

Inter-Tech ST-5255

INTER TECH ST-5255 Removable Frame 5-Way User Manual

Model: ST-5255 (88887370)

1. INTRODUCTION

The Inter-Tech ST-5255 is a versatile 5-way removable frame designed to accommodate up to five 2.5-inch or 3.5-inch hard drives within three standard 5.25-inch drive bays of a computer chassis. This unit facilitates easy installation and removal of storage devices, supporting data transfer speeds up to 6Gb/s (SATA III or SAS). It is an ideal solution for expanding storage capacity or implementing RAID configurations (requires a separate RAID controller).

2. SAFETY INFORMATION

- Always disconnect power from your computer before installing or removing any internal components.
- Handle hard drives and the frame with care to prevent damage from electrostatic discharge. Use an anti-static wrist strap if available.
- Ensure proper ventilation around the computer chassis to prevent overheating.
- Do not expose the device to moisture or extreme temperatures.
- Only use compatible power and data cables.

3. PACKAGE CONTENTS

Please verify that all items are present in the package:

- Inter-Tech ST-5255 5-Way Removable Frame
- Hard Drive Trays (5 units)
- Mounting Screws
- User Manual (this document)

Note: Individual S-ATA data cables and a RAID controller are not included and must be purchased separately if required.

4. SETUP AND INSTALLATION

4.1. Preparing the Computer Chassis

1. Power off your computer and disconnect the power cable.

2. Open the computer chassis to access the internal drive bays.
3. Identify three consecutive empty 5.25-inch drive bays. Remove any front bezels or covers from these bays.

4.2. Installing the Removable Frame

Slide the ST-5255 frame into the three available 5.25-inch bays from the front of the chassis. Secure the frame using the provided mounting screws on both sides of the chassis. Ensure the frame is firmly seated.



Figure 1: The Inter-Tech ST-5255 5-way removable frame, shown installed, ready for hard drive insertion. This image displays the front and side profile of the unit.

4.3. Installing Hard Drives into Trays

Each hard drive tray supports one 2.5-inch or 3.5-inch hard drive.

1. Pull out an empty drive tray from the ST-5255 frame by pressing the release lever and pulling the handle.

2. Place your 2.5-inch or 3.5-inch hard drive into the tray. Align the screw holes on the drive with those on the tray.
3. Secure the hard drive to the tray using appropriate screws (not included with the frame, typically provided with hard drives).
4. Slide the populated tray back into an empty slot in the ST-5255 frame until it clicks into place.



Figure 2: A single removable drive tray, designed to hold either a 2.5-inch or 3.5-inch hard drive, ready for insertion into the ST-5255 frame.

4.4. Connecting Cables

The ST-5255 requires five individual S-ATA data cables (one for each drive bay) and two 4-pin Molex power connectors.

1. Connect one end of each S-ATA data cable to the corresponding port on the rear of the ST-5255 frame.
2. Connect the other end of each S-ATA data cable to an available S-ATA port on your motherboard or RAID controller.
3. Connect two 4-pin Molex power connectors from your power supply unit (PSU) to the power ports on the rear of the ST-5255 frame.



Figure 3: Rear panel of the ST-5255, illustrating the integrated 80mm cooling fan, five individual SATA data ports, and two 4-pin Molex power connectors.

4.5. RAID Configuration (Optional)

For RAID functionality, a separate RAID controller is required. The ST-5255 itself does not provide RAID capabilities. Refer to your RAID controller's manual for specific setup instructions.

Important Note for Intel Onboard S-ATA Controllers: When using this product with Intel Onboard S-ATA controllers, the controller must be explicitly set to "hot plug/external port" in RAID mode or the individual ports of the controller. If these settings are not available, error-free operation, especially hot-swapping, may only be possible with an additional S-ATA controller.

5. OPERATING INSTRUCTIONS

5.1. Powering On

After completing all connections, close your computer chassis, reconnect the power cable, and power on your computer. The installed hard drives should be detected by your operating system or RAID controller.

5.2. Hot-Swapping Drives

The ST-5255 supports hot-swapping of hard drives, provided your motherboard or RAID controller also supports this feature and is configured correctly (refer to section 4.5). To hot-swap a drive:

1. Safely eject or unmount the drive from your operating system.
2. Press the release lever on the desired drive bay and pull the handle to remove the drive tray.
3. Replace the old drive with a new one in the tray (refer to section 4.3).
4. Slide the new drive tray back into the bay until it locks. The new drive should be detected by the system.

5.3. LED Indicators

Each drive bay typically features LED indicators:

- **Power/Activity LED:** Usually illuminates when a drive is powered on and blinks during data access.



Figure 4: Front view of the ST-5255, showing the five individual drive bays with their respective handles and LED indicators.

6. MAINTENANCE

- **Cleaning:** Periodically clean the exterior of the frame and the fan grille to prevent dust buildup, which can impede airflow and cooling performance. Use a soft, dry cloth. For internal cleaning, disconnect power and use compressed air.
- **Fan Inspection:** Check the integrated 80mm fan periodically for proper operation. If the fan becomes noisy or stops working, consider replacing it to ensure adequate cooling for your hard drives.

7. TROUBLESHOOTING

- **Drives Not Detected:**
 - Ensure all S-ATA data cables are securely connected to both the frame and the motherboard/controller.
 - Verify that both 4-pin Molex power connectors are firmly attached to the frame.
 - Check if the hard drives are properly seated and secured within their trays.
 - Confirm that your motherboard's BIOS/UEFI settings or RAID controller configuration recognize the S-ATA ports.
 - If using an Intel Onboard S-ATA controller, ensure "hot plug/external port" settings are enabled if applicable (refer to section 4.5).
- **Overheating Issues:**
 - Ensure the integrated 80mm fan is operating correctly.
 - Check for dust buildup on the fan and vents and clean if necessary.
 - Verify that your computer chassis has adequate airflow.
- **Slow Data Transfer:**
 - Ensure you are using S-ATA III compatible cables and your motherboard/controller supports 6Gb/s speeds.
 - Check the health of your hard drives.

8. SPECIFICATIONS

Model	ST-5255 (88887370)
Brand	Inter-Tech
Drive Bays	5 x 2.5-inch or 3.5-inch HDD/SSD
Required PC Bays	3 x 5.25-inch bays
Interface	SAS or SATA III (6Gb/s)
Data Transfer Rate	Up to 6 Gigabits Per Second
Power Connector	2 x 4-pin Molex
Cooling	Integrated 80 mm fan
Material	Plastic (Frame), Metal (Trays)
Color	Black
Item Weight	5.4 pounds (approx. 2.45 kg)
Compatible Devices	PC, Laptop (for drive compatibility, not direct laptop installation)

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Inter-Tech website or contact your point of purchase. Keep your proof of purchase for warranty claims.

