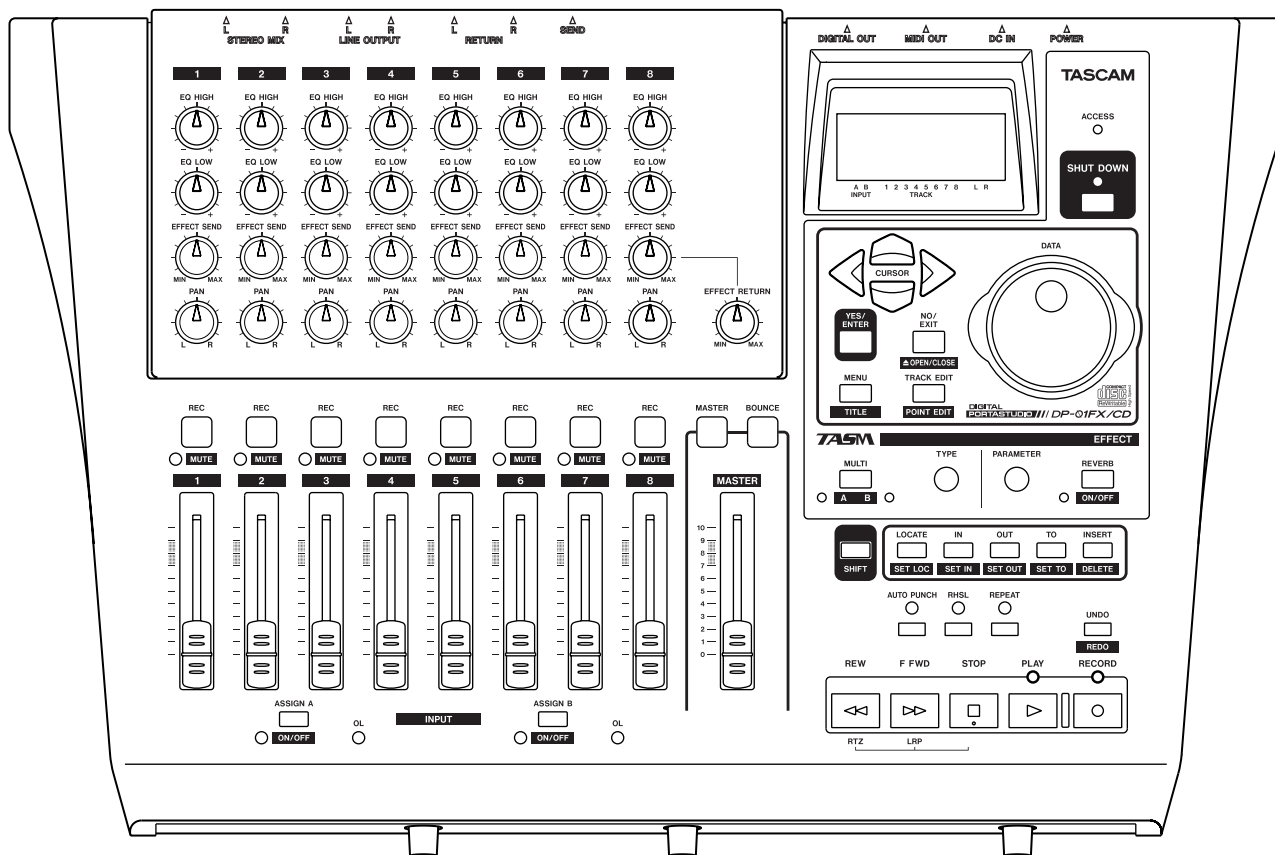


TASCAM

TEAC Professional Division

DP-01 DP-01 FX DP-01 FX/CD

DIGITAL PORTASTUDIO



Important Safety Precautions

Declaration of Conformity

Model Number : DP-01FX/CD
Trade Name : TASCAM
Responsible party : TEAC AMERIA, INC.
Address : 7733 Telegraph Road, Montebello,
California, U.S.A.
Telephone number : 1-323-726-0303

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

For U.S.A

TO THE USER

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 instruction manual 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:

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

CAUTION

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



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.



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 appliance.

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.

Model number: _____
Serial number: _____

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

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. 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 service 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.
 - Do not expose this apparatus to drips or splashes.
 - Do not place any objects filled with liquids, such as vases, on the apparatus.
 - Do not install this apparatus in a confined space such as a book case or similar unit.
 - The apparatus draws nominal non-operating power from the AC outlet with its POWER switch in the off position.
 - The apparatus should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.
 - An apparatus with Class I construction shall be connected to an AC outlet with a protective grounding connection.

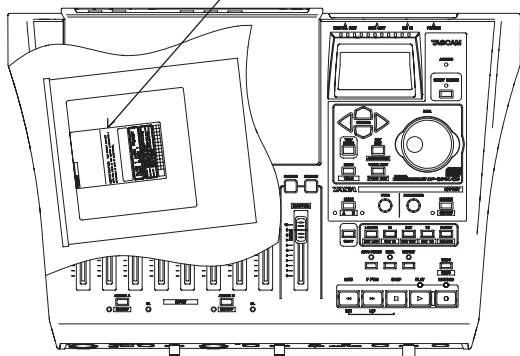


Safety Information

This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as a class 1 laser product. There is no hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown (1).

(1) For U.S.A

CERTIFICATION THIS PRODUCT COMPLIES WITH DHHS RULES 21 CFR CHAPTER 1, SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.



CAUTION

- DO NOT REMOVE THE PROTECTIVE HOUSING USING A SCREWDRIVER.
- USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
- IF YOU DETECT PROBLEMS WITH THIS UNIT, CONTACT YOUR NEAREST QUALIFIED SERVICE PERSONNEL, AND DO NOT USE THE PRODUCT IN ITS DAMAGED STATE.

Optical pickup:

Type: SF-W37

Manufacturer: Sanyo Electric Co, Ltd.

Laser output (on the objective lens):

Read Power; Less than 1.5mW (play)

Write Power; Less than 74mW (record)

Wavelength: 778 - 786nm

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Getting started

Read this section first. It contains important basic information about using your DP-01 effectively, and will help you create exciting original musical projects. When you have read this section (“Starting out with your DP-01” on page 9), you will be able to find your way around the DP-01, and to make and play back recordings.

Congratulations on your purchase of the TASCAM DP-01. This 8-track digital hard disk recorder is designed to provide you with great sound in an easy-to-use compact package, allowing you to concentrate on the music, and not on the recording process.

The DP-01 contains a large hard disk, allowing you to record many hours of music, up to two tracks at a time, to a maximum of eight tracks, and then mix them down to a pair of mastered stereo tracks using the built-in mixing facilities.

The stereo mix can then be played back into a suitably-equipped CD recorder, etc., or into a computer’s audio inputs for distribution over the Internet, etc. or transferred using a fast USB 2.0 connection to a personal computer.

In addition, individual tracks can be imported and exported between your DP-01 and a personal computer, and songs can be archived, backed up and restored using a PC.

This manual

Whether or not you have had experience in multitrack recording, you should read this manual in order to understand how to get the best out of the DP-01. This first section gives you an idea of the basic operations of the DP-01 and will get you started with recording. Further features are described in “Advanced techniques” on page 28

Note that when we refer to features of the DP-01 such as keys and connectors, we display them like this: **RETURN L** and **R**.

We refer to features of other equipment like this: **AUX IN**.

When we show messages, etc., that appear on the screen, we show them like this: In Punch Mode.

Take special note of the extra information provided at the side of the main text, especially the **WARNING** messages.

This manual cannot begin to be a full guide to multitrack recording techniques. However, if you visit the TASCAM Web site, you can download various documents on recording which may be of interest to you.

Troubleshooting The DP-01 was designed to be easy to use, but sometimes you may need a little help. See the section “Troubleshooting” on page 56 for a list of questions you may have, and answers to help you. There’s also a list of messages that may pop up, with an explanation of their meaning, and suggestions on what do to (see “Messages” on page 57).

How to do it? At the back of this manual, there’s a section called “Commonly-used functions” on page 85. Refer to this section when you want to know how to perform a particular operation.

TIP

We give hints and tips on using the DP-01 when you see this icon.

WARNING

Warnings should be taken very seriously. They describe situations which can cause injury, or damage to the equipment if you don’t follow the instructions.

NOTE

A note at the side of the main text provides additional explanations for special situations.

CAUTION

A caution shows that you may lose data (your recordings) if you don’t follow the instructions.

Copyright

Windows, Windows XP, and Windows 2000 are trademarks of Microsoft Corporation.

Macintosh, MacOS, and MacOS X are trademarks of Apple Computer.

DP-01 Line-up

There are three models of the DP-01: the DP-01, DP-01FX, and DP-01FX/CD. The DP-01FX is equipped with phantom-powered XLR input jacks and internal effect processors. The DP-01FX/CD is a DP-01FX provided with an internal CD-R/RW drive. This manual refers to all three models as “DP-01”, as the majority of the functions are common to all models. Any exceptions are noted.

Chapter 3 of this manual, “DP-01FX Appendix” on page 62, deals with the features of the DP-01FX and the DP-01FX/CD.

Chapter 4 of this manual, “DP-01FX/CD Appendix” on page 69, deals with the features found on only the DP-01FX/CD.

You only need to read Chapter 3 if you own a DP-01FX; Chapter 4 if you own a DP-01FX/CD.

What’s in the box

When you unpack the box, you should find (as well as this manual):

- The unit itself (DP-01, DP-01FX, or DP-01FX/CD)
- Power adaptor
- Power cable suitable for your region
- Warranty card

If any of these items is missing, contact your TASCAM dealer or distributor.

About the power adaptor

WARNING When using the DP-01, use only the power adaptor and cable supplied with product. Do not use this power adaptor and cable with any other product.

Startup & shutdown

Read this section to understand how to power up and power down the DP-01.

WARNING

When switching the DP-01 on and off, we suggest that you turn down the volume of any speakers or amplifiers connected to the unit. Also, do not wear headphones connected to the DP-01 when switching power on or off. This will avoid damage to speakers, etc. and possible damage to your hearing.

Starting up the DP-01

With the DP-01's rear panel power switch OFF, connect the power adaptor to the DP-01, the power cable to the power adaptor, and the power cable to the power supply.

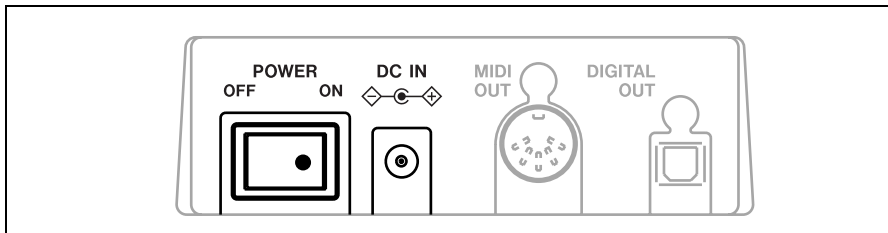


Figure 1.1: Power connections to the DP-01

- Switch on the DP-01 using the rear panel switch.
- The DP-01 display shows a welcome message.

```

|          TASCAM          |
|          DP-01          |
    
```

The system is loaded, and the last saved song is then loaded. The **ACCESS** indicator lights to show the hard disk is in use while the song is being loaded, and the display shows the current operation.

- When the **ACCESS** light goes off, the display shows the “home screen”:

```

| ABS  00:00:00:00 |
    
```

TIP

You can reach this screen from most operations by repeatedly pressing the **EXIT** key.

Shutting down the DP-01

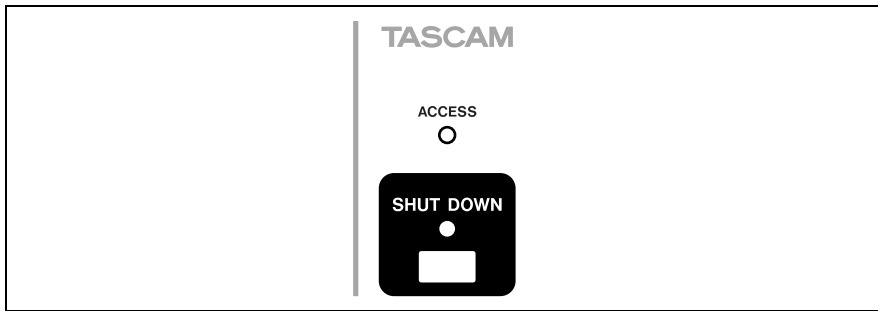


Figure 1.2: SHUT DOWN and ACCESS

- 1 First, stop playback or recording.
- 2 Press and hold the **SHUT DOWN** key for about a second. The screen shows:

```
| SHUTDOWN |  
| [ENTER] -> Exit |
```

- 3 Press **ENTER** to start the shut down process.
The display shows: Storing Song...
- 4 Once the song data is stored to hard disk, the display shows:

```
| Complete |  
| Now Sw Off |
```

- 5 You can now use the rear panel switch to turn off the DP-01.

CAUTION

If you don't shut down the DP-01 in the way described here, you may lose your recordings and settings. Always shut down the DP-01 according to these instructions.

NOTE

Pressing the **EXIT** key cancels the shutdown process.

The ACCESS light

This red indicator shows that the hard disk or the CD-RW drive is in use. Although the DP-01 is not exactly a delicate piece of equipment, you should take care with it, as with all electronic equipment, especially when the hard disk is in operation or when it is writing to CDs.

WARNING

Do not move the DP-01 or turn it off or disconnect the power when the **ACCESS** indicator is lit, to avoid damage to the hard disk and possible loss of data.

How to play back demo songs

Before the DP-01 is shipped, demo songs are stored on its hard disk. Follow the procedure below to play back these demo songs.

- 1 Connect the **LINE OUT** connector on the DP-01 to the amplifier or monitor system. To listen on headphones, insert the headphone plug into the **PHONES** jack on the right of the front panel.
- 2 Switch on the DP-01.

When the DP-01 is started up, the display shows the home screen.

```
| ABS 00:00:00:00 |
```

- 3 Press **MENU**.

The MENU screen is displayed.

```

----- MENU -----
SONG           0
DISK           :
BACKUP        : ▾
  
```

- 4 Turn the **DATA** dial to move the cursor to “SONG” and press the **▶** cursor key.

The [SONG MENU] screen is displayed.

```

-- SONG MENU --
CREATE         0
SAVE          :
REVERT        : ▾
  
```

- 5 Turn the **DATA** dial to move the cursor to “LOAD” and press the **▶** cursor key.

The [SONG LOAD] screen is displayed.

```

-- SONG LOAD --
# MyBlues    118M
  GoHome    ←224M
  
```

- 6 Move the cursor to “DP01DEMO” and press the **ENTER** key.

When the demo is finished being loaded, the display returns to the [SONG MENU] screen.

```

-- SONG LOAD --
# DP01DEMO
  
```

- 7 Press the **EXIT** key.

The display returns to the home screen.

- 8 Press the **PLAY** key to play back the demo songs.

Eight tracks of each demo song is available. Adjust the fader, MASTER fader, PAN and other controls for each channel. To adjust the volume of the headphones, use the PHONES knob on the front panel.

Navigation

The DP-01 uses a menu system which allows you to make settings, and perform many operations. This section explains how to use the menu system and to check and make settings.

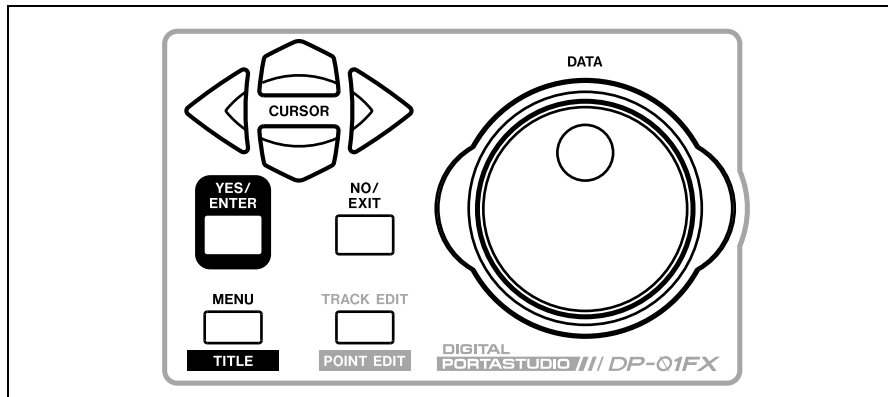
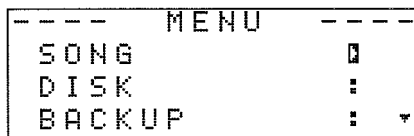


Figure 1.3: Menu controls

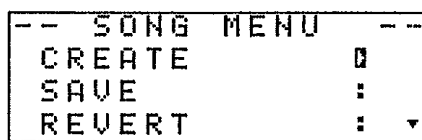
- Press the **MENU** key to bring up the opening menu screen:



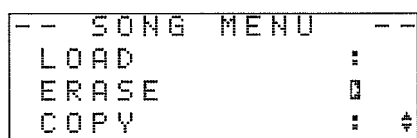
- Use the wheel or the **▲** and **▼** keys to scroll up and down through the list of top-level menus. Note how the **:** symbol changes to an inverted triangle (▣) when the menu is highlighted.

At the bottom right of all menu screens is a symbol showing whether there are more menus below the current list (▼), above the current list (▲), or above and below the current list (⊕).

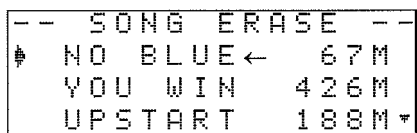
- Press the **▶** cursor key to enter the selected menu. The screen below shows the **SONG** menu:



- Use the jog wheel or the **▲** and **▼** keys to select an action from the menu (here the **ERASE** option is selected—note that there are options above and below the current list):



- Press **▶** to enter the menu action screen. In this case, selecting **ERASE** presents you with a list of songs:



TIP To go up a level in the menu “tree”, press the **EXIT** key.

NOTE The song names and filesizes shown here may be different on your DP-01.

- Use the jog wheel (or the ▲ and ▼ keys) to move the cursor to select the song to be erased, and then press the **ENTER** key.

```
|  SONG ERASE  |
|Are you sure ?|
```

- In cases like this, where the DP-01 asks you a question, the **ENTER** key now becomes a **YES** key, and the **EXIT** key becomes a **NO** key.
- Some screens allow a number of values to be filled in. In these cases, you should use the ▲ and ▼ keys to move the cursor and the wheel to set the value:

```
-- PREFERENCE --
Pre  # 2.0Sec
Post : 1.0Sec
EQ LF: 100 Hz #
```

The SHIFT key

The **SHIFT** key modifies the behavior of a number of different keys. When you press and hold it while pressing another key, the other key takes on the function shown in the label shown below the key (white-on-blue for the DP-01FX and white-on-green for the DP-01 and DP-01FX/CD).

Titling

You can give titles to your songs, exported tracks, etc. Here's how you do it:

When you see a screen like the one below:

```
- SONG CREATE -
Title [SONG001 ]
[ENTER] -> Exe
```

- Use the jog wheel to change the letter above the underlined cursor. You can choose from common punctuation marks, numbers, capital (UPPERCASE) letters, and small (lowercase) letters.
- Use the **INSERT** key to insert a blank space at the cursor position, and use the **SHIFTed INSERT** key (**DELETE**) to delete the character at the cursor.
- When you have finished entering the name, press **ENTER**. The song, with its new name, is stored to disk.

Connecting your DP-01 to other equipment

Connecting your DP-01 to other equipment

Before you start recording with the DP-01, you will need to make a few connections to other equipment. Figure 1.4 shows how you can connect your DP-01 to your existing audio setup.

NOTE

Figure 1.4 shows a DP-01FX model. The appearance of the DP-01 and DP-01FX/CD differs slightly, but the principles are the same.

