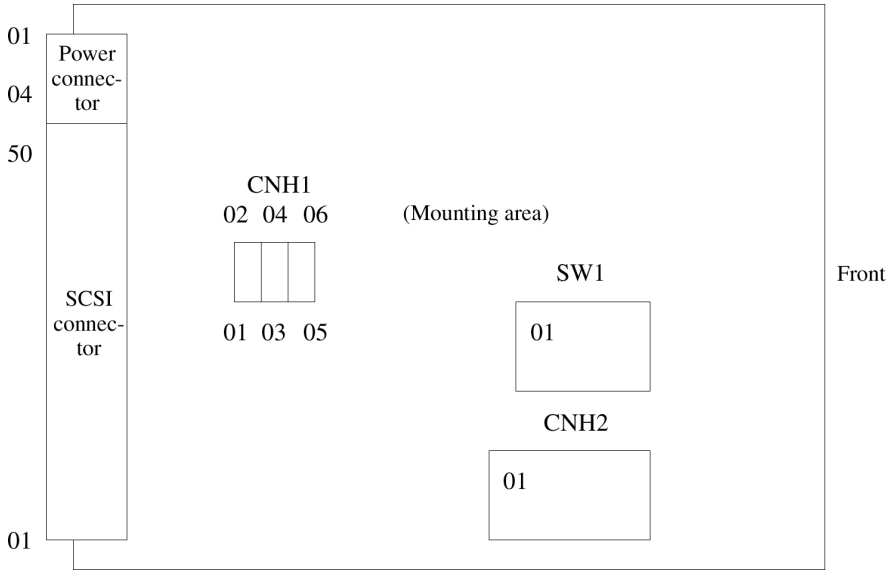


Figure 4.4 Positions of setting terminals and switches

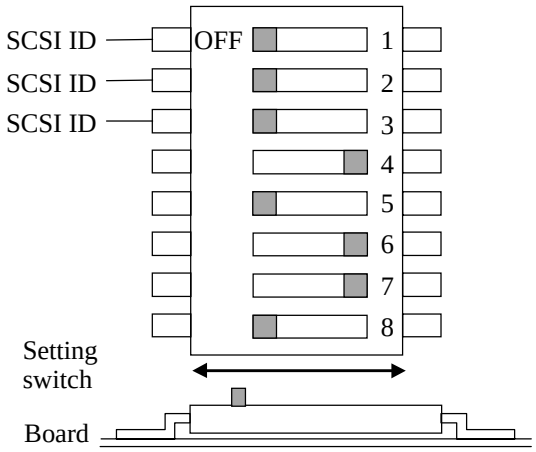
Setting items are as follows:

- SW1
  SCSI ID
  SCSI data bus parity check
  Write cache mode
  Device type mode
  Spindle automatic stop mode
  Factory test mode (user setting inhibited)
- CNH1
  SCSI terminating resistor power supply
  SCSI terminating resistor mode
- CNH2
  SCSI ID
  Device type mode
  Verify mode
  SCSI type-0
- SCSI connector
  SCSI signal
- Power connector
  +5VDC
  GND

4.3.1 Setting switches (SW1)

Figure 4.5 shows the types of switches and their settings when the drive was shipped.

• SW1



	Switch number	Signal name	At shipment
SW1	01 02 03	SCSI ID	OFF OFF OFF
	04	SCSI data bus parity check	ON
	05	Write cache mode	OFF
	06	Device type mode	ON
	07	Spindle automatic stop mode	ON
	08	Factory test mode (user setting inhibited)	OFF

Figure 4.5 Setting switch (SW1)

(1) SCSI ID

Table 4.1 shows the SCSI ID settings of the drive.

Table 4.1 SCSI ID setting (SW1)

SCSI ID	SW1-01	SW1-02	SW1-03
0 (*1)	OFF	OFF	OFF
1	OFF	OFF	ON
2	OFF	ON	OFF
3	OFF	ON	ON
4	ON	OFF	OFF
5	ON	OFF	ON
6	ON	ON	OFF
7	ON	ON	ON

*1 Setting when shipped

IMPORTANT

1) Each SCSI device connected to the same SCSI bus must have a unique SCSI ID.
2) If contention occurs in the ARBITRATION phase, the priority of the SCSI use authority depends on SCSI IDs as follows:
   7 > 6 > 5 > 4 > 3 > 2 > 1 > 0

(2) SCSI data bus parity checking

Table 4.2 shows the settings which determine whether to check the SCSI bus parity bit. Regardless of the settings, the parity bit is ensured for data transmitted by the drive.

Table 4.2 SCSI data bus parity checking (SW1)

SCSI data bus parity checking by drive	SW1-04
Checked	ON (*1)
Not checked	OFF

*1 Setting when shipped

(3) Write cache mode

The write cache mode can be set. The write cache mode can also be enabled or disabled by the MODE SELECT command.

When the write cache mode is enabled, the cache control page is added to the code page of the mode parameter even if the SCSI-1 is set. Table 4.3 shows the settings of the write cache mode.

Table 4.3 Write cache mode setting

Write cache mode	SW1-05
Write cache is enabled at executing the WRITE/WRITE AND VERIFY command.	ON
Write cache is disabled at executing the WRITE/WRITE AND VERIFY command	OFF (*1)

*1 Setting when shipped

IMPORTANT

When the write cache feature is enabled, a write error is reported at the completion status of next command. At a system so that the initiator retries the command, a retry process may be failed.

(4) Device type mode

The device type settings, which are returned when the INQUIRY command is issued to the optical disk drive, are shown below.

