ViSTA Networking Solutions

VT157A USER'S GUIDE

1.0

MU018A

The information in this User's Manual has been carefully reviewed and is believed to be accurate. The vendor assumes no responsibility for any inaccuracies that may be contained in this document, makes no commitment to update or to keep current the information in this manual, or to notify any person or organization of the updates.

VISTA NETWORKING SOLUTIONS (VNS) reserves the right to make changes to the product described in this manual at any time and without notice. This product, including software, if any, and documentation may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any medium or machine without prior written consent.

IN NO EVENT WILL VISTA NETWORKING SOLUTIONS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, SPECULATIVE OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR INABILITY TO USE THIS PRODUCT OR DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN PARTICULAR, THE VENDOR SHALL NOT HAVE LIABILITY FOR ANY HARDWARE, SOFTWARE, OR DATA STORED OR USED WITH THE PRODUCT, INCLUDING THECOSTS OF REPAIRING, REPLACING, INTEGRATING, INSTALLING OR RECOVERING SUCH HARDWARE, SOFTWARE, OR DATA.

Any disputes arising between manufacturer and customer shall be governed by the laws of Sacramento County in the State of California, USA. The State of California, County of Sacramento shall be the exclusive venue for the resolution of any such disputes. VNS's total liability for all claims will not exceed the price paid for the hardware product.

Unless you request and receive written permission from V*i*STA Networking Solutions, you may not copy any part of this document. Information in this document is subject to change without notice. Other products and companies referred to herein are trademarks or registered trademarks of their respective companies or mark holders.

Printed in the United States of America

WARNING: After approximately 20 minutes of use the VTK157A handheld PC will become warm to the touch.

Getting Started

- Kit Contents
- Before you begin
- Connection Diagram
- Glossary? (IPDT), Base IP address

Battery Section (from its user guide)

Start Up and Operation Instructions

1) Charge external battery
2) Set battery switch to Unlocked/Off (front of battery)
3) Plug cable into battery and VT157A
4) Use button on top of battery to select 12V output
    a) Battery starts with a red light at 5V
    b) Push button on top to advance the green LED display to the 12V position
5) Set battery switch to Locked/On position (front of battery)
6) Optional: push and hold the button on top of the battery to display the amount of charge remaining in the battery. If the green LED moves to a position other than 12V after the button is released then the battery switch is not in the locked position. Continue to push the top button until the 12V green LED is lit and move the battery switch to the locked position.
7) Turn on VT157A using the power switch on the handheld unit (it will take approximately 1 minute to boot up) - screenshot1. Please note that the onscreen keyboard is active and available.

