING].

Enhancing Basic Practice (Sound Back, Training)

Training Your Ability to Imagine the Correct Pitch (Sound Back)

You can use the sound back function to help train your ability to imagine pitch. With this function, the HD-300 detects the pitch of the input sound and returns the nearest reference tone within the currently set temperament. So, you can confirm whether sounds are performed at the correct pitch from a soundless state.

Using the Sound Back Function

1. **Set the temperament (page 18) to a note you want to try and match.**

2. **Adjust the microphone settings (page 16).**

3. **Turn the [SOUND BACK] button on.**

> **NOTE**
> While the Sound Back function is on, there will be no sound even when you play the keyboard.

4. **Practice to play at a correct pitch using the Sound Back function.**

  4-1. **Perform on your instrument with the pitch you imagined and input the sound into the HD-300.**
  The HD-300 will play the note in the correct pitch that is nearest to the sound you have played.

  4-2. **Adjust your performance to match the pitch to the note played back by the HD-300.**
  The HD-300 continues playing the sound, unless you stop performing.

  4-3. **Stop your performance and wait a while.**
  The HD-300 stops sounding automatically after a specified length of time.

  > **NOTE**
  > You can set the duration that the sound continues in "Sound Back Time" in the Setting screen (page 31).

5. **When finished practicing, turn the [SOUND BACK] button off.**
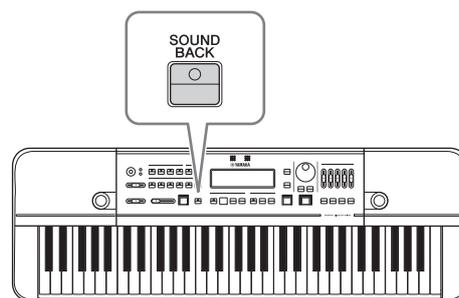
Playing Training Examples and Accompaniments (Training)

The HD-300 contains music data based on the "JBC Band Method" compiled by the JBC (Japan Band Clinic), which can be used as training examples or accompaniments. This is a great practice aid to use when an accompanist is absent.

Using the Training Mode

Press the **[TRAINING] button** to enter the Training mode.
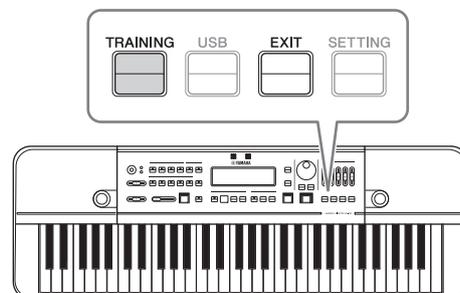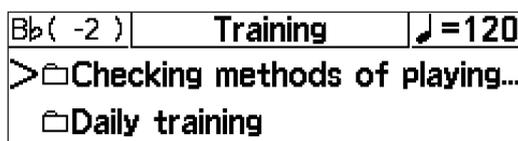
For details on training content included, refer to the Data List (page 41).

■ Operation method when using the Training mode

Selecting folders and files	[-]/[+] buttons, dial
Confirming folders (descending a level)	[START/STOP] button, CURSOR [►] button
Ascending a level	[EXIT] button, CURSOR [◄] button
Playing and stopping files	[START/STOP] button

NOTE
- In the training mode, the Voices of the [PIANO/OTHERS] button cannot be selected.
- Each song file has a default temperament and tempo. The temperament is set automatically when playback starts, and the tempo is set automatically when a file is selected or playback is stopped.
- The tempo can be changed in the same way as the metronome (page 23). Set the tempo as necessary, immediately before or during playback. If you want to select another file after changing the tempo, press the [TRAINING] button so that the cursor moves to the file selection area.

To exit the Training mode, press the [EXIT] button when at the uppermost level.
You can also stop playback, exit the Training mode and then return to the Home screen, by pressing one of these buttons: [BEAT], [RHYTHM STYLE], [REC], or [TIME SHIFT RECORDING].

Restoring Factory Settings

Press the [⏻] (Standby/On) switch to turn on the power while pressing down the highest note of the keyboard (white key). This restores all settings of the HD-300 to their default settings, and the "Clear Backup" message will appear on the LCD screen.
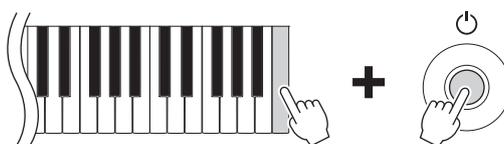
Restoring default settings will delete all user-made temperaments and Beat • Tempo memories. It is recommended that you take notes on any settings you've made before restoring the factory settings.

Advanced Settings (Settings)

You can change advanced settings on the Settings screen.
Press the [SETTING] button to call up the Settings screen. Press the [EXIT] button to exit from the screen.
Select an item using the CURSOR [◄][►] buttons, and then use the [-]/[+] buttons, or the dial to change values.
To return the selected item to its default value, press both [-]/[+] buttons simultaneously.
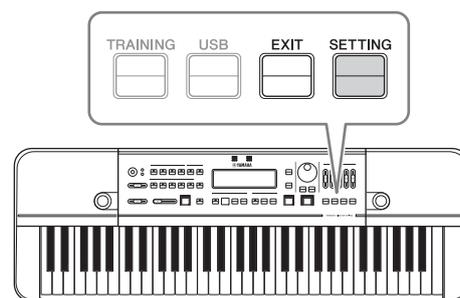
Items in the Settings screen are as follows.

