

TASCAM

TEAC Professional Division



HD-R1

Professional Stereo Audio Recorder

QUICK START GUIDE



Battery Recycling

For European Customers

Disposal of your old appliance

- 1 **When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.**



- 2 **All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.**
- 3 **The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.**
- 4 **For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.**

Recycling the battery

This unit uses a lithium ion battery. Lithium ion batteries are a valuable, recyclable resource. Before disposing of this unit, please remove and recycle its battery.

CAUTION

NEVER TAKE THE UNIT APART FOR ANY PURPOSE OTHER THAN TO REMOVE THE BATTERY BEFORE DISPOSAL!

- 1 **Remove the eight top panel screws and remove the top panel.**
- 2 **Remove the button-type battery from the unit.**

1–Main Functions and Features	4
2–System Organization	5
Fundamentals.....	5
Audio files.....	5
Non-audio files.....	5
Tracks and files.....	5
Folders	5
Markers	5
Playlists	5
Settings.....	6
Media considerations.....	6
File system format.....	6
3–Preparations for Use	7
Making connections.....	7
Turning on the power.....	8
Inserting the CF card.....	8
Removing the CF card.....	8
Setting the time.....	9
Formatting the CF card.....	9
Display screens.....	10
Home Screen.....	10
Menu screens.....	10
Panel lockout.....	10
4–Recording	11
Making settings related to recording.....	11
Standard recording procedures.....	13
Other recording functions.....	13
Media capacity and recording.....	13
5–Playback	14
Standard playback operations.....	14
Setting the playback mode.....	14
Other playback functions.....	14
6–Folders and Playlists	15
Creating new folders.....	15
Setting the current folder.....	15
Creating playlists.....	16
Setting the current playlist.....	16
7–Marker Functions	17
Setting markers	17
Locating to markers	17
Setting marker names.....	17
Editing markers	17
8–System Settings	18
Meter settings.....	18
Resume mode setting	18
Shuttle mode setting	18
Analog reference level setting.....	18
Contrast adjustment	18
9–Saving settings as a preset	19
10–Editing Audio Files	19
11–Transferring Files	20
Transfer between CF card and USB media.....	20
Transfer between this unit and a computer.....	20
12–Using the Ducking Function	21
13–Using External Controllers	21
Using a USB keyboard.....	21
Using parallel control.....	21
Using serial control	21
14–Menu Tree	22

1–Main Functions and Features

- Rack-mountable stereo audio recorder for professional use and installations
- High reliability, durability and resistance to vibration-caused skipping realized by design that uses Compact Flash memory cards (CF cards) to record without moving parts
- USB type A port on the front panel allows file exchange with USB storage devices and text input with USB computer keyboards
- Record and play both uncompressed WAV-format (16/24-bit) audio files and compressed MP3-format audio files
- Handles MP3 files with a variety of bit rates (64/80/96/112/128/160/192/224/256/320 kbps for stereo MP3s)
- Handles 44.1 kHz /48 kHz /88.2 kHz /96 kHz sampling rates
- Records in either mono or stereo
- Failsafe mechanism closes recording files every 4 seconds
- Playback and stereo input signals can be mixed and monitored
- Mic/line inputs (with a 20 dB PAD) and line outputs use balanced analog XLR connectors
- Euro terminal block input and output
- Unbalanced RCA inputs and outputs (–10 dBV)
- XLR/TRMNL input switch on the back panel and input level knob on the front panel to adjust the analog input
- Phantom power switch on the rear panel (indicator on the front)
- S/PDIF digital input and output
- Standard jack and level knob for headphone monitoring on the front panel
- Records uncompressed audio in WAV format or compressed audio in MP3 format
- 192 x 32 pixel LCD display with a backlight
- Direct playback control of tracks 1–16 possible using 25-pin D-sub parallel remote interface
- Playback control of up to 1023 track possible using Binary Play mode
- RS-232C serial control port
- File exchange with a computer and remote control (FTP and Telnet) are possible using RJ45 Ethernet interface at 10/100 Mbps
- Supports various playback modes including playback of a single file, all files on a CF card, all files in a designated folder, all files in a playlist, and random playback
- Power On Play function starts playback automatically when power is turned ON
- Ducking mode with threshold and attenuation functions
- Adjustable reference level (+15/+18/+20/+22/+24 dBu)
- Auto Marker function sets markers at fixed intervals (1, 2, 3, 4, 5, 10, 30, 60 minutes) automatically
- Preference and marker files are saved in XML format
- Playlist allows various settings, including track playback order, playback start and end points for individual tracks, and volume adjustment for individual tracks

2–System Organization

Fundamentals

Audio files

When the HD-R1 starts recording, it creates a new, automatically-named audio file in the currently active folder (Main Menu ▶ Folder). Audio file naming preferences are configurable (Main Menu ▶ Record Settings ▶ File Base

Name). The HD-R1 has an internal real-time clock, so the file will also carry its actual creation date and time.

The HD-R1 is designed to protect recorded audio data. If power is lost during recording, no more than 4 seconds of audio will be lost.

Non-audio files

Non-audio files created by the HD-R1 are small text files that adhere to the XML (Extensible Markup Language) standard. While this is a common file format, it is strongly recommended that you do not

edit or modify these files yourself. This format was chosen for ease of troubleshooting and also so you can copy them, as a means of back-up.

Tracks and files

Audio data is stored on the media as audio files. These files are treated as “tracks” by this unit. For this reason, we call these files “tracks” when we are discussing recording and playback. When explaining

their handling in various management operations, for example, we call them “files.” The important thing to remember is that “files” and “tracks” are the same.

Folders

Newly recorded audio files are always placed in a folder specified by the user (Main Menu ▶ Folder). This is called the active folder. By default, the HD-R1 creates and uses a folder named “Audio”. If the HD-R1’s Playback Mode is set to Folder (Main Menu ▶ Play Settings ▶ Playback Mode), it will play back all files in

the currently active folder.

It is important to know that the HD-R1 is limited to one level of folders for audio files. Audio files that exist in subfolders will not be visible to the HD-R1.

Markers

Markers are used to quickly identify and locate specific points within an audio file. Pressing the **MARK** button at any time will automatically create a marker at the current transport position. If the Shuttle Mode is set to Track/Mark Only, instead of using the menu system, the **SHUTTLE/DATA** wheel can be used to locate to markers. Additionally, there are optional settings for automatically placing markers at predefined intervals or at events such as input signal overload (Main Menu ▶ Record

Settings ▶ Auto Markers). Marker names are automatically created but can be renamed, if desired, and the marker times may also be modified (Main Menu ▶ Manage Folders/Files ▶ Compact Flash ▶ {path to folder} ▶ View Files ▶ {filename} ▶ Edit Markers). This is only accessible if the file actually has markers. A maximum of 256 markers can be set within one CF Card.

Playlists

The HD-R1 can use playlists to determine what to play. A playlist is a collection of tracks in a specified order. A track is typically an entire audio file but may be just a portion of an audio file.

A maximum of 1023 tracks can be added to a playlist.

If, during playback, the HD-R1 cannot find an audio file that the playlist references, it will simply skip to the next track and continue playing. When this occurs, a brief message will appear on the screen. This will happen if the user moves or deletes audio files after the playlist has been created.

2–System Organization

Settings

The HD-R1 maintains its current settings in non-volatile memory, meaning that they are retained even if the unit is turned off.

