

Windows XP Scanner and Camera Wizard

COMPLETE GUIDE

Mary Branscombe makes scanning and managing photos simpler in XP. From archiving images to tracking down lost wizards, you'll find it all here

→ AT A GLANCE

How Windows XP enables you to work with photos

As soon as you add a device with photo files, Windows XP should offer you the tools to work with them

YOUR PHOTOS

When you plug in a removable drive or put in a CD, Windows XP looks at the type of files on it and offers you relevant AutoPlay options

START THE WIZARD

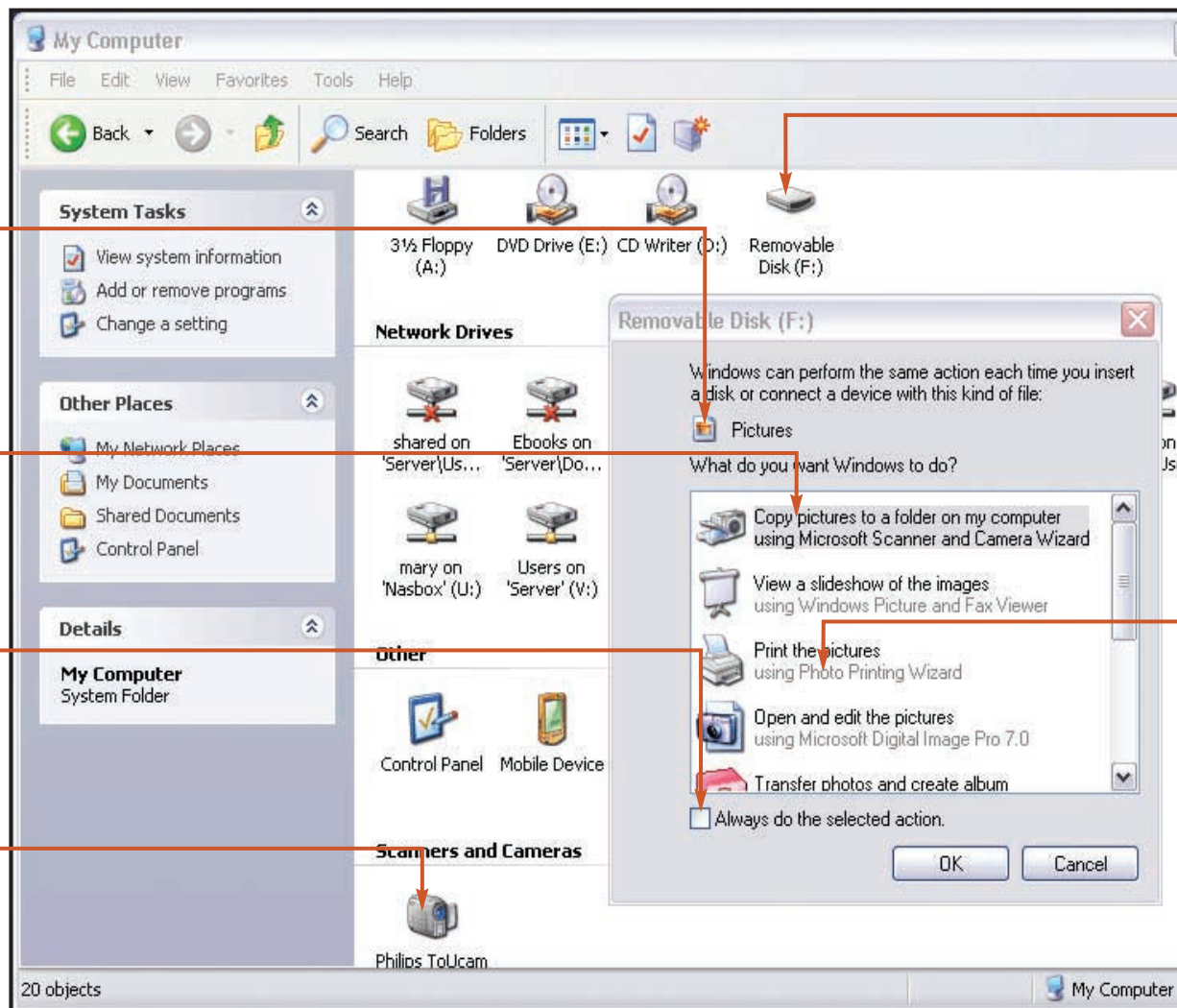
Click here to open the wizard, ready to work with the device that Windows has spotted the pictures on

