

Re: fitting second hard drive

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From: R. C. White (RCWhite_at_msn.com)

Date: 03/12/04

Date: Fri, 12 Mar 2004 08:44:27 -0600

Hi, Mike.

See inline...

"Mike" <anonymous@discussions.microsoft.com> wrote in message news:9d8601c405ef\$c4fe2890\$a101280a@phx.gbl...

- > *I have some questions, if you would be so good as to give me further advice.*
- > *Is the socket that is mounted "piggy back" on the ribbon cable about six to eight inches from the existing hard drive, the one to plug the old hard drive in to?*

Yes. Newer cables have labels on these connectors. With older ones, it doesn't matter which of the two connectors is plugged into which drive, so long as the jumpers on the drives are properly set for Master or Slave. Some, though, insist that the Master be at the end of the cable, with the Slave on the middle connector.

- > *Peter, who has also kindly offered advice, says that if it is a 40 pin flat ribbon cable, which it is, I would need a new cable. Is that correct?*

Newer "80-pin" cables actually still have only 40-pin connectors. The cable itself, though, has 80 wires. It's hard to tell them apart at first glance, but a close look will show that the 80-wire cables have much finer traces so that they can get 80 wires into the same width as 40-wire cables. The extra 40 wires allow the high-speed drives/controllers to move data to/from the drives at much higher speeds. Either cable can be used for either drive, but your speed will be limited by the slower of the cable or the drive (or the controller).

- > *My motherboard manual-- I assume Peter's "mobo" means motherboard?-- says extra hard drives can be fitted using the onboard IDE connectors but not as a RAID array. I think that refers to the arrangement for connecting 2 drives together so that they work faster? Not something I would want. It goes on to say that however it is set up it*

> *will function in the ATA-133 protocol.*

Mainboard = motherboard (since that's what "daughterboards" plug into) = mobo for short.

I've never used RAID, but my two IDE drives are plugged into the HighPoint RAID connectors on my EPoX mobo, using 80-wire cables, so that they are the Master drives on the two connectors. (These drives were connected to the "standard" IDE connectors, but now only my CD/DVD drives are connected there.) Others here can explain RAID or point you to information about it. My HighPoint controller just lets my ATA-100 and ATA-133 drives work at their full speeds. My system normally boots from a SCSI drive and uses both IDEs as secondary drives.

> *The manual describes 16 different jumper switch settings*
> *but none of them refer to adding a slave hard drive. do*
> *you have any suggestions for that?*
> *The old hard drive jumper switch was straight forward to*
> *adust to the Slave option.*

I'm not sure if you mean the manual for the mobo or for the RAID controller or for one or more of the hard drives. What is the make and model of each of your HDs, for your mobo, and for your RAID controller if it is on an add-in card?

I've never seen hardware offering 16 different jumper settings. Usually there are just Master w/slave; Master (w/o slave); and Slave. Some newer ones also have one for "CS", or Cable Select.

> *Thanks again*
> *Mike*

RC

--

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Microsoft Windows MVP

> >Hi, Mike.

> >

> >Sounds like some computer terminology is confusing you.

> >

> >The typical PC today comes with two IDE channels built

> >in. These are called

> >the Primary and Secondary channels. Each can accept two

> >hard drives or

> >other devices (such as CD/DVD drives), so each cable that

> >connects the

> >drives to the mainboard has connectors for two drives.

> >The first drive on

> >each cable is the Master; the second is the Slave. The

> >newest system uses

> >"cable select" to determine automatically which drive is

> >master; older

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> >drives need to have "jumpers" set to distinguish them. A
> jumper is a sleeve
> >that fits over a pair of pins on the drive to
> electrically connect the pins.
> >
> >For a newbie, the hardest part might be working up the
> courage to actually
> >open the computer case and start poking around the
> unfamiliar insides.
> >Actually doing the job is no harder than changing the
> spark plugs in your
> >car. The job (both this first one and all future such
> upgrades and repairs)
> >will be MUCH easier if you read the manuals - and look at
> the pictures -
> >before you begin. You should have documentation for both
> the
> >computer/mainboard itself and for the HD, since different
> manufacturers use
> >different jumper settings and even change details between
> their own models.
> >
> >With all that behind us, all you need to do is to power
> down, open your
> >computer, plug in your second drive to the cable, and
> reboot. Leave your
> >main HD (your "boot device") as Master on the Primary
> channel. Add the old
> >drive as primary slave, or on either position on the
> secondary cable,
> >depending you what CD/DVDs you have connected. If your
> computer doesn't
> >automatically recognize the second HD, recheck the
> mainboard manual to see
> >if you need to set the BIOS to recognize it. If the
> computer sees the
> >drive, then WinXP should see it, too.
> >
> >In WinXP, use Disk Management (Run Diskmgmt.msc) to
> explore all your drives,
> >including the one you just added. Assign it a drive
> letter that does not
> >conflict with the letters you are already familiar with
> so that you can copy
> >files to and from it without confusion. Then simply use
> the normal Windows
> >commands to copy from the old drive to the new one. When
> you have retrieved
> >everything useful, you can use Disk Management to
> repartition and/or
> >reformat the old drive and use it for additional storage,
> if you like.
> >
> >Read the manuals, open the case, and begin. If you get
> stuck, tell us what
> >you did and what happened. We are a few steps ahead of
> you on the learning
> >curve, but we got here the same way you are about to, so
> we have a pretty
> >good idea of how you feel. ;<)
> >
> >RC

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> >
> >"mike" <anonymous@discussions.microsoft.com> wrote in
> message
> >news:909901c40551\$35e6e230\$a301280a@phx.gbl...
> >> I want to download info. from previous computer's hard
> >> drive onto my new one. I believe this can be done by
> >> something called slaving.
> >> Can anyone tell me if this is a difficult process for
> the
> >> inexperienced. Are there any particular pitfalls?
> >> If the answers to the above are favourable where would I
> >> look for instructions on the procedure?
> >> Thanks in advance for any advice.