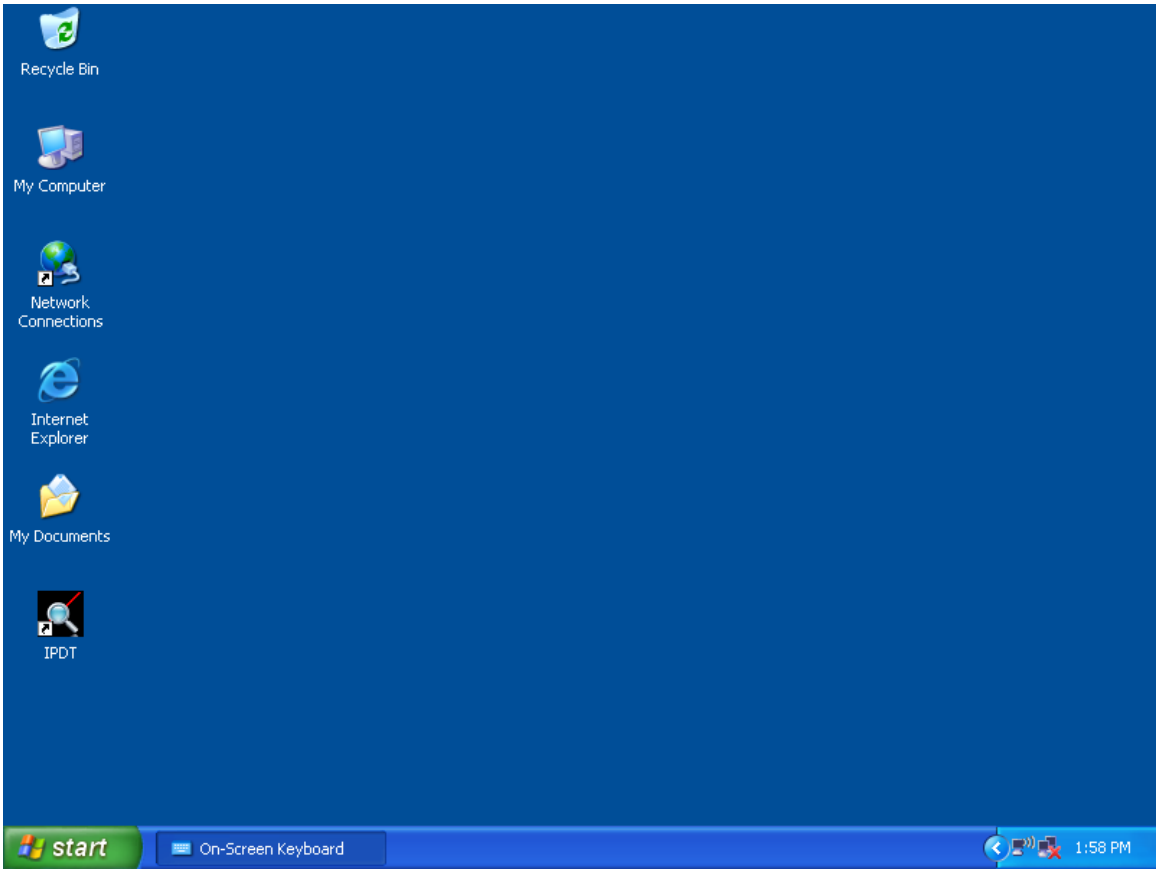


Figure 1

8) Double tap on Network Connections shortcut on the Desktop - screenshot2. The VTK157A ships from the factory with all 3 connection technologies enabled. This needs to be the standard setting. Disabling one or more of the network connections affects the function of the IPDT software and will require a change to the .ini file, which is covered in another section.