MAKE YOUR MIND UP

If you always want to open the Scanner and Camera Wizard automatically, tick here to skip this AutoPlay dialog in future

YOUR CAMERAS

Turn on 'Show in Groups for My Computer' and your digital camera or Web cam will show up here



Compatible with Windows:

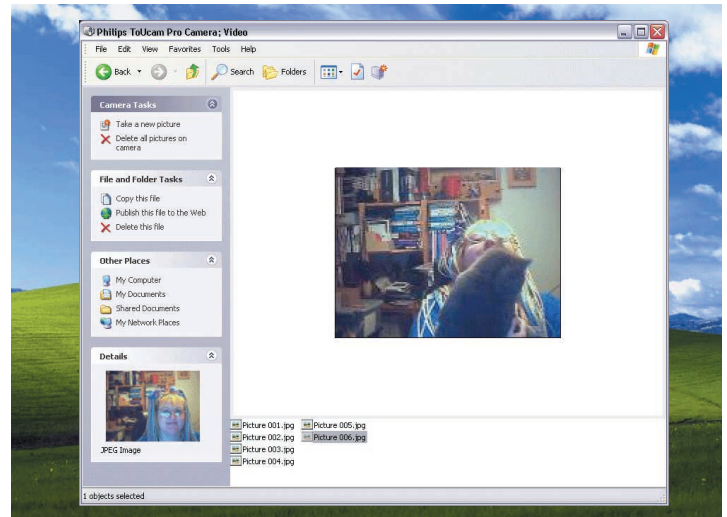


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Windows XP is pretty good at dealing with media. Look at a photo or an MP3 file in Explorer and you can find out a lot about it without having to open it because you can see the metadata for the file. For images this includes the EXIF data from the camera, such as when you took the photo (rather than when you copied the file to your PC) and whether the flash was on or not. To make it easier to work with your photos, XP has the Scanner and Camera Wizard, which helps you transfer photos, scan images and work with image files on your PC.

You don't have to use the Scanner and Camera Wizard to access your photos. Most scanners come with their own scanning software and most digital cameras show up as a removable drive in Explorer so you can just click the drive letter to open them. Your



If your Web cam can store pictures you can see those in Explorer as well as the live image

images on to your PC. For a start, it works with a variety of devices, including Web cams as well as standard digital cameras and

PC (or if you've had a traditional camera film developed on to CD). As soon as Windows XP spots that you've put in a CD with pictures on it, the AutoPlay dialog asks you if you want to start the wizard to transfer them to your PC.

Once you've transferred your photos, you can publish the ones you like best straight to your Web site, or send them to an online service for professional printing, all without leaving the wizard.

THE WIZARD WORKS WITH A VARIETY OF DEVICES, INCLUDING WEB CAMS

pictures will probably be in a sub-folder rather than in the root of the drive. You can drag the images into a folder on your hard drive to copy them to your PC, but you have to delete them by hand and you have to change the file names individually, too. You may be able to preview them in the camera by switching the view to Thumbnail, but it's slow unless you have a USB2 connection.

Multi-talented wizard

Yet it's worth giving the wizard a try because it does more than just giving you a simple interface for getting

scanners. Many Web cams have internal memory that you can store photos in. This is handy for doing time-lapse photography or taking a few quick snaps to see which you like best, which is much more convenient when you don't have to transfer the images one at a time. Start the wizard with your Web cam and you are presented with a live preview for taking your snaps. In addition, you can see any images you've taken with the Web cam and not deleted or transferred already.

