



Board number

15532060-20A / 13332060-00

Jumpers DS0, DS1, DS2 and DS3

The DS0 to DS3 jumpers determine the *Drive Select* signal the drive should react to.

Only one of the jumpers must be placed.

For PC-AT interfaces only DS0 and DS1 will function, for Shugart interfaces DS0 to DS3 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 DS1 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 DS0 or DS1 jumper of the connected drives can then be placed.

When using the drive in a systems with Shugart interface DS0, DS1, DS2 or DS3 can be placed to make it drive 0, drive 1, drive 2 or drive 3 respectively.

The jumper DS1 will be placed in the default setting.

Jumpers DC, RY and XT

The DC, RY and XT jumpers select what signal shall be output on pin number 34.

When only DC is placed the *Disk Change* signal will be used.

When only RY is placed the *Ready* signal will be used

When only XT is placed the a logical false signal will be used.

Neither jumper is placed in the default settings.

Jumper E0

The E0 jumper determines the behavior of the *Index* (pin number 8) output signal.

When the E0 jumper is not placed the following conditions will determine the *Index* signal:

Index hole detected, drive selected, ready state, seek completed

When the E0 jumper is placed the following conditions will determine the *Index* signal:

Index hole detected, drive selected, ready state

Setting this jumper will generate *Index* signals even when seeking is not completed. This might be required for systems that require 'masking the *Index*'. (e.g. Older systems that do not give the drive enough time to reach a ready state)

In the default setting this jumper is set via a resistor.

Jumper E2

The E2 jumper determines the behavior of the *Read Data* (pin number 30) output signal.

When the E2 jumper is not placed the following conditions will determine the *Read Data* signal:

Read data detected, drives selected, ready state, not writing, seek completed

When the E2 jumper is placed the following conditions will determine the *Read Data* signal:

Read data detected, drives selected, ready state, not writing

Setting this jumper will generate *Read Data* signals even when seeking is not completed.

In the default setting this jumper is not placed.

Jumper FG

The FG jumper connects or disconnects the metal frame of the drive from the electrical ground line.

When FG is not placed the metal frame is isolated from electrical ground. The resistance between the frame and electrical ground will be at least 150 kOhm.

When FG is placed the metal frame is connected to the electrical ground.

This jumper is placed in the default setting.

Jumper HL

The HL jumper controls whether or not the input on pin number 4 should be interpreted as *Head Load* signal.

When the HL jumper is not placed the signal will not be interpreted as *Head Load* signal.

When the HL jumper is placed the signal will be interpreted as *Head Load* signal.

This jumper should only be placed when the floppy controller generates a valid *Head Load* signal.

This jumper is placed in the default setting.

Jumper IU

The IU jumper controls whether or not the input on pin number 4 should be interpreted as *In Use* signal.

When the IU jumper is not placed the signal will not be interpreted as *In Use* signal.

When the IU jumper is placed the signal will be interpreted as *In Use* signal.

If it is interpreted as *In Use* signal, an active *In Use* signal will turn the activity LED in the front panel on, no matter how U0, U1 and U2 might be placed.

This jumper should only be placed when the floppy controller generates a valid *In Use* signal. It is not placed in the default setting.

Jumpers LG, HG, I and II

The LG, HG, I and II jumpers determine the drives density mode.

When no jumpers are placed the drives operates in quad density mode.

When LG and I are placed the drive operates in double density mode.

When HG and II are placed the drive operates in high density mode.

In the default setting no jumpers are placed.

Jumper ML

The ML jumper controls under what conditions the drive motor should turn on.

When the ML jumper is not placed the motor will only turn on when the *Motor Enable* signal is active.

When the ML jumper is placed the motor will turn on when either the *Motor Enable* is signal active or the activity LED is lit.

This jumper is not placed in the default setting.

Jumper RE

The RE jumper enabled or disabled the automatic zero seeking of the head carriage upon power-up.

When the RE jumper is not placed the drive will not attempt any seeking upon power-up.

When the RE jumper is placed the drive will attempt to seek to track zero upon power-up.

This jumper is not placed in the default setting.

Jumpers U1 and U2

The U1 and U2 jumpers determine the behavior of the drives activity LED in the front panel.

When only U1 is placed no signal but the *In Use* signal (only when enabled) will light up the activity LED.

When only U2 is placed the activity LED will light up when the *In Use* signal or the *Drive Select* signal is active.

When U0 and U1 are placed the activity LED will light up with the *In Use* signal or when the *Drive Select* signal is active and the drive is ready.

When no jumpers are placed the activity LED will light up with the *Drive Select* signal or the *Drive Select* signal is active.

In the default setting jumper U2 is placed.