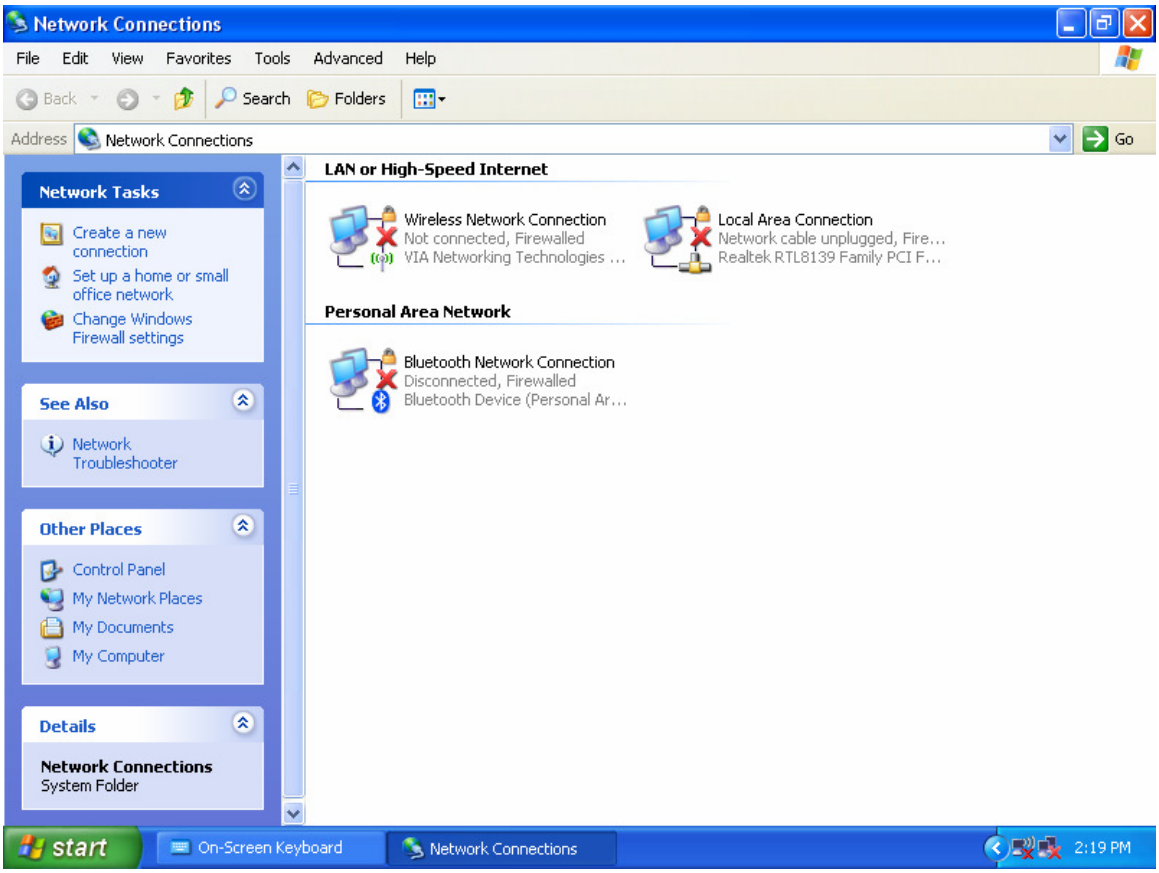


Figure 2

9) Double click on "Local Area Connection" - screenshot3

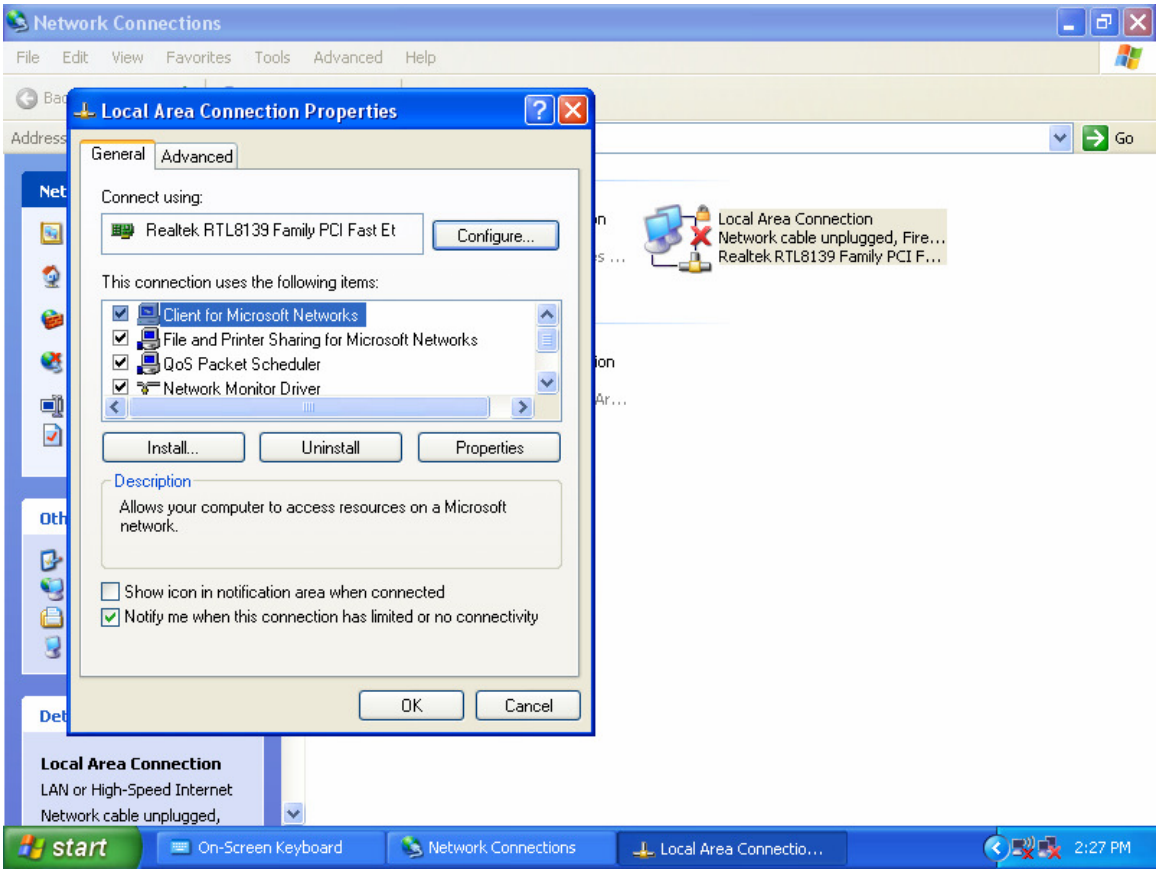


Figure 3

10) Scroll down in the active part of the window and select "Internet Protocol (TCP/IP)". Once highlighted select "Properties" - screenshot4