Play Settings and Record Settings can be saved as a user preset to internal non-volatile memory or as a file on the CF card, making it simple to switch between various playback and recording scenarios. In addition, there are several factory presets available that can be used to quickly configure the

HD-R1's play and record settings for some of the most common uses.

System Settings can also be saved as a file on the CF card. This is useful for backing up the system configuration, should it need to be restored in the future. As with the play and record settings, there are several factory presets available that can be used to quickly configure the HD-R1's system settings for some of the most common uses.

Media considerations

The capabilities and performance of the HD-R1 will vary based on the speed and abilities of the Compact Flash (CF) media used. Older and some less expensive CF cards use slower memory components and little internal buffering which results in poor recording performance. Newer CF cards, especially those tailored for high-resolution digital cameras, not only perform reading and writing faster, but also come in larger storage sizes. The HD-R1 supports Type I and II Compact Flash media. Type I cards are typically based on Flash memory chips and provide higher

performance and durability than hard disk cards, while Type II cards are more commonly used for CF hard disks and can offer greater overall storage capacities. The HD-R1 can test and display the performance of the CF card being used. (See Main Menu ▶ Utilities ▶ Media Tools ▶ Media Speed Check.)

The following table gives the approximate recording time of four representative recording modes for various sizes of Compact Flash cards.

Compact Flash card	44.1 kHz mono 32 kbps MP3	44.1 kHz stereo 128 kbps MP3	44.1 kHz stereo 16-bit WAV	96 kHz stereo 24-bit WAV
512 MB	35 hours	8.75 hours	0.8 hours	0.25 hours
1 GB	70 hours	17.5 hours	1.6 hours	0.5 hours
4 GB	280 hours	70 hours	6.5 hours	2 hours
8 GB	560 hours	140 hours	13 hours	4 hours
16 GB	1120 hours	280 hours	26 hours	8 hours

File system format

When a new CF card is first inserted into the HD-R1, a screen pops up offering to format the media. This is to ensure that the optimal file system is being used with the card. The HD-R1 supports both FAT16 and FAT32 file system formats. FAT32 is required for CF cards 2GB and larger. While either file system can be used on smaller cards, FAT16 is most efficient and, therefore, recommended. The HD-R1 will always format the card with the optimal file system.

Windows, by default, will format all cards using FAT32, so if Windows is used to format cards smaller than 2GB, be sure to select FAT16.

Due to font and screen resolution limitations, only English and Western European characters will be drawn. If a character is not supported, a box will be drawn in its place.

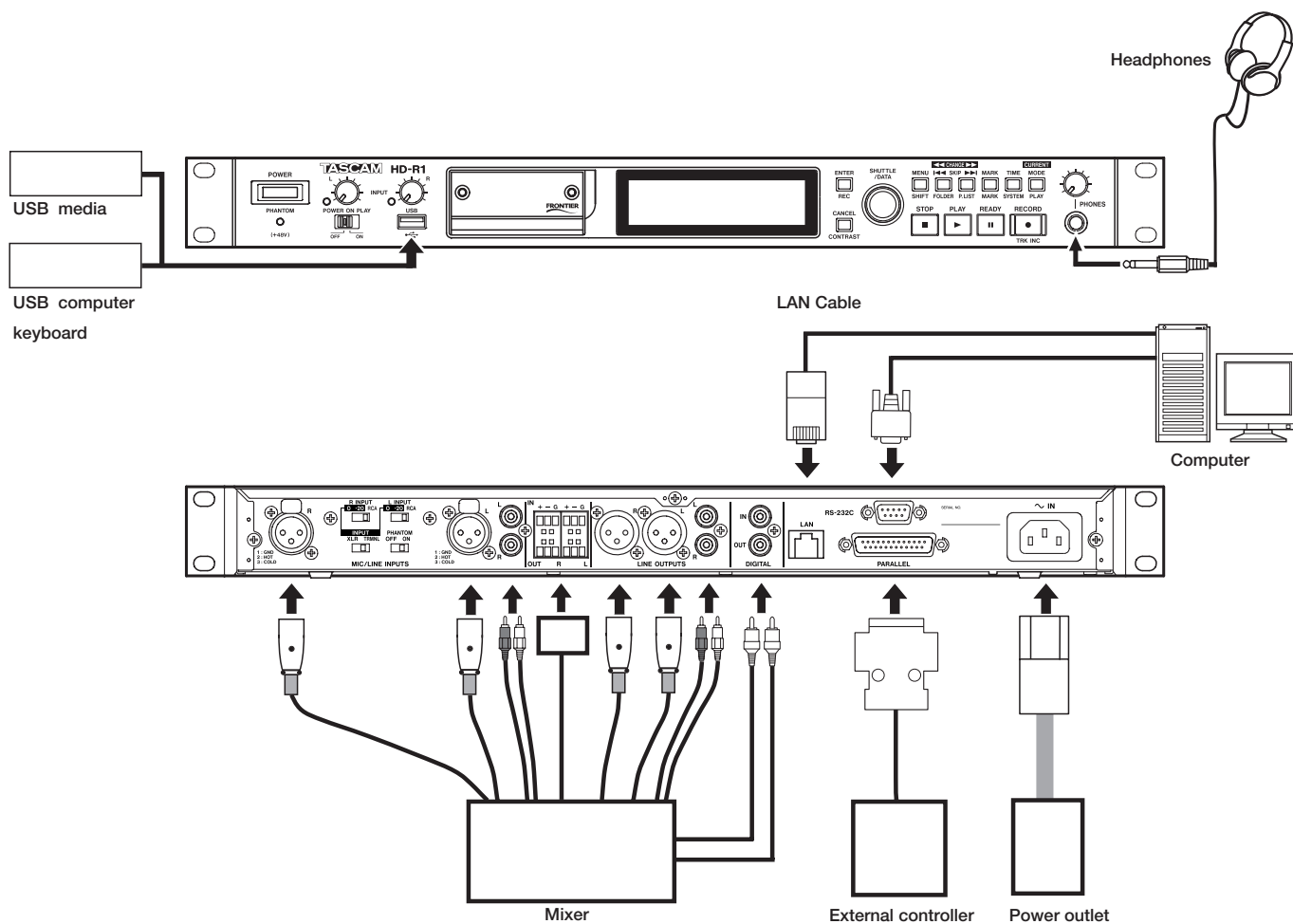
By default, the HD-R1 names new audio files using the "TRACK" name prefix. This prefix can be customized (Main Menu ▶ Record Settings ▶ File Base Name). Files and folders can be renamed at any point using the built-in renaming screen. File and folder names must be unique within their containing folder.

NOTE

- Names of files can be up to 20 characters. When a new track is created, the audio file will have the File Base Name followed by a three-digit number, such as 001. These three digits are included in the total length, so please limit the File Base Name to 17 characters or less. FAT16 and FAT32 formats do allow longer names, but this device does not support editing of more than 20 characters.
- The name must be eight characters or less and not use any special (non-FAT supported) characters. In addition, the name must be unique: projects must be named uniquely on a storage card; audio files must be unique within their project. Non-FAT supported characters include: #, %, &, ', (), *, +, Comma, ", /, :, ;, <, >, ?, =, \, [], ` , { }, ~.

3-Preparations for Use

Making connections



Connecting the power

Connect the included power cord to the ~IN connector on this unit and a standard power outlet.

Connecting the recording source

Connect analog sources to the MIC/LINE INPUTS or the Euroblock. Balanced mics and line level sources can be connected to the XLR jacks, -10 dBV unbalanced line level sources can be connected to the RCA jacks, and +4 dBu balanced sources can be connected to the Euroblock.

