

DLT Media & Format – Drive Compatibility Guide

DLTtape Data Cartridge Compatibility, with different model drives, will depend on the **cartridge-type** and/or the **data-format** that the user records on the tape media (during its initial use). Compatibility can be confusing at sites with multiple drive models. The chart shows compatibility of each cartridge **Tape Media Type**, including four possible **Tape Media Formats** that can be recorded on DLTtape IV.

TAPE MEDIA TYPE	FORMAT RECORDED BY USER	NATIVE CAPACITY (*3)	Tape Drive Transfer Rate (*1) And Cartridge / Format Compatibility												
			DLT 2000	DLT 2000 XT	DLT 4000	DLT 7000	DLT 8000	DLT1 VS80 (*2)	DLT VS 160	DLT V4	SDLT 220	SDLT 320	SDLT 600	SDLT 600A	DLT -S4
DLTtape III	DLT 2000	10 GB	1.25	1.25	1.5	1.5	1.5	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
DLTtape IIIXT	DLT 2000XT	15 GB	N/C	1.25	1.5	1.5	1.5	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
DLTtape IV	DLT 4000	20 GB	N/C	N/C	1.5	1.5	1.5	Read Only	N/C	N/C	Read Only	Read Only	N/C	N/C	N/C
	DLT 7000	35 GB	N/C	N/C	N/C	5	5.0	N/C	N/C	N/C	Read Only	Read Only	N/C	N/C	N/C
	DLT 8000	40 GB	N/C	N/C	N/C	N/C	6	N/C	N/C	N/C	Read Only	Read Only	N/C	N/C	N/C
	DLT VS80 & DLT1 (*2)	40 GB	N/C	N/C	N/C	N/C	N/C	3	Read Only	Read Only	Read Only	Read Only	N/C	N/C	N/C
DLTtape VS1	DLT VS160	80 GB	N/C	N/C	N/C	N/C	N/C	N/C	8	Read Only	N/C	N/C	Read Only	N/C	N/C
	DLT V4	160 GB	N/C	N/C	N/C	N/C	N/C	N/C	N/C	10	N/C	N/C	N/C	N/C	N/C
<u>Super DLTtape</u>	SDLT-220	110 GB	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	11	11.0	Read Only	N/C	N/C
SDLT I	SDLT-320	160 GB	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	16	Read Only	N/C	Read Only
SDLT II	SDLT-600	300 GB	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	36	N/C	Read Only
	SDLT-600A	300 GB	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	36	N/C
DLTtape S4	DLT-S4	800 GB	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	60

NOTES: (*1) – When read/write compatible, Native Transfer Rate is shown in Megabytes (MB) per second.
(*2) – The DLT 1 and DLT VS80 Drives both record in the same 40/80 GB, 3 MB/sec DLT 1 format.
(*3) – One Gigabyte (GB) equals 1,000,000,000 bytes. One Megabyte (MB) equals 1,000,000 bytes.

N/C = Tape-Type or the Tape-Format Recorded By The User is **Not Compatible** with the drive.

DLTtape Media & Format Compatibility Guide – Q & A

Question – If a DLTtape IV has been written on a DLT4000 drive and I want to re-write on a DLT7000 or DLT8000 drive, does the tape need to be **re-formatted** or **degaussed** first?

Answer – Re-formatting is optional; **re-format if you want to change density to the higher drive capability.** Re-formatting can happen automatically on a write from BOT, if your software setup is set that way, or you can also initiate the re-formatting. Degaussing is NOT needed.

The same is true when migrating tapes from a DLT7000 to a DLT8000 drive.

Question – If a DLTtape IV has been written on a higher-capacity DLT drive and I want to re-write on a lower-capacity DLT drive, does the tape cartridge have to be **re-formatted** or **degaussed** first?

Answer – Yes! When a higher-capacity formatted data cartridge is loaded in a lower-capacity DLT drive, the drive will detect something but **cannot** recognize it. The drive's clean light will be lit! That can be ignored; a "write from BOT" command will automatically reformat the cartridge to the lower-capacity format, the clean light will go off, and the drive will write new data.