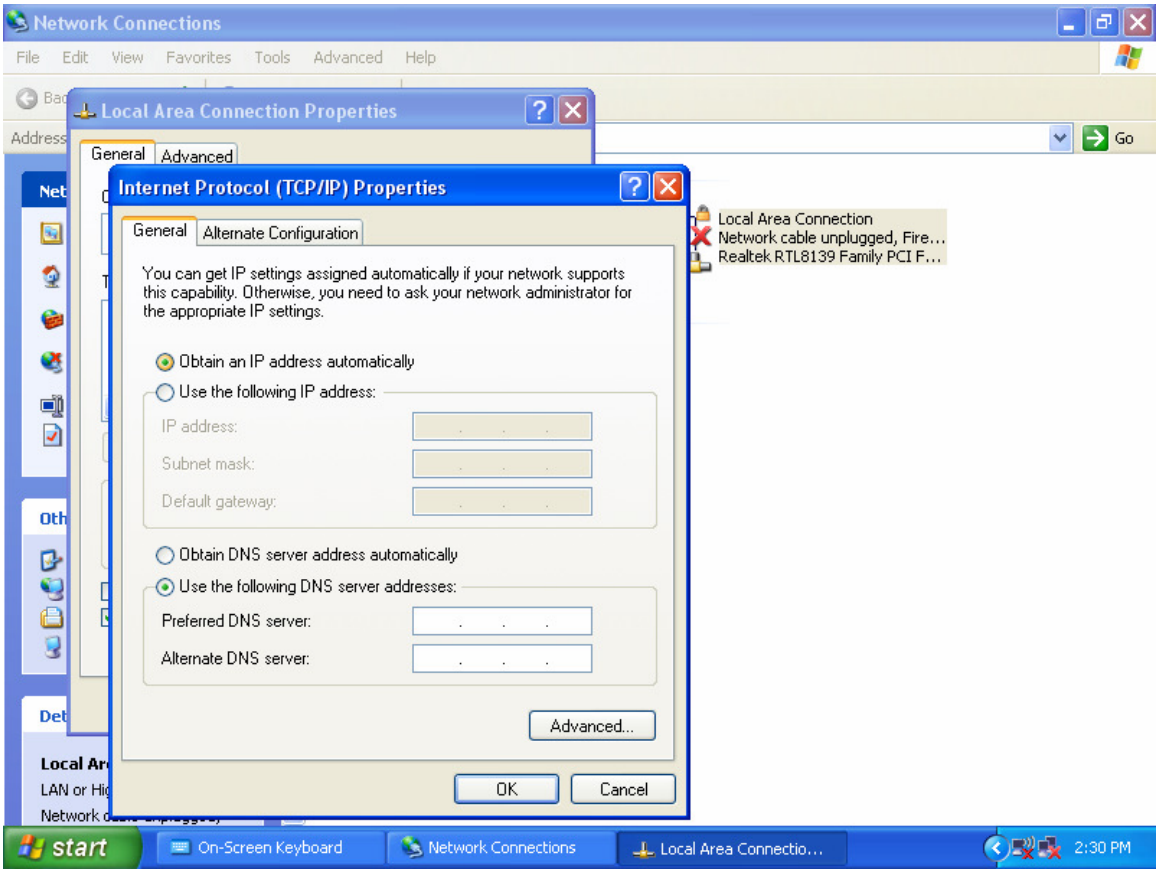


Figure 4

11) The window will have a default setting of "Obtain an IP address automatically". Select the radio button "Use the following IP address". This will allow you to enter the IP address for the network you to which will be connecting. You will need to know the base IP address of the camera you wish to work on. All cameras ship from their respective manufacturer with a default IP address. See Manufacturer Default IP Address Reference Table at the end of this manual for help choosing an IP address. If the camera has had its default IP address changed it should use the same base network address as the rest of the surveillance network. At this point you will need to enter an IP address for the handheld device - being sure not to choose one already in use if connecting to a multi-camera network. In the example we have used 111.111.111.0

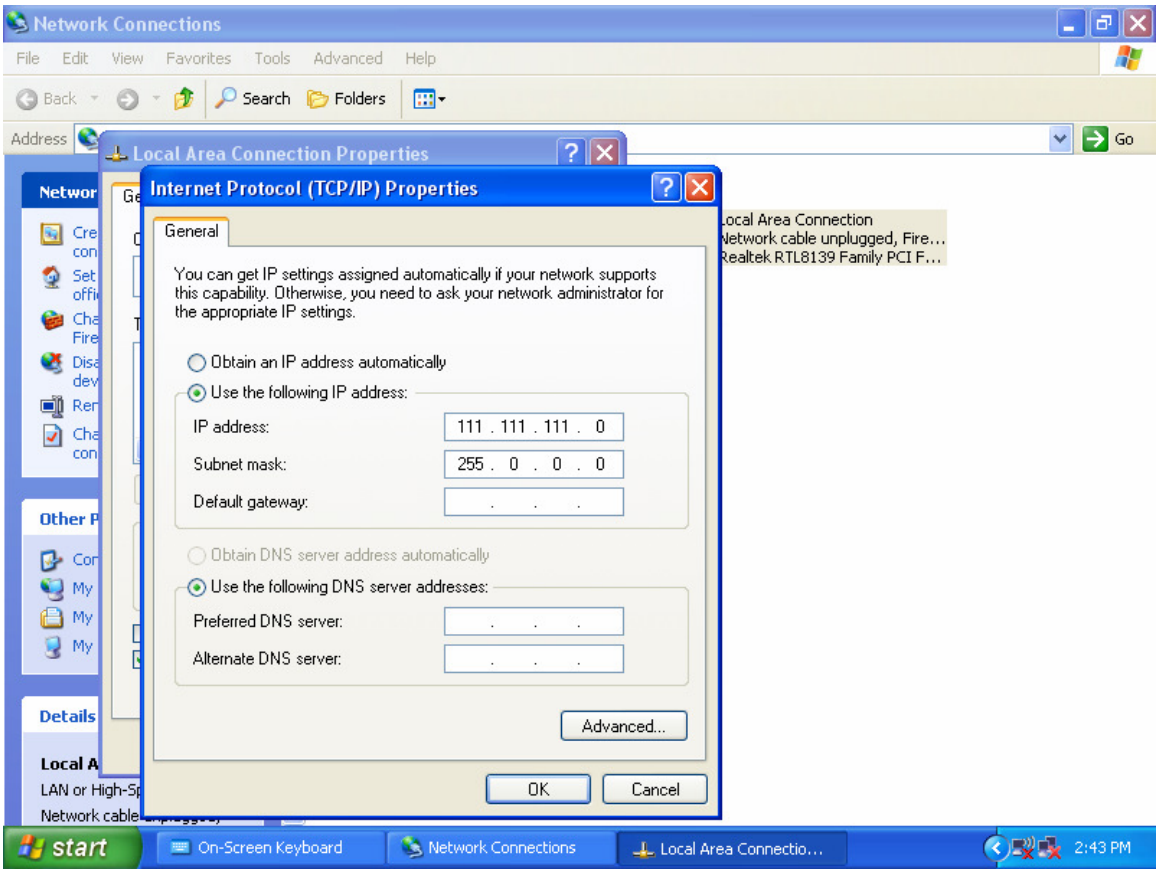
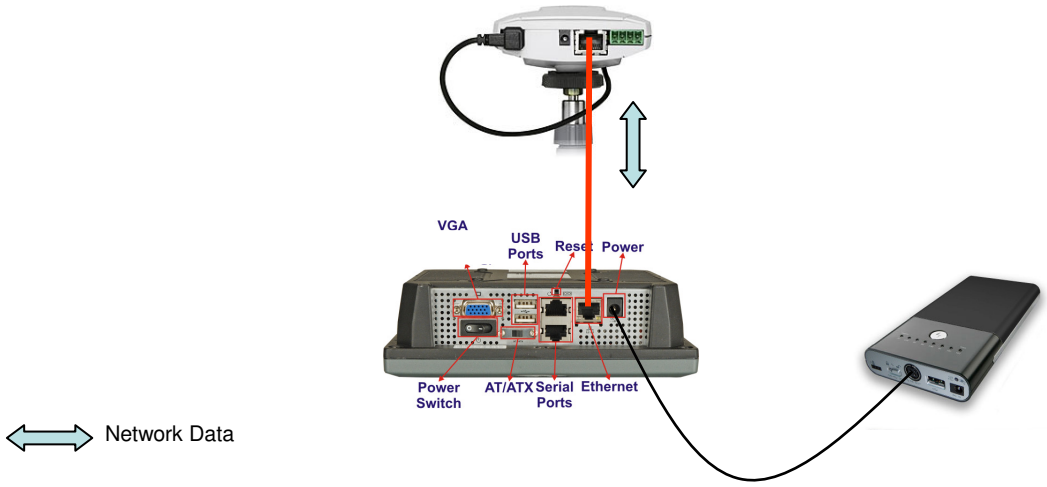


