

## DIGITAL VIDEO/AUDIO TAPE DRIVES

### DIGITAL VIDEO TAPE DRIVES

The EXB-8200S uses standard 8 mm tapes. If the tape is 112 m long, its overall capacity is 2.3 GB. Data are recorded on tape by means of the Helical Scan technology.

### DIGITAL AUDIO TAPE

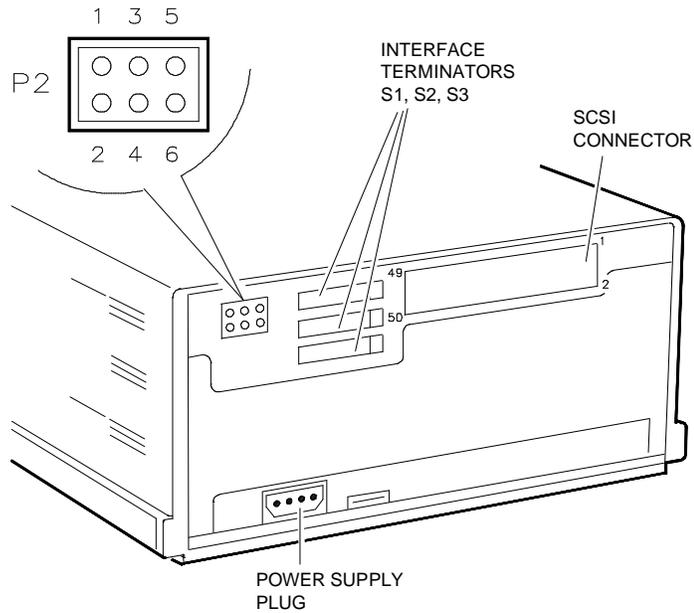
The DAT uses 3.81 mm DDS tape cartridges or standard audio cartridges with the possibility of reading and writing data from/on the tape. With respect to the certified DDS cartridges, the standard ones offer less data integrity security.

The recording format used is DDS (Digital Data Storage) with Helical Scan technology.

If the DAT is equipped with a data compression/decompression chip, the storage capacity doubles if technical data are stored while it quadruples if standard data are stored.

The following table indicates the type of cartridges that can be used on the different models.

	HP35470A	HP35480A	HP C1536A	HP C1533A	HP C1539A	SONY SDT4000	SONY SDT7000
<b>Data compression (DCLZ)</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Compatible format</b>							
DDS-1	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DDS1-DC	No	Yes	Yes	Yes	Yes	Yes	Yes
DDS-2	No	No	No	Yes	Yes	No	Yes
<b>Capacity (typical with a 2:1 data compression where supported)</b>							
DDS-1 (60 m)	1.3 GB	2.6 GB	2.6 GB	2.6 GB	2.6 GB	2.6 GB	2.6 GB
DDS1-DC (90 m)	2.0 GB	4.0 GB	4.0 GB	4.0 GB	4.0 GB	4.0 GB	4.0 GB
DDS-2 (120 m)	No	No	No	8.0 GB	8.0 GB	No	8.0 GB

**2.3 GB DVT****EXABYTE EXB-8200S****SCSI**

JUMPERS P2			SCSI ID SELECTION
PIN 1-2	PIN 3-4	PIN 5-6	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4 *
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7

**TERMINATION RESISTANCES S1, S2, S3**

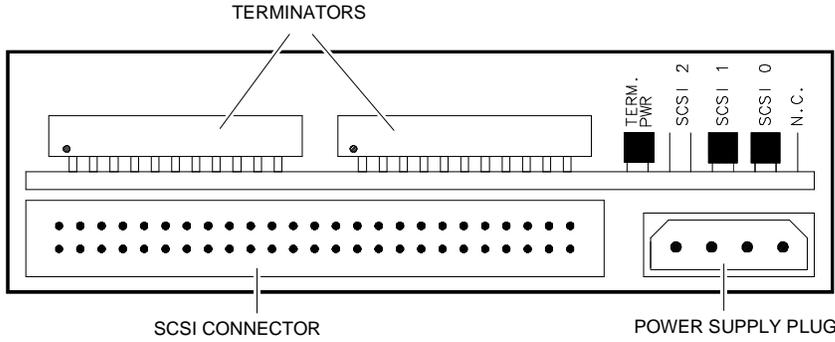
Whether terminators are present or not depends on the configuration of the system SCSI channel.

Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween. On some systems termination is made directly on the drive while on others termination is made at the end of the SCSI cable.

**USER DISK EVOLUTION**

<b>DATE</b>	<b>REL.</b>	<b>CODE</b>	<b>MODIFICATION</b>
	1.0		New User Disk for MS-DOS 4.01 and therefore compatible only with LSX 5010/20 systems.
	2.0	2690127K (1.44 MB) 2690126P (1.2 MB)	User Disk for MS-DOS 5.0 rev. 3.00 compatible with LSX 5010/20/15/25/30/40. New Customer Test EXB_DIA ver. 1.30.
9/93	3.11	2690609Y (1.44 MB) 2690610J (1.2 MB)	User Disk updated so that it can be used on LSX 5025 E systems.
10/94	3.23	2690931 C (1.44 MB)	Diagnostic program updated so that it is aligned with SCSI Library 0.23 with the addition of management using the DPT and PCI Dagger SCSI controllers.
12/94	3.24	2690970 F (1.44 MB)	Diagnostic program updated so that it is aligned with SCSI Library 0.24. It solves a problem with the previous release (time-out on an Adaptec 1540CF controller). Starting from this release the 1.2 MB diskette will no longer be offered in the Starter Kit.

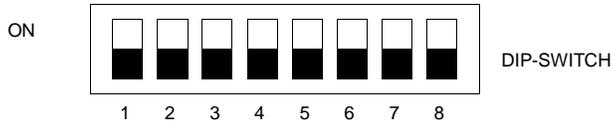
<b>1.3/2 GB DAT</b>	<b>HEWLETT PACKARD HP35470A</b>	<b>SCSI</b>
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JUMPERS			SCSI ID SELECTION
SCSI 2	SCSI 1	SCSI 0	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7

JUMPER TERM PWR	POWER SUPPLY TO THE TERMINATORS
OFF	The drive provides the power supply to the terminators
ON	
	The terminators are powered by the Terminator Power signal while the drive provides power to pin 26 of the SCSI bus (Term. Power) *

The drive is also equipped with a series of DIP-Switches that are not used on model HP35470A. The 8 DIP-Switches indicated in the following figure must always be kept in the OFF position.



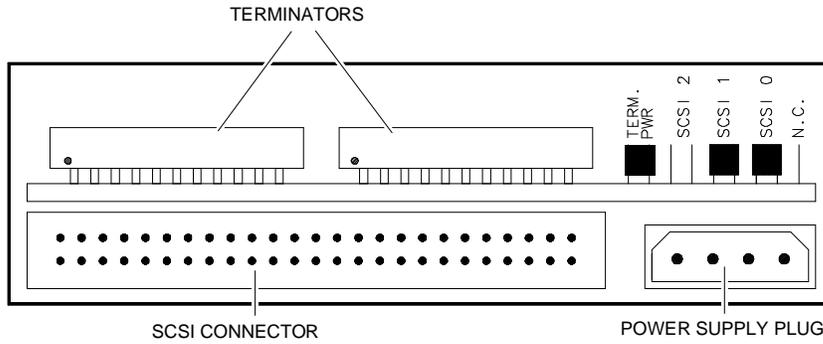
**TERMINATION RESISTANCES**

Whether terminators are present or not depends on the configuration of the system SCSI channel. Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween. On some systems termination is made directly on the drive while on others termination is made at the end of the SCSI cable.

**USER DISK EVOLUTION**

<b>DATE</b>	<b>REL.</b>	<b>CODE</b>	<b>MODIFICATION</b>
	1.00	2690141C (1.44 MB) 2690142Q (1.2 MB)	New User Disk.
9/93	2.11	2690603E (1.44 MB) 2690604T (1.2 MB)	User Disk updated so that it could be used on LSX 5025 E systems.
12/94	2.33	2690971G (1.44 MB)	Diagnostic program updated so that it is aligned with SCSI Library 0.24 with the addition of management using the DPT and PCI Dagger SCSI controllers. Starting from this release the 1.2 MB diskette will no longer be available in the Starter Kit.

