NetworkEye/270-Colour v1.1 Release Notes

OVERVIEW

Microplex offers two frame servers: the **NetworkEye/270** (**NE**) which supports the black and white QuickCam for Windows from Connectix and the **NetworkEye/270-Colour** (**NE-C**) which supports the colour QuickCam for Windows. These frame servers have comparable configuration and image capturing methods but there are a few differences to be aware of. Therefore, these release notes expand on these differences plus they touch upon the new features incorporated into version 1.1 of the NetworkEye/270-Colour model. These notes should be used in conjunction with the NetworkEye/270 product manual you have also received.

DIFFERENCES BETWEEN MODELS

Camera Support

The NE-C supports the colour QuickCam for Windows from Connectix only. It cannot operate with the black and white camera.

Minimum Requirements

If you will be viewing the Java-produced images from the NE-C, you will need to use a Web browser that supports Java. However, *Choice of Image Delivery Method* on page 1 describes alternatives to this.

Image Format

The NE-C serves images in a portable pixmap (PPM) format which get transparently converted to JPEG with the help of a Microplex Java applet and a shareware utility called "cjpeg". In addition, version 1.1 now makes it possible to get JPEG images directly from the NE-C. However, the NE-C does *not* provide Graphics Interchange Format (GIF) images like the NE does with its black and white images.

HTML Forms

On-board HTML configuration pages can still be used to configure settings on the NE-C but additional settings like image hue and saturation can now be set. Online help is provided for these settings.

NEW FEATURES

Choice of Image Delivery Method

With firmware versions prior to 1.1, Portable Pixmap (PPM) formatted-images have to be converted to JPEG for display in a Web browser. This is transparently done through Microplex's own Java applet and an image conversion utility called "cjpeg".

With version 1.1, JPEG images are available right from the NE-C. This means there's no Java or image conversion requirements. You now have the choice to use the old image method (referred to as Java) or to use the new JPEG alternative.

Frame Rates

The frame or refresh rate may be an issue when deciding which image delivery method to choose. Therefore, these are the values for each:

Java:

• 320 x 240 pixels up to 4.0 seconds/frame
• 160 x 120 pixels up to 2.0 seconds/frame
• 80 x 60 pixels up to 1.5 seconds/frame

JPEG Direct:

• 320 x 240 pixels up to 30 seconds/frame
• 160 x 120 pixels up to 8.5 seconds/frame
• 80 x 60 pixels up to 3.5 seconds/frame

> **Note**: These rates are dependent on the Web browser and operating system used and the number of simultaneous viewers.

Viewing Images

As explained in the NE-C product manual, you can view the default image pages by clicking on "Sample Java Image" or "Sample Java Animation" once the NE-C's home page is displayed in a Web browser. The URL for this home page is "http://*NE-CIPaddress*" (e.g. "http://192.75.11.9"). Either image link displays a JPEG image transparently produced through the Java applet and a conversion utility, "cjpeg".

With version 1.1, the NE-C's home page now also includes links for "Sample JPEG Image" and "Sample JPEG Animation". These links display JPEG images acquired directly from the NE-C as JPEG images. No conversion takes place with these images.

Manipulating Image Files

Even with the older firmware, you are able to grab images (i.e. "cgi-bin/image") directly from the NE-C using FTP or RSHD. You can also manipulate the default image HTML forms (i.e. "image.html" and "images.html") contained on the NE-C within its "http" directory. This is no different with version 1.1. However, the file names have changed slightly and the format of the image you grab is different.

If you are acquiring the JPEG image directly from the NE-C's "cgi-bin" directory within its file system, the image file name is "**imageJpg**" referring to the JPEG image rather than the PPM image file, "**image**".

If you want one of the JPEG default image HTML forms from the NE-C's "http" directory to manipulate back on your host, the name is "**image Jpg.html**" or "**imagesJpg.html**" depending on whether you want a single snapshot or a continuously updated image.

> **Note**: The default image HTML forms for the Java method are now called "**imageJava.html**" and "**imagesJava.html**".

> **Note**: The JPEG image file, "cgi-bin/imageJpg", is significantly smaller than the PPM image, "cgi-bin/image".

IPAssign Windows Configuration Tool

Prior to version 1.1 of the NE-C, assigning an IP address to the frame server is accomplished using ARP, RARP, or BOOTP. Most often a manual ARP command is the preferred choice but there can be problems with the protocol's complexity and some ARP implementations on Windows stations. Therefore, with version 1.1, Microplex has introduced a new Windows uility, IPAssign, which helps identify NE-C's on your network and temporarily assign IP addresses to them without needing ARP at all. Instead, IPAssign automatically recognizes BOOTP packets broadcasted on the network by an NE-C allowing you to then assign an IP address to it and load a Web browser to view its captured images.

To use IPAssign to recognize an NE-C on your network, you will need to:

1   Insert the Microplex diskette labeled "IPAssign" into the floppy drive on your Windows station.

2   Load the File manager or WinFile and look under the floppy drive for an IPAssign self-extracting file.

3   Double click on the IPAssign file to launch the install program.

4   When prompted to install, click on YES to load the InstallShield Wizard.

5   Answer the prompts throughout the wizard.

6   Once the install process is complete, you will be prompted to view the "ReadMe" file. Select "Yes" to read this and when done, close the file.