Connect digital sources to the DIGITAL IN jack. (This unit accepts S/PDIF digital, but does not accept AES/EBU digital sources.)

Connecting output destinations

Use the XLR or RCA LINE OUTPUTS or the Euroblock to connect analog output destinations.

Use the DIGITAL OUT jack to connect digital output destinations. (This unit works with S/PDIF, but not with AES/EBU digital sources.)

Connecting headphones for monitoring

Connect stereo headphones to the front panel PHONES jack.

Connecting a keyboard for text input

Connect a USB keyboard to the front panel USB port.

Connecting USB memory to copy files

Connect the USB media (flash memory) to the front panel USB port.

Connecting an external parallel controller

Connect a parallel controller to the PARALLEL connector on the rear panel.

Connecting an external serial controller

Connect a serial controller to the RS-232C connector on the rear panel.

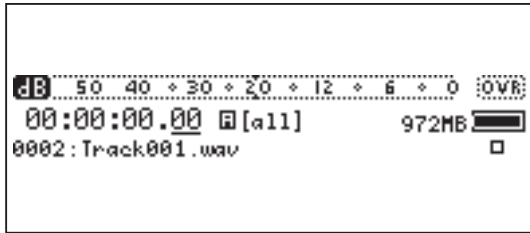
Connecting a LAN cable for remote control and file transfer

Connect the unit using the LAN connector on the rear panel.

3-Preparations for Use

Turning on the power

Press the **POWER** switch on the front panel to turn the power ON. After the unit starts-up, the display shows the Home Screen.

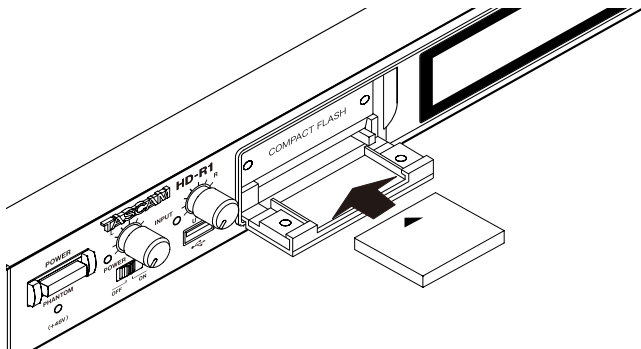


To turn the power OFF, press the **POWER** switch again.

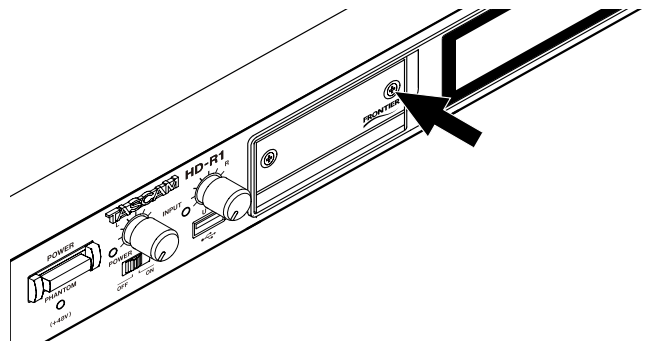
This unit uses CF cards (type I and type II) for recording and playback.

Inserting the CF card

1 Open the CF card slot door on the front panel.



- 2 Insert the CF card.
- 3 Close the door.
- 4 Use the included security screws to fasten the door shut as necessary.



NOTE

You can set the unit to either display a warning message or to automatically unmount the CF card when the CF card slot door is opened. (See "System settings" in the Owner's Manual.)

Removing the CF card

The CF card can be removed when the unit's power is OFF or when it is not recording or playing a file.

CAUTION

Some data will be lost if the card is removed during recording. If it is necessary to remove the card during recording, press the **STOP** key and then remove it.

3-Preparations for Use

Setting the time

Set the unit's system clock to the current date and time.

- 1 Press the MENU key.

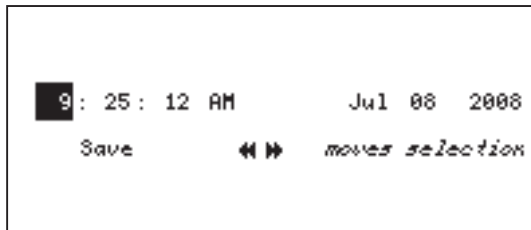
The Main Menu appears.

- 2 Use the SHUTTLE/DATA wheel to select Utilities, and press the ENTER key.

The Utility Menu appears.

- 3 Use the SHUTTLE/DATA wheel to select Set System Time, and press the ENTER key.

The setting screen appears.



- 4 Set the date and time in the following manner.
While the screen is open, use the SKIP (|◀◀/▶▶|) keys to move between data fields, and use the SHUTTLE/DATA wheel to change the values.

- 5 When the setting is finished, use the SKIP (|◀◀/▶▶|) keys to select SAVE, and press the ENTER key.

The system time setting is confirmed and the Utility Menu returns to the screen.

NOTE

To cancel the setting, press the CANCEL key. The screen returns to the Utility Menu and the system time reverts to the previous setting.

- 6 Press the MENU key.

The Home Screen reopens.

Formatting the CF card

When a new CF card is inserted it must be formatted.

- 1 Press the MENU key.

The Main Menu appears.

- 2 Use the SHUTTLE/DATA wheel to select Utilities, and press the ENTER key.

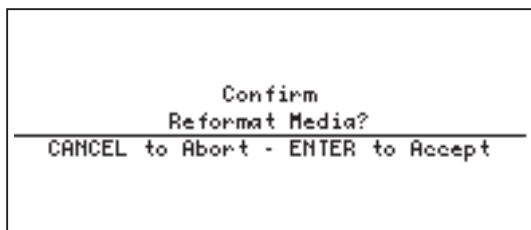
The Utility Menu appears.

- 3 Use the SHUTTLE/DATA wheel to select Media Tools, and press the ENTER key.

The Media Tools submenu appears.

- 4 Use the SHUTTLE/DATA wheel to select Reformat Media, and press the ENTER key.

The following confirmation screen appears.



- 5 Press the ENTER key.

The CF card is formatted.

When formatting completes and the completion screen appears, press the ENTER key to return to the Media Tools submenu.

NOTE

If you press the CANCEL key instead of the ENTER key, you will return to the Media Tools submenu without formatting the card.

- 6 Press the MENU key.

The Home Screen reappears.

3-Preparations for Use

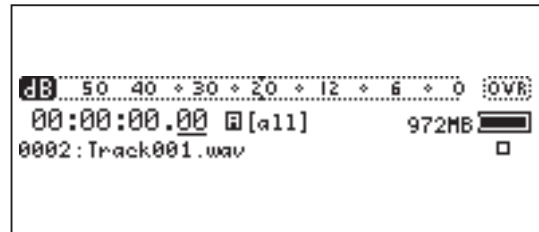
Display screens

The Home Screen appears when the unit's power is ON and it is starting up. This screen is the basic screen. Press the **MENU** key to enter the menu mode and open the Main Menu screen. Other menu screens

appear according to selections you make. If you press the **MENU** key when any menu screen is open, menu mode ends and the Home Screen reappears.

Home Screen

Level meters that show playback and record (input) levels, the time display, the track name, the current transport mode and other information appear on this screen.



Menu screens

While the Home Screen is open, press the **MENU** key to enter menu mode and open the Main Menu screen.