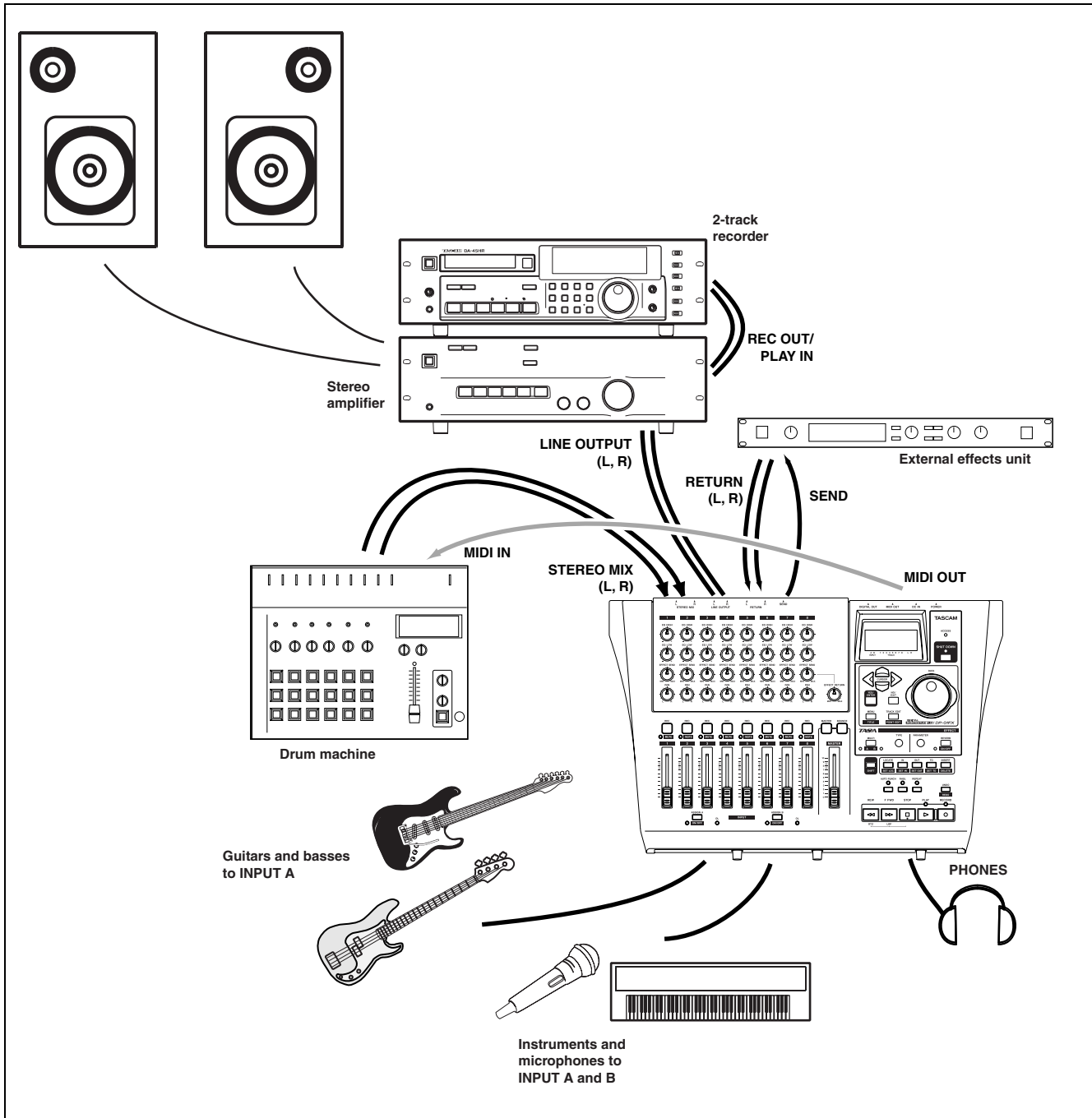


Figure 1.4: Connecting your DP-01 to other equipment

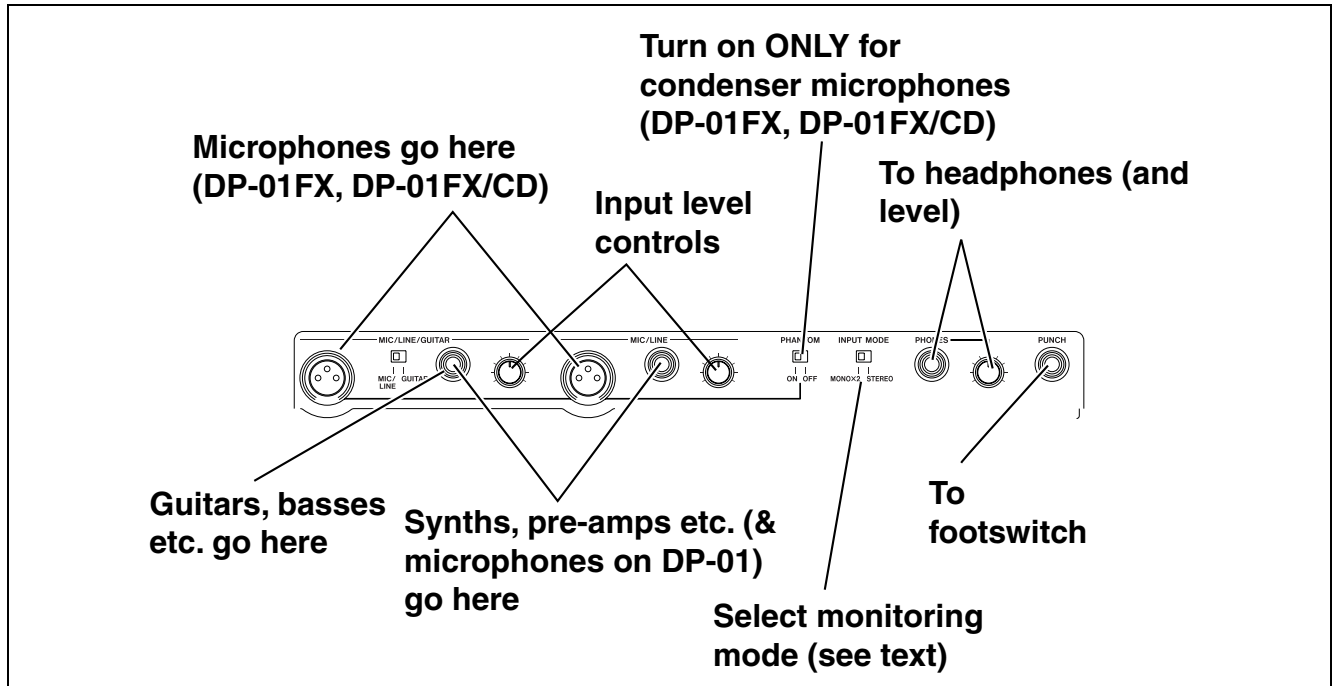


Figure 1.5: DP-01FX front panel

Microphones are connected to the front panel inputs.

Set the **GUITAR/LINE** switches to **LINE**. Turn the input level controls so that the **OL** indicators light up only in the loudest part of the recording.

Synthesizers, etc. including drum machines, guitar amplifier simulators, active basses, etc. as well as CD players, cassette decks, and so on can be connected to the front panel input jacks using standard 1/4" mono plugs (unbalanced). When you are recording a stereo source, make sure the **INPUT MODE** switch is set to **STEREO** (see “The INPUT MODE switch” on page 18).

Set the **GUITAR/LINE** switch to **LINE**. Adjust the input level controls and use the instrument’s output volume controls to adjust the level so that the **OL** indicators light up only during the very loudest passages.

Guitars and basses (passive types) are connected to the front panel input **A** using a standard 1/4" mono plug (unbalanced).

Set the **GUITAR/LINE** switch to **GUITAR**. Turn the input level control until the **OL** indicators barely light on the loudest passages.

Headphones Plug a pair of standard headphones into the 1/4" stereo jack on the front panel.

Adjust the volume with the level control to the right of the jack.

Footswitch You can connect a standard “punch-in” footswitch, such as the TASCAM RC-30P to the front panel **PUNCH** jack.

Use the switch to punch in and out (that is, start and stop recording on the fly).

NOTE

The DP-01FX and DP-01FX/CD include phantom-powered XLR microphone input connectors. See “DP-01FX Appendix” on page 62 for details of using these connectors.

WARNING

NEVER plug the speaker outputs of a guitar amplifier into the DP-01.

TIP

Use the built-in tuner (on the DP-01FX and DP-01FX/CD) to tune the guitar or bass (see “Tuning a guitar” on page 62).

TIP

The footswitch is useful if both hands are busy playing a guitar, for example.

Connecting your DP-01 to other equipment

The INPUT MODE switch

You will use this switch when you are recording from input A and input B at the same time.

This front panel switch affects the way that you monitor the input signals, both through the headphones and/or through the **LINE OUTPUT** jacks. There are two positions:

- **MONO x 2**—The signals from input A and input B are both sent to the center of the monitoring “stage”.
- **STEREO**—The signal from input A is sent to the left, and the signal from input B is sent to the right of the monitoring “stage” forming a stereo pair for use when you are recording stereo instruments such as synthesizers, etc.

NOTE **INPUT MODE** does not affect the recording at all—just the monitoring process.

NOTE In the **MONO X 2** mode, the A and B input signals are added together in the center, and you may hear distortion in the monitoring system. This does not affect the recording, though.

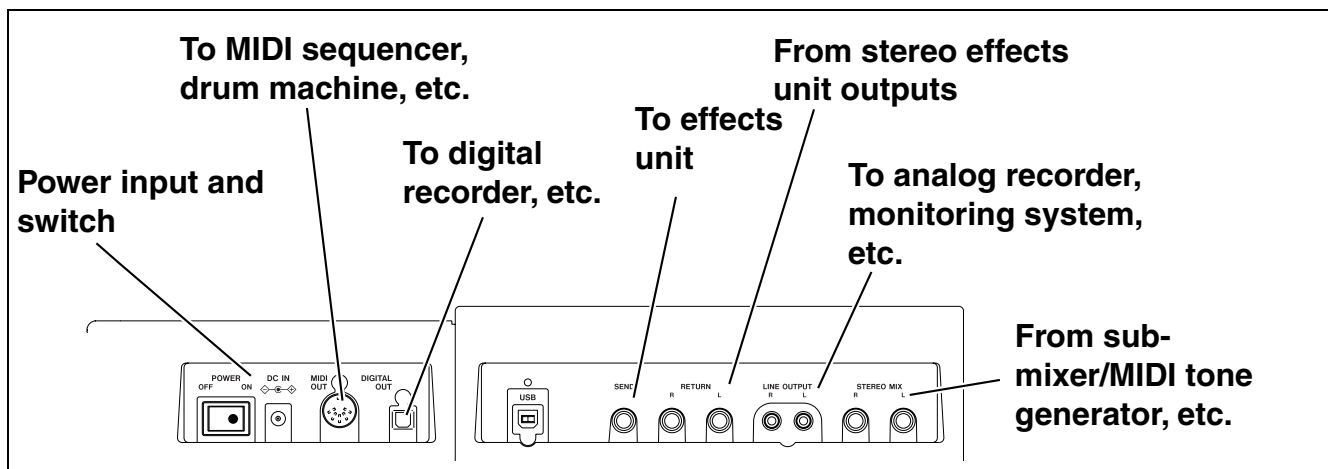


Figure 1.6: Rear panel connections

Monitoring and recording Use the rear panel **LINE OUTPUT** RCA jacks to connect the DP-01 to your monitoring system (that is, an amplifier/speaker setup). When you’re ready to make your final stereo master, you can use these jacks to connect to an analog recorder.

A typical setup would connect these jacks to the AUX IN of a stereo system.

Use the stereo system’s selector switch to listen to the AUX source when tracking, bouncing or mastering on the DP-01.

When you have mastered the stereo track and you want to record it, set the stereo monitoring system so that the recorder is set to record from the AUX source. Now you are monitoring (or listening) through your stereo system.

Effect processor When you want to use an external effect processor with the DP-01, connect the rear panel **SEND** of the DP-01 to the mono input of the processor (1/4" unbalanced jack).

Connect the stereo outputs of the processor to the two **RETURN** jacks of the DP-01 (1/4" unbalanced jacks).

NOTE “Tracking” means recording tracks on the DP-01. “Mastering” means taking these recording tracks and mixing them down to stereo.

NOTE The DP-01FX and DP-01FX/CD their own internal reverb processors. However, you can also use an external effect processor if you prefer.

External stereo input The DP-01 has two 1/4" mono unbalanced jacks on the rear panel marked **STEREO MIX**.

These can be used to connect an external stereo sub-mixer, synthesizer, drum machine, CD player, etc.

This stereo signal is routed to the analog **LINE OUTPUT** jacks. They cannot be recorded on the DP-01, nor can you adjust the signal level using the DP-01.

Digital output Use a standard optical digital cable to connect this (rear panel, close to the power switch) to a suitable digital stereo input of a monitoring system, or stereo recorder.

The signals sent from this are the same as those sent from the **LINE OUTPUT** jacks (although the **STEREO MIX** signals are not output through the digital output).

MIDI output Use this (rear panel) to connect a sequencer, drum machine, etc. which can be started, stopped and synchronized with the DP-01. See "Working with MIDI" on page 38 for details.

TIP

*You can connect a digital recorder (CD, MD) using the digital connection, while using the **LINE OUTPUT** jacks for monitoring.*

Managing your songs

Managing your songs

This section shows you how to create a new song, as well as basic song management, such as renaming, deleting, copying, etc. For more details on disk management, and the other song management features of the DP-01, see “Disk management” on page 40 and “Advanced song management” on page 42.

NOTE

Any recording made on the DP-01 is referred to as a “song”, even though it may only consist of instrumental tracks or spoken word.

Creating a new song

- 1 Press the **MENU** key, use the jog wheel to highlight the **SONG** menu, and press the **▶** key.

```
== SONG MENU ==
CREATE
SAVE
REVERT
```

- 2 If the **CREATE** option is not highlighted, use the jog wheel to highlight it and press the **▶** key.

```
- SONG CREATE -
Title [SONG001 ]
[ENTER] -> Exe
```

- 3 Enter a title as described in “Titling” on page 15.
- 4 Press **ENTER** to create the song. The current song is stored even though the new song has not yet been created.

TIP

You can re-title a song by pressing the **SHIFTed MENU** key to edit the title of the currently-loaded song.

Storing songs

Since the DP-01 does not automatically save the audio you record as part of a song, you should get into the habit of performing frequent manual saves, and always shutting down the DP-01 properly (“Shutting down the DP-01” on page 12) to store all data.

NOTE

A “song” is not just the audio files you record—it also includes editing, settings, etc.

- 1 Press the **MENU** key, use the jog wheel to highlight the **SONG** menu item, and press the **▶** key.

```
== SONG MENU ==
CREATE
SAVE
REVERT
```

- 2 Highlight the **SAVE** option and press the **▶** key:

```
-- SONG SAVE --
Title [SONG001 ]
[ENTER] -> Exe
```

- 3 Rename the file if you want to save it as another name and press **ENTER**, or simply press **ENTER** to save the file to disk.

The screen shows a message (Saving Song) as the song is saved.

Reverting to last version The REVERT action (which follows the SAVE action in the SONG menu) allows you to undo all changes since the last save.

- When you select the REVERT action, the title of the song is shown. Press **ENTER** to go back to the last saved version, or **EXIT** to keep the current song as it is.

Loading a saved song

Of course, saving songs is no use unless you can load them again. This is how you do it.

- 1 Press the **MENU** key, use the jog wheel to highlight the SONG menu item, and press the **▶** key.

```

== SONG MENU ==
SAVE          :
REVERT       :
LOAD         0  #
  
```

- 2 Highlight the LOAD action, and press the **▶** key:

```

-- SONG LOAD --
# MyBlues    118M
  GoHome    ←224M
  
```

- 3 Use the jog wheel to move the **#** cursor to the song to be loaded and press **ENTER**. If the **←** symbol appears next to the song, then that song is currently loaded.

The current song is saved, and the selected song is loaded.

Erasing a song

If your disk is getting full, or you really don't need a song any more, you can erase it.

- 1 From the SONG menu, select the ERASE action:

```

-- SONG ERASE --
# MyBlues    118M
  GoHome    ←224M
  
```

- 2 Highlight a song and press **ENTER**.
- 3 You are asked if you want to erase the song (Are you sure?).

Press **ENTER** to erase the song, or **EXIT** to cancel the operation.

If you erase the current song, the first song in the list is automatically loaded.

CAUTION

Erase a song only if you are certain you don't need it any more—you can't undo this operation! However, you can use a USB connection to back up songs to a PC before you erase them.

Managing your songs

Erasing many songs at one time

You may want to select a number of songs for erasing.

- Use the jog wheel to scroll up and down through the list of songs.
- Select a song for erasing using the **INSERT** key. A check mark (✓) appears by the song title.
- De-select a song by using the **SHIFTed INSERT (DELETE)** key. The check mark disappears.
- Press **ENTER** when you have selected all the songs to be erased. You are asked if you are sure. Press **ENTER** again to erase them, or **EXIT** to exit the process without erasing them.

You can erase all the songs shown, and a new song is automatically created. There is always at least one song on partition.

TIP

You can also use this method to perform other operations, such as copying.

NOTE

For more information about partitions, see "Disk management" on page 40.

Song information

You can view the title, working partition, and amount of time left for recording from the "home screen".

- From the home screen, press and hold the **EXIT** key. While you hold down the **EXIT** key, the display shows:

```
-- Song Info. --  
Part   : Part01  
Song   : MYBLUES  
RecRem: 1269 min
```

The current partition (Part), song title (Song) and amount of time left on the partition for recording (RecRem) in minutes.

Additional song operations

Further song operations are described in "Advanced song management" on page 42.

Assigning inputs

When we talk about “assigning” inputs, we are talking about routing the signals from the two inputs to the tracks.

You can record on up to two tracks at a time. This means that the same input can be assigned to two tracks at the same time (but you can't then use the other input) or the two inputs can be assigned to different tracks. You can't assign both inputs to the same track at the same time.

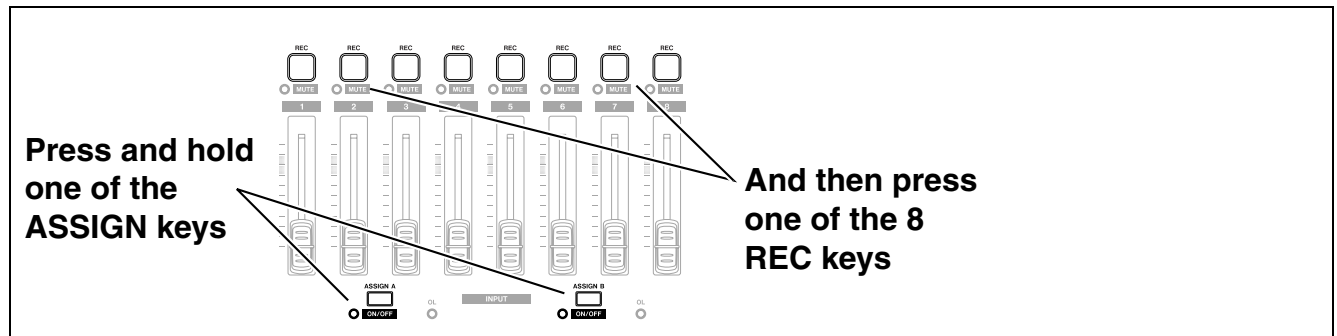


Figure 1.7: Assigning inputs to tracks

- Press and hold the **ASSIGN** key corresponding to the input signal you are assigning (A or B).
- While holding down the **ASSIGN** key, press the **REC** key of the track to which you are assigning the input.
The **REC** key flashes rapidly.
- If you want to assign the input to another track, you must first clear the current assignment (see below), and then re-assign the input.

Note that the **REC** key of the first track to which you assigned the input flashes when you hold down the **ASSIGN** key.

Clearing an assignment Hold down the **ASSIGN** key to check current assignments, then while holding the **ASSIGN** key, clear current assignments by pressing a flashing **REC** key (which then stops flashing).

TIP

Press and hold **SHIFT** and either of the **ASSIGN** keys (A or B) to turn the inputs on or off as shown by the indicator. You may want to turn off unused inputs to reduce noise.

Recording

When you've connected a source, and assigned the inputs to tracks, you're ready to start recording.

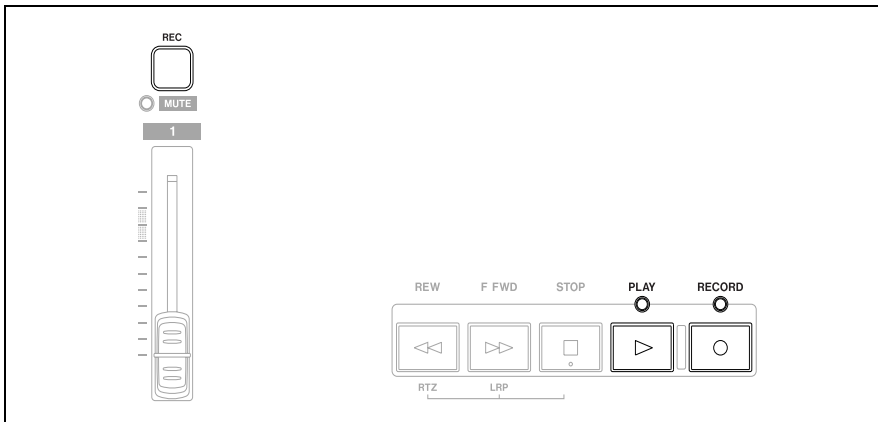


Figure 1.8: Recording tracks

- 1 Press the **REC** key of the track(s) you're going to record on, which start to flash slowly (this process is called "arming the track(s)").
- 2 Press and hold the **RECORD** key and press the **PLAY** key.
The **RECORD** key indicator lights red, and the **PLAY** indicator lights green. The track **REC** indicators stop flashing and light steadily.
- 3 Press **STOP** when you've finished recording.
- 4 To return to the place where you started recording, press and hold down the **STOP** key, and press the **F FWD** (**LRP** = Last Recording Position) key.

To return to the zero point, press and hold down the **STOP** key and press the **REW** (**RTZ** = Return To Zero) key.

- 5 Press **PLAY** to start playback of the recorded tracks.
Use the track fader(s) and the red **MASTER** fader to adjust the level of what you hear.

The pan controls position the track in the stereo "image" you hear in the left and right speakers (or headphones). The center position is marked by a "click" when you turn the knob.

The **EQ HIGH** and **EQ LOW** equalization controls work in a similar way to the bass and treble tone controls on a stereo system. The center "click" position of the knob means there's no cut or boost for that control.

