

# TR-7W Configuration Guide

## Before You Start

Take a few moments before you start to make the following simple checks. A few moments spent before you start installing your system can save a lot of time later by avoiding some of the most common problems that users can encounter.

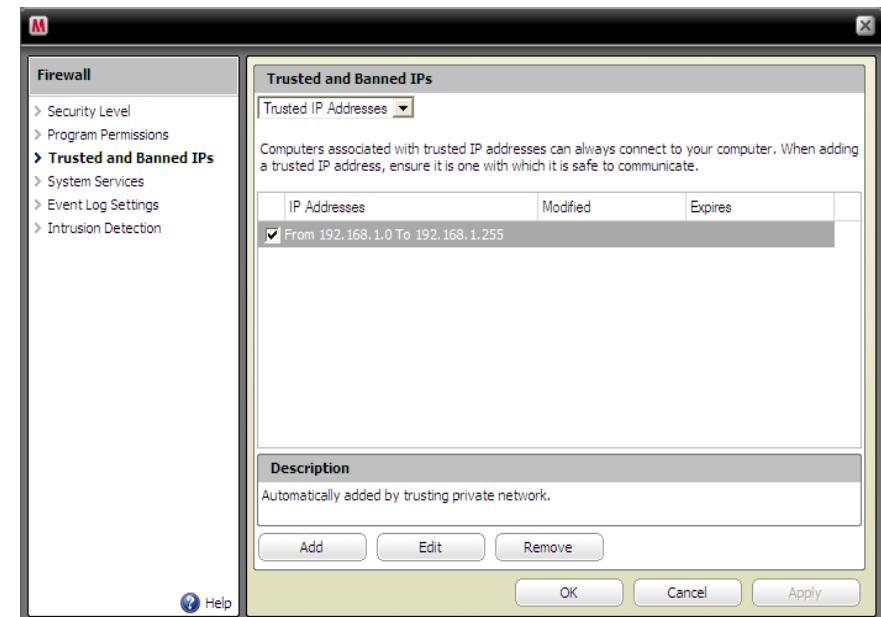
### I) Administrator Rights

For installation of TandD software and drivers it is ABSOLUTELY NECESSARY that you have complete administrator rights.

Go to Control Panel > User Accounts and confirm that this is the case. If it is not, then stop right here and correct it.

### II) Firewall Settings

Make sure that your firewall settings allow communication with both the default IP address that the product ships with (192.168.1.200) and the permanent IP address that you intend to use. If necessary add these to your Trusted Addresses list. Also, check the settings for Windows Firewall, even if you are using a subscription firewall from Norton, McAfee or the like. Windows update can turn on the Windows Firewall without your knowing about it.



### III) SPAM Filter Settings

If you are going to be sending warning monitoring emails be sure to set your SPAM filter not to block them.