See “3–Screens and Menus” in the Owner’s Manual for details about the various items.



In menu mode, use the **SHUTTLE/DATA** wheel to select items (letters appear light on a dark background when selected), and press the **ENTER** key to confirm a

selection. Depending on the item, a submenu appears, a parameter setting mode starts or an operation is executed after confirmation.

For items with submenus, a appears at the right side of the display.

When in menu mode, press the **MENU** key to return to the Home Screen. When a submenu is displayed, press the **CANCEL** key to return to the parent menu. When the Main Menu is displayed, press the **CANCEL** key to return to the Home Screen.

NOTE

Items that are currently unavailable are shown in italic.

Panel lockout

Operation from the front panel of this unit can be disabled using the lockout function to prevent unintentional operation.

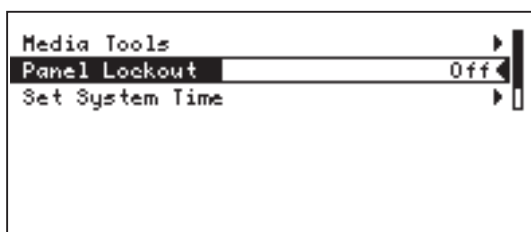
1 Press the MENU key.

The Main Menu appears.

2 Use the SHUTTLE/DATA wheel to select Utilities, and press the ENTER key.

The Utility Menu appears.

3 Use the SHUTTLE/DATA wheel to select Panel Lockout, and press the ENTER key.



4 Use the SHUTTLE/DATA wheel to switch from OFF to ON, and press the ENTER key.

The Home Screen reopens.

In this state, all the keys are inoperative.

The Panel Lockout setting is retained even if the power is turned OFF.

To unlock the front panel, hold down the **ENTER**, **CANCEL**, and **MENU** keys simultaneously.

NOTE

When the front panel is locked, external control via RS-232, parallel, and LAN are still possible.

Use this unit to record audio as WAV or MP3 format files. Recording is conducted in the same manner as with a conventional recorder.

Making settings related to recording

Before recording, use the Menu to select, for example, the recording file format (WAV/MP3), the sampling rate, the bit length (WAV) or bit rate (MP3), the stereo/mono settings, the input source and other standard settings. In addition to these, various other settings can be made as necessary. (See “Record Settings” in the Owner’s Manual.)

In addition, if the input source is set to analog input, the rear panel switches are also used to make some settings related to input.

1 Press the MENU key.

The Main Menu appears.

2 Use the SHUTTLE/DATA wheel to select Record Settings, and press the ENTER key.

The Record Settings Menu appears.

File Format	WAV
WAVE Settings	▶
MP3 Settings	▶
Channels	Stereo
Input Source	Analog/Mic
Auto Markers	▶
Pre-Record	Off
Auto Track	2 GB
Sync Record	Off
File Base Name	Track
Mark Base Name	Mark

NOTE

When the Home Screen is open, you can press the ENTER key while holding down the MENU key (SHIFT key) to open the Record Settings Menu directly.

Recording file format, stereo/mono and input source are selected in the following procedures.

3 Use the SHUTTLE/DATA wheel to select File Format, and press the ENTER key.

4 Use the SHUTTLE/DATA wheel to select WAV or MP3, and press the ENTER key.

If WAV is selected:

5a Use the SHUTTLE/DATA wheel to select WAVE Settings, and press the ENTER key.

The Wave Settings submenu appears.

WAVE Sample Rate	44.1kHz
Sample Width	24 Bits

With this Menu, you can set the sampling rate (WAVE Sample Rate) and bit depth (Sample Width).

Use the SHUTTLE/DATA wheel to select the item to set, and press the ENTER key. Use the SHUTTLE/DATA wheel to make the setting and press the ENTER key again to confirm it.

- WAVE Sample Rate: 44.1 kHz, 48 kHz, 88.2 kHz or 96 kHz
- Sample Width: 16-bit or 24-bit

NOTE

When the input source is SIPDIF, if the input signal sample rate differs from the sample rate setting, the unit cannot record and an error message appears.

If MP3 is selected:

5b Use the SHUTTLE/DATA wheel to select MP3 Settings and press the ENTER key.

The MP3 Settings submenu appears.

MP3 Sample Rate	44.1kHz
Stereo Bitrate	128 kbps
Mono Bitrate	64 kbps

Use this Menu to set the sampling rate (MP3 Sample Rate) and bit rate (Stereo Bit Rate, Mono Bit Rate). The bit rates can be set separately for stereo and mono recording.

Use the SHUTTLE/DATA wheel to select the item to set and press the ENTER key. Use the SHUTTLE/DATA wheel to make the setting and press the ENTER key again to confirm it.

- MP3 Sample Rate: 44.1 kHz or 48 kHz

NOTE

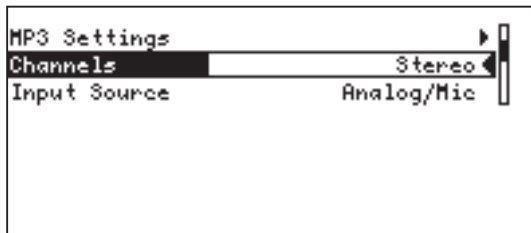
When the input source is SIPDIF, if the input signal sample rate differs from the sample rate setting, the unit cannot record and an error message appears.

- Stereo Bit Rate: 64 kbps, 80 kbps, 96 kbps, 112 kbps, 128 kbps, 160 kbps, 192 kbps, 224 kbps, 256 kbps or 320 kbps
 - Mono Bit Rate: 32 kbps, 40 kbps, 64 kbps, 80 kbps, 96 kbps, 112 kbps, 128 kbps or 160 kbps
- 6 After completing the setting procedures in 5a or 5b, press the CANCEL key to return to the Record Settings Menu.

4-Recording

- 7 Use the SHUTTLE/DATA wheel to select Channels, and press the ENTER key.

Set the record channel mode with this item.

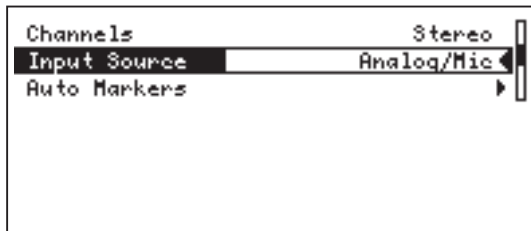


- 8 Use the SHUTTLE/DATA wheel to select the channel mode, and press the ENTER key.

- Stereo: records in stereo
- Mono Right: records R channel input in mono
- Mono Left: records L channel input in mono

- 9 Use the SHUTTLE/DATA wheel to select Input Source, and press the ENTER key.

Set the record input source with this item.



- 10 Use the SHUTTLE/DATA wheel to select the record input source, and press the ENTER key.

- Analog/Mic: sets the input source to the MIC/LINE INPUTS (XLR, RCA or Euro connectors) on the rear panel
- S/PDIF: sets the input source to the DIGITAL IN jack on the rear panel

NOTE

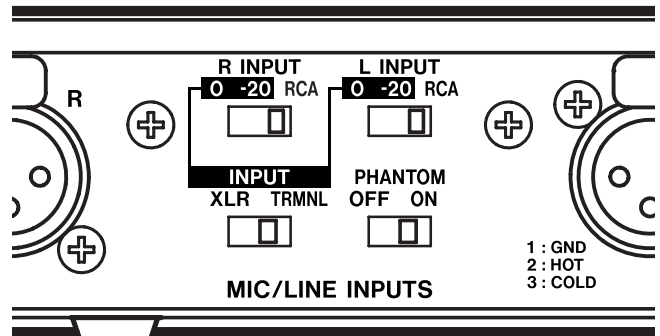
If Analog/Mic is selected, the switches on the rear panel also need to be set. See step 13 below.

