

## Introduction

This guide describes the network configuration for the UTAH-100/UDS Router and Panel. Using two setup scenarios; New Configuration on an Independent Network, and New Configuration on an Existing Network. These are the first steps required to configure and control the system.

# System Setup Requirements

- Windows<sup>™</sup> operating system 7
- Java 7.07<sup>™</sup> or newer
- Internet Explorer<sup>™</sup>, Firefox<sup>™</sup>, or Chrome<sup>™</sup>
- Ethernet connection

All UDS devices - PC, Router, and Panel - connect over Ethernet on a house network, or within a stand-alone (direct) mode. The system will provide default IP address during setup, or you can use unique IP addresses if required within your operation.

# UTAH-100/UDS Network Configuration

### New Configuration on Independent Network

This scenario consists of a router and a panel working in a stand-alone mode with one or more PC to complete an independent, stand alone network.



#### FIGURE 1.

New configuration on an independent network is relatively simple, involving Ethernet connection between the PC and devices (router and panel) only, as a stand alone network. Simply connect all devices together as shown in Figure 1 for basic setup. In this case you will only need to set the PC address to the same subnet as the router and panel. This will facilitate applet operation and table configuration. The following default IP addresses (below) ship from the factory. The numbers will be consecutive in the case of multiple panels; i.e., .182, 183, etc.

#### Routers - 192.168.5.180 Panel - 192.168.5.181

To change the devices to use non default addresses, see *New Configuration on an Existing Network* (next). Also note, the PC and devices (router and panel) must occupy the same subnet.<sup>1</sup> See your network administrator for configuration assistance if no default subnet appears.

Online instruction is also available by accessing the HTML help file located within the applets, which will also provide details for setup and configuration of the router and panel tables.

<sup>1.</sup> All routers and panels require separate IP addresses.

UTAH-100/UDS Network Configuration

#### New Configuration on an Existing Network

This procedure describes new configuration on an existing network. Use this routine if you need to modify the router or panel's network parameters. The steps below are based on the default set of parameters.

On the PC, click Control Panel, Network and Internet, Network Sharing Center, then Change Adapter Settings.<sup>2</sup>



<sup>2.</sup> These steps are based on Windows 7 operation.

When the following window appears, right-click the icon to produce the drop-down menu, then select *Properties*.



#### FIGURE 3.

The following window will appear.

Connection				
Connect us	ng:			
🔮 Intel(	R) 82567LM-2	Gigabit Network	Connection	
			Cor	nfigure
This connec	ction uses the f	ollowing items:		
🗹 📑 Clie	ent for Microsof	t Networks		
	S Packet Sche	eduler		
	e and Printer Sh	naring for Microso	oft Networks	
🗹 🔺 Int	emet Protocol	Version 6 (TCP/II	Pv6)	
🗹 📥 Int	ernet Protocol	Version 4 (TCP/II	Pv4)	
🗹 🔺 Lin	k-Layer Topolo	gy Discovery Ma	apper I/O Dri	iver
🗹 🔺 Lin	k-Layer Topolo	gy Discovery Re	sponder	
Instal		Ininetall	Pro	notice
in Ista	····	OFINISCON		pontos
	n			
Descriptio	aion (Control Mrr		otocol. The	detault
Descriptio Transmis wide area	a network proto	col that provides	communica	
Descriptio Transmis wide area across di	enetwork proto	col that provides ected networks.	communica	
Descriptio Transmiss wide area across di	a network proto verse interconn	col that provides ected networks.	communica	

FIGURE 4.

Select Internet Protocol Version 4, then click the Properties button. The following window will appear.

ci ici di	Alternate Configuration				
You ca this cap for the	n get IP settings assigned aut bability. Otherwise, you need appropriate IP settings.	omatically if to ask your	your n netwo	etwork sup 'k administr	ports ator
0	btain an IP address automatic	ally			
- O U	se the following IP address: -				
IP a	ddress:		1	201	
Subr	net mask:		1		
Default gateway:		4	12		
0 0	btain DNS server address aut	omatically			
- () U	se the following DNS server a	ddresses:			
Pref	erred DNS server:				
Alte	mate DNS server:				
	alidate settings upon exit			Advanc	ed

#### FIGURE 5.

Click the second radio button down to set a static IP address.

General	
You can get IP settings assig this capability. Otherwise, yo for the appropriate IP settin	ned automatically if your network supp ou need to ask your network administra gs.
Obtain an IP address a	utomatically
<ul> <li>Use the following IP ad</li> </ul>	dress:
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server add	ress automatically
Use the following DNS s	erver addresses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon	exit Advance

FIGURE 6.

