FOSTEX®

8289682100
(564922)

Quick Start Guide

DC-R302

Portable recorder

This manual provides the basics of the DC-R302. Read this before you use the unit for the first time.

For the more detailed information, see the "Owner's manual (details)" that can be downloaded from the Fostex website (www.fostex.com).

SAFETY INSTRUCTIONS

FCC (U.S.A.) & ICES-003 (Canada) INFORMATION

1. IMPORTANT NOTICE
This product, when installed as indicated in the instructions contained in this manual, meets FCC and ICES-003 requirements. Changes or modifications not expressly approved by Fostex Company for compliance could void the user' s authority to operate the equipment. DO NOT MODIFY THIS PRODUCT.

2. IMPORTANT
In order to comply with FCC and ICES-003 requirements, use high quality shielded cables for connection to accessories and / or another products. If any cables are supplied with this product, they MUST be used. Follow all installation instructions. Failure to do so could void your FCC / ICES-003 authorization to use this product in the USA / Canada.

3. NOTE
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

4. Compliance with Part 15 of FCC Rules and Canadian ICES-003.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that many cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Introduction

Thank you very much for purchasing the Fostex DC-R302 portable recorder.
The DC-R302 is a portable stereo recorder with 3-channel audio mixer ideal for DSLR (Digital Single Lens Reflex) video recording. You can record audio to an SD card while feeding it to a DSLR camera. A DSLR camera can be mounted on the top of the unit.

Supplied accessories

The following accessories are supplied with the DC-R302.
• Bracket for camera mounting x 1
• Quick start guide (this manual) x 1

After purchasing the DC-R302, check that all the accessories are included in the package.

Table of contents

Front panel

❶ [PK] indicators (1 through 3)

When an input signal is too loud, this indicator lights in red.
If the indicator lights frequently, set the [GAIN] switch to a more left position.

❷ [GAIN] switches (1 through 3)

Each switch should be set appropriately according to the microphone sensitivity or the volume of an audio source.
If the [PK] indicator lights in red frequently, select a more left position.

❸ [HPF] switches(1 through 3)

When an input signal from the [INPUT] connector contains suppressing wind or other low frequency noise, you can remove it by setting this switch to "80" or "200".

❹ Level controls (1 through 3)

Each level control controls the recording level of the corresponding input signal.
You can check the recording level via the level meter on the display.

❺ [PAN] switches (1 through 3)

Each switch decides the signal's left-right position in stereo for recording. You can select from left (L), center (C) or right (R).

❻ Display

Shows the level meters or other various information.
In the menu mode, the display shows a menu item.

❼ [LIMITER] indicator

When the recording signal is too loud, the internal limiter automatically reduces the volume to prevent distortion.
This indicator lights in yellow when the limiter is active.
If the indicator lights frequently, reduce the level control.

❽ Status indicator

Lights in red during recording.
Lights in green during playback.

❾ [REC] key

Starts or stops recording.
While the recorder is stopped, pressing this key starts recording.
During recording, pressing this key stops recording.

❿ [■] ([EXIT]) key

Stops playback.
In the menu mode, it acts as the [EXIT] key.

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⑪ [▶] ([ENTER]) key

Starts playback while the recorder is stopped.
In the menu mode, it acts as the [ENTER] key.

⑫ [◀◀] ([-/DOWN]) key

When the recorder is stopped, pressing the key briefly skips back to the beginning of the current or previous file, while holding down the key fast-rewinds the file.
During playback, pressing the key briefly skips to the beginning of the file, while holding down the key executes backward cueing playback.
During recording, the key is disabled.
In the menu mode, the key is used for changing the setting.

⑬ [▶▶] ([+/UP]) key function:

When the recorder is stopped, pressing the key briefly skips forward to the beginning of the next file, while holding down the key fast-forwards the file.
During playback, pressing the key briefly skips to the beginning of the next file, while holding down the key executes forward cueing playback.
During recording, the key is disabled.
In the menu mode, the key is used for changing the setting.