You can also use it with a CD of photos that you've archived from your

→ BETTER PRINTS

Top printing advice

Speed up your prints and get better pictures

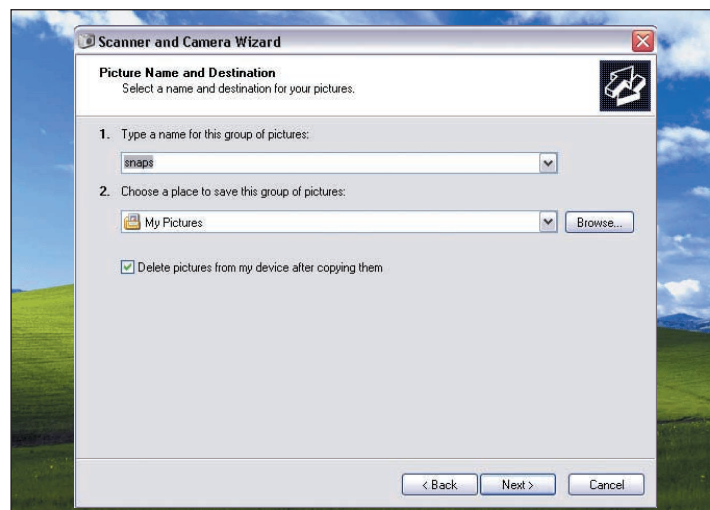
The Photo Printing Wizard is similar to the Scanner and Camera Wizard: it walks you through picking the images you want and laying them out on the page so you don't waste paper. It can be a bit tedious to keep clicking Next if you're only printing one picture. Instead, you can drag the image file on to the icon of your printer in Explorer to get a full-page print. That only uses your printer's default settings, so use the wizard if you want to check the resolution or select manual feed rather than the main print tray. It's also worth spending a few seconds checking that your printer cartridge is aligned before you print on photo paper.

ANYTHING WITH PICTURES

It doesn't matter if you use a card reader for your memory card, you have a CD full of photos, or you don't have the specific driver for your camera so Windows only sees it as a removable drive. As long as there are photos on there the wizard will work

STRAIGHT TO PRINTING

Click here if you want to print the pictures straight away without copying them to your PC first



The wizard copies, renames and deletes the images from your camera all in one go

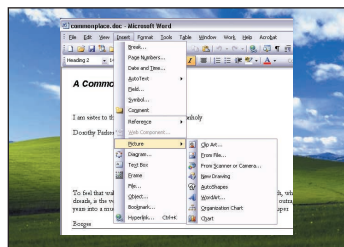
Straightforward scanning tips

Get the pictures you've already got into your PC with the minimum of fuss

All scanners come with their own scanning software, but as long as there's a TWAIN driver you can use it in any image-editing software. The scanning interface in the Windows XP Scanner and Camera Wizard is simple, and it has the key features you need to get your photos into your PC.

You can start it by double-clicking your scanner in My Computer or from inside an application if you know you want to use the image there. If you're working from an application and you've got more than one device on your PC, remember to pick your scanner from the drop-down Device menu. This will also show your digital camera and any other image devices on the system because you can insert a picture from a digital camera or Web cam through the same interface.

As you're scanning an image rather than importing a digital photo or grabbing an image from a Web cam, it doesn't matter whether you choose Web Quality or Print Quality for Resolution at this stage because you'll be able to choose exactly what you want later in the wizard. Print Quality gives you larger images that print out better. In contrast, Web

