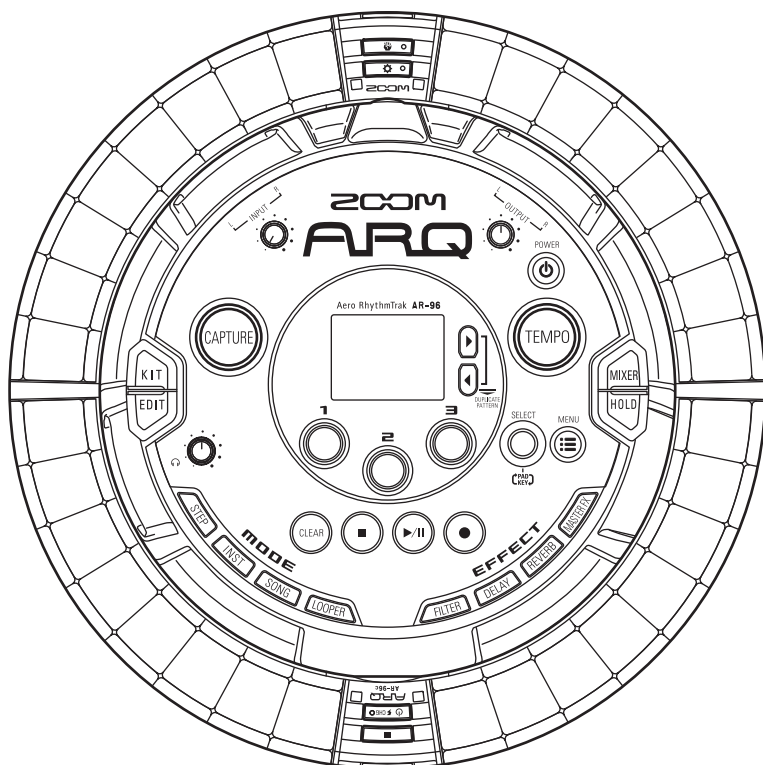# ZOOM®

ARQ
Aero RhythmTrak
AR-96

Quick Manual

The Operation Manual can be downloaded from the ZOOM website (www.zoom.co.jp)

Contents

Usage and Safety Precautions

Safety Precautions

In this Quick Manual, symbols are used to highlight warnings and cautions that you must read to prevent accidents. The meanings of these symbols are as follows.

⚠ Warning	Something that could cause serious injury or death
⚠ Caution	Something that could cause injury or damage to the equipment

Other symbols used

❗	An action that is mandatory
🚫	An action that is prohibited

⚠ Warning

Operation using an AC adapter
- ❗ Never use any AC adapter other than a ZOOM AD-14. The use of other than the specified type could damage the unit and pose a safety hazard.
- 🚫 Connect the AC adapter only to an AC outlet that supplies the rated voltage required by the adapter.

Operation using the rechargeable battery
- ❗ Always use a ZOOM BT-04 rechargeable battery.
- ❗ Carefully study warning indications on batteries before use.
- ❗ Always keep the battery cover closed during use.

Alterations
- 🚫 Do not open the case or modify the product.

⚠ Caution

Product handling
- ❗ Do not drop, bump or apply excessive force to the unit.
- ❗ Be careful not to allow foreign objects or liquids to enter the unit.

Operating environment
- 🚫 Do not use in extremely high or low temperatures.
- 🚫 Do not use near heaters, stoves and other heat sources.
- 🚫 Do not use in very high humidity or where it could be splashed by water.
- 🚫 Do not use in places with frequent vibrations.
- 🚫 Do not use in places with much dust or sand.

AC adapter handling
- ❗ When disconnecting the power plug from an outlet, always pull on the plug itself.
- ❗ Disconnect the power plug from the outlet when the unit will not be used for a long time and whenever there is lightning.

Connection cables and input/output jacks
- ❗ Always turn the power OFF for all equipment before connecting any cables.
- ❗ Always disconnect all connection cables and the AC adapter before moving the unit.

Volume
- 🚫 Do not use at a loud volume for a long time.

Usage Precautions

Interference with other electrical equipment
In consideration of safety, the **AR-96** has been designed to minimize its emission of electromagnetic waves and to suppress interference from external electromagnetic waves. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves could result in interference if placed nearby. If this occurs, place the **AR-96** and the other device farther apart.
With any type of electronic device that uses digital control, including the **AR-96**, electromagnetic interference could cause malfunction, corrupt or destroy data and result in other unexpected trouble. Always use caution.

Cleaning
Use a soft cloth to clean the exterior of the unit if it becomes dirty. If necessary, use a damp cloth that has been wrung out well to wipe it.
If the Ring Controller surface becomes dirty, wipe it with a soft damp cloth that does not shed fibers.
Never use abrasive cleansers, wax or solvents such as alcohol, benzene or paint thinner.

Breakdown and malfunction
If the unit becomes broken or malfunctions, immediately disconnect the AC adapter, turn the power off and disconnect other cables. Contact the store where you bought the unit or ZOOM service with the following information: product model, serial number and specific symptoms of breakdown or malfunction, along with your name, address and telephone number.

Usage and Safety Precautions (continued)

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- Other product names, registered trademarks and company names in this document are the property of their respective companies.

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For optimal performance
The **AR-96** uses Bluetooth LE wireless communication for communication between the Ring Controller and the Base Station. Communication at up to 10 meters is possible in an unobstructed indoor space. If interference from electromagnetic waves or other causes prevent good communication, try the following.
- Bring the Ring Controller and the Base Station closer together.
- Move any obstacles between the Ring Controller and the Base Station.
- Stop unnecessary 2.4GHz transmissions or move interfering devices (including the following) further away.
  - WiFi access points
  - Smartphones and other devices that use WiFi
  - Microwave ovens
  - Audio monitors, lighting controllers and other devices that communicate at 2.4GHz

Warnings and requests regarding safe battery use

Carefully read the following warnings in order to avoid serious injuries, burns, fires and other problems caused by leaking, heat generation, combustion, rupture or accidental swallowing.

⚠ DANGER

- ⊘ Do not charge the lithium-ion battery (BT-04) in any way other than using the **AR-96** and an AD-14.
- ⊘ Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- ⊘ Do not disassemble the battery, put it in fire, or heat it in a microwave or conventional oven.
- ⊘ Do not leave the battery near a fire, in strong sunlight, inside a vehicle that has become hot or in similar conditions. Do not recharge in conditions like these.
- ⊘ Do not carry or store the battery with coins, hairpins or other metal objects.
- ⊘ Do not allow the battery to be wet by any liquid, including water, seawater, milk, soft drinks or soapy water. Do not charge or use a battery that is wet.

⚠ Warning

- ⊘ Do not hit the battery with a hammer or other object. Do not step on it or drop it. Do not otherwise impact or apply force to the battery.
- ⊘ Do not use the battery if it becomes deformed or damaged.
- ⊘ Do not remove or damage the outer seal. Never use a battery that has had all or part of its outer seal removed or a battery that has been torn.

Recycling request
Please recycle batteries to help conserve resources. When discarding used batteries, always cover their terminals and follow all laws and regulations that are applicable to the location.

Usage and Safety Precautions (continued)

FCC regulation warning (for U.S.A.)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
· **Reorient or relocate the receiving antenna.**
· **Increase the separation between the equipment and receiver.**
· **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
· **Consult the dealer or an experienced radio/ TV technician for help.**

For EU Countries

C E   **Declaration of Conformity**

Disposal of Old Electrical & Electronic Equipment (Applicable in European countries with separate collection systems)

Products and batteries that have been marked with the symbol of a crossed-out wheeled waste bin must not be disposed of with household waste.
Old electrical/electronic equipment and batteries should be recycled at facilities that are able to process them and their byproducts.
Contact the local government for information about nearby recycling facilities. Conducting recycling and waste disposal properly helps conserve resources and prevents harmful impacts on human health and the environment.

For U.S.A. and CANADA

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

For CANADA

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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'IC. Cet équipement émet une énergie RF très faible qui est considérée conforme sans évaluation du débit d'absorption spécifique (DAS).

Label is located at the bottom of the unit.

The contents of this document and the specifications of the product could be changed without notice.

Introduction

Thank you very much for purchasing a ZOOM Aero RhythmTrak **AR-96**. The **AR-96** has the following features.

• Loop-shaped controller

The loop-shaped Ring Controller makes inputting loop sequences intuitive.