Name	Description	Settings
Standard Pitch	Sets the standard pitch.	430.0 – 450.0 Hz
Metronome Sound	Sets the metronome sound.	**Peck:** This is the same tone used by the HD-200. **Click:** This is a mechanical metronome tone. **Beep:** This is an electronic metronome tone.
Metronome Pattern	Sets the metronome pattern (page 23).	**All:** The metronome plays back all beats. **Alternate:** The metronome plays back beats so that multiple click sounds are not doubled at the same timing.
Sound Back Time	Specifies the duration until the sound produced by the HD-300 turns off after there are no more input sounds when the Sound Back feature is turned on.	**Short:** approx. 2 sec. **Long:** approx. 4 sec.
Pre Time Shift Rec	Specifies the number of seconds recorded before the [REC] button is pressed while in Time Shift Recording mode.	3 – 10 sec.
Post Time Shift Rec	Specifies the number of seconds until a recording automatically stops after starting or extending a recording in Time Shift Recording mode.	5 – 20 sec.
Bluetooth	Sets the Bluetooth communication mode.	**Off:** Use this to disable Bluetooth communication. **On:** Use this to connect to a paired device. **Pairing:** Use this to switch to pairing mode.
BD Address (*)	Displays the MAC address for the HD-300 as a Bluetooth device.	—
LCD Contrast	Adjusts the contrast of the LCD.	0 – 20
Foot Pedal	Sets functions of the pedal connected to the [FOOT PEDAL] jack.	**Volume:** This adjusts the main volume. **Hold:** This produces the same effect as the [HOLD] button. **Start/Stop:** This produces the same effect as the [START/STOP] button. **Rec:** This produces the same effect as the [REC] button.
Auto Power Off	Enables/disables the Auto Power Off function.	**Disable:** This disables the Auto Power Off function. **Enable:** This enables the Auto Power Off function. **NOTE** The amount of time that elapses before the power is automatically turned off depends on the type of power being used. This is set to 30 minutes for battery power, and two hours when using an AC adaptor.
Language	Sets the language of alert messages and file names that appear in training mode.	English, Japanese
Firmware Version (*)	Displays the firmware version.	—

(*) Items with this mark are for display only and cannot be changed.

Connecting External Devices

Connecting Amplifiers or Other Equipment (OUTPUT [L/MONO], [R] jacks)

Standard phone plug
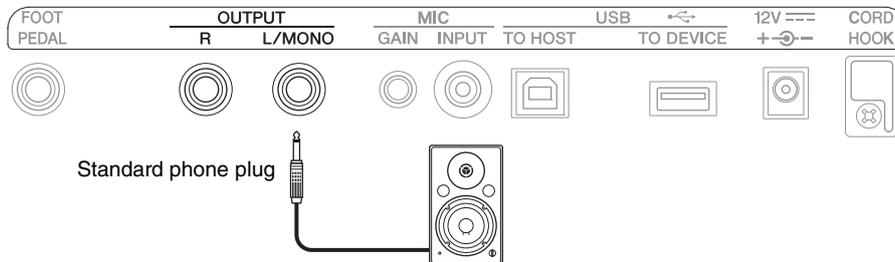
Connect a speaker with an internal amplifier to the OUTPUT jack.
For mono sound, only connect the [L/MONO] jack. For stereo sound, connect both the [L/MONO] jack and the [R] jack.
When an external device is connected, sound will no longer be produced by the instrument's speakers.

⚠ **_CAUTION_**
Make sure to turn off all devices when connecting external devices. Additionally, reduce the volume of each device to the minimum before turning the power on or off. Failure to do so may cause electric shock or damage the device.

NOTICE
When outputting sound from the instrument to an external device, first turn on the power to the instrument, and then turn the external device on. When turning the power off, follow the procedure in reverse order. Failure to do so may damage the device.

Connecting a Microphone (MIC [INPUT] jack, MIC [GAIN] knob)

Stereo mini phone plug
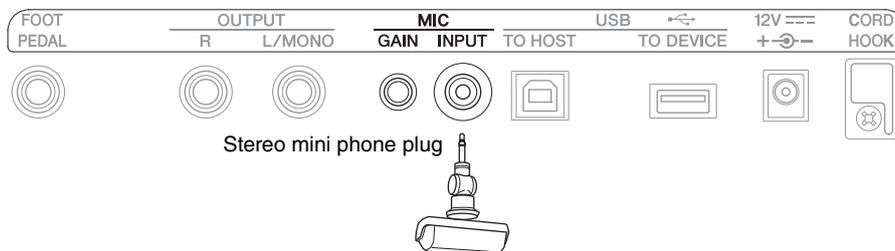
Connect a commercially available external microphone to the MIC [INPUT] jack.
Use a microphone with a stereo mini phone jack and plug-in power compatibility.
Connecting an external microphone will automatically disable the internal microphone.

NOTE
When an external microphone is connected, the MIC [GAIN] knob controls the volume of the external microphone.

Using a Pedal ([FOOT PEDAL] jack)

You can connect a volume-type pedal (FC7, sold separately) to the HD-300 to control certain functions.

FC7 (sold separately)
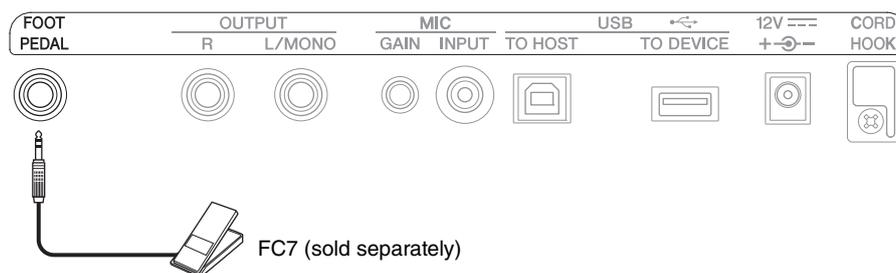
One of these functions can be assigned to the foot pedal: volume control, [HOLD] button, [START/STOP] button or [REC] button.

To assign the function to the pedal, change the value of the [SETTING] button → "Foot Pedal" (page 31).

NOTE

• A switch-type foot pedal cannot be used.
• Always turn off the power before inserting or removing plug.

Connecting a USB Flash Drive (USB [TO DEVICE] terminal)

NOTICE

Before using a USB flash drive, make sure to read through "Precautions when using the USB [TO DEVICE] terminal" on page 7.

When connecting a USB flash drive to the instrument, the recording function (page 26) will be available for use.
You can obtain a list of tested devices from the website below. At the website's "Support" page, select your country, click on "Document and Data," and then search for "HD-300."

https://download.yamaha.com

NOTE

A USB flash drive cannot be formatted on the instrument. If the USB flash drive needs formatting, format it in FAT32 format on a computer.

Connecting to a Computer (USB [TO HOST] terminal)

Use the USB [TO HOST] terminal to connect to a computer and transmit audio and MIDI signals to and from the computer. You can use this to record audio from the HD-300 in high quality, and control the HD-300 by sending MIDI signals from a PC.

NOTE

Before connecting to a computer using the USB [TO HOST] terminal, make sure to read the "Precautions when using the USB [TO HOST] terminal" on page 7.

Preparations

■ Windows

Windows users need to use the "Yamaha Steinberg USB Driver." Download the driver from the following website and install it on your computer.