- You can re-record the track if you're not happy with it by going back to the original point and repeating the process.
- When you're happy with your recording, you can un-arm the track(s) ("safe" them) and arm and record on other tracks. Remember to re-assign the inputs as well as arming the tracks.
- Press the **REW** or **F FWD** keys for a short while and then release them to move backwards or forwards through your recording (like a tape recorder). Press and hold these keys to increase the rewind or fast forward speed. Press **STOP** to stop (again, like a tape recorder).

NOTE

The **DP-01FX** and **DP-01FX/CD** contain internal input effects processors (**MULTI**). See "DP-01FX Appendix" on page 62 for details.

NOTE

The faders and other mixer controls adjust the output level of the recorded when playing back recorded tracks.

TIP

You can change the EQ control point of the high and low equalization controls. See "EQ settings" on page 31 for details.

More advanced features

The DP-01 has many advanced features which you may want to use later on. Though we don't want to go into all of them now, you should be aware of a few of them now.

Using marks to locate positions

Although "Recording" on page 24 shows you some ways of moving around in your song, the DP-01 provides you with ways to jump around the song using location marks, as well as locating to locate directly to a position you set.

- See "Location" on page 28 for details of how to set and use these location marks.

Punch recording

When we talk about "punch recording", we mean going from play mode into record mode without stopping the song ("punching in") as well as going from recording to playback without stopping the song ("punching out").

The DP-01 provides three ways to perform punching:

- When at least one track is armed (the **REC** key is flashing), and a song is being played back, press the **RECORD** transport key to punch in. When recording, press the **PLAY** key to stop recording (punch out).
- If you have a footswitch connected to the **PUNCH** jack, you can press the footswitch to change between playback and recording, as long as at least one track is armed for recording.
- You can automate the punch process by setting in and out points. This is described in "IN and OUT marks" on page 29 and also in "Punching" on page 32.

Bouncing

The DP-01 provides eight tracks for recording. But what happens if you want to record more than eight instruments?

You can take existing tracks, mix them, and record them to unused tracks, freeing up the tracks you just mixed for recording additional tracks. See "Bouncing" on page 34 for full details.

Track editing

Because the DP-01 is a hard disk recorder, not a tape recorder, there are many options available to you which would be extremely difficult, or even impossible, with a tape-based recording system.

See "About track editing" on page 50 for details of copy, cut, and paste, etc. operations that you can perform on the DP-01.

Undoing operations

Just like on many computer systems, you can undo many operations (including recording, if you record over something you shouldn't have done).

See the full explanation of how to use the **UNDO** and **REDO** functions in "Undoing operations" on page 54.

Mixdown and mastering

This is the last stage in creating a song, allowing you to create a file which you can play back into a stereo recorder, and export to a WAV file for further processing, archiving, recording, etc. on a personal computer (“Exporting the mastered stereo tracks” on page 49).

Mixdown This is the art of mixing the different tracks you have recorded earlier so that the whole song sounds “right”—everything is at the right volume, and the song sounds like one piece of music.

There are no real rules to mixing, except that if you like the mix, and other people like it, it’s probably a good mix.

- Use the eight track faders to adjust the relative volume of the tracks and the red **MASTER** fader to adjust the overall level, and watch the L and R meters at the right of the display to make sure that the mix is not too loud (if it’s too loud, it will distort, and sound bad).
- Use the **EQ HIGH** and **EQ LOW** (tone) controls to boost or cut bass and treble from the individual tracks.
- If you have an external effect processor connected through the **SEND** and **RETURN** loop, adjust the **EFFECT SEND** levels for each track. This is the amount of signal sent from each track to the effect. You can use this to add effects only to certain tracks. Use the **EFFECT RETURN** control to adjust the amount of the effect returned to the mix.
- Use the **PAN** controls to adjust the left-right position of each track in the stereo mix.
- To cut out the sound of a track, use the **SHIFT** key and the track’s **REC** key to mute (the orange **MUTE** indicator lights for muted tracks) and un-mute the track.

TIP

The most important components of a mix are your ears—if you think it sounds good, then it is.

TIP

You don’t have to keep levels the same through the whole song (try raising the level of a guitar during solos, for example).

NOTE

On the DP-01FX and DP-01FX/CD, you can use the internal reverb unit instead of an external effect processor (“Reverb” on page 68).

TIP

If you have two tracks with different versions of the same part, you can use the mute function to make easy comparisons between the two.

NOTE

The track meters show the level of the signal recorded on the track, not the level sent from the track.

Mastering

This is where the actual stereo recording takes place, once you're happy with the mix you've created. You create a mixed master stereo track, starting at 00:00:00:00 (the "zero point") and continuing to the OUT point.

The mixed stereo master is stored on disk as part of the song.

- Before starting the mastering procedure, you must set the OUT point. This is where the mastering process stops. See "IN and OUT marks" on page 29 for details.

- 1 Press the **MASTER** key so that it flashes.
- 2 Press and hold the **RECORD** key and press the **PLAY** key. Recording starts on the stereo master tracks (**RECORD** and **PLAY** are lit).

Make the mix moves (faders, pan, etc.) that you practiced earlier. These mix moves will affect the sound of the final master stereo track.

When the playback point reaches the OUT point, recording stops.

- 3 Press the **MASTER** key so that it is lit steadily. Now when you press **PLAY**, you can hear the master stereo mix you have just created. This mix is output through the analog and digital outputs, and you can record it on a stereo recorder.
- 4 If you are happy with the mix, you can then exit the mastering mode by pressing the **MASTER** key until it is unlit.

If you want to do the mix again, press the **MASTER** key until it flashes, and re-record. The new mix will overwrite your previous mix.

- If a song has had a master stereo mix recorded and saved with it, you can play back this master stereo mix whenever the song is loaded, by pressing the **MASTER** key until it is lit steadily and then pressing **PLAY**.
- To add the **STEREO MIX** inputs (through the analog outputs only), you can play back the stereo master mix. Any MIDI synchronization, etc. is output as the stereo master mix is played back so that the output from a sequencer, etc. can be added to the analog outputs, and recorded on a stereo recorder (cassette, CD, MD or computer audio program).
- The stereo master mix can be "cloned" to a pair of stereo tracks (see "CLONE TRACK" on page 54).

NOTE

While the DP-01 is in the mastering mode, you will notice that a number of playback functions are not available. If you try to perform these operations, a popup message tells you that you are in mastering mode.

NOTE

You can hear any signals received at the **STEREO MIX** inputs, but they won't be recorded on the master track.

NOTE

Note that while the **MASTER** key is lit steadily, you cannot use the mixer controls, except for the **MASTER** fader.

TIP

If you want to save a mix from the DP-01 as a file, you can transfer it via USB to a computer (see "Exporting the mastered stereo tracks" on page 49).

2 : Advanced techniques

The operations described here are ones that you may use less often than the ones described earlier in this manual, but you will find useful in your work with the DP-01.

Location

This section tells you how to jump around to different parts of a song on the DP-01.

Direct location

The DP-01 displays the current position at the top of the display as hours:minutes:seconds:frames. There are 30 frames in a second.

- From the “home screen” when the DP-01 is stopped, turn the jog wheel, so that the top time display blinks.
- Use the ◀ and ▶ cursor keys to move the underline cursor between the different fields of the time shown at the top of the screen. In this case, the seconds field is selected.

```
ABS 00:02:59:20
```

- To change the value of the highlighted (underlined) field, use the jog wheel. Fields “wrap round”, so going from 59 seconds to 0 seconds adds 1 to the minutes, etc. As you turn the jog wheel, the display blinks. If you leave the jog wheel untouched for a few seconds, or if you press **ENTER**, the display stops blinking.
- If you want to edit another field, use the cursor keys to move to that field and then use the jog wheel to get to the time you're looking for.
- Press **PLAY** to start playback from the position whose value has just been entered.

NOTE

The DP-01 can also display the current time in bars and beats. See “Working in bars & beats” on page 36 for details.

Location marks

The DP-01 can store up to 999 location marks per song! Use these to mark the start of verses, vocal entry points, etc.

To set a location mark (while stopped, recording or playing), press the **INSERT** key, or press and hold the **SHIFT** key and press the **LOCATE (SET LOC)** key at the point where you want the new mark.

- Marks are shown on the display on the second line of the “home” screen. The mark number you see is the one at or immediately before the current position. In the example below, “M023” indicates the twenty-third mark in the selected song.

```
ABS 00:02:59:20
M023
```

NOTE

Marks are numbered in the order you enter them, not according to their position in the song. Mark 999 can therefore appear in a song before mark 001.

To move to a location mark Press and hold the **LOCATE** key, and briefly press and release the **REW** or **F FWD** key to move to the previous or next mark in the song. This works while playing back, while stopped or “winding”, but not while recording.

- Alternatively, press and hold the **LOCATE** key for about a second to show the location mark list:

```
ABS 00:02:59:20
-- LOCATE LIST --
M001 00m34s22
M003: 00m48s03
```

Use the jog wheel to choose a mark (they're listed in the order they appear in the song) and press **ENTER** to jump to that mark.

To delete a location mark Stop playback (or recording) and locate to the mark you want to delete (or a little after). Press and hold down the **SHIFT** key and press the **INSERT (DELETE)** key.

To edit a location mark If you made a mistake when you entered a location mark, you can change the time of the mark.

- Press and hold the **LOCATE** key for about a second to show the location mark list.
- Use the jog wheel to select a mark and press the **▶** cursor key to select it.

```
--- Trim M001 ---
00m34s22f0
```

- Use the wheel to move the mark backwards and forwards by 1/10 frame (the rightmost digit of the number). You can't move a mark forward past the next mark in the list, or backwards to before the previous mark in the list.
- Press **ENTER** when done (to return to the home screen) or **EXIT** (to return to the mark list).

NOTE

You can't undo this.

TIP

This is sometimes called “trimming”.

NOTE

The marks are shown in the order they appear in the song, not by number.

TIP

1/10 frame is 1/300 of a second—about 3.3 milliseconds

IN and OUT marks

These marks are used for setting the points at which automated punch recording starts and ends and for repeat playback, as well as for track editing. You can set these marks while playing back, recording, or while playback is stopped.

- Set **IN** and **OUT** marks by pressing and holding the **SHIFT** key and pressing **IN (SET IN)** or **OUT (SET OUT)** at the appropriate points.
- Locate to the **IN** and **OUT** points by simply pressing **IN** and **OUT**.
- Fine-tune the position of the **IN** and **OUT** points by pressing and holding **SHIFT** and pressing **TRACK EDIT (POINT EDIT)**:

```
-- POINT EDIT --
IN POINT 0
OUT POINT :
TO POINT :
```

- Edit the point, to 1/10 frame accuracy, using the cursor keys and the jog wheel, in the same way as for direct location (“Direct location” on page 28).
- Press **ENTER** when done.

NOTE

IN and OUT marks are also used (along with the TO mark, which is set and used in the same way) when performing track editing functions.

Using the meters

Meters to let you know what's going on with the audio in the DP-01. Here are a few little hints and tips which may help you.

As well as showing you the level of signals, the meters can show you if the signals are actually getting to the DP-01. Even if you can't hear anything and the input meters are showing a signal, it means that the connections from the instrument to the DP-01 are okay (and you should probably check your monitoring equipment levels).

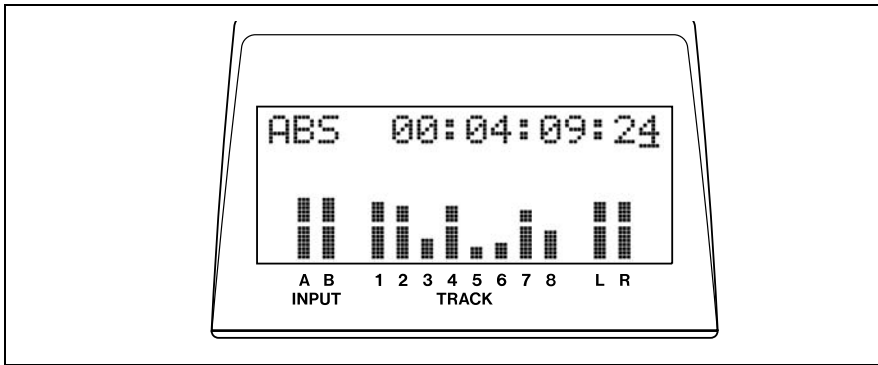


Figure 2.1: The DP-01 meters

It's important to remember that meters should never be continuously at the top of the bar. If they are, it means the level is too high, and you will probably experience distortion. Digital distortion is unpleasant (unlike, say, tube guitar amp distortion), and you need to avoid it.

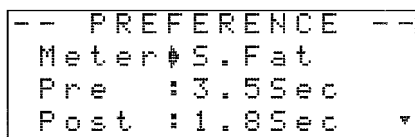
Input meters These meters (**A** and **B**) show the level of the signal coming into the DP-01. Adjust the level with the front panel controls, or the instrument volume control, if available.

Track meters These meters (**1** through **8**) show the volume of the signal recorded on the track (un-armed tracks) or entering the track (armed tracks). Remember that the faders do not control the level of signals sent to the track, and will never affect the track meter readings.

Master meters These meters (**L** and **R**) show the master level at all times. The **MASTER** fader controls the level of these meters.

You can change the way the meters are displayed.

- 1 Press **MENU**, and then select the **PREFERENCE** menu:



- 2 The **Meter** option allows you to use the jog wheel to pick from four options:

- S.Fat (short and fat)
- S.Slim (short and thin),
- L.Fat (tall and fat)
- L.Slim (tall and thin)

The behavior of all these is the same—only the appearance differs.

EQ settings

On the DP-01, you can set the frequency at which the EQ HIGH and EQ LOW controls work; individually for each channel.

- 1 Press **MENU**, and then select the **PREFERENCE** menu.
- 2 Use the arrow keys to scroll to **EQ FRQ**:

```
-- PREFERENCE --
Post   : 1.5Sec
EQ FRQ
NSP    : 10 *
```

- 3 Press the **▶** cursor key:

```
--EQ FREQUENCY --
Source ▶ Track 1
High   : 10kHz
Low    : 100 Hz
```

- 4 Use the cursor keys and wheel to set these parameters.

Source This is the track affected by this setting, from Track1 through Track8.

High This is the frequency for the **EQ HIGH** control. Choose from 1.7, 1.8, 1.9, 2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 9.0, 10, 11, 12, 13, 14, 15, 16, 17, 18 (all measured in kHz).

Low This is the frequency for the **EQ LOW** control. Choose from 32, 40, 50, 60, 70, 80, 90, 100, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500, 600, 700, 800, 850, 900, 960 (Hz), 1.1, 1.2, 1.3, 1.4, 1.5, or 1.6 (kHz).

TIP

This can help you emphasize the particular frequency ranges on a track.

NOTE

The NSP setting is only available on the DP-01FX and DP-01FX/CD. The DP-01 will not show this option.

Punching

As mentioned in “Punch recording” on page 25, the DP-01 provides two manual ways of changing between playback and recording modes: using the **PLAY** and **RECORD** keys, and using the foot switch. There is also an automated punch mode, described here.

Rehearsal

The auto-punch mode allows you to rehearse your playing before actually making a recording.

- 1 First, set the **IN** and **OUT** points (“**IN** and **OUT** marks” on page 29) so that they correspond to the points where you want recording to start, and where you want it to finish.
- 2 Assign an input or inputs to a track or tracks (“**Assigning inputs**” on page 23), and arm those track(s) for recording (press the track’s **REC** key so that it flashes).
- 3 Press the **AUTO PUNCH** key so that it lights.
- 4 Press the **RHSL** (rehearsal) key so that it lights.
- 5 Press the **PLAY** key.

Playback starts from before the **IN** point (the **PLAY** indicator is lit).

At the **IN** point, the playback of the armed track(s) stops. The **RECORD** indicator starts to flash, indicating this the point where recording would start were you actually punching in.

At the **OUT** point, the signal you hear returns to what you recorded earlier. The **RECORD** indicator stops flashing.

When playback reaches the post-roll point, it stops. When you do your next rehearsal or punch, playback will start from the pre-roll point.

TIP

The **RHSL** key indicates you are in “rehearsal” mode, as long as **AUTO PUNCH** is not lit. Your rehearsal take(s) is not actually recorded.

TIP

If you’re replacing a mistake, make sure that the sound you are recording matches the sound you’re replacing (same effect settings, etc.).

TIP

If the **IN** and **OUT** points are not where they should be for your punch recording operation, you can turn off **AUTO PUNCH** and edit their position (See “**IN** and **OUT** marks” on page 29).



What you hear

Playback from previously recorded track starts at pre-roll position, up to **IN** point (**PLAY** indicator lights).

Recorded signals are cut (**RECORD** indicator flashes in rehearsal, lights when recording)

Return to track playback (**RECORD** indicator goes out) and playback stops at post-roll point

You can always hear the input signal

- 6 Repeat the rehearsal as many times as you need until you are happy with your performance.

TIP

You can rehearse by looping between the pre-roll and post-roll points using the **REPEAT** key.

Punch recording

When you have rehearsed your punch-in, you can start recording.

- 1 Press the **RHSL** key so that the indicator goes out (but the **AUTO PUNCH** indicator is still lit).
- 2 Press **PLAY** so that playback starts. Use the pre-roll time to get ready to record.

At the punch-in point, the DP-01 goes into record mode (the **RECORD** indicator lights).

At the punch-out point, recording stops (the **RECORD** indicator goes out), and playback continues until the post-roll point and then returns to the pre-roll point. The **AUTO PUNCH** indicator is turned off (the track arming status stays the same).

- If you want to re-record the punch, turn **AUTO PUNCH** back on before recording again.

Pre-roll and post-roll times

The pre-roll and post-roll times can be set to suit your style of playing.

- 1 Press **MENU** and scroll down to **PREFERENCE** and press the **▶** key.

```

-- PREFERENCE --
Meter: S. Fat
Pre   # 3.5Sec
Post  : 1.8Sec

```

- 2 Use the cursor keys to move the cursor to the **Pre** (pre-roll time) item, and use the jog wheel to set the value in seconds.
- 3 Use the cursor keys to move down to the **Post** (post-roll time) item and use the jog wheel to change the value.
- 4 Press **EXIT** when you're done, so that you can start using these settings.

TIP

The pre-roll and post-roll times can be set between 1.0 seconds and 9.9 seconds in 0.1 second steps

Bouncing

“Bouncing” on the DP-01 refers to the technique of mixing recorded tracks through the **MASTER** fader to a pair of unused tracks.

You might use a track bounce operation in the following situation:

TIP

You can bounce to one track, if you want, but you will probably want to bounce in stereo.

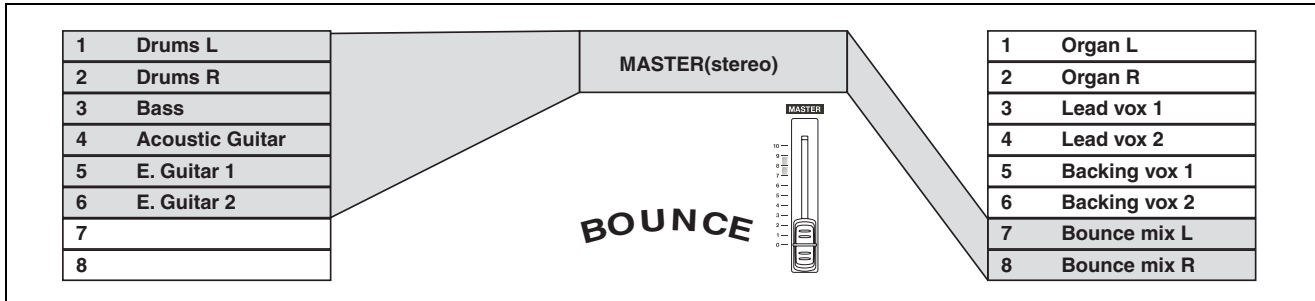


Figure 2.2: Bouncing tracks

You’ve recorded the drums in stereo, the bass and two rhythm guitars (one acoustic and one electric) and an electric guitar lead line. There are two tracks left. You’d like some stereo organ added in, and there are two lead vocal lines to record, as well as at least one set of backing vocals. But there are only two tracks left!

Luckily, you can bounce everything through the stereo tracks, and record them onto the two spare tracks.

- 1 “Un-arm” (safe) the existing tracks so that you don’t accidentally record over them.
- 2 Press the **BOUNCE** key (above the **MASTER** fader) so that it lights.
- 3 Arm the two tracks which you are mixing to.
- 4 Use the faders and mixer controls of the tracks you’re bouncing to create a stereo mix.
- 5 Adjust the overall level of the mix using the **MASTER** fader. Watch the L and R meters on the right side of the display so that the level is adjusted to the optimum level. During this step, mute the tracks at the bounce destination.
- 6 When you’re ready, use **PLAY** and **RECORD** to record the mix onto the two armed tracks from start to end, with no stops. “Safe” the armed tracks.
- You can now record over the original tracks you bounced, playing along to the stereo pair created from the bounce.

TIP

You may want to copy the song and give it another name (see “Copying songs” on page 42) before starting the bounce, so that you can go back to the original if necessary.

TIP

You can also use auto punch recording (“Punching” on page 32) to bounce only part of a song between the **IN** and **OUT** points.

Repeat

Repeat allows you to repeat the playback or auto-punched rehearsal (see “Rehearsal” on page 32) between the IN and OUT points.

