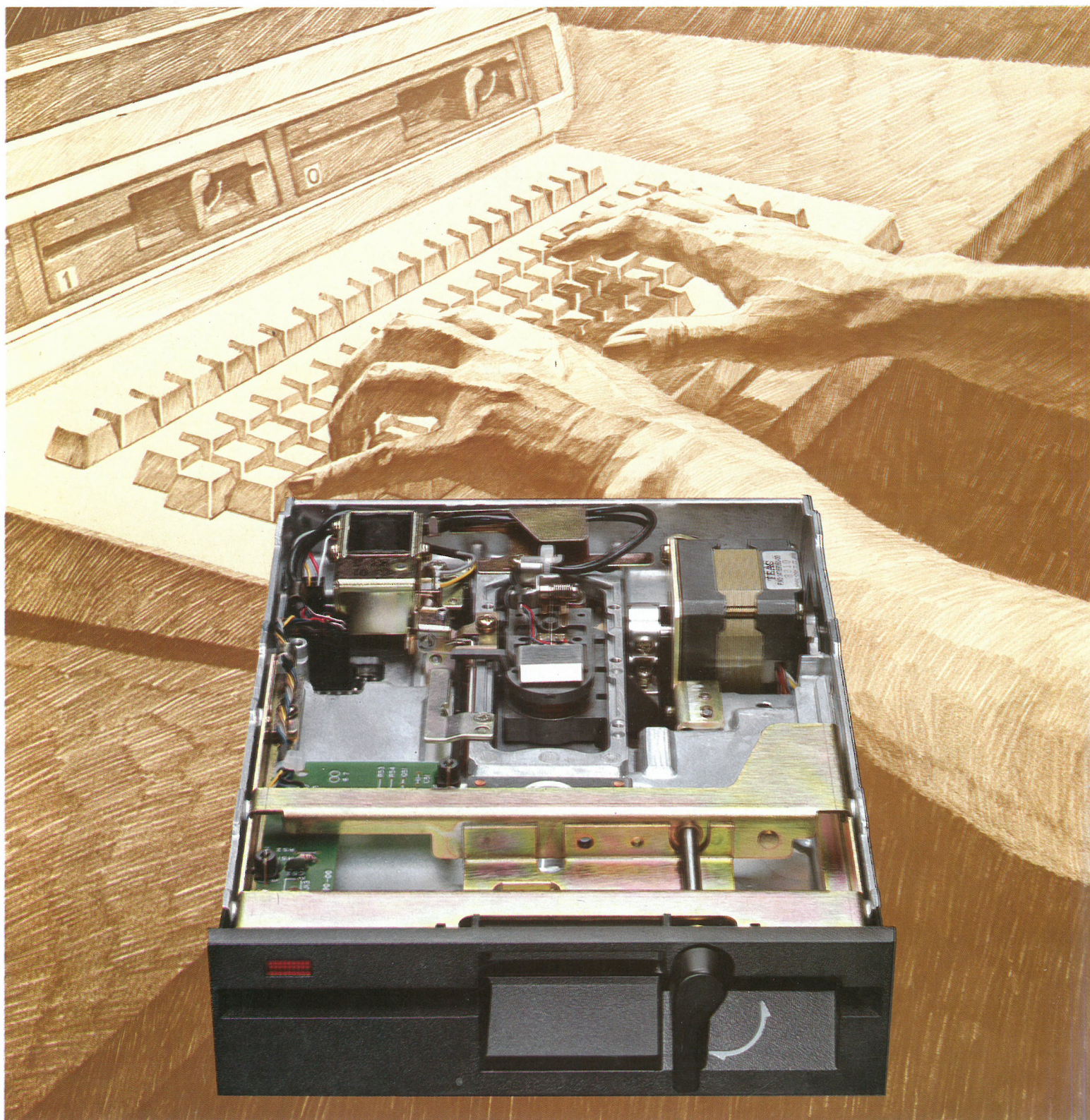


TEAC[®]
5-1/4" FLOPPY
DISK DRIVES

FD-55Series

- 5 models of 5-1/4" floppy disk drives
- 1/2 the height of conventional drives
- Choice of capacity from 125 KBytes to 1.6 MBytes
- New TEAC LSIs reduce power consumption, increase reliability
- Brushless DC direct drive motor
- High-speed data access



