

## SPECIFICATIONS



Four-track PCM Recorder for DSLR Video Production

**DR-70D**

## SPECIFICATIONS

## Spec description

|                                                        |                                                                                                                                      |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Recording media                                        | SDHC card (4GB to 32GB), SDXC card(48GB to 128GB) High speed cards required. See the Tested Media List on the DR-70D DOWNLOADS page. |
| Recording format                                       |                                                                                                                                      |
| WAV                                                    | 44.1k/48k/96k Hz, 16/24-bit                                                                                                          |
| BWF                                                    | 44.1k/48k/96k Hz, 16/24-bit                                                                                                          |
| <b>Number of channels</b>                              | 4-channel (stereo × 2, mono × 4)                                                                                                     |
| <b>Analog audio input</b>                              |                                                                                                                                      |
| 1/L, 2/R, 3/L, 4/R connectors                          |                                                                                                                                      |
| Connector                                              | XLR-3-31 (1:GND, 2:HOT, 3:COLD) / 1/4" (6.3mm)TRS standard jack                                                                      |
| <b>Set to "MIC / MIC+PHANTOM"</b>                      |                                                                                                                                      |
| Input impedance                                        | 2k ohms                                                                                                                              |
| Phantom power                                          | 48V ±4V (10mA/CH), 24V ±4V (10mA/CH)                                                                                                 |
| Maximum input level                                    | 0dBu                                                                                                                                 |
| Minimum input level                                    | 72dBu                                                                                                                                |
| MIC input gain                                         | TRIM MAX                                                                                                                             |
| LOW                                                    | +21dB                                                                                                                                |
| MID                                                    | +36dB                                                                                                                                |
| HIGH                                                   | +51dB                                                                                                                                |
| HI + PLUS                                              | +63dB                                                                                                                                |
| Please choose your language <span>International</span> |                                                                                                                                      |

|                             |                                                                              |
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| <b>Set to "LINE"</b>        |                                                                              |
| Input impedance             | 10k ohms or more                                                             |
| Standard input level        | +4dBu                                                                        |
| Maximum input level         | +20dBu                                                                       |
| <b>1/2 connector</b>        |                                                                              |
| Connector                   | 1/8" (3.5mm) stereo mini jack (this connector can be supplied plug-in power) |
| Input impedance             | 10k ohms                                                                     |
| Maximum input level         | +10dBV                                                                       |
| Minimum input level         | 50dBV                                                                        |
| MIC input gain              | TRIM MAX                                                                     |
| LOW                         | +3dB                                                                         |
| MID                         | +11dB                                                                        |
| HIGH                        | +26dB                                                                        |
| HI + PLUS                   | +38dB                                                                        |
| <b>CAMERA IN connector</b>  |                                                                              |
| Connector                   | 1/8" (3.5mm) stereo mini jack                                                |
| Input impedance             | 10k ohms                                                                     |
| Standard input level        | 10dBV                                                                        |
| Maximum input level         | +6dBV                                                                        |
| <b>Analog audio output</b>  |                                                                              |
| <b>LINE OUT connector</b>   |                                                                              |
| Connector                   | (1/8" (3.5mm) stereo mini jack                                               |
| Output impedance            | 200 ohms                                                                     |
| Standard output level       | 10dBV                                                                        |
| Maximum output level        | +6dBV                                                                        |
| <b>CAMERA OUT connector</b> |                                                                              |
| Connector                   | 1/8" (3.5mm) stereo mini jack                                                |



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| Output impedance              | 200 ohms                                                                                                                                                                             |
| Standard output level         | 40dBV                                                                                                                                                                                |
| Maximum output level          | 24dBV                                                                                                                                                                                |
| <b>PHONES connector</b>       |                                                                                                                                                                                      |
| Connector                     | 1/8" (3.5mm) stereo mini jack                                                                                                                                                        |
| Maximum output level          | 20mW + 20mW                                                                                                                                                                          |
| <b>USB</b>                    |                                                                                                                                                                                      |
| Connector                     | Micro-B type                                                                                                                                                                         |
| Format                        | USB2.0 HIGH SPEED mass storage class                                                                                                                                                 |
| <b>REMOTE</b>                 |                                                                                                                                                                                      |
| Connector                     | 2.5mm TRS jack                                                                                                                                                                       |
| Power                         | 4 AA batteries(Alkaline or NI-MH),<br>USB bus power,<br>Dedicated AC adapter (TASCAM PS-P515U, sold separately),<br>Dedicated external battery pack (TASCAM BP-6AA, sold separately) |
| Power consumption             | 5.0W                                                                                                                                                                                 |
| Continuous operation time     | 2ch WAV, 44.1kHz, 16-bit Rec, Phantom power not used. *All times are approximate.                                                                                                    |
| <b>DR-70D alone</b>           |                                                                                                                                                                                      |
| Alkaline batteries (EVOLTA)   | 6 hours (XLR/TRS input is selected. Phantom OFF)<br>3-½ hours (XLR/TRS input is selected. Phantom ON)<br>11 hours (Built-in Mic (MIC 3/4) is selected.)                              |
| NI-MH batteries (eneloop)     | 6-¼ hours (XLR/TRS input is selected. Phantom OFF)<br>3-¾ hours (XLR/TRS input is selected. Phantom ON)<br>10-½ hours (Built-in Mic (MIC 3/4) is selected.)                          |
| NI-MH batteries (eneloop pro) | 7-¾ hours (XLR/TRS input is selected. Phantom OFF)<br>4-¾ hours (XLR/TRS input is selected. Phantom ON)<br>14-¼ hours (Built-in Mic (MIC 3/4) is selected.)                          |
| <b>DR-70D with BP-6AA</b>     |                                                                                                                                                                                      |
|                               | *BP-6AA is using the alkaline batteries (EVOLTA).                                                                                                                                    |
| Alkaline batteries (EVOLTA)   | 13 hours (XLR/TRS input is selected. Phantom OFF)<br>7-½ hours (XLR/TRS input is selected. Phantom ON)<br>25-½ hours (Built-in Mic (MIC 3/4) is selected.)                           |

