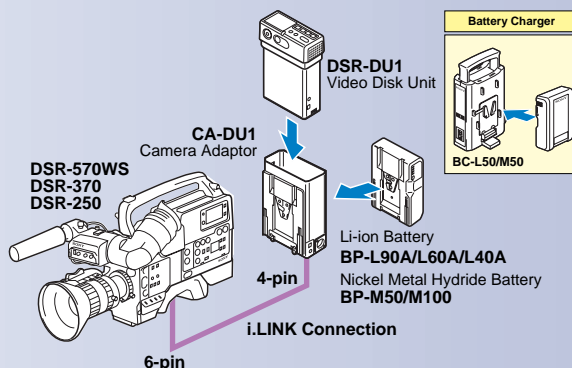# SONY®

DVCAM ™

DSR-DU1

Application Examples
New levels of flexibility in the field and in production

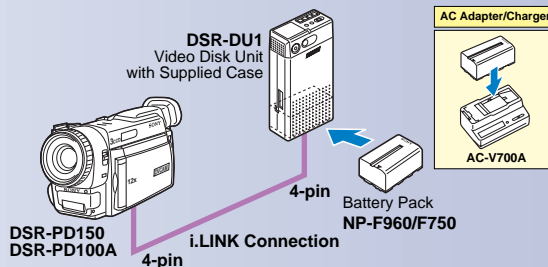## In Acquisition: An innovative shooting style using DVCAM shoulder-mount camcorders

The DSR-DU1 docks onto the rear of compatible camcorders by use of the optional CA-DU1 Camera Adaptor. By connecting an i.LINK cable from the camcorder to the camera adaptor, the camera output is recorded to the hard drive of the DSR-DU1 in parallel with the recording on the camcorder's tape. Additionally, the DSR-DU1 will continue to record during cassette changes, preventing the loss of a vital scene. Since a slot-in mechanism interfaces the DSR-DU1 to the CA-DU1 Camera Adapter, mounting and demounting the DSR-DU1 is very quick and simple. This system provides the reliability required to protect your important footage.

Compatible Sony camcorders are the DSR-570WS/570WSP/370/370P/500WS/500WSP/300A/300AP/250/250P

DSR-DU1
Video Disk Unit

CA-DU1
Camera Adaptor

DSR-570WS
DSR-370
DSR-250

Battery Charger

BC-L50/M50

Li-ion Battery
BP-L90A/L60A/L40A
Nickel Metal Hydride Battery
BP-M50/M100
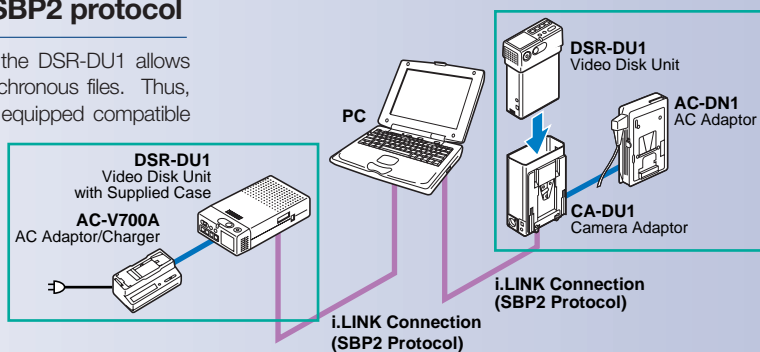
4-pin

i.LINK Connection

6-pin

In Acquisition: Longer recording and higher reliability with i.LINK(DV) interface equipped handy camcorders

The DSR-DU1 is also capable of interfacing with a variety of i.LINK(DV) interface equipped Sony hand-held camcorders. With a single i.LINK cable connection, it is possible to record the camera output in parallel with the recording being made on the camcorder's tape. Since these camcorders only accommodate mini cassettes with a maximum recording time of 40 minutes in DVCAM mode, the three-hour recording time of the DSR-DU1 (equivalent to the maximum recording time of a standard size DVCAM tape) can significantly expand the use of these compact, hand-held camcorders in DVCAM-based productions.

DSR-DU1
Video Disk Unit
with Supplied Case

AC Adapter/Charger

AC-V700A

DSR-PD150
DSR-PD100A

4-pin

Battery Pack
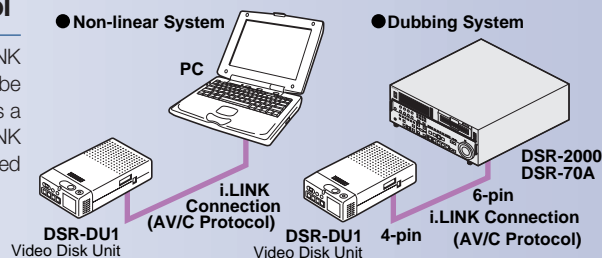**NP-F960/F750**

4-pin

i.LINK Connection

As a source feeder machine using the SBP2 protocol

The support of the SBP2 protocol on the i.LINK port of the DSR-DU1 allows DVCAM/DV stream video and audio to be output as asynchronous files. Thus, when connected to an SBP2-compatible, i.LINK interface equipped compatible nonlinear editor, the files on the DSR-DU1 can be directly transferred to the nonlinear editor's local media drive. A maximum of twice normal transfer speed is achieved, effectively reducing the time required for material ingestion. Since the record start and stop time code values generated during acquisition are stored in the DSR-DU1 and transferred together with the material files, the burden of the logging process common to nonlinear editing is reduced.