The FD-55 Series Gives You More Performance in Less Space

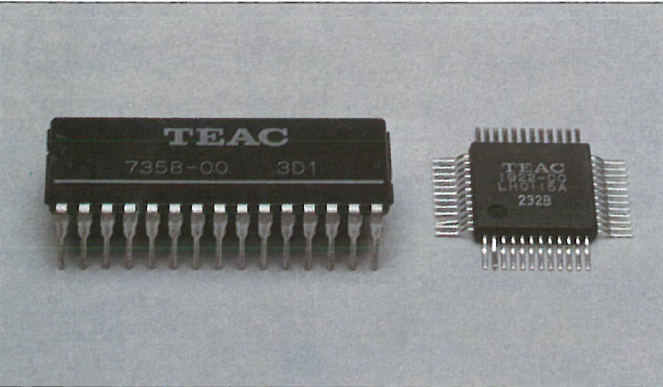
FD-55Series

1/2-Height Size

All models in the FD-55 Series are only 41 mm high—half the height of conventional drives. You can double your data storage capacity without doubling the space your equipment takes up.

New LSIs

Two new TEAC-developed LSIs handle the control and read/write functions, replacing two PCBs which ate up space in previous models. They provide increased reliability, reduced power consumption (4.9 W while operating), and more space for options.



Perfect Disk Registration

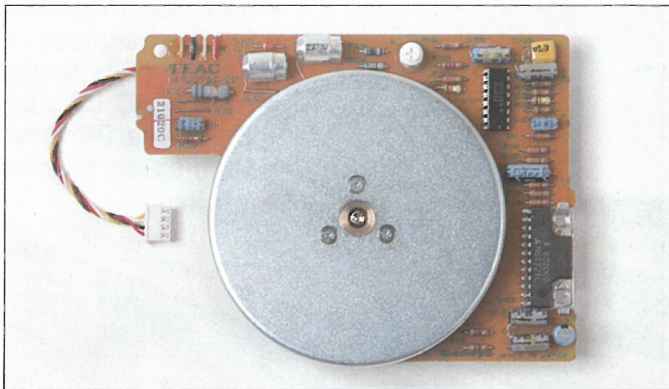
The extra space afforded by the LSIs also let TEAC employ a new disk registration method. When the disk is inserted, the spindle motor starts automatically and runs for 10 seconds, ensuring that the disk is perfectly centered when it is clamped down.

Low Power, Heat Generation

TEAC floppy disk drives have always been low power consumers, and the FD-55 models are even more so, due to a new motor and circuitry. This low power consumption makes system planning a whole lot easier. Their low heat generation is important, too, since the compact size means two can be used where one was formerly.

Brushless DC Direct Drive Motor

This motor is so durable (lifetime over 10,000 hours) that it can be left running continuously, so there is no start-up time. And the electrical noise caused by brushes in conventional motors has been eliminated.

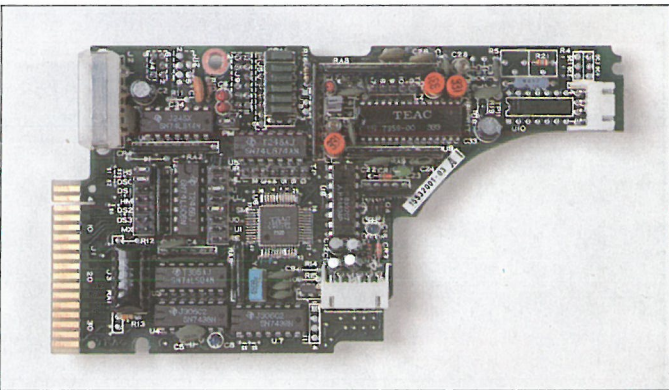


High Speed Access

Data access in the FD-55 series is super-fast. Track-to-track access time is 3 msec. in the E, F and G models, and 6 msec. in the A and B models.

LED/Photo Sensor System

Mechanical sensors have been eliminated in the FD-55 Series. Write protect, index, and track 00 sensing are all done by an LED and photo sensor system. Precision and reliability are both significantly higher.