- First, set the IN and OUT points at the place where you want the repeat loop to start and stop (see “IN and OUT marks” on page 29).
- Press the **REPEAT** key briefly so that the indicator lights. Playback starts automatically from the IN point.
- When the playback reaches the OUT point, playback pauses for a short while (see “Setting the repeat interval” on page 35) and the **PLAY** indicator flashes before playback starts again, and the **PLAY** indicator lights steadily.
- Turn off the repeat function by pressing **REPEAT** so that the indicator goes out.

Repeat auto-punch rehearsal, but not repeat auto-punch recording, is also possible. If **AUTO PUNCH**, **RHSL** and **REPEAT** are all lit, pressing **RHSL** to go from rehearsal to auto punch recording mode will also turn off **REPEAT**.

NOTE

You can't set these points when the **REPEAT** key is lit.

Setting the repeat interval

You can set the time between repeats up to 9.9 seconds.

- Press and hold the **REPEAT** key for about a second, and the screen shows:

```

ABS  00:02:34:21
-----
REPEAT
INTERVAL  1.7
    
```

Use the jog wheel to set the repeat interval from 0.5 seconds to 9.9 seconds in 0.1 second steps.

- Press **REPEAT** again briefly to exit the interval setting mode.

TIP

This repeat interval allows you to reposition your hands for a guitar lick, take a breath for a vocal phrase, etc., when you are rehearsing.

Working in bars & beats

Besides working in minutes and seconds (as explained in detail in “Direct location” on page 28), the DP-01 can work in musical bars and beats. This is especially useful when working with external MIDI devices (see “Working with MIDI” on page 38).

TIP

“Bars” are also sometimes referred to as “measures”.

Tempo setting

For the bars/beats function to be useful, you must set up a tempo and time signature. These allow the DP-01 to calculate where the bar and beat divisions fall, based on the tempo of your song.

- 1 With playback stopped, press **MENU** and select the MIDI menu.
- 2 Select the TEMPO/T.SIG (tempo and time signature) action and press the **▶** key:

```
- TEMPO/T.SIG -  
Tempo      ♪ 120  
Time Sig   : 4/4
```

- 3 There are two parameters here, the tempo and the time signature. Use the cursor and jog wheel to set these.
 - The tempo is measured in beats per minute (bpm) and can be set from 20 to 250.
 - The time signature can be set with the number of beats to the bar (1 through 12) and the number of beats per whole note (1, 2, 4, or 8).

TIP

Most rock and pop music is in 4/4 (with a few famous exceptions). Some country and folk songs, as well as waltzes, are in 3/4.

Selecting the time mode

Once the time signature and tempo are set, the DP-01 can map the bar and beat divisions to the time.

To display bars and beats: On the “home” screen, move the cursor to the ABS field:

```
|ABS  00:00:05:12|
```

Turn the jog wheel clockwise. ABS changes to BAR and the current position in bars and beats is shown, with the tempo shown on the right of the screen:

```
|BAR  002-01 50|
```

- With the cursor at BAR, turn the jog wheel counterclockwise to return to the time-based display.

Location is performed in the same way as described in “Location” on page 28, except that there are only two fields now, bars and beats.

Track editing is also performed in the same way as described in “About track editing” on page 50, but because the editing points are now set to a bars and beats-based position, the editing can be more “musical”.

Point editing Even when the screen shows positions in bars and beats, location points are edited in minutes and seconds (“To edit a location mark” on page 29), except that the bars and beats equivalent is also shown.

When the **LOCATE** key is held down in “bars and beats” mode, the display looks something like this:

```

BAR 003-02 59
-- LOCATE LIST --
M001: 004-03 59
M002: 007-05 59
    
```

Selecting a point to edit shows the bars and beats below the absolute time value. The bars and beats cannot be set directly, but change, together with the absolute time value, as the jog wheel is turned:

```

--- Trim M001 ---
          00m15s24f0
(BAR 004-03 59)
    
```

NOTE *IN, OUT and TO points do not show the bars/beats value when being edited.*

Metronome

To help you keep in time, the DP-01 provides an internal metronome function and a MIDI metronome function. The internal metronome function allows you to listen to the metronome on the DP-01, while the MIDI metronome function generates a metronome output on the MIDI interface.

- 1 Press **MENU**, use the **DATA** dial to select the **MIDI** menu, and press the **▶** cursor key.
- 2 Select the **METRONOME** item, and press the **▶** cursor key.

When "INT" is selected at "Output" [internal metronome]

The DP-01's internal metronome (not an external sound source) can be output to headphones and LINE OUTPUT L/R.

```

--- METRONOME ---
Output = INT
Mode   :Rec&Play
IntLvl : 100
    
```

Mode Select from **RecOnly** (only at recording) and **Rec&Play** (at recording and playback).

IntLvl Set the output level of the metronome within the range 0 to 127. (The output level cannot be adjusted on the MASTER fader.)

When "MIDI" is selected at "Output" [MIDI metronome]

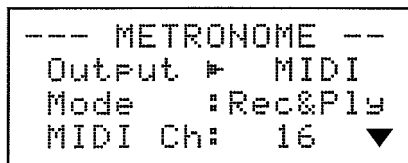
This setting generates a metronome output via the MIDI interface. Generally, percussion type sounds are used as the metronome. Any sound, of course, can be produced.

TIP *The internal metronome is not output in the following instances:*

- While the **BOUNCE** key is lit
- While the **MASTER** key is flashing or is lit

Working in bars & beats

You can select MIDI channel, note/note on velocity of a regular click, and note/note on velocity of an accent.



Scroll the list to set the following parameters:

Mode Select from **RecOnly** (only at recording) and **Rec&Play** (at recording and playback).

MIDI Ch The MIDI channel on which the metronome signals are output.

AccNote The note played at the start of each bar. C3 is equivalent to MIDI note 60.

AccVelo The velocity (which typically affects the volume) of the note at the start of each bar.

NrmNote The note played at each beat, except at the start of each bar. C3 is equivalent to MIDI note 60.

NrmVelo The velocity (which typically affects the volume) of the note at each beat, except the start of each bar.

When "OFF" is selected at "Output"

The metronome function is disabled, and no items other than Output are displayed.

TIP Channel 10 is defined as the default drum channel for all General MIDI devices.

Working with MIDI

The DP-01 is equipped with a MIDI OUT jack. This can be used to drive a sequencer, drum machine, etc., either synchronized to a time base, or a MIDI clock (see below for an explanation of how this works). MIDI OUT is also used to drive a MIDI instrument as a metronome (see "Metronome" on page 37).

A MIDI instrument can be connected to the **A** and **B** inputs, or mixed with the recorded tracks from the analog outputs if it is fed into the **STEREO MIX** inputs.

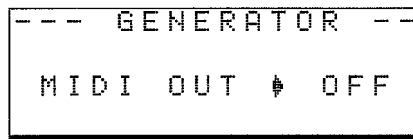
MIDI Clock, etc.

The MIDI song control messages put out by the DP-01 from the MIDI OUT port include tempo (MIDI Clock), bar and beat information (Song Position Pointer), and Start/Stop/Continue messages. This way of working is particularly suitable for synchronizing with bar/beat-based MIDI devices such as drum machines and rhythm units.

NOTE You must set a tempo and time signature on the DP-01 ("Tempo setting" on page 36) to use this feature.

1 Press **MENU** and scroll down to MIDI and press the **▶** key.

- 2 Select the GENERATOR action and press the ▶ key:

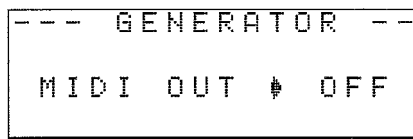


- 3 Use the jog wheel to change the OFF setting to CLK (clock).
 - The DP-01 now sends the messages described here from MIDI OUT when playing back or recording. Connect the MIDI OUT of the DP-01 to the MIDI IN of your MIDI instrument.
 - Consult the documentation of the MIDI instrument for details of how to synchronize to MIDI Clock, etc. messages as a slave.

MIDI timecode

MIDI Timecode sends out the current position in hours, minutes, seconds and frames through the MIDI OUT port. Typically, you will use the timecode function with devices such as recorders and Digital Audio Workstations (DAWs) that work to a time base, rather than a bars and beats base.

- 1 Press MENU and scroll down to MIDI and press the ▶ key.
- 2 Select the GENERATOR action and press the ▶ key:



- 3 Use the jog wheel to change the OFF setting to MTC (MIDI Timecode).
 - The DP-01 now sends timecode from MIDI OUT when playing back or recording. Connect the MIDI OUT of the DP-01 to the MIDI IN of your MIDI device.
 - Consult the documentation of the MIDI device for details of how to synchronize to MIDI Timecode as a slave.

NOTE The DP-01's MIDI Timecode is fixed at a frame rate of 30 fps and cannot be changed.

When "OFF" is selected at "Output" The metronome function is disabled, and no items other than Output are displayed.

Disk management

The DP-01 allows you format and re-partition the internal hard disk to suit your needs.

The DP-01's hard disk is divided into partitions. Songs can be created on a partition and moved to another one later for archive purposes, etc., or you can use different partitions for different types of songs.

In addition to the song partitions, there is also a FAT-formatted partition. This is the part of the hard disk that can be read by a personal computer when the DP-01 is connected using USB. Whenever you want to archive or store a song on a computer, export a mix to a computer, or import an audio file for inclusion in a song, the data must be copied in two operations, copying first to the FAT partition and then from there to your computer.

CAUTION

Formatting and re-partitioning are "destructive" actions. You cannot undo them, and the changes are permanent.

NOTE

The FAT format (File Allocation Table) is a disk format which can be read by all personal computers.

Selecting the active partition

Choose the active partition, from which you can load existing songs and on which you can create new songs, etc.

- 1 Press **MENU** and select the DISK menu.
- 2 Select the PARTITION action and press the **▶** key.

```
-- PARTITION --
# Part01 ← 16GB
  Part02   16GB
  Part03   1GB
```

An arrow (←) shows the active partition. The sizes of the partitions are shown (not the available space).

- 3 Move the cursor (#) to the partition to make it active and press **ENTER**.
The DP-01 stores the current song, loads the current song on the new partition and shows a series of messages about the progress of the operation.

NOTE

You cannot select the FAT partition here.

Formatting a disk

As well as formatting the internal hard disk, you can set the size of the DP-01 native partitions.

- 1 Press **MENU** and select the DISK menu.
- 2 Select the FORMAT action and press the **▶** key.

```
-- FORMAT --
Disk Size   37GB
Parti Size  #32GB
[ENTER] -> Exe
```

- 3 Use the jog wheel to select the size of the partitions (32, 16, 8 or 4 gigabytes—1 gigabyte is 1024 megabytes).
- All partitions will be the same size, except the last one, which will be the size of the remaining space.

CAUTION

This destroys all data on the entire disk. You cannot undo it. ONLY CARRY OUT THIS OPERATION IF YOU ARE SURE THIS IS WHAT YOU REALLY WANT TO DO.

NOTE

The disk size shown on the display may vary from the example given here.

- 4 Press **ENTER**.

A message reminds you that all songs will be lost.

- 5 Press **ENTER** again to format the disk with the new partition sizes (or **EXIT** to escape without formatting).

WARNING

It is most important that the power to the DP-01 is not turned off when the disk is being formatted. If this happens, the unit may become unusable.

Formatting a partition (Reform)

If you want to keep partition sizes the same, or you only wish to clean out one partition of the hard disk, this is the way to do it.

- 1 Press **MENU** and select the DISK menu.
- 2 Select the REFORM action and press the **▶** key

```

-- REFORM --
Part01 ← 16GB
Part02  16GB
Part03  1GB
    
```

An arrow (←) shows the active partition. The sizes of the partitions are shown (not the available space).

- 3 Select the partition to be re-formatted (shown by the **⚡** cursor) and press **ENTER**.

A popup message reminds you that all data on the partition will be lost.

- 4 Press **ENTER** to reformat the partition.

CAUTION

You cannot undo this operation—all data on the selected partition will be lost. ONLY CARRY OUT THIS OPERATION IF YOU ARE SURE THIS IS WHAT YOU REALLY WANT TO DO.

Formatting the FAT partition

The FAT partition is used for transfer between the DP-01 and a personal computer. Its size is fixed by the DP-01, and cannot be changed.

- 1 Press **MENU** and select the DISK menu.
- 2 Select the FAT REFORM action and press the **▶** key

```

-- FAT REFORM --
[ENTER] -> Exe
    
```

- 3 Press **ENTER**.

A popup message reminds you that all data on the FAT partition will be lost.

- 4 Press **ENTER** to reformat the FAT partition.

CAUTION

You cannot undo this operation—all data on the FAT partition will be lost. ONLY CARRY OUT THIS OPERATION IF YOU ARE SURE THIS IS WHAT YOU REALLY WANT TO DO.

Automatic song creation

After formatting a disk or a partition, a new song is always created on any blank partition, in the same way that one is created if the only song on a partition is erased. You always have a song available to work with.

Advanced song management

Copying songs

The DP-01 disk is divided into “partitions” (see “Disk management” on page 40). You can use different partitions for different purposes: old songs/new songs, or instrumentals/vocal numbers, for example.

This function allows you to copy a song to another partition.

- 1 From the SONG menu, select the COPY action:

```
-- SONG COPY --
# MyBlues 118M
  GoHome <224M
```

- 2 Highlight a song and press ENTER.

```
-- SONG COPY --
to #Part02
Free : 16380MB
Song : 118MB
```

- 3 Use the jog wheel to select the “target” partition that the song will be copied to. As you scroll through the partitions, you will see the available free space figure change, so you will always know if there is enough space for the song.

- 4 Press ENTER when you’ve selected the target partition.

You are asked if you want to copy the song (Are you sure?).

Press ENTER to copy the song, or EXIT to cancel the operation.

- 5 The DP-01 then provides you with a progress report as it carries out the copying operation. When it is finished, you see the copy screen again.

TIP

You can also use the multiple selection procedure described in “Erasing many songs at one time” on page 22 to copy many songs at once.

TIP

When the DP-01 leaves the factory, the disk has three “native” partitions.

Deleting unused data

Because a DP-01 song is not just the parts you hear, but possibly unused audio parts (see “About track editing” on page 50), there may be parts which have been cut out or that you want to delete so you don’t waste hard disk space.

You can delete the unused data from the currently-loaded song.

- 1 From the SONG menu, select the DEL/UNUSED action:

```
- SONG DEL/UNUSE -
Title : MyBlues
[ENTER] -> Exe
```

- 2 Press ENTER to delete the unused data, or EXIT to cancel the operation.

CAUTION

This operation cannot be undone. Only do it if you are sure you do not want the unused parts.

Protecting a song

When a song is protected, it cannot be edited, and further recording is not possible. Of course, it cannot be erased, either.

- 1 From the SONG menu, select the PROTECT action:

```
-SONG PROTECT --  
Title : MyBlues  
Protect # OFF  
[ENTER] -> Exe
```

- 2 Use the wheel to change protection from OFF to ON and press **ENTER**.
 - In lists of songs for copying, deletion, etc., a “key” icon (🔑) appears beside any protected song.
 - If you try to do an action which cannot be performed on a protected song, a message appears (Song Protected).
 - Unprotect a song by following the steps above, but changing ON to OFF.

Using the USB connection

You can use a personal computer to read and write from the FAT partition of the hard disk.

Data transfer between a personal computer and the DP-01 is always done through this FAT partition. You cannot access “native” partitions from a computer, so performing data transfer functions is a two-stage process.

Within the FAT partition, there are three directories (folders): BACKUP, WAVE and UTILITY, as explained below.

You can make the following transfers:

- Whole songs—the DP-01 calls this BACKUP (from the DP-01 to the BACKUP directory of the FAT partition to the PC) and RESTORE (from the PC to the BACKUP directory of the FAT partition of the DP-01).
- Tracks in WAV format—tracks can be exported (one or more at a time) as WAV files, or imported (one at a time) from WAV files between the PC and the WAVE directory of the FAT partition of the DP-01.
- Mastered stereo mixes—export only, as stereo WAV files to the WAVE directory of the FAT partition of the DP-01.

System requirements

The DP-01 will work with the following Microsoft operating systems: Windows ME, Windows 2000, and Windows XP. It will also work with the following operating systems from Apple Computer: MacOS 9.0 and above, and MacOS X 10.2 and above.

For all the above operating systems, no driver is required. The DP-01 simply appears as a removable disk.

However, you should always follow your computer’s instructions on how to disconnect a USB removable drive safely from your system. If you do not do this, there is a risk of data corruption in the DP-01’s FAT partition.

Disconnecting from Windows ME / 2000 / XP systems With Windows ME, Windows 2000 and Windows XP, the procedure is a little more complex than simply unplugging the DP-01.

In the system tray (typically at the bottom right of the screen), you see an icon of a PC card and an arrow.

- 1 Left-click this icon to show a popup bar. Click this popup bar to allow the DP-01 to be removed from the computer.

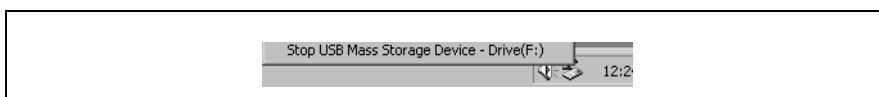


Figure 2.3: Disconnecting the DP-01

- 2 When the panel telling you it is safe to remove the DP-01 appears, press the DP-01 EXIT key to “close” the system (see ““Open” and “Close”” on page 45):

```
| [EXIT] -> close |
```

NOTE

We use the term “PC” throughout this section to mean either a Windows or Macintosh personal computer.

CAUTION

Do not rename or delete these directories—if you do, you will lose the ability to carry out the operations described here.

NOTE

The UTILITY directory is used for DP-01 system updates, etc. Explanations of how this is used are given with the update software.

NOTE

Data transfer between the DP-01 and a PC takes place at USB 2.0 speeds (maximum). If your computer has USB 1.1, but no USB 2.0, data transfer will still work, but the USB 1.1 rate. We recommend that you always use a high-quality USB 2.0 cable in order to maximize data transfer speeds.

- 3 You can now unplug the USB cable.
- If a panel telling you it is not safe to remove the DP-01 appears, do not “close” or unplug the DP-01. Close all programs and windows that are accessing the files on the DP-01 and try again.

Disconnecting from a Macintosh system When you are disconnecting the DP-01 from a Macintosh system (OS 9 or OS X), drag the disk icon to the Trash, or press Command-E (OS X 10.3 also has a button in the Finder which allows ejecting removable media). When the icon has disappeared from your desktop, you can disconnect the DP-01.

“Open” and “Close”

Before using the DP-01’s FAT partition, you must “open” the system so that it can be read by the PC. While the system is open, you cannot perform any recording, playback, etc., or any operations involving the DP-01 hard disk.

- 1 Connect the DP-01 to the PC.
- 2 Press **MENU** and select the DISK menu.
- 3 Select the USB OPN/CLS action and press the **▶** key

```

-- USB OPN/CL --
[ENTER] -> Exe
    
```

- 4 Press **ENTER** to open the disk. A popup message appears, asking if you are sure.
- 5 Press **ENTER** again. The screen shows:

```

| [EXIT]->close |
    
```

The DP-01 is now locked until you press **EXIT**.

TIP

Make sure that you have saved songs, copied all the files you’re going to transfer to the PC to the FAT partition, etc., before you open the DP-01.

CAUTION

*Remove the DP-01 from the computer (see “Using the USB connection” on page 44) before pressing **EXIT**.*

Backing up and restoring songs

When you back up a song, you’re backing up the audio tracks, as well as any editing, etc. Reverse the process (computer hard disk to FAT partition to DP-01 disk) when you want to restore a song.

Backing up

- Before you start, make sure that you’ve selected the partition containing the song you’re going to back up (“Selecting the active partition” on page 40).
- 1 Press **MENU** and select the BACKUP menu.
 - 2 Select the SONG BACKUP action and press the **▶** key

```

--- BACKUP ---
# MyBlue ← 127M
  BigBang 234M
  TrioInF 312M
    
```

The current song is shown with the **←** symbol beside it.

Using the USB connection

- Use the jog wheel to move the selection cursor (⤴) to the song to be backed up. Press **ENTER**.
- You can now use the left and right cursor keys and the wheel to name the song archive (up to 8 characters) (see “Titling” on page 15) :

```
---- BACKUP ----  
File [SONG0000]  
[ENTER] -> Exe
```

- Press **ENTER** to back up the song to the FAT partition. An error message appears if there is not enough space.

The song is then copied as an archive from the current partition to the FAT partition (with a .001 extension). Messages appear on the screen as the DP-01 goes through the file archiving process.

- Connect the DP-01 to the computer using the USB cable, and “open” the drive (“Open” and “Close” on page 45).
- Use the PC operating system to copy or move the song archive from the BACKUP directory of the DP-01 FAT partition to the PC.
- Once the song archive is on the PC, you can “close” the DP-01.
- The song archive on the PC can then be backed up to CD-R, etc. You can restore it later to the same DP-01 or to a friend’s DP-01, allowing you to complete the recording at another location, or perform the final mix where there are better speakers available, etc.

Restoring a song

This is basically the reverse of the backup process, allowing you to transfer a song archive from a PC to the DP-01.