- 11 As necessary, conduct other settings related to recording.

See "Record settings" in the Owner's Manual for more details about those items.

- 12 When setting is completed, press the MENU key to return to the Home Screen.

- 13 If Analog/Mic was selected in procedure 10 above, set the switches on the rear panel according to the analog input used as follows.



When using XLR inputs:

- Set the INPUT switch to XLR.
- Set the L INPUT and R INPUT switches to 0 or -20.

If the input level is too high, use the -20 setting, which engages a 20 dB pad.

- If a condenser mic that requires +48V phantom power is connected set the PHANTOM switch to ON.

When using the Euroblock:

- Set the INPUT switch to TRMNL

When using the RCA INPUT:

- Set the INPUT switch to XLR.
- Set the L INPUT and R INPUT switches to RCA.

Standard recording procedures

After making the above settings, the unit is ready to record. A new file is automatically created for every recording.

1 Press the RECORD key.

The unit becomes ready to record and input monitoring is turned ON.

The RECORD and READY keys light up.

2 Check the input level using the meters on the Home Screen.

When INPUT is set to Analog/Mic, use the INPUT knob on the front panel to adjust the level.

When INPUT is set to S/PDIF, the level cannot be adjusted. Adjust the level at the source if it is not suitable.

NOTE

When connecting headphones to the PHONES jack to monitor recording, use the PHONES knob to adjust the level. This knob only affects the headphone level; it does not affect the output level from the LINE OUT jack on the rear panel.

3 Press the PLAY key to start recording.

The RECORD and PLAY keys light.

4 When finished recording, press the STOP key.

A file is created.

With the default setting, the files are automatically named "Track001," "Track002," etc.

Press the READY key to pause recording.

Pausing also creates a file. A new file is created for the next recording.

NOTE

Audio files created when recording are stored in the current folder. Moreover, when the playback mode is set to playlist, the created audio file is automatically added to the current playlist. See "6-Folders and Playlists" on page 15 for information about the current folder and the playlist. See also "Setting the playback mode" on page 14.

Other recording functions

Using the Record Settings Menu, you can also set the following functions.

- Automatically create markers during recording at specified time intervals or when the input signal clips.
- Turn ON/OFF the prerecord function, which retains the input signal in a buffer when the unit is in ready-to-record mode.
- Set the maximum size for audio files.

- Turn ON/OFF the Sync Record function, which automatically starts recording if the input signal exceeds a certain level.
- Set the base name that is given automatically to new files.
- Set the base name that is given automatically to new markers.

Please see "Record settings" in the Owner's Manual for more about these functions.

Media capacity and recording

During recording, the media space indicator on the screen displays the remaining space.



When there is no remaining space, the unit stops recording, the file closes, and a warning message that there is no space appears on the screen.

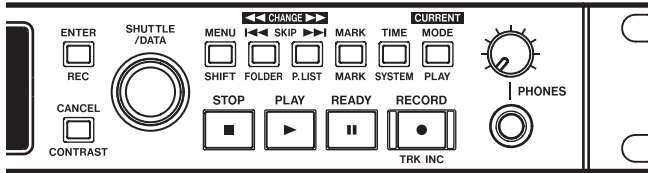
In the FAT file system used by this unit, the maximum size for each file is limited to 2GB. If the file size reaches the limit, the unit closes that file and continues recording to a new file. In this situation, no gap in recording occurs, so the files can be relinked in a DAW, for example. Moreover, if the unit's playback mode is set to playlist, the files can be played back in order without an audible gap between them.

5-Playback

This section explains standard playback operation and playback modes.

Standard playback operations

At the default setting, all files on a card are played back in the order that they were recorded. The transport keys function like those on an ordinary CD player or similar device.



- Press the **PLAY** key to start playback.
- When stopped or during playback, press the **SKIP** (◀◀/▶▶) keys to jump to the previous/next track (file).
- When stopped or during playback, press and hold the **SKIP** (◀◀/▶▶) keys to fast reverse and fast forward.
- Press the **READY** key to pause playback. When playback restarts, it will begin playing from this paused position.
- Press the **STOP** key to stop playback. When playback restarts, it will begin playing from the beginning of the playback area.
- Turn the **SHUTTLE/DATA** wheel to move the playback point to earlier and later tracks and markers. The wheel can also be set, however, to move the playback point in time units (hour, minute, second, 1/100 second). See “System settings” in the Owner’s Manual.
- Press the **SKIP** (◀◀/▶▶) keys while pressing and holding the **STOP** key, to move the playback point to the beginning of the first/last track in the playback area.

Setting the playback mode

By setting the playback mode, the unit can be set to play all tracks, a single track, the tracks in a folder or the tracks in the current playlist. (See “6–Folders and Playlists” on page 15.)

Use the following procedures to set the playback mode.

1 Press the **MENU** key.

The Main Menu appears.

2 Use the **SHUTTLE/DATA** wheel to select **Play Settings**, and press the **ENTER** key.

The Play Settings Menu appears.

Playback Mode	Playlist
Track Sorting	Name
Random	Off
Repeat	Off
Auto Ready	Off
Auto Cue	Off

NOTE

While the Home Screen is open, press the **MODE** key while pressing and holding the **MENU** key (**SHIFT** key) to open the Play Settings Menu directly.

3 Use the **SHUTTLE/DATA** wheel to select **Playback Mode**, and press the **ENTER** key.

4 Use the **SHUTTLE/DATA** wheel to select the **playback mode**, and press the **ENTER** key.

- **All**: all files on the card are available for playback
- **Single**: all files on the card are available for playback, but only one file plays and then playback stops
- **Folder**: all files in the current folder are available for playback
- **Playlist**: all files in the current playlist are available for playback

See “6–Folders and Playlists” for instructions on how to create folders and playlists and how to select the current folder and current playlist. For more details, see “Folder” and “Playlist” in the “3–Screens and Menus” chapter of the Owner’s Manual.

NOTE

When the unit’s power is turned ON with a CF card inserted, the playback mode used previously will be used again if the same folder or playlist can be found. If the previously used folder or playlist cannot be found, the playback mode is automatically set to All.

Other playback functions

This unit features other playback functions, including random playback and repeat playback of all tracks in the playback area, as well as an Auto Ready function that waits at the beginning of the next track after finishing playback of a track, and an Auto Cue

function that starts playback from the first sound in a track. For how to set these, see the “Play settings” in the Owner’s Manual.

6-Folders and Playlists

By categorizing and organizing audio files in folders, they can be managed effectively and played back in folder units. Moreover, by creating playlists and adding audio files to them as necessary, you can play the files that you want in the order that you want. (See “Setting the playback mode” on page 14.)

Creating new folders

By creating folders, files can be categorized and organized by genre and artist, for example, much like file management on a computer.

A CF card that has just been formatted does not have any folders. Recording in this state will create an audio file in the card’s top directory.

When FAT16 format is used, the number of folders and tracks in the root directory is limited to 512 total, and the number of sub-directories is limited to 65534. When FAT32 format is used, this total number is limited to 65535 in the root directory and 65534 in the sub-directories.

Audio files from any top-level folder on the HD-R1 can be read, but those in lower level folders cannot be read.

