# JUKE BOXES

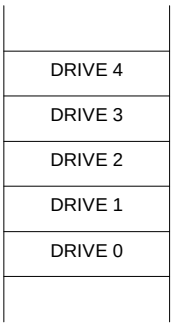
The Juke Box, or Automated Disk Library, is an external peripheral used to archive optical disks. The peripheral consists of a floor-standing cabinet, containing a variable number of EOD or MOD drives and a sophisticated robot-controlled interior.

| JUKE BOX | KODAK ADL560 | ODL 50-2/3/4 |
|---|---|---|

## SCSI ID SELECTION

Selection of the SCSI ID is made directly on the Sony SMO-E501 drives inside the juke box, where each drive must have a different ID (for location of the jumpers, see the previous page). The SCSI ID's used are written on a label on the rear of the ODL. Depending on position of the drives inside the cabinet, the SCSI ID of each drive must be set in the following way:

AREA INSIDE THE ODL FOR
INSTALLATION OF THE OPTIC DRIVES



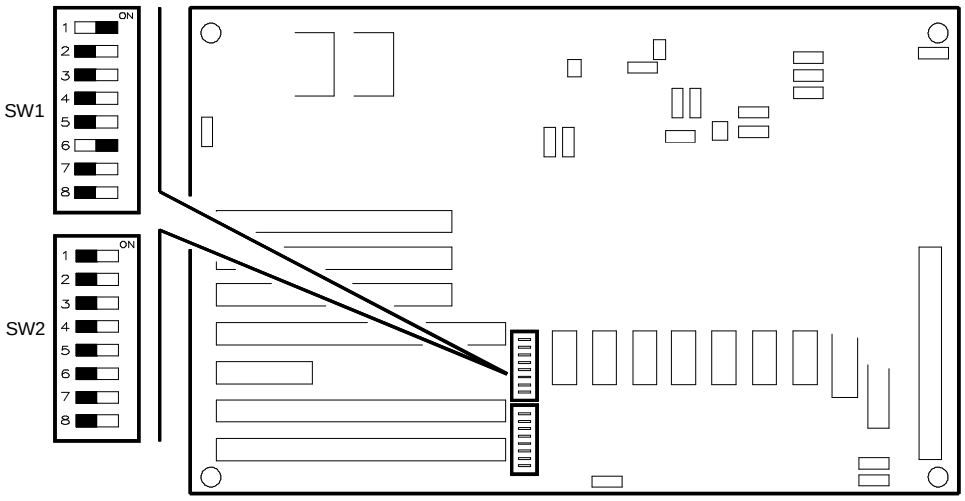

| INSTALLATION ORDER | DRIVE POSITION | SCSI ID |
|---|---|---|
| 5 | 4 | 4 |
| 4 | 3 | 3 |
| 1 | 2 | 0 |
| 2 | 1 | 1 |
| 3 | 0 | 2 |

## TERMINATION

Drives inside the cabinet are never terminated and the SCSI channel is terminated on the outside (with a terminator plug) on the free SCSI connector on the rear of the ODL. Whether the terminator is present or not depends on the configuration of the system's SCSI channel. Usually the terminator must be present if the ODL is the last peripheral in the SCSI bus chain and must be removed from all the others. If the ODL is the only peripheral connected on the SCSI bus, the terminator must be present.

## SERIAL PORT CONFIGURATION

The robot mechanisms inside the ODL are managed by the system through the serial port. The DIP-switches on which the communication parameters are set on control board CBA.



**Note:** *The robot mechanism inside the peripheral function only with the RS232 serial port parameters set in the following way:*
*- BAUD RATE = 9600*
*- PARITY = NONE*
*- DATA BITS = 8*
*- START BITS = 1*
*- STOP BITS = 1*
*- DATA RECEPTION CHECKING = ENABLED*
*- COMMUNICATION MODE = ECHO MODE.*

