TASCAM DV-RA1000 — Quick Reference Guide

Before you start

Use the DV-RA1000 to record and play back UDF-format discs containing audio files on DVD+RW media, as well as using it to create Red Book audio CDs on standard CD-R and CD-RW media.

The audio files created on UDF DVD+RW discs can be played back on the DV-RA1000, and transferred, using a USB connection, to a digital audio workstation for editing and mastering.

The 24-bit audio files are organized on the disc within projects (maximum of 99 files/project) and the files within a project are all the same sampling frequency, but a single disc may contain up to 99 projects of different sampling frequencies.

Making connections

Analog connections: use the XLR **ANALOG** jacks for connecting to and from +4 dBu equipment, and the RCA jacks for –10 dBV equipment.

Digital connections: use the RCA (pin) jacks for S/PDIF connections. These can be used at double-speed for 88.2 and 96 kHz projects.

Use the XLR **DIGITAL** jacks for connecting AES/EBU equipment. Use two connectors (**1** and **2**) for double-wire 88.2 or 96 kHz recording, or for quad-rate recording.

Use the BNC **SDIF-3/DSD-raw** connectors (one per channel) for DSD recording.

Use the BNC **WORD SYNC** connectors for making system word sync connections.

Setting the reference clock (word sync, etc.)

Before using the DV-RA1000 with other digital equipment, you must set up the audio system so that one unit acts as the system clock master. The DV-RA1000 can act as a clock master or as a slave.
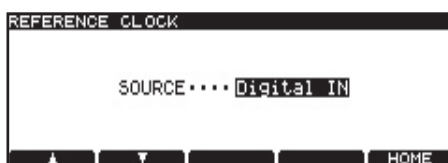
☞ Press the **MENU** key.

☞ Use the wheel to highlight SYSTEM SETUP, and press the **ENTER** key.

☞ Use the wheel to highlight REFERENCE CLOCK, and press the **ENTER** key.

☞ Use the wheel to select the SOURCE as either INTERNAL (the DV-RA1000 acts as the system sync master), WORD (the sync clock is input through the **WORD SYNC IN** BNC connector) or DIGITAL IN.

☞ Press **ENTER** to make the setting and return to the SYSTEM SETUP screen.

> NOTE *that when recording a DSD project, the clock may be either internal, or input through the dedicated* **WORD SYNC IN** *BNC connector. In either case, the clock is 44.1kHz. Also remember that when loading a project, the sampling frequency of the DV-RA1000 changes to match that of the project.*

✳ **Note that when turning the DV-RA1000 off after recording on DVD+RW media,** you should either eject the disc first (short press of **OPEN/CLOSE**) or shut down the unit by holding down the **OPEN/CLOSE (SHUT DOWN)** key to write all information to disc.

Preparing to record

✱ For best results, and to maintain data integrity, TASCAM strongly recommends the use of **new** DVD+RW discs for important recordings.

Starting a new DVD disc

When you load a new DVD+RW into the drive, the DV-RA1000 determines that it is blank, and asks to start a new project.

```
CREATE
        NAME······ PROJECT001
        Mode······ 176.4kHz-24bit
    ▲         ▼         ◄         ►         HOME
```
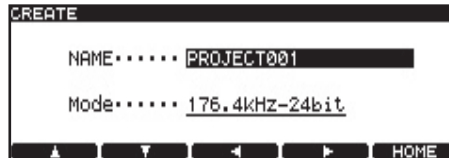
☞ Press **F4** to start editing the name. Use the wheel and cursor keys to name the project. Press **ENTER** when finished.

☞ Use the wheel to select a sampling frequency for the project. Press **ENTER**.

☞ The DV-RA1000 will create the new project and start a background format of the whole disc. You can make settings, etc. while this is taking place, but we recommend that you do not start recording until the format is over. The top right of the "home" screen shows CLOSE blinking when the background format is in progress. CLOSE is displayed steadily when formatting is finished (after about 20 minutes).

Selecting the input

☞ Press **MENU**, use the wheel to highlight SYSTEM SETUP, and press **ENTER**. Highlight INPUT SELECT and press **ENTER**.

```
INPUT SELECT
            INPUT..... DIGITAL
            DIO....... AES/EBU
            MODE...... 2xWire
    ▲         ▼                             HOME
```

☞ Use the cursor keys and wheel to select the type of input (INPUT), the digital terminals to use (DIO) and the double-speed or double-wire MODE for double-rate digital input. Press **ENTER** to confirm.
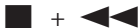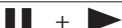
Adjusting the input level

Use the soft keys and wheel to adjust the input level (this procedure works with both analog and digital inputs).

☞ Press the **INPUT LEVEL** key and use **F3** and **F4** to highlight the on-screen controls: the gain control (MAIN), the balance control (BALANCE), and the bypass control (BYPASS).