⑭ [DISP] ([MENU]) key

Pressing the key briefly changes the displayed item.
Pressing the key for more than two seconds enters the menu mode. In the menu mode, pressing the key changes the menu item.

⑮ [LIGHT] key

Pressing the key briefly turns on the display backlight for two seconds and then turns off.
By pressing the key more than two seconds, the display backlight keeps lighting until you press the key more than two seconds again.

⑯ [VOLUME] control

Controls the headphone volume.

⑰ Monitor source selector

Selects the headphone monitor source from the followings.
RTN: the [RTN IN] signal
L: recorder's left track
S: recorder's left and right tracks in stereo
R: recorder's right track

<div style="border:1px solid black;text-align:center">

Left side panel

</div>
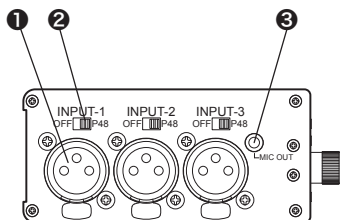
❶ [INPUT] connectors (1 through 3)

Used for connecting to microphones, etc.
You should set the [GAIN] switch appropriately according to the input source.

❷ Phantom power switches (1 through 3)

When connecting a condenser microphone requiring 48V phantom power to the [INPUT] connector, "P48" should be selected.

<Note>:Do not connect or disconnect a microphone while this switch is set to "P48". A large click noise may be generated.

❸ [MIC OUT] connector

This connector allows sending the same signal as recorder's input signal to the microphone input of a DSLR camera.
It also allows remote record start/stop of some DSLR camera.
See "Owner's manual (details)" for detail.

Right side panel
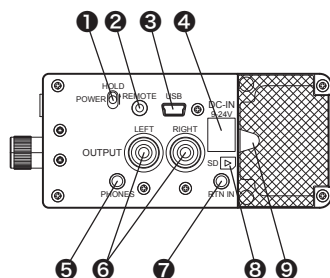
❶ [POWER] switch

Used to turn the power on or off.

While the power is off, you can turn on the power by sliding up and release the switch.

While the power is on, you can turn off the power by sliding up and holding the switch for two seconds.

<Memo>:During playback or recording, you cannot turn off the power.

❷ [REMOTE] connector

By connecting a Panasonic (or equivalent) remote shutter release to this connector, you can start or stop recording using the remote shutter release.

❸ [USB] connector

By connecting to a personal computer using a USB cable, you can transfer audio data, copy audio files, etc. between the unit and a personal computer.

❹ [DC-IN] connector

Provided for connecting the optional AC adaptor (AC12) or an external battery power supply to run the unit.

When a plug is connected to this connector, the internal battery power is disabled.

<Caution>:When you connect or disconnect a plug to this connector, make sure that the power is off.

❺ [PHONES] connector

Provided for connecting headphones for monitoring.

❻ [OUTPUT] connectors (L and R)

These connectors output the recorder's output signals.

❼ [RTN IN] connector

Provided for connecting the stereo output of an external device.

You can monitor the signal received from this connector via headphones.

❽ [SD-CARD] slot

This slot is located inside the battery compartment cover.

To set an SD card to the slot, hold an SD card with the label side facing to the battery compartment, and press the card into the slot until you hear a click.

To remove an SD card, firmly press the card into the slot and release it. The card should pop partially out of the slot. Remove the card from the slot.

<Memo>:You can use the following SD card types with the unit.

  SD, SDHC, MiniSD, MiniSDHC,
  MicroSD, MicroSDHC

* When you use a MiniSD or microSD card, use the appropriate card adaptor.

* You cannot use an SDXC card.

❾ Battery compartment

To run the unit on battery power, set four AA batteries into this compartment. It is recommended to use alkaline or rechargeable nickel hydride batteries.

To remove battery compartment, open the battery compartment cover and pull up the ribbon attached to the battery compartment.