Table 4.4 Device type mode settings

Device type	Setting terminal (SW1-06)
X‘00’ (Direct access device)	OFF
X‘07’ (Optical memory device)	ON (*1)

*1 Setting when shipped

(5) Spindle automatic stop mode

Normally, with the cartridge loaded, the spindle rotation is maintained until the spindle is instructed to stop by the START/STOP UNIT command. The spindle auto stop function automatically stops the spindle after the command has not been issued from the host for about 33 minutes (default value). When the command is issued from the host with the spindle automatically stopped, the optical disk derive turns the spindle again and performs processing in the same manner as in a ready state without posting a not ready state.

The access supervision time from the host is about 33 minutes as the default. However, it can be changed by the MODE SELECT command.

The spindle auto stop mode can also be changed by the MODE SELECT command.

Table 4.5 shows spindle auto stop mode setting.

Table 4.5 Spindle automatic stop mode setting

Spindle auto stop	SW1-07
The spindle motor automatically stops.	ON (*1)
The spindle motor does not automatically stop.	OFF

*1 Setting when shipped

IMPORTANT

The characteristic of the spindle auto stop function are as follows:

- Reduces the deposition of dust which could cause a cartridge error.
- Not suitable for a system requiring quick response because it takes a few seconds to start the spindle.

4.3.2 Setting of supplying power to SCSI terminating resistor

Table 4.6 shows how to supply power to the SCSI terminating resistor module on the drive and how to use TERMPWR lines on the SCSI bus.

Table 4.6 SCSI terminating resistor power supply (CNH1)

SCSI terminating resistor power supply	CNH1 01-02	CNH1 03-04
Power is supplied from both of the drive and TERMPWR pin.	Short (*1)	Short (*1)
Power is supplied from the drive only. (TERMPWR pin is not used)	Short	Open
Power is supplied from TEMPWR pin only. (Drive’s power supply is not used)	Open	Short
No power is supplied.	Open	Open

*1 Setting when shipped

4.3.3 SCSI terminating resistor mode

Enabling or disabling the SCSI terminating resistor, module on the PCA can be set.

When the drive positions at other than the end of the SCSI bus, the SCSI terminating resistor should be disabled. Table 4.7 shows the SCSI terminating resistor mode setting.

Table 4.7 SCSI terminating resistor mode (CNH1)

SCSI terminating resistor mode	CNH 1 05-06
SCSI terminating resistor module on the PCA is enabled.	Short (*1)
SCSI terminating resistor module on the PCA is disabled.	Open

*1 Setting when shipped

Note:

Open CNH1 5-6 pins when the SCSI terminating resistor set by CHN 2-15 pin.

4.4 Mounting

4.4.1 Checks before mounting the drive

Before mounting the optical disk drive in the system cabinet, check whether the setting switches and terminals are set correctly.

Table 4.8 shows the checklist.

Table 4.8 Setting checklist

Setting switch

	Setting item	Setting on:	Default	Check
1	SCSI ID	 SW1-01 SW1-02 SW1-03	 OFF OFF OFF	(SCSI ID=__) ☐OFF ☐ON ☐OFF ☐ON ☐OFF ☐ON
2	SCSI data bus parity check	SW1-04	ON	☐OFF ☐ON
3	Write cache mode	SW1-05	OFF	☐OFF ☐ON
4	Device type mode	SW1-06	ON	☐OFF ☐ON
5	Spindle automatic stop mode	SW1-07	ON	☐OFF ☐ON
6	Factory test mode (user setting inhibited)	SW1-08	OFF	☐OFF ☐ON

CNH1

	Setting item	Setting on:	Default	Check
1	Supplied from both ODD and TERMPWR pin.	CNH1 1-2 CNH1 3-4	Short Short	☐Short ☐Open ☐Short ☐Open
2	Supplied from ODD	CNH1 1-2 CNH1 3-4	Short Short	☐Short ☐Open ☐Short ☐Open
3	Supplied from TERMPWR pin.	CNH1 1-2 CNH1 3-4	Short Short	☐Short ☐Open ☐Short ☐Open

Terminating resistor

	Check item	Check
1	Drive location on SCSI bus	☐Other than end ☐Either end
2	SCSI terminating resistor mode (CNH1 5-6)	☐Open ☐Short

4.4.2 Mounting procedure

How the drive is mounted depends on the system cabinet structure. Determine the mounting procedure in consideration of the requirements of each system. This section contains the general mounting procedure and check items.

See Section 3.2 for details on mounting drive.

1) For a system with an external operator panel mounted, connect the external operator panel cable before mounting the drive in the system cabinet because it is difficult to access the connector after the drive is mounted.

2) Tighten four mounting screws to secure the drive in the system cabinet.

   The drive has ten mounting holes (both sides: 3×2, bottom: 4). Secure the drive using the four mounting holes on both sides or the bottom.

   Use mounting screws whose lengths are 3 mm or less from the external wall of the mounting frame of the drive when they are tightened. (See Figure 3.6)

   When mounting with screws, the screw tightening torque should be 0.4 to 0.45Nm (4 to 4.6kgf-cm).

   Be careful not to damage the parts on the PCA when mounting the drive.

3) After securing the drive, make sure that the drive does not touch the chassis of the system cabinet. There must be at least 1.5 mm clearance between the drive and chassis. (See Figure 3.6)

4.5 Cable Connections

Use the following cables to connect the drive to the system. See Subsection 3.4.2 for details on the connector positions and cable requirements.

- Power supply cable
- SCSI cable
- External operator panel cable (if required)

The general procedure for cable connection and notes on connecting cables are given below. Pay attention to the insertion direction of each cable connector.

⚠CAUTION

1) Make sure that the system power is off.
2) Do not connect or disconnect any cable when the power is on.

1) Connect the power cable.

2) Connect the external operator panel (only if required for the system).

3) Connect the SCSI cable.