|                               |                                                                                                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NI-MH batteries (eneloop)     | 12-¾ hours (XLR/TRS input is selected. Phantom OFF)<br>7-¾ hours (XLR/TRS input is selected. Phantom ON)<br>24-¾ hours (Built-in Mic (MIC 3/4) is selected.) |
| NI-MH batteries (eneloop pro) | 14-½ hours (XLR/TRS input is selected. Phantom OFF)<br>8-¾ hours (XLR/TRS input is selected. Phantom ON)<br>27 hours (Built-in Mic (MIC 3/4) is selected.)   |
| Dimensions (W×D×D)            | 6.65" × 2.2" × 4.2" / 169 × 55.2 × 106.5 mm (with the top adapter attached)                                                                                  |
| Weight                        | 1.37 lbs. / 625 g (including batteries)<br>1.16 lbs. / 530 g (excluding batteries;)                                                                          |
| Operating temperature         | 32°F to 104°F / 0°C to 40°C                                                                                                                                  |
| Standard accessories          | USB cable, Camera attachment bracket screw hole covers × 6 Owner's Manual (including warranty)                                                               |

| Audio performance      |                                                                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency response     | 20Hz to 20kHz +0.5/ -2dB (LINE IN or MIC IN to LINE OUT, Fs 44.1k/48k Hz, JEITA)<br>20Hz to 40kHz +0.5/ -3dB (LINE IN or MIC IN to LINE OUT, Fs 96kHz, JEITA) |
| Distortion             | 0.02% or less (LINE IN or MIC IN to LINE OUT Fs 44.1k/48k/96k Hz, JEITA)                                                                                      |
| S/N ratio              | 92dB or more (LINE IN or MIC IN to LINE OUT Fs 44.1k/48k/96k Hz, JEITA)                                                                                       |
| Equivalent input noise | 120dBU or less                                                                                                                                                |

| Computer compatibility                                                                                                 |                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Windows                                                                                                                |                                                                                                                           |
| OS                                                                                                                     | Windows XP, Windows Vista, Windows 7, Windows 8, Windows 8.1                                                              |
| CPU                                                                                                                    | Pentium 300MHz or more                                                                                                    |
| RAM                                                                                                                    | 128MB or more                                                                                                             |
|  Please choose your language.<br>USB | recommended: USB2.0  International ▼ |

| Macintosh |                                                                                                                                                                                                            |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS        | Mac OS X Jaguar (V10.2), Mac OS X Panther (V10.3), Mac OS X Tiger (V10.4), Mac OS X Leopard (V10.5), Mac OS X Snow Leopard (V10.6.8), OS X Lion (V10.7), OS X Mountain Lion (V10.8), OS X Mavericks (10.9) |
| CPU       | Power PC, iMac, G3, G4 266MHz or more                                                                                                                                                                      |
| RAM       | 64MB or more                                                                                                                                                                                               |
| USB       | recommended: USB2.0                                                                                                                                                                                        |

## Recording Duration

The table below shows the maximum recording time on SD/SDHC cards of different capacities for different file formats for recording.

| File format (recording setting) |         | SD/SDHC card capacity (hours:minutes) |      |      |       |
|---------------------------------|---------|---------------------------------------|------|------|-------|
|                                 |         | 1GB                                   | 2GB  | 4GB  | 8GB   |
| WAV/BWF 16-bit (STEREO)         | 44.1kHz | 1:41                                  | 3:22 | 6:44 | 13:28 |
|                                 | 48kHz   | 1:33                                  | 3:06 | 6:12 | 12:24 |
|                                 | 96kHz   | 0:46                                  | 1:33 | 3:06 | 6:12  |
| WAV/BWF 24-bit (STEREO)         | 44.1kHz | 1:07                                  | 2:15 | 4:30 | 9:00  |
|                                 | 48kHz   | 1:02                                  | 2:04 | 4:08 | 8:16  |
|                                 | 96kHz   | 0:31                                  | 1:02 | 2:04 | 4:08  |

The recording times shown above are estimates. They might differ depending on the SD/SDHC 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 card.