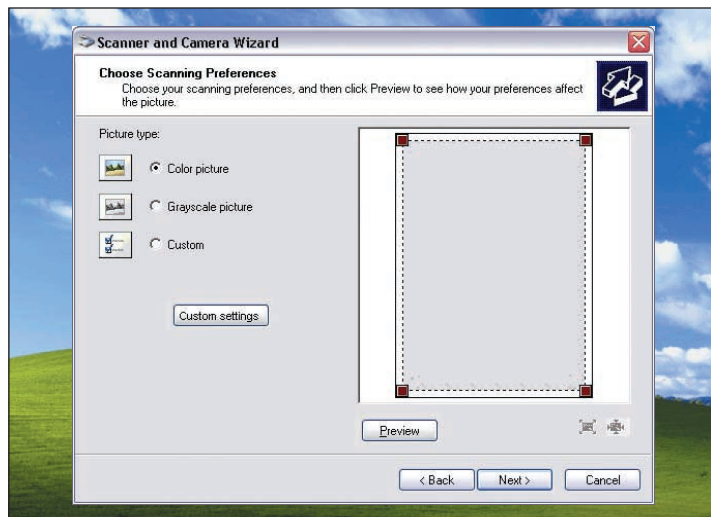


Most apps that work with documents can use the wizard to grab an image directly

quality lowers the image resolution so you get a smaller file that's good enough to look at on screen and won't take long to upload or email but doesn't look as good printed. Click Custom Insert to set the options for scanning.

Your scan, your choice

Like the rest of the wizard the dialog is simple but it has the settings you'll need most. You can choose to scan in colour, greyscale or black and white (use black and white if it's a document you plan to use for optical character recognition at some point). You can also choose Custom and Click Custom settings that enables you to pick the brightness, contrast and resolution to scan at as well as setting whether it's a colour, greyscale or black and white



The wizard has simple controls for the most common types of scan

image. You can only use the optical resolution of the scanner because the wizard can't do interpolation, unlike the software that's designed to drive the scanner. If you're going to use an image on screen – a Web page or a PowerPoint file – then 75dpi is enough. For images you plan to print out again pick something between 150 and 300dpi, depending on much disk space you've got free.

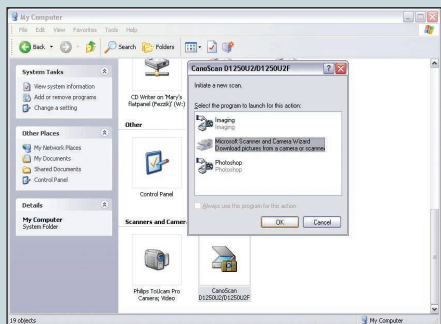
Click Preview: if there's only one picture on the scanner the wizard will

automatically select it, although you can drag the scanning boundaries if you only want a particular section of the image. You can put several images on your scanner at once and choose the scanning area for each of them by hand. When you click Scan the wizard asks for a group name and the file type you want: there's the choice of BMP, JPG, TIF and PNG. If you want to scan several pictures one after another click Back instead of Finish on the final screen.

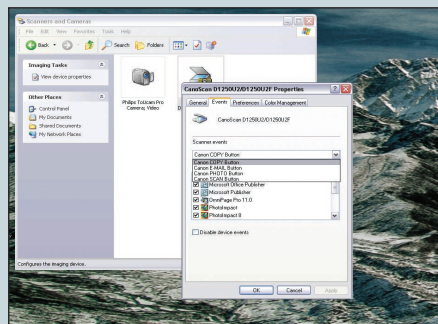
→STEP-BY-STEP GUIDE

Different ways of scanning

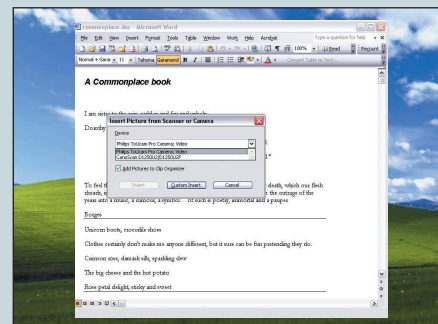
You can start the wizard from Explorer, from an application or from the scanner



01 Double-click your scanner in My Computer and you'll be faced with an AutoPlay dialog with the choice of scanning using the Scanner and Camera Wizard or through another application such as *Photoshop*.



02 If you want to start scanning by pressing a button on your scanner you can set that up from the Scanners and Cameras control panel. Pick a button that's assigned to a task you don't use, like sending a scan by email.

