

Configuring Internal Python Drives - 4326NP 4326RP

The internal Python tape drives can be installed in three different orientations: One horizontally (eject button right) and two vertically (eject button up or eject button down).

Setting Operational Switches

An eight-position, 8-pin D-sub connector is located at the rear of the drive. These switches allow you to set up the following configuration options before you install the drive in the computer.

- SCSI ID 0
- The drive reads or writes both MRS and non-MRS 4-mm media.
- Parity checking is disabled.
- DDS-DC data compression is enabled.
- The power-on self-test diagnostics of the drive are disabled.

Note: The drive must be turned OFF, then ON or a SCSI Bus Reset must be received in order for switch settings to take effect.

If you need to change any switch settings, refer to the appropriate following section and make the changes.

SCSI Device Address (S1 through S3)

The three switches S1 through S3 correspond to the SCSI device address identification bits 0 (LSB) through 2 (MSB), respectively. Use the switches to set the SCSI device addresses. The default setting is SCSI address 0.

Note 1: Each SCSI device on a bus must have a unique SCSI ID. The SCSI host controller generally uses ID 7. In some systems, the boot drive uses ID 0.

Note 2: If you set the SCSI ID by these switches, you must leave the jumper settings for SCSI ID set to 0. (See External SCSI Address Port section below.)

Media Recognition System (MRS)(S4)

The media recognition system allows the drive to detect DDS cartridges that support this feature. Use of non-DDS media might appear to give satisfactory results, but the inferior specifications of such media might cause data integrity problems. The S4 switch enables or disables Media Recognition System (MRS) mode. If S4 is ON, the drive reads or writes both MRS and non-MRS 4-mm media. If S4 is OFF, the drive only writes to MRS media but will read any kind of 4-mm media. S4 = ON disables MRS (Default)

S4 = OFF enables MRS

Parity Check Enable/Disable (S5) The S5 switch enables or disables parity checking for the SCSI bus. S5 = ON enables parity checking S5 = OFF disables parity checking (Default) When parity checking is disabled, parity is still generated by the drive.

DDS Pass-Through Mode Enable/Disable

(S6) (Applies to drives that support data compression only.) The S6 switch enables or disables DDS pass-through mode. The default is DDS passthrough mode disabled (S6=OFF). S6 = ON enables DDS pass-through mode (data compression disabled) S6 = OFF disables DDS pass-through mode (data compression enabled)

Note: The function of the S6 switch can be over-ridden by the proper SCSI MODE SELECT command * issued from the host computer. Regardless of the position of S6, the MODE SELECT command can enable or disable data compression.

Reserved Switch (S7) The S7 switch is reserved and should be left in its factory default setting (OFF).

Power-on Self-Test Mode Enable/Disable (S8)

The S8 switch enables or disables execution of power-on self-test diagnostics when the power comes ON. If ON, the drive will only respond to SCSI commands after successful completion of the test (about 5 seconds). S8 = ON enables power-on self-test mode S8 = OFF disables power-on self-test mode (Default)

Other Settings

Termination

Terminators are located on the rear of the tape drive. Two terminator single-inline packages (SIPs) are available. When you install the terminator, be sure to align pin one on the terminator with pin one on the SIP. You only need to install the terminators if the drive is the only device on the SCSI bus or the last device on the SCSI bus. If the drive is within the SCSI bus chain, no termination is necessary on the tape drive.

Terminator Power

At the rear of the 4326NP and 4326 RP drives, a 2-1)hi header allows you to enable +5 terminator power if needed for terminators or other SCSI devices. The factory default for internal drives is with terminator power disabled (jumper shunt over one pin), which is normal operation. To enable terminator power, place the jumper shunt over the two pins. Be sure the jumper is firmly in place.

If the jumper is installed, be careful not to short the TER2V1PYVR signal to ground. The drive contains a terminator power fuse to prevent damage to drive components in case the terminator power is shorted. If terminator power is enabled and the SCSI cable is connected upside down for example. This fuse may blow to prevent damage to the drive itself. If this occurs, the drive will not longer supply terminator power to the bus and will need to be returned to an authorized repair facility to correct the problem,

External SCSI Address Port

A 6-pin header (JP6) on the rear of the drive allows remote SCSI address selection. The three sets of pins, 1 through 3, correspond to the SCSI device address identification bits 0 (Less Significant Bit) through 2 (Most Significant Bit), respectively. The lower pin on any of the pin sets can be used for ground.

S3	S2	S1
(MSB=4)	(Value=2)	(LSB=1)
(ground)	(ground)	(ground)
JP6		

Note 1: Each SCSI device on a bus must have a unique SCSI ID. The SCSI host controller generally uses ID 7. In some systems, the boot drive uses ID 0.

Note 2: Set the DIP switches S 1, S2, and S3, all to OFF to use the external SCSI address port. (See Setting Operational Switches section above.)

Serial Port

For Manufacturing use only.

* See **Python DDS and DDS-DC** Tape Drives and Autoloaders SCSI MANUAL Part # 27298-001 April 1992