• Ring Controller with 3 rows of 32 pads and 5 rows of 32 LEDs

During step input, you can use the 3 rows of pads to input 3 instruments at the same time. In addition, the multicolor LEDs allow you to see the input status of up to five instruments at a glance.

Furthermore, each pad row can be used separately for real-time input, allowing diverse performance options.

• Ring Controller can be removed from Base Station

The Ring Controller can be removed from the Base Station to perform with it in hand. You can now realize entertaining performances in ways that are not possible with conventional rhythm machines.

•Accelerometer built into the Ring Controller

You can control effect parameters by tilting the Ring Controller. Enjoy a new feeling of controlling sound with your body.

• Automatic detection of the grip area

The grip area setting function can prevent misoperation when holding the Ring Controller during performances.

The position can be set easily when holding it in the most comfortable position.

• The Ring Controller and Base Station connect with Bluetooth LE

The Ring Controller and Base Station connect wirelessly using Bluetooth LE. Power consumption is low, so use for long periods of time is possible.

In addition, the Ring Controller can be independently connected to Mac computers and iOS devices to be used as a multifunction MIDI controller.

• Built-in sound sources can be edited in various ways

The sounds included in the **AR-96** have various setting parameters that increase their tonal ranges.

Each of the sound parameters can be set easily on an icon-based editor screen.

In addition, each kit can use the sounds of up to 33 instruments (16 simultaneous voices), allowing the creation of rich musical pieces.

• More than 400 PCM sound sources and 70 synthesizer oscillator types built-in

From the rich selection of sound sources, you will be able to find sounds that fit your image of the music you want to make.

The sounds are organized by categories so you can find them quickly.

• Various creation modes

Create music using different modes for different purposes. Build patterns one step at a time in STEP mode. Perform patterns in INST mode. Arrange patterns you have made into complete pieces of music in SONG mode. Assign captured audio to pads and perform with them in LOOPER mode.

• Use up to five effects simultaneously

You can use an insert effect on individual instruments, as well as global filter, delay, reverb and master effects at the same time. This vastly increases sound design possibilities.

• Inputs for electronic instruments and audio devices

You can perform while listening to the input from a connected device and capture input sounds to use as loops.

• Loading of audio files possible

You can use a computer to save WAV files on an SD card and load them for use as loops. (An SD card (not included) is required.)

• Headphone output independent from other outputs

The second stereo output allows you to output a metronome just to the headphones, for example.

Explanation of terms

Pattern

This is a short musical part of several bars. The **AR-96** has preset patterns that cover a variety of musical genres.

Song

This is a combination of multiple patterns that form a single musical piece.

Step

These are the smallest parts of patterns. Input sounds in steps when inputting a sequence.

Sequence

A sequence combines the data for the various scales and tones used for the sounds in the melodies and rhythms in the patterns.
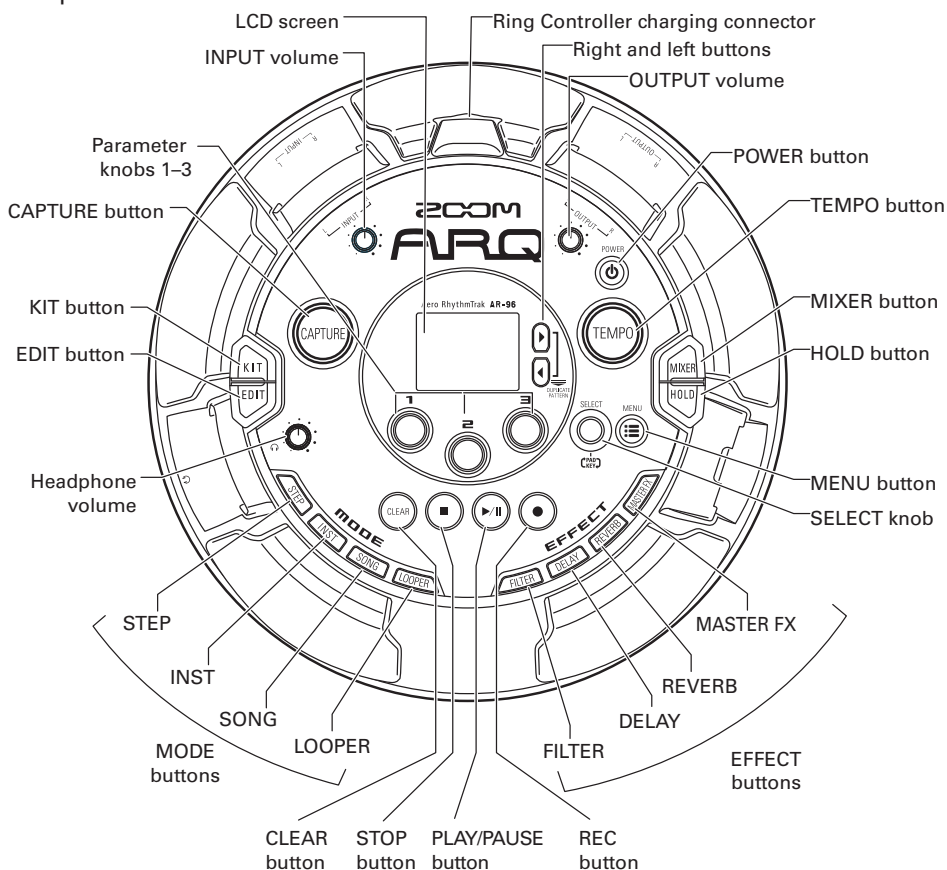
Kit

This is a set of sounds, which can include drum sets, percussion instruments, basses and synthesizers, for example. By changing the kit, you can easily use sounds that suit different musical genres and applications. The **AR-96** has preset kits organized by genre.

Overview

Names of parts

Base Station

■ Top

LCD screen
Ring Controller charging connector
INPUT volume
Right and left buttons
OUTPUT volume
Parameter knobs 1–3
POWER button
CAPTURE button
TEMPO button
KIT button
MIXER button
EDIT button
HOLD button
Headphone volume
MENU button
SELECT knob
STEP
MASTER FX
INST
REVERB
SONG
DELAY
MODE buttons
LOOPER
FILTER
EFFECT buttons
CLEAR button
STOP button
PLAY/PAUSE button
REC button

Names of parts (continued)

■ Left side

■ Right side

INPUT jack

OUTPUT jack

External power jack

USB jack

Headphone jack

SD card slot
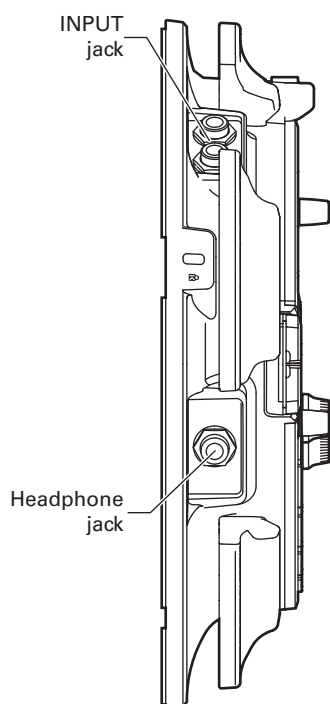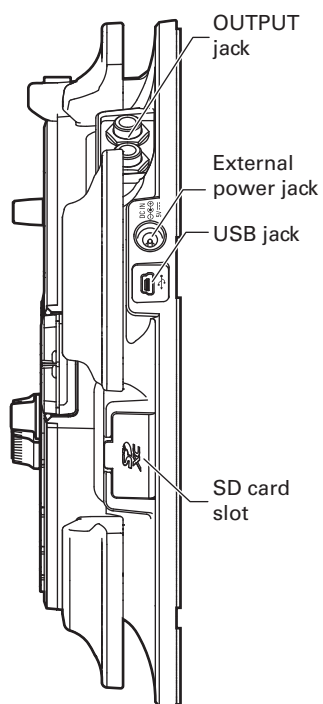
Names of parts (continued)

