# ADDING EXTERNAL INTERNAL DRIVES TO A COMPUTER WITHOUT USING A USB DRIVE ADAPTER

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# SUMMARY

By using low-cost SATA data cables and SATA power cables, you can cheaply add internal drives outside of your computer. Doing so lets you share the same set of drives between two or more computers without incurring the expense of buying USB hard drive adapters.
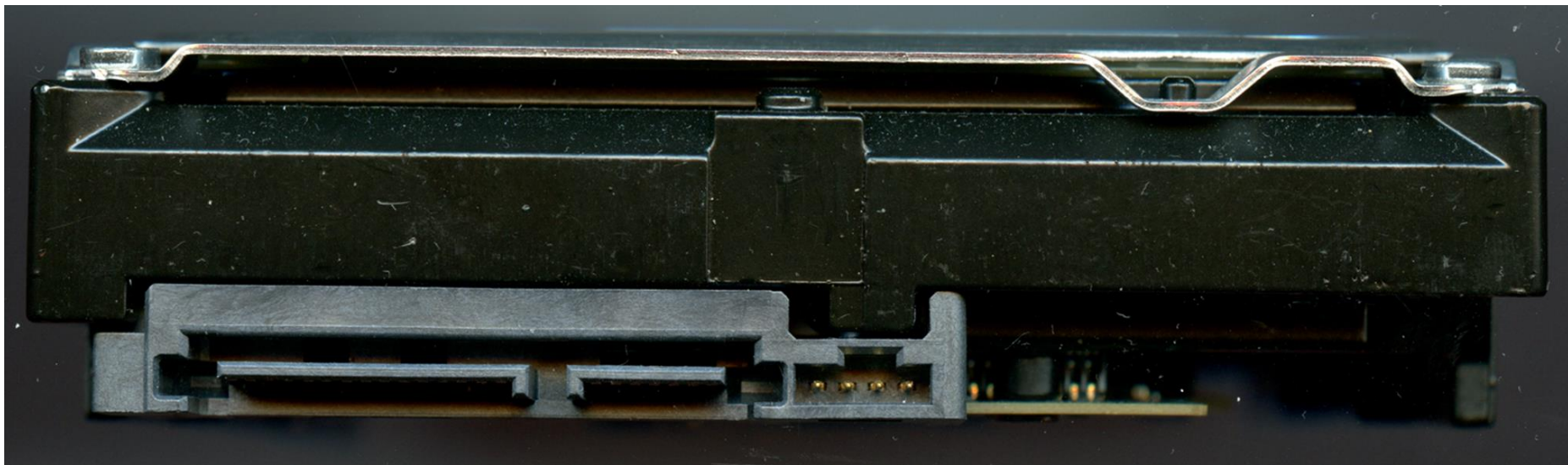
# TOPICS

- Ports In A SATA Hard Drive Or A 2.5-in SATA SSD

- Attaching An External Internal Drive To Your Computer, Using A SATA Data Cable and a SATA Power Extension Cable

PORTS IN A SATA HARD DRIVE OR 3.5-IN. SATA SSD:

Any 3.5-in. SATA hard drive, 2.5-in. SATA hard drive, or 2.5-in. SATA solid state drive (SSD) will have the following standardized configuration consisting of a SATA power port and a SATA data port:
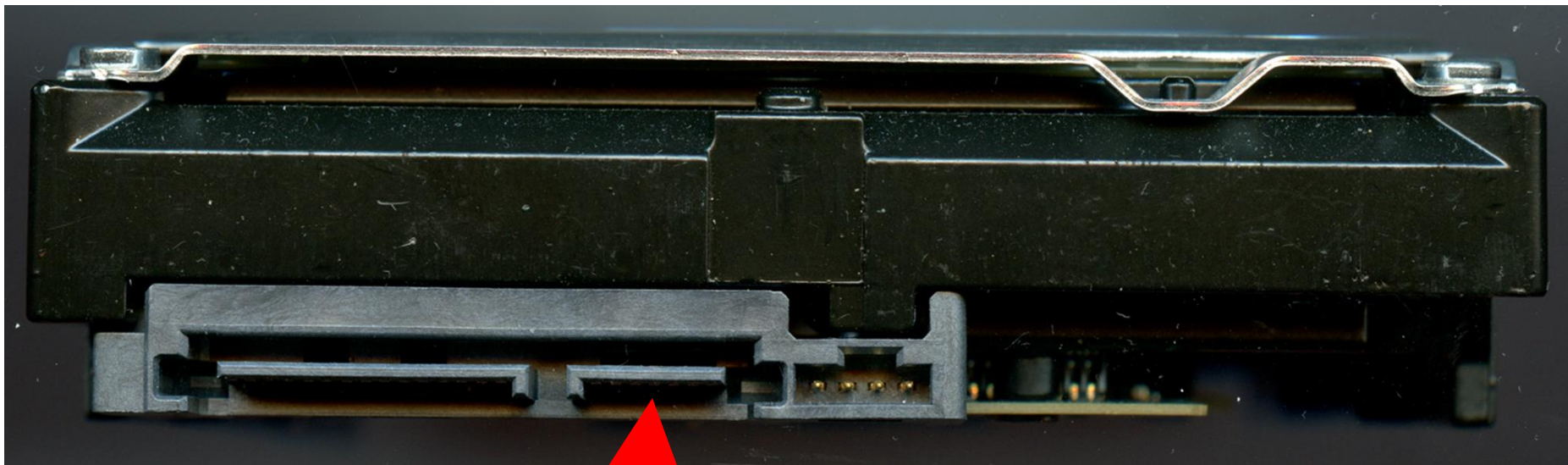
# PORTS IN A SATA HARD DRIVE OR SATA SSD (continued):