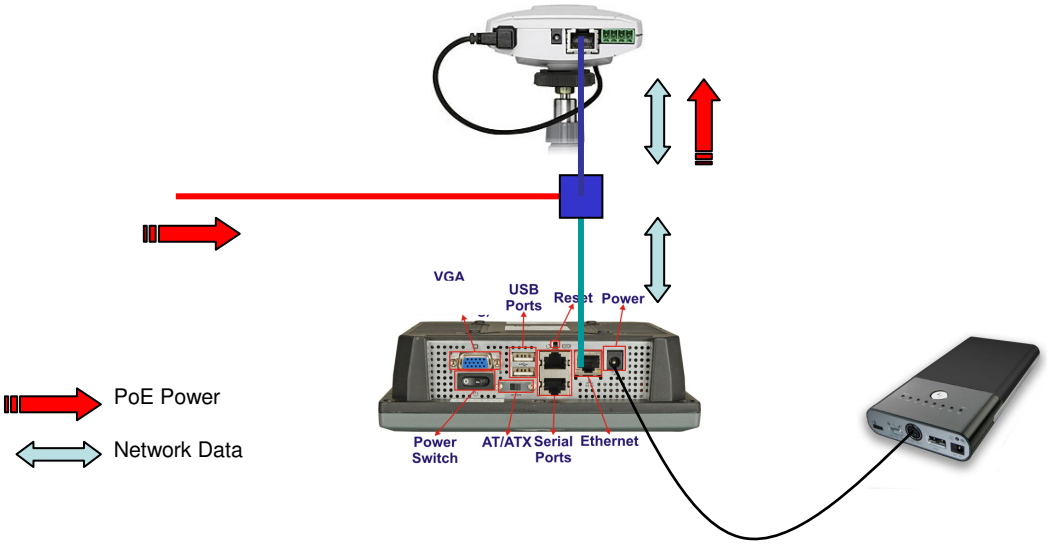
Figure 5

12) To enter the IP address you will need to use the onscreen keyboard. Please see the section "How to use the On-Screen Keyboard. After the IP address is entered, select "OK".
13) At this point the handheld has the correct IP address for communicating with the camera over the RJ-45 Ethernet port. Select OK to close the Local Area Connection Properties window.
14) Now close the Network Connections window by selecting the x in the red box at the top right corner of the window.
15) You should be back at the Desktop. Now connect one end of the crossover cable to the handheld's RF-45 port and the other end to the camera's RJ-45 port. You will observe activity (two computer icons and a moving yellow dot) in the system tray (lower right hand portion of the screen near the time display). When the activity has stopped and the icons have disappeared you are ready to proceed. If you get an error message such as Local Area Connection has limited or no connectivity" make sure you have the correct IP address entered and have not left the default setting. Also see Trouble Shooting. Do not proceed if you have an error.



- Camera connected to power source (non-PoE)
- Battery powers VT157A
- Cross over cable connects VT157A Ethernet port to Camera's RJ-45

Figure ? Connection Diagram



- Camera connected to PINPOINT
- Battery powers VT157A
- PIPOINT Connects PoE Source. VT157A & Camera

Figure ? PoE Connection Diagram

16) The next step is to launch the IP Discovery Tool. To do this, double tap on the IPDT icon. screenshot6