Power-up procedure

can get IP settings assigned aut capability. Otherwise, you need the appropriate IP settings. ) Obtain an IP address automatic	tomatically if your network supports to ask your network administrator	
the appropriate IP settings.	-ally	
) Obtain an IP address automatic		
	Lon y	
Use the following IP address: -	¥	$\leq$
P address:	192.168.5.2	
ubnet mask:	- 14 ·	
efault gateway:		
) Obtain DNS server address aut	omatically	
) Use the following DNS server a	ddresses:	-
referred DNS server:		
lternate DNS server:	x (x) (x	
Validate settings upon exit	Advanced	
referred DNS server: Iternate DNS server:	Advanced	

Enter the following address into the indicated cell (192.168.5.2)<sup>3</sup>

#### FIGURE 7.

Accept the Subnet mask default, then click OK.

Now connect your PC or laptop to the router with a standard Ethernet cable.

Note: A crossover cable (typically used with an Ethernet connection) is not necessary as the signal 'switch' is done internally.

<sup>3.</sup> This is the subnet default address. You can substitute the last digit if required for your system. If your system contains a completely different subnet for the PC, routers, and panels, substitute the correct addresses where applicable.

**Router Applet Activation and Configuration** 

### Router Applet Activation and Configuration

Launch your preferred browser and complete the following steps:<sup>4</sup>

a. Log into the Router Applet by entering 192.168.5.180 into your browser's URL line (default). If your router is using a different address than the default, enter it into the browser.

NOTE: If the applet does not activate, try pinging the system by opening your command prompt and typing the router's IP address (address number ending in .180) to determine whether or not the connection is good. If you are unable to pint the device, check the connections or see the network administrator for additional help.

In addition, if you are unsure of the IP address, you may need to default the router to the factory IP address of 192.168.5.180. In this case refer to the UTAH 100-UDS Operations Guide for more detail.

b. Accept the following advisory (checkbox) then click Run to continue



FIGURE 8.

<sup>4.</sup> IMPORTANT: You must use Java version 7 or later.

c. When the Router icons appears, select "Router Configuration".

Router Control	Router Configuration

#### 0

#### FIGURE 9.

Note: You will only be able to connect if the browser window (shown in Figure 9) indicates "Applet ready for login."

d. Enter Username "admin" (default) - in the username entry box

User Login	×
?	Login to authenticate Username Password
	OK Cancel

e. Enter Password "admin" (default) - in the password entry box



f. Click the Data Comm (radio button) to change the network configuration.

Note: The program will default to your router's IP address (IP Address cell, above). It is important however that Net mask and Gateway remain constant among all devices, and to keep the DHCP box unchecked.

- g. Enter the desired IP address is the space provided.
- h. Verify the Port setting of 5001.
- i. Make sure the DHCP box is unchecked.
- j. Click the "Program Router" button when the network configuration is complete.
- k. A dialog will appear prompting you to reset the device. To make the IP changes active, reset the router by pressing (and quickly releasing) the small button at the far right side of the control module on the back of the router.

Note: There is no need to restart the browser when the router is reset.

Once the above steps are complete, the router can be placed on the target network and configured as needed.

Power-up procedure

# Panel Applet Activation and Configuration

Make sure the panel is plugged into the same network as the PC, and that the PC is set to the same subnet as the panel. This procedure allows the configuration from the Panel Applet in the absence of a physical router connection.

Log into the Panel Applet first by bringing up a web browser and entering 192.168.5.181 (factory default setting) in the URL browser box. Click the Panel Configuration icon to log in, as shown in the figure below.



In this mode, the Panel Applet dialog will indicate the router's absence.<sup>5</sup>

<sup>5.</sup> This is a simple operational scenario with no router currently connected. You will be taken directly to the Configuration screen when the router and panel are simultaneously connected.

The following dialog will appear (with no router connected).

?	Router is not connected! Enter new IP address below, check connection or try again momentarily
	[
	OK Can'y

FIGURE 12.

Since there is no router connected, click Cancel to dismiss this dialog.

The following window will appear, which will give you an opportunity to designate the necessary configuration detail.

Deuten	Panel Network Configuration			
Router	Network Parameters			
	Panel Name ACME Panel			
	Controller IP 192.168.4.61 Port 5001			
Panel	Panel IP 192.168.4.64 Netmask 255.255.255.0			
	Gateway 192.168.4.40 DHCP			
	Controls			
	Configure Panel Cancel			
JRE IS.				

The above illustration contains a default IP address (your address may be different). The Controller IP corresponds to the router address, while the Panel IP and Gateway are associated with the panel that you are using. Enter the correct addresses as needed.

Click Configure Panel when the correct addresses are in place, then reset the system.

A dialog will appear prompting you to reset the device. To make the IP changes active, cycle the power to the panel or reset the panel by pressing (and quickly releasing) the small button at the far right side of the control module (rear of panel).

Once the above steps are complete, the panel can be placed on the target network and configured as needed.

You can now log in to the router and panel applets to configure you system as needed using the newly configured IP addresses. The default username and password is *admin*, in both cases. Once you have logged in, click the configuration icons to activate the configuration dialogs.

For additional assistance, please contact Utah Scientific Customer Service - 1(800) 447-7204.