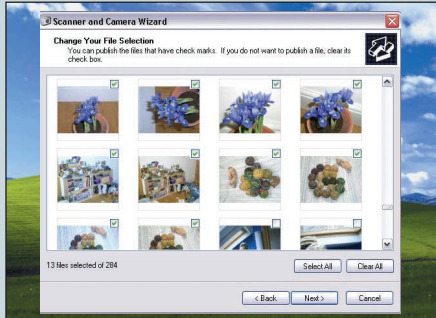


03 You can also start the scanning wizard from inside any application that works with documents. In image-editing applications the command is usually on the File menu but in *Word* it's Insert -> Picture -> From Scanner or Camera.

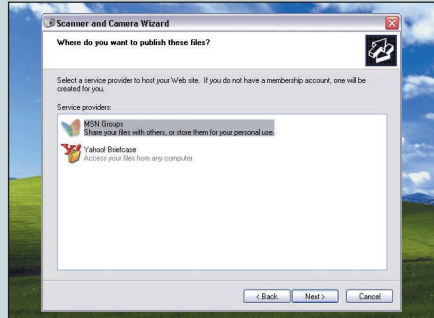
→STEP-BY-STEP GUIDE

Publishing your photos online

Use the Scanner and Camera Wizard to put your photos on to a free Web site



01 Once your photos are on your PC the wizard asks if you want to stop, print your photos or publish them to a Web site. The interface is similar, so you can pick a selection of your images. Furthermore, you don't have to only choose images you've just transferred because the wizard points at My Pictures.



02 Which Web hosting services you see here depends on what you already have set up on your PC, like Yahoo Messenger, but you'll always get MSN Groups. You don't have to have an MSN account already: you can sign up through the wizard because it just loads the appropriate Web pages.



03 Resize your pictures so they're smaller files. You have a limited amount of space on the site so you'll fit more pictures in this way, plus they'll upload more quickly. If you want to make the images smaller, use the Image Resizing PowerToy in Explorer and choose the resized images in the wizard.

Fixing problems with the wizard

What to do if you can't find the Scanner and Camera Wizard

Usually, the wizard opens automatically when you connect your camera or put a memory card into your reader. If it doesn't, you can try opening it from the My Pictures task pane or right-clicking the camera in My Computer and choosing Get Pictures. If you open the Scanners and Cameras control panel you'll also get the tools from the wizard in the task pane when you click your camera. Set your Start

menu to show Control Panel as a cascading menu and you can navigate straight to your camera.

The most common reason for the wizard not opening automatically is that you've turned off AutoPlay for removable devices. You can turn it back on by hand in the Registry. Find the HKEY_CURRENT_USER\Software\Microsoft\Windows\Current Version\Policies\Explorer key and make sure that the NoDriveTypeAutoRun

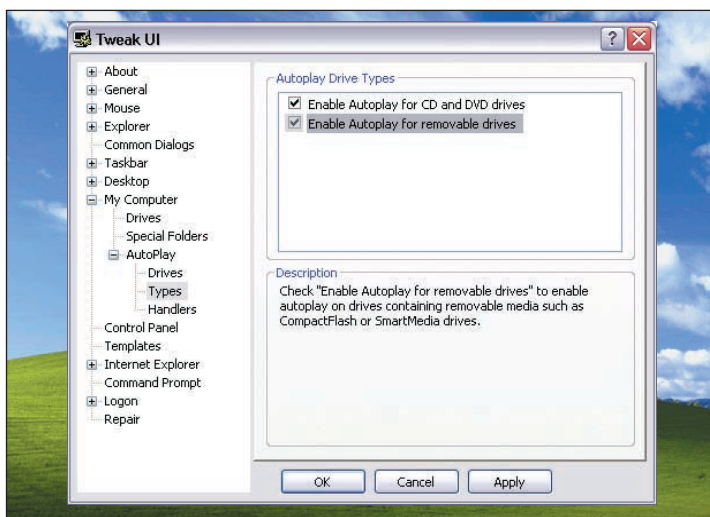
value is a REG_DWORD with the value 0x00000091 (145 decimal). More simply, download a copy of *Tweak UI* from www.microsoft.com/windowsxp/pro/downloads/powertoys.asp. In *Tweak UI* click My Computer -> AutoPlay -> Types and turn on 'Enable AutoPlay for removable drives'.