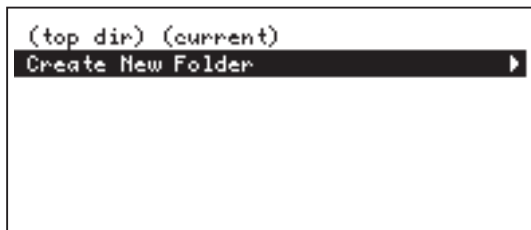
Create folders using the following procedures.

1 Press the MENU key.

The Main Menu appears.

2 Use the SHUTTLE/DATA wheel to select Folder, and press the ENTER key.

The Folder Menu appears.



NOTE

When the Home Screen is open, press the SKIP ◀◀ key while pressing and holding the MENU key (SHIFT key) to open the Folder Menu directly.

3 Use the SHUTTLE/DATA wheel to select Create New Folder, and press the ENTER key.

A new folder called “Audio01” is created and becomes the current folder.

Audio files created during recording are saved in the current folder.



You can edit the names of folders as well as delete them. For how to do this, see “Manage folders/files” in the Owner’s Manual.

Setting the current folder

When the playback mode (See “Setting the playback mode” on page 14) is set to Folder, the playback area is the current folder. Use one of the following operations to set the current folder.

Using the menu to set the current folder

1 Follow steps 1 and 2 in “Creating new folders” above to open the Folder Menu.

2 Use the SHUTTLE/DATA wheel to select the desired folder, and press the ENTER key.

This folder loads and becomes the current folder.

Using the panel keys to set the current folder

Press the SKIP ▶▶ or SKIP ◀◀ keys while pressing and holding the MODE key.

The current folder is changed in alphabetical order.

NOTE

The current folder is not only used as the playback area when the playback mode is set to Folder, it is also where new files from recordings are always saved regardless of the playback mode.

6–Folders and Playlists

Creating playlists

In playlist playback mode, this unit plays audio files (tracks) that have been added to the current playlist.

There are no playlists on a CF card that has just been formatted. You can make as many playlists as needed.

NOTE

When the playback mode is set to Playlist, new files created in recording are added to the current playlist.

Create playlists using the following procedures.

- 1 Press the MENU key.

The Main Menu appears.

- 2 Use the SHUTTLE/DATA wheel to select Playlist, and press the ENTER key.

The Playlist Menu appears.



NOTE

When the Home Screen is open, press the SKIP ►► key while pressing and holding the MENU key (SHIFT key) to open the Playlist Menu directly.

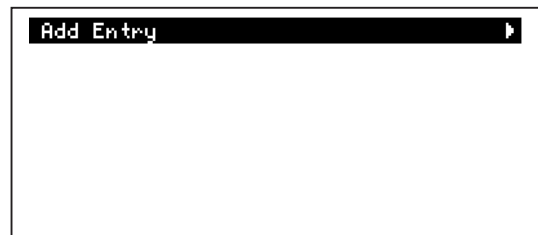
- 3 Use the SHUTTLE/DATA wheel to select Create New Playlist, and press the ENTER key.

A playlist called “Playlist00” is created, and this playlist becomes the current playlist.



- 4 With Playlist00 (current) selected, press the ENTER key.

A screen showing the contents of the playlist opens. The newly created playlist does not have any files yet, so only “Add Entry” is shown, as in the following screen.



Add files to the playlist using the following procedures

- 5 With “Add Entry” selected, press the ENTER key.

The files and folders at the top level of the card appear.

To show the files and folders inside a folder, select the folder and press the ENTER key.

- 6 Select the file that you want to add the playlist, and press the ENTER key.

The file is added to the playlist.

The playlist content screen reopens, so you can confirm that the file has been added to the playlist. Instead of the “Add Entry” item, “Add Entry To Bottom” appears if one or more files have already been added.

- 7 To add more files to the playlist, select “Add Entry To Bottom” and press the ENTER key.

The same screen appears as in procedure 5 above.

- 8 Select the file you want to add to the playlist and press the ENTER key as in procedure 6 above.

The file is added to the end of the playlist, and the playlist content screen reopens.

- 9 Repeat steps 7 and 8 as necessary.

You can also edit the names of playlists, as well as copy and delete them. You can also change the order of the added files, remove files from playlists, and set playback start and end points, set Fade In and Fade Out, and set playback volume, for example. For how to conduct these operations, see “Playlist” in the Owner’s Manual.

Setting the current playlist

When the playback mode (See “Setting the playback mode” on page 14) is set to Playlist, the playback area is the current playlist. Use one of the following operations to set the current playlist.

Using the menu to set the current playlist

- 1 Follow steps 1 and 2 in “Creating new playlists” to open the Playlist Menu.

- 2 Use the SHUTTLE/DATA wheel to select the desired playlist, and press the ENTER key.

This loads and becomes the current playlist.

Using the panel keys to set the current playlist

Press the SKIP ►► or SKIP ◀◀ keys while pressing and holding the MODE key. The current playlist is changed in alphabetical order.

By setting markers within files, you can locate desired track positions easily.

Setting markers

When recording or playing a track, press the **MARK** key to set a marker at the current position.

When recording, you can set the unit to automatically create markers at set intervals or whenever input clipping occurs by using the **Auto Markers** item in the Record Settings Menu. (See “Record settings” in the Owner’s Manual.)

Locating to markers

At the default setting, you can use the **SHUTTLE/DATA** wheel to locate to markers, but you can also change how the **SHUTTLE/DATA** wheel functions. (See “System settings” in the Owner’s Manual.)

Setting marker names

New markers are automatically given names. The base name can be set by using the **Marker Base Name** item in the Record Settings Menu. (See “Record settings” in the Owner’s Manual.)

Editing markers

Using the Manage Folders/Files Menu, markers can be deleted, and their positions (times) and names edited. For details see “Manage folders/files” in the Owner’s Manual.

8–System Settings

Use the System Settings Menu to make various system settings. The main settings are introduced below. For a detailed explanation and information about other settings, please see “System settings” in the Owner’s Manual.

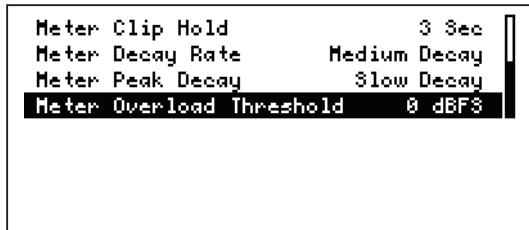
To display the System Settings Menu, press the **MENU** key to open the Main Menu, and then use

the **SHUTTLE/DATA** wheel to select **System Settings** and press the **ENTER** key. Alternatively, press and hold the **MENU** key (**SHIFT** key) and press the **TIME** key.

With the System Settings Menu open, use the **SHUTTLE/DATA** wheel to select and set the various items.

Meter settings

Select the **Metering** item and press the **ENTER** key to open the following submenu.



From this screen, settings can be made for the hold time for the overload indicators that occur when the meters clip, the meter decay speed, the meter peak decay speed, and the threshold level for meter overload indication.

For details, see “System settings” in the Owner’s Manual.

Resume mode setting

Select the **Resume** item and press the **ENTER** key to turn the Resume mode **ON** and **OFF**.

When **ON**, the unit remembers the playback position when the **STOP** key was pushed, and the next to time playback is started, it continues from that position.

This setting is effective even if the power is turned **OFF**, so when the power is turned **ON** again and playback restarts, it will play from the same position.