- Connect the DP-01 to the PC using the USB cable, and “open” the drive (“Open” and “Close” on page 45).
- Use the PC operating system to copy the song archive from the PC to the BACKUP directory of the DP-01 FAT partition.
- “Close” the DP-01.
- Press **MENU** and select the BACKUP menu.
- Select the SONG RESTORE action and press the **▶** key. The display shows the song archive files on the FAT partition

```
---- RESTORE ----  
MYBLUE .001  
⤴ BIGBANG.001  
TRIOINF.001
```

- Select a song archive using the jog wheel and press **ENTER**. The current song is saved.
- The “real” song name is extracted from the archive and shown:

```
| Song: BigBang |  
| Are you sure ? |
```

- Press **ENTER** to load the archived song as the current song. Appropriate messages are shown if there is not enough disk space, etc.

TIP If you do not have enough space on the FAT partition to back up a song, you must connect the DP-01 to a PC and manage the files from the PC.

NOTE You should not rename the song archive on the PC as this may “confuse” the DP-01 when you come to restore it.

NOTE If there are no song archive files on the FAT partition, a message is shown.

NOTE Although the DP-01 displays shorter file names with spaces at the end of the name, these spaces are not part of the actual file name.

Importing and exporting tracks

You can import and export individual tracks to and from a PC via the FAT partition. The files used for track import and export are 16-bit 44.1 kHz mono WAV format (and must have the .WAV extension). Audio in other formats intended for import must be converted before they can be imported to the DP-01.

Importing a track

Before you start, make sure that you have selected the partition containing the song to which you want to import the track, and that the song is loaded.

- 1 Connect the DP-01 to the PC, and “open” the drive (“Open” and “Close” on page 45).
- 2 Use the PC operating system to copy the WAV file from the PC to the WAVE directory of the DP-01 FAT partition.
- 3 “Close” the DP-01.
- 4 Press **MENU** and select the WAVE menu.
- 5 Select the IMPORT TRACK action and press the **▶** key. The display shows the song archive files on the FAT partition:

```

- IMPORT WAVE -
▶ BIGDRUMS.WAV
  BELLS .WAV
  MALEAHH.S.WAV
    
```

- 6 Use the jog wheel to select the WAV file to be imported and press **ENTER**.

```

- IMPORT WAVE -
to ▶ Track 2
Free : 4023MB
Wav : 75MB
    
```

The display shows the amount of free space on the current partition, and the size of the selected WAV file.

- 7 Use the jog wheel to select the track into which the WAV file will be imported. Press **ENTER**. Appropriate messages are shown if there is not enough space, the file is in the wrong format, etc.
 - The DP-01 reads the file from the FAT partition into the track, with the start of the file at the “zero” position in the song.
 - Once the file has been read into the track, it can be edited (moved, copied, etc.) like any other recorded track. See “About track editing” on page 50.

Exporting tracks

Any track can be exported as a mono, 16-bit 44.1 kHz WAV format file.

- 1 Press **MENU** and select the WAVE menu.

NOTE

Although shorter file names are shown with spaces on the DP-01 display, the actual file names on disk do not contain these spaces.

NOTE

Make sure the target track is an empty track. You cannot import a track unless the target track is empty.

Using the USB connection

- 2 Select the EXPORT TRACK action and press the **▶** key. The display shows a list of suggested file names, based on the song tracks which contain audio:

```
- EXPORT TRACK -  
▶ TRACK001  
  TRACK002  
  TRACK006 ▾
```

- 3 Use the jog wheel to highlight a track, and the **INSERT** key to mark it for export.

A check mark (✓) appears by the song title if it is marked for export.

De-select a track by moving the cursor to it, and pressing **SHIFT + INSERT (DELETE)**. The check mark disappears.

- When the cursor is by a track, you can press **SHIFT** and **MENU** to bring up a titling screen:

```
| FILE NAME |  
| [TRACK001] |
```

- Edit the name, and press **ENTER** when you're finished ("Titling" on page 15).

- 4 When all tracks for export have been selected, press **ENTER**.

```
- EXPORT TRACK -  
Free   : 4789 MB  
Total  : 402 MB  
[ENTER] -> Exe
```

The display shows the free space on the FAT partition (the destination of the exported tracks) and the space which the exported tracks will occupy.

- 5 Press **ENTER** to export the selected tracks.

The tracks are exported with the names you entered (a .WAV extension is added). If you already have exported a track file with the same name as one you have chosen, a message appears asking you if you want to overwrite the older file.

- 6 Connect the DP-01 to the computer and "open" the drive ("Open" and "Close" on page 45).

- 7 Use the PC operating system to copy or move the exported tracks from the WAVE directory of the DP-01 FAT partition to the PC.

- Once the tracks are on the PC, you can "close" the DP-01.
- The exported tracks on the PC can then be backed up to CD-R, etc.
- You can rename the exported tracks on the PC, but you should remember to keep to the "8.3" standard and the .WAV extension and remember to limit the character to letters of the alphabet (no accented characters or "odd" punctuation, etc.).
- You can import these tracks later to the same DP-01 or to a friend's DP-01.

NOTE

If a track does not contain audio, it does not appear in this list.

Exporting the mastered stereo tracks

When you have finished mastering (see “Mastering” on page 27), you may want to save the mastered stereo mix, otherwise it will be overwritten when you next perform a mastering operation.

Before you start this operation, make sure you have loaded the song whose mastered mix you will be exporting (and that it does indeed contain a stereo mastered mix).

- 1 Press **MENU** and select the **WAVE** menu.
- 2 Select the **EXPORT MSTR** action and press the **▶** key. The display shows a default file name for you to edit:

```

-- EXPORT MSTR --
File [MIXST001]
[ENTER] -> Exe
  
```

- 3 Use the left and right cursor keys and the jog wheel to name the exported mastered stereo mix (“Titling” on page 15).
- 4 When you’re done, press **ENTER** to export the mastered stereo mix (as a single 16-bit 44.1 kHz stereo WAV file).
- The file is exported with the name you just entered, and a **.WAV** extension.
- 5 Connect the **DP-01** to the computer and “open” the drive (“Open” and “Close” on page 45).
- 6 Use the **PC** operating system to copy or move the exported mastered mix file or files from the **WAVE** directory of the **DP-01** **FAT** partition to the **PC**.
- Once the file or files are on the **PC**, you can “close” the **DP-01**.

NOTE If there is no mastered mix, the display will inform you.

NOTE Press **EXIT** if you want to cancel the export operation.

About track editing

One of the most useful features of a disk-based recorder such as the DP-01 is the ability to edit material easily. When working with a stereo tape recorder in the past, editing was not an easy process, and was very difficult to undo if there were any mistakes. Multitrack editing was nearly impossible!

The DP-01 allows you to edit songs, copying and moving material from one part of a song to another. This editing is known as *non-destructive editing*, meaning that the operation does not actually destroy data, and you can undo mistaken or unwanted editing operations easily.

If you have ever used a word-processor on a computer, you will probably find most of the DP-01's editing operations pretty simple. If you have never used a computer, the DP-01's editing operations are nothing to be scared of—just read through this section to see how it all works.

NOTE

You can undo the editing operations described here (see "Undoing operations" on page 54). Even if you delete all the material on every track using these functions, you can still get it back with only a few key-presses.

IN, OUT and TO

We have previously seen how the IN and OUT points can be used for punching and for location. They are also used in these track editing operations, together with the TO point.

- The IN point marks the start of the part of the track which is selected when editing a part of a track (rather than a whole track).
- The OUT point marks the end of the part of the track which is selected when editing part of a track.
- The TO point marks the final destination of a copy or a move operation.

Using edit mode

- 1 Make sure that the DP-01 is stopped (not playing back or recording).
- 2 Press the TRACK EDIT key (beside the jog wheel).

```
-- TRACK EDIT --
COPY PASTE  ⤴
COPY INSERT :
MOVE PASTE  :
```

- 3 Use the jog wheel to move the ⤴ cursor to the track editing function you will be using and press the ▶ key.
- 4 Select the appropriate values, as described for each individual function.
- 5 Press YES to perform the operation, or NO to exit without performing the operation.

Track editing functions

The track editing functions available on the DP-01 are:

- COPY->PASTE
- COPY->INSERT
- MOVE->PASTE
- MOVE->INSERT
- OPEN
- CUT
- SILENCE
- CLONE TRACK
- CLEAN OUT

COPY -> PASTE

This function takes the section of a track or tracks marked by the IN and OUT points, copies it, and pastes it at the TO point on the chosen track or tracks.

The original source is left unchanged.

The copy operation overwrites anything which is already recorded at the destination. The track is the same length as it was before the operation.

You can copy the section more than once in one operation.

- You can change the following values:

Src.Trk This sets the source track or tracks from which the section is copied. Choose 1 through 8 to select an individual track. Choose 1/2, 3/4, 5/6 or 7/8 to select a pair of tracks. Choose 1-8 to select all tracks.

Dst. Trk This sets the destination track or tracks to which the selected section is pasted. What you can select here depends on what you have selected for the source track. If you have selected a single track, you can select tracks 1 through 8 here. If you have selected a pair of tracks (for instance, 1/2), you can only select track pairs here. If you have selected all tracks (1-8), then 1-8 is the only option available to you here.

Times This is the number of times that the selected section is pasted into the destination track or tracks. You can set this value from 1 to 99.

Press **YES** to perform the operation or **NO** to leave this screen.

COPY -> INSERT

This function takes the section of a track or tracks marked by the IN and OUT points, copies it, and inserts it on the chosen track or tracks, as new material, starting at the TO point.

The original source is left unchanged.

The insert operation adds the selected section as new material to the destination. Nothing is overwritten at the destination, as any existing material following the TO point is moved to the end of the newly-inserted section. The track is now longer than it was before the operation.

You can copy the section more than once in one operation (for example, to repeat a verse/chorus section).

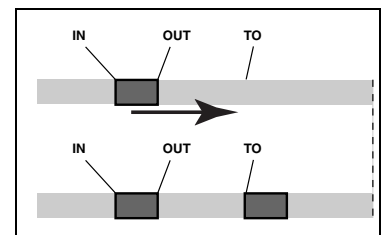


Figure 2.4: Copy and paste

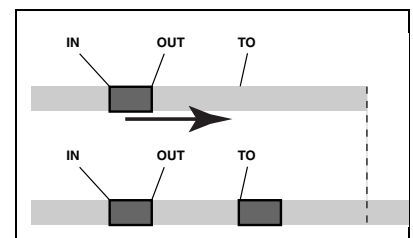


Figure 2.5: Copy and insert

About track editing

- You can change the following values:

Src. Trk This sets the source track or tracks from which the section is copied. Choose 1 through 8 to select an individual track. Choose 1/2, 3/4, 5/6 or 7/8 etc. to select a pair of tracks. Choose 1-8 to select all tracks.

Dst. Trk This sets the destination track or tracks into which the selected section is inserted. What you can select here depends on what you have selected for the source track. If you have selected a single track, you can select tracks 1 through 8 here. If you have selected a pair of tracks (for instance, 1/2), you can only select track pairs here. If you have selected all tracks (1-8), then 1-8 is the only option available to you here.

Times This is the number of times that the selected section is inserted (end-to-end) in the destination track or tracks. You can set this value from 1 to 99.

Press **YES** to perform the operation or **NO** to leave this screen.

MOVE -> PASTE

This function takes the section of a track or tracks marked by the IN and OUT points, and moves it to the chosen track or tracks, starting at the TO point.

After the operation, the selected section of the source between the IN and OUT points is replaced by silence.

This operation overwrites anything which is already recorded at the destination. The track is therefore the same length as it was before the operation.

- You can change the following values:

Src. Trk This sets the source track or tracks from which the section is taken. Choose 1 through 8 to select an individual track. Choose 1/2, 3/4, 5/6 or 7/8 to select a pair of tracks. Choose 1-8 to select all tracks.

Dst. Trk This sets the destination track or tracks to which the selected section is moved. What you can select here depends on what you have selected for the source track. If you have selected a single track, you can select tracks 1 through 8 here. If you have selected a pair of tracks (for instance, 1/2), you can only select track pairs here. If you have selected all tracks (1-8), then 1-8 is the only option available to you here.

Press **YES** to perform the operation or **NO** to leave this screen.

MOVE -> INSERT

This function takes the section of a track or tracks marked by the IN and OUT points, and moves it to the chosen track or tracks, inserting it as new material, starting at the TO point.

After the operation, the selected section of the source between the IN and OUT points is replaced by silence.

The insert operation adds the selected section as new material to the destination. Nothing is overwritten on the destination, as any material following the TO point is moved to the end of the newly-inserted section. The track is therefore longer than it was before the operation.

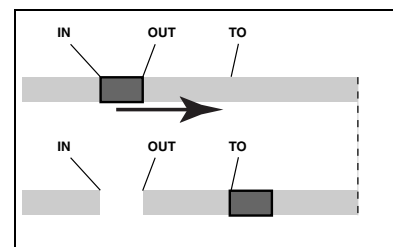


Figure 2.6: Move and paste

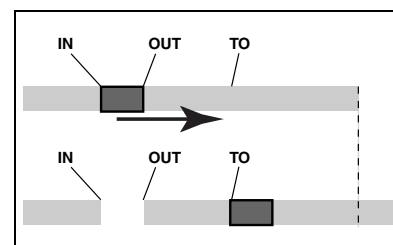


Figure 2.7: Move and insert

- You can change the following values:

Src. Trk This sets the source track or tracks from which the section is taken. Choose 1 through 8 to select an individual track. Choose 1/2, 3/4, 5/6, 7/8 to select a pair of tracks. Choose 1-8 to select all tracks.

Dst. Trk This sets the destination track or tracks into which the selected section is inserted. What you can select here depends on what you have selected for the source track. If you have selected a single track, you can select tracks 1 through 8 here. If you have selected a pair of tracks (for instance, 1/2), you can only select track pairs here. If you have selected all tracks (1-8), then this is the only option available to you here.

Press **YES** to perform the operation or **NO** to leave this screen.

OPEN

This function “opens up” a silent gap between the IN and OUT points on the chosen track or tracks.

The source and destination are the same, and after the operation, the track is split at the IN point, with the material which followed the IN point now moved to follow the OUT point. The result is therefore longer than the original.

- There is only one value that you can change:

Src. Trk Select an individual track (1 through 8), a pair of tracks (1/2, 3/4, 5/6, 7/8), all of the tracks (1-8) or all tracks (ALL).

Press **YES** to perform the operation or **NO** to leave this screen.

CUT

This function deletes the material between the IN and OUT points on the chosen track or tracks and “closes up” the gap.

The source and destination are the same, and after the operation, the material between the IN and OUT points is deleted. The track is therefore shorter than the original.

- There is only one value that you can change:

Src. Trk Select an individual track (1 through 8), a pair of tracks (1/2, 3/4, 5/6, 7/8), all of the tracks (1-8) or all tracks (ALL).

Press **YES** to perform the operation or **NO** to leave this screen.

SILENCE

This function is equivalent to recording silence between the IN and OUT points on the chosen track or tracks.

Material is deleted, but the length of the result is the same as that of the original (the gap is not closed up, unlike with the CUT function).

- There is only one value that you can change:

Src. Trk Select an individual track (1 through 8), a pair of tracks (1/2, 3/4, 5/6, 7/8), or all the tracks (1-8).

Press **YES** to perform the operation or **NO** to leave this screen.

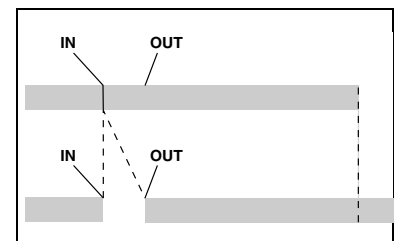


Figure 2.8: Opening a gap

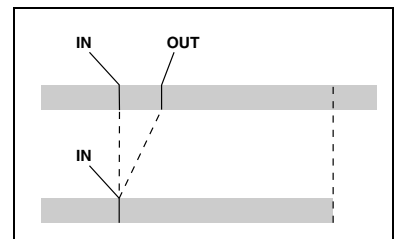


Figure 2.9: Cutting material

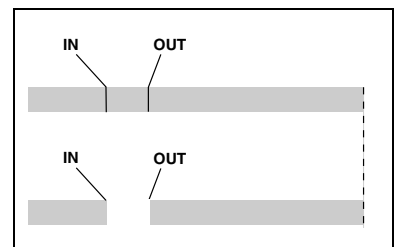


Figure 2.10: Inserting silence

About track editing

CLONE TRACK

This copies a track or pair of tracks to another track or pair of tracks. There are no IN and OUT points when cloning.

- There are two values that you can change:

Src. Trk Select an individual track (1 through 8), a pair of tracks (1/2, 3/4, 5/6, 7/8) or the MASTER stereo track.

Dst. Trk This sets the destination track or tracks to which the source track is cloned. What you can select here depends on what you have selected for the source track. If you have selected a single track, you can select tracks 1 through 8 here. If you have selected a pair of tracks (for instance, 1/2), you can only select track pairs here.

Press **YES** to perform the operation or **NO** to leave this screen.

- Mix down to the mix master track, using the **EFFECT SEND** and **EFFECT RETURN** (“Mixdown and mastering” on page 26) to add reverb to your mix.
- Clone the stereo mix to a pair of tracks.
- Disconnect the drum machine from the **STEREO MIX** and connect it to the **RETURN** jacks. Make sure that the drum machine is set up to be synchronized to the DP-01 (“Working with MIDI” on page 38).
- Mix down again with only the two cloned tracks, using the **EFFECT RETURN** control to add and adjust the levels of the drum machine. You now have a mix including the drum machine as well as the effect added to the main tracks.

CLEAN OUT

This deletes all the material in a track or tracks. There are no IN and OUT points when performing the clean out function.

- There is only one value that you can change:

Src. Trk Select an individual track (1 through 8), a pair of tracks (1/2, 3/4, 5/6, 7/8), or all the tracks (1-8).

Press **YES** to perform the operation or **NO** to leave this screen.

Undoing operations

If you have made a mistake, very often you can undo it. This includes the track editing operations described here, as well as most other common operations you can perform (including recording).

- Press the **UNDO** key briefly, to undo the last undoable action.
or
- Press and hold the **UNDO** key for about a second, to show the UNDO/REDO screen:

```
UNDO / REDO
COPY PASTE ← 2
RECORDING    1
-START UP-   0
```

Event numbering starts at 0—START UP at the bottom of the event history list (you can't change this list)

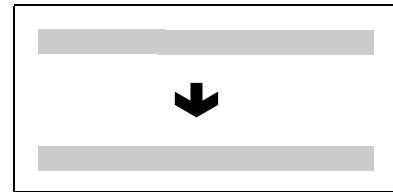


Figure 2.11: Cloning tracks

NOTE If you try to select the same track as a destination that you have selected as the source, when you press the **YES** key, a message will appear.

TIP Although you cannot mix the inputs of the **STEREO MIX** to the mixed master track, you can add a drum machine (say for instance) to the mix in the following way:

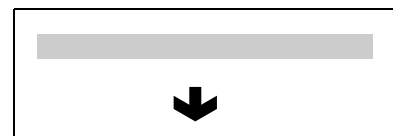


Figure 2.12: Cleaning out a track

NOTE You must have performed at least one undoable action after switching on for the undo function to work.

The top line is the most recent event.

When you undo an action (or event), you undo the action pointed to by the cursor (⤠) and all actions after it. You can't undo just one action in the middle of the event history list.

- Use the jog wheel to scroll up and down through the list until you come to the action you want to undo (together with all the actions that have been performed since then).
- Press **ENTER** to leave the list, and the status of the DP-01 changes to the status that it had immediately after the highlighted operation in the list was performed.

Note that the actions above the undo point do not disappear, and that an arrow symbol appears to the right of the undo point.

Redoing an action If you make a mistake undoing an action, you can undo the undo (that is, you redo the action).

- Press and hold the **SHIFT** key and press the **UNDO (REDO)** key to redo the last undone action.

or

Press and hold the **UNDO** key (no **SHIFT**) to bring up the the UNDO/REDO screen:

```

- UNDO / REDO -
  COPY PASTE ← 2
  ⤠ RECORDING   1
  -START UP-   0
    
```

You can scroll down to the position marked by the left-pointing arrow (to the right of the list), which marks the furthest point in the event history at which you can perform a redo operation.

Press **ENTER** to redo the selected undone actions.

NOTE

In order to redo an action, you must have undone an action first.

Troubleshooting

When working with any new piece of equipment like the DP-01, it's sometimes difficult to work out why something isn't happening the way you expect. The main thing is to take your time—after all, you're not paying hourly studio rates! Stop and think. Ask yourself questions, like the ones below, and you can usually find the answer.

Also, see the section on “Messages” on page 57 for the meaning of messages that may pop up on the display.

Why can't I hear any sound when I play back?

Are the faders of the tracks you've recorded at a reasonable level?

Is the **MASTER** fader at a reasonable level?

Have you connected the **LINE OUTPUT** jacks to your monitoring system properly, and is your monitoring system set up correctly?

Is a track muted (**MUTE** indicator lit)? Press **SHIFT** and the **REC** key to un-mute it.

If you're monitoring through headphones, is the **PHONES** control turned to a suitable level?

Why does the sound I'm recording sound distorted?

Is the input level control on the front of the DP-01 set appropriately for the input source?

If you're recording an acoustic instrument, are you sure you're not sending it through an electric guitar effect (DP-01FX, DP-01FX/CD)?

Are you listening at too high a volume? Is it your monitoring system that's distorting?

Why can't I record?

You must have at least one track armed (**REC** indicator flashing) before you can use the **RECORD** key.