If that doesn't work, especially if the wizard worked when you first plugged your camera in but it doesn't work any more, then make sure the Shell Hardware Detection service is set to run automatically and log off and on again. Explorer only tries to register with the service when you start your PC. If it's not working at the time, it won't try to register again late and so it never gets a notification that you've attached a new device, which is what triggers AutoPlay.

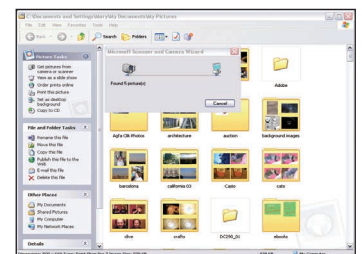
It's also possible that there are more serious problems with AutoPlay, especially if you get the AutoPlay dialog but can't get the Scanner and Camera Wizard to run. Check in the Registry for the [HKEY_LOCAL_MACHINE\SOFTWARE\Classes\WIA.AutoPlay DropHandler.1\shell\open\DropTarget] key (if it's not there create it). The Clsid value should be a REG_SZ string with the value {F1ABE2B5-C073-4dba-B6EB-FD7A511DD8F}. Again, it's simpler to use

the AutoPlay Repair Wizard that's designed to check and fix problems with AutoPlay settings. Search on www.microsoft.com/downloads for AutoPlay: the file is called AutoFixe.EXE. You can press the Repair button to apply the automatic fixes, then click Open Log to see what it's changed. AutoFix only works with cameras and devices that show up in My Computer as removable disks with their own drive letter.

If you've got your digital camera plugged into a USB hub and you find it doesn't work after you've unplugged it and then connected it, it's possible that the USB hub isn't responding. There's a fix for this in the Microsoft Download Centre too: search for Q810400_WXP_SP2_x86_ENU.exe to download it.



If the Scanner and Camera Wizard doesn't start when you connect your camera, use Tweak UI to turn AutoPlay back on



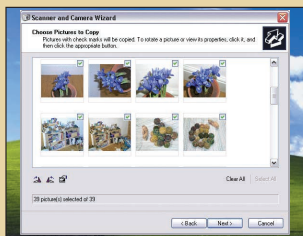
If the wizard doesn't start automatically click the link on the Task bar in My Pictures

→ INSIDE INFORMATION

HOW IT WORKS

The wizard can connect to most cameras without a driver

When you plug a new device into your PC the hardware recognition service informs Explorer about the new device. If there's an AutoPlay setting defined for the type of files on the device it opens the AutoPlay dialog with the list of tasks that are set up for those file types. When you put in a



The wizard can show you information about the files based on the EXIF data

CD that doesn't have an AutoRun.INF file it's the same process, so the Scanner and Camera Wizard works just as well for retrieving photos you've archived on to a CD as for getting them from your camera in the first place.

The wizard works with almost any camera because it can use PTP (Picture Transfer Protocol) to control the camera without having to use the software that comes with the camera. This is a standard USB protocol for transferring still images, and if your digital camera supports it then you don't need to install a driver – just plug it in and Windows can work with it.

PTP cameras show up as removable hard drives in Explorer, but the wizard can also work with cameras in USB mode as long as you have the drivers. If you can use a digital camera as a Web cam the wizard takes the streaming images from the camera in USB mode rather than PTP.

