

# Jumpers DS1, DS2, DS3 and DS4

The DS1 to DS4 jumpers determine the  $\mathit{Drive \ Select}$  signal the drive should react to.

Only one of the jumpers must be placed.

For PC-AT interfaces only DS1 and DS2 will function, for Shugart interfaces DS1 to DS4 will work.

When using the drive in a system with PC-AT interface, it should be noted that the *Motor Enable* input signal is only taken from pin number 16. There are two options to handle this issues. The first option is to use a ribbon cable with a twist and place the DS2 jumper on all drives. In this case the drive that is connected behind the twist will be drive 0 and the drive that is connected before the twist will be drive 1. The second option is to use a untwisted ribbon cable and shorting the pin number 10 and pin number 16 together, the DS1 or DS2 jumper of the connected drives can then be placed.

When using the drive in a systems with Shugart interface DS1, DS2, DS3 or DS4 can be placed to make it drive 0, drive 1, drive 2 or drive 3 respectively.

The jumper DS2 will be placed in the default setting.

## Jumpers DA and UA

The DA and UA jumpers determine the behavior of the drives activity LED in the front panel.

When the UA jumper is placed the activity LED will light up with the *Ready* signal.

When the DA jumper is placed the activity LED will light up with the *Drive Select* signal.

In the default setting the DA jumper is set via a solder bridge.

### Jumper HS

Function unknown. Possibly related to internal head load signal. In the default setting this jumper is not set.

#### Jumpers MDA and MDB

Exact function unknown. Likely to define what kind of signal (Ready / Disk Change) may be output on pin number 34.

In the default setting both jumper MDA and jumper MDB are set via a solder bridge.

### Jumpers MS and MM

The MS and MM jumpers control under what conditions the drive motor should turn on.

When the MM jumper is placed the motor will only turn on when the *Motor Enable* signal is active.

When the MS jumper is placed the motor will only turn on when the *Drive Select* signal is active.

For PC-AT interfaces the MM jumper should be placed, this is also the default setting.

#### Jumper MX

The MX jumper defines if the drive is in multiplex mode or if it is in regular drive select mode. In multiplex mode the drive is permanently active, as if its *Drive Select* signal was active.

When the MX jumper is not placed the drive will function in regular drive select mode, only being active when its *Drive Select* signal is active.

When the MX jumper is placed the drive will always be active regardless of its *Drive Select* signal.

For PC-AT interfaces the MX jumper should not be placed, this is also the default setting.

### Jumper NTR

Function unknown.

In the default setting this jumper is set via a solder bridge.

### Jumper RY

The RY jumper connects the output for pin number 34 to the internal driver. When the RY jumper is not placed pin number 34 will not be driven. When the RY jumper is placed pin number 34 will be driven. This jumper is not placed in the default setting.

### Jumper TH

The TH jumper controls whether or or not the output on pin number 34 should always be driven or only when the *Drive Select* signal is active.

When TH is placed the output on pin number 34 should will only be driven when the *Drive Select* signal is active.

When TH is not placed the output on pin number 34 will always be driven. This jumper is not placed in the default setting.

### Jumper TM

The TM jumper connects or disconnects the 1500hm termination resistors from the input data lines.

When TM is not placed the termination resistors are isolated from the input data lines.

When TM is placed the input data lines are pulled up to 5V via the termination resistors.

In the default setting this jumper is set via a breakable trace.