Shuttle mode setting

Select the **Shuttle Mode** item and press the **ENTER** key to set the transport control mode of the **SHUTTLE/DATA** wheel.

At the default setting, use of the wheel skips between track start points and markers, but it can also be set to skip in units of hours, minutes, seconds or 1/100 seconds.

Analog reference level setting

Select the **Ref Level** item and press the **ENTER** key to set the analog reference level. The reference level shows the relationship between the digital audio

level (dBFS) and the analog reference level (dBu). Set this to suit your audio system.

Contrast adjustment

Select the **Adjust Contrast** item and press the **ENTER** key. Then, use the **SHUTTLE/DATA** wheel to adjust the display contrast. The adjusted contrast setting is retained even if the power is turned **OFF**.

In addition, the contrast adjustment screen can be opened directly by pressing the **CANCEL** key while pressing and holding the **MENU** key (**SHIFT** key) when the Home Screen is open. After adjusting, press the **CANCEL** key or **MENU** key (**SHIFT** key).

9—Saving settings as a preset

The current record, playback and system settings made using the Play Settings Menu, Record Settings Menu and System Settings Menu can be saved as a preset file on a CF card.

The settings made in the Play Settings Menu and Record Settings Menu are saved together in the same preset file, but the settings made in the System Settings Menu are saved in a separate preset file. Saved presets can be recalled as necessary and also loaded on a different HD-R1. Moreover, preset files for the Play Settings Menu and Record Settings Menu can also be saved in the internal memory of this unit. (System Settings Menu preset files can only be saved to CF cards.)

Use the Manage Settings Menu to save presets. For details, see “Manage settings” in the Owner’s Manual.

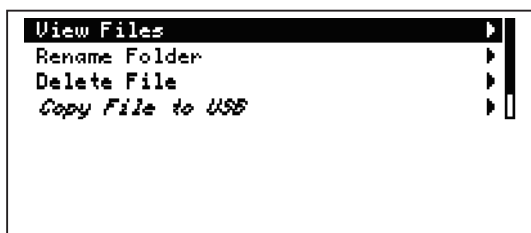
10—Editing Audio Files

Audio files that have been created can have their names edited, and be deleted or copied. Markers set in audio files can also be edited or deleted.

In addition to audio files on the CF card, files on USB media connected to this unit can also be edited.

Use the Manage Folders/Files Menu to edit audio files.

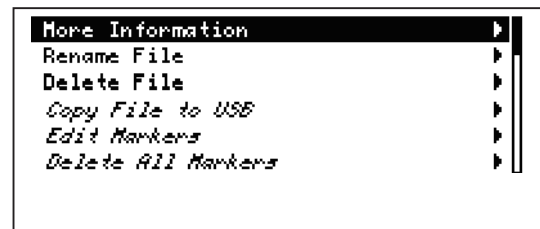
- 1 Open this menu and select `Compact Flash` or `USB`.



- 2 Then, select the folder with the desired file, and select `View Files` to open a list of all files in the folder.



- 3 Select the desired file from this list to open the following screen.



- 4 Select the item to be edited from this screen and change it as desired.

For details see “Manage folders/files” in the Owner’s Manual.

NOTE

After selecting a folder, it can be deleted or its name can be edited by choosing `Delete Folder` or `Rename Folder`.

11-Transferring Files

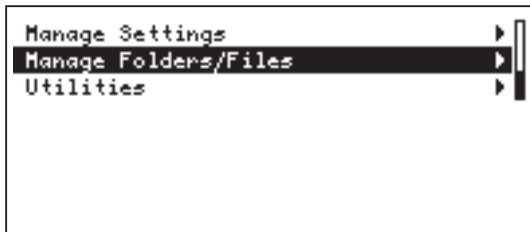
Files can be transferred (copied) between a CF card and USB media using this unit. In addition, files can

be transferred (copied) over a LAN from this unit to a connected computer.

Transfer between CF card and USB media

If both a CF card and USB media are connected to this unit, files can be transferred between the media.

- 1 Press the MENU key to open the Main Menu.
- 2 Select **Manage Folders/Files**, and press the ENTER key.



Select the file that you want to transfer.

Select **Copy File to USB** (when copying from a CF card to USB storage).

- 3 Select the transfer source (copy source) media, and press the ENTER key.

The top directory of the transfer destination media appears.



- 4 Select the folder or **(top dir)** of the transfer destination, and press the ENTER key to start file transfer.

NOTE

This unit mounts the USB media immediately before file operation, and unmounts it when file operation completes. Do not disconnect the USB media during a file operation.

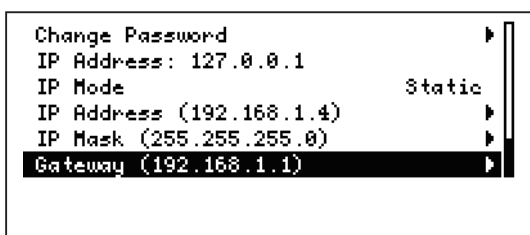
Transfer between this unit and a computer

By connecting this unit and a computer by LAN, files can be transferred (copied) between a computer and the CF card in the unit or attached USB media.

- 1 Connect a computer with this unit directly using a LAN cross-cable.

Using an ordinary broadband router, you can also connect them using LAN straight cables.

- 2 Press the MENU key to open the Main Menu.
- 3 Select **System Settings**, and press the ENTER key.



- 4 Select **Network** and press the ENTER key.
- 5 Select the **IP Mode** item and press the ENTER key. Set whether the IP address is fixed or automatically acquired (DHCP).

NOTE

If DHCP is selected, the network must support DHCP.

- 6 Launch an FTP application that supports Unicode and make the following settings. (One recommended FTP application is FileZilla.)

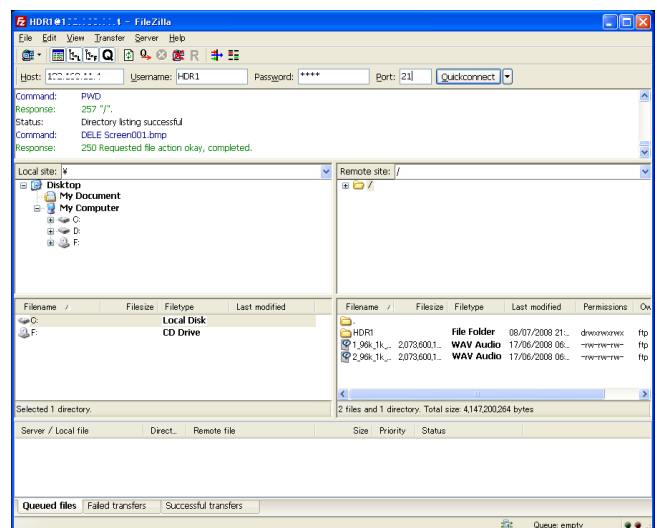
Host: Enter the IP address.

Username: HDR1

Password: hdr1 (default)

Port: 21

- 7 Click the connect button in the FTP application. In most FTP applications, the PC and its file structure should appear on the left and the CF card in the HD-R1 should appear on the right.



- 8 Use the FTP application to transfer files.

12—Using the Ducking Function

This unit has a ducking function. By using this function, the playback signal can automatically be reduced when an analog signal is input into the unit, or the analog input signal can be reduced when a track is playing. One specific use, for example, is to automatically reduce the volume of background music when an announcement is being made.