Other features

- Full compatibility with TEAC FD-50 Series
- High-accuracy band positioner
- FM and MFM recording methods
- Protection against accidental erasure
- Voltage-sensing circuit prevents spurious writes when power switched on and off
- Daisy-chain up to four drives
- Optional Head Load Solenoid

FD-55G

The FD-55G is the newest addition to TEAC's outstanding FD-55 series. It packs a huge amount of data—1.6 megabytes—onto a 5-1/4" floppy disk, and does it in a slim, compact body that is only 41 mm high. It features a double sided, double track density format with 96 tpi track density. And since capacity and transfer rate are compatible with 8" floppy disk drives, you can transfer data from 8" to 5-1/4" floppies and use the FD-55G to compactly design your system.

Choice of 5 Models.

All the FD-55 Series models offer the same performance and features—the differences are in capacity.

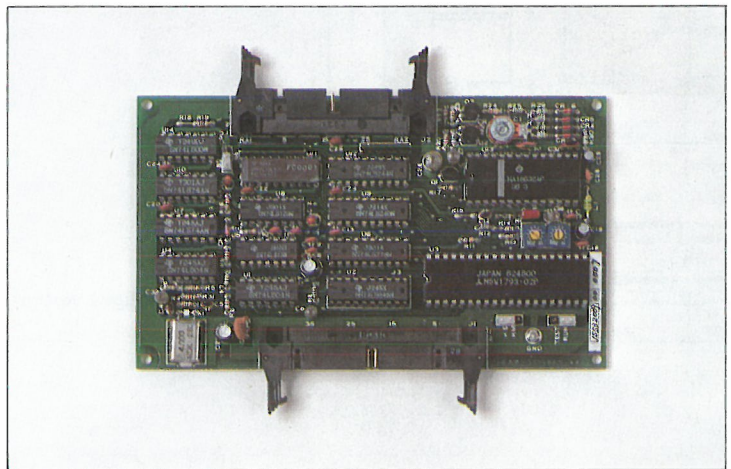
- FD-55A**
- Single sided
 - Track density: 48 tpi
 - Tracks/disk: 40
 - Data capacity: 250 KBytes

- FD-55B**
- Double sided
 - Track density: 48 tpi
 - Tracks/disk: 80
 - Data capacity: 500 KBytes

- FD-55E**
- Single sided
 - Track density: 96 tpi
 - Tracks/disk: 80
 - Data capacity: 500 KBytes