☞ Use the cursor keys and wheel to adjust the input level, the left-right balance, and to turn the bypass on or off, depending on the control currently highlighted.

☞ Use **F1** (MAIN->0) to reset the input gain to unity gain and **F2** (BAL->0) to reset the input signal balance to center. Press **ENTER** to confirm the settings here.

```
ANALOG  L                                    ■        DVD-RW
COAXIAL    -dB50 40 · 20 · 12 · 8 · 4 · 2 · 0 OVER    BLANK
        R
WORD        MAIN    BALANCE   BYPASS          192-24

  0dB       ◉         ◉         ◉
                     L    R
  MAIN→0  BAL→0       ◄         ►         HOME
```

What do the front panel controls do?

Transport keys: function in much the same way as most CD recorders.

◄◄	A single press moves back to the start of the current track (or back by a track). Pressing and holding the key searches inside the current track.
►►	Single press moves forward to the start of the next track. Pressing and holding the key searches within the current track.
■	Stops playback or recording.
■ + ◄◄	Acts as a "return to zero" key combination.
►	Starts playback, or recording from record ready mode.
❚❚ + ►	Press and hold the **READY** key and press **PLAY** to use the wheel as a jog wheel.
❚❚	Pauses playback (also lights in record ready status).
●	Enters record ready mode (the **READY** key also lights when ready to record).
MUTE	"Smart" key (long press=non-latching, short press=latching)—mutes the input signal to the DV-RA1000, and the output signal from the DV-RA1000.

Other keys: These keys access many of the DV-RA1000's "hidden functions"

OPEN/CLOSE	A short press opens or closes the tray. A long press (marked as **SHUT DOWN**) starts the shutdown procedure, writing UDF management information to disk and canceling the background format if it is in progress.
MARK	Press to set a mark at the current playback position. Marks are stored as part of the UDFMI on DVD+RW media, and are not stored on CD-R/CD-RW media.
DISPLAY	Press to change the display between elapsed time and remaining time. The choices available depend on the media, and whether the DV-RA1000 is recording or playing back.
DISPLAY + wheel	Press and hold the **DISPLAY** key and turn the wheel to adjust the display contrast.
DISPLAY + MARK	Press and hold **DISPLAY** and press **MARK** to bring up the locate list, and then jump to, edit or delete marks.
F1 through **F5**	"Soft function keys" which change function depending on the current status of the unit. **F1** through **F4** are often used as cursor keys. **F5** is often used as a "return to home screen" key and is labeled as HOME in these cases.
INPUT LEVEL	Press to bring up the input level screen (see previous page)
MENU	Brings up the menu system
ENTER	From the home screen, brings up the virtual front panel (VFP). From menu screens, confirms selection and goes "up" a level, or selects and goes "down" a level in the menu structure.
CANCEL	Goes "up" a level in the menu structure without changing any parameters.
EFFECT	A short press enables effects (indicator lights), or disables them. A long press brings up the effect editing screen.
MONITOR	Changes between input (lit) and playback (unlit) monitoring.
FADE	Short presses switch fade-in and fade-out for playback and recording through on (indicator lights), rehearsal (indicator flashes) and off. A long press brings up the fade time setting screen.
SYNC REC	Short presses switch synchronized recording through off, rehearsal (indicator flashes, and sync time can be "slipped"), and on (indicator lights). A long press brings up the threshold level setting screen.

Main menu
(press MENU key)

SYSTEM SETUP

COPY ID
Sets SCMS copy-protection

DVD MENU

USB
enables and disables connection to PC

INPUT SELECT
selects the input source

CALENDAR
sets the time and date on the internal clock

PROJECT

CREATE
creates a new project

OPEN
loads an existing project from disc

PROJECT TEXT
enters and edits text stored with the project

REFERENCE CLOCK
selects the word sync clock

CHECK
checks battery and firmware version

PREFERENCE
sets different working parameters

EDIT

RENAME
Renames a recorded file

DIVIDE
Splits the current file into two

COMBINE
Combines the current file and the next into one file

ERASE
Deletes the current file

PLAYLIST
Arranges files into a play list order

UNDO
Undoes (and re-does) the last edit action

The PREFERENCE menu allows the following settings to be made:

METER RELEASE TIME: The "fall-back time" for the on-screen peak meters.

PEAK HOLD: The time that peak levels are displayed by the meters.

CALENDAR: Format of date display.

TIME ZONE: Local time zone setting.

SHORT CUT: Assignment of functions to "soft" keys.

REF. LEVEL: The reference level relative to 0dBFS.

RESUME: Enables or disables "resume" playback and recording of DVD+RW discs and "resume" playback of CDs.

DISC

SAVE UDFMI
writes unsaved UDF management information to disc

FORMAT
re-formats a DVD+RW disc

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