Yamaha Downloads: https://download.yamaha.com

* After selecting your country and clicking on "Firmware/Software Updates" from the "Support" page, set the "-" on the product category and enter "Steinberg" to perform a search.

Refer to the website above for information on system requirements.
For details on installation and computer settings, refer to the Installation Guide that comes with the download file package.

■ **Mac**

Standard driver on Mac OS can be used; there is no need to install another driver.

Connecting

1. **Turn the instrument off.**

2. **Start up the computer.**

Close all applications on the computer.

3. **Connect the USB cable to the USB [TO HOST] terminal on the instrument, and then connect the USB cable to the computer.**
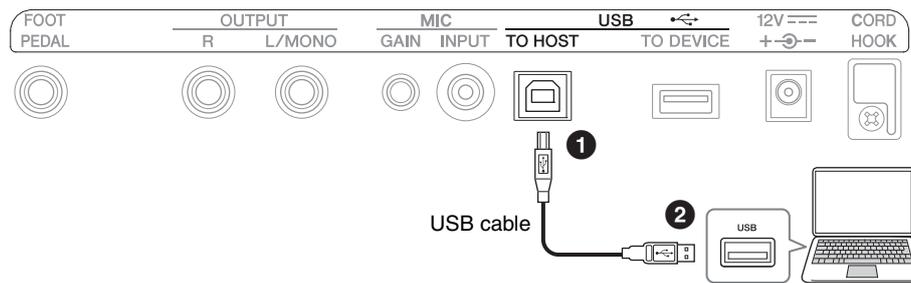
USB cable

4. **Turn the instrument on.**

The computer and instrument are now able to communicate with each other.

NOTE

Use an AB type USB cable to connect. Additionally, use a cable less than three meters in length. A USB 3.0 cable cannot be used.

What you can do by connecting to a computer (examples)

■ **Send and receive performance information (MIDI data)**

- **Play a song in MIDI format**
  You can play a MIDI file on the computer and produce the sounds on the instrument.

- **Record a performance as MIDI data**
  Once a performance is recorded as MIDI data, you can then change the Voice, note numbers and make other edits using music production software.

- **Use the instrument as a keyboard for entering data into music production software or music notation software**
  You can use the HD-300 keyboard to program music in music production software, or add notes in music notation software.

■ **Sending and receiving audio data digitally**

- **Playing audio data in high quality**
  You can enjoy clearer audio with less sound quality degradation.

- **Record instrumental performances as audio data in recording software and music production software**
  Recorded data can be played back on a computer or smart device. Use this to create tracks for practicing.

Using the "HD-300 Assistant" iPhone/iPad App (Bluetooth)

You can use the "HD-300 Assistant" iPhone/iPad app to control the instrument remotely, demonstrate minutely out-of-tune sounds (interference beats) using the instrument, play rhythms created with the app on the instrument, and much more. The app also comes with useful standalone functions, such as a tuner and a chord detector.
When using the HD-300 Assistant, you will need to connect to the HD-300 from the HD-300 Assistant via Bluetooth, using a different method than the "Pairing" that is used to connect to output audio of an iPhone/iPad. For details on the connection procedure, refer to the HD-300 Assistant instruction manual.

To get the HD-300 Assistant, search for "HD-300 Assistant" in the iPhone/iPad App Store.

Listening on the HD-300 to Audio Playback from an iPhone/iPad (Bluetooth)

You can connect to an iPhone/iPad via Bluetooth to output audio played back on the iPhone/iPad from the HD-300.

⚠️ **CAUTION**
Adjust the volume on the iPhone or the iPad side before playing the music, to avoid possible hearing impairment or damage to the equipment.

NOTE
It is not possible to play the audio output of the HD-300 from a Bluetooth speaker.

Initial connection

When connecting the instrument to an iPhone/iPad via Bluetooth for the first time, you will need to "pair" the two devices. To do this, follow the operation steps below.

1. **Press the [SETTING] button on the HD-300 to open the Settings screen.**

2. **Set "Bluetooth" to "Pairing."**
The Bluetooth status LED will start flashing to show the HD-300 is in pairing standby mode.

3. **Search for Bluetooth devices on your iPhone/iPad, and then select "HD-300 *******" (where * is the BD Address).**
The two devices are now paired and can communicate with one another.
• The Bluetooth status LED lights up.
• "Bluetooth" on the Settings screen turns to "On" automatically.
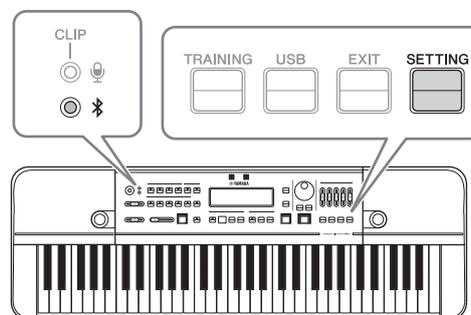
Connecting to a paired device

The instrument will automatically reconnect to a paired device at the following intervals.
• When turning the HD-300 on
• When changing "Bluetooth" from "Off" to "On"

When the connection process is complete and the two devices are able to communicate, the Bluetooth status LED will light up.

Error Messages

If an error occurs, a message will appear on the display. Use the following chart to confirm the problem and find an appropriate solution.

Message	Cause	Solution
Battery Power is Low.	The battery power is low.	Replace all 6 batteries.
Connect AC Adaptor	The function cannot be used, since now power is being drawn from batteries.	Turn off the power, connect the AC adapter, and then turn it on again (pages 13, 14).
Backup Error	An error occurred reading the settings.	Do not remove the power adapter or batteries until the screen display disappears when turning off the power.
MIDI Error	An error occurred while transmitting and receiving MIDI data.	Check the connection status with the computer or iPhone/iPad.
Update Error	An error occurred during the update.	Turn off the power and then turn it on again (pages 14, 15).
Please Reboot.	The instrument needs to be restarted.	
File Open Error	An error occurred while reading the file.	Check the connection status of the USB device and the content data of the device.
File Read Error		
File Close Error		
File Write Error	An error occurred while writing the file.	Check the USB device connection status, device data contents, and write protect status.
Connect USB Memory.	No USB device is connected.	Connect a USB device (page 33).
Cannot Record.	The USB device is write-protected.	Check the write protect status of the USB device.
Cannot Play.	Failed to play back the file.	Check the USB device connection status, device data contents, and write protect status.
Operation Failed.	File deletion failed.	
USB Device Error	An error occurred while accessing the USB device.	
System File Error	An error occurred while accessing the system file.	
File Error	An error occurred while accessing the file.	
Disk Full Error	During recording, the recording data size has exceeded the remaining capacity of the USB device.	Delete unnecessary files of the USB device, on your computer.
	The remaining capacity of the USB device has run out while writing a file.	
File is too Large.	The selected file was too large to read.	Reduce the size of the file.
USB Connection Error	Failed to connect the USB device.	Check the USB device status, and then reconnect the device.
USB Overcurrent Error	An abnormal current has flowed through the USB device. (The USB device is defective.)	Unplug the USB device and use another USB device.
Format Error	An unformatted USB device is inserted.	Check the format of the USB device. This instrument only supports FAT32 format.