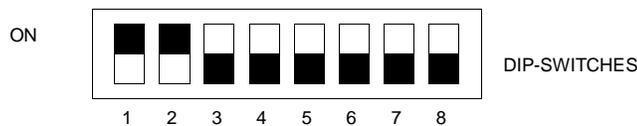
<b>2/8 GB DAT</b>	<b>HEWLETT PACKARD HP35480A</b>	<b>SCSI</b>
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JUMPERS			SCSI ID SELECTION
S2	S1	S0	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7

JUMPER TERM PWR	POWER SUPPLY TO THE TERMINATORS
OFF	The drive provides the power supply to the terminators
ON	The terminators are powered by the Terminator Power signal while the drive provides power to pin 26 of the SCSI bus (Term. Power) *

The drive also configures a series of DIP-Switches for data compression/decompression which are only read at power on.



DIP-SWITCH		DESCRIPTION
1	2	
OFF	OFF	Data compression disabled (operates as the HP35470)
OFF	ON	Data compression disabled managed by system
ON	OFF	Data compression enabled not managed by system
ON	ON	Data compression enabled managed by system *

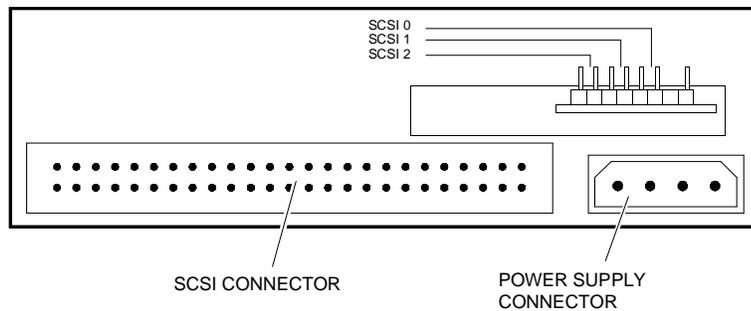
**TERMINATION RESISTANCES**

Whether terminators are present or not depends on the configuration of the system SCSI channel. Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween. On some systems termination is made directly on the drive while on others termination is made at the end of the SCSI cable.

**USER DISK EVOLUTION**

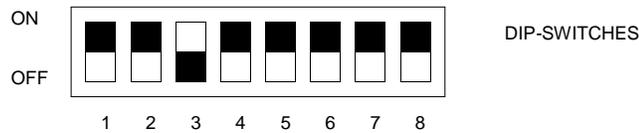
DATE	REL.	CODE	MODIFICATION
	1.00	2690515J (1.44 MB) 2690516W (1.2 MB)	New User Disk.
9/93	2.11	2690605X (1.44 MB) 2690606B (1.2 MB)	User Disk updated so that it could be used on LSX 5025 E.
12/94	2.33	2690972 L (1.44 MB)	Diagnostic program updated so that it is aligned with SCSI Library 0.24 with the addition of management using the DPT and PCI Dagger SCSI controllers. Starting from this release the 1.2 MB diskette will no longer be available in the Starter Kit.

<b>2/4 GB DAT</b>	<b>HEWLETT PACKARD C1536A</b>	<b>SCSI</b>
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JUMPERS			SCSI ID SELECTION
SCSI 2	SCSI 1	SCSI 0	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7

The drive is equipped with a series of DIP-Switches for the data compression/decompression feature; the settings of these switches are only read at power on.



DIP-SWITCHES		DESCRIPTION
1	2	
OFF	OFF	Data compression disabled (as the HP35470)
OFF	ON	Data compression disabled and handled by the system
ON	OFF	Data compression enabled but not handled by the system
ON	ON	Data compression enabled and handled by the system *

DIP-SWITCH 3	MEDIA RECOGNITION SYSTEM (MRS) ENABLE
ON	The MRS is disabled. All tapes are handled in the same way, whether they have the Media Recognition Stripes or not. This setting is to be made when using standard or DDS tapes without MRS.
OFF *	The MRS is active. The standard or DDS tape that do not have the MRS are dealt with as if they were write protected and therefore only read operations can be performed.