Are inputs assigned to tracks (see “Assigning inputs” on page 23)?

If you're in a menu, etc., recording may not be possible. Return to the “home” screen.

Why can't my computer “see” the DP-01 files?

Make sure the DP-01 is connected to a USB port and “open” (see ““Open” and “Close”” on page 45).

The computer can't see files which are in the “native” partitions. Back up or export songs, tracks and mixes to the FAT partition (“Using the USB connection” on page 44) before “opening” the USB connection, so that the files can be read on a computer.

Why can't I hear the selected effect (DP-01FX and DP-01FX/CD)?

You must turn on the effect for the appropriate input (**MULTI**) or turn on the effect (**REVERB**).

For reverb, you must turn up at least one track's **EFFECT SEND**, together with the master **EFFECT RETURN**.

The volume of a multi-effect may need adjusting or the parameter is set so low that the effect is too subtle to be noticed (“Multi-effect” on page 64).

Messages

The following popup messages alert you to conditions that may arise while you are using the DP-01. Consult this table if you see something you don’t understand:

Empty Export Track	You’re trying to export a track (“Importing and exporting tracks” on page 47) which doesn’t have anything recorded on it. Pick another track to export.
File Not Found	You’re trying to restore a song when there are no backed-up songs on the partition (“Backing up and restoring songs” on page 45)—maybe you hit the ▶ key by mistake, or you may want to change the partition (“Selecting the active partition” on page 40).
I-O Too Short	You are trying to enter repeat mode, but the time between the IN and OUT points is too short. Make the time longer.
Import File Not Found	You’re trying to import a WAV file from the FAT partition when there aren’t any WAV files there (“Importing a track” on page 47). Connect the DP-01 to a PC and transfer some files to the FAT partition for import.
Import File Too Big	You’re trying to import a WAV file from the FAT partition that is too big for the remaining space on the partition. Free up some space on the (native) partition and try again.
In Bounce Mode	You tried to perform an action that cannot be done while in Bounce mode (“Bouncing” on page 34).
In Master Mode	You tried to perform an action that cannot be done while in Master mode (“Mixdown and mastering” on page 26).
In Punch Mode	You tried to perform an action that cannot be done while in Punch mode (“Punching” on page 32).
In Repeat Mode	You tried to perform an action that cannot be done while in Repeat mode.
Mark Full	You tried to store more than 999 location marks in a song (“Location marks” on page 28). Delete some location marks and try again.
Master Track Not Found	You’ve tried to export a mastered mix track (“Exporting the mastered stereo tracks” on page 49) when the song doesn’t have one. Master the song and then export the mix.
Master Track Too Big	You tried to export a master track which was too big for the remaining space on the FAT partition (“Exporting the mastered stereo tracks” on page 49). Connect the DP-01 to a computer and free up some space on the FAT partition.
No Armed Track	You’re trying to set up auto-punching with no tracks armed (“Punching” on page 32). Arm a track or tracks and try again.
No Disk Space	You tried to create a song, but there’s not enough space on the partition to create a song (“Creating a new song” on page 20). Free up some space and try again.
No Locate Mark	You’re trying to edit the location mark list (“To edit a location mark” on page 29) when no location marks have been set.
No Master Trk	You’ve tried to use a non-existent master track as the source in a track cloning operation (“CLONE TRACK” on page 54). Select another source or master the song and try again.
No Redo Histry	There’s nothing for you to redo (nothing’s been undone). See “Undoing operations” on page 54.
No Song	You’re trying to load a song from a partition that has no songs on it (“Loading a saved song” on page 21). Change partitions (“Selecting the active partition” on page 40).
No Undo Histry	There are no actions to be undone. See “Undoing operations” on page 54.

Troubleshooting

Not Stopped	The transport is moving (not stopped, but playing back, recording, etc.) and you've pressed a key such as the BOUNCE key which cannot be used until you press STOP .
Now Recording	You're trying to perform an action which cannot be done while recording.
Same Track	You can't clone a track to itself. "CLONE TRACK" on page 54
Song Protected	The song is protected ("Protecting a song" on page 43) and you are trying to change it (record or edit, etc.). Unprotect the song.
Too Many Songs	You have 250 songs on one partition. You must delete some before you can create another song.
Track Full	You're trying to import a file from the FAT partition to a track that has already been recorded to ("Importing a track" on page 47). You can only import to a blank track.
Trk too short	You're trying to master with the OUT point at the zero position ("Mixdown and mastering" on page 26). Set the OUT point ("IN and OUT marks" on page 29) and try again.

Specifications

Analog specifications

INPUTs (A and B)	1/4" phone (unbalanced)	XLR balanced (DP-01FX and DP-01FX/CD)
Input impedance	> 10k Ω (max), or 1 M Ω (A only) with switch in GUITAR position	2.4k Ω
Nominal input level	-10dBV	-8dBu
Maximum input level	+6dBV	+8dBu
EFFECT RETURN	2 x 1/4" phone (unbalanced)	
Input impedance	10k Ω	
Nominal input level	-10dBV	
Maximum input level	+6dBV	
STEREO MIX	2 x 1/4" phone (unbalanced)	
Input impedance	10k Ω	
Nominal input level	-10dBV	
Maximum input level	+6dBV	
LINE OUTPUT	2 x unbalanced RCA (pin) jacks	
Output impedance	1k Ω	
Nominal output level	-10dBV	
Maximum output level	+6dBV	
EFFECT SEND	1 x 1/4" phone (unbalanced)	
Output impedance	1k Ω	
Nominal output level	-10dBV	
Maximum output level	+6dBV	
PHONES	1/4" stereo jack	
Maximum output	30mW + 30mW (into 30 Ω)	

Digital specifications

DIGITAL OUT	Optical digital audio output (TOSLINK)
Data format	S/PDIF 1

Audio performance

Frequency response	20Hz — 20kHz, +1 dB/-3dB
Signal-to-noise ratio	> 85dB (A-weighting, 22kHz LPF)
Total harmonic distortion	< 0.05% (1kHz, -10dBV, 22kHz LPF, MASTER fader at nominal)

Specifications

Physical characteristics

External power adapter AC input	100 — 240V AC, 50/60Hz
External power adapter output	12V
External power adapter output current	2.5A
Power consumption	DP-01/DP-01FX: 15W, DP-01FX/CD: 25W
External dimensions (w x h x d)	DP-01/DP-01FX: 4.1kg, DP-01FX/CD: 5.2kg
Weight	DP-01/DP-01FX: 452 x 110 x 307 (mm) 17.8" x 4.3" x 12.1" DP-01FX/CD: 452 x 130 x 307 (mm) 17.8" x 5.1" x 12.1"

Dimensional drawings

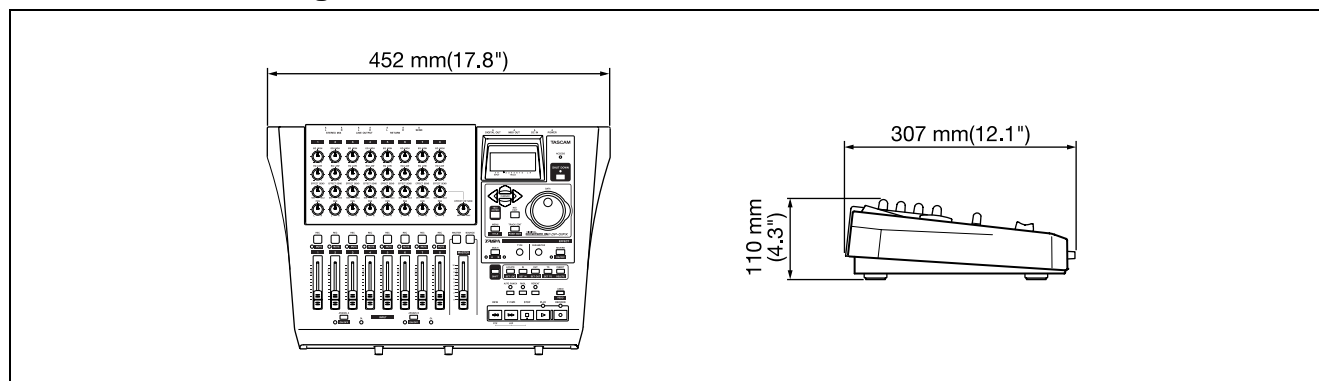


Figure 2.13: Dimensions of the DP-01 and DP-01FX

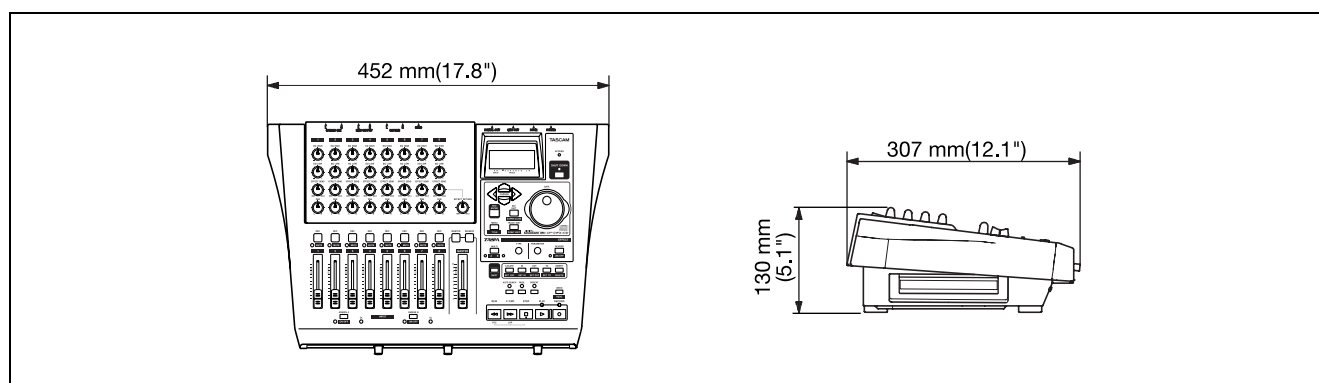
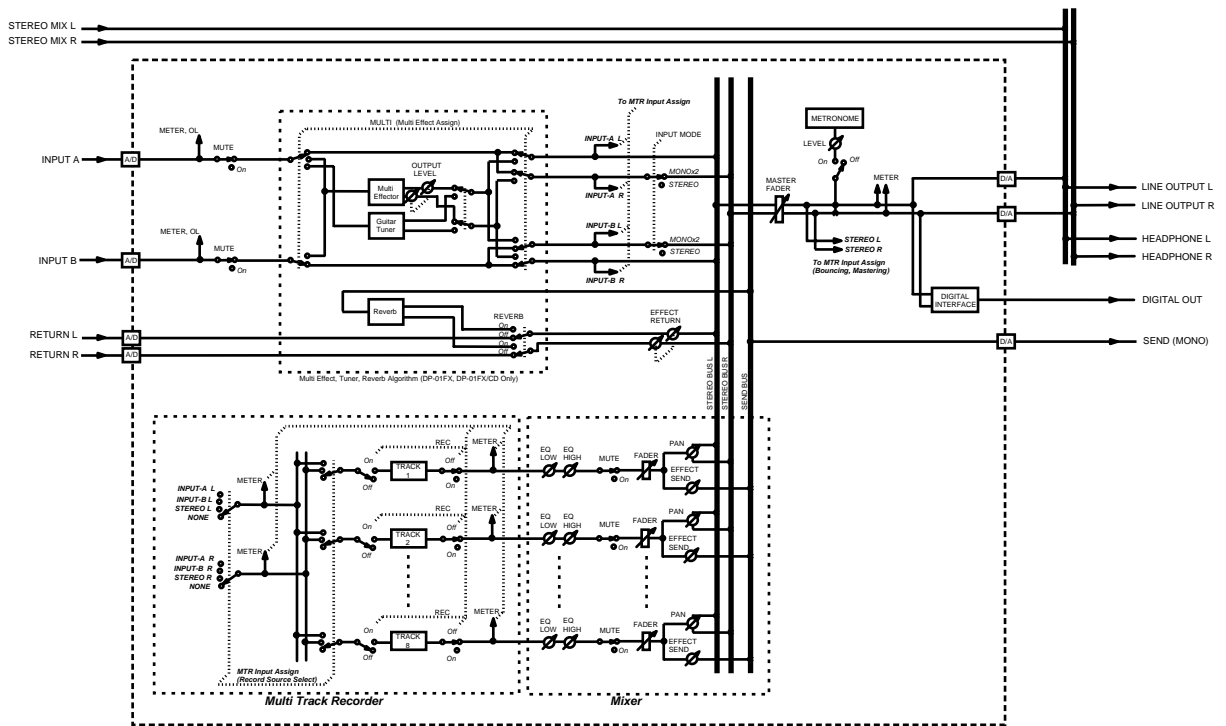
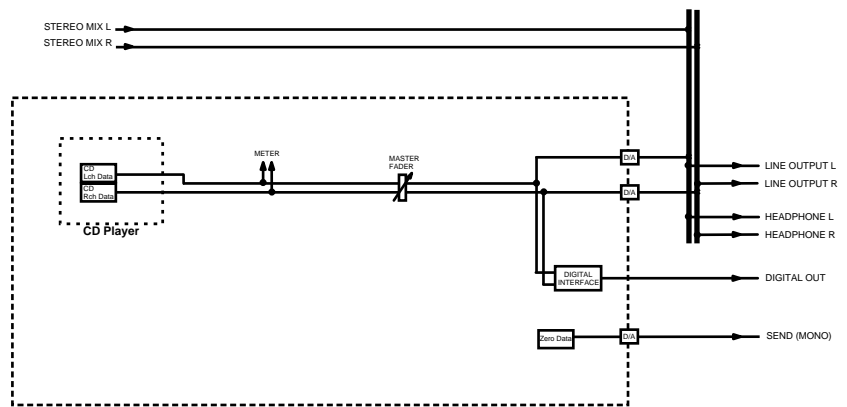


Figure 2.14: Dimensions of the DP-01FX/CD

Block diagram (DP-01)



Block Diagram (MTR mode)



Block Diagram (CD player mode) [DP-01FX/CD only]

Figure 2.15: Block diagram

3 : DP-01FX Appendix

The DP-01FX differs from the DP-01 in a few important respects: it provides balanced XLR connectors with switchable phantom power for connecting condenser microphones, there is a built-in guitar/bass tuner, it provides a multi-processor for the input signals, and noise reduction, and it provides a reverb effect for the mixdown process.

Balanced XLR inputs

These inputs enable you to connect condenser microphones (the same type as those used in professional recording studios).

The +48V phantom power supply allows you to power condenser microphones. Without such phantom power, many condenser microphones will not work. Some, however, use internal batteries.

Consult any documentation that came with your microphones for full details of power requirements, etc.

Phantom power

The **PHANTOM** switch can be turned **ON** or **OFF** to supply +48V phantom power to the XLR connectors. Phantom power is not supplied to the 1/4" jacks.

Input level controls

Use the input level controls the same way you would microphones that use 1/4" jacks.

However, some microphones are more powerful than others, and you may need to turn down the control to prevent overloading.

Tuning a guitar

The built-in tuner allows you to tune a guitar or bass connected to input A only.

- Press the **MULTI** key and the **REVERB** key together:

```
----- Tuner -----  
C#1: 440Hz  
    - - -  
    |      0      |
```

- Play a single string. The DP-01FX makes its “best guess” at the note, shows the value, and provides an indication of whether it’s sharp or flat. This is a very flat F#:

```
----- Tuner -----  
C#1: 440Hz  
          F#  
    | ■■■■■ 0 |
```

NOTE

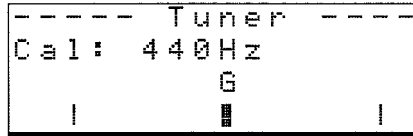
These XLR inputs are wired with these pin assignments: 1=ground, 2=hot, 3=cold.

WARNING

Never connect or disconnect microphones to or from the XLR connectors with the phantom power turned on.

Never turn the phantom power on when unbalanced dynamic microphones are plugged into the XLR connectors.

- The line of symbols on either side of the center square gets shorter as the played note approaches the “target” and the center square fills when the string is in tune:



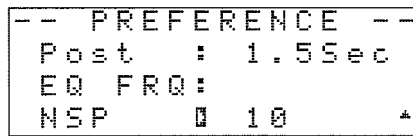
Changing the tuning Most instruments are tuned to A=440Hz. If you are playing with another instrument that cannot be tuned, you may want to change this value, that is, tune your guitar to the other instrument.

- Use the jog wheel to change the reference tuning away from 440Hz if you need to do this.

Noise reduction

When you are recording, the background noise of microphones, or the noise from guitar amplifiers, etc., may be too loud. The DP-01FX allows you to “gate” this noise, and only open the gate when the input signal goes over a certain level. This only takes effect when the **MULTI** effect is enabled.

- 1 Press **MENU**, and then select the **PREFERENCE** menu.
- 2 Use the arrow keys to scroll to **NSP**:



- 3 Set the level at which the gate opens to a value of: OFF (the gate is always open), or from 1 (the gate will open easily, with very quiet sounds) to 60 (a lot of force—a very loud sound—is needed to open the gate).

TIP

Using a noise gate like this sometimes requires a little work to make sure that you don't accidentally cut off quiet parts of a song. Before you make a recording using the noise gate, it's a good idea to rehearse the whole part to make sure you've got the right gate level.

Multi-effect

The DP-01FX contains an input effector, which contains different types of effects, grouped by the type of input (electric guitar, acoustic guitar, vocals, etc.) that they are suitable for.

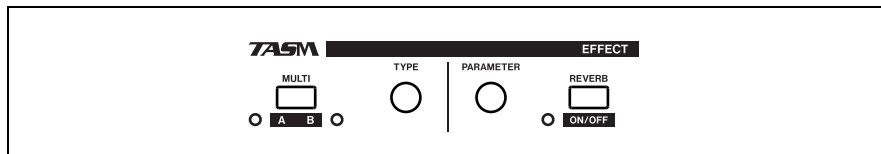


Figure 3.1: Effect controls

Assigning the effect

Although there are two inputs, the multi-effect can only be applied to one of them at a time.

The multi-effect produces a stereo output, so you can use it on stereo pairs, and you can then assign the output to two tracks (see “Assigning inputs” on page 23).

- Press and hold the **SHIFT** key and press the **MULTI** key so that either the **A** or **B** indicator lights, showing the input to which you want to apply the multi-effect.

There is a third setting in which neither indicator is lit, showing that the multi-effect is not in use on either input.

Selecting the effect type

- Press the **MULTI** key alone to bring up the multi-effect selection and editing screen:

```

- MULTI EFFECT -
< Tradist >
.. EGTR ..
PAR: 83 VOL:100
    
```

- Press and hold the **SHIFT** key and turn the **TYPE** control to scroll through the different effect types available:

EGTR	Electric guitar
AGTR	Acoustic guitar
BASS	Bass guitar
VOCAL	Vocals
DRUM	Drums and percussion

The effect (third line of the display) also changes as you change the type, and so does the parameter value (on the fourth line).

Selecting the effect

- Turn the **TYPE** control to scroll through all available effects (including those in other effect types). Effects available are listed in “Available multi-effect settings” on page 65.

Setting the parameter

- Each multi-effect has one parameter (shown as PAR).
- Use the **PARAMETER** control to set the value of the parameter (the parameter is different for different types of effects).

Setting the effect volume

- Set the volume of the effect from 0 to 127 by pressing the **SHIFT** key and turning the **PARAMETER** control.