Ring Controller

(Side)
△ button
▽ button

SETUP button

GRIP button

Pads

Charging connector

(Bottom)
DELAY button
FILTER button

(Bottom)
MASTER FX button
REVERB button

POWER button

STOP button

(Side)
PLAY/PAUSE button
REC button
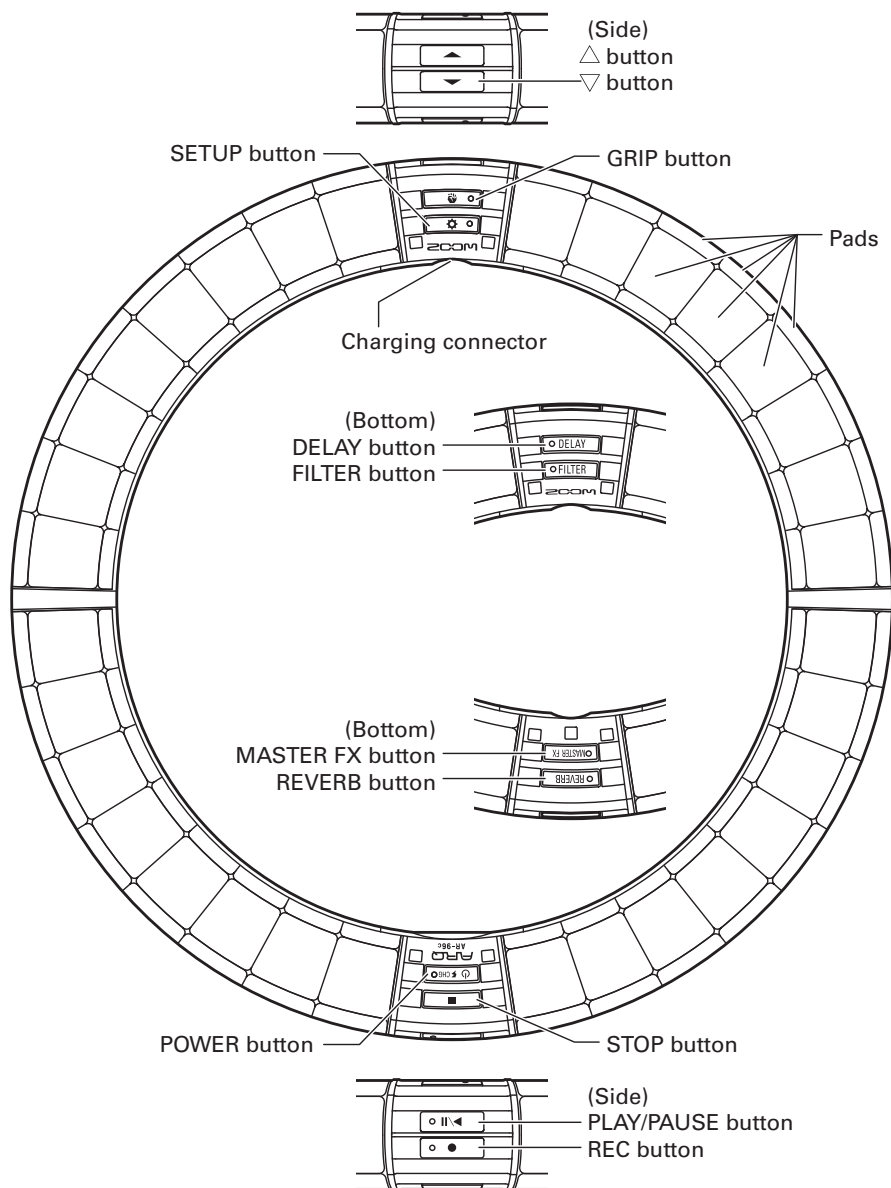
HINT

- You can use the Ring Controller buttons for the same operations as the Base Station buttons.
- The Ring Controller ⬍ corresponds to the Base Station ⦿.

Using the AR-96

The **AR-96** consists of a Base Station and a Ring Controller.

Ring Controller
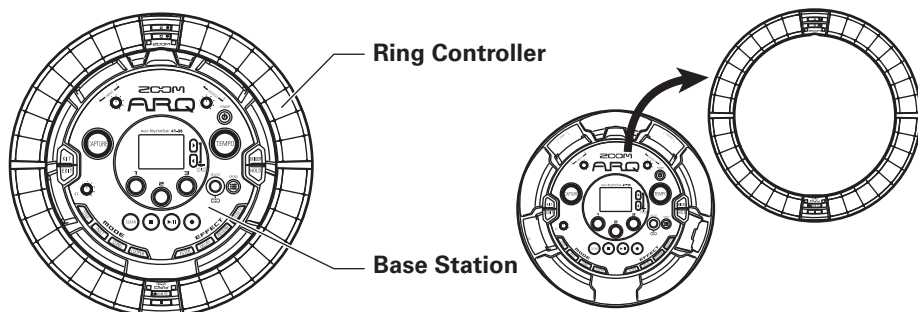
Base Station

With the Base Station, you can edit tones, create songs and save them, for example. Use the Ring Controller for input when creating songs.

Since the Ring Controller can be detached from the Base Station, you can hold it in your hand and play it like an instrument. You can also connect it wirelessly to a Mac computer or iOS device and use it as a MIDI controller.

The Ring Controller includes an LED matrix with 5 rows of 32 blocks (3 rows with pads and 2 rows for display only). Placing a two-dimensional matrix on the surface of a three-dimensional hoop enables confirmation and operation of all steps in a compact form.
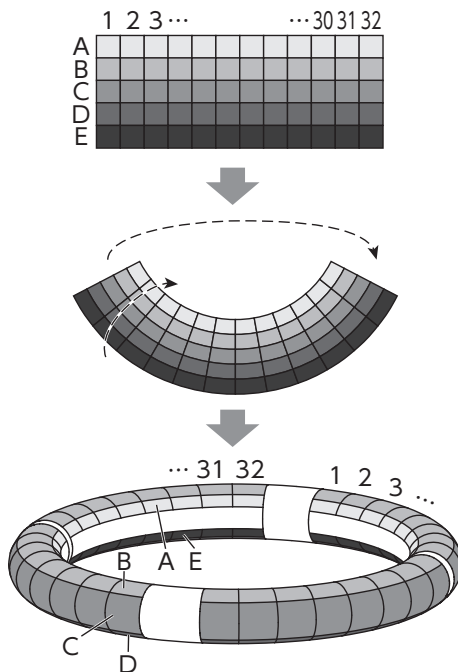
Ring Controller overview

The **AR-96** Controller surface has 5 ring-shaped areas. The top, side and bottom rings each have 32 pressure-sensitive pads.

Using these pads, you can input and edit songs and perform in real-time, for example.

Top inner ring
LED indicators
(no input)

Bottom inner ring
LED indicators
(no input)

Top ring
Pressure-sensitive
pads for input

Bottom ring
Pressure-sensitive
pads for input

Side ring
Pressure-sensitive
pads for input

Pad locations
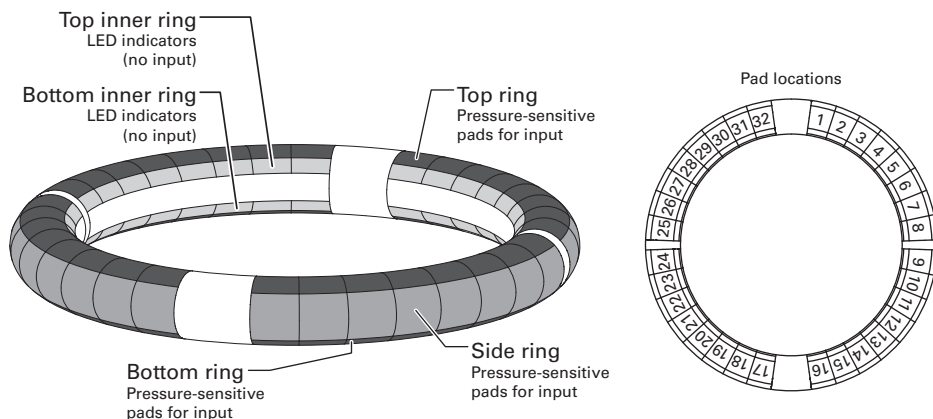
Assignment of functions

Various functions are assigned to the Ring Controller rings and pads according to the operation status and mode.

Example: In STEP mode PAD layout, the rings display 5 different instrument sequences (3 when set to Guideline display), and each pad and indicator corresponds to a step between 1 and 32.

Step
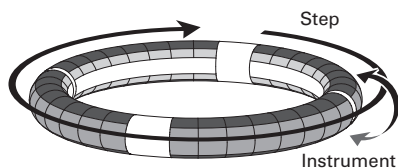
Instrument

Example: In INST mode PAD layout, each pad controls 1 of 32 instruments with each ring assigned to a different parameter setting.

