TASCAM

DR-701D Linear PCM Recorder for DSLR







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IMPORTANT SAFETY PRECAUTIONS

For U.S.A.

INFORMATION 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.

For Canada

THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMERIQUE DE LA CLASSE B EST CONFORME A LA NORME NMB-003 DU CANADA.

DECLARATION OF CONFORMITY

We, TEAC EUROPE GmbH. Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany declare in own responsibility, the TEAC product described in this manual is in compliance with the corresponding technical standards.

Declaration of Conformity

Responsible party: TEAC AMERICA, INC. Address: 1834 Gage 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.

IMPORTANT SAFETY INSTRUCTIONS

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use



caution when moving the cart/apparatus combination to avoid injury from tip-over.

- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply

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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.

- The apparatus draws nominal non-operating power from the AC outlet with its POWER or STANDBY/ON switch not in the ON position.
- The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.
- Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or headphones can cause hearing loss.
- If you are experiencing problems with this product, contact TEAC for a service referral. Do not use the product until it has been repaired.

CAUTION

- 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 should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.
- If the product uses batteries (including a battery pack or installed batteries), they should not be exposed to sunshine, fire or excessive heat.
- CAUTION for products that use replaceable lithium batteries: there is danger of explosion if a battery is replaced with an incorrect type of battery. Replace only with the same or equivalent type.

CAUTIONS ABOUT BATTERIES

This product uses batteries. Misuse of batteries could cause a leak, rupture or other trouble. Always abide by the following precautions when using batteries.

- Never recharge non-rechargeable batteries. The batteries could rupture or leak, causing fire or injury.
- When installing batteries, pay attention to the polarity indications (plus/minus (⊕/⊙) orientation), and install them correctly in the battery compartment as indicated. Putting them in backward could make the batteries rupture or leak, causing fire, injury or stains around them.
- When you store or dispose batteries, isolate their terminals with insulation tape or something like that to prevent them from contacting other batteries or metallic objects.
- When throwing used batteries away, follow the disposal instructions indicated on the batteries and the local disposal laws.

- Do not use batteries other than those specified. Do not mix and use new and old batteries or different types of batteries together. The batteries could rupture or leak, causing fire, injury or stains around them.
- Do not carry or store batteries together with small metal objects. The batteries could short, causing leak, rupture or other trouble.
- Do not heat or disassemble batteries. Do not put them in fire or water. Batteries could rupture or leak, causing fire, injury or stains around them.
- If the battery fluid leaks, wipe away any fluid on the battery case before inserting new batteries. If the battery fluid gets in an eye, it could cause loss of eyesight. If fluid does enter an eye, wash it out thoroughly with clean water without rubbing the eye and then consult a doctor immediately. If the fluid gets on a person's body or clothing, it could cause skin injuries or burns. If this should happen, wash it off with clean water and then consult a doctor immediately.
- The unit power should be off when you install and replace batteries.
- Remove the batteries if you do not plan to use the unit for a long time. Batteries could rupture or leak, causing fire, injury or stains around them. If the battery fluid leaks, wipe away any fluid on the battery compartment before inserting new batteries.
- Do not disassemble a battery. The acid inside the battery could harm skin or clothing.
- For European Customers

Disposal of electrical and electronic equipment

- (a) All electrical and electronic equipment should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- (b) By disposing of the electrical and electronic equipment correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.
- (c) Improper disposal of waste equipment can have serious effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.

(d) The crossed out wheeled dust bin symbol indicates that electrical and electronic equipment must be collected and disposed of separately from household waste.



(e) The return and collection systems are available to the end users. For more detailed information about disposal of old electrical and electronic equipment, please contact your city office, waste disposal service or the shop where you purchased the equipment.

Disposal of batteries and/or accumulators

- (a) Waste batteries and/or accumulators should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
- (b) By disposing of waste batteries and/or accumulators correctly, you will help save valuable resources and prevent any potential negative effects on human health and the environment.
- (c) Improper disposal of waste batteries and/or accumulators can have serious effects on the environment and human health as a result of the presence of hazardous substances in batteries and/or accumulators.
- (d) The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.



Pb, Hg, Cd

If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the Battery Directive (2006/66/EC), then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will be indicated beneath the crossed out wheeled dust bin symbol.

(e) The return and collection systems are available to the end users. For more detailed information about disposal of waste batteries and/or accumulators, please contact your city office, waste disposal service or the shop where you purchased them.

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Introduction

Thank you very much for purchasing the TASCAM DR-701D.

Before using this unit, read this Owner's Manual carefully so that you will be able to use it correctly and enjoy working with it for many years. After you have finished reading this manual, please keep it in a safe place for future reference.

This product has a Blackfin[®] 16/32-bit embedded processor made by Analog Devices, Inc. This processor controls the unit's digital signal processing.

Inclusion of this Blackfin[®] processor in the product increases its performance and reduces its power consumption.

Note about the Reference Manual

This Owner's Manual explains the main functions of this unit. Please see the Reference Manual for information about all the unit's functions.

You can download the Reference Manual from the TEAC Global Site (http://teac-global.com/).

Included items

This product includes the following items.

Keep the box and packing materials for transportation in the future.

Please contact TASCAM Customer Support (see back cover) if any of these items are missing or have been damaged during transportation.