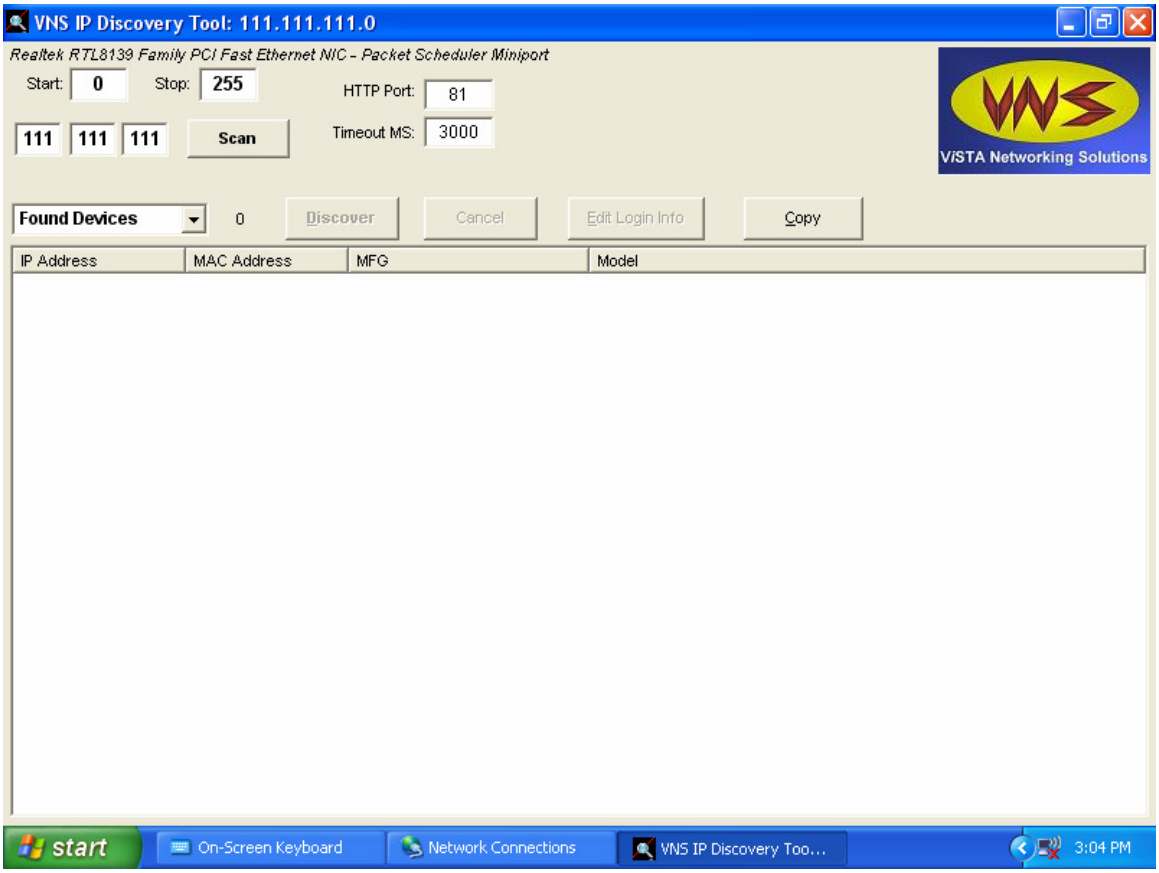


Figure 6

17) The fields for this window are defined in a later section. The next step is to tap on the "Scan" button. screenshot7 for scan results