Instrument

Ring parameters
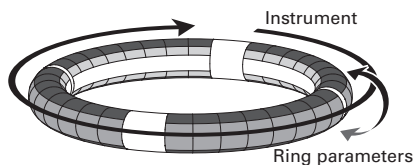
HINT

Since input procedures differ for each mode, see the explanation pages for each operation for details.

Playback position

During playback of a pattern or song, for example, the LEDs of the top and bottom inner rings light green at the step currently playing.

In addition, in INST mode and during other real-time input, the LEDs light red.
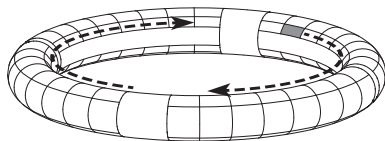
Guideline

In STEP mode, the LEDs of the top and bottom inner rings can be set to light for each beat to assist in step recording.

See the Operation Manual for setting instructions.
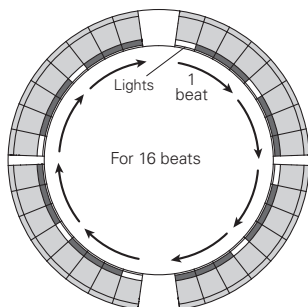
Grip area

You can set a grip area that does not respond to touch in order to prevent pads from being pressed unintentionally when using the Ring Controller separately from the Base Station. The grip area can be set automatically by holding the Ring Controller after pressing ⬚.
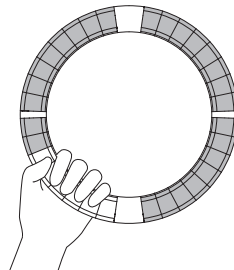
Connecting other devices

Audio source for
capturing recordings

Mixer, audio system or
other playback equipment

INPUT

OUTPUT

AC adapter

Headphones

AR-96

Computer
(USB connection)
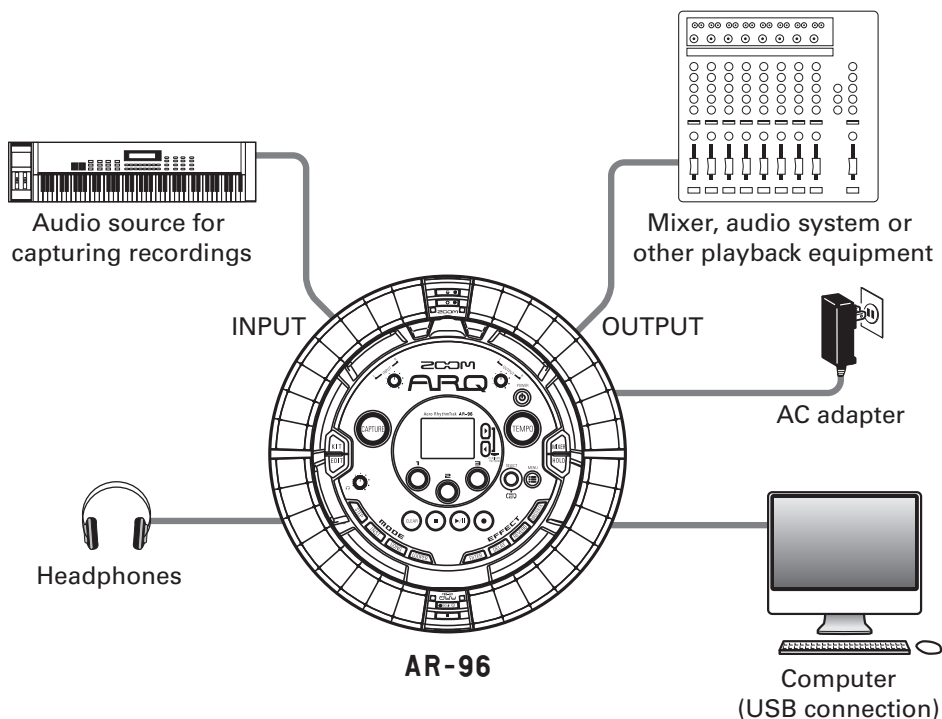
Switching modes

With the **AR-96**, you can create patterns and combine multiple patterns to create songs.

Editing with the **AR-96** mainly uses the following four modes. By switching between these modes, you can alternate between creating patterns and creating songs.

```
                 MODE
    STEP
        INST    SONG    LOOPER
```

The two modes for creating patterns are STEP and INST.

· In STEP mode, you can record instrument sounds one step at a time to create patterns.
· In INST mode, and you can record a

performance as a pattern by playing the pads in real-time.

Use SONG and LOOPER modes to create songs.

· In SONG mode, create songs by playing and changing patterns in real-time and recording the results.
· In LOOPER mode, use audio data captured from the input of devices connected to the INPUT jacks, patterns and songs, as well as WAV files loaded from SD cards, for example, as materials to build loop sequences and create songs.

Pattern creation
Create and save patterns

STEP mode
Create patterns by inputting one step at a time

INST mode
Record patterns by playing in real time

SONG mode
Combine patterns that have already been made to create songs

LOOPER mode
Create songs using loops from other songs, captured external input and PCM audio files

Song creation
Combine patterns and other sources to create songs

Instrument overview

The **AR-96** can use up to 33 sound sources in a single kit. Each of these is called an instrument and produces sound from waveform data, such as a drum hit, or from the built-in synthesizer. You can choose from hundreds of types of sounds and assign ones you like to each instrument.

In STEP or INST mode, press $\overset{\text{SELECT}}{\odot}$ to switch between the two following types of instrument layouts. Up to 16 sounds can be generated simultaneously in either layout.

PAD layout	In this mode, you can assign different instruments to as many as 32 pads and play them. In addition to being useful for playing drums, you can also assign the synthesizer to instruments.
KEY layout	Use this mode to use a musical scale to play one instrument. The pads become like a keyboard in a musical scale order. The Ring Controller LEDs light white for white keyboard keys and blue for black keyboard keys. The scale can also be set to major or minor, for example. This is useful for playing synthesizer parts, but can also be used to play snares and other percussion instruments with a musical scale.

Assignments of instruments to the Ring Controller are different for STEP and INST modes as well as for PAD and KEY layouts.

16
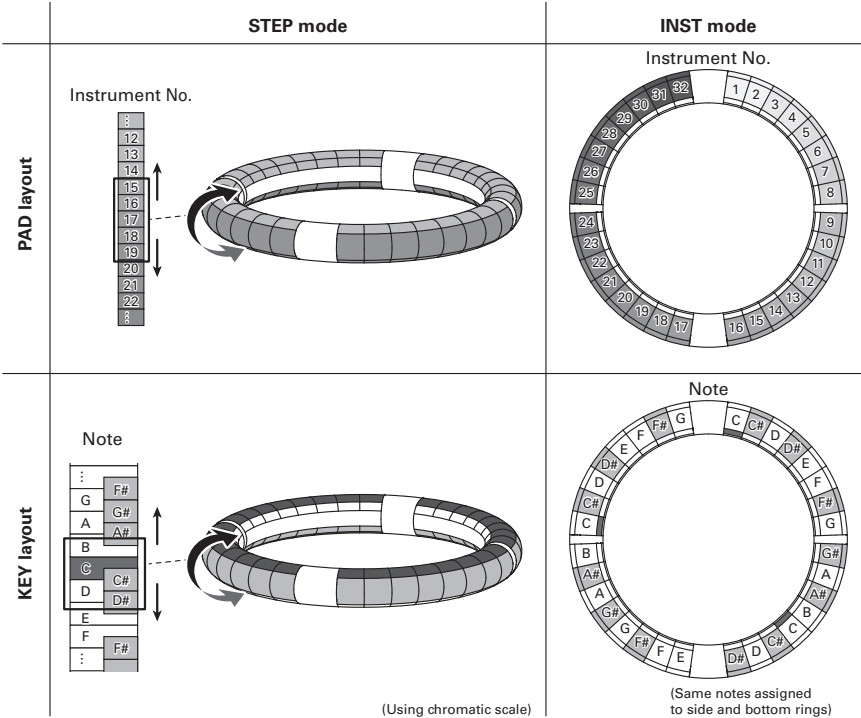
Preparations

Turning the power on and off

Base Station power

1. Connect the included AC adapter to the Base Station.
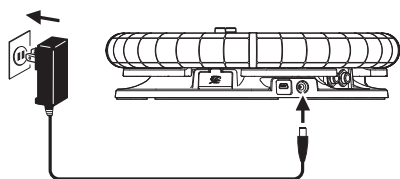
2. Press and hold POWER ⏻ on the Base Station.