- Main unit×1
- USB cable× 1
- Camera attachment bracket screw hole
 covers×6
- Owner's Manual (this document) including
 warranty× 1

Precautions for placement and use

- The environmental temperature operating range of this unit is 0–40°C (32–104°F).
- Do not install this unit in the following types of locations. Doing so could degrade the sound quality and/or cause malfunctions.

Places with significant vibrations Near windows or other places exposed to direct sunlight

Near heaters or other extremely hot places Extremely cold places

Places with bad ventilation or high humidity Very dusty locations

Places exposed directly to rain or other water

- Do not place this unit on top of a power amplifier or other device that generates heat.
- If this unit is placed near a power amplifier or other device with a large transformer, it could cause a hum. If this occurs, increase the distance between this unit and the other device.
- This unit could cause color irregularities on a TV screen or noise from a radio if used nearby. If this occurs, use this unit farther away.
- This unit might produce noise if a mobile phone or other wireless device is used nearby to make calls or to send or receive signals. If this occurs, increase the distance between this unit and those devices or turn them off.

Using the TEAC Global Site

You can download the Owner's Manual and the Reference Manual necessary for this unit from the TEAC Global Site (http://teac-global.com/).

- 1. Open the TEAC Global Site (http://teac-global. com/).
- 2. In the TASCAM Downloads section, click the desired language to open the Downloads website page for that language.

NOTE

If the desired language does not appear, click Other Languages.

- 3. Click the product name in the "Search by Model Name" section to open the Downloads page for that product.
- 4. Select and download the Owner's Manual that are needed.

Beware of condensation

Condensation could occur if the unit is moved from a cold place to a warm place, it is used immediately after a cold room has been heated or it is otherwise exposed to a sudden temperature change. To prevent this, or if this occurs, let the unit sit for one or two hours at the new room temperature before using it.

Cleaning the unit

To clean the unit, wipe it gently with a soft dry cloth. Do not wipe with chemical cleaning cloths, thinner, alcohol or other chemical agents. Doing so could damage the surface or cause discoloration.

User registration

Customers in the USA, please visit the TASCAM website (http://tascam.com/) to register as a user online.

Names and functions of parts

Front



- 1 Built-in stereo microphone
- 2 Front cover



- 3 Battery compartment
- ④ SD card slot

Rear panel



- **5** Display
- 6 1 knob and PEAK indicator
- ⑦ 2 knob and PEAK indicator
- 8 MENU button
- **9 MONITOR button**
- 10 2/► button
- ① 1/■ button
- ① DUAL indicator This lights when dual recording mode is selected.
- (3) REC indicator This lights red when recording.
- 14 Record (●) button
- 15 3 knob and PEAK indicator
- 16 4 knob and PEAK indicator
- ⑦ DATA dial (ENTER) Turn to select items and change values on setting screens.
- 18 3/►►I button

- 19 4/ I**◄◄** button
- 20 SLATE button
 - Use to generate slate tones.

Left side



NOTE

When connecting and using plugs from external devices, do not apply excessive force to the plugs. Doing so could damage the equipment.

- 21 HOLD/心/ Iswitch
- 22 PHONES volume
- 23 PHONES jack (3.5mm stereo mini jack)
- 24 EXT IN 1/2 connector (3.5mm stereo mini jack)
- 25 REMOTE connector (2.5mm TRS jack)
- 26 IN 1 connector (XLR/TRS)
- IN 2 connector (XLR/TRS)
- 28 IN 3 connector (XLR/TRS)

Right side



NOTE

When connecting and using plugs from headphones and other external devices, do not apply excessive force to the plugs. In particular, be careful not to apply too much force when using a standard to mini plug adapter. Doing so could damage the equipment.

- 29 HDMI IN connector
- 30 HDMI OUT connector
- 31 Micro USB connector
- 32 IN 4 connector (XLR/TRS)
- 33 DIN connector (3.5mm stereo mini jack)
- 34 OUT connector (3.5mm stereo mini jack)
- 35 LINE OUT jack (3.5mm stereo mini jack)
- 36 TIME CODE IN connector

Тор



- ③ DSLR camera attachment bracket
- 38 DSLR camera mounting screw (1/4-inch)



39 Accessory shoe

Bottom



- 40 Tripod mounting threads (1/4-inch)
- (4) Video camera pin hole

Home Screen

This unit's Home Screen has a counter display mode and a trim display mode.

When the unit's Home Screen is open, turn the **DATA** dial to change the display contents.



Home Screen counter display mode



Home Screen trim display mode

1 Timecode reception status

This shows the timecode reception status. Nothing shown: no timecode being received

2 Recorder operation status

This icon shows the recorder operation status.

Indicator	Meaning			
	Stopped			
П	Paused			
	Playing back			
	arching forward			
	Searching backward			
	Skipping to the beginning of the next file			
	Skipping to the beginning of the previous file			
•	Recording			

3 Elapsed time

This shows the elapsed time (hours: minutes: seconds) of the current file.

④ Power supply status

When a battery is being used, a battery icon shows the amount of power remaining with 25 levels ($\blacksquare \rightarrow \Box$).

The battery is almost dead and the power will soon turn off (enter standby) if the empty icon appears and blinks.

When using the TASCAM PS-P515U AC adapter (sold separately) or USB bus power, ■⊷ appears.

5 HDMI connection status

This shows the HDMI connection status. No icon: no HDMI connection HDMI: HDMI connection HDMI connection (clock synchronization)

- 6 Recording setting status
 1 2 3 4: Recording off
 1 2 8 1: Recording on
- Phantom power status
 No icon: Phantom power off
 Phantom power on
- 8 MIX recording setting status MIX: MIX recording setting off MIX: MIX recording setting on
- **9** Level meters

These show the levels of input or playback signals.