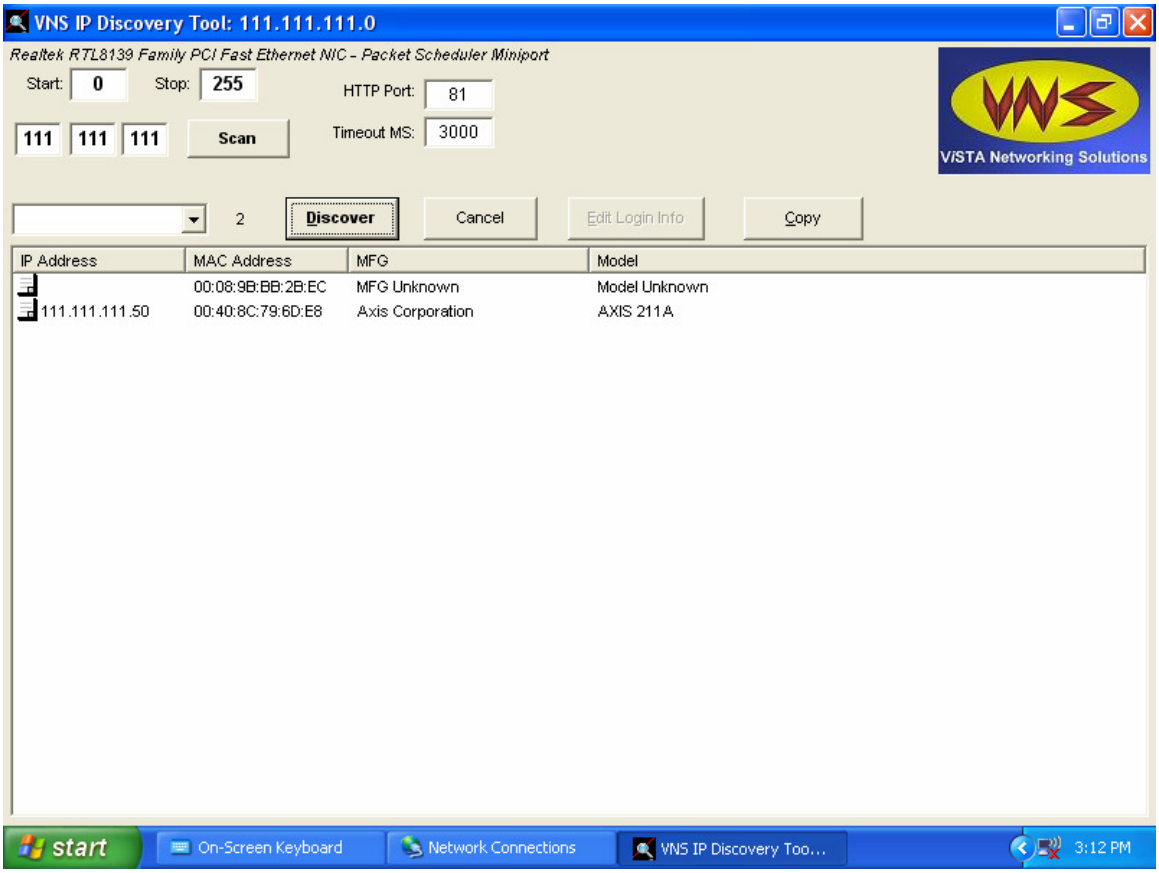


Figure 7

18) If you are directly connected to a single camera the display should look like figure ?. Next click on "Discover". screenshot8

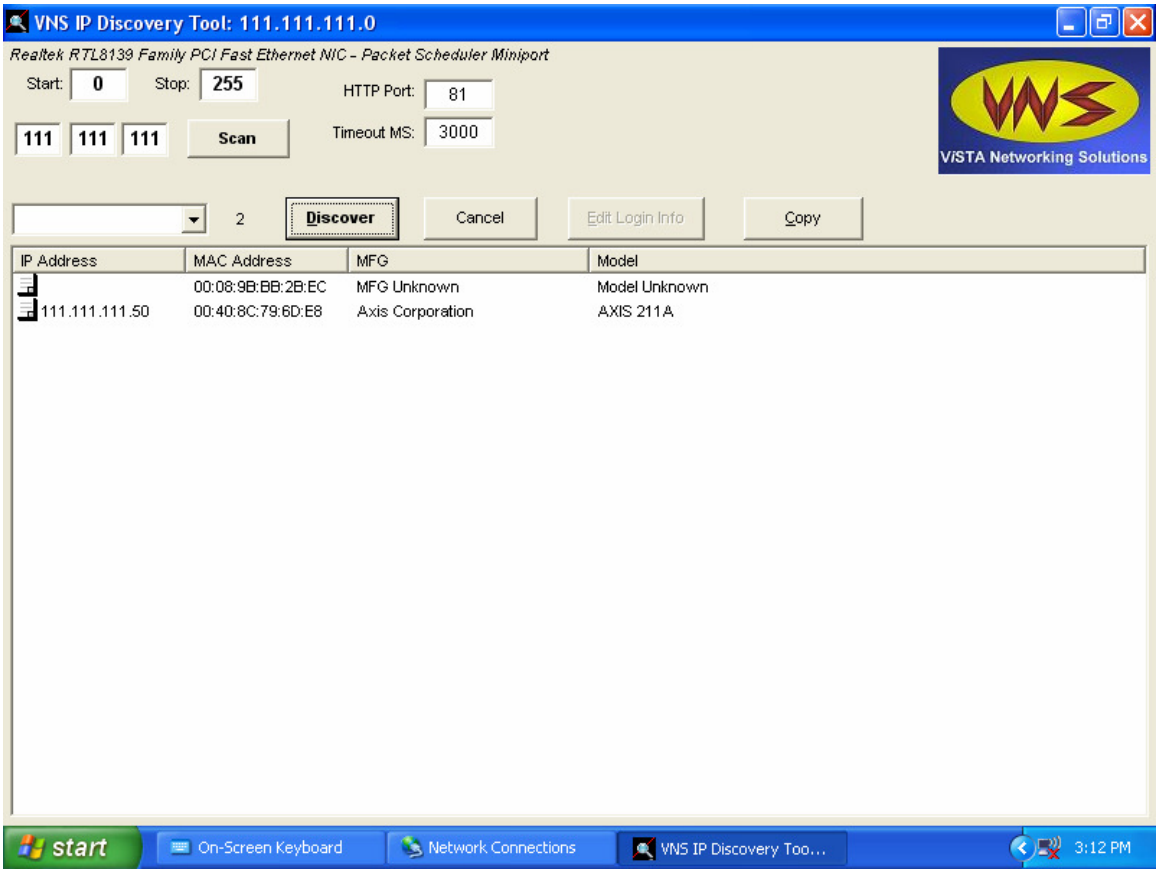


Figure 8

19) In this example you can see that the tool has returned a report showing 2 IP devices within the IP address range. The first at 111.111.111.0 is the handheld device. The second, at 111.111.111.50, is an Axis camera. Also reported are the device MAC addresses. Please note that while the IPDT software works with most cameras there are cameras which it will interface to but not report a manufacturer.
20) Double tap anywhere on the line for the Axis camera and the camera log in screen will be presented (screenshot9). Not all camera manufacturers require a log in when accessing the camera - see your camera owner's manual.