**These are the most common causes of problems encountered by users when setting up their systems.**

# Setting the TR-7W IP Address

## I) Initialization

1. Load the TR-7W Settings Utility software on your PC.

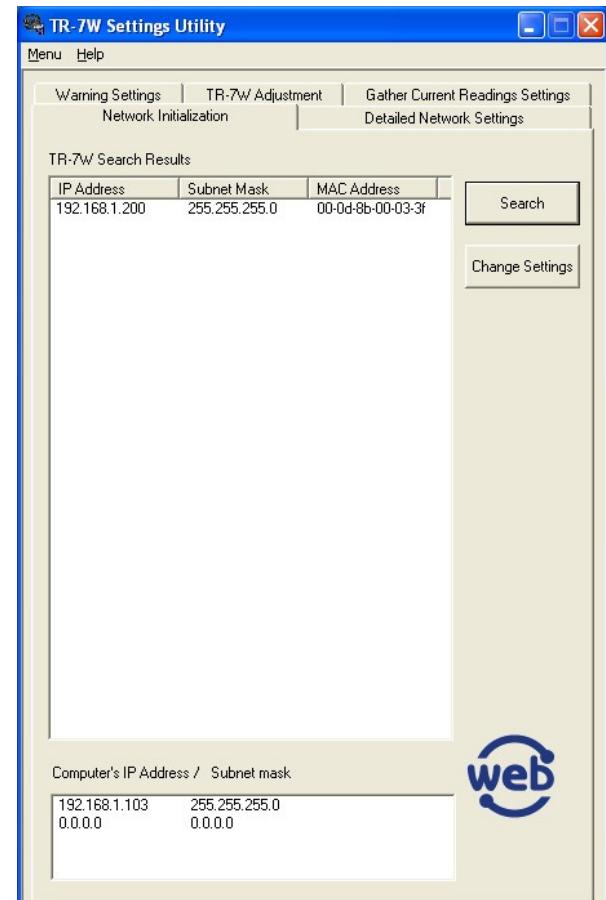
TR-7W Network Initialization Window

### A) LAN Method

2. Connect the TR-7W to your LAN.
3. Open the TR-7W Settings Utility software.
4. Select the “Network Initialization” tab.
5. Click on the “Search” button.
6. The search results should show the connected unit.
7. If so, proceed to Detailed Network Settings.
8. If not, the factory preconfigured IP address may not be within the Scope settings of your router; go to PC Direct Method.

### B) PC Direct Method

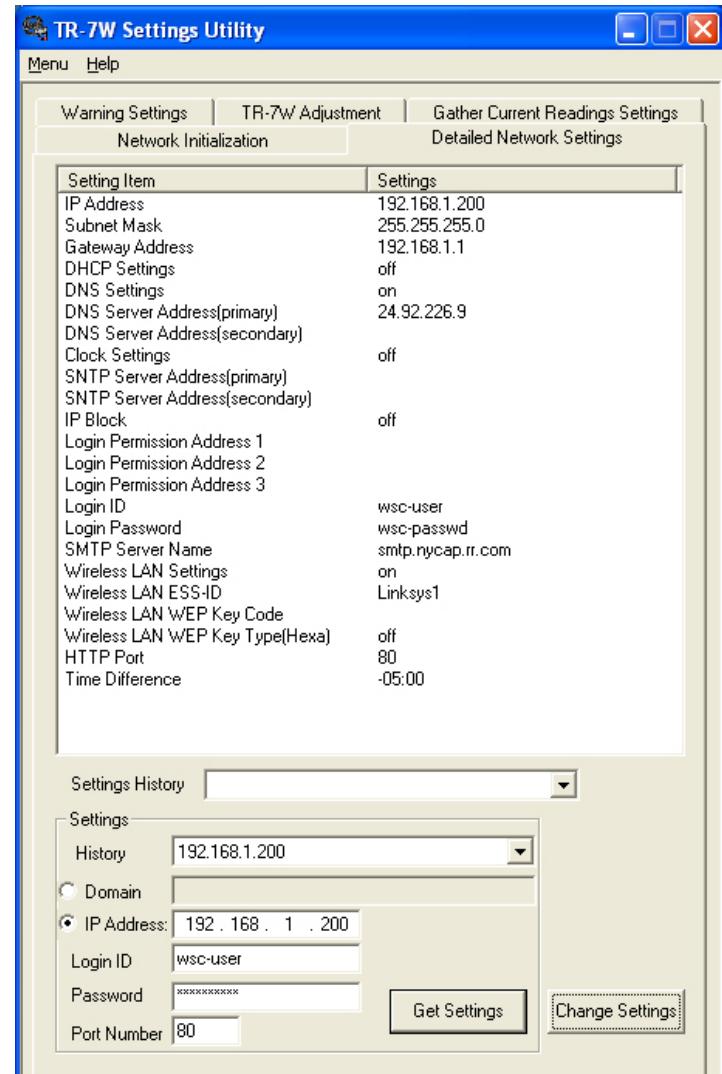
1. Configure your PC’s for a fixed IP address for direct connection. Go to:  
Control Panel> Network Connections>LAN Connections>Properties  
Select: TCP/IP> Properties> IP Address> Enter: 192.168.1.100
2. Connect the TR-7W to the PC with a “cross connect” cable.
3. Open the TR-7W Settings Utility software.
4. Click on the “Search” button.
5. Proceed to Detailed Network Settings. (Make sure to reset the IP address of your PC to the normal setting when finished configuring the TR-7W. This is usually set to obtain an IP address automatically through DHCP.)