If recorded in mono in WAV files, the maximum recording time will be double the figures above.

For dual and 4-channel recording in WAV/BWF format, the recording times are about half those shown above.



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## DR-70D Tested media List

[Visit the downloads page](#) for a list of SD card media tested with the DR-70D.

## Supported Media

## SD card

| Maker                                                                                                           | Series                                                             | Model                                                                                                                     | Capacity |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------|
| Panasonic                                                                                                       | SDHC (UHS-I / Class10) R:90MB/s W:45MB/s                           | RP-SDUC32GJK                                                                                                              | 32GB     |
| Panasonic                                                                                                       | SDHC Memory Card (Class6) R:20MB/s                                 | RP-SDLC04GJK                                                                                                              | 4GB      |
| Panasonic                                                                                                       | SDHC Memory Card (Class6) R:20MB/s                                 | RP-SDLC08GJK                                                                                                              | 8GB      |
| SanDisk                                                                                                         | Extreme Pro SD UHS-II card                                         | SDSDXPK-032G-JNJIP<br>New                                                                                                 | 32GB     |
| SanDisk                                                                                                         | Extreme Pro SD UHS-II card                                         | SDSDXPK-064G-JNJIP<br>New                                                                                                 | 64GB     |
| SanDisk                                                                                                         | Extreme SDXC™ UHS-I card (U3, Class10)                             | SDSDXVE-064G-JNJIP*1                                                                                                      | 64GB     |
| SanDisk                                                                                                         | Extreme® SDHC™ UHS-I Card (U3,Class10)                             | SDSDXNE-016G-JNJIP*1                                                                                                      | 16GB     |
| SanDisk                                                                                                         | SanDisk Extreme Pro® SDHC™ UHS-I Memory Card (Class10)             | SDSDXPA-016G-J35                                                                                                          | 16GB     |
| SanDisk                                                                                                         | SanDisk Extreme Pro® SDHC™ UHS-II Memory Card                      | SDSDXPB-016G-J35                                                                                                          | 16GB     |
| SanDisk                                                                                                         | SanDisk Extreme Pro® SDHC™ UHS-II Memory Card                      | SDSDXPB-032G-J35                                                                                                          | 32GB     |
| SanDisk                                                                                                         | SanDisk Extreme Pro® SDHC™ / SDXC™ UHS-I Memory Card (U3, Class10) | SDSDXPA-016G-JU3                                                                                                          | 16GB     |
|  Please choose your language. |                                                                    |  International<br>SDSDXPA-032G-JU3*1 | 32GB ▼   |

| Maker   | Series                                                           | Model                       | Capacity |
|---------|------------------------------------------------------------------|-----------------------------|----------|
|         | SanDisk Extreme Pro® SDHC™/SDXC™ UHS-I Memory Card (U3, Class10) |                             |          |
| SanDisk | SanDisk Extreme Pro® SDHC™/SDXC™ UHS-I Memory Card (U3, Class10) | SDSDXPA-064G-JU3            | 64GB     |
| SanDisk | SanDisk Extreme Pro® SDHC™/SDXC™ UHS-I Memory Card (U3, Class10) | SDSDXPA-128G-JU3            | 128GB    |
| SanDisk | SanDisk Extreme® SDHC™/SDXC™ UHS-I Memory Card (U3, Class10)     | SDSDXL-016G-JU3*1           | 16GB     |
| SanDisk | SanDisk Extreme® SDHC™/SDXC™ UHS-I Memory Card (U3, Class10)     | SDSDXL-032G-JU3             | 32GB     |
| SanDisk | SanDisk Extreme® SDHC™/SDXC™ UHS-I Memory Card (U3, Class10)     | SDSDXL-064G-JU3             | 64GB     |
| SanDisk | SanDisk Ultra® PLUS SDHC™ UHS-I Memory Card(Class10)             | SDSDUM-016G-J01*1           | 16GB     |
| SanDisk | SanDisk Ultra® PLUS SDHC™ UHS-I Memory Card(Class10)             | SDSDUP-008G-J35             | 8GB      |
| SanDisk | SanDisk Ultra® PLUS SDHC™ UHS-I Memory Card(Class10)             | SDSDUP-016G-J35             | 16GB     |
| SONY    | SDHC UHS-I Memory Card                                           | SF-8UY2                     | 8        |
| TASCAM  | TSQD                                                             | TSQD-16880A*1               | 16GB     |
| TASCAM  | TSQD                                                             | TSQD-32A <small>New</small> | 32GB     |
| TOSHIBA | EXCERIA PRO™ SDHC/SDXC Memory Card SDXU-B Series                 | SDXU-B064G                  | 64GB     |
| TOSHIBA | EXCERIA™ SDHC/SDXC Memory Card SD-FU Series                      | SD-FU008G                   | 8GB      |
| TOSHIBA | EXCERIA™ SDHC/SDXC Memory Card SD-FU Series                      | SD-FU016G                   | 16GB     |



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