This specification provides a description for the TEAC FD-235HF, double sided, dual density, 3.5 inch floppy disk drive. This table shows the outline of the floppy disk drive as well as the factory default jumper settings.

Model Name	FD-235HF-6391	
Safety standard on label	UL, CSA & IEC950 (CB)	
Operation modes	2MB mode, Write and read	1MB mode, Write and read
3.5" disk used	High density (2HD)	Normal density (2DD)
Data transfer rate	500k bits/sec	250 bits/sec
Disk rotational speed	300 rpm	300rpm
Track density	135tpi	
Track to track time	3msec	
Required power	+5v single (4.5 – 5.5V)	
Front bezel & flap	Beige (PS)	
Eject button	Beige (PS)	
LED indicator color	Green	
Signal output driver	Open collector TTL	
Input signal terminator	1kΩ± 5%, unremovable	
Customer selectable strap	10 selections4	
Function setting at Delivery	1. Strap setting 1.1 DS1: DRIVE SELECT 1 on pin 12 1.2 DC34: DISK CHANGE on pin 34 1.3 HA: Automatic density setting by HD Hole 2. Other function setting 2.1 LED turn-on condition: DRIVE SELECT 2.2 Motor rotating condition: MOTOR ON 2.3 Ready and seek-complete gate (full-mask) for INDEX and READ Data output pulses. 2.4 Auto-chucking at disk installation 2.5 Auto-recalibration at power on	
Interface connector	34 pin right angle header connector and power connector	
Other optional function	Not equipped	

HA/H12/HO2 Straps

(1) Straps to select designating method of the density mode and to select a signal pin number.
(2) Table 21 shows the combination of the straps and selectable functions.

SEL. No.	Strap setting			Input	Output	Density designation	
	HO2	H12	HA	Pin 2	Pin 2	Host side	FDD
A	_	ON	_	HD IN	OPEN	Key-in or software	HD in from host
B	_	_	ON	OPEN	OPEN	Key-in or software	Automatic By sensor
C	ON	_	ON	OPEN	HD OUT	HD OUT from FDD	Automatic by sensor

Note: 1. "_" mark indicates the off-state of the strap.

RY34/DC34/DC2 Straps

(1) RY34 strap is used to output the READY signal on interface pin No. 34
(2) DC34/DC2 straps are used to output the DISK CHANGE signal on interface pin No. 34, 2.

IR Strap

IR strap is used to select a turn-on condition of the front bezel indicator (LED).

ACD and REN Straps

(1) ACD strap is used to inhibit the auto-chucking at disk installation.
 (a) When the ACD strap is off-state, the auto-chucking operation is executed. The spindle motor Automatically rotates for 490ms, approx. (500ms, Max.), and all of the interface signals are effective during the above auto-checking operation.
 (b) When the ACD strap is on-state, the auto-chucking operation is inhibited.
(2) REN strap is used to execute the auto-recalibration is inhibited.
 (a) When the REN strap is off-state, the auto-recalibration is inhibited.
 (b) When the REN strap is on-state, the auto-recalibration is executed at power-on.

FG Strap

FG strap is used to electrically connect the FDD frame to DC 0V.

RY34/DC34/DC2 Straps

(1) RY34 strap is used to output the READY signal on interface pin 34.
(2) DC34/DC2 straps are used to output the DISK CHANGE signal on interface pin No. 34, 2.

TURN ON CONDITION OF INDICATOR AND SPINDLE MOTOR

Front Bezel Indicator

The indicator (LED) turns-on while the DRIVE SELECT signal is true. However, the indicator keeps off until 3.1msec has passed after the DRIVE Selection to avoid the polling operation of the DRIVE SELECT Signal.

Spindle Motor

The spindle motor rotates while the MOTOR ON signal is TRUE. However the spindle motor does not rotate at any condition while no disk is installed.

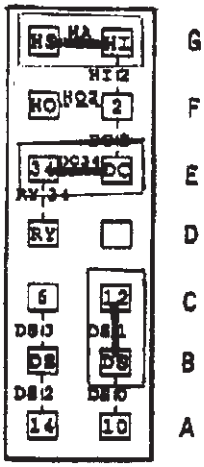
Auto-chucking operation is executed at each disk installation by rotating the spindle motor for 490msec, approx. (500msec, Max.) All the interface signals are valid while the auto-chucking operation is in progress.

CUSTOMER SELECTABLE STRAPS

FUNCTION SUMMARY OF STRAPS

The FDD is equipped with the following selectable straps on the main PCBA. Insertion of a short bar onto the post pin is defined as the on-state of the strap.

Strap	FUNCTION
DS0	DRIVE SELECT 0 input on pin 10
DS1	DRIVE SELECT 1 input on pin 12
DS2	DRIVE SELECT 2 input on pin 14
DS3	DRIVE SELECT 3 input on pin 6
*RY34	READY output on pin 34
*DC34	DISK CHANGE output on pin 34
*DC2	DISK CHANGE output on pin 2
*HA	Density set automatically
*HI2	Density set by HD IN on pin 2
*HO2	HD OUT output on pin 2



Strap post layout

Notes: 1. *Straps overlap with other strap posts. Insert a short bar according to your priority.