10 Remaining time

This shows the elapsed time (hours: minutes) of the current file.

When recording, the remaining recording time on the SD card is shown in hours and minutes according to the set recording mode, sampling frequency and recording format.

(1) Peak values in decibels (dB)

During playback, the maximum level that occurs in a fixed period of time is displayed in decibels for each channel.

During recording, peak input levels are shown in decibels.

12 Project name

This shows the name of the project being recorded or played.

A project is a group of files used for recording/ playback.

13 Trim levels

These show the trim levels of knobs 1, 2, 3 and 4.

14 GANG status

This shows the GANG status of knobs 1, 2, 3 and 4.

: Set to GANG group 1

: Set to GANG group 2

Preparation

Powering the unit

Using AA batteries

- 1. Open the front cover on the front of the unit.
- 2. Pull the lever on the battery compartment cover down to open it.
- 3. Install 4 AA batteries with their \oplus and \boxdot marks as shown in the battery compartment.
- 4. Close the battery compartment cover.



 Use the BATTERY item on the POWER MANAGEMENT page to set the type of battery in order to accurately show the amount of battery power remaining and allow the unit to accurately determine whether enough power is available for proper operation. (By default, this is set to ALKALI for alkaline batteries.)

Turning the unit on

To start the unit when off (in standby), slide the **HOLD**/ \bigcirc / I switch toward \bigcirc / I until TASCAM DR-701D (start-up screen) appears on the display. The Home Screen appears after the unit starts up.



Setting the built-in clock

When the unit is started up for the first time (or when the built-in clock is reset after being left unused without batteries), the DATE/TIME screen appears before the start-up screen to allow the date and time to be set.

DATE/TIME
2000 - 01 - 28
06:19:00
ENTER NEXT MENU SET

Turning the unit off (putting it in standby)

When on, slide the **HOLD**/**ウ**/**I** switch toward **ウ**/**I** until LINEAR PCM RECORDER appears on the display.

The unit turns off (enters standby) after it completes its shutdown process.

Inserting SD cards

- 1. Open the front cover on the front of the unit.
- 2. Insert an SD Card into the slot as shown in the illustration until it clicks into place.



CAUTION

- SD cards that meet SD, SDHC or SDXC standards can be used with this unit.
- A list of SD cards that have been confirmed to work with this unit can be found on the TEAC Global Site (http://teac-global.com/).

Connecting external stereo mics and monitoring equipment

Connect an external stereo mic to the **EXT IN 1/2** jack on the left side of the unit.

To listen with headphones, connect them to the **PHONES** jack.



To listen with an external monitoring system (powered monitor speakers or an amplifier and speakers), connect it to the **LINE OUT** jack on the right side of the unit.



Powered monitor speakers or amplifier and speakers

Connecting cameras



When you want to record audio from this unit with a camera

Use a 3.5mm stereo mini plug cable (commercially-available) to connect the **DOUT** jack on the right side of this unit with the external mic input on the camera.

When you want to input audio from the camera into this unit and monitor it using headphones

Use a 3.5mm stereo mini plug cable (commercially-available) to connect the **D** IN jack on the right side of this unit with the audio output on the camera.

Connecting cameras using HDMI

The unit can be synchronized to a camera clock by connecting the camera HDMI output to the **HDMI IN** connector. In addition, HDMI timecode can be received from the camera.

Connecting with HDMI monitor recorders

Audio recorded by the DR-701D can be added to HDMI video input from a camera and then output from the **HDMI OUT** connector. The unit can also output the received HDMI timecode.

NOTE

- Refer to the camera's operation manual for information about its connectors.
- Use the CAMERA item on the OUTPUT LEVEL page to adjust the volume output to the camera.
- To mount the camera on this unit, use the camera attachment screw on the top of the unit.

Using the TIMECODE IN connector

When recording starts, time can be acquired from timecode and recorded in the BWF Time Reference field.

Linear timecode (LTC)

When something is connected to the BNC connector, the internal timecode generator synchronizes with the linear timecode. Operation will continue using the internal generator if the connection is interrupted.

Selecting the monitored signal

- 1. When the Home Screen is open and the unit is stopped, paused, in recording standby or recording, press the **MONITOR** button to open the MONITOR SELECT screen.
- 2. Turn the **DATA** dial to select which signal to monitor.

Option	Meaning
MIX	Monitor a mix in stereo.
CH1	Monitor the channel 1 input sound.
CH2	Monitor the channel 2 input sound.
CH3	Monitor the channel 3 input sound.
CH4	Monitor the channel 4 input sound.
CAMERA IN	Monitor the 🗖 connector signal.
CH1-2	Monitor a mix of channels 1-2.
CH3-4	Monitor a mix of channels 3–4.
HDMI1*	Monitor the HDMI 1 input sound.
HDMI2*	Monitor the HDMI 2 input sound.
HDMI3*	Monitor the HDMI 3 input sound.
HDMI4*	Monitor the HDMI 4 input sound.
HDMI5*	Monitor the HDMI 5 input sound.
HDMI6*	Monitor the HDMI 6 input sound.
HDMI7*	Monitor the HDMI 7 input sound.
HDMI8*	Monitor the HDMI 8 input sound.
HDMI1-2*	Monitor a mix of HDMI 1-2.
HDMI3-4*	Monitor a mix of HDMI 3-4.
HDMI5-6*	Monitor a mix of HDMI 5-6.
HDMI7-8*	Monitor a mix of HDMI 7-8.