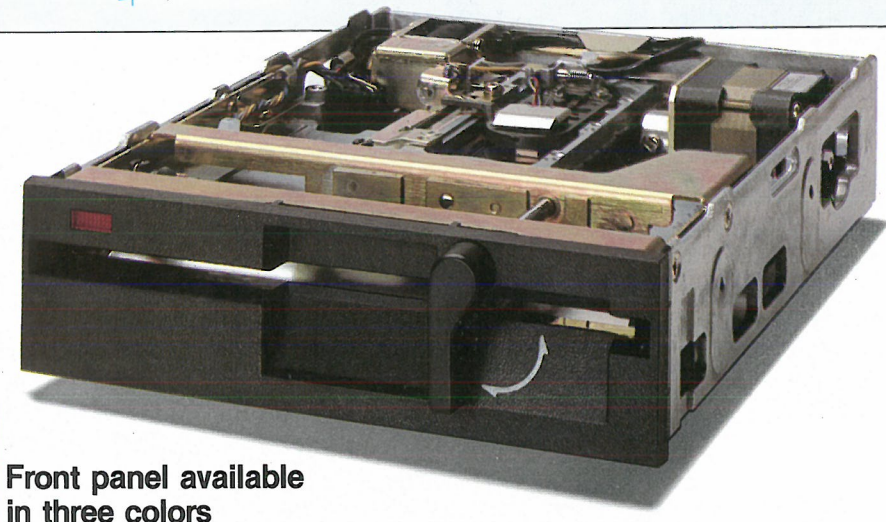
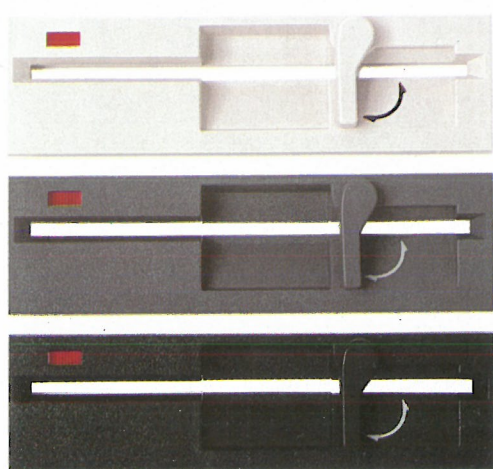
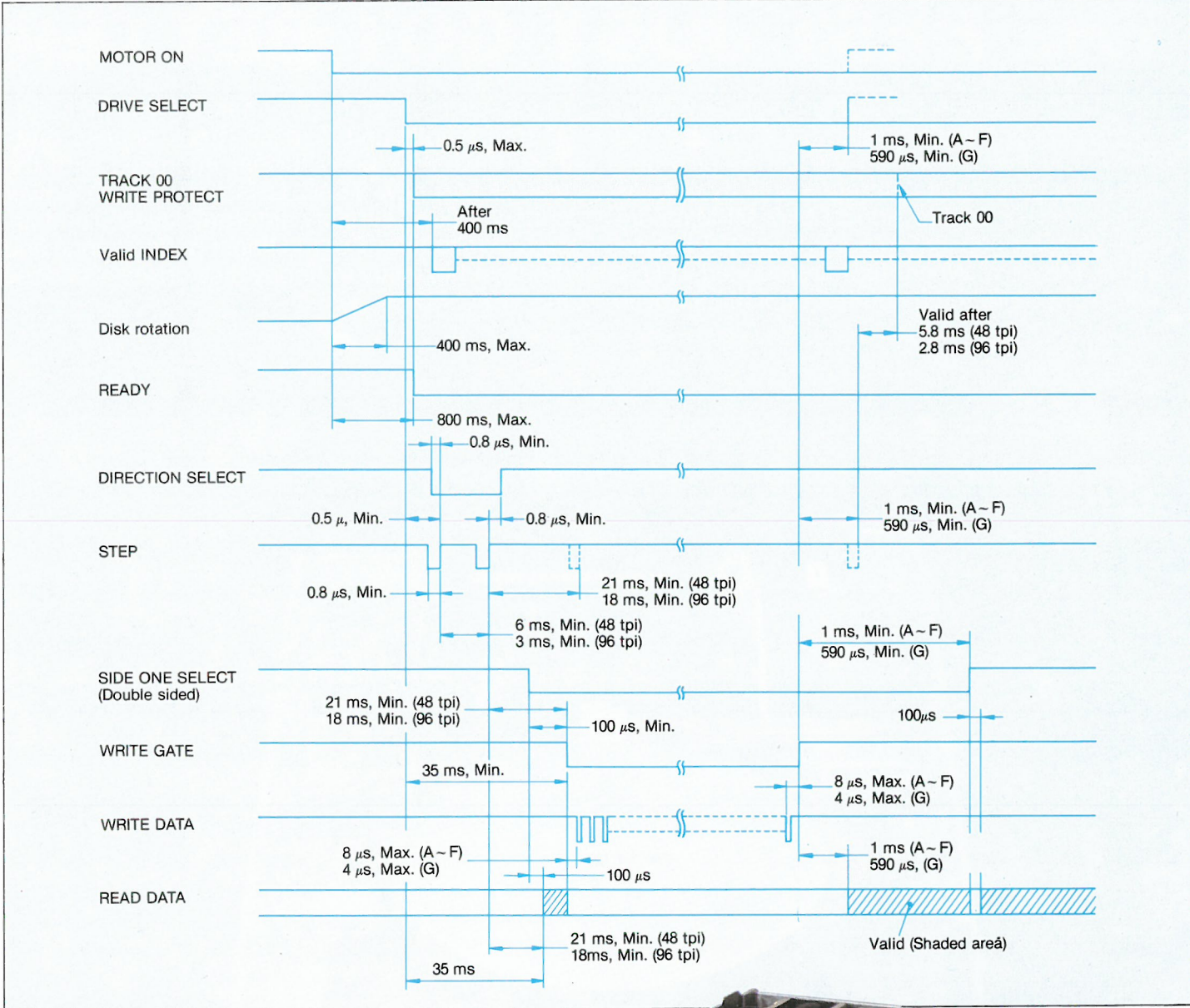
- FD-55F**
- Double sided
 - Track density: 96 tpi
 - Tracks/disk: 160
 - Data capacity: 1 MByte

- FD-55G**
- Double sided
 - Track density: 96 tpi
 - Tracks/disk: 160
 - Data capacity: 1.6 MBytes



Floppy Disk Controller

The FC-55 5-1/4" Floppy Disk Controller makes interfacing FD-55 Series drives to micro-processors an easy matter. Two versions are available—one for the A, B, E and F models, and one for the G model. The FC-55 is even smaller and more reliable than previous TEAC controllers, thanks to incorporation of the VFO into an LSI.