3. Press and hold POWER ⏻ to turn the power OFF.

HINT

When the Ring Controller is asleep and connected to the Base Station, turning the Base Station power ON/OFF will also turn the Ring Controller ON/OFF.

NOTE

Use the AC adapter to power the **AR-96** even when it is connected to a computer or other device by USB.

Ring Controller power

■ Charging the Ring Controller

1. Place the Ring Controller on the Base Station.
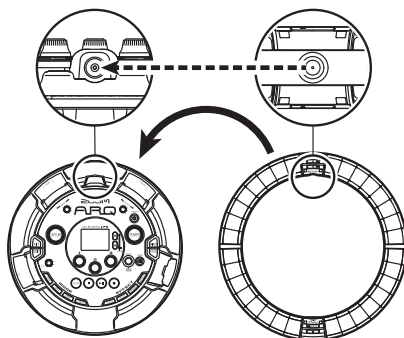
Align their charging connectors before placement.
Charging will start and the Ring Controller ⏻ ⚡CHG○ LED will light.

Charging (Power off or asleep)	Red
Charging during use	Orange
Using battery (Remaining battery charge at least 12%)	Green
Using battery (Remaining battery charge less than 12%)	Blinking green

---

HINT

Even when the Base Station is OFF, if it is connected to a power supply, it can recharge the Ring Controller.

17

Turning the power on and off (continued)

■ Putting the Ring Controller to sleep

When the Ring Controller is charging, the power will not turn OFF. Instead, it will go to sleep.

1. ○ CONTROLLER Press and hold ⏻ ⚡CHG○.

2. ○ CONTROLLER Press and hold ⏻ ⚡CHG○ to wake it from sleep.

HINT

When asleep, the Ring Controller ⏻ ⚡CHG○ LED will light red (charging) or blink red (not charging).

■ Turn the Ring Controller OFF

To turn the Ring Controller OFF, follow these steps when it is not charging.

1. ○ CONTROLLER Press and hold ⏻ ⚡CHG○ for at least 7 seconds when not charging.

2. ○ CONTROLLER Press and hold ⏻ ⚡CHG○ to turn the power on.

NOTE

• When the power is OFF, the ⏻ ⚡CHG○ LED becomes unlit.

• Even if the power is OFF, the Ring Controller will automatically enter sleep mode when charging starts.

Loading SD cards

■ Loading and removing SD cards

1. Turn the power off.

....

2. Open the SD card slot cover on the

Base Station.

....

3. Insert the SD card into the slot.

To eject an SD card:
Push the card further into the slot and
then pull it out.
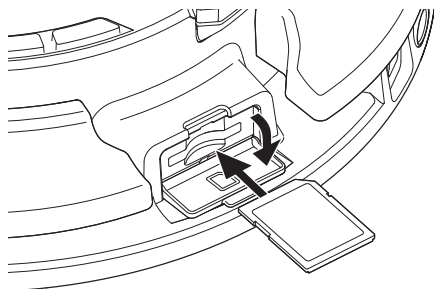
NOTE

• If no SD card is loaded in the **AR-96**, cap-
tured data cannot be saved and patterns and
songs that are created cannot be backed up.

• When inserting an SD card, be sure to insert
the correct end with the top side up as
shown.

• Before using SD cards that have just been
purchased or that have been formatted on
a computer, they must be formatted by the
AR-96. See the Operation Manual for for-
matting procedures.

INST mode

INST mode overview

You can tap pads to perform as you like. You can also record performances in real-time to create patterns.

In this mode, each pad around the Ring Controller corresponds to a single instrument (PAD layout) or note (KEY layout).

PAD layout

Instrument 1	
Instrument 2	
Instrument 3	
Instrument 4	
Instrument 5	
⋮	
Instrument 31	
Instrument 32	

Instrument
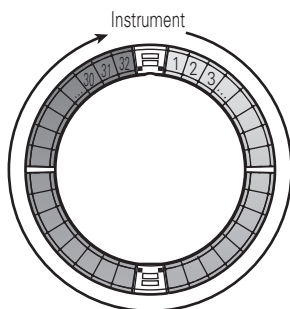
KEY layout
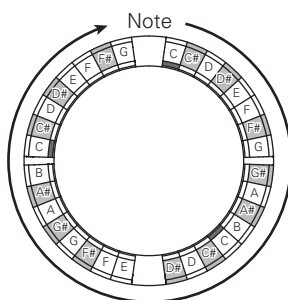
Note

The same notes are assigned to the side and bottom rings

Different parameter settings are assigned to top, side and bottom rings, so they can be used for different tones.

Same instrument — Different parameters
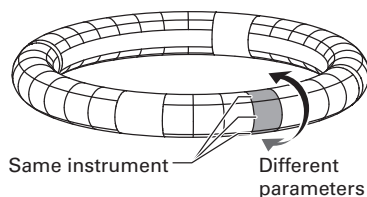
Pattern creation in PAD layout:

After starting real-time input, tap pads for an instrument to input it.

The pattern will start loop playback, and you can overdub as many times as you like.

Bar 1 Bar 2

| Instrument 1 |
| Instrument 2 |
| Instrument 3 |
| ⋮ |
| Instrument 32 |

Instrument

Real-time input (loop playback)
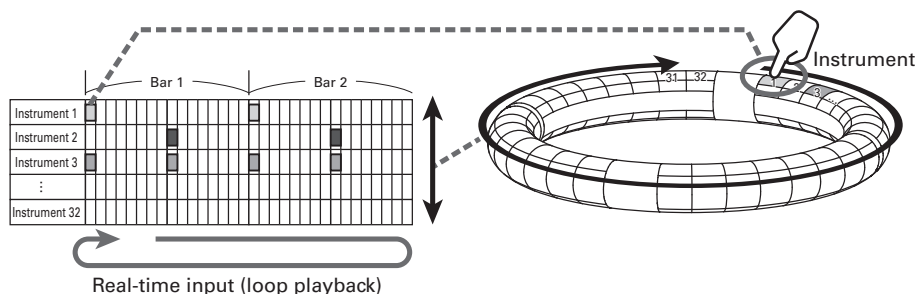
INST mode overview (continued)

Pattern creation in KEY layout:

After starting real-time input, tap pads for notes to input them. The pattern will start loop playback, and you can overdub as many times as you like (when set to polyphonic).

Real-time input (loop playback)
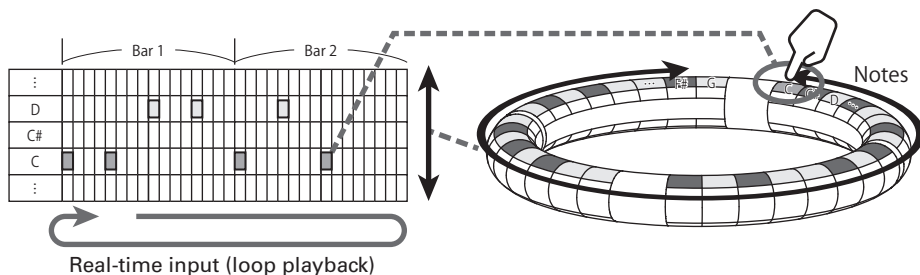
Operation procedure

Enter INST mode

Press [INST] to enter INST mode.

Select a pattern

Use ▷/◁ to select a pattern number.

Select a sound set

Press [KIT], and use ⊙ SELECT to select a sound set (kit) that suits the pattern being made.

You can press [EDIT] to edit the sounds.

Check the instruments

Play the pads to listen to the sounds of the input instruments. The inner ring LED lights for the last tapped pad, and the name of the instrument and its parameters appear on the display.
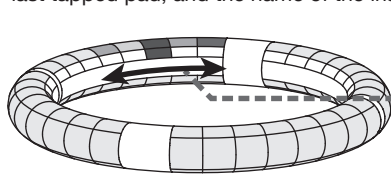
To use KEY layout for input, press ⊙ SELECT to change the mode.
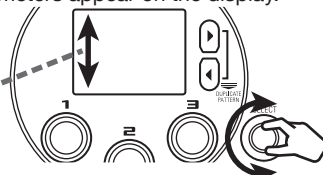
You can also use ⊙ SELECT to check the instruments.

Operation procedure (continued)

Start input

Press ⏺ to enter standby, and press ▶❚❚ to start real-time input.
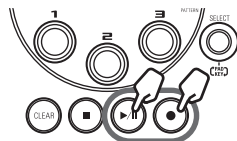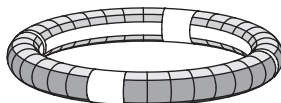
Start real-time input

In PAD layout:
Tap the pads of the instrument to input it in time with the looping pattern that is playing back.