*This means that the communication parameters of the host system must be adapted to those of the ODL and not vice versa.*

| DIP-SWITCH SW1 | | | BAUD RATE |
|---|---|---|---|
| SW1-1 | SW1-2 | SW1-3 | |
| OFF | OFF | OFF | Reserved |
| ON | OFF | OFF | 9600 * |
| OFF | ON | OFF | 4800 |
| ON | ON | OFF | 2400 |
| OFF | OFF | ON | 1200 |
| ON | OFF | ON | 600 |
| OFF | ON | ON | 300 |
| ON | ON | ON | 110 |

| DIP-SWITCH SW1 | | PARITY |
|---|---|---|
| SW1-4 | SW1-5 | |
| OFF | OFF | No parity * |
| ON | OFF | Parity even |
| OFF | ON | Parity Odd |
| ON | ON | Invalid selection |

| DIP-SWITCH SW1-6 | DATA RECEPTION CHECKING |
|---|---|
| ON | XON / XOFF protocol enabled * |
| OFF | XON / XOFF protocol disabled |

| DIP-SWITCH SW1-8 | COMMUNICATION MODE |
|---|---|
| ON | CS Mode (Checksum or Computer Mode) |
| OFF | ECHO Mode (or Human Mode) * |

**Note:** *DIP-Switch SW1-7 is used in the factory only; in normal operating conditions, it must be set OFF.*

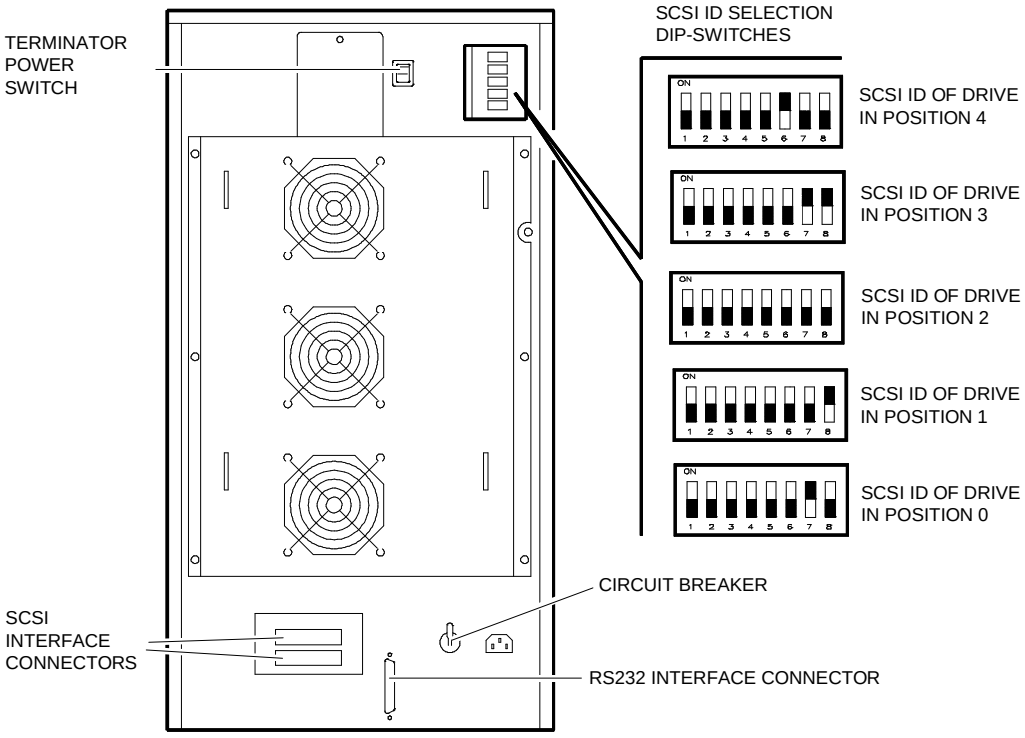
| DIP-SWITCH SW2 | | EXTENDED DIAGNOSTIC |
|---|---|---|
| SW2-1 | SW2-2 | |
| OFF | OFF | Extended diagnostic disabled (normal operation) * |
| ON | ON | Extended diagnostic enabled |

**Note:** *The SW2 DIP-switch block is for the use of service personnel only (SW2-1 and SW2-2) and all 8 DIP-switches must be set OFF for normal operation.*

| JUKE BOX | KODAK ADL560E | ODL 50MF-2/3/4 |
|---|---|---|

**SCSI ID SELECTION**

The SCSI ID on the Sony SMO-E511 drives inside the juke box is selected through a series of DIP-switches on the rear of the ODL and then needs to be confirmed by the software through the console keyboard.

