

Connect a PC floppy drive to a (Philips) MSX computer

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Connect a standard floppy drive (Shugart 34 pins connector) to 14 pins Philips connector as found in the VG8235/00, VG8235/20, NMS8245, VY0010 and VY0011

Connector

Many types of disk drives can be connected to a (Philips) MSX computer. Brands that have proved to be usefull are Teac, Mitshibishi, Samsung and Chinon.

Most MSX computers use the standard 34 pins conenctor as found also on PC floppy drives. If a new cable is required you can use a standard floppy drive cable, note to cut off the part with the twist in the cable, you need a straight connection. Some Philips MSX computers use a 14 pins connector that requires a cable to be made yourself. The next table shows how to connect. Also a standard floppy cable can be used as a base for this, just cut of the unwanted connectors and solder directly on the 14 pin connector.

Adapt the PC floppy drive

Note the following (for the jumpers the drive has to be opened to have access to the jumpers))

1. The jumper or smd resistor 0 ohm or solder bridge must be set right for A (DS0) or B (DS1) drive. The default for PC diskdrives is DS1.
2. The function of pin 34 is 'Disk change' on a PC, this has to be changed to 'Ready' (RY or RDY), look for the jumper or solder bridge.
3. Optionaly the switch that detects a 1.44 MB floppy must be removed to prevent 'disk offline' messages when a HD floppy is used as 720 KB floppy without a covered HD hole.

Pin	Shugart floppy connector	NMS8245	VG8235/00	VG8235/20
1	Gnd			
2	Open/Disk change/Ready			
3	Gnd			
4	In use/Open	9	LF58	2 (b-connector)
5	Gnd			
6	Drive select 3		9	9
7	Gnd			
8	Index	1	1	1
9	Gnd			
10	Drive select 0	6	6	6
11	Gnd			
12	Drive select 1	7	7	7
13	Gnd			
14	Drive select 2		8	8
15	Gnd			
16	Motor on	10	10	10
17	Gnd			
18	Direction	2	2	2
19	Gnd			
20	Step	3	3	3
21	Gnd			
22	Write data	4	4	4
23	Gnd			
24	Write gate	5	5	5
25	Gnd			
26	Track 00	12	12	12
27	Gnd			
28	Write protect	13	13	13
29	Gnd			
30	Read data	14	14	14
31	Gnd			
32	Side select	8	LF65	13 (b-connector)
33	Gnd			
34	Ready/Disk change/Open		LF61	
	GND	11	11	11