*The HDMI options will appear when synchronized with HDMI.

NOTE

The monitoring options depend on the HDMI input and output settings.

3. When finished selecting the monitoring signal, press the **DATA** dial or **MONITOR** button to return to the Home Screen.

NOTE

When CAMERA IN is selected, you can monitor the input sound through the **PHONES** jack, but the level meters will show the input sound according to the recording mode.

Menu structure

Press the **MENU** button the first time to open the INPUT menu page. In the future, pressing this button will reopen the menu page that was last open. The menu screen has 18 pages organized by types of menu items.

	Page name	Contents
1	INPUT	Make input settings.
2	MIXER	Make mixer settings.
3	PHASE/DELAY	Make settings for input phase and to compensate for mic distance.
4	LEVEL CONTROL	Make input level settings.
5	TRIM GANG	Make gang settings.
6	OUTPUT LEVEL	Make output level settings.
7	MIC POWER	Make mic power settings.
8	RECORD	Make recording channel settings.
9	REC SETTING	Make recording settings
10	FILE	Make file settings.
11	MEDIA	Make media settings.
12	TIME CODE	Make timecode settings.
13	SLATE TONE	Make slate tone settings.
14	HDMI AUDIO ASSIGN	Make HDMI output audio assignments.
15	METER/TRIM	Make meter and trim settings.
16	POWER MANAGEMENT	Make power management settings.
17	REMOTE	Make remote control settings.
18	SYSTEM	Make system settings.

Basic operation procedures

1. Press the **MENU** button to open the INPUT page.



- 2. Turn the **DATA** dial to select (highlight) a menu page or an item to be set.
- 3. Press the **DATA** dial to move the cursor to (highlight) the setting content.

NOTE

When a menu page showing CH1, CH2, CH3 and CH4 icons is open, press the DATA dial or a 1/■, 2/▶, 3/▶▶ or 4/I◀◀ button to select that channel.

- 4. Turn the **DATA** dial to change the setting.
- Press the DATA dial or MENU button to set a different item.

This enables selection of a different item. Turn the **DATA** dial to select an item to be set.

- 6. Repeat step 3 to 6 as necessary to set other items.
- 7. Press the **MENU** button to return to the Home Screen.



Recording

Setting input destinations

- 1. Connect external mics to the EXT IN 1/2, IN 1, IN 2, IN 3 and/or IN 4 jacks.
- 2. Select the SEL item on the INPUT page. (See "Basic operation procedures" on page 11.)



3. Select a channel and set its input destination.

Item	Option	Meaning
CH1/CH2	EXT IN (default)	Input from EXT IN 1/2 jack
	IN 1-2	Input from IN 1/IN 2 jacks
CH3/CH4	INT (default)	Input from built-in mic
	IN 3-4	Input from IN 3/IN 4 jacks

4. When finished, press the **MENU** button to return to the Home Screen.

Adjusting the input level

1. Select the GAIN item on the INPUT page. (See "Basic operation procedures" on page 11.)



- Select the channel with the input level that you want to adjust and set the mic input gain.
 Options: LINE, LOW (default), MID, HI, HI+
- 3. When finished, press the **MENU** button to return to the Home Screen.
- 4. Turn the **DATA** dial to switch the Home Screen to trim display mode.
- Use the 1-4 knobs to adjust the input levels. Guidelines are shown at -20dB and -12dB. Set levels so that they average around -20 dB and have a maximum level of -12 dB.

Set the input levels so that the **1–4** knob **PEAK** indicators do not light. If they do, the sound will distort.

Using the limiter

When the limiter is on, the mic input gain will be adjusted automatically according to the input level to set the recording level so that distortion does not occur even when loud sounds are input.

 Select the LIM. item on the LEVEL CONTROL page. (See "Basic operation procedures" on page 11.)

LE	VEL C	ONTR	OL	4/18
	CH1	CH2	CH3	CH4
LIM.	OFF	OFF	OFF	0FF
AUTO:	OFF	OFF	OFF	OFF
AUTO: LCF :	OFF	OFF	OFF	OFF

2. Select the channel that will use the limiter function, and set the limiter function to use during mic input.

Option	Meaning	
0FF (default value)	Limiter off	
ON	Limiter on	
3B	Three-band limiter on	
LINK	Limiter on (channel link)	
3BAND	Three-band limiter on (channel link)	

3. When finished, press the **MENU** button to return to the Home Screen.

Setting the automatic level control (ALC) function

When ALC is on, the input level will be automatically adjusted in response to the input sound.

 Select the AUTO item on the LEVEL CONTROL page. (See "Basic operation procedures" on page 11.)

LEVEL CONTROL 4/18 CH1 CH2 CH3 CH4 LIM.: OFF OFF OFF OFF					
		CH1	CH2	CH3	CH4
LIM.	:	OFF	OFF	OFF	OFF
OUTC	1:	OFE	OFE	OFE	OFE
LCF	:	OFF	OFF	OFF	OFF

- Select the channel that will use the ALC function, and turn the ALC function on/off.
 Options: UFF (default), UN
- 3. When finished, press the **MENU** button to return to the Home Screen.