Instrument

Input in real time

	Bar 1		Bar 2	
Instrument 1				
Instrument 2				
Instrument 3				
⋮				
Instrument 32				
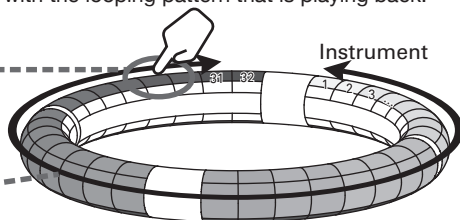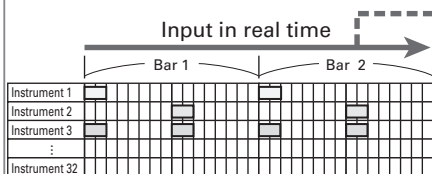
In KEY layout:
Tap the pads of notes to input them in time with the looping pattern that is playing back.

Notes

	Bar 1		Bar 2	
⋮				
D				
C#				
C				
⋮				
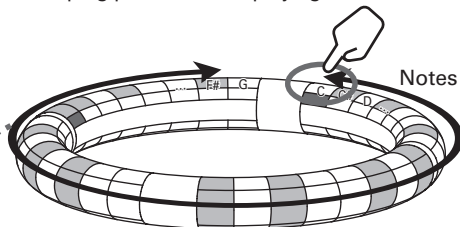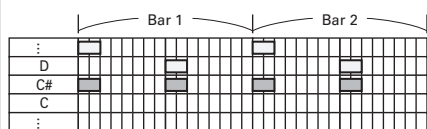
End input

Press ▪ to end real-time input.
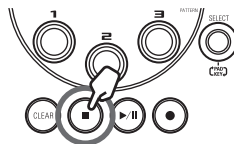
STEP mode

STEP mode overview

In STEP mode, you can create patterns by inputting them one step at a time.

In this mode, each pad around the Ring Controller corresponds to a single sequential step.
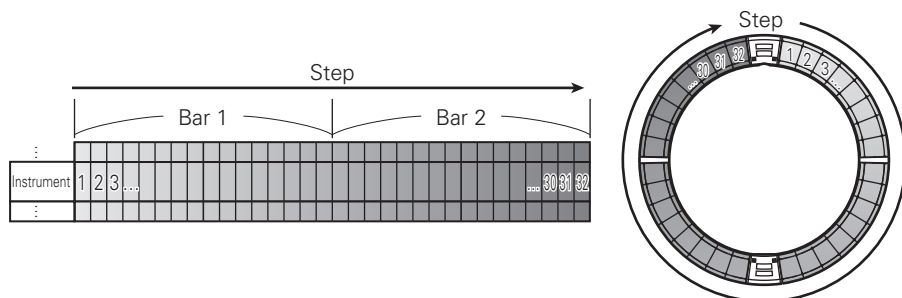
Since the Ring Controller rings are divided into 32 steps, you can input up to two musical bars (①) at a time (when the smallest step is a 16th note).

① Input first instrument

Bar 2

Bar 1
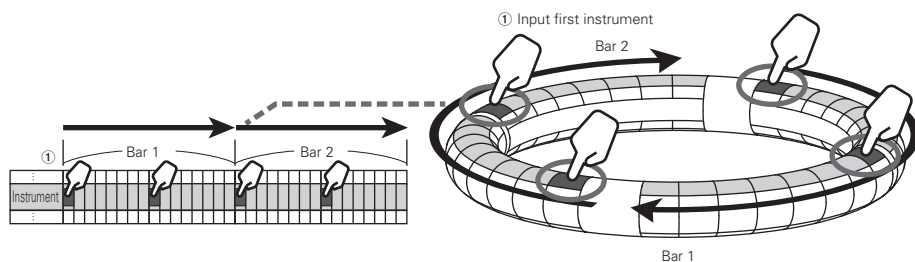
STEP mode overview (continued)

In PAD layout:

The 5 rings (3 when set to Guideline display) on the Ring Controller each show a different instrument. You can use ⊙ to change which instruments are shown by which rings (②).

Since multiple instruments can be shown by the Ring Controller, you can check instruments that have already been input as you input the next instrument (③).

Instrument display

③ Input next instrument

②

Bar 1   Bar 2

③

Instrument

② Change display
Move the instrument input first to the side ring
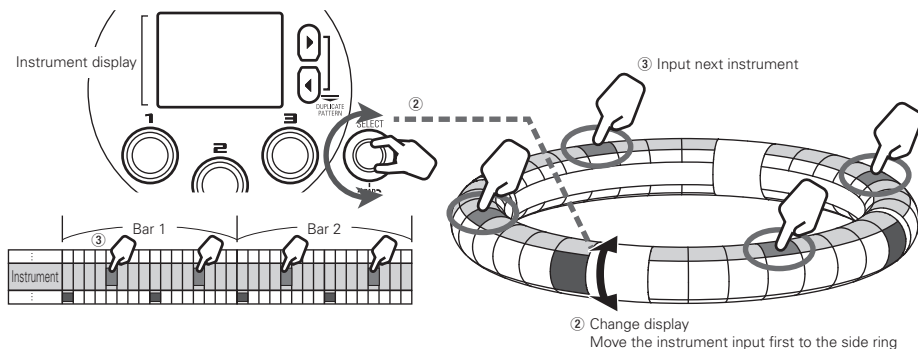
In KEY layout:

⊙ to select the note to input.

Note display

Change notes
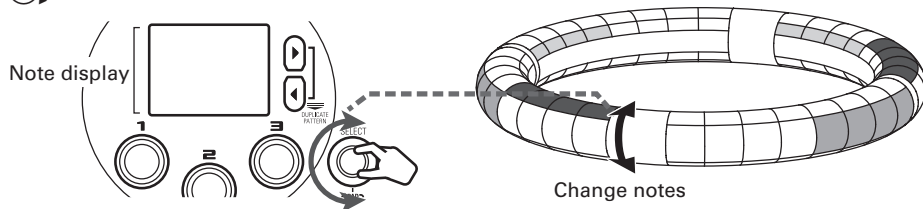
Operation procedure

Enter STEP mode

Press ⟨STEP⟩ to enter STEP mode.

▼

Select a pattern

Use 🔼🔽 to select a pattern number.

▼

Select a sound set

Press 🔘ᴷᴵᵀ, and use 🔘 SELECT to select a sound set (kit)
that suits the pattern being made.

You can press ⟦ᴱᴰᴵᵀ⟧ to edit the sounds.

▼

Select the instrument to input

Use 🔘 SELECT to select the instrument to use for input from the 32 instruments. That instrument moves to the top ring of the Ring Controller.
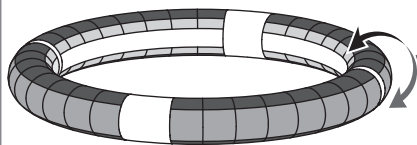
② The instrument color shown on the ring moves   ① Use 🔘 SELECT to select the input instrument
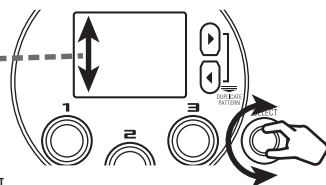
To use KEY layout for input, press 🔘 SELECT to change the mode.

▼

After finishing, switch to a different instrument

Step input

Tap pads to input the sound at those points.