Here is how the two ports look on an "internal" 3.5-in. hard drive:
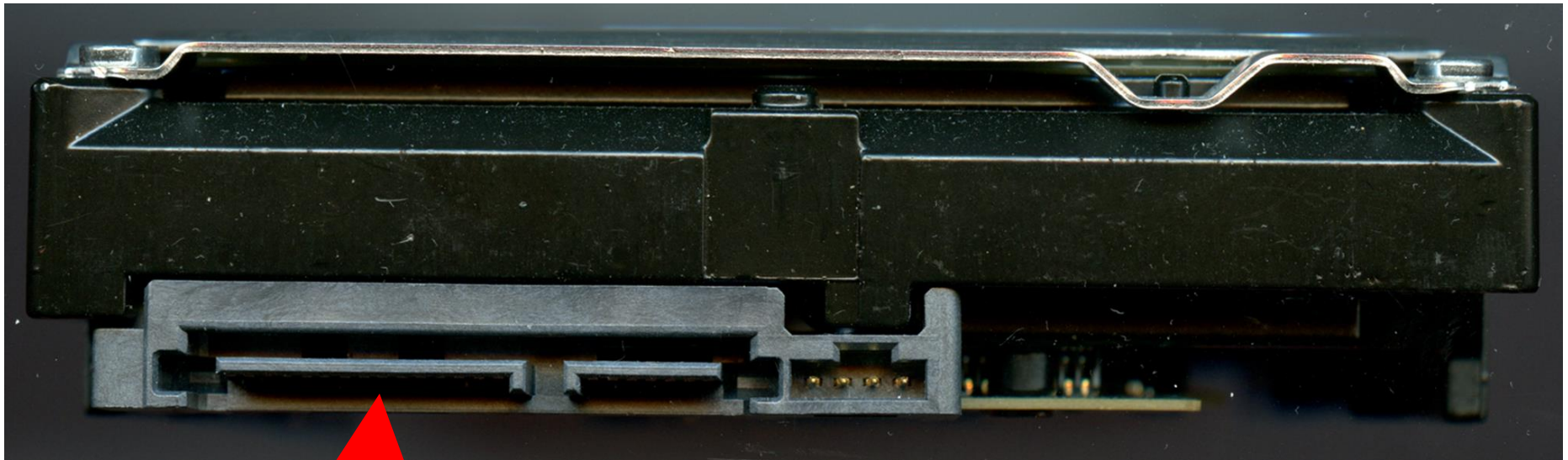
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# PORTS IN A SATA HARD DRIVE OR SATA SSD (continued):

The SATA data port is the smaller port on the right:

# PORTS IN A SATA HARD DRIVE OR SSD (continued):

The SATA power jack is the larger port on the left:

# PORTS IN A SATA HARD DRIVE OR SSD (continued):

Here is how the two ports look on a 2.5-in. hard drive or a 2.5-in SATA Solid State Drive:

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# PORTS IN A SATA HARD DRIVE OR SSD (continued):

To connect a SATA hard drive or 3.5-inch SATA SSD to a computer, you have to make two connections:
a connection to the SATA data port
and
a connection to the SATA power port.

ATTACHING AN EXTERNAL INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE

To connect an internal hard drive or a SATA-type SSD to your computer as cheaply as possible, you can use SATA data cables and/or SATA power extension cables instead of USB enclosures/adapters:

# ATTACHING AN INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE (continued)

Be sure to power down your computer before you make these two connections.

# ATTACHING AN INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE (continued)

For SATA hard drives and SSDs, the plugs at the end of SATA power and SATA data cables are "female" ports. and the corresponding receptacle ports on the SATA hard drives and SSDs are "male" plugs.

# ATTACHING AN INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE (continued)

Here is a good quality 40-inch SATA data cable that you can use to connect a SATA port on a motherboard to the SATA data port of 3.5-in. hard drive, a 2.5-in. hard drive, or a SATA-type SSD

Roll over image to zoom in

# Micro Connectors F03-152 SATA III (6Gb) Data Cable Straight, 1 Meter

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$10⁶⁰

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Color: **Red**

Size: **40" (STRAIGHT)**

# ATTACHING AN INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE (continued)

https://www.amazon.com/dp/B000GG1QEW/ref=twister_B07P44DNQ1?th=1

# ATTACHING AN INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE (continued)

Here is a good SATA power extension cable that you can use to connect a SATA power cable on the power supply of the computer to the SATA data port of 3.5-in. hard drive, a 2.5-in. hard drive, or a SATA-type SSD

Roll over image to zoom in

# CRJ SATA Power Extension Cable with High Density Black Sleeving 24" Length (1-Pack)

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Size: **1-Pack**

| 1-Pack | 2-Pack |
|---|---|

| **Brand** | CRJ Electronics |
|---|---|
| **Connector Type** | Sata 15-pin Male Power Connector |
| **Color** | Black |
| **Connector Gender** | Male-to-Female |

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# ATTACHING AN INTERNAL HARD DRIVE OR AN SSD TO YOUR COMPUTER WITH A SATA DATA CABLE AND A SATA POWER CABLE (continued)

https://www.amazon.com/CRJ-Power-Extension-Density-Sleeving/dp/B0711M91D4/ref=sr_1_23?crid=17K8W7N1ODPTQ