## II) Detailed Network Settings.

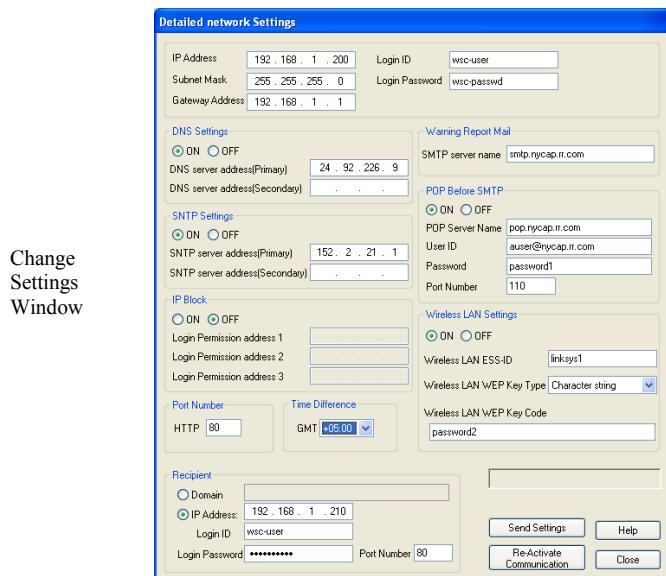
1. Click on the Detailed Network Settings tab.
2. Ensure that the IP address reflects the unit to be configured.
3. Enter the default Login ID and Password, and set the Port to 80.
4. Click on the “Get Settings” button.
5. The unit’s pre-configured settings will populate the window.
6. Click the “Change Settings” button.
7. Enter the new IP address, subnet mask and gateway\*.
8. Enter the new Login ID and Password
9. Click the “Send Settings” button.

TR-7W Detailed Settings Window



## III) Confirm Settings

1. Click “Get Settings” button.
2. Confirm data retrieved from unit is correct as entered.



# Time Settings

Use of an SNTP server is a very important aspect of your system design. It will reset your clock to the correct time at midnight each night and immediately after a power failure.

## I) Set the Time Difference

1. Click on the Detailed Network Settings tab.
2. Click on the “Get Settings” button.
3. Click the “Change Settings” button.
4. Select the offset from GMT for your time zone.
5. Click the Send Settings button

NOTE: This step is necessary for the time of logged data to be indicated correctly when downloaded.

## II) Setting the SNTP Server

1. Click the On radio button under SNTP Settings.
2. Enter the IP address of the SNTP server you wish to use.
3. Enter a secondary server address if desired.
4. Click the Send Settings button.

HOW TO FIND AN SNTP SERVER: A list of free, public SNTP servers can be found at:

<http://tf.nist.gov/service/time-servers.html>

The screenshot shows a software interface titled "Detailed network Settings". The window is divided into several sections:

- Detailed network Settings**: Includes fields for IP Address (192.168.1.200), Subnet Mask (255.255.255.0), Login ID (wsc-user), and Login Password (wsc-passwd).
- DNS Settings**: Shows DNS server addresses for Primary (24.92.226.9) and Secondary (.. ..).
- SNTP Settings**: Shows SNTP server addresses for Primary (152.2.21.1) and Secondary (.. ..). The "ON" radio button is selected.
- Warning Report Mail**: SMTP server name is set to smtp.nycap.rr.com.
- POP Before SMTP**: POP Server Name is pop.nycap.rr.com, User ID is auser@nycap.rr.com, Password is password1, and Port Number is 110. The "ON" radio button is selected.
- IP Block**: Shows three login permission addresses (1, 2, 3) with the "ON" radio button selected.
- Wireless LAN Settings**: Wireless LAN ESS-ID is linksys1, Wireless LAN WEP Key Type is Character string, and Wireless LAN WEP Key Code is password2. The "ON" radio button is selected.
- Port Number**: HTTP port is set to 80.
- Time Difference**: GMT offset is +05:00.
- Recipient**: Domain is selected, IP Address is 192.168.1.210, Login ID is wsc-user, and Login Password is masked as \*\*\*\*\*. Port Number is 80.
- Buttons**: Send Settings, Help, Re-Activate Communication, and Close.