Bar 2

Bar 1   Bar 2

Instrument

Bar 1
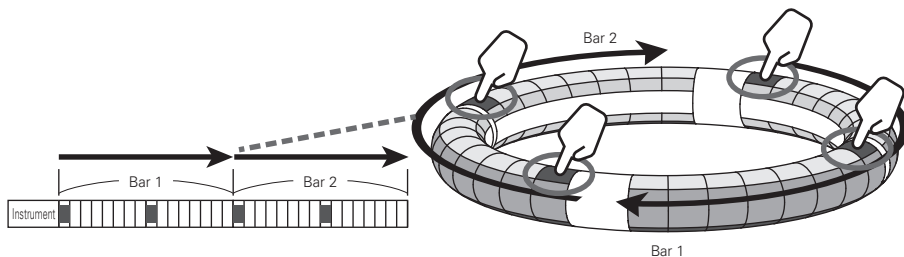
SONG mode

SONG mode overview

In SONG mode, you can combine multiple patterns that you have created into one complete song.
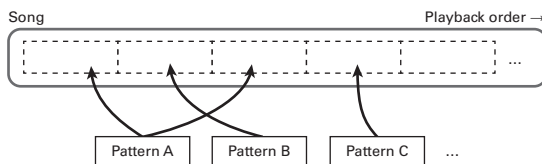
From all the patterns, a range of 96 patterns is assigned to the pads (32 each on top, side and bottom rings). You can press ⟨▷◁⟩ to change the assigned range in ring units. Playing a pad starts playback of its assigned pattern.
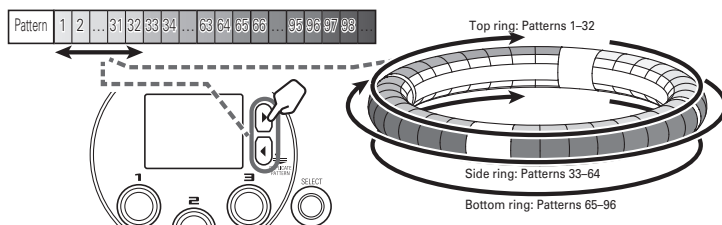
After completing preparation, start real-time input and tap pads to play their patterns.
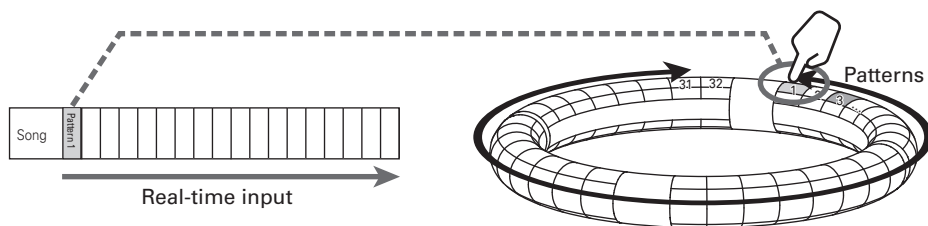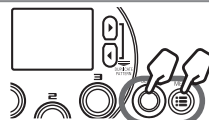
Operation procedure

Enter SONG mode

Press [SONG] to enter SONG mode.

Select a song

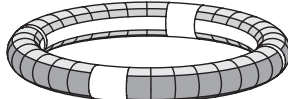Press (≣) to open the song sequence list, and use (◯) and (◯) to select a song

Select a pattern to play

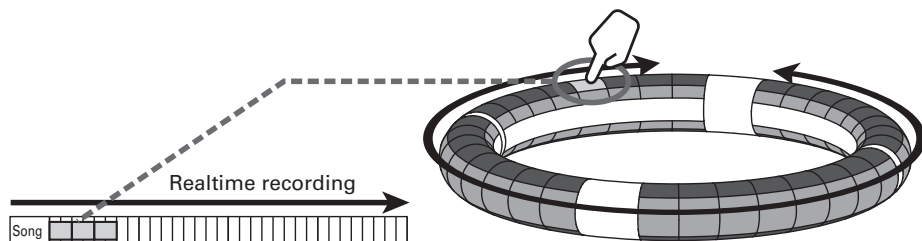Tap a pad or use (◯) to change the selected pattern and select the pattern to play.
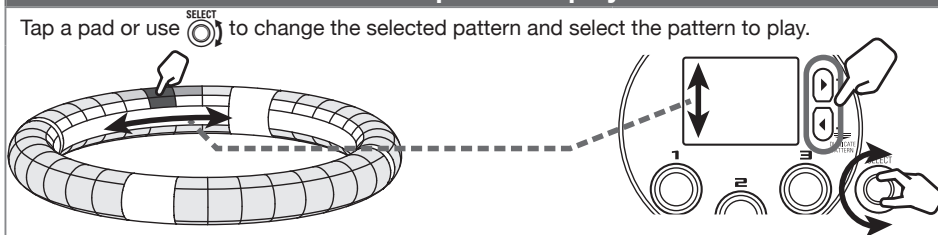
Start input

Press (⬤) to start real-time input.
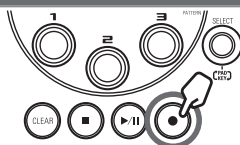
Create a song

Tap pads for patterns to play them and add them to the song in real time.

Realtime recording

Song

### End input

Press (■) to end song input.

Capturing audio (recording)

Capture overview

The **AR-96** can capture (record) audio it is playing back and audio input through its INPUT jacks in every mode.

The contents of WAV files saved on an SD card can also be added as captured materials.

You can use captured audio in LOOPER mode.

Capture external input

Capture output audio

Patterns, songs, looper sequences

Add audio files
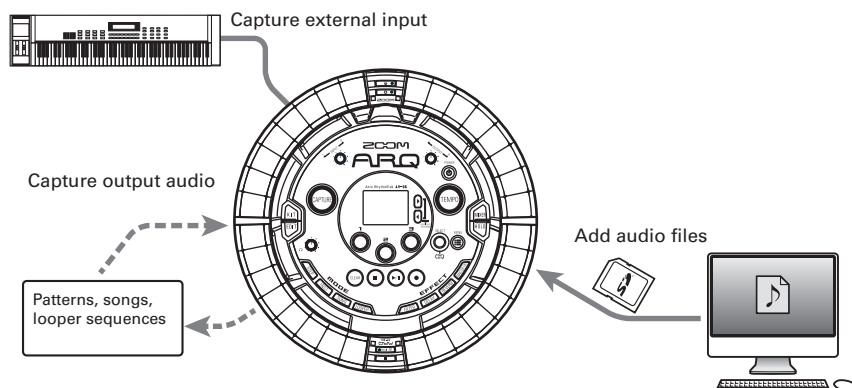
| HINT |
| --- |
| Up to 96 captured recordings can be added. |

NOTE
Captured audio data is saved on the SD card. Be aware that you will not be able to use the captured recordings if you remove the SD card or replace it with a different SD card.

Operation procedure
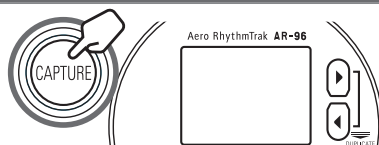
Play the material to capture

Play a pattern or song, for example, that you want to use as a captured recording.

You can also capture audio sources input through the INPUT jacks, and load audio files saved on SD cards.
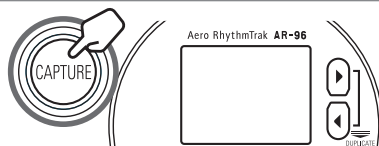

External input

Audio files

Play patterns, songs, etc.
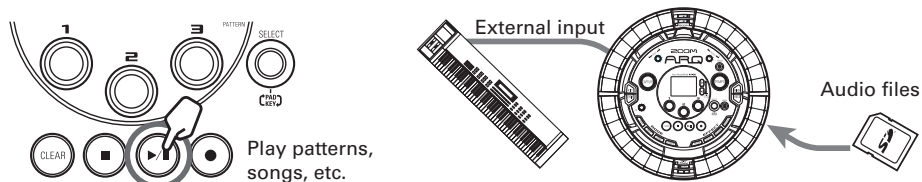
Start capturing

Press (CAPTURE) to start capturing.

Aero RhythmTrak **AR-96**

Stop capturing

Press (CAPTURE) again to stop capturing.

On the setting screen that appears after capturing stops, you can set the range used by the looper, for example.

Aero RhythmTrak **AR-96**
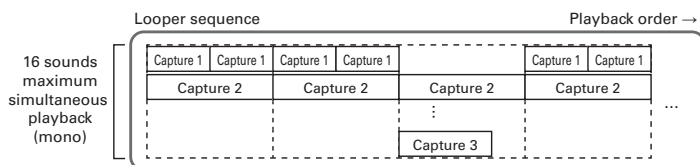
Save

Press (≡) to save the captured audio.

Set the name and number of the captured audio on the screen that appears.
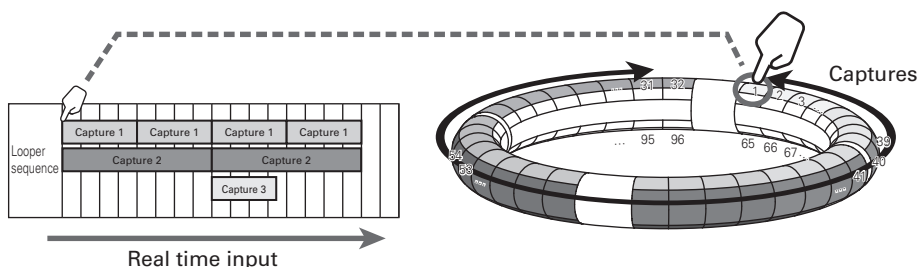
LOOPER mode

LOOPER mode overview

In LOOPER mode, you can combine patterns and songs that have already been created, input from the INPUT jacks, WAV files and other captured audio into a single song as a looper sequence.