Features and controls

Top panel
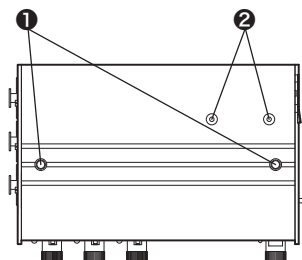
Bottom panel
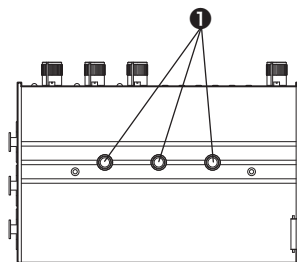
❶ **Screw holes for mounting bracket for camera mounting**

These screw holes are used for fixing the supplied bracket for camera mounting.
The bracket provides a screw for fixing a camera.

❷ **Infrared LEDs**

These LEDs are used for controlling record start/stop of a DSLR camera which supports infrared remote.

❶ **Tripod screw holes**
Used for mounting the unit on a camera tripod, etc.

Basic signal flow

The input signal from each of [INPUT] connectors 1 through 3 on the left side panel flows to the [GAIN] switch, [HPF] switch and level control. Then the signal is assigned to the left, right or both recording tracks by the [PAN] switch. The assigned signals are mixed and recorded to the recorder.
The recorder stereo output signals are output from the [OUTPUT] connectors.

<Memo>:Limiters are provided after the [GAIN] switches as well as before the recorder inputs to eliminate sound distortion caused by overload. The limiters work automatically depending on audio levels.

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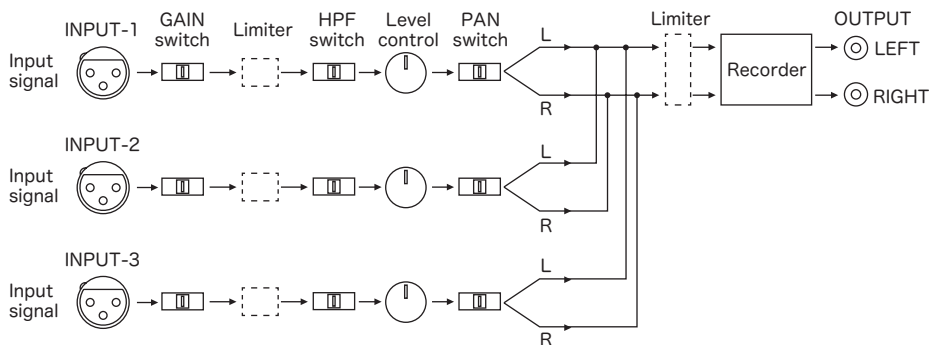
Recording tutorial

The following shows how to record high quality audio to the recorder. In this example, two microphones are used and the unit runs on batteries.

Preparations

1. Insert four alkaline or rechargeable nickel hydride AA batteries to the battery compartment on the right side panel.
   To remove battery compartment, open the battery compartment cover and pull up the ribbon attached to the battery compartment.

2. Insert a new SD card to the [SD-CARD] slot.
   The [SD-CARD] slot is located inside the battery compartment cover.
   To set an SD card to the slot, hold an SD card with the label side facing to the battery compartment, and press the card into the slot until you hear a click.

3. Connect two microphones to [INPUT] connectors 1 and 2 on the left side panel.

4. Connect headphones to the [PHONE] connector on the right side panel.

Set the following switches and control for each input signal appropriately.

5. When you use a condenser microphone that requires phantom power, set the phantom power switch above the [INPUT] connector to "P48".

6. Set the [PAN] switch on the front panel to L (left), R (right) or C (center) depending on which track(s) you want to record audio onto.

7. Set the [GAIN] switch and the level control on the front panel appropriately depending on the microphone sensitivity and audio source volume.

   If the [PK] indicator lights in red frequently, set the [GAIN] switch to a more left position. The more right position of this switch provides higher sensitivity.
   If the "OL" of the level meter on the display lights, turn the level control down (counterclockwise).

<Memo>:It is recommended to make settings above while listening to the sound via headphones. You can control the headphone volume using the [VOLUME] control on the front panel.

Recording

After all the preparations are made, you are now ready for recording.