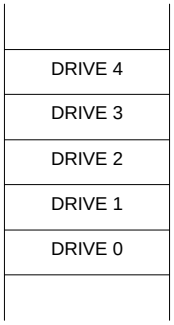



| SWITCH | DESCRIPTION | SET |
|---|---|---|
| 1 | Not used | OFF |
| 2 | The drive motor does not turn automatically when the cartridge is inserted<br>The drive motor turns when the optical cartridge is inserted | ON<br>OFF * |
| 3 | External terminator is powered<br>External terminator is not powered | ON<br>OFF * |
| 4 | Cartridge is not ejected when the eject button is pressed<br>Cartridge is ejected when the eject button is pressed | ON<br>OFF * |
| 5 | Parity check is disabled<br>Parity check is enabled | ON<br>OFF * |

| SWITCH | | | SCSI ID SELECTION |
|---|---|---|---|
| 6 | 7 | 8 | |
| 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 5 groups of DIP-switches specialize each of the 5 possible optical drives inside the ODL (max. 4 for Olivetti). The first 5 switches of each group must be set identically whereas the settings for the SCSI ID switches vary from group to group. Depending on position of each of the drives inside the unit, the SCSI ID of each drive must be set in the following way:

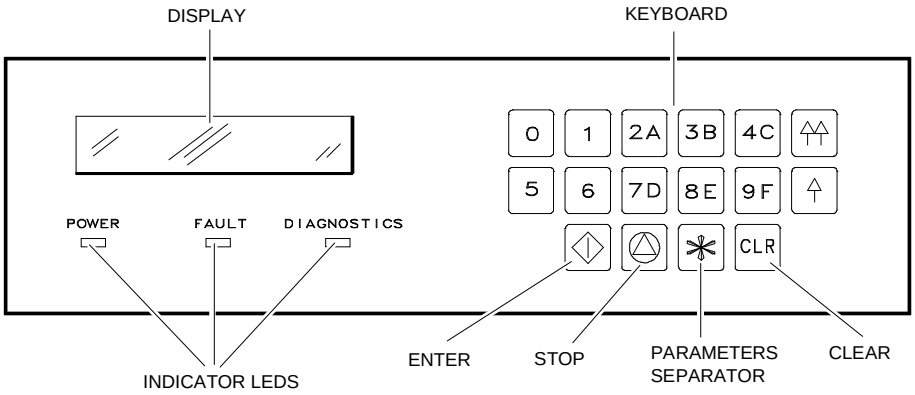
AREA INSIDE THE ODL FOR
INSTALLATION OF OPTICAL DRIVES




| ORDER IN WHICH INSTALLED | DRIVE POSITION | SCSI ID |
|---|---|---|
| 5 | 4 | 4 |
| 4 | 3 | 3 |
| 1 | 2 | 0 |
| 2 | 1 | 1 |
| 3 | 0 | 2 |

**Note:** *A label beside the DIP-switches gives the SCSI ID of each drive, manufacturer and model (for Olivetti, always Sony SMO-E511). Note that the DIP-switches will have a different significance in the event of a different manufacturer or model. The label also gives the ID assigned the robot inside the ODL (robot control on this model can be provided through the SCSI interface instead of the RS232 interface). The ID is set in the factory through the software and is 8 (not used); this setting on Olivetti systems means that robot control is always provided through the RS232 interface. Never alter this setting.*

After manual selection of the SCSI ID's has been completed on the DIP-switches, the selection must be confirmed via software through the console keyboard:




- Enter the following commands:
  - 555 followed by ENTER (to access diagnostic mode, log on)
  - 22*aa*777*cc followed by ENTER.

  where:
  aa: is the drive position (0 to 4) and
  cc: is the SCSI address required (0 to 7)

- To display the ID without changing it, enter the following commands:
  - 22*aa followed by ENTER.
  where:
  aa: is the drive position (0 to 4)

  The display shows:
  ADL DRIVE X
  SCSI ID: Y
  where:
  X: is the drive position (0 to 4)
  Y: is the SCSI address of the drive in position X (0 to 7)
- To exit (log off) diagnostic mode, type 888 and press ENTER.