**Note:** DDS-1 tapes with the MRS are identified by the writing on the logo.

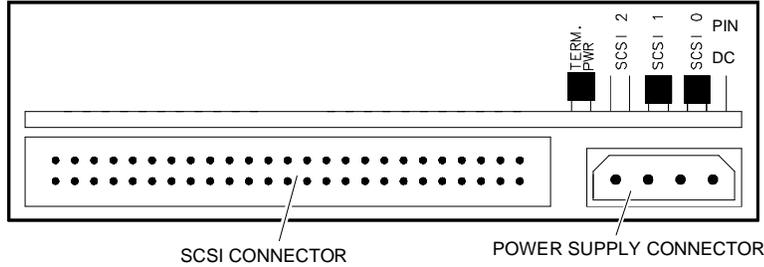
**Note:** Switches 4 to 8 are set to ON at the factory and their setting must not be changed.

### Terminators

This DAT does not support internal terminations and therefore it does not have terminators. The drive can be terminated by means of an external terminator which is attached on the rear of the drive.

Whether terminators are present or not depends on the configuration of the system SCSI channel. Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween. The drive is permanently configured to provide power to the terminators by means of the Terminator Power pin 26.

<b>2/8 GB DAT</b>	<b>HEWLETT PACKARD C1533A HEWLETT PACKARD C1539A</b>	<b>SCSI</b>
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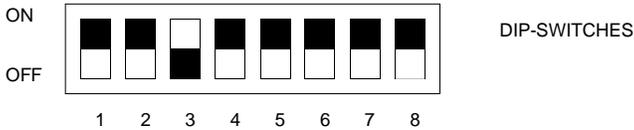
JUMPERS			SCSI ID SELECTION
SCSI 2	SCSI 1	SCSI 0	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7

DC PIN	DATA COMPRESSION ENABLE
Not connected *	Data compression is only controlled by DIP-Switches 1 and 2 by means of the SCSI Mode Select command (default setting).
Connected at 0 V	Data compression is disabled. The setting of DIP-Switch 1 is ignored, that of DIP-Switch 2 is valid and control is always made through Mode Select. Bear in mind that the drive continues to decompress compressed data during the read phase. Consequently when using this pin DIP-Switch 1 must be set to ON.

**Note:** The DC pin is only active at power on; any successive change made to the configuration of the pin is ignored.

JUMPER TERM PWR	TERMINATOR POWER SUPPLY
OFF	The drive does not provide power to the terminators
ON *	The drive provides power supply to the terminators through the Terminator Power pin 26

The drive has a series of data compression/decompression configuration DIP-Switches that are only read at power on.



DIP-SWITCHES		DATA COMPRESSION ENABLE
1	2	
OFF	OFF	Data compression disabled (as the HP35470)
OFF	ON	Data compression disabled and handled by the system
ON	OFF	Data compression enabled but not handled by the system
ON	ON	Data compression enabled and handled by the system *

DIP-SWITCH 3	MEDIA RECOGNITION SYSTEM (MRS) ENABLE
ON	The MRS is disabled. All tapes are handled in the same way, whether they have the Media Recognition Stripes or not. This setting is to be made when using standard or DDS tapes without MRS.
OFF *	The MRS is active. The standard or DDS tape that do not have the MRS are dealt with as if they were write protected and therefore only read operations can be performed.

**Note:** DDS-1 tapes with the MRS are identified by the writing on the logo.

**Note:** Switches 4 to 8 are set to ON at the factory and their setting must not be changed.

### Terminators

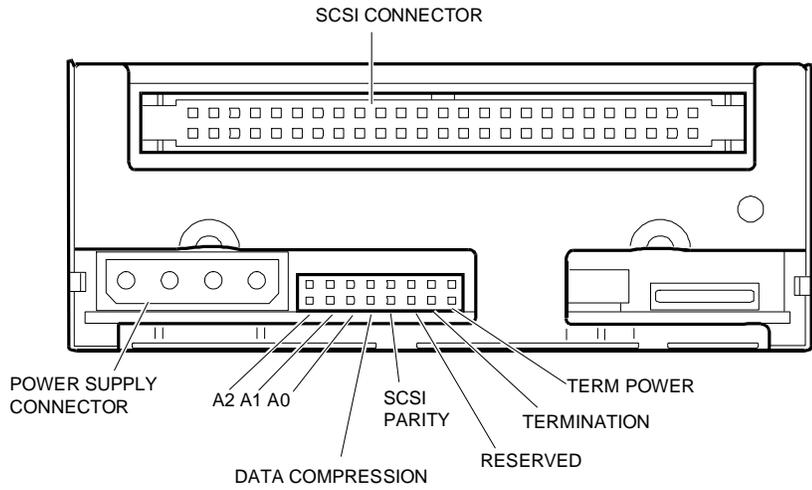
This DAT does not support internal terminations and therefore it does not have terminators. The drive can be terminated by means of an external terminator which is attached on the rear of the drive.