Setting the low-cut filter

Use the low-cut filter if you want to cut noise and other sounds at low frequencies. This function can be used to reduce air-conditioning noise and unpleasant wind noise, for example.

 Select the LCF item on the LEVEL CONTROL page. (See "Basic operation procedures" on page 11.)



 Select the channel that will use the low-cut filter, and set the cutoff frequency of the low-cut filter to use during mic input.

Options: 0FF (default), 50 (Hz), 80 (Hz), 120 (Hz), 180 (Hz), 220 (Hz)

3. When finished, press the **MENU** button to return to the Home Screen.

Recording formats

You can select the format of files created by this unit.

MONO recording

The channels selected for recording will be recorded as mono files.

A file will be made for each channel selected for recording.

STEREO recording

Stereo files will be recorded. Examples:

If only channel 1 is selected for recording, a stereo file with channel 2 silent will be created. If only channels 1 and 3 are selected for recording, stereo files with channels 2 and 4 silent will be created.

POLY (6ch) recording

Channels 1–4 and a stereo mix will all be recorded as a single file.

Recording (MONO/STEREO/POLY (6ch))

Make recording settings

 Select the FILE TYPE item on the REC SETTING page. (See "Basic operation procedures" on page 11.)



2. Move the cursor to the setting, and set the recording format.

Options: MONO (default), STEREO, 6ch

3. When finished, press the **MENU** button to return to the Home Screen.

Setting where to save files

- 1. Select the BROWSE item on the MEDIA page. (See "Basic operation procedures" on page 11.)
- 2. Press the **DATA** dial to open the BROWSE screen.
- On the BROWSE screen, select the folder where you want to save recorded files, and press the DATA dial.

This opens the browse menu pop-up.

- 4. Turn the **DATA** dial to select SELECT, and press the **DATA** dial.
- 5. Set the folder where files will be saved, and return to the Home Screen.

Starting recording

1. Press the record (●) button to start recording.



When recording starts, the **REC** indicator lights and the display shows the project name, elapsed recording time and remaining recording time.

2. Press the 1/■ button to finish recording.

Adjusting the volume

Adjust the volume output from the **DOUT** and **LINE OUT** jacks individually on the DUTPUT LEVEL page.

OUTF	UT I	_EVEL	6/18
CAMERA	:	ØdB	
LINE	:	ØdB	

Use the **PHONES** volume control to adjust the volume output from the **PHONES** jack.

Playback

Playing recordings

When the Home Screen is open and playback is stopped, press the **2**/ ► button to start playback.

Pausing playback

When the Home Screen is open and a track is playing back, press the **2**/▶ button to pause playback at the current position.

Stopping playback

When the Home Screen is open and a track is playing back, press the 1/■ button to pause playback. Press the 1/■ button again to return to the beginning of the file (stopping playback).

Searching backward and forward

When the Home Screen is open and a file is playing back or stopped, press and hold the **4**/I**ব** to search backward or the **3**/**>**I button to search forward.

Jumping to playback positions

When the Home Screen is open, use the 4/I◄◀ and 3/►►I buttons to jump to the nearest marks. Press the 4/I◄◀ button when at or before the first mark in a file to skip to the beginning of that file. Press the 4/I◄◀ button when at the beginning of a file to jump to the beginning of the previous file. Press the 3/►►I button when at or after the last mark in a file to skip to the beginning of the next file.

Connecting with a computer

You can transfer audio files on the SD card in the unit to a computer, as well as transfer audio files from the computer to the unit.

Connecting with a computer using USB

- 1. Use the included USB cable to connect the unit to a computer. If the unit is off, turn it on.
- On the USB_SELECT screen, select STORAGE, and press the DATA dial to connect this unit to the computer. USB_connected will appear on the display.
- 3. This unit appears on the computer as an external drive named "DR-701D" (if the card has been formatted by this unit).

Exchanging files with a computer

After following the instructions in the previous section, click the "DR-701D" drive on the computer screen to show the "SOUND" and "UTILITY" folders. To transfer files to the computer, open the "SOUND" folder and drag and drop the desired files to the destinations of your choice.

To transfer files from the computer, drag and drop the desired audio files on the computer to the "SOUND" folder.

Disconnecting from a computer

Before disconnecting the USB cable, use the proper procedures for the computer to unmount this unit. The unit turns off after it completes its shutdown process.

See the computer's operation manual for instructions about how to unmount an external volume.

Quick reference for using various functions

- Button names are shown like this: MENU.
- Instructions are abbreviated. For example, "On the Home Screen, press the MENU button. Select the INPUT page, and then select the SEL item" becomes: Home Screen → MENU → INPUT → SEL
- Not all steps are given for complex operations. For detailed operation procedures, see the Reference Manual.