# Configuring Warning E-Mails

Open the TR-7W Settings Utility Software

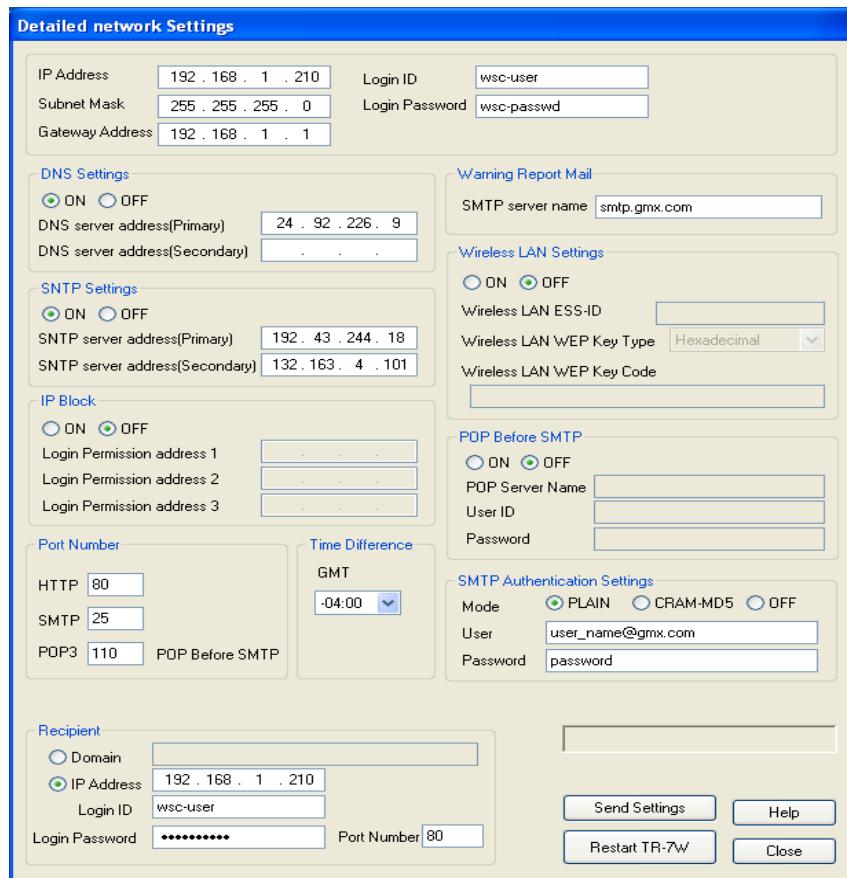
## I) Detailed Settings Window

1. Click on the “Detailed Network Settings” tab.
2. Enter the IP address, Login ID and Password for the unit to be configured.
3. Click on the “Get Settings” button.
4. Click on the “Change Settings” button.
5. Turn “DNS Settings” On.
6. Enter the IP address of your ISP’s DNS server\*.
7. Enter the name of the SMTP (outgoing mail) server you will be using.

## II) Determine E-Mail Authorization Requirements

The mail (smtp) server you use may or may not require authentication for outgoing e-mail messages. Normally, if you are connected directly to your ISP or have an in-house mail server, you may not need to use authentication of any type. In many cases, however, outgoing mail authentication is necessary. The TR-7W supports two types of mail authentication commonly in use today: “POP before SMTP” and “SMTP Authentication”. If in doubt as to which you should use, check with your ISP or in-house IT support staff. You can also try using Telnet to issue your mail server the “ehlo” command, as described below. Once you have determined that authentication is needed for your server, and which type you should use, proceed to either IIIa or IIIb) below.

TR-7W Detailed Settings Window



### IIIa) POP Before SMTP Settings

Some e-mail service providers require that you log onto your POP server with a User ID and Password prior to sending e-mail. This may be the case if the outgoing mail server you are using is not maintained by your local ISP.

- 1) Click the “On” radio button in the POP Before SMTP menu box.
- 2) Enter the name of your POP Server.
- 3) Enter your User ID
- 4) Enter your Password

### IIIb) SMTP Authentication Settings

Some e-mail service providers require that each outgoing message be authenticated with a user name and password. If this is the case for the ISP you are using be sure that POP Before SMTP is set to Off..

- 1) Check the Authentication Mode used by your ISP
- 2) Enter the User Name for your e-mail account
- 3) Enter the Password for your e-mail account

**A Note about Microsoft Exchange Server:** The TR-7W will work with MS Exchange Servers. In order to do so, however, it will be necessary to have the IT Specialist who maintains your server set up an unencrypted Client to Server Connector for the TR-7W on port 587.

Detailed network Settings

IP Address	192 . 168 . 1 . 210	Login ID	wsc-user
Subnet Mask	255 . 255 . 255 . 0	Login Password	wsc-passwd
Gateway Address	192 . 168 . 1 . 1		

DNS Settings

<input checked="" type="radio"/> ON	<input type="radio"/> OFF
DNS server address(Primary)	24 . 92 . 226 . 9
DNS server address(Secondary)	.....