DSR-DU1
Video Disk Unit

AC-DN1
AC Adaptor

PC

CA-DU1
Camera Adaptor

DSR-DU1
Video Disk Unit
with Supplied Case

AC-V700A
AC Adaptor/Charger

i.LINK Connection
(SBP2 Protocol)

i.LINK Connection
(SBP2 Protocol)

As a source feeder machine using the AV/C protocol

Thanks to its VTR-like functions and the support of the AV/C protocol on its i.LINK connector, the DSR-DU1 can be used as an independent source feeder. It can be connected to i.LINK(DV) interface equipped compatible DVCAM recorder VTRs as a feeder machine for making dubs. Establishing the same connection with an i.LINK interface equipped nonlinear editor allows material on the DSR-DU1 to be uploaded to the media drive of the editor.

●Non-linear System   ●Dubbing System

PC

DSR-2000
DSR-70A

DSR-DU1
Video Disk Unit

i.LINK Connection (AV/C Protocol)

DSR-DU1
Video Disk Unit

4-pin

6-pin

i.LINK Connection (AV/C Protocol)

The equipment in the figure above are labeled with NTSC model names.

Product Overview

Hard-drive unit for DVCAM and DV camcorders
The DSR-DU1 incorporates a 2.5-inch, 40 GB hard drive. It can record a 25 Mb/s DVCAM/DV stream video signal and audio signals for up to three hours. These signals are recorded as files.

Shock resistant
The shock resistant mechanical design and the use of a memory to buffer data makes the DSR-DU1 extremely durable and highly reliable even when subjected to severe vibration. Moreover, when the DSR-DU1 is used with a compatible DVCAM shoulder-mount camcorder, it is housed within the aluminum die-cast body of the CA-DU1 Camera Adaptor for even greater protection.

VTR-like functions and operation keys
The DSR-DU1 provides controls for functions such as Play, Stop, Next, Previous and Recording. These controls enable the unit to be used as an independent feeder or straight recorder. An additional feature is that the playback picture can be monitored* on the viewfinder of a Sony DSR-570WS/570WSP/370/370P camcorder, or the LCD screen of a Sony DSR-PD150/PD150P or DSR-250/250P camcorder.

*Not available with the DSR-500WS/500WSP/300A/300AP. The DSR-PD150/PD150P/250/250P should be in VTR mode.

JOG DIAL for searching menu
LCD MONITOR for indicating menu

i.LINK Connector and Its protocol
The i.LINK connector of the DSR-DU1 supports two types of protocol - the AV/C protocol and SBP2 protocol. The AV/C protocol is used for the transfer of DVCAM/DV stream signals such as those used in conventional VTR to VTR dubbing. This allows the DSR-DU1 to be connected to Sony i.LINK(DV) interface equipped compatible VTRs and nonlinear editors. The SBP2 protocol further allows DVCAM/DV stream signals to be transferred as files to compatible i.LINK interface equipped, compatible nonlinear systems.

Compact and lightweight
Excellent portability and mobility is achieved with the low weight and compact body of the DSR-DU1.

Photo shows DSR-DU1, CA-DU1 and BP-L60A.

Other Features

Loop recording
Allows video and audio signals to be buffered in an internal memory and then recorded to the hard drive the instant the record button is pressed. This function helps to avoid the loss of an important scene. Up to eight seconds of video and audio are continuously buffered in the memory.

Interval recording
Allows interval recording by setting the DSR-DU1 to automatically switch between record and standby modes. The maximum recording time is two seconds at predetermined intervals. This allows recordings to be made for scientific applications such as botanical observation.

525 (NTSC)/625 (PAL) switchable recording
The DSR-DU1 offers 525 (NTSC)/625 (PAL) switchable operation, and can record and playback in either color system*[1]. This function is switched from a menu.

REC Trigger
The REC On/Off function of the DSR-DU1 can be controlled from the REC On/Off button of Sony i.LINK(DV) interface equipped compatible DVCAM camcorders.*[2]

Supplied remote controller (RM-LG2)
Provides controls for Rec, Cue and Rec Tally

Can be powered by DC12 V*[3] or DC 8.4 V

Shooting data
During acquisition, the time codes of record in and out points are automatically stored in the DSR-DU1. Cue points can also be marked from the controls of the DSR-DU1 and the supplied remote controller.

*1 The DSR-DU1 does not convert signals between 525 (NTSC) to 625 (PAL) video formats.
*2 To use this function with camcorders other than the DSR-570WS/570WSP/370/370P, a tape should be loaded in the cassette compartment.
*3 An optional CA-DU1 is required for operation on DC 12 V.