7   Find the new IPAssign program group and double click on the "IPAssign" icon to load the program.

8   At the "IPAssign" main dialogue box that appears, you should see an entry for your NE-C appear in the list box. If not, give IPAssign a couple of minutes to find the device on the network or repower the device to speed the process. *Figure 1* shows an example screen.

Figure 1: IPAssign Main Screen
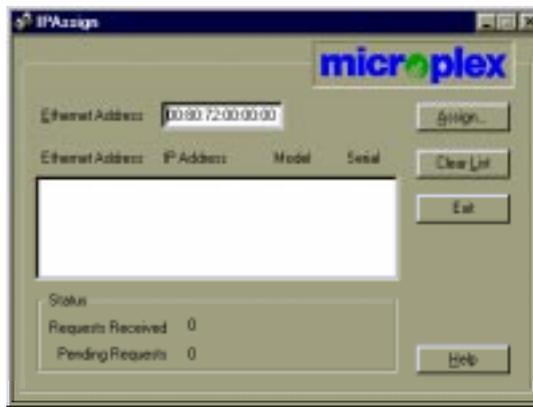
9   Once your NE-C's Ethernet address appears in the list box, select it and press ASSIGN.

10   At the "Assign IP" dialogue box that displays next, fill in the IP address and subnet mask for this NE-C.

> **Note**:   You can also assign a default router/gateway entry within this dialogue box allowing your NE-C to communicate across subnets. This is optional though.

11   Click SET when done to assign these TCP/IP settings to the NE-C. IPAssign will then display two dialogue boxes informing you of its progress.

12   Once you see the message about successfully assigning the settings, click OK. These TCP/IP settings are now in the NE-C's *current* memory to be retained until the next power cycle.

13   Click on LAUNCH BROWSER at the next window that displays if you want to store the TCP/IP settings into the NE-C's Flash. This will prevent you from losing the settings after a power cycle.

14   Read the text in the "Configuration Information" window that displays and click OK to launch your Web browser.

> **Note**:   If you are taken back to the IPAssign main dialogue box instead, you will be unable to launch your browser this way. Please load it manually and go to the URL, "`http://NE-CIPaddress/network Conf.html`" (e.g. "`http://192.75.11.9/net workConf.html`").

15   Once your Web browser is loaded and you're prompted for a "User ID", type "`root`".

16   At the "Password" prompt, press ENTER since there is no password configured by default and click OK. If you have a root password configured, please enter this instead.

17   At the "Network Configuration" HTML form that displays, fill in the NE-C's IP address under the "IP Address" field. *Figure 2* shows an example configuration form.

Figure 2: Network Configuration HTML Form

18 Click in the field labeled "Subnet Mask" and fill in the NE-C's subnet mask.

Note: If you would like to communicate with the NE-C from across routers, you will need to fill in an entry within the "Routing" section.

19 Click on the SUBMIT button when done.

20 Repower the NE-C to make the changes take effect. Either physically unplug and plug in the power supply or click on the "System" link at the top of the "Network Configuration" HTML form. Once at the "System" form, click on the REBOOT button.

At this point, the TCP/IP settings are stored in Flash. These new settings will now be retained anytime the NE-C is repowered.

Embedded Text Within Images

With version 1.1, a string of text can now be added to captured images to help describe viewing areas. For example, if you had one Connectix QuickCam pointed at the front reception area and one pointed at the shipping area, you could label the captured images with "Front Reception" and "Shipping" so viewers knew exactly where they were looking.

To set specific text, you will need to:

1 Direct your Web browser at URL, "`http://NE-CIPaddress/camera Conf.html`" (e.g. "`http://192.75.11.9/cameraConf.html`") to bring up the Camera Configuration HTML form.

2 If prompted for a user ID, type "`root`".

3 At the "Password" prompt, enter your root password if you have one configured on the NE-C. There is *no* password by default.

4 Click on the OK button.

5 At the "Camera Configuration" form that displays, scroll down until you see the "Embedded Image Text" section.

6 Click on the "Embed text into image" checkbox so that this feature is enabled.

7 Select whether you want the text aligned to the right, left, or centre within the image by choosing one option in the drop down list.

8 At the "Text" field, enter the string of text you'd like displayed within the image.

9 When done, click on the SUBMIT button and reset the NE-C by unplugging and plugging it back in. You can also click on the REBOOT button found on the System Configuration HTML form at URL, "`http://NE-CIPaddress/systemConf.html`" (e.g. "`http://192.75.11.9/systemConf.html`").

At this point, images produced from this NE-C will include the appropriate text.

Colour Correction

Version 1.1 improves upon the Connectix QuickCam for Windows' colour correction (or white balancing) capabilities. With previous versions, colour images appear off colour but with this new release, adjusting settings within the NE-C's "Camera Configuration" HTML form (i.e. "`http://NE-CIPaddress/cameraConf.html`"; e.g. "`http://192.75.11.9/cameraConf.html`") enhance the image's appearance.

ERATA FOR NETWORKEYE/270 VERSION 1.0 MANUAL

Page 25   There should be no option for "FTP" under the "Configuration Menu" listing.

Page 46   The "TCP Port Numbers Used on the NetworkEye/270" list should include "80 HTTP Server Port" as well.

Throughout Manual   Any references to the "PC QuickCam" should be read as "QuickCam for Windows".