Available multi-effect settings

This list is divided into the available effect types:

Electric guitar settings (EGTR)

TraDist	Traditional distortion and doubling with a short delay
Tube OD	Tube (valve) overdrive and vibrato
BlueDrv	Blues overdrive with an auto-wah. Use short picking strokes with this setting
BlueSlid	Blues with a right and left tremelo
R.Bottom	80's heavy rock sound
ClsRock1	A classic 70's British stack sound
ClsRock2	A deeper classic sound with a detuned chorus effect
MelSus	Mellow sustain setting with longish sustain. Use this with a bridge humbucker for a sweet drive sound
SmthDist	Smooth distortion for solos, combining echo with an overdrive sound
SpeeKing	Single-coil pickup distortion
Heavy1	Distorted "tube"-type sound for heavy rock
Heavy2	Fuzz and flange for a heavy feel
Heavy3	Chorus and distortion
Metal	Traditional metal sound (twin lead)
80sRock1	80's metal with a cutting edge
80sRock2	Deeper echo and a high cut with distortion
90sRock	Bright distortion and reverb; good for solo use
FstChor	Good with single-coil pickups for chords and arpeggios. Similar to acoustic.
CompChr1	For single-coil pickups chorus with pre-delay expands the treble-emphasized sound
CompChr2	A good backing sound
Rhythm1	A backing sound with an edge to it
Rhythm2	Smooth backing sound, suitable for jazz
Rhythm3	A harder backing sound
Funk	A "feather" effect for funk/fusion backing
Groove	Flanger provides a rolling sound for backing, and arpeggio playing
Country	Short echo and compression
Crying	Very emotional — use at different volumes for a variety of effects
Weeping	Overdrive with a "big heart"
Fusion1	Sweet sustained overdrive
Fusion2	Long delay and bright distortion
ClnSolo	Long, sustained solos are possible with this sound
PwrDist1	A tube setting with echo
PwrDist2	A deep chorused distortion for an American rock sound
PwrDist3	A rough, metal distortion sound
PwrDist4	Doubled distortion with an edge
Texas1	The classic "black panel amp" sound
Texas2	A powerful overdriven sound
Texas3	A sharper overdrive sound
Texas4	Chorus and "stretched" overdrive

Multi-effect

Swingy	Mid-peaking warm sound
FatJazz1	Use on jazz pieces with breaks
FatJazz2	Compressed “fat” jazz setting
R&B	High emphasis with a rough sound
ClnVerb	Clear long sustained sound
CtyBlues	Fat-sounding overdrive
LtlWing	Bright crunch sound
CoolPick	3D sound with some “feathering” on the crunch
Fuzzy	A fuzzy deep sound
Hazy	No matter what color it is, it’s still hazy (use with a single-coil pickup)
BritCln	The traditional British clean sound
PowChord	Distorted power chord setting for backing
BmLead	A special lead sound with pitch shift of a seventh and distortion
FngGtr	Treble overdrive and a “jet” flanger
Oct.Dist	One octave down split distortion
PhaseRev	Phase and reverb for backing
Ensemble	3D chorus effect — good with single-coil pickups
Surf	Suitable for West Coast surf
Violin	Smooth attack — nice with a humbucker
BlkPanel	A famous tube combo with spring reverb
UK Stack	Maybe the most famous stack in the world
Jimi Box	There was only one Jimi and his distorted sound was something like this
MBoogie	Famous combo sounds
HeartBrk	Tube stack at low gain
GentWeep	Chorus and distortion — great for a “crying” solo
Bfinger	Distortion and retuned chorus. Good for finger-style playing
Tweed	Tweed-covered amp sound — use with the front single-coil pickup (blues, for instance)
RSCrunch	A warm “crunch” guitar setting for single-coil pickups
NightDrv	A deeper shade of purple. Single-coil sounds good here
Ult.Funk	Ultimate funky cutting sound
Axe Bom	Heavy metal with a doubling edge
Doctor	Wah-wah pedal halfway down
Sold No	Simulated high-quality tube amp
Run Away	Play a cutting sound using a pick
Remains	Double-neck 12-string sound
Nostalgi	Tube-based overdrive
RealDst1	Distortion only, influenced by a large stack
RealDst2	Distortion only, influenced by a famous small combo
RealDst3	Power tube distortion sound
RealDst4	Distortion only, influenced by echo on a smaller combo

Acoustic guitar settings (AGTR)

Heaven	Reverb with treble boost for a spacious feel
Stroke	Echo and chorus — good for backing
Solo	For acoustic solos
Blues	For acoustic blues slide work

Arpeggio	Acoustic picked arpeggios sound good with this setting
12String	12-string guitar sound (chorus and exciter)
Crystal	A crystal-clear sound, emphasizing the treble, and making the best of a not-so-good guitar
Nashvill	For that Nashville sound (“fat” acoustic)
Mellow	A mellow acoustic setting — simulates nylon guitar on steel strings, using a treble cut
ChorVib	A “thick” vibrato chorus sound
TremSolo	A stereo tremolo solo sound

Bass guitar settings (BASS) These sound best with bass instruments — other sources may not give such a good effect.

Miller	Flanger — good for “chopper” bass
Singing	A “singing” bass tone (chorus and distortion). Progressive sound
Fretless	A fretless bass sound
Chopper	Useful for slap-style playing
Heavy	For heavy rock, etc. Distortion adds depth to the sound
Peculiar	A warm bass sound
RockBass	Distorted pick-bass setting with emphasized treble

Vocal settings (VOCAL)

De-Esser	Removes sibilance (ess sounds)
Chorist	Choir sound using detuning
Emphasis	Adds emphasis to vocals to make them stand out
Shout	For loud distorted vocals
Moody	Moody feeling for quieter smooth vocal lines
Response	Echo vocal setting
Proclaim	“Echo plus” — a distinctive sound
Quiverin	A quavering voice with vibrato
Duet	For two (male and female) singers and harmony groups
Lo-Fi	Imitates low-fidelity equipment (high and low treated specially)
Megaphon	For “megaphone”-type sound
Screamin	Screaming sound using flanger
Panning	A panned stereo vocal sound

Drum settings (DRUM) These sound good with rhythm machines, etc.

Groove	A groove setting with flanger
Stepping	Stepping beat — delay with a small amount of feedback
TrnAroun	Stereo “bouncing” setting
GetSpace	Drum reverb
CsBottom	Classic “bass heavy” sound
Trem.Pad	Another stereo bounce setting
PerfrmEQ	Echo and pan
Lo-Fi	Low fidelity for drums
Reverb	Reverberation only
Comp.	Compressor only
Vibrato	A vibrato effect
Filter	A creative low-pass filter effect

Reverb

The reverb effect is available as an alternative to the external SEND/RETURN loop with an external effect processor (see “Effect processor” on page 18). You cannot use both at the same time.

TIP

“Reverb” is short for “reverberation”—the sound produced by many short echoes off the walls of rooms, etc.

Turning the reverb on and off

- Press and hold the **SHIFT** key and press the **REVERB** key to turn the reverb on (the indicator lights) and off (the indicator is unlit).

Using the reverb

When the reverb is on, the mixer **EFFECT SEND** controls and the **EFFECT RETURN** control affect the amount of signal sent to the internal reverb from the tracks, and returned from the internal reverb unit to the stereo mix.

When the reverb is turned off, the mixer **EFFECT SEND** controls and the **EFFECT RETURN** control affect the amount of signal sent to the **SEND** jack from the tracks, and returned to the stereo mix via the **RETURN** jacks.

Setting the reverb type

- Bring up the reverb screen by pressing the **REVERB** key:

```
---- REVERB ----  
Hall : 2.7sec
```

- Turn the **TYPE** control to select one of the different “flavors” of reverb: Hall, Room, Live or Studio. Each of these settings has a different quality and character.

Setting the reverb time

- With the reverb screen displayed, simply turn the **PARAMETER** control to change the time the reverb sound takes to die away, from 0.1 seconds to 5.0 seconds in 0.1 second steps.

About CD-R and CD-RW discs

The DP-01FX/CD can use CD-R and CD-RW media, including CD-R and CD-RW Digital Audio media.

CD-R discs can be recorded once only. Once they have been used for recording, they cannot be erased or re-recorded. However, if space is available on the disc, additional material can be recorded. The packaging of CD-R discs will include one of the following logos:



By contrast, a CD-RW disc can be used in much the same way as a CD-R disc, but the last track or tracks recorded can be erased before the disc has been “finalized”, and the space on the disc can be re-used for other recordings. The packaging of CD-RW discs will include the logo one of the following logos:



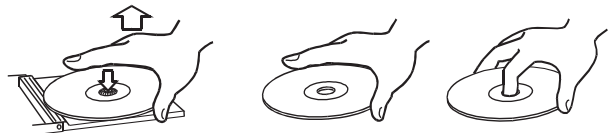
However, you should note that an audio CD created using a CD-RW disc may not play back satisfactorily on every audio CD player. It will, naturally, be play-able on the DP-01FX/CD. This is in no way a limitation of the DP-01FX/CD itself, but of the difference between the different types of media and the methods used to read them.

CD-R discs created on the DP-01FX/CD, by contrast, may be played satisfactorily on the majority of audio CD players.

Handling of compact discs

Observe the following:

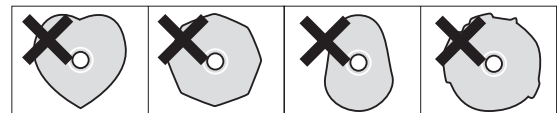
- Always place the compact discs in the trays with their label facing upward (compact discs can only be played on one side).
- To remove a disc from its storage case, press down on the center of the case, and lift the disc out, holding it carefully by the edges.



- Finger marks and dust should be carefully wiped off the disc’s recorded surface with a soft cloth. Unlike traditional vinyl records, the compact disc has no grooves to collect dust and microscopic debris, so gently wiping with a soft cloth should remove most particles.
- Wipe in a straight motion from the inside to the outside of the disc. Small dust particles and light stains will have absolutely no effect on reproduction quality.



- Never use such chemicals as record sprays, anti-static sprays or fluid, benzine or thinner to clean compact discs. Such chemicals will do irreparable damage to the disc’s plastic surface.
- Discs should be returned to their cases after use to avoid serious scratches that could cause the laser pickup to “skip”.
- Don’t expose discs to direct sunlight or high humidity and temperature for extended periods. Long exposure to high temperature can warp the disc.
- Only use circular compact discs. Avoid using non-circular promotional, etc. discs.



- To keep the laser pickups clean, don’t touch them. For the same reason, don’t leave the disc tray opened unnecessarily. Additional notes with regard to CD-R and CD-RW discs

Media Compatibility Table

Media Compatibility Table

	Playback of Audio CDs	Writing of Audio CDs Data Backup Data Export	Data Restore Data Import
12cm CDDA standard format Made on this CD-R/CD-RW player	A		
12cm CDDA standard format Commercially available CD	A		
12cm CDDA standard format Made on a CD player other than this CD-R/CD-RW player	B		
12cm CDDA standard format Made on this CD-R/CD-RW player Non-finalized	A		
12cm CDDA standard format Made on a CD player other than this CD-R/CD-RW player Non-finalized	N		
8cm CDDA standard format Commercially available CD	B		
Format other than CDDA standard Commercially available CD (protected CD, DATA CD, CD extra, etc.)	B		
Format other than CDDA standard CD-R/CD-RW (DATA CD, CD extra, etc.)	B		
12cm "Ultra Speed" CD-RW media	N	N	N
12cm CD-R/CD-RW Up to HIGH Speed		A	
8cm CD-R/CD-RW		B	
Recorded CD-R/CD-RW (CD-RW can be used by ERASE.)		N	
12cm ISO 9660 Level1 CD-R/CD-RW Backup on this CD player			A
12cm ISO 9660 Level1 CD-R/CD-RW Made on a CD player other than this CD player			A
12cm ISO 9660 other than Level1 CD-R/CD-RW			N
8cm ISO 9660 Level1 CD-R/CD-RW			B
12cm ISO 9660 Level1 CD-R/CD-RW Addition of data other than data for this CD player			B

A: Compatible; B: Operation not assured; N: Not compatible

The DP-01FX/CD is a DP-01FX with a built-in CD-R/RW drive. This appendix describes CD-R/RW functions.

TIP

In the menu instructions below, select menus by pressing ENTER or the ▶ cursor key.

Opening/Closing CDs

- The CD can be opened or closed with the hard disk and CD stopped.

- 1 Hold down the **SHIFT** key and press **EXIT**.
- 2 The following screen is displayed, and the CD tray opens.

```

|      CD TRAY      |
|      OPEN        |
  
```

Audio CD Menu

Playing back audio CDs

- 1 Place the audio CD into the CD tray and close the tray using the instructions above.
- 2 Press the **MENU** key and select the **AUDIO CD** menu.

```

---- MENU ----
WAVE          :
MIDI          :
AUDIO CD     >
  
```

- 3 Select **CD PLAYER** from the **AUDIO CD** menu.

```

--- AUDIO CD ---
CD PLAYER     >
MASTER WRITE  :
FINALIZE      :
  
```

- 4 The **CD PLAYER** display is explained below:

The diagram shows the CD PLAYER display with the following text and annotations:

- CD 01 00m00s**: Displays the track number currently being played.
- 02: 5m10s**: Displays the time elapsed from the start of the current track.
- 03: 4m15s**: Displays the track number and track length. The list of tracks on an audio CD can be viewed by turning the DATA dial or pressing the ▲/▼ keys.
- Level meter of audio (pre-fader) recorded to the CD.**: The stereo output level can be adjusted by the MASTER fader.
- The next track can be selected using the DATA dial or the ▲/▼ keys. Press the PLAY or ENTER button to begin playing the selected track.**

Audio CD Menu

5 When the CD PLAYER menu is displayed, the CD player can be controlled using the following keys:

- STOP key: Stops the CD player.
- PLAY key: Plays back the selected track.
- F FWD key: Selects the next track.
- REW key: Selects the previous track.
- DATA dial: Selects a track to playback from the track list.
- ENTER key: Plays the selected track.
- STOP+REW key: Stops playback and locates at the start of the CD.
(Press the REW key with the STOP key held down.)

Making an audio CD

On the DP-01FX/CD, a song's master stereo track can be written to a CD-R or CD-RW (see "Mastering" on page 27), and this master recording can be burned to CD for audio CD playback.

There are two ways of making a CD:

Disk At Once (simply called "DAO" from here on)

Track At Once (simply called "TAO" from here on)

In the **DAO recording**, master stereo tracks recorded on the DP-01FX/CD are written all at once.

DAO finalizes the disc when it's finished (see "Finalizing CDs" on page 75), making the CD compatible with other CD players immediately after writing by DAO has ended.

With DAO, additional tracks cannot be written to the CD because it creates a finalized disc.

In the **TAO recording**, master stereo tracks recorded on the DP-01FX/CD are written to the CD on a track-by-track basis.

If you want to write tracks to a CD over several sessions, choose the TAO recording.

Since TAO does not finalize the CD, this CD cannot be played back on a regular CD player (it can be played on the DP-01FX/CD).

After all of the desired master stereo tracks have been written by TAO, finalize the disc ("Finalizing CDs" on page 75).

Additional tracks cannot be written to the CD after finalization has ended.

Writing by Disk At Once

With Disk At Once, the track order can be set when writing two or more tracks.

A silent gap of any desired length can also be added between tracks.

- 1** Insert a blank CD-R or an erased CD-RW into the CD tray.
- 2** Press the **MENU** key to display the **AUDIO CD** menu.

```
----- MENU -----  
WAVE                :  
MIDI                :  
AUDIO CD           >
```


- 3 Select **MASTER WRITE** from the **AUDIO CD** menu.

```

--- AUDIO CD ---
CD PLAYER      :
MASTER WRITE   >
FINALIZE       :
    
```

- 4 A list of songs that have master tracks is displayed. Move the arrow using the **▲** and **▼** keys to select songs to write to the CD, and press the **INSERT** key to add them to the list. A tick mark "✓" is displayed to the left of songs to indicate that the song is selected.

```

- MASTER WRITE -
>✓ SONG001      1:10
 ✓ DPO1DEMO    3:15
(TOTAL 4:25)
    
```

TIP

To cancel selection of a song, hold the **SHIFT** key and press the **INSERT** key.

- 5 When you have decided on the songs to write, press the **ENTER** key. In this screen, you can set the order in which the master stereo tracks are to be written to the CD. Select the song whose order is to be changed using the **▲** and **▼** keys, and press the **ENTER** key. The arrow to the side of the song name changes to an up/down arrow. You can now change the order of the song using the **DATA** dial. When you have changed the song order, press **EXIT** key. The up/down arrow display returns to the right arrow display. (When there are two or more songs whose order is to be changed, repeat this operation.)

```

-- SONG ORDER --
> DPO1DEMO     1:10
  SONG001      3:15
(TOTAL 4:25)
    
```

- 6 In the **SONG ORDER** screen, press the **▶** cursor key. The screen for setting the gap between songs is displayed. Move the arrow using the **▲** and **▼** keys to select, and set the length of the gap to be made after each song by the **DATA** dial. You can set any gap within the range 0.0 to 9.9 seconds in 0.1 second increments. To end setting of the gap and write to the CD, press the **ENTER** key.

```

--- SONG GAP ---
DPO1DEMO >0.0s
SONG001  0.0s
(TOTAL 4:25)
    
```

TIP

To return to the **SONG ORDER** screen, press the **◀** cursor key.

- 7 The following write confirmation screen is displayed.

```

| Burn to CD |
| Are you sure ? |
    
```

Press the **ENTER** key again to begin the burning process.

Audio CD Menu

- 8 After writing to the CD ends, the unit allows you to make another copy of the same disc.

```
| | Another CD ? | |  
| | Insert BlankCD | |
```

To write to another CD, press the **ENTER** key.

To cancel writing to another CD, press **EXIT** key.

Writing by Track at Once

With Track at Once, a silent gap of two seconds is automatically added at the end of each track.

- 1 Press the **MENU** key to display the **AUDIO CD** menu.
- 2 Select **MASTER WRITE** from the **AUDIO CD** menu.
- 3 A list of songs including the master track is displayed. Move the arrow using the **▲** and **▼** keys to select a song to write to the CD, and press the **ENTER** key.
- 4 A menu screen for confirming whether or not to finalize after writing ends is displayed. To finalize, select **ON** by the **DATA** dial and press the **ENTER** key again. To cancel finalization, select **OFF** by the **DATA** dial and press the **ENTER** key again.

```
-SONG001 WRITE-  
FINALIZE : OFF
```

- 5 The following write confirmation screen is displayed.

```
| | Burn to CD | |  
| | Are you sure ? | |
```

Press the **ENTER** key to write the CD.

Finalizing CDs

If you are finished recording to a CD in TAO, you need to finalize the CD so that it can be played on a regular CD player.

- 1 Press the **MENU** key and choose the **AUDIO CD** menu.
- 2 Select **FINALIZE** from the **AUDIO CD** menu.

```

--- AUDIO CD ---
CD PLAYER      :
MASTER WRITE   :
FINALIZE       >
  
```

- 3 Press the **ENTER** key. The following confirmation message is displayed.

```

| Finalize CD |
| Are you sure ? |
  
```

Press the **ENTER** key to finalize the CD.

Erasing Audio CDs

To erase a CD-RW disc so that you can reuse it:

- 1 Press the **MENU** key and choose the **AUDIO CD** menu.
- 2 Select **CD-RW ERASE** from the **AUDIO CD** menu.

```

--- AUDIO CD ---
MASTER WRITE   :
FINALIZE       :
CD-RW ERASE    >
  
```

- 3 Press the **ENTER** key. The following confirmation message is displayed.

```

| CD ERASE |
| Are you sure ? |
  
```

Press the **ENTER** key to erase the CD-RW.

NOTE

Only CD-RWs can be erased. A CD-R cannot be erased.

Data CD Menu

Importing and exporting tracks

Between a CD and the DP-01's song tracks, you can import and export individual tracks to and from. The files used for track import and export are 16-bit 44.1kHz mono WAV format (and must have the .WAV extension).

Audio in other formats intended for import must be converted before the import operation.

Importing from a CD

You can read WAV-format files recorded on data CDs and import these files to tracks of the currently-loaded song.

- 1 Insert a CD containing WAV format files into the CD tray and close the tray.
- 2 Press the **MENU** key to display the **DATA CD** menu.

```
----- MENU -----  
MIDI                :  
AUDIO CD           :  
DATA CD            >
```

- 3 Select **CD IMPORT** from the **DATA CD** menu.

```
----- DATA CD ---  
CD IMPORT          >  
CD EXPORT          :  
CD BACKUP          :
```

- 4 The names of any WAV format files on the CD are displayed.

```
--- CD IMPORT---  
> BIGDRUMS.WAV  
  BELL      .WAV  
  MELEAHHS.WAV
```

- 5 Select a WAV file to import using the **DATA** dial and press the **ENTER** key.
- 6 Select the import destination track of the WAV file using the **DATA** dial and press the **ENTER** key.

```
--- CD IMPORT---  
  to > Track2  
Free :   4023MB  
Wav  :    75MB
```

NOTE

Only 16-bit, 44.1 kHz monaural WAV format files can be handled in import and export operations. (The filenames that are not in this format are not displayed.)

After the file is imported from the CD, the display returns to the Menu screen.

Exporting to CDs

You can convert a track to WAV format files and write them to CDs for editing in a computer. To do this:

- 1 Insert a CD-R that has not been written or an erased CD-RW into the CD tray and close the tray.
- 2 Press the **MENU** key and select the **DATA CD** menu.

```

----- MENU -----
MIDI                :
AUDIO CD            :
DATA CD             >
    
```

- 3 Select **CD EXPORT** from the **DATA CD** menu.

```

----- DATA CD -----
CD IMPORT           :
CD EXPORT           >
CD BACKUP           :
    
```

- 4 A file list of the tracks you have recorded to in the current song is displayed. Select the tracks to export by turning the **DATA** dial or pressing the **▲** and **▼** keys, and press the **INSERT** key.

A tick mark "✓" is displayed to the left of the track to indicate that track is selected.

To deselect a track, select the track using the **DATA** dial or the **▲** and **▼** keys, and press the **INSERT (DELETE)** key while holding the **SHIFT** key.

To edit a track name:

Press and hold down the **SHIFT** key and press the **MENU (TITLE)** key. The following screen is displayed, and you can rename of the track at the cursor position.

```

| FILE NAME |
| [TRACK001] |
    
```

Rename the track and press **YES/ENTER** key to set the new name. ("Titling" on page 15)

- 5 When you have selected the song tracks to export, press the **ENTER** key.
- 6 The available space on the **DATA CD** and the total file size of the tracks to export are displayed.

```

--- CD EXPORT ---
Free :    702 MB
Wav  :    402 MB
[ENTER] -> Exe
    
```

Data CD Menu

- 7 Press the **ENTER** key. The following confirmation screen is displayed.

```
| | CD EXPORT | |  
| | Are you sure ? | |
```

Press the **ENTER** key to begin exporting to CD.

- 8 After exporting ends, the display prompts to ask if you want another copy:

```
| | Another CD ? | |  
| | Insert_BlanKCD | |
```

To export to another CD, press the **ENTER** key.

To cancel exporting to another CD, press **EXIT** key.