Each of the top, side and bottom rings of the Ring Controller can have 32 captured recordings assigned to it. Playing a pad starts playback of its assigned captured recording.
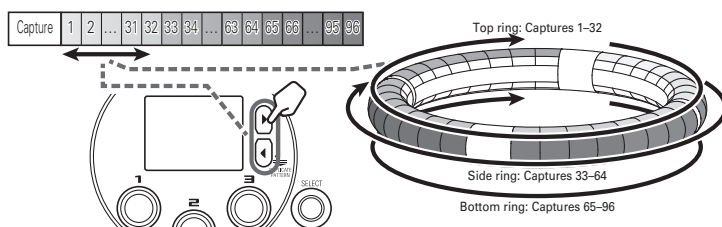
After completing preparation, start real-time input and tap pads to play their captured recordings. Up to 16 captured mono recordings can be played back at the same time.

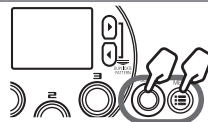| HINT |
| --- |
| See "Capturing audio" (→ P. 28) for how to create captured recordings. |

Operation procedure

Enter LOOPER mode

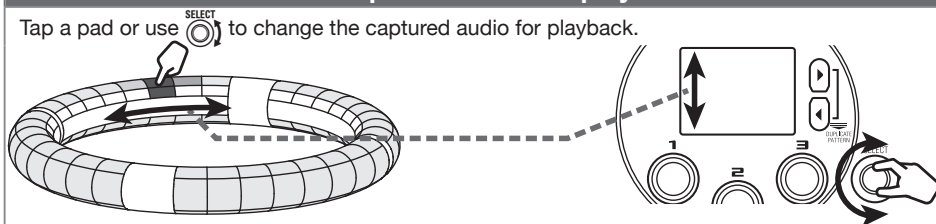Press (LOOPER) to enter LOOPER mode.

Select the looper sequence

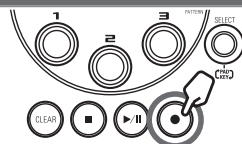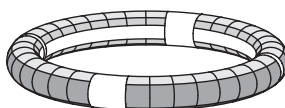Press (≣) to open the looper sequence list, and use (○) and (○) to select a loop sequence.

Select captured audio for playback

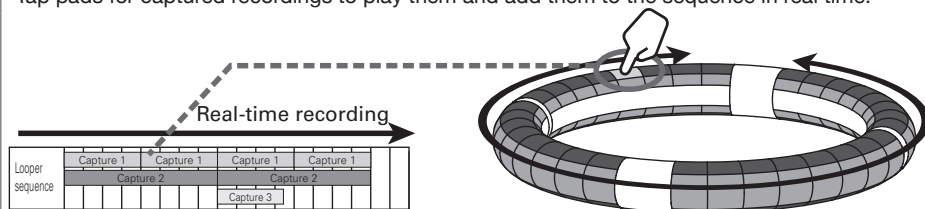Tap a pad or use (○) to change the captured audio for playback.

Start input

Press (●) to start real-time input.

Create a looper sequence

Tap pads for captured recordings to play them and add them to the sequence in real time.

Real-time recording

Looper sequence					
Capture 1	Capture 1	Capture 1	Capture 1		
Capture 2		Capture 2			
	Capture 3				

End input

Press (■) to end looper sequence input.

Other functions

Editing sounds

Press $\boxed{\text{EDIT}}$ to edit sounds by changing settings related to oscillator and noise types, insert effects, level, pan, send effects, LFOs and envelopes, for example.

You can also set Ring Controller display settings in SONG mode and capture settings in LOOPER mode.

Effects
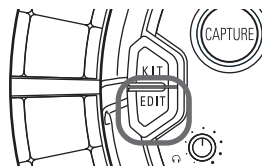
Press $\boxed{\text{FILTER}}$, $\boxed{\text{DELAY}}$, $\boxed{\text{REVERB}}$ or $\boxed{\text{MASTER FX}}$ to apply the filter, delay, reverb or master effect to a pattern, song or looper sequence.
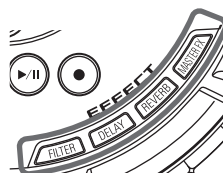
Mixer

Press $\boxed{\text{MIXER}}$ when creating or playing a pattern, song or loop to adjust the mix of the instruments, as well as to mute, solo and use other settings.

HINT
See the Operation Manual for detailed information about all the functions.

Troubleshooting

If you think that the **AR-96** is operating strangely, check the following items first.

■ **There is no sound or it is very quiet**
- Confirm that the power is ON.
- Check the connections.
- Adjust the levels of the instruments.
- Adjust mixer group levels.
- Confirm that it is not muted.
- Check the headphone and OUTPUT volume levels.

■ **There is a lot of noise**
- Confirm that nothing is wrong with the shielded cable.
- Use a genuine ZOOM AC adapter.

■ **Effects are not working**
- Confirm that the effect is properly assigned to the instrument.
- Effects are only enabled when their individual buttons are being pressed. Use ⬡ to keep an effect enabled even after releasing its button.

■ **The Ring Controller does not work well**
- Confirm that its power is ON.
- Confirm its connection with the Base Station.
- Adjust the pad sensitivity.
- Confirm the grip setting.
- If using it as a MIDI controller, check the Mac or iOS device settings.

HINT

See the Operation Manual for detailed information about all the functions.

Specifications

Base Station

Inputs	INPUT L/R	Connector type	Standard mono phone jacks (unbalanced)
		Input gain	+10 to −65 dB
		Input impedance	50 kΩ
Outputs	OUTPUT L/R	Connector type	Standard mono phone jacks (unbalanced)
		Output impedance	200 Ω
	PHONES	Connector type	Standard stereo phone jack 20mW × 2 (into 32Ω load)
		Output impedance	10 Ω
Dynamic range			ANALOG IN (AD): 92 dB typ (IHF-A) PHONE OUT (DA): 102 dB typ (IHF-A) MAIN OUT (DA): 106 dB typ (IHF-A)
Recording media			16MB–2GB SD cards, 4GB–32GB SDHC cards, 64GB–128GB SDXC cards
MIDI IN/OUT			USB MIDI or MIDI over Bluetooth LE
Power			5V 1A AC adapter
Power consumption			Base Station: 1.25 W maximum When powering Ring Controller: 4.5 W maximum (including charging current when charging)
External dimensions			260.0 mm (D) × 260.0 mm (W) × 64.0 mm (H)
Weight (main unit only)			990 g
Display	LCD		2.0" full-color LCD (320×240)
Interface	USB 2.0 (standard USB MIDI)	Supported operating systems	Windows 7 (SP1 or later), Windows 8 (including 8.1) or later, Windows 10 Mac OS X 10.8 or later
		Minimum specifications	Chipset that includes USB 2.0 as standard, Intel Core i3 or faster CPU
	MIDI over BLE	Transmission speed	31.25 kbps (±1%) maximum
		Latency (with Ring Controller)	5–12.5 ms

Ring Controller

MIDI IN/OUT			MIDI over Bluetooth LE
Sensors			PAD pressure sensors, 3-axis accelerometer
Power			Lithium polymer rechargeable battery (DC4.2V maximum voltage, 3.7V nominal voltage, 3.7V 450mAh capacity), direct supply from Base Station
Power consumption			When using battery: 2 W maximum
Recharging time			About 2.5 hours
Battery operation time			About 4.5 hours (differs according to use conditions)
External dimensions			280.5 mm (D) × 280.5 mm (W) × 33.5 mm (H)
Weight (main unit only)			540 g
Trigger pads		Number of pads	96
		Velocity curves	4 types
Interface	MIDI over BLE	Supported iOS devices	iPad devices running iOS 8.0 or later
		Supported Macs	Mac OS 10.10.5 Yosemite or later MacBook, iMac and Mac pro series computers that support BLE transmission
		Transmission speed	31.25 kbps (±1%) maximum
		Latency (with Base Station)	5–12.5 ms
		Latency (iOS and Mac OS)	16.25–20 ms