Whether terminators are present or not depends on the configuration of the system SCSI channel. Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween.

### EVOLUTION OF THE DAT DDS2 STARTER KIT

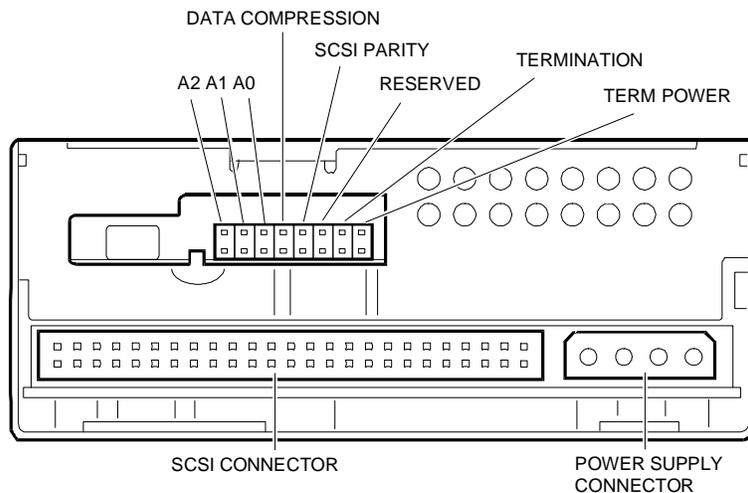
DATE	CODE	LEV.	REASON FOR CHANGE
	2756120 D	00	New Starter Kit with Customer Test code 2691177 R.
2/97		01	Starter Kit updated with the Sony SDT-7000 DAT. Customer Test replaced with the new release 2.4.2 code 2693539 W, a flyer with the instructions for the adapter code 2692575 has been added together with the Sony manual code 2693538 S.

<b>2/4 GB DAT</b>	<b>SONY SDT-4000</b>	<b>SCSI</b>
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JUMPERS			SCSI ID SELECTION
A2	A1	A0	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7
<b>DATA COMPRESSION</b>			ON = Data compression disabled OFF = Data compression enabled (default)
<b>SCSI PARITY</b>			ON = SCSI parity enabled (default) OFF = SCSI parity disabled
<b>TERMINATION</b>			ON = SCSI bus terminator enabled OFF = SCSI bus terminator disabled (default)  Whether terminators are enabled or not depends on the configuration of the system SCSI channel. Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween.
<b>TERM POWER</b>			ON = Power supply to the terminators enabled (default) OFF = Power supply to the terminators disabled

<b>2/8 GB DAT</b>	<b>SONY SDT-7000</b>	<b>SCSI</b>
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JUMPERS			SCSI ID SELECTION
A2	A1	A0	
OFF	OFF	OFF	0
OFF	OFF	ON	1
OFF	ON	OFF	2
OFF	ON	ON	3
ON	OFF	OFF	4
ON	OFF	ON	5
ON	ON	OFF	6
ON	ON	ON	7
<b>DATA COMPRESSION</b>			ON = Data compression disabled OFF = Data compression enabled (default)
<b>SCSI PARITY</b>			ON = SCSI parity enabled (default) OFF = SCSI parity disabled
<b>TERMINATION</b>			ON = Terminator on the SCSI bus enabled OFF = Terminator on the SCSI bus disabled (default)  Whether terminators are enabled or not depends on the configuration of the system SCSI channel. Usually the SCSI channel must only be terminated at its ends (on the first and last device on the bus), while the terminator must be removed from all the peripherals inbetween.
<b>TERM POWER</b>			ON = Power supply to the terminators enabled (default) OFF = Power supply to the terminators disabled

### STARTER KIT DAT DDS2 EVOLUTION

See the section related to the H.P. C1533A DAT.