Troubleshooting

If you encounter any problems, first check the items listed below. If the solution provided below does not solve the problem, or you are experiencing a problem other than those mentioned in the list, turn the power OFF by pressing and holding the [⏻] (Standby/On) switch, disconnect the AC adaptor and contact the dealer whom you purchased the instrument to have the instrument repaired.

Problem	Cause	Solution
The instrument does not turn on.	The AC adaptor is not connected.	Make sure to connect the AC adaptor to the instrument and the AC outlet (page 13).
Noise is emitted from the instrument.	A mobile phone is being used near this unit.	Do not put a mobile phone near this unit.
Noise occurs from the radio or TV, etc.	The radio or TV is positioned too close to the instrument.	Position the radio or TV as far away as possible from the instrument.
The sound is low overall, or there is no sound at all.	The volume setting is too low.	Increase the volume by moving the [MAIN VOL] slider.
	The external amplifier is connected, and the volume of the external amplifier is set to the minimum.	Turn up the volume of the external amplifier.
The sound is distorted, resonating, or clipping.	The sound of the instrument is resonant with the main unit or other objects close to the instrument, because the volume is too high.	Reduce the volume.
		Remove the objects that are resonating.
	A low-power rated speaker is connected.	Connect a high-power rated speaker. A speaker rated 100 W or more is recommended when using this instrument with a concert band.
The sound is interrupted momentarily.	The protection circuit was activated because the volume was raised too high.	Reduce the volume.
The LCD display is hard to read.	The contrast settings are not appropriate.	Adjust the "LCD Contrast" setting value (page 16).
The recorded data cannot be erased.	This instrument only can delete data immediately after it was recorded.	Connect the USB flash memory to the computer and delete the files.
Communication with the USB device has stopped.	An incompatible USB device is being used.	Check the USB devices that can be used with the instrument (page 7).
The operation of the USB storage device is unstable.	An error has occurred in the communication processing with the USB device.	Disconnect the USB device, wait at least 6 seconds, and then reconnect it.
There is no sound from the HD-300 even though the Sound Back function is turned on and sound is input.	The microphone sensitivity setting is too low.	Adjust the microphone sensitivity (page 16).
	The volume setting is too low.	Increase the volume with the [MAIN VOL] slider and set the [BALANCE] slider to the center (page 16).
The audio playback sound does not come out of the HD-300 even though the instrument is connected to an iPhone/iPad via Bluetooth.	The distance is too far.	Reduce the distance between the iPhone/iPad and the HD-300.
	Connection has failed.	Turn the power of the HD-300 off and then on again (pages 14, 15).
		Restart your iPhone/iPad.
		Try deleting once the HD-300 registration on the Bluetooth setting screen on your iPhone/iPad, and then perform the "Initial connection" setting procedure again (page 35).
There is no sound even when playing the keyboard.	The [BALANCE] slider is set to the far right.	Set the [BALANCE] slider to the center (page 16).
	The Sound Back function is turned on.	Turn off the Sound Back function (page 29).
	The keys being played are outside the range of the FM Voice.	Play keys inside the range of the FM Voice, or select a PCM Voice.
There is no sound for rhythm playback.	The [BALANCE] slider is set to the far left.	Set the [BALANCE] slider to the center (page 16).

About the Temperaments Used in This Instrument

Interval

■ Unit of interval

A cent is a unit used to measure musical intervals. The logarithm of the frequency ratio of two sounds is taken, and a semitone of equal temperament is defined as 100 cents. Using cents to measure intervals, we can calculate the interval using simple addition/subtraction rather than multiplication/division. For this reason, the cent is commonly and internationally used in fields such as music and acoustics as a standard for measuring intervals.

$$\text{(value in cents)} = \frac{1200}{\log 2} \times \log \text{(frequency ratio)}$$

$$\text{(frequency ratio)} = 10^{\frac{\log 2}{1200} \times \text{(value in cents)}}$$

■ Frequency Ratio and Cent Values for the Main Intervals

Interval	Frequency Ratio	Cent Value	Comments
Octave	2	1200.000	
Pure Perfect 5th	3/2	701.955	
Pure Perfect 4th	4/3	498.045	
Pure Major 3rd	5/4	386.314	
Pure Minor 3rd	6/5	315.641	
Pure Large Interval Whole Tone	9/8	203.910	
Pure Small Interval Whole Tone	10/9	182.404	
Pure Diatonic Scale Semi-tone	16/15	111.731	Difference between the perfect 4th and major 3rd
Pure Chromatic Scale Semi-tone	25/24	70.672	Difference between the major 3rd and minor 3rd
Meantone	$\sqrt{5}/2$	193.157	Average between large and small interval whole tones
Syntonic-Comma (S.C.)	81/80	21.506	Difference between large and small interval whole tones
Pythagorean Comma (P.C.)	–	23.460	Difference between the pure 5th ×12 and 7 octaves
Schisma	–	1.954	Difference between P.C. and S.C.
Equal Semi-tone	$\sqrt[12]{2}$	100.000	

Temperaments

■ Equal and Pure Temperaments

Temperament	Description
Equal	Temperament that divides one octave into 12 equal steps. The frequency ratio between neighboring notes is $\sqrt[12]{2}$ (= 1.0594631).
Pure (Major)	The tuning preserves the pure mathematical intervals of the major scale, especially for the triad chords (in case of the "C Major"; CEG, FAC, and GBD). Since this tuning includes the pure perfect 5th and pure major 3rd, both large and small interval whole tones, and chromatic scale semi-tones, changing keys requires changing the pitch ratio of every note in the scale, making it impractical for keyboard or fretted instruments.
Pure (minor)	Like the pure major, this tuning preserves the pure mathematical intervals of the minor scale (in case of "a minor"; ACE, DFA, EGB). Changing keys also requires changing the pitch of every note in the scale, making it impractical for keyboard or fretted instruments.