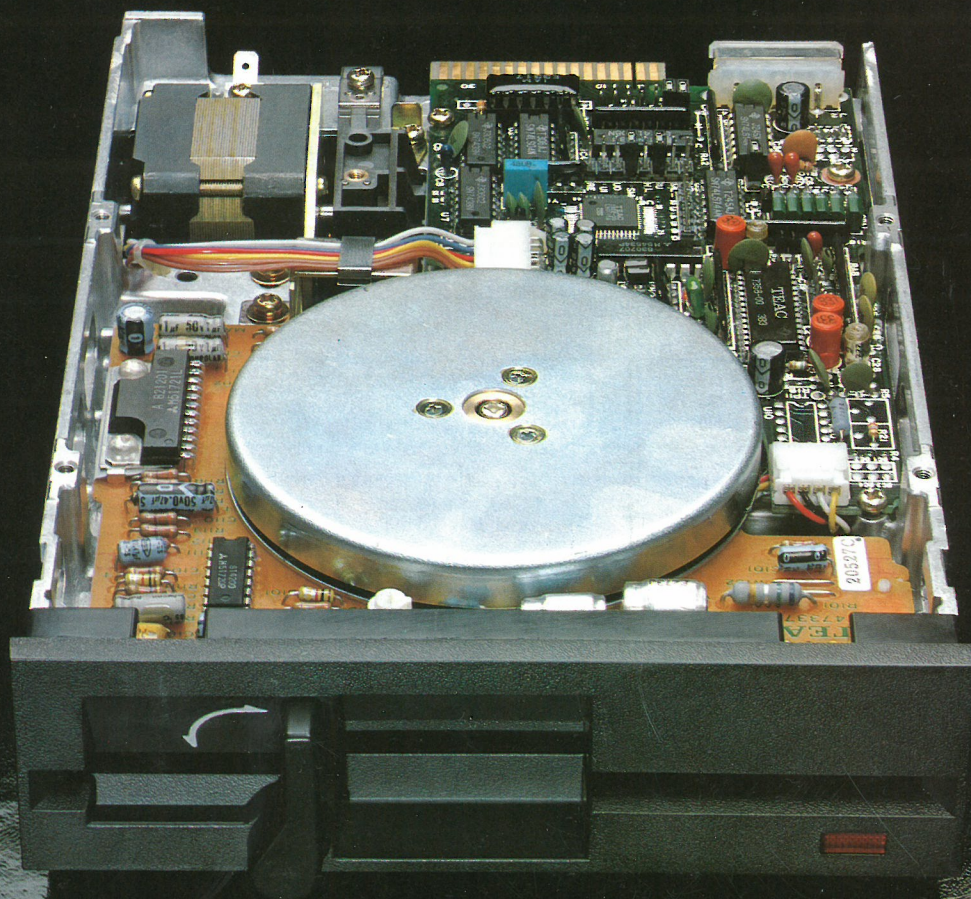


Front panel available in three colors

THE BEST JUST GOT BETTER

The FD-55 series is the culmination of TEAC's long experience in producing 5-1/4" floppy disk drives. The five models in the series provide a wide selection of data storage capacity options: single-sided or double-sided, FM or MFM recording—so total capacity ranges from 125 KBytes to 1.6 MBytes. When first introduced, FD-55 series drives offered a number of distinct advan-

tages over other floppy disk drives, including 41-mm height and 3 msec. track access time. They have now been further improved with the use of two new TEAC LSIs that reduce power consumption, simplify internal layout, and increase reliability. For the finest performance and greatest flexibility in floppy disk drives—choose the TEAC FD-55 Series.