Category	Desired action	Function name	Procedures, buttons used and explanation
	Return to the		Press MENU repeatedly until the Home Screen reopens
	Home Screen		Return to the Home Screen if you become unsure about how to proceed.
	Record		Record ()
	Record		Recording will start using the current settings.
	Playing recordings		Home Screen → 2/►
	Flaying recordings		Play the file shown (selected).
Basic	Adjust the		PHONES volume
functions	headphone volume		Use this knob to adjust the headphone volume.
	Adjust the line		Home Screen \rightarrow MENU \rightarrow OUTPUT LEVEL \rightarrow LINE
	output volume		Adjust the volume of speakers, etc.
			Home Screen $\rightarrow 4/I \triangleleft 0$ or $3/I \rightarrow I$
	Select a file for		If there are many files, using the browse function might be more conve-
	playback		nient.
	Change the file		Home Screen → MENU → REC_SETTING → FORMAT
	format		Set the file format (BWF, WAV, etc.) used for recordings.
	C I I I I		Home Screen → MENU → LEVEL CONTROL → LCF
	Set the low-cut filter	Low cut filter	This function removes noise and other sounds at low frequencies. Set the
	miter		cutoff frequency.
	Set the input gain		Home Screen → MENU → INPUT → GAIN
	Set the input gain		Sets the input gain.
Recording	Adjust the input		1/2/3/4 knobs
	level manually		Watch the meters and set the recording level so that they do not peak.
	Adjust the input level automat- ically	Limiter	Home Screen \rightarrow MENU \rightarrow LEVEL CONTROL \rightarrow LIM.
			This function compresses only loud sounds to prevent overloads and does
			not change the recording level.
		Automatic level control (ALC)	Home Screen → MENU → LEVEL CONTROL → AUTO
			The input level will be automatically adjusted in response to the input sound.
			Recording Screen - DATA (ENTER)
	Add a mark during recording	Mark	This function adds a mark to the file that can be used as an index during
Other	during recording		playback.
recording	Create a new file	lly while Manual track	Recording Screen → 3/►►
features	manually while		Use this function to create a new file without interrupting recording when
	recording		for example, the song changes.
	Add a slate tone		SLATE
			You can add slate tones to recorded files at the points you want. Home Screen → MENU → MEDIA → BROWSE → DATA → INFO
	Check file infor- mation		
	mation		Use this function to check recording dates and file sizes, for example. Home Screen → MENU → MEDIA→ BROWSE → DATA → DELETE
File opera-	Delete a file		
tions	Delete all files in a		You can delete files that you do not need.
	folder at the same		Home Screen → MENU → MEDIA → BROWSE → DATA → ALL DEL
	time		You can delete all the files in a folder at the same time.
Folder	Recording to a		Home Screen → MENU → MEDIA → NEW FOLDER
operations	new folder		Recorded files will be saved in this folder.

Category	Desired action	Function name	Procedures, buttons used and explanation
	Set the date and		Home Screen → MENU → SYSTEM → DATE/TIME
	time		Use this function to set the internal clock, which is used for the recording
			dates written to files, for example.
	Turn plug-in		Home Screen → MENU → MIC POWER → PLUGIN
	power on		Make this setting when using an external mic that requires plug-in power connected to the EXT IN 1/2 jack.
	Check information		Home Screen → MENU → SYSTEM → INFORMATION
	about the unit or card		Use this function to check the unit firmware version and the remaining
	orcard		space on the card, for example.
	Change the automatic power	Automatic power	Home Screen \rightarrow MENU \rightarrow POWER MANAGEMENT \rightarrow AUTO PWR SAVE
	saving function	saving	This function automatically turns the unit off when it is not used for some time.
	Change the		Home Screen → MENU → POWER MANAGEMENT → BACKLIGHT
	backlight setting		Use this to change the display backlight setting.
	Adjust the display		Turn the DATA dial while pressing MENU .
	contrast		Use this to set the contrast of the characters on the display.
			Home Screen → MENU → POWER MANAGEMENT → BATTERY
	Set the battery type		Select the type of battery being used. This setting affects the accuracy of the remaining battery display.
	Set the phantom		Home Screen → MENU → MIC POWER → VOLTAGE
	power voltage		Sets the phantom power voltage.
	Restore the unit to		Home Screen \rightarrow MENU \rightarrow SYSTEM \rightarrow INITIALIZE
	its default settings		
	its default settings		Use this function to restore all settings to their factory defaults. Home Screen → MENU → MEDIA → FORMAT
	Format an SD card	Format	a second se
Unit settings	Set the file name		Use this function to format cards.
onnesettings	Set the file name format		Home Screen → MENU → FILE → NAME TYPE
			You can change the characters used in automatically-assigned file names.
	Link multiple trim	Gang	Home Screen \rightarrow MENU \rightarrow GRNG \rightarrow GRP1 or GRP2
	controls		You can group channels to link their operation.
	Add audio input		Home Screen → MENU → HDMI_AUDIO_ASSIGN → SEL or MIX
	through the unit to the HDMI audio		A REAL PROPERTY AND A REAL
	output.		This replaces the audio of the selected channel.
	Change the		
	timecode source		Home Screen → MENU → TIME CODE → SELECT
	to HDMI		Use this to select the input timecode source.
	Make timecode		Home Screen → MENU → TIME CODE → POWER OFF GEN
	generator run		
	even when unit		Use this to make the timecode generator continue running even when the unit is off.
	is off		
	Check remaining		Home Screen → MENU → SYSTEM → INFORMATION → SYSTEM
	battery charge		(3/3)
	when operating		Check the remaining battery charge with the AA BAT. LEVEL item
	on USB power Do not mute		
	Do not mute when trim turned		Home Screen → MENU → METER/TRIM → TRIM MIN
	down completely		Set whether or not to mute when a trim is turned down completely.
	Set the peak hold		Home Screen → MENU → METER/TRIM → PEAK HOLD
	time		Use this to change the peak hold time.
	Adjust the levels		
	of this unit and		Home Screen \rightarrow MENU \rightarrow SLATE TONE \rightarrow OSCILLATOR
	connected	Oscillator	Use this to output a signal at the set level.
	equipment		ose and to surplut a signal at the set level.