SNTP Settings

<input checked="" type="radio"/> ON	<input type="radio"/> OFF
SNTP server address(Primary)	192 . 43 . 244 . 18
SNTP server address(Secondary)	132 . 163 . 4 . 101

IP Block

<input type="radio"/> ON	<input checked="" type="radio"/> OFF
Login Permission address 1	.....
Login Permission address 2	.....
Login Permission address 3	.....

Port Number

HTTP	80
SMTP	25
POP3	110

Time Difference

GMT	-04:00
-----	--------

POP Before SMTP

<input type="radio"/> ON	<input checked="" type="radio"/> OFF
POP Server Name	.....
User ID	.....
Password	.....

SMTP Authentication Settings

Mode	<input checked="" type="radio"/> PLAIN	<input type="radio"/> CRAM-MD5	<input type="radio"/> OFF
User	user_name@gmx.com		
Password	password		

Recipient

<input type="radio"/> Domain	.....
<input checked="" type="radio"/> IP Address	192 . 168 . 1 . 210
Login ID	wsc-user
Login Password	*****
Port Number	80

Buttons: Send Settings, Help, Restart TR-7W, Close

**A Note About Free E-Mail Service:** Some of the most popular free e-mail services, such as **Gmail** and **Hotmail**, use SSL encryption, which the TR-7W does not support. Because of this, these services cannot be used to send warning e-mails. There is, however, an excellent free POP3 e-mail service provided by GMX which has been tested to work with the TR-7W. An account for free POP3 e-mail service can be quickly established at [www.gmx.com](http://www.gmx.com). When setting up the TR-7W for a GMX account use the settings shown here:

Warning Report Mail

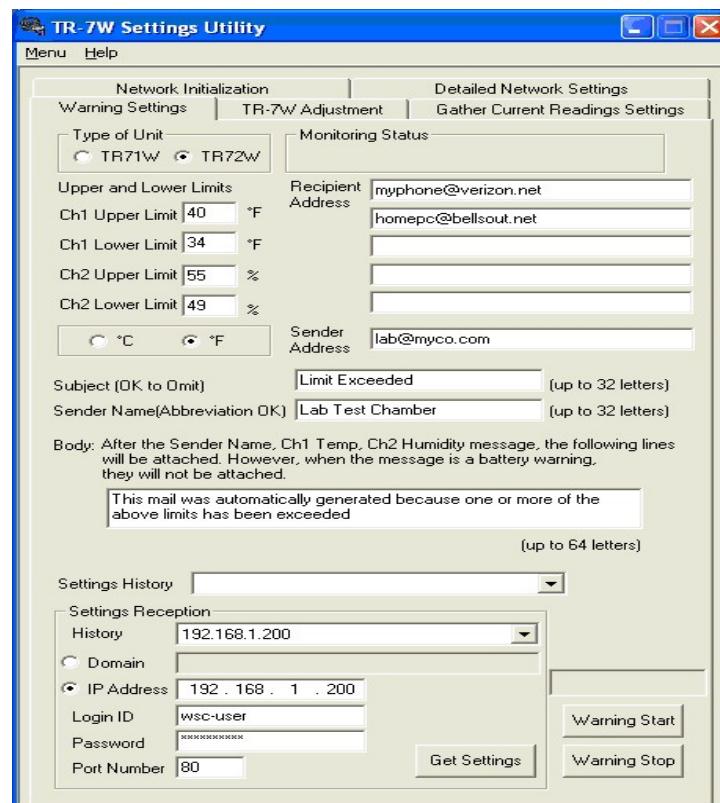
SMTP server name: smtp.gmx.com

SMTP Authentication Settings

Mode:  PLAIN  CRAM-MD5  OFF

User: user\_name@gmx.com

Password: password



### III) Warning Settings Window

1. Click on the “Warning Settings” tab.
2. Enter the IP address, Login ID and Password for the unit to be configured.
3. Click the “Get Settings” button.
4. Select the Type of Unit and Degrees C or F.
5. Enter the upper and / or lower limits to trigger warnings.
6. Enter the e-mail addresses (up to 5) for receipt of warning messages.
7. Enter senders e-mail address (Most e-mail servers will require that this be the address of the account holder).
8. Enter subject of warning message.
9. Enter name of sender (unit originating message).
10. Enter text to be appended to message (if any).
11. Click “Warning Start” button.

# Connecting to a Wireless LAN

Connect the TR-7W to a LAN or PC via a wired Ethernet connection.