However, some application software versions/setup may not allow the write to occur, because the drive isn't ready (error, "Use Cleaning Tape" light lit). In that case, format the DLTtape IV to the lower-capacity format using the higher-capacity drive, before attempting to use it on the lower-capacity drive. DLT drives are backward compatible, but of course *not* forward compatible! For other options and format compatibility information, see below:

Please refer to Fujifilm's Technical Support Document, "DLTtape Data Cartridge Initial Calibration" for information concerning the density format compatibility between the different DLT drive models (DLT4000, DLT7000 & DLT8000) that all use DLTtape IV. Degaussing is also an option.

The above information references the drive's DLTtape initial calibration ("formatting") written on the tape when it is first used. Other application specific labels and volume serial numbers written to the tape by the user's software can cause a DLTtape used under one application to be rejected by another. This can happen when an application (that has internal label/serial number requirements) attempts to use a tape without the tape being labeled (identified to, or inventoried by) that application. Consult with you Software Application Vendor concerning application initialization (label and inventory type requirements) for application-specific information and procedures.

Note: DLTtape IV that was written by a DLT1 drive may show up as **blank media**, when inserted in a DLT4000, DLT7000 or DLT8000 drive. Or, tapes written by a DLT1 drive with upgraded firmware or written by a DLT VS80 drive, will fail when inserted in a DLT4000, DLT7000 or DLT 8000 drive. The drive's "**use cleaning tape**" light will be lighted when these DLT 1 or DLT VS80 (DLT VS80 a.k.a. ValuSmart-Tape 80) formatted tapes are detected.

Question – How can I re-format my old [used in DLT4000, DLT7000 or DLT8000] DLTtape IV cartridges for use in my DLT 1 or DLT VS80 drive?

Answer – You **cannot** re-format DLT cartridges having older formats in a DLT 1 or DLT VS80 (a.k.a. ValuSmart-Tape 80) drive. Make sure that all the cartridges that you want to use for writing are either new (new DLTtape is unformatted) or that they have been previously formatted by a DLT 1 or DLT VS80 drive.

DLT 1 and DLT VS80 drives will **automatically eject** any DLTtape IV whose format is not compatible (any format that the drive cannot read). All the other DLT cartridge types (e.g., DLTtape III and III-XT) will also be ejected.

DLT4000 formatted cartridges can be read, but cartridges with incompatible formats will be ejected. Any cartridge that you want to use for writing should be either new (thus unformatted) or have been previously formatted by either a DLT 1 or by a DLT VS80 drive.

If you want to reuse cartridges that have a DLT4000, DLT7000 or DLT8000 format, you can use a bulk eraser (degausser) to prepare these cartridges for use on DLT 1 and/or DLT VS80 drives. However, degaussed tapes are not recommended! When initially writing on DLT 1 and/or DLT VS80 drives, it is best to use new Fujifilm DLTtape IV! For more information see “Media Compatibility for DLT 1 & DLT VS80 Drives” Technical Flash.

Question – Which Drive Cleaning Tape is compatible with my drive? **Answer** –

Tape Drive		Drive Cleaning Tape	Fujifilm Part Number
Model	Description		
DLT S4	(800/1600 GB)	Super DLT CleaningTape	26300010
SDLT 600A	(300 GB)		
SDLT 600	(300/600 GB)		
SDLT 320	(160/320 GB)		
SDLT 220	(110/220 GB)		
DLT V4	(160/320 GB)	DLT VS160 CleaningTape	Currently Not available from Fujifilm
DLT VS160	(80/160 GB)		
DLT VS80	(40/80 GB)	DLT 1 Cleaning Tape – DLT VS CleaningTape	Currently Not available from Fujifilm
DLT 1	(40/80 GB)		
DLT 8000	(40/80 GB)	DLT CleaningTape III	26112090
DLT 7000	(35/70 GB)		
DLT 4000	(20/40 GB)		
DLT 2000XT	(15/30 GB)		
DLT 2000	(10/20 GB)		

Note: Although DLT 1 and DLT VS80 drives use Fujifilm DLTtape IV Data Cartridges, these drives can only use the special **Quantum VS Drive CleaningTape** (formerly DLT-1 Cleaning Tape). Do **not** use DLT CleaningTape III in DLT-1, DLT-VS80, DLT-VS160, DLT-V4 or SuperDLT drives. The different model cleaning tapes may look similar, but they are **not** interchangeable! All four models of DLT cleaning-tape are each good for 20 uses; mark the label after each use and do not use more than 20 times. **DISCARD AFTER 20 USES!**

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