SPECIFICATIONS

Recording Method:

FM (single density), MFM (double density)

Motor Starting Time: 400 ms

Index: 1

MTBF: more than 10,000 hours

Error Rates

Soft Errors: 1 per 10^9 bits (up to 2 retries)

Hard Errors: 1 per 10^{12} bits

Seek Errors: 1 per 10^6 seeks

Temperature

Operating: 4° — 46° C

Transportation: -40° — 65° C

Storage: -22° — 60° C

Relative Humidity

Operating: 20—80% (noncondensing)

Max. Wet Bulb Temperature: 29° C

Transportation: 5—95% (noncondensing)

Max. Wet Bulb Temperature: 45° C

Storage: 10—90% (noncondensing)

Max. Wet Bulb Temperature: 40° C

Power Requirements

DC + 12 V $\pm 5\%$ 0.25 A Typ., 0.9 A max.

DC + 5 V $\pm 5\%$ 0.38 A typ., 0.6 A max.

Power Consumption

Operating: 4.9 W

Non-Operating: 1.6 W

Dimensions

(W \times H \times D): 146 \times 41 \times 203 mm

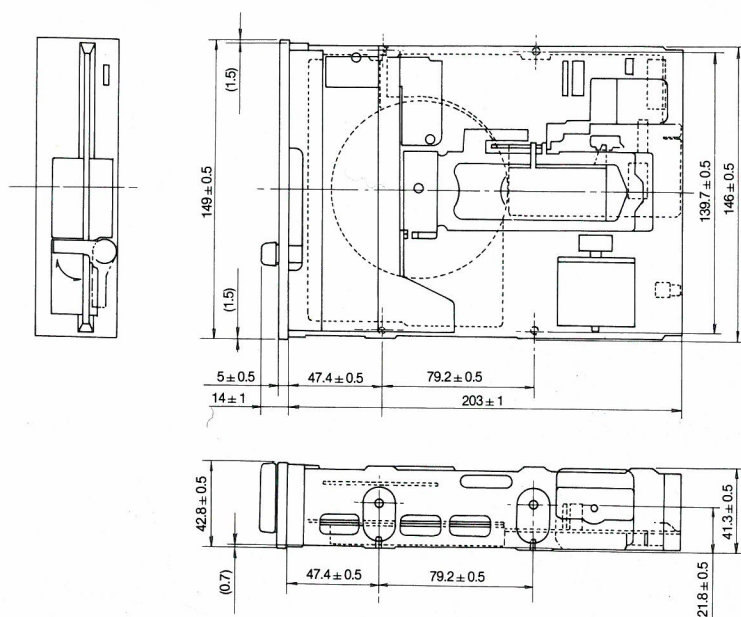
(5-3/4" \times 1-5/8" \times 8")

Weight: less than 1.5 kg (3 lbs. 5 oz.)

Component Life: 5 years

Safety Standard: Complying with UL and CSA

			FD-55A		FD-55B		FD-55E		FD-55F		FD-55G		
			FM	MFM	FM	MFM	FM	MFM	FM	MFM	FM	MFM	
Transfer Rate (K bits/sec)			125	250	125	250	125	250	125	250	250	500	
Capacity (K bytes)	Unformatted	Per Track	3.125	6.25	3.125	6.25	3.125	6.25	3.125	6.25	5.028	10.416	
		Per Disk	125	250	250	500	250	500	500	1,000	802	1,604	
	Formatted (16 sectors/ track)*	Per Sector	0.128	0.256	0.128	0.256	0.128	0.256	0.128	0.256	0.256	0.512	
		Per Track	2.048	4.096	2.048	4.096	2.048	4.096	2.048	4.098	3.840	7.680	
		Per Disk	81.92	163.84	163.84	327.68	163.84	327.68	327.68	655.36	591	1,183	
Inside Track Recording Density (bpi)			2768	5536	2938	5876	2788	5576	2961	5922	4823	9646	
Inside Track Flux Density (frpi)			5536		5876		5576		5922		9646		
Tracks/Disk			40		80		80		160		154		
Track Density (tpi)			48				96						
Track Radius (mm)	Outside		57.150		side 0 : 57.150 1 : 55.033		57.150		side 0 : 57.150 1 : 55.033				
	Inside		36.513		side 0 : 36.513 1 : 34.396		36.248		side 0 : 36.248 1 : 34.131		side 0 : 37.042 1 : 34.925		
Average Access Time (ms)			93				94				91		
Track Access Time (ms)			6				3						
Settling Time (ms)			15										
Disk Rotational Speed (rpm)			300									360	



Zuständiges Vertriebsbüro:

nbn
ELEKTRONIK

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