■ Preset Temperaments Cent List (for C MAJOR/a minor)

Display	Temperament Type	Difference from the equal temperament (cent)											
		C	D♭	D	E♭	E	F	F♭	G	A♭	A	B♭	B
Equal	Equal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pure C	Pure Major (C)	0.0	-29.3	3.9	15.6	-13.7	-2.0	-31.3	2.0	-27.4	-15.6	17.6	-11.7
Pure a	Pure Minor (a)	15.6	-13.7	-2.0	31.3	2.0	13.7	-15.6	17.6	-11.7	0.0	33.2	3.9

■ Other Temperaments Cent List (for reference)

The following temperaments can be set in the individual temperament mode.

Temperament	Difference from the equal temperament (cent): When the root key is C											
	C	D♭	D	E♭	E	F	F♭	G	A♭	A	B♭	B
Meantone	0	-24.0	-6.8	10.3	-13.7	3.4	-20.5	-3.4	-27.4	-10.3	6.8	-17.1
Pythagoras	0	13.7	3.9	-5.9	7.8	-2.0	11.7	2	15.6	5.9	-3.9	9.8
Werkmeister I 3rd Variant	0	-9.8	-7.8	-5.9	-9.8	-2.0	-11.7	-3.9	-7.8	-11.7	-3.9	-7.8
Kirnberger III	0	-9.8	-6.8	-5.9	-13.7	-2.0	-9.8	-3.4	-7.8	-10.3	-3.9	-11.7
Valloti & Young	0	-9.8	-3.9	-5.9	-7.8	-2.0	-11.7	-2.0	-7.8	-5.9	-3.9	-9.8

Specifications

		HD-300
Product Name		Harmony Director
Tone Generator and Polyphony	Tone Generation Technology	FM, AWM
	Polyphony (max.)	FM: 8 (WOOD, BRASS, ORGAN categories) AWM: 48 (PIANO/OTHERS category, Metronome, Rhythm Style)
Keyboard		61 keys (with touch response)
Panel Controls		Buttons (with tactile feedback), sliders, dial
Display		LCD (with contrast adjustment)
Voices		FM: 9 Voices (WOOD, BRASS, ORGAN categories) AWM: 70 Voices (PIANO/OTHERS category, Metronome)
Hold		Yes
Transposition		Transpose: 12 semitones Octave Shift: 4 octaves
Temperaments		Temperament: Equal, Pure, Individual Volumes/Pitches Reference Pitch: 430.0 – 450.3 Hz Root Key: Automatically detected from keyboard input, lock function available
Metronome		Tempo: 32 – 280 (for quarter notes), Tap tempo input function Reference note selection: eighth note, quarter note, dotted quarter note Tempo Memory: 8 memories, up to 8 measures in 1 memory Volume control of each note type (by 5 sliders) Sound selection (Peck, Click, Beep) Pattern selection (All, Alternate)
Rhythm Style		9 Rhythm Styles
Recording/Playback		Microphone: Internal stereo microphone, or commercially available external microphone Recording Time (max.) 80 minutes (approx. 0.9 GB) for each file Format: WAV (44.1 kHz, 16 bit, stereo) Time Shift Recording function: Yes
Sound Back		Yes, Sound Back Time Setting (Short/Long)
Training		167 Songs
Other Settings		Foot pedal function assignment (Volume, Hold, Start/Stop, Rec) Message display language (English, Japanese)
External Input/Output Jacks		DC IN 12V [FOOT PEDAL] (FC7; sold separately) OUTPUT [L/MONO]/[R] (standard mono phone jack × 2) MIC [INPUT] (mini stereo phone jack, plug-in power) USB [TO HOST]/[TO DEVICE]
Bluetooth		Bluetooth Version: 4.2 Supported Profile: A2DP Functions: Bluetooth Audio, MIDI over BLE Wireless Output: Bluetooth Class 2 Maximum communication distance: about 10 m Operating Radio Frequency: 2,402 – 2,480 MHz Maximum Output Power (EIRP): 6 dBm Type of Modulation: GFSK, π/4 DQPSK, 8 DPSK
Power Amplifier		3.0 W × 3.0 W
Speaker		12 cm (6 Ω) × 2

Power Supply	Rated Power Supply	AC Adaptor:
		    For EU countries: PA-150B or an equivalent specified by Yamaha (Output: DC 12 V, 1.5 A)
		    For other countries: PA-150 or an equivalent recommended by Yamaha (Output: DC 12 V, 1.5 A)
		Batteries: Six "AA" size alkaline (LR6), or Ni-MH rechargeable (HR6) batteries (sold separately)

	Power Consumption	9 W (when using PA-150 AC adaptor)
Auto Power Off		Yes
Size/Weight	Dimensions (W × D × H)	940 mm × 317 mm × 106 mm (37" × 12-1/2" × 4-3/16")
	Weight	4.0 kg (8 lb 13 oz) (not including batteries)
Included Accessories		Owner's Manual (this manual), Use Guide, Warranty Information, Online Member Product Registration, AC adaptor* * May not be included depending on your area. Check with your Yamaha dealer.

The contents of this manual apply to the latest specifications as of the printing date. Since Yamaha makes continuous improvements to the product, this manual may not exactly match the specifications of your particular product. To obtain the latest manual, access the Yamaha website, and then download the manual file.

Data List

Voice List

■ FM Voices

Buttons	Voice Name	Program Change No.
WOOD	Flute	1
	Oboe	2
	Clarinet	3
	Saxophone	4
BRASS	Trumpet	5
	Horn	6
	Brass	7
ORGAN	Organ	8
	Strings	9

NOTE
The playable range of FM Voices is E-1 to C7.