Backing up and restoring songs

When you back up a song, you're backing up the audio tracks, as well as any editing, etc. Reverse the process (a CD to FAT partition to DP-01 disk) when you want to restore a song.

Backing up songs to a CD

Back up your songs to a data CD so that you can restore them later.

- 1 Insert a CD-R that has not been written or an erased CD-RW into the CD drive.
- 2 Press the **MENU** key and choose the **DATA CD** menu.
- 3 Select **CD BACKUP** from the **DATA CD** menu.

```
---- DATA CD ----  
CD IMPORT      :  
CD EXPORT      :  
CD BACKUP      >
```

- 4 The song list is displayed.

```
-- SONG BACKUP--  
> SONG001      2M  
   SONG002     10M  
   DEMOSONG1   80M
```

- 5 Select the songs to back up using the **DATA** dial and the **ENTER** key.
- 6 The screen displays the name of the file to write to the data CD.
- 7 Name the songs using up to eight letters by the **◀** and **▶** cursor keys or the **DATA** dial. ("Titling" on page 15)

```
---- BACKUP ----  
File [SONG000U]  
[ENTER] -> Exe
```

- Press the **ENTER** key. The following confirmation screen is displayed.

```
| Song Backup |
| Are you sure ? |
```

Press the **ENTER** key again. The songs are saved, and the number of CDs required for the backup is displayed.

```
| Required CD 2 |
| Are you sure ? |
```

When you have prepared the required number of CDs, press the **ENTER** key to begin backing up.

- After backup to the first CD ends, a message prompting you to insert the second CD is displayed. Insert a blank CD.

```
| #2/2 CD |
| Insert BlankCD |
```

If you insert a written CD-RW instead of a blank CD:

The following message is displayed.

```
| Erase a CD-RW ? |
| Are you sure ? |
```

If you press the **ENTER** key, the CD-RW will be erased and the backup continues.

If you do not want to erase the CD-RW, press **EXIT**. If you hold the **SHIFT** key while pressing **EXIT**, the DP-01FX/CD will eject your CD-RW so that you can insert a blank CD.

Restoring songs from a CD

Restore (reading) songs backed up to data CDs.

- Insert the CD recorded with the backup file into the CD drive.
- Press the **MENU** key to and choose the **DATA CD** menu.

```
---- MENU ----
MIDI          :
AUDIO CD     :
DATA CD      >
```

- Select **CD RESTORE** from the **DATA CD** menu.

```
---- DATA CD ---
CD IMPORT    :
CD BACKUP   :
CD RESTORE  >
```

- The names of the backup songs on the CD are displayed.

Data CD Menu

- 5 Press the **ENTER** key. The following confirmation screen is displayed.

```
| Song:SONG0000C |  
| Are_you_sure ? |
```

Press the **ENTER** key again. The song will be restored from CD.

- 6 If the song is backed up to two or more CDs, a message prompting you to insert the second backup CD will be displayed. After the restore from the first CD ends, insert the second CD.

```
| #2/2 CD |  
| Insert_BackupCD |
```

Erasing data CDs

To erase a CD-RW so that it can be reused:

- 1 Press the **MENU** key to display the **DATA CD** menu.
- 2 Select **CD-RW ERASE** from the **DATA CD** menu.

```
--- AUDIO CD ---  
CD BACKUP      :  
CD RESTORE     :  
CD-RW ERASE   >
```

- 3 Press the **ENTER** key. The following confirmation screen is displayed.

```
| CD ERASE |  
| Are_you_sure ? |
```

Press the **ENTER** key again. The CD-RW will be erased.

CD-related Error Messages

If you experience a problem while reading or writing a CD, you may see one of the following error messages:

When a popup message is displayed, press **EXIT** key to clear the display, check the state of the media, and retry the operation.

Backup Error Press EXIT	An error occurred in the BACKUP execution process.
CD Read Error Press EXIT	A CD read error occurred in the FINALIZE, BACKUP, RESTORE, IMPORT, EXPORT, and ERASE execution processes.
CD Write Error Press EXIT	An error occurred in the FINALIZE, BACKUP, RESTORE, and ERASE execution processes.
Erase Error Press EXIT	An error occurred in the ERASE execution process.
Export Error Press EXIT	An error occurred in the EXPORT execution process.
Finalize Error Press EXIT	An error occurred in the FINALIZE execution process.
Import Error Press EXIT	An error occurred in the IMPORT execution process.
Media Error Press EXIT	An error occurred in the CD media in the CD player menu.
Restore Error Press EXIT	An error occurred in the RESTORE execution process.
Writing Failed Press EXIT	An error occurred in the CD write process in the MASTER WRITE or CD EXPORT menu.

Messages

The following shows a list of the popup messages. On the DP-01FX/CD, popup messages are displayed according to the situation. Refer to this list to learn the details of each of the messages and how to remedy the trouble.

Blank CD Insert CD-RW	"A blank CD has been inserted. Insert a CD-RW that is not blank" An erased CD-RW or unwritten CD-R has been inserted in the CD-RW ERASE menu. There is no need to erase the inserted CD.
Blank CD Insert Opened CD	"A blank CD has been inserted. Insert a non-finalized CD." An erased CD-RW or unwritten CD-R has been inserted in the FINALIZE menu. Insert the CD to be finalized.
CD ERASE Insert CD-RW	"The CD-RW will be erased. Insert the CD-RW." The CD tray was opened in the CD-RW ERASE menu. Insert the CD-RW to erase and close the CD tray.
CD Export Insert Blank CD	"Insert a blank CD." The CD tray was opened in the CD EXPORT menu. Insert a blank CD and close the CD tray.
CD IMPORT Insert Import CD	"Insert a CD written with import data." The CD tray was opened in the CD IMPORT menu. Insert a CD written with import data and close the CD tray.
CD RESTORE InsertBackupCD	"Will restore from CD. Insert a CD." The CD tray was opened in the CD RESTORE menu. Insert a CD written with backup data and close the CD tray.
Empty Export Track	"There are no exportable tracks" No audio data is recorded to tracks 1 to 8 in the CD EXPORT menu.
FINALIZE Insert Opened CD	"Insert the CD to be finalized." The CD tray was opened in the finalize menu. Insert the CD to be finalized and close the CD tray.
Finalized CD Insert CD-RW	"A finalized CD has been inserted. Insert a CD-RW that is not blank." A finalized CD-R has been inserted in the CD-RW ERASE menu. Only CD-RW disks can be erased.
FinalizedCD Insert Opened CD	"A finalized CD has been inserted. Insert a non-finalized CD." A finalized CD has been inserted in the finalize menu. This CD does not need to be finalized.
Import File Not Found	"The import file cannot be found. Insert the import CD." There is no import file in the inserted CD in the CD IMPORT menu. Insert a CD written with import data.

Import File Too Big	<p>"The import file is too big."</p> <p>The size of the file to import equals or exceeds the free space on hard disk when executing an import in the CD IMPORT menu.</p> <p>Create more free space on hard disk by DEL/UNUSED, for example, to ensure sufficient free space for reading the import file.</p>
Invalid CD Insert Backup CD	<p>"An invalid CD has been inserted. Insert the backup CD."</p> <p>A CD not written with backup data has been inserted in the CD RESTORE menu.</p> <p>Insert a CD written with backup data.</p>
Invalid CD Insert Blank CD	<p>"An invalid CD has been inserted. Insert a blank CD."</p> <p>A CD other than a blank CD has been inserted when writing to CD by the MASTER WRITE, CD BACKUP or CD EXPORT menu. (This is also displayed when a finalized CD has been inserted when writing by Track at Once.)</p> <p>Insert a blank CD.</p>
Invalid CD Insert CD-RW	<p>"An invalid CD has been inserted. Insert a CD-RW."</p> <p>A CD-R or other CD that cannot be erased has been inserted in the CD-RW ERASE menu.</p> <p>Insert a CD-RW to be erased.</p>
Invalid CD Insert Import CD	<p>"An invalid CD has been inserted. Insert the import CD."</p> <p>An audio CD, blank CD or other invalid CD has been inserted in the CD IMPORT menu.</p> <p>Insert a CD written with import data.</p>
Invalid CD Insert Opened CD	<p>"An invalid CD has been inserted. Insert a non-finalized CD."</p> <p>A CD that cannot be finalized has been inserted in the finalize menu.</p> <p>Insert a CD to be finalized.</p>
Low Capacity Insert Blank CD	<p>"A CD with low capacity has been inserted. Insert a blank CD with adequate capacity."</p> <p>The capacity of the CD was less than the data to be written when an attempt was made to make two or more CDs having the same content after ending MASTER WRITE (Disc at Once) to CD, CD BACKUP or CD EXPORT. (This message is displayed, for example, when writing is executed with the CD capacity at 700 MB and the data capacity at 700 MB at the initial write, and a 650 MB CD is inserted after "Another CD?" is displayed after writing ends.)</p> <p>Insert a blank CD having adequate capacity.</p>
MASTER WRITE Insert Blank CD	<p>"Insert a blank CD."</p> <p>The CD tray was opened after preparation for writing to CD was completed in the MASTER WRITE menu.</p> <p>Insert a blank CD and close the CD tray.</p>
No Disk Insert Backup CD	<p>"A CD has not been inserted. Insert the backup CD."</p> <p>There is no CD in the CD tray in the CD RESTORE menu.</p> <p>Insert a CD written with backup data.</p>

Messages

No Disk Insert Blank CD	<p>"A CD has not been inserted. Insert a blank CD."</p> <ul style="list-style-type: none">• There is no CD in the CD tray when writing to a CD in the MASTER WRITE or CD EXPORT menus.• The CD tray was opened after preparation for backup was completed in the CD BACKUP menu. <p>Insert a blank CD and close the CD tray.</p> <p>Insert a blank CD.</p>
No Disk Insert CD- RW	<p>"A CD has not been inserted. Insert a CD-RW that is not blank."</p> <p>There is no CD in the CD tray in the CD-RW ERASE menu.</p> <p>Insert a CD-RW to be erased.</p>
No Disk Insert Import CD	<p>"A CD has not been inserted. Insert the CD to import from."</p> <p>There is no CD in the CD tray in the CD IMPORT menu.</p> <p>Insert a CD written with the import data.</p>
No Disk Insert Opened CD	<p>"A CD has not been inserted. Insert a non-finalized CD."</p> <p>There is no CD in the CD tray in the finalize menu.</p>
No Room On CD Press Exit	<p>"An attempt has been made to write data exceeding the capacity of the CD. Exit the menu."</p> <p>The total capacity of the specified master track exceeded the capacity of the inserted CD when writing to CD is started in the MASTER WRITE menu. Press EXIT to exit the menu, and specify the track to write to again.</p>
No Room On HD Press EXIT	<p>"Not enough room on hard disk. Exit the menu."</p> <p>There is no free space to make the CD image file on hard disk when writing to CD is started in the MASTER WRITE, CD BACKUP or CD EXPORT menus.</p> <p>Create more free space on hard disk by DEL/UNUSED, for example, to ensure sufficient free space to make the CD image file on the hard disk.</p>
Not Blank Insert Blank CD	<p>"A non-finalized CD has been inserted. Insert a blank CD."</p> <p>A CD written in the Track at Once is inserted when writing by Disc at Once in the MASTER WRITE menu.</p> <p>Either insert a blank CD or write by Track at Once.</p>
Track Full	<p>"No free tracks"</p> <p>There are no more tracks to import (that is, all tracks are used) when you execute an import in the CD IMPORT menu.</p> <p>Either import after you have made empty tracks by CLEAN OUT, or import after making a new song.</p>
Wrong Order InsertBackup CD	<p>"The CD order is wrong. Insert the backup CD."</p> <p>You have inserted the backup CD in the wrong order while you are restoring from two or more CDs in the CD RESTORE menu.</p> <p>Insert the correct backup CD.</p>

How do I..?

This section gives you a brief guide to some operations on the DP-01 which may not be immediately obvious from looking at the panel controls.

- Key names are written like this: **LOCATE**. **SHIFT + LOCATE** means “press and hold the **SHIFT** key and press **LOCATE**.”
- Menu items are written like this: **MENU** ⇒ **DISK** ⇒ **FORMAT**, meaning “press the **MENU** key, select the **DISK** menu, and then the **FORMAT** action.”

You may find the same action listed more than once in this alphabetical list. That’s because different people use different words for the same things, so you may find both “Delete” and “Erase”, for example.

The list of popup messages and their meaning (“Messages” on page 57) may also be useful to you.

How to	Keys, etc. to press	Description
<i>Assign inputs to tracks</i>	ASSIGN + REC	See “Assigning inputs” on page 23.
<i>Back up a song to a PC</i>	MENU ⇒ BACKUP ⇒ SONG BACKUP	See “Backing up and restoring songs” on page 45.
<i>Bounce tracks</i>	BOUNCE	See “Bouncing” on page 34.
<i>Change the display between minutes/seconds and bar/beat</i>	Wheel from “home screen”	See “Working in bars & beats” on page 36.
<i>Change the EQ frequencies</i>	MENU ⇒ PREFERENCE ⇒ EQ FREQ	See “EQ settings” on page 31.
<i>Choose another disk partition as the active partition</i>	MENU ⇒ DISK ⇒ PARTITION	See “Selecting the active partition” on page 40.
<i>Choose the meter shape</i>	MENU ⇒ PREFERENCE ⇒ Meter	See “Using the meters” on page 30.
<i>Connect the DP-01 to a PC</i>	MENU ⇒ DISK ⇒ USB OPN/CLS	See “Using the USB connection” on page 44.
<i>Copy a song</i>	MENU ⇒ SONG ⇒ COPY	See “Copying songs” on page 42.
<i>Copy and insert parts of a track</i>	TRACK EDIT ⇒ COPY INSERT	See “COPY -> INSERT” on page 51.
<i>Copy and paste parts of a track</i>	TRACK EDIT ⇒ COPY PASTE	See “COPY -> PASTE” on page 51.
<i>Create a new song</i>	MENU ⇒ SONG ⇒ CREATE	See “Creating a new song” on page 20.
<i>Cut and close up part of a track</i>	TRACK EDIT ⇒ CUT	See “CUT” on page 53.
<i>Delete a song</i>	MENU ⇒ SONG ⇒ ERASE	See “Erasing a song” on page 21.
<i>Delete unused song data</i>	MENU ⇒ SONG ⇒ DEL/UNUSED	See “Deleting unused data” on page 42.
<i>Display the current partition</i>	From the home screen, press and hold EXIT	“Song information” on page 22
<i>Edit the IN and OUT and TO points</i>	POINT EDIT (SHIFT + TRACK EDIT)	See “IN and OUT marks” on page 29.
<i>Edit the location marks</i>	Press and hold LOCATE	See “Location marks” on page 28.
<i>Erase a song</i>	MENU ⇒ SONG ⇒ ERASE	See “Erasing a song” on page 21.
<i>Erase the whole of a track</i>	TRACK EDIT ⇒ CLEAN OUT	See “CLEAN OUT” on page 54.
<i>Export a stereo mix to PC</i>	MENU ⇒ WAVE ⇒ EXPORT MSTR.	See “Exporting the mastered stereo tracks” on page 49.
<i>Export a track’s contents to PC</i>	MENU ⇒ WAVE ⇒ EXPORT TRACK	See “Exporting tracks” on page 47.
<i>Find out how much time is left for recording</i>	From the home screen, press and hold EXIT	“Song information” on page 22
<i>Format one partition</i>	MENU ⇒ DISK ⇒ REFORM	See “Formatting a partition (Reform)” on page 41.
<i>Format the disk</i>	MENU ⇒ DISK ⇒ FORMAT	See “Formatting a disk” on page 40.

How do I..?

How to	Keys, etc. to press	Description
<i>Format the FAT partition</i>	MENU ⇒ DISK ⇒ FAT REFORM	See “Formatting the FAT partition” on page 41.
<i>Hands-free recording</i>	AUTO PUNCH, RHSL , etc.	See “Punching” on page 32.
<i>Import a WAV file to a track</i>	MENU ⇒ WAVE ⇒ IMPORT TRACK	See “Importing a track” on page 47.
<i>Insert silence at a point in a track</i>	TRACK EDIT ⇒ OPEN	See “OPEN” on page 53.
<i>Jump to a location mark</i>	Press LOCATE + FF or REW or press and hold LOCATE for the location mark list	See “Location marks” on page 28.
<i>Jump to the IN and OUT and TO points</i>	Press IN or OUT or TO	See “IN and OUT marks” on page 29.
<i>Load a song</i>	MENU ⇒ SONG ⇒ LOAD	See “Loading a saved song” on page 21.
<i>Make an exact copy of (clone) a track</i>	TRACK EDIT ⇒ CLONE TRACK	See “CLONE TRACK” on page 54.
<i>Metronome settings</i>	MENU ⇒ MIDI ⇒ METRONOME	See “Metronome” on page 37.
<i>Mix to a stereo master track</i>	MASTER	See “Mixdown and mastering” on page 26.
<i>Move parts of a track and insert them in another location</i>	TRACK EDIT ⇒ MOVE INSERT	See “MOVE -> INSERT” on page 52.
<i>Move parts of a track to another location</i>	TRACK EDIT ⇒ MOVE PASTE	See “MOVE -> PASTE” on page 52.
<i>Multi-effect setting^a</i>	MULTI, TYPE and PARAMETER	See “Multi-effect” on page 64.
<i>Name a song</i>	Press SHIFT + MENU	See “Titling” on page 15.
<i>Ping-pong to other tracks</i>	BOUNCE	See “Bouncing” on page 34.
<i>Protect a song</i>	MENU ⇒ SONG ⇒ PROTECT	See “Protecting a song” on page 43.
<i>Read a WAV file into a track</i>	MENU ⇒ WAVE ⇒ IMPORT TRACK	See “Importing a track” on page 47.
<i>Redo one operation</i>	Press SHIFT + UNDO briefly	See “Undoing operations” on page 54.
<i>Redo several operations</i>	Press and hold UNDO	See “Undoing operations” on page 54.
<i>Remove a section of a track and replace it with silence</i>	TRACK EDIT ⇒ SILENCE	See “SILENCE” on page 53.
<i>Restore a song from a PC</i>	MENU ⇒ BACKUP ⇒ SONG RESTORE	See “Backing up and restoring songs” on page 45.
<i>Reverb setting^a</i>	REVERB, TYPE and PARAMETER	See “Reverb” on page 68.
<i>Revert to a previously saved version of a song</i>	MENU ⇒ SONG ⇒ REVERT	See “Reverting to last version” on page 21.
<i>Route inputs to tracks</i>	ASSIGN and REC	See “Assigning inputs” on page 23.
<i>Save a song</i>	MENU ⇒ SONG ⇒ SAVE	See “Storing songs” on page 20.
<i>Save a stereo mix to PC</i>	MENU ⇒ WAVE ⇒ EXPORT MSTR.	See “Exporting the mastered stereo tracks” on page 49.
<i>Save a track’s contents to PC</i>	MENU ⇒ WAVE ⇒ EXPORT TRACK	See “Exporting tracks” on page 47.
<i>Select the active disk partition</i>	MENU ⇒ DISK ⇒ PARTITION	See “Selecting the active partition” on page 40.
<i>Set a location mark</i>	Press SHIFT + LOCATE , or INSERT	See “Location marks” on page 28.
<i>Set pre-roll and post-roll times</i>	MENU ⇒ PREFERENCE ⇒ Pre/Post	See “Pre-roll and post-roll times” on page 33.
<i>Set the IN and OUT and TO points</i>	Press SHIFT + IN or OUT or TO	See “IN and OUT marks” on page 29.
<i>Set the noise reduction^a</i>	MENU ⇒ PREFERENCE ⇒ NSP	See “Noise reduction” on page 63.
<i>Set the time signature and tempo for MIDI clock</i>	MENU ⇒ MIDI ⇒ TEMPO/T.SIG	See “Tempo setting” on page 36.

How to	Keys, etc. to press	Description
<i>Show the song name</i>	From the home screen, press and hold EXIT	"Song information" on page 22
<i>Synchronize another device using MIDI Timecode or MIDI clock</i>	MENU ⇒ MIDI ⇒ GENERATOR	See "Working with MIDI" on page 38.
<i>Trim the IN and OUT and TO points</i>	POINT EDIT (SHIFT + TRACK EDIT)	See "IN and OUT marks" on page 29.
<i>Tune a guitar or bass^a</i>	MULTI + REVERB	"Tuning a guitar" on page 62
<i>Un-protect a song</i>	MENU ⇒ SONG ⇒ PROTECT	See "Protecting a song" on page 43.
<i>Undo one operation</i>	Press UNDO briefly.	See "Undoing operations" on page 54.
<i>Undo several operations at once</i>	Press and hold UNDO .	See "Undoing operations" on page 54.
<i>Use the MIDI metronome</i>	MENU ⇒ MIDI ⇒ METRONOME	See "Metronome" on page 37.
<i>Use the multi-effect^a</i>	MULTI, TYPE and PARAMETER	See "Multi-effect" on page 64.
<i>Use the reverb^a</i>	REVERB, TYPE and PARAMETER	See "Reverb" on page 68.
<i>Use the USB connection</i>	MENU ⇒ DISK ⇒ USB OPN/CLS	See "Using the USB connection" on page 44.

a.DP-01FX and DP-01FX/CD.

TASCAM

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DP-01

DP-01FX

DP-01FX/CD

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