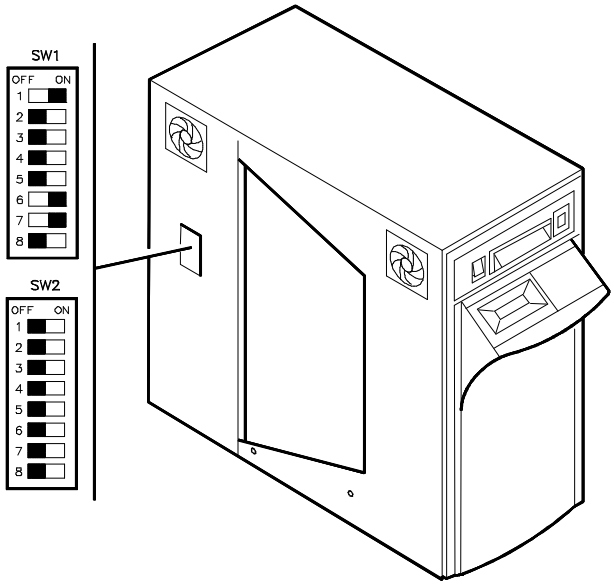
**TERMINATION**

Drives inside the cabinet are never terminated and the SCSI channel is terminated on the outside (with a terminator plug) on the free SCSI connector on the rear of the ODL. For reasons of mechanical tolerances, you are advised to use the Kodak terminator coming with the peripheral.
Whether the terminator is present or not depends on SCSI channel configured in the system. Usually the terminator must be present if the ODL is the last peripheral in the SCSI bus chain and must be removed from all the others. If the ODL is the only peripheral connected on the SCSI bus, the terminator must be present.
There is a terminator power switch marked "Robotics Term. Power" on the rear of the ODL:

| "ROBOTIC TERM. POWER" SWITCH | POWER TO TERMINATORS |
|---|---|
| ON | ODL powers the terminator through pin 26 * |
| OFF | Terminator is powered by host through pin 26 |

**SERIAL PORT CONFIGURATION**

As seen previously, the robot mechanisms inside the ODL are not controlled by the SCSI interface but through the RS232 serial port.
The DIP-switches for setting of the communication parameters can be found on the peripheral left hand side, after the panel has been taken off.



**Note:** *The internal robot mechanism operates only with the RS232 serial port parameters set as follows:*
*- BAUD RATE = 9600*
*- PARITY = NONE*
*- DATA BITS = 8 - START BITS = 1*
*- STOP BITS = 1*
*- DATA RECEPTION CHECKING = ENABLED*
*- COMMUNICATION MODE = ECHO MODE.*
*The communication parameters of the host system must be adapted to those of the ODL and not viceversa.*

| DIP-SWITCH SW1 | | | BAUD RATE |
|---|---|---|---|
| SW1-1 | SW1-2 | SW1-3 | |
| OFF | OFF | OFF | 19200 |
| ON | OFF | OFF | 9600 * |
| OFF | ON | OFF | 4800 |
| ON | ON | OFF | 2400 |
| OFF | OFF | ON | 1200 |
| ON | OFF | ON | 600 |
| OFF | ON | ON | 300 |
| ON | ON | ON | 110 |

| DIP-SWITCH SW1 | | PARITY |
|---|---|---|
| SW1-4 | SW1-5 | |
| OFF | OFF | No parity * |
| ON | OFF | Parity even |
| OFF | ON | Parity odd |
| ON | ON | Invalid selection |

| DIP-SWITCH SW1-6 | DATA RECEPTION CHECKING |
|---|---|
| ON | XON / XOFF protocol enabled * |
| OFF | XON / XOFF protocol disabled |

| DIP-SWITCH SW1-7 | SCSI INSTALLED |
|---|---|
| ON | Installed * |
| OFF | Not installed |

| DIP-SWITCH SW1-8 | COMMUNICATION MODE |
|---|---|
| ON | CS Mode (Checksum or Computer Mode) |
| OFF | ECHO Mode (or Human Mode) * |

| DIP-SWITCH SW2 | | EXTENDED DIAGNOSTIC |
|---|---|---|
| SW2-1 | SW2-2 | |
| OFF | OFF | Extended diagnostic disabled (normal operation) * |
| ON | ON | Extended diagnostic enabled |

**Note:** *The SW2 DIP-switch block is for the use of service personnel only (SW2-1 and SW2-2) and all 8 DIP-switches must be set OFF for normal operation.*

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