■ PCM Voices ([PIANO/OTHERS] button)

No.	Voice Name	No.	Voice Name
1	Grand Piano	36	Timpani
2	Harpsichord	37	Glockenspiel
3	Celesta	38	Xylophone
4	CP80	39	Vibraphone
5	Suitcase E.Piano	40	Marimba
6	DX Modern E.Piano	41	Tubular Bells
7	Clavi	42	Music Box
8	Pipe Organ	43	Violin
9	Reed Organ	44	Cello
10	Jazz Organ	45	Contrabass
11	Rock Organ	46	Strings Section
12	Accordion	47	Synth Strings
13	Bandoneon	48	Pizzicato Strings
14	Harmonica	49	Harp
15	Piccolo	50	Nylon Guitar
16	Flute	51	Steel Guitar
17	Oboe	52	Electric Guitar
18	English Horn	53	Distortion Guitar
19	Bassoon	54	Finger Bass
20	Clarinet	55	Acoustic Bass
21	Soprano Sax	56	Pick Bass
22	Alto Sax	57	Slap Bass
23	Tenor Sax	58	Synth Bass
24	Baritone Sax	59	Orchestra Hit
25	Pan Flute	60	Choir
26	Recorder	61	Gemini
27	Ocarina	62	Sweet Heaven
28	Trumpet	63	Square Lead
29	Muted Trumpet	64	Sawtooth Lead
30	French Horn	65	Bell Pad
31	Trombone	66	Banjo
32	Euphonium	67	Steel Drums
33	Tuba	68	Bagpipe
34	Brass Section	69	Shamisen
35	Synth Brass	70	Koto

Rhythm Style List

Name	Tempo	Time Signature	Number of measures
8 Beat	116	4/4	2
16 Beat	80	4/4	2
Swing	118	4/4	2
March	116	4/4	2
6/8 March	120	6/8	4
Waltz	180	3/4	2
Samba	110	4/4	2
Bossa Nova	140	4/4	2
Qtr Triplet	120	4/4	2
Custom	You can set the tempo, time signature, and number of measures using the dedicated app "HD-300 Assistant" for iPhone and iPad.		

Training Contents (JBC Band Method) List

Folder Name	Pages (*)
Checking method of playing...	21 – 28
Daily training	39
Chromatic scale practice	47
Rhythm	60 – 63
Option → Lip slur 1	47
Option → Lip slur 2	48
Option → Preparation for major scale A	49
Option → Major scale and cadence	51
Option → Minor scale and cadence	51
Option → Unison	56
Option → Chorale	64

* The page numbers of the JBC Band Method—Conductor

MIDI Messages

NOTE
"HEX" means hexadecimal.

■ Program Change

Changes the FM Voice of the specified channel.

Data (HEX)	Cn prog
Parameters	**n:** Channel Number (0 – (Quantity of FM Voice channels – 1)) **prog:** Program Change No. (Refer to the Voice List (page 41))

■ System Exclusive Messages

Quantity of FM Voice channels

Specifies the quantity of channels used for FM Voices out of 16 channels.

Data (HEX)	F0 43 77 10 00 <track> <accept> F7
Parameters	**track:** Quantity of channels used for FM Voices (0 – 6) **accept:** Whether to change the FM Voice that produces sound by receiving a MIDI message, by operating from the panel. (0 = disable, 1 = enable)

Temperament mode

Specifies which of the three temperament modes to use.

Data (HEX)	F0 43 77 10 01 <temp> F7
Parameters	**temp:** Temperament mode (0 = Equal, 1 = Pure, 2 = User)

Chord

Specifies the chord directly instead of auto-detected.

Data (HEX)	F0 43 77 10 02 <root> <chord> F7
Parameters	**root:** Root key. The meaning of the numbers changes depending on whether they are in major or minor. (See table following) **chord:** Chord. This also specifies major/minor at the same time. (See table following)

root (HEX)	Key signature (for reference)	Major	Minor
00	0	C	A
01	$\flat$5	D$\flat$	B$\flat$
02	$\sharp$2	D	B
03	$\flat$3	E$\flat$	C
04	$\sharp$4	E	C$\sharp$
05	$\flat$1	F	D
06	$\flat$6 / $\sharp$6	F$\sharp$	E$\flat$
07	$\sharp$1	G	E
08	$\flat$4	A$\flat$	F
09	$\sharp$3	A	F$\sharp$
0A	$\flat$2	B$\flat$	G
0B	$\sharp$5	B	G$\sharp$

chord (HEX)	Chord	Major/Minor
00	Maj	Major
01	m	Minor
02	7	Major
03	m7	Minor
04	M7	Major
05	m7$\flat$5	Minor
06	sus4	Major
07	aug	Major
08	dim	Minor
09	mM7	Minor
0A	6	Major
0B	m6	Minor
0C	7$\flat$5	Major
0D	add9	Major

Individual pitches

Specifies the 12 pitches of the individual temperament. Upon receiving this message, the HD-300 will automatically enter the individual temperament mode.

Data (HEX)	F0 43 77 10 03 <cent1_l> <cent1_u> … <cent12_l> <cent12_u> F7
Parameters	**centx_l, centx_u (x = 1 – 12):** The individual pitch (a set of two bytes for each). (cent value: -55.0 – 0 – 55.0) **Method of calculation from the cent value to 2 bytes of messages** 1. Convert ten times of the cent value to hexadecimal, and then add 0x2000 (HEX). 2. Of the lower 14 bits of the calculation result, sends the lower 7 bits (centx_l) and the upper 7 bits (centx_u) in that order.

Individual volumes

Specify the 12 volumes of the individual temperament. Upon receiving this message, the HD-300 will automatically enter the individual temperament mode.

Data (HEX)	F0 43 77 10 04 <vol1> … <vol12> F7
Parameters	**vol1 – 12:** The individual volume (one byte each). (00 – 15(HEX) = 0 – 20)

Beat, Tempo memory

Rewrites the contents of the specified memory number on the Beat/tempo memory.

Data (HEX)	F0 43 77 10 05 <num> <note> <tempo_l> <tempo_u> <step> <numer1> … <numer8> <denom1> … <denom8> F7
Parameters	**num:** Memory number (0 – 7 = M1 – M8) **note:** Tempo reference note (0 = 8th note, 1 = quarter note, 2 = dotted quarter note) **tempo_l, tempo_u:** A set of two bytes data; among the lower 14 bits of the tempo value, the lower 7 bits and the upper 7 bits **step:** Number of effective steps in the beat memory – 1 (0 – 7) **numer1 – 8:** numerator (0 – 9) **denom1 – 8:** denominator (0 = quarter, 1 = 8th) **NOTE** Make sure that the numerator next to the number of valid steps is 0. For example, if the number of valid steps is 4 (step = 3), set numer5 = 0.