1. To start recording, press the [REC] key on the front panel.

2. To stop recording, press the [REC] key again.
   The recorder stops recording and closes the file.
   Now an audio file (44.1 kHz/16-bit WAV file, by default) is created on the SD card.

Playing back the recorded file

Now, let's play back the recorded file and check the result via headphones.

1. Press the [▶] key.

The recorder starts playback of the file.
After finishing playback of the file, the recorder stops.

• By holding down the [◀◀] or [▶▶] key, you can rewind or fast-forward the file.
• By pressing the [◀◀] key briefly, you can skip back to the beginning of the file.
• Pressing the [■] key stops playback.

Mounting a DSLR camera to the unit

The following describes how to mount a DSLR camera to the unit.

1. Fix the screws of the supplied bracket for camera mounting to the screw holes on the top panel of the unit.

2. Fix the movable screw on the center of the bracket to the tripod screw hole on a DSLR camera.
   Be sure to determine the appropriate position before fixing the screw.

Using the menu

The menu allows you to make the various settings of the unit, etc.
The following chart shows the list of the menu items.

Menu item	Description	Setting options	Default
FS/BIT	Selects Fs/bit	44/16, 48/16, 44/24, 48/24, 88/24, 96/24	44/16
TONE REC (S)	Selects "Record start tone" record mode	OFF, ON(0s), ON(0.5s), ON(1s), ON(1.5s), ON(2s), ON(3s)	OFF
TONE REC (E)	Selects "Record end tone" recording mode	OFF, ON(0s), ON(0.5s), ON(1s), ON(1.5s), ON(2s), ON(3s)	OFF
REC STOP KEY	Selects key for record stop	REC, REC & STOP, STOP	REC
DEF. FILE NAME	Selects "default file name"	SCENE, DC-R_	SCENE
MAX FILE NAME	Selects maximum file size	2G, 4G	2G
AUTO CONT FILE	"Auto continuous file" mode ON/OFF	ON, OFF	ON
BATTERY	Selects battery type	ALCALI, Ni-MH	ALCALI
USB	Selects USB connection mode	OFF, PC, AUDIO	OFF
IR REMOTE	Selects infra-red controlled device	OFF, Canon	OFF
SD FORMAT	Formats SD card	-	-
RTC	Adjusts internal clock	-	-
RESET	Initializes menu item settings	-	-
VER	Displays current version	-	-

Menu operation

1. Press the [MENU] key for more than two seconds while the recorder is stopped.
   The unit enters the menu mode and the display shows the menu item that was shown last time.

2. Select the desired menu item by pressing the [MENU] key.

   Pressing the "MENU" key for 2 seconds while any of the menu items is displayed, the order of displaying the menu items will become reversed. Pressing the "MENU" key again for 2 seconds will make the menu items back to the original displaying order.

3. If the menu item is for selecting an option, select the desired option using the [-/DOWN] and [+/UP] keys.
   If the menu item is for execution, follow the instructions on the display.

How to adjust RTC (Real Time Clock)

1. Enter the Menu and choose "RTC".

2. Pressing the "ENTER" key will go into the "RTC SETUP" mode. The blinking digits here will be Year.

3. Pressing the "ENTER" key in sequence will move the blinking digits as the following order;
   Year -> Month -> Day -> Hour -> Minute -> Second

4. While the digits you want to adjust are blinking, use the "-/DOWN" key or "+/UP" key to set the number.

5. Press the "EXIT" key to finish the setting and go back to the Menu.

Declaration of EC Directive

This equipment is compatible with the EMC Directive (2004/108/EC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility and with the Low Voltage Directive (73/23/EEC) - Directive on approximation of member nation's ordinance concerning electric equipment designed to be used within the specified voltage range.

The Affect of Immunity on This Equipment

The affect of the European Specification EN61000-6-1 (coexistence of electromagnetic waves - common immunity specification) on this equipment are as shown below.

In the electrical fast transient/burst requirements, surge, conducted disturbances by radio-frequency fields, power frequency magnetic field, radiate electromagnetic field requirements and static electricity discharging environment, this could be affected by generation of noise in some cases.

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