

1. OUTLINE

This specification provides a description for the TEAC FD-235HF, double sided, dual density, 3.5 inch floppy disk drive (hereinafter referred to as the FDD). Table 1 shows the outline of the FDD.

Model name	FD-235HF-62XX	
Safety standard on label	UL, CSA & IEC950 (CB)	
Operation modes	High density mode, Write and read	Normal density mode, Write and read
3.5" disk used	High density (2HD)	Normal density (2DD)
Unformatted data capacity	2M bytes	1M bytes
Data transfer rate	500k bits/sec	250k bits/sec
Disk rotational speed	300rpm	
Track density	135tpi	
Track to track time	3msec	
Required power	+5V single (4.5 ~ 5.5V)	
Front bezel & flap		
Eject button		
LED indicator color	Green	
Signal output driver	Open collector TTL	
Input signal terminator	1k $\Omega$ $\pm$ 5%, unremovable	
Customer selectable strap	2 selections, refer to item 11.1.	
Function setting at delivery	<ol style="list-style-type: none"> <li>1. Strap setting               <ol style="list-style-type: none"> <li>1.1 DS1: DRIVE SELECT 1 on pin 12</li> </ol> </li> <li>2. Other function setting               <ol style="list-style-type: none"> <li>2.1 Automatic density setting by HD hole</li> <li>2.2 LED turn-on condition: DRIVE SELECT</li> <li>2.3 Motor rotating condition: MOTOR ON</li> <li>2.4 Ready and seek-complete gate (full-mask) for INDEX and READ DATA output pulses</li> <li>2.5 DISK CHANGE on pin 34</li> <li>2.6 Auto-chucking, auto-recalibration</li> <li>2.7 FDD frame is electrically shorted to DC 0V.</li> </ol> </li> </ol>	
Interface connector	34 pin right angle header connector and power connector	
Other optional function	Not equipped.	

FDD name	Front color	Parts Nos.	
		Front bezel Ass'y	Button
FD-235HF-6240	PC/AT	17968300-03	16788039-03
FD-235HF-6291	PS/2	17967696-04	16788039-04

(Table 2B) Parts Nos. of front bezel Ass'y and button

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* Model name	FD-235HF-6429	
Safety standard	UL, CSA & IEC950 (CB)	
Operation modes	High density mode, Write and read	Normal density mode, Write and read
3.5" disk used	High density (2HD)	Normal density (2DD)
Unformatted data capacity	2M bytes	1M bytes
Data transfer rate	500k bits/sec	250k bits/sec
Disk rotational speed	300rpm	
Track density	135tpi	
Track to track time	3msec	
Required power	+5V single (4.5 - 5.5V)	
* Front bezel & flap	Black	
* Eject button	Black	
LED indicator color	Green	
Signal output driver	Open collector TTL	
Input signal terminator	1k $\Omega$ $\pm$ 5%, unremovable	
Customer selectable strap	2 selections, refer to item 11.1.	
Function setting at delivery	<ol style="list-style-type: none"> <li>1. Strap setting               <ol style="list-style-type: none"> <li>1.1 DS1: DRIVE SELECT 1 on pin 12</li> </ol> </li> <li>2. Other function setting               <ol style="list-style-type: none"> <li>2.1 Automatic density setting by HD hole</li> <li>2.2 LED turn-on condition: DRIVE SELECT</li> <li>2.3 Motor rotating condition: MOTOR ON</li> <li>2.4 Ready and seek-complete gate (full-mask) for INDEX and READ DATA output pulses</li> <li>2.5 DISK CHANGE on pin 34</li> <li>2.6 Auto-chucking, auto-recalibration</li> <li>2.7 FDD frame is electrically shorted to DC 0V.</li> </ol> </li> </ol>	
Interface connector	34 pin right angle header connector and power connector	
Other optional function	Not equipped.	

(Table 1) Specification outline

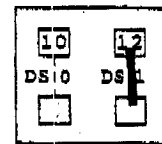
NOTE: Jumper settings for models FD235HF-62XX & -64XX  
 (The only difference is the color of the faceplate)

## 11. CUSTOMER SELECTABLE STRAPS

### 11.1 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. Refer to Table 1 in item 1 as to the strap setting at delivery.

Strap	Function
DS0	DRIVE SELECT 0 input on pin 10
DS1	DRIVE SELECT 1 input on pin 12



DS 0 1

Strap-post layout

(Table 6) Function summary of straps

### 11.2 DS0 and DS1 Straps

- (1) In the multiplex control, these straps designate the address of the FDD.
- (2) By the combination with the DRIVE SELECT 0 and 1 signals, two addresses, can be designated. Refer to Fig.3 and Table 6.

## 12. TURN ON CONDITION OF INDICATOR AND SPINDLE MOTOR

### 12.1 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.

### 12.2 Spindle Motor

- (1) 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.
- (2) 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 according to the explanation in item 8.3 while the auto-chucking operation is in progress.