Peripheral Equipment and Optional Accessories

Camcorders

DSR-570WS/570WSP
DVCAM Camcorder

DSR-370/370P
DVCAM Camcorder

DSR-250/250P
DVCAM Camcorder

DSR-PD150/PD150P
DVCAM Camcorder

DSR-PD100A/PD100AP
DVCAM Camcorder

Optional Accessories

CA-DU1
Camera Adopter

BP-L40A/L60A/L90A
Rechargeable Li-ion
Battery Pack

BP-M50/M100
Rechargeable Nickel Metal Hydride
Battery Pack

NP-F960/F750
infoLITHIUM Rechargeable
Battery Pack

BC-L50
Battery Charger for
BP-L40A/L60A/L90A

BC-M50
Battery Charger for
BP-L40A/L60A/L90A/M50/M100

AC-V700A
AC Adaptor/Charger for NP-F960

AC-DN1
AC Adaptor

VMC-IL4408A/IL4415/IL4435
i.LINK Cable
(4-pin to 4-pin, 0.8m/1.5m/3.5m)

VMC-IL4615A/IL4635
i.LINK Cable
(4-pin to 6-pin, 1.5m/3.5m)

Specifications

DSR-DU1 Video Disk Unit	
General	
Power requirements	DC 7.2 V (Battery), DC 8.4 V (AC Adaptor)
Power consumption	8.5 W
Weight	1 lb 5 oz (600 g)
Dimensions (W x H x D)	4 x 1 $^3/_4$ x 5 $^5/_8$ inches (101 mm x 44 mm x 142mm)
Operating temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage temperature	-4 °F to 140 °F (-20 °C to 60 °C)
Operating Humidity	Less than 85% (without condensation.)
Input/Output Terminals	
DV IN/OUT	i.LINK x 1 (IEEE1394 4-pin)
Remote	4-pin mini Jack x 1
DC IN	x 1
Supplied Accessories	
	Warranty card Operation manual i.LINK cable (4-pin to 4-pin) Remote controller (RM-LG2) Battery (CR2032) Case

CA-DU1 Camera Adaptor	
General	
Power requirements	DC 11 to 17 V
Weight	Approx. 14 oz (400 g)
Dimensions (W x H x D)	4 x 2 $^1/_4$ x 5 $^3/_4$ inches (101 mm x 54.5 mm x 143mm)
Operating temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage temperature	-4 °F to 140 °F (-20°C to 60 °C)
Operating Humidity	Less than 85% (without condensation.)
Input/Output Terminals	
DV IN/OUT	i.LINK x 1 (IEEE1394 4-pin)
Remote	4-pin mini Jack x 1
DC IN	XLR 4-pin male x 1
Supplied Accessories	
	Warranty card Operation manual i.LINK cable (4-pin to 6-pin)

Expanding DVCAM™ production

The DSR-DU1 is a compact videodisk unit that is set to bring a new level of operational versatility to DVCAM production. Introduced for use with Sony DVCAM and Sony DV camcorders[*1], it provides up to three hours of DVCAM/DV stream recording – equivalent to the maximum recording time of a DVCAM tape. Through an i.LINK®[*2](DV) connection, the output of the camcorder's camera is simultaneously recorded to both the hard drive of the DSR-DU1 and the camcorder's tape cassette.

The DSR-DU1 is an extremely versatile unit. When a shoot has been completed, it can be detached from the camcorder and used for field off-line logging or EDL creation, as a player for making dubs, or as a source feeder machine for i.LINK interface equipped nonlinear editors. The DSR-DU1 also offers many other convenient features that include loop recording to avoid missing an important scene, and interval recording to capture scenes over a long period.

The i.LINK IEEE 1394 interface on the DSR-DU1 supports two types of protocols which are AV/C (Audio Video/Control) and SBP2. The DSR-DU1 receives and stores the DVCAM/DV stream from compatible DV/DVCAM camcorders using the AV/C protocol. The DSR-DU1 can then upload the DV files into compatible i.LINK interface equipped nonlinear editors[*3] using either the SBP2 or AV/C protocol. In the case of the SBP2 protocol, the DV files stored on the DSR-DU1 can be selected on a file basis from the GUI of the compatible nonlinear editor, and then uploaded to the editor's hard drive at up to two times faster[*4] than real time. The record start and stop time code values of each scene are also transferred to the editor, eliminating the logging process common to nonlinear editing.

The DSR-DU1 presents an outstanding workflow innovation to DVCAM users in field acquisition and in production.


Photo shows DSR-DU1 and supplied case.

SONY Video Disk Unit

DSR-DU1

*1 Please contact your nearest Sony office or authorized dealer for compatible DV camcorders
*2 i.LINK is a Sony trademark used only to designate that a product is equipped with an IEEE 1394 connector.
    All products with an i.LINK connector may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connector for information on compatibility, operating conditions, and proper connection. ị is the logo for products that implement i.LINK.
*3 Please contact your nearest Sony office or authorized dealer for compatible nonlinear products that support AV/C or SBP2 file upload from the DSR-DU1
*4 The time required to upload DV files from the DSR-DU1 may vary depending on the nonlinear editor used.In the case of downloading DV files from a nonlinear editor to the DSR-DU1, only the DV AV/C protocol can be used and therefore only real-time speed is supported.

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