Function...	Transmitted	Recognized	Remarks
Basic Default	1 - 16	1 - 16	
Channel Changed	X	X	
Mode			
Default	3	3	
Messages	X	X	
Altered	**************	X	
Note	0 - 127	0 - 127	
Number : True voice	**************	0 - 127	
Velocity Note On	O 9nH,v=1-127	O 9nH,v=1-127	
Note Off	X	X	
After Key's	X	X	
Touch Ch's	X	X	
Pitch Bend	X	O	
0,32	O	O	Bank Select
1	X	O	Modulation
6	X	O	Data Entry (MSB)
38	X	O	Data Entry (LSB)
7	O	O	Main Volume
Control 10	X	O	Pan
11	X	O	Expression
Change 64	X	O	Sustain
71-74	X	O	Sound Control
84	X	O	Portamento Control
91,93	O	O	Effect Depth
96,97	X	O	RPN Inc, Dec
100,101	X	O	RPN LSB, MSB
Prog	O 0 - 127	O 0 - 127	
Change : True #	**************		
System Exclusive	O	O	
: Song Pos.	X	X	
Common : Song Sel.	X	X	
: Tune	X	X	
System : Clock	O	O	
Real Time: Commands	O	O	
: All Sound Off	X	O (120,126,127)	
Aux : Reset All Cntrls	X	O (121)	
: Local On/Off	X	O (122)	
Mes- : All Notes Off	X	O (123-125)	
sages: Active Sense	O	O	
: Reset	X	X	

Notes:

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

🎵 YAMAHA

LIMITED 1-YEAR WARRANTY ON
HD-300 HARMONY DIRECTOR

Thank you for selecting a YAMAHA product. YAMAHA products are designed and manufactured to provide a high level of defect-free performance. Yamaha Corporation of America ("YAMAHA") is proud of the experience and craftsmanship that goes into each and every YAMAHA product. YAMAHA sells its products through a network of reputable, specially authorized dealers and is pleased to offer you, the Original Owner, the following Limited Warranty, which applies only to products that have been (1) directly purchased from YAMAHA's authorized dealers in the fifty states of the USA and District of Columbia (the "Warranted Area") and (2) used exclusively in the Warranted Area. YAMAHA suggests that you read the Limited Warranty thoroughly and invites you to contact your authorized YAMAHA dealer or YAMAHA Customer Service if you have any questions.

THIS WARRANTY COVERS THE LISTED PRODUCTS AGAINST DEFECTS IN MATERIALS OR WORKMANSHIP FOR 1 YEAR.

Coverage: YAMAHA will, at its option, repair or replace the product covered by this warranty if it becomes defective, malfunctions or otherwise fails to conform with this warranty under normal use and service during the term of this warranty, without charge for labor or materials. Repairs may be performed using new or refurbished parts that meet or exceed YAMAHA specifications for new parts. If YAMAHA elects to replace the product, the replacement may be a reconditioned unit. You will be responsible for any installation or removal charges and for any initial shipping charges if the product(s) must be shipped for warranty service. However, YAMAHA will pay the return shipping charges to any destination within the USA if the repairs are covered by the warranty. This warranty does not cover (a) damage, deterioration or malfunction resulting from accident, negligence, misuse, abuse, improper installation or operation or failure to follow instructions according to the Owner's Manual for this product; any shipment of the product (claims must be presented to the carrier); repair or attempted repair by anyone other than YAMAHA or an authorized YAMAHA Service Center; (b) any unit which has been altered or on which the serial number has been defaced, modified or removed; (c) normal wear and any periodic maintenance; (d) deterioration due to perspiration, corrosive atmosphere or other external causes such as extremes in temperature or humidity; (e) damages attributable to power line surge or related electrical abnormalities, lightning damage or acts of God; or (f) RFI/EMI (Interference/noise) caused by improper grounding or the improper use of either certified or uncertified equipment, if applicable. Any evidence of alteration, erasing or forgery of proof-of-purchase documents will cause this warranty to be void. This warranty covers only the Original Owner and is not transferable.

In Order to Obtain Warranty Service: Warranty service will only be provided for defective products within the Warranted Area. Contact your local authorized YAMAHA dealer who will advise you of the procedures to be followed. If this is not successful, contact YAMAHA at the address, telephone number or website shown below. YAMAHA may request that you send the defective product to a local authorized YAMAHA Servicer or authorize return of the defective product to YAMAHA for repair. If you are uncertain as to whether a dealer has been authorized by YAMAHA, please contact YAMAHA's Service Department at the number shown below or check YAMAHA's website at www.usa.yamaha.com. Product(s) shipped for service should be packed securely and must be accompanied by a detailed explanation of the problem(s) requiring service, together with the original or a machine reproduction of the bill of sale or other dated, proof-of-purchase document describing the product, as evidence of warranty coverage. Should any product submitted for warranty service be found ineligible therefore, an estimate of repair cost will be furnished, and the repair will be accomplished only if requested by you and upon receipt of payment or acceptable arrangement for payment.

Limitation of Implied Warranties and Exclusion of Damages: ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE APPLICABLE PERIOD OF TIME SET FORTH ABOVE. YAMAHA SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE OR INTERRUPTION OF PERFORMANCES OR ANY CONSEQUENCES. YAMAHA'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, AT YAMAHA'S OPTION. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is the only express warranty applicable to the product specified herein; YAMAHA neither assumes nor authorizes anyone to assume for it any other express warranty.

If you have any questions about service received or if you need assistance in locating an authorized YAMAHA Servicer, please contact:

🎵 YAMAHA

CUSTOMER SERVICE
Yamaha Corporation of America
6600 Orangethorpe Avenue, Buena Park, California 90620-1373
Telephone: 800-854-1569
www.usa.yamaha.com

Do not return any product to the above address without a written Return Authorization issued by YAMAHA.

FCC and IC Information

For U.S.A.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without testing of specific absorption rate (SAR).

For CANADA

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules as this equipment has very low levels of RF energy.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE puisque cet appareil a une niveau tres bas d'energie RF.