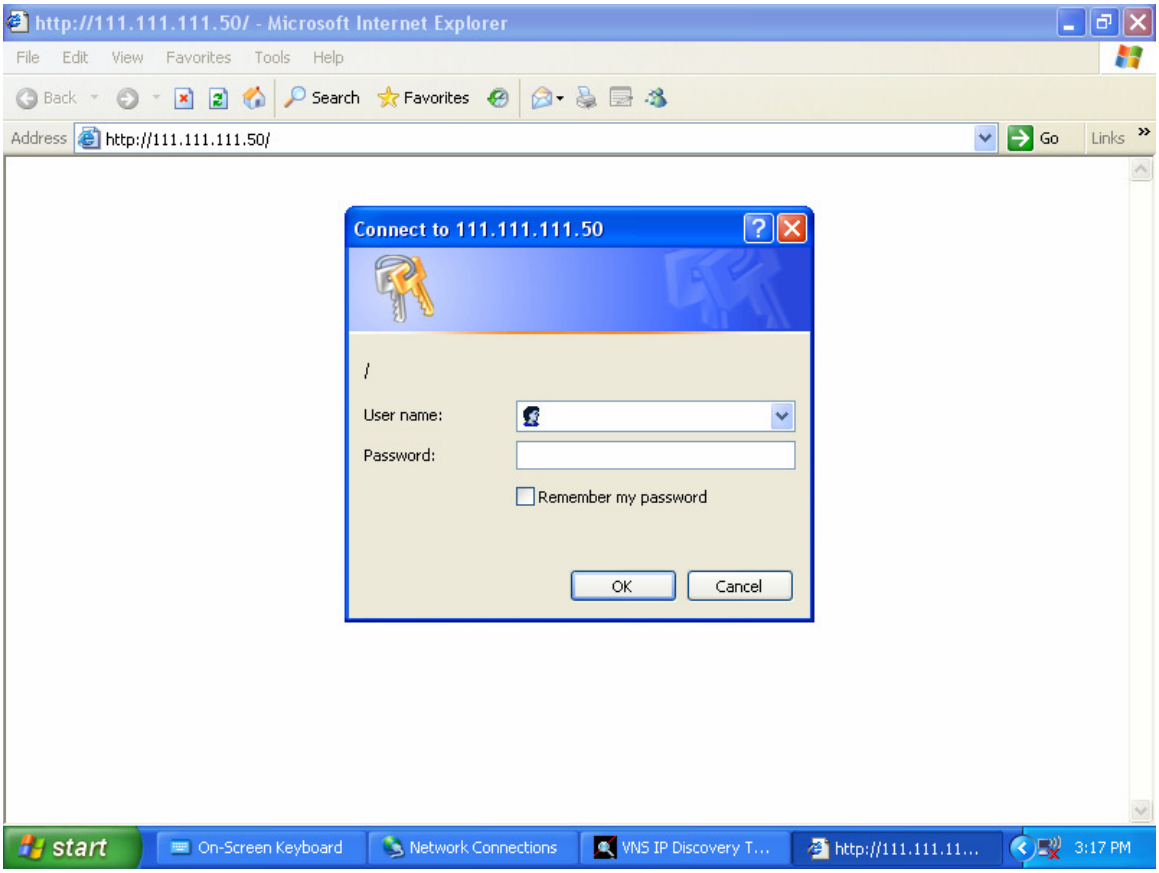


Figure 9

21) Enter log in data if necessary as this will allow the web page for the camera to launch using Microsoft Explorer. The result will be sreenshot10.

Figure 10

22) At this point you should have a live video display within a web browser. This will allow the user to set the field of view, zoom and focus for the camera. While logged on the user can also make any other changes available from the camera's web page should they choose to do so. In order to maximize video display area, the user may go to the View menu for Internet Explorer and select "Full Screen". This will allow you to position the video so that a full 640 x 480 video stream can be displayed. To return to the normal view mode select the double window icon at the top right side of the display.
24) Congratulations you have successfully connected to a camera, launched its web paged and focused the camera. Once you have made all the camera adjustments necessary, close the Internet Explorer window by taping on the red x at the top right hand corner of the window and disconnect the crossover cable from the camera.
25) If all the camera base IP addresses for a specific installation are expected to be the same then you can leave the IDPT application open, move on to the next camera, connect the crossover cable, wait until network negotiation is complete and then repeat steps 17 through 24. If the next camera has a different base IP address then the user will need to close IDPT, change the handheld IP address and repeat the steps above.
26) When finished, turn off the handheld using the Start -> Turn Off Computer. After the handheld is off disconnect the battery cable from the battery and move the switch to the Off/Unlocked position – all LEDs on the battery should be off.

Trouble Shooting

Using PINPOINT

Connection to a Multi-Camera Network

Helpful Hints (Full View IE, keep battery in duffle bag while using VT157A, use of pen?, turn off handheld if not using for more than 10 minutes, include use of touch screen and onscreen keyboard?)

How to use the On-Screen Keyboard within Windows including how to invoke it

Manufacturer Default IP Address Reference Table (subject to change by the manufacturer without notice)
Axis
IQInvision
Sony