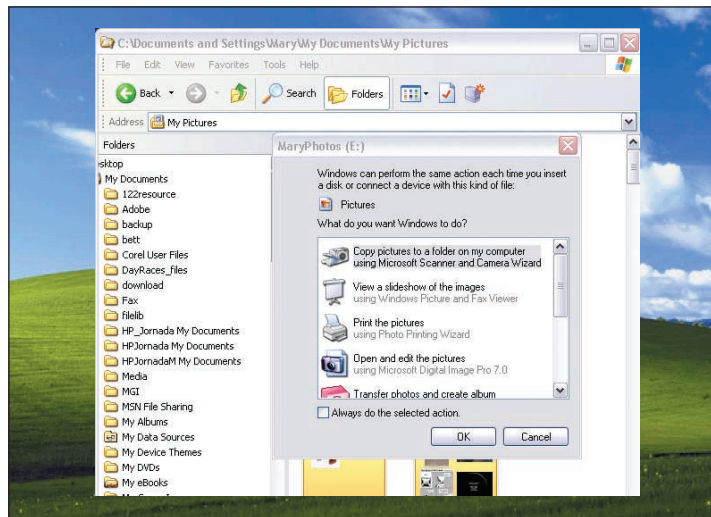
Advice for working with photos

The wizard saves you time – here's how to save more

The internal name your camera creates for a photo is pretty meaningless and the wizard renames the files for you using the description you give it as the group name. Although you can always sort the folder by date to get things in order, it's worth including a date in the file name because if you edit the file later then it gets a new timestamp. Put the year at the beginning of the filename: it's less intrusive, it won't get confusing when the wizard adds 002 to the end of the filename for your second picture and it'll keep you're my Pictures folder roughly sorted by date even when it's sorted alphabetically.

Bypass the wizard

Rather than clicking through the wizard screen by screen, you can instruct Windows XP to transfer pictures automatically as soon as you plug in your camera (this works for any Plug and Play camera that supports PTP or has a Windows image acquisition (WIA) driver). This is ideal for cameras that don't show up as



Your pictures don't have to be on a camera – you'll get the wizard for a CD of photos, too

removable drives in Explorer but just appear in My Computer.

Right-click the camera in My Computer and choose Properties -> Events -> Save all pictures to this folder. If the folder you want isn't in the list, click Browse to find it. Choose Delete pictures from camera after saving

them: not all cameras support it so you may have to delete them by hand, but if your camera can manage it this frees up your memory card quickly. Remember to rename the pictures in Explorer: you can select the whole batch and use File -> Rename to change all the filenames at once.

Configuring Windows to make the most of photos

Make your photos work better once you get them on to your PC

There's more you can do to Windows XP to make it easy to work with photos than just turning on the common tasks pane in my Pictures or switching to the Filmstrip view. For a start, make sure that your monitor is calibrated and that you're using the right profile for your monitor. Calibration sets up your

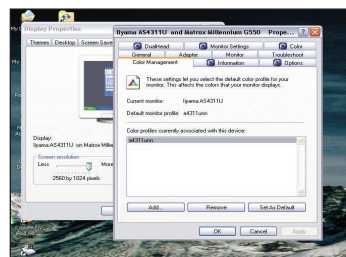
monitor so that white is white, black is black and grey doesn't have any tinge of colour in it, and it sets the screen brightness to the best level. Then you can profile how the screen displays colours, so that Windows can adjust the signals it sends to get an accurate image of your photos.

Consider calibration

You can calibrate your monitor by hand in a program like *Photoshop*, adjusting the brightness, contrast and colour temperature until the on-screen calibration tools look right. You get a much better result with a clip-on tools that measures the colour on-screen exactly. Start with a colour temperature of 65,000K (D65 or cool white) and a gamma of 2.2. Look on the Web site for your screen to see if



Don't rotate images in the viewer – you'll lose detail



Use the correct colour profile and you'll see a more accurate view of your photos

there's a standard monitor profile you can download to start with and choose it in the Display Properties control panel. Right-click the desktop and choose Properties -> Settings -> Advanced -> Colour Management and pick the profile. Profile files are usually in C:\WINDOWS\SYSTEM32\SPool\DRIVERS\COLOR. ■