Epson SMD-340 1.44 MB Floppy Drive

Performance

Track density	135 tpi
Disk rotation speed	300 rpm
Tracks per diskette	160
Number of heads	2
Recording method	MFM

Recording density:

High density	17,434 bpi
Standard density	8717 bpi

Data transfer rate:

High density	500 Kbits/sec
Standard density	250 Kbits/sec

Seek time:

Track-to-track	3 ms
Average	100 ms
Latency	100 ms
Motor start time	500 ms

Electrical Requirements

Operating voltage	5 VDC 10%
Ripple	0.1 V (maximum)

Current load at 5.5 VDC:

Seeking	0.9 A
Spindle motor running	0.85 A
Power consumption	3.5 W

Size and Weight

Height	25.4 mm (11.0 inches)
Width	101.6 mm (4.0 inches)
Depth	150.0 mm (5.91 inches)
Weight	395 g (13.92 oz)

Environmental Limits

Temperature range:

Operating	4 to 45C (40 to 113F)
Nonoperating	-20 to 65C (-4 to 139F)

Relative humidity:

Operating	20% to 80% (noncondensing)
Nonoperating	10% to 90% (noncondensing)

Vibration:

Operating	0.6 G
Nonoperating	3 G

Shock:

Operating	5 G
Nonoperating	60 G

Reliability

```
MTBF                                10,000 POH
```

Error rate:

```
Soft                                10E-9 per bit
Hard                                10E-12 per bit
Seek                                10E-6 per seek
```
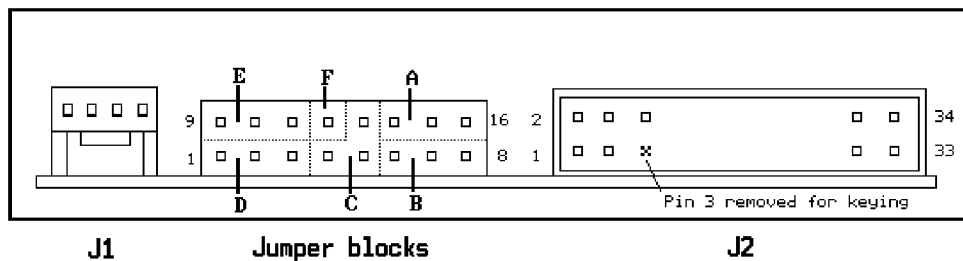
Jumpers


```
                    Top of drive (rear view)
```

```
              E       F       A
        9  □ □ □ □ □ □ □ □  16  2  □ □ □         □ □  34
        1  □ □ □ □ □ □ □ □   8  1  □ □ ✕         □ □  33
              D       C   B                  Pin 3 removed for keying

     J1          Jumper blocks                      J2
```

Jumper block A

14 - 15*	Drive selected by DS0
15 - 16	Drive selected by DS1

Jumper block B

6 - 7	Drive selected by DS2
7 - 8	Drive selected by DS3

Jumper block C

4 - 5*	Mode switched internally
5 - 13	Mode switched by HDI inp.

Jumper block D

1 - 2	2M mode set by HDI inp.
2 - 3*	2M mode set by (HDI) inp.

Jumper block E

9	Grounding
10 - 11	Test terminals

Jumper block F

12	Test terminal

```
* indicates factory default setting
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Mounting
The drive is NOT designed for upside-down mounting.

Connectors and Pinouts

Pin	Signal	Pin	Signal
1	Not connected	2	High density in
3	Pin removed	4	Not connected
5	Not connected	6	Drive select 3
7	+5 VDC	8	Index
9	+5 VDC	10	Drive select 0
11	+5 VDC	12	Drive select 1
13	Signal ground	14	Drive select 2
15	Signal ground	16	Motor on
17	Signal ground	18	Direction
19	Signal ground	20	Step
21	Signal ground	22	Write data
23	Signal ground	24	Write gate
25	Signal ground	26	Track 00
27	Signal ground	28	Write protect
29	Signal ground	30	Read data
31	Signal ground	32	Side select
33	Signal ground	34	Disk change