For EU countries

BG Bulgarian
ОПРОСТЕНА ЕС ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ
С настоящото Yamaha Music Europe GmbH декларира, че този тип радиосъоръжение [HD-300] е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес:
https://europe.yamaha.com/en/support/compliance/doc.html

ES Spanish
DECLARACIÓN UE DE CONFORMIDAD SIMPLIFICADA
Por la presente, Yamaha Music Europe GmbH declara que el tipo de equipo radioeléctrico [HD-300] es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente:
https://europe.yamaha.com/en/support/compliance/doc.html

CS Czech
ZJEDNODUŠENÉ EU PROHLÁŠENÍ O SHODĚ
Tímto Yamaha Music Europe GmbH prohlašuje, že typ rádiového zařízení [HD-300] je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese:
https://europe.yamaha.com/en/support/compliance/doc.html

DA Danish
FORENKLET EU-OVERENSSTEMMELSESERKLÆRING
Hermed erklærer Yamaha Music Europe GmbH, at radioudstyrstypen [HD-300] er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse:
https://europe.yamaha.com/en/support/compliance/doc.html

DE German
VEREINFACHTE EU-KONFORMITÄTSERKLÄRUNG
Hiermit erklärt Yamaha Music Europe GmbH, dass der Funkanlagentyp [HD-300] der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar:
https://europe.yamaha.com/en/support/compliance/doc.html

ET Estonian
LIHTSUSTATUD ELI VASTAVUSDEKLARATSIOON
Käesolevaga deklareerib Yamaha Music Europe GmbH, et käesolev raadioseadme tüüp [HD-300] vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil:
https://europe.yamaha.com/en/support/compliance/doc.html

EL Greek
ΑΠΛΟΥΣΤΕΥΜΕΝΗ ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΕΕ
Με την παρούσα ο/η Yamaha Music Europe GmbH, δηλώνει ότι ο ραδιοεξοπλισμός [HD-300] πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο:
https://europe.yamaha.com/en/support/compliance/doc.html

EN English
SIMPLIFIED EU DECLARATION OF CONFORMITY /
SIMPLIFIED UK DECLARATION OF CONFORMITY
Hereby, Yamaha Music Europe GmbH declares that the radio equipment type [HD-300] is in compliance with Directive 2014/53/EU and the radio equipment regulations of UK. The full texts of the EU declaration of conformity and the UK declaration of conformity are available at the following internet address:
https://europe.yamaha.com/en/support/compliance/doc.html

FR French
DECLARATION UE DE CONFORMITE SIMPLIFIEE
Le soussigné, Yamaha Music Europe GmbH, déclare que l'équipement radioélectrique du type [HD-300] est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante:
https://europe.yamaha.com/en/support/compliance/doc.html

HR Croatian
POJEDNOSTAVLJENA EU IZJAVA O SUKLADNOSTI
Yamaha Music Europe GmbH ovime izjavljuje da je radijska oprema tipa [HD-300] u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi:
https://europe.yamaha.com/en/support/compliance/doc.html

IT Italian
DICHIARAZIONE DI CONFORMITÀ UE SEMPLIFICATA
Il fabbricante, Yamaha Music Europe GmbH, dichiara che il tipo di apparecchiatura radio [HD-300] è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet:
https://europe.yamaha.com/en/support/compliance/doc.html

LV Latvian
VIENKĀRŠOTA ES ATBILSTĪBAS DEKLARĀCIJA
Ar šo Yamaha Music Europe GmbH deklarē, ka radioiekārta [HD-300] atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē:
https://europe.yamaha.com/en/support/compliance/doc.html

LT Lithuanian
SUPAPRASTINTA ES ATITIKTIES DEKLARACIJA
Aš, Yamaha Music Europe GmbH, patvirtinu, kad radijo įrenginių tipas [HD-300] atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu:
https://europe.yamaha.com/en/support/compliance/doc.html

HU Hungarian
EGYSZERŰSÍTETT EU-MEGFELELŐSÉGI NYILATKOZAT
Yamaha Music Europe GmbH igazolja, hogy a [HD-300] típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen:
https://europe.yamaha.com/en/support/compliance/doc.html

NL Dutch
VEREENVOUDIGDE EU-CONFORMITEITSVERKLARING
Hierbij verklaar ik, Yamaha Music Europe GmbH, dat het type radioapparatuur [HD-300] conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres:
https://europe.yamaha.com/en/support/compliance/doc.html

PL Polish
UPROSZCZONA DEKLARACJA ZGODNOŚCI UE
Yamaha Music Europe GmbH niniejszym oświadcza, że typ urządzenia radiowego [HD-300] jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym:
https://europe.yamaha.com/en/support/compliance/doc.html

PT Portuguese
DECLARAÇÃO UE DE CONFORMIDADE SIMPLIFICADA
O(a) abaixo assinado(a) Yamaha Music Europe GmbH declara que o presente tipo de equipamento de rádio [HD-300] está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet:
https://europe.yamaha.com/en/support/compliance/doc.html

RO Romanian
DECLARAȚIA UE DE CONFORMITATE SIMPLIFICATĂ
Prin prezenta, Yamaha Music Europe GmbH declară că tipul de echipamente radio [HD-300] este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet:
https://europe.yamaha.com/en/support/compliance/doc.html

SK Slovak
ZJEDNODUŠENÉ EÚ VYHLÁSENIE O ZHODE
Yamaha Music Europe GmbH týmto vyhlasuje, že rádiové zariadenie typu [HD-300] je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese:
https://europe.yamaha.com/en/support/compliance/doc.html

SL Slovenian
POENOSTAVLJENA IZJAVA EU O SKLADNOSTI
Yamaha Music Europe GmbH potrjuje, da je tip radijske opreme [HD-300] skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu:
https://europe.yamaha.com/en/support/compliance/doc.html

FI Finnish
YKSINKERTAISTETTU EU-VAATIMUSTENMUKAISUUSVAKUUTUS
Yamaha Music Europe GmbH vakuuttaa, että radiolaitetyyppi [HD-300] on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa:
https://europe.yamaha.com/en/support/compliance/doc.html

SV Swedish
FÖRENKLAD EU-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE
Härmed försäkrar Yamaha Music Europe GmbH att denna typ av radioutrustning [HD-300] överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress:
https://europe.yamaha.com/en/support/compliance/doc.html

TR Turkey
BASİTLEŞTİRİLMİŞ AVRUPA BİRLİĞİ UYGUNLUK BİLDİRİMİ
İşbu belge ile, Yamaha Music Europe GmbH, radyo cihaz tipinin [HD-300], Direktif 2014/53/AB'ye uygunluğunu beyan eder. AB uyumu beyanının tam metni aşağıdaki internet adresinden edinilebilir:
https://europe.yamaha.com/en/support/compliance/doc.html

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