To use the ducking function, in the Ducking submenu of the System Settings Menu, set the Ducking Mode to “Attenuate Playback” or “Attenuate Input”. Use this submenu to set the analog input threshold level, the playback signal reduction level and the time until the playback signal returns to the ordinary level after the analog input has stopped. (See “System settings” in the Owner’s Manual.)

13—Using External Controllers

Using a USB keyboard

By connecting a computer USB keyboard to the USB port on the front panel of this unit, you can control the transport, and call up and operate menus, for example, with this keyboard. For the key assignments, see “USB computer keyboard equivalents” in the Owner’s Manual.

Using parallel control

Using the **PARALLEL** port on the rear panel, you can control playback on this unit externally. For an overview and pin assignments, see “5—Parallel Interface” in the Owner’s Manual.

For menu settings related to the parallel port, see “System settings” in the Owner’s Manual.

Using serial control

Using the **RS-232C** port on the rear panel, you can control the transport of this unit and make various setting externally. For details see “6—RS-232C Serial Interface” in the Owner’s Manual.

14-Menu Tree

Level 0 is the Main Menu. Values in parentheses are default values.

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Folder(*1) *1: Current Folder name or "top dir"	--- (top dir) L Folder name L Create New Folder				
Playlist(*2) *2: Current playlist name or "no playlist"	--- Playlist name (current) L Playlist name	--- Add Entry To Bottom L Track name	--- Change Playlist Position L Remove from Playlist L Start/End L Fade In L Fade Out L Volume L Delay Interval L Parallel Control L Track Info	--- Shuttle/Data --- SKIP and Shuttle/Data --- Off (On) --- Off (On) --- -30 to 0dB in 1dB step --- (0)-9 in 1sec steps, 10-55 in 5sec steps, 1-9 in 1min steps, 10-60 in 5min steps --- Trigger Mode --- Repeat Count L Interruptible	--- (Trigger), Momentary, Toggle (Off), 20, Infinite --- (Yes), No
Play settings	--- Create New Playlist L Rename Playlist L Copy Playlist L Delete Playlist				
Record Settings	--- Playback Mode L Track Sorting L Random L Repeat L Auto Reaz L Auto Cue	--- (All), Single, Folder, Playlist --- (Name), Time --- (Off), On --- (Off), On --- (Off), On --- (Off), -72, -66, -60, -54, -48, -42, -36, -30, -24 dBFS			
	--- File Format L WAVE Settings L MP3 Settings L Channels L Input Source L Auto Markers L Pre-Record L Auto Track L Sync Rec L File Base Name L Marker Base Name	--- (WAV), MP3 --- WAVE Sample Rate L Sample Width --- MP3 Sample Rate L Stereo Bitrate L Mono Bitrate --- Mono Left, Mono Right, (Stereo) --- (Analog/Mic), S/PDIF --- Audio Overs L Time Interval --- (Off), On --- 512MB, 1GB, 1.5GB, 1.8GB, (2GB), 5Min, 10Min, 15Min, 30Min, 60Min --- (Off), -72, -66, -60, -54, -48, -42, -36, -30, -24 dBFS --- Track_ Mark_	--- (44, 1kHz), 48kHz, 88.2kHz, 96kHz --- 16Bits, (24Bits) --- (44, 1kHz), 48kHz --- 64, 80, (128), 160, 192, 224, 256, 320 kbps --- 32, 40, (64), 80, 96, 112, 128, 160 kbps --- (Off), On --- (Off), 1, 2, 3, 4, 5, 10, 30, 60 minutes		
System Settings	L Ducking L Metering	--- Ducking Mode L Ducking Threshold L Ducking Attenuation L Ducking Hold Time --- Meter Clip Hold L Meter Decay Rate L Meter Peak Decay L Meter Overload Threshold	--- (Off), Attenuate Input, Attenuate Play (-6dBfs), -12dBfs, -18dBfs, -24dBfs, -30dBfs (-3dB), -6dB, -9dB, -12dB, -18dB, -24dB, Infinite (0.1sec), 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0 sec Flash, (3 sec), 6 sec, 10 sec, Infinite Fast Decay, (Medium Decay), Slow Decay Hold, Fast Decay, Medium Decay, (Slow Decay), Off -0.2dBfs, (0dBfs)		

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
L	Network	Change Password IP Address : 127 . 0 . 0 . 1 IP Mode IP Address (192 . 168 . 1 . 4) IP Mask (255 . 255 . 255 . 0) Gateway (192 . 168 . 1 . 1) Parallel Mode Input Polarity Busy1 Signal Busy1 Polarity Busy2 Signal Busy2 Polarity (Off), On (Track/Mark Only), Hours, Minutes, Seconds, Hours, Minutes, Seconds, Hours, Minutes, Seconds, Hours, Minutes, Seconds Hundredths (-20dBFS=+4dBu), -18dBFS, -16dBFS, -14dBFS (-4dBu, -9dBFS=+6dBu) (Off), Show Warning, Unmount CF (English), Japanese Sample Rate[Internal] S/PDIF Input Adjust Contrast with JOG Trigger Mode Interruption Repeat Count Attenuation	Ind1_ display IP Address (DHCP), Static Input IP Address Input mask Input Gateway (Off), Direct Play, Binary Play, Program Play (Active Low), Active High (Playback), Recording, Finished, Ducking, CF Doo, Media Full (Normally Open), Normally Closed (Playback), Recording, Finished, Ducking, CF Doo, Media Full (Normally Open), Normally Closed		
L	Resume Shuttle Mode				
L	Ref Level				
L	CF Door Action				
L	Keyboard Type				
L	Audio Clock Information				
L	Adjust Contrast				
L	Playlist Defaults				
---	Manage Play/Rec Settings	Settings File (Setting File Name) New Settings File Save as Preset Delete Settings Load From File Save To File Delete File	Select Current File ("Using Factory Default") *3, preset... Select User Preset1-5 Select User Preset1-6 Select File Select File Select File	*3: Factory setting	
L	Manage System Settings				
---	Compact Flash USB	(Top dir) Select Files	View Files More Information Rename File Delete File Copy File to USB Edit Markers Delete All Markers View Folder Rename Folder Delete Folder	View Files See Files Files Select a Folder or an Audio File Done Selecting Select a Folder or an Audio File Done Selecting Rename Marker Edit Marker Delete Marker See Files	
---	Media Tools	Media Information Media Speed Check Format Media (Off), On Input Day and Time Display Software version			
L	Panel Lockout				
L	Set System Time				
L	Software Version				

TASCAM

TEAC Professional Division

HD-R1

TEAC CORPORATION

Phone: +81-42-356-9143
1-47 Ochiai, Tama-shi, Tokyo 206-8530, Japan

www.tascam.com

TEAC AMERICA, INC.

Phone: +1-323-726-0303
7733 Telegraph Road, Montebello, California 90640 USA

www.tascam.com

TEAC CANADA LTD.

Phone: +1905-890-8008 Facsimile: +1905-890-9888
5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada

www.tascam.com

TEAC MEXICO, S.A. De C.V

Phone: +52-55-5010-6000
Río Churubusco 364, Colonia Del Carmen, Delegación Coyoacán, CP 04100, México DF, México

www.tascam.com

TEAC UK LIMITED

Phone: +44-8451-302511
Suites 19 & 20, Building 6, Croxley Green Business Park, Hatters Lane, Watford, Hertfordshire, WD18 8TE, UK

www.tascam.co.uk

TEAC EUROPE GmbH

Phone: +49-611-71580
Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany

www.tascam.de