Messages

The following is a list of the pop-up messages. Refer to this list if one of these pop-up messages appears on the DR-701D and you want to check the meaning or determine a proper response.

Message	Meaning and response
Battery Empty	The batteries are almost out of power. Replace the batteries.
Card Error	The SD card could not be recog- nized properly. Change the card.
Card Full	The SD card has no remaining space. Erase unnecessary files or move them to a computer to make open space.
File Full	The total number of folders and files exceeds the 5000 limit. Erase unnecessary folders and files or move them to a computer.
File Not Found	A file cannot be found or a file might be damaged. Please check that file.
File Not Found Make Sys File	The system file is missing. This unit requires a system file for operation. When this message appears, press the DATA dial to automatically create a system file.
File Protected	The file is read only and cannot be erased.
Format Error Format CARD	The SD card is not formatted properly or the card is broken. This message also appears if the card was formatted using a computer connected by USB or if an unformatted card is inserted in the unit. Always use the DR-701D to format cards to be used with it. Change the card or press the DATA dial while this message is being shown to format the card. Formatting will erase all the data on the SD card.
Invalid Card Change Card	Something might be wrong with the SD card. Change the SD card.
Invalid SysFile Make Sys File	The system file required to operate this unit is invalid. When this message appears, press the DATA dial to automat- ically create a new system file.
Layer too Deep	Folders can be created down to two layers. You cannot create a new folder inside the current folder.

Message	Meaning and response
MBR Error Init CARD	The SD card is not formatted properly or the card is broken. Change the card or press the DATA dial while this message is being shown to format the card. Formatting will erase all the data on the SD card.
No Card	No SD card is loaded in the unit. Insert a recordable SD card.
No PB File	There is no file that can be played back. The file might be damaged.
Non-Supported	The audio file is not a supported format. Please see "Connecting with a Computer" in the Reference Manual for file formats that this unit can use.
Switched To Internal Battery	The power source has switched from USB bus power to the batteries in the unit.
Write Timeout	Writing to the SD card timed out. Backup files on the card to a computer, and format the card.
No Rec Channels Selected	No recording channels have been selected (all are off).
HDMI CONNECTED LOCK to HDMI.	HDMI has been connected. The clock master will switch to HDMI.
HDMI DISCON- NECTED LOCK to INTERNAL	HDMI has been disconnected. The clock master will switch to internal.
-HDMI CONNECTED- Mismatch Audio Clock. Change to **kHz?	HDMI has been connected. The sampling frequency is different. Change it?
Fs Mismatch LOCK to INTERNAL	The sampling frequency has been changed. The clock master will switch to internal.
Fs Match LOCK to HDMI.	The sampling frequency has been changed. The clock master will switch to HDMI.

If any other error occurs, turn the unit off and restart it.

Troubleshooting

If you are having trouble with the operation of this unit, please try the following before seeking repair. If these measures do not solve the problem, please contact the store where you bought the unit or TEAC customer support (see back page).

The unit will not turn on.

- Confirm that the batteries are not dead.
- Confirm that the batteries are installed with the correct \oplus / \odot orientation.
- Confirm that the AC adapter (TASCAM PS-P515U, sold separately) is securely connected to both the outlet and the unit.
- When using USB bus power, confirm that the USB cable is securely connected.
- When using USB bus power, confirm that it is not connected via a USB hub.

The unit turns off automatically.

Is the automatic power saving function on? (See "Setting the automatic power saving function" in "Settings and Information" of the Reference Manual.)

 Since this unit complies with the European Standby Power Regulations (ErP), the automatic power saving function operates regardless of whether the unit is being powered by an AC adapter or batteries. If you do not want to use the automatic power saving function, set it to OFF. (The factory default setting is 30min.)

The unit does not function.

- Confirm that the HOLD/ウ/ I switch is not set to HOLD.
- Is the unit connected to a computer by a USB cable?
- The SD card is not recognized.
- Confirm that the SD card is inserted completely.

Playback is not possible.

 If you are trying to play a WAV file, confirm that the sampling frequency is supported by this unit.

No sound is output.

- Check the connections with the monitoring system.
- Is the volume of the monitoring system minimized?
- Is the output level setting of the unit minimized?

Recording is not possible.

- Check connections with other equipment again.
- Check the input settings again.
- Confirm that the input level is not too low.

- Confirm that the SD card is not full.
- Confirm that the number of files has not reached the maximum that the unit can handle.

The input level is low.

- Confirm that the input level setting is not too low.
- Confirm that the output level of any connected device is not too low.

The sound I am trying to record sounds distorted.

• Confirm that the input level setting is not too high.

Adjust the input knobs so that the PEAK indicators do not light.

• Lower the volumes of the sound sources being input to this unit.

I cannot erase a file.

• Confirm that you are not trying to erase a write-protected file that has been copied from a computer.

This unit's files do not appear on the computer.

- Confirm that the unit is connected to the computer using its USB port.
- Confirm that no USB hub is being used.
- Confirm that the unit is not recording.
- Is the unit connected to a computer by USB?

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Specifications

Ratings

Recording media

SD card (64 MB–2 GB) SDHC card (4 GB–32 GB) SDXC card (48 GB–128 GB)

Recording/playback formats

WAV: 44.1/48/96/192 kHz, 16/24-bit BWF: 44.1/48/96/192 kHz, 16/24-bit

- The number of input channels 4 maximum (44.1/48/96 kHz) 2 maximum (192 kHz)
- The number of recording tracks

6 maximum (44.1/48/96 kHz) 2 maximum (192 kHz)

Inputs and outputs

 IN 1/2/3/4 jacks (Phantom power supplied only to XLR)

Connector: XLR-3-31, 6.3mm (1/4") standard TRS jacks

EXT IN 1/2 jack (can provide plug-in power) Connector: 3.5mm (1/8") stereo mini jack

IN connector

Connector: 3.5mm (1/8") stereo mini jack

PHONES jack

Connector: 3.5mm (1/8") stereo mini jack

OUT connector

Connector: 3.5mm (1/8") stereo mini jack

LINE OUT jack

Connector: 3.5mm (1/8") stereo mini jack

HDMI IN/OUT connectors

Connector: Type A receptacle

USB port

Connector type: Micro-B Format: USB 2.0 HIGH SPEED mass storage class

TIMECODE IN connector

Connector: BNC

REMOTE jack
 Connector: 2.5mm (3/32") TRS jack

Audio performance

Frequency response

20 Hz – 20 kHz +0.5/–1 dB (LINE IN to LINE OUT, 44.1/48kHz sampling frequency, JEITA) 20 Hz – 40 kHz +0.5/–1 dB (LINE IN to LINE OUT, 96kHz sampling frequency, JEITA) 20 Hz – 80 kHz +0.5/–5 dB (LINE IN to LINE OUT, 192 kHz sampling frequency, JEITA)

Distortion

0.007% or less (MIC IN to LINE OUT, 44.1/48/96/192kHz sampling frequency, JEITA)

S/N ratio

100 dB or more (MIC IN to LINE OUT, -10 dBu input, 1 kHz, 44.1/48/96/192kHz sampling frequency, JEITA)

Equivalent input noise (EIN)

–124 dBu or lower Note: based on JEITA CP-2150

Recording times (in hours: minutes)

File format (recording settin	SDHC card capacity 4 GB	
WAV/BWF 16-bit (2 channels)	44.1 kHz	6:17
WAV/BWF 24-bit (2 channels)	96 kHz	1:55
WAV/BWF 24-bit (2 channels)	192 kHz	0:57

- The recording times shown above are estimates. They might differ depending on the SD/SDHC/ SDXC card in use.
- The recording times shown above are not continuous recording times, but rather they are the total possible recording times for the SD/ SDHC/SDXC card.
- If recorded in mono WAV format, the maximum recording time will be double the figures above.
- When using dual/4-channel recording in WAV/ BWF format, the maximum recording time will be about half the figures above.

General

Power

4 AA batteries (alkaline, NiMH or lithium) AC adapter (TASCAM PS-P515U, sold separately) External battery pack (TASCAM BP-6AA, sold separately)

Power consumption

6.5 W (maximum)

Consumption current

1.3 A (maximum)

Battery operation time (continuous operation) (in hours: minutes)

• Using alkaline batteries (EVOLTA)

Use conditions	Operation time	
Channels 1/2 unused		
Channels 3/4 use built-in mic	About 3:45	
Phantom power off		
HDMI not connected		
Recording 2ch 48 kHz/16-bit WAV files		
Channels 1/2 used		
Channels 3/4 unused		
3mA phantom power used for 2 channels HDMI not connected	About 2:00	
Recording 2ch 48 kHz/16-bit WAV files		
Channels 1/2 used		
Channels 3/4 unused		
3mA phantom power used for 2 channels HDMI input connected (1080/60i)	About 1:30	
Recording 2ch 48 kHz/16-bit WAV files		

• Using NiMH batteries (eneloop)

Use conditions	Operation time
Channels 1/2 unused	
Channels 3/4 use built-in mic	
Phantom power off	About 4:00
HDMI not connected	
Recording 2ch 48 kHz/16-bit WAV files	
Channels 1/2 used	
Channels 3/4 unused	
3mA phantom power used for 2 channels HDMI not connected	About 2:30
Recording 2ch 48 kHz/16-bit WAV files	
Channels 1/2 used	
Channels 3/4 unused	
3mA phantom power used for 2 channels	About 2:00
HDMI input connected (1080/60i)	
Recording 2ch 48 kHz/16-bit WAV files	

Using lithium batteries (Energizer ULTIMATE LITHIUM)

Use conditions	Operation time	
Channels 1/2 unused		
Channels 3/4 use built-in mic		
Phantom power off	About 7:30	
HDMI not connected		
Recording 2ch 48 kHz/16-bit WAV files		
Channels 1/2 used		
Channels 3/4 unused		
3mA phantom power used for 2 channels HDMI not connected	About 6:30	
Recording 2ch 48 kHz/16-bit WAV files		
Channels 1/2 used		
Channels 3/4 unused		
3mA phantom power used for 2 channels	About 3:30	
HDMI input connected (1080/60i)		
Recording 2ch 48 kHz/16-bit WAV files		

NOTE

When using phantom power, the operation time might be reduced depending on the mic being used.

Dimensions

169 \times 57.3 \times 113.5 mm (W \times H \times D with top adapter attached)

Weight

654 g (including batteries) 561 g (not including batteries)

Operating temperature range

0°C-40°C (32°F-104°F)

- Illustrations in this manual might differ in part from the actual product.
- Specifications and external appearance might be changed without notification to improve the product.
- Detailed specifications are provided in the Reference Manual.