## I) Configure Settings

1. Open the TR-7W Settings Utility software.
2. Click in the “Detailed Network Settings” tab.
3. Enter the IP address, Login ID and Password for the unit to be configured.
4. Click on the “Get Settings” button.
5. Click on the “Change Settings” button.
6. Turn “Wireless LAN Settings” On.
7. Enter the SSID for your wireless LAN router\*\*.  
\*\*Note: The TR-7W will not recognize ‘Space’ Characters in the SSID
8. If WEP encryption is used enter the Key Type.
9. Enter the Key Code (leave blank if no encryption is in use).
10. Click the “Send Settings” button.

Make sure that your wireless router is set for ‘Shared Key’ authentication. The TR-7W does not support ‘Open’ authentication.

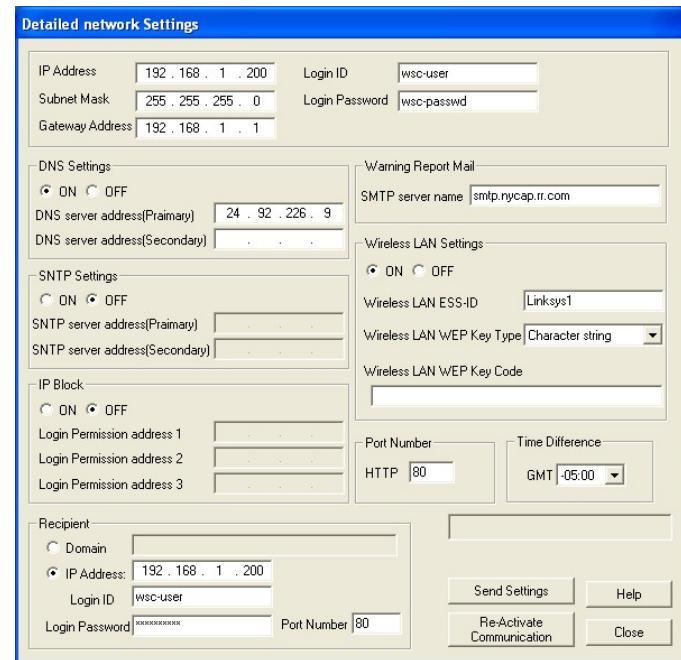
**Note: The TR-7W does not support WPA or WPA2 encryption.**

## II) Confirm Settings

- 1 Click “Get Settings” button.
- 2 Confirm data retrieved from unit is correct as entered.

Disconnect the TR-7W from the wired LAN and remove power. Insert the Wireless 802.11b LAN adapter card in the CF option slot along the top edge of the unit. Reconnect the A/C adapter to the TR-7W. The LED on the CF adapter card will stop blinking when the wireless connection with the router has been established.

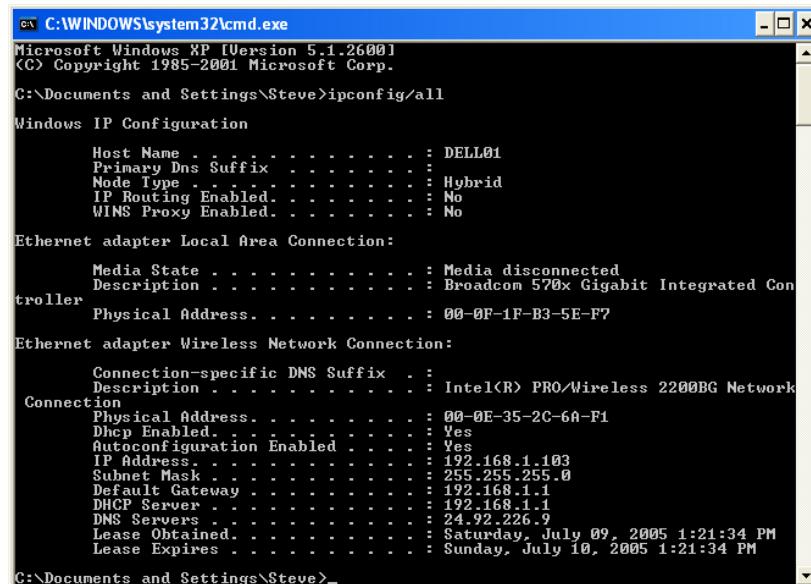
TR-7W Change Settings Window



## \*Determining Router & Server IP Addresses

Key addresses for your router and ISP server can be obtained from your computer. In order to display this information use the following procedure:

1. Connect your PC to the LAN to which your TR-7xW will be attached.
2. Go to the Start menu and click on Run.
3. Enter "Cmd".
4. In the DOS prompt window enter "ipconfig/all".
5. In the "Connection" Section find:
  - The IP address of the PC  
(as assigned by the router)
  - The assigned subnet mask
  - The router's default gateway address
  - The IP address of your ISP's DNS server



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Steve>ipconfig/all

Windows IP Configuration

Host Name . . . . . : DELL01
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled . . . . . : No
WINS Proxy Enabled . . . . . : No

Ethernet adapter Local Area Connection:

Media State . . . . . : Media disconnected
Description . . . . . : Broadcom 570x Gigabit Integrated Controller
Physical Address. . . . . : 00-0F-1F-B3-5E-F7

Ethernet adapter Wireless Network Connection:

Connection-specific DNS Suffix . . . . . :
Description . . . . . : Intel(R) PRO/Wireless 2200BG Network Connection
Physical Address. . . . . : 00-0E-35-2C-6A-F1
Dhcp Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IP Address . . . . . : 192.168.1.103
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
DHCP Server . . . . . : 192.168.1.1
DNS Servers . . . . . : 24.92.226.9
Lease Obtained . . . . . : Saturday, July 09, 2005 1:21:34 PM
Lease Expires . . . . . : Sunday, July 10, 2005 1:21:34 PM

C:\Documents and Settings\Steve>
```

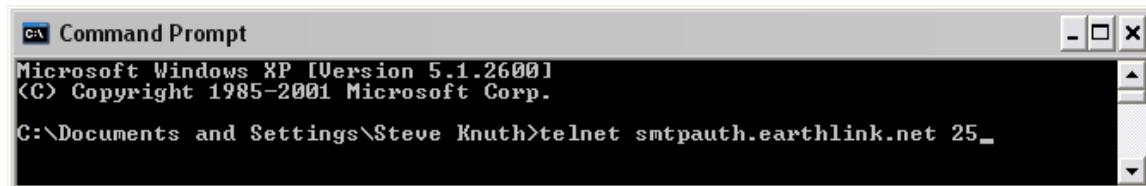
DOS Prompt Window

## \*Determining E-Mail Authentication Type

This procedure can be used with many E-Mail servers to determine the authentication type(s) that is required.

- 1) Open the Cmd prompt. Then type:

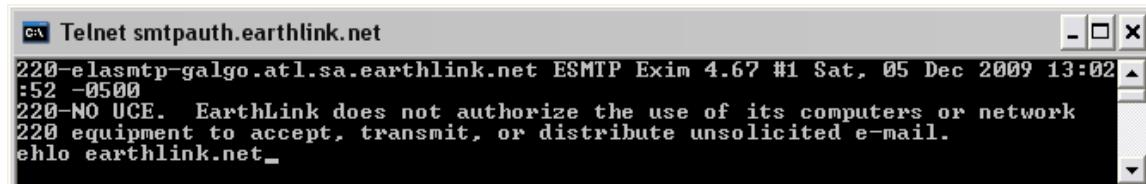
```
telnet <server_name>  
<smtp_port_no> (return)
```



A screenshot of a Microsoft Windows XP Command Prompt window. The title bar says "Command Prompt". The window shows the following text:  
Microsoft Windows XP [Version 5.1.2600]  
(C) Copyright 1985-2001 Microsoft Corp.  
C:\Documents and Settings\Steve Knuth>telnet smtpauth.earthlink.net 25

- 2) After server response, Type:

```
ehlo <your_domain_name> (return)
```



A screenshot of a Telnet window titled "Telnet smtpauth.earthlink.net". The text in the window is:  
220-elasmtplib-galgo.atl.sa.earthlink.net ESMTP Exim 4.67 #1 Sat, 05 Dec 2009 13:02  
:52 -0500  
220-NO UCE. EarthLink does not authorize the use of its computers or network  
220 equipment to accept, transmit, or distribute unsolicited e-mail.  
ehlo earthlink.net

- 3) The server will respond something like the following:

In this case you can see that Earthlink accepts both PLAIN and CRAM-MD5 smtp authentication (both of which are supported by TandD), as well as LOGIN (which TandD does not support).



A screenshot of a Telnet window titled "Telnet smtpauth.earthlink.net". The text in the window is:  
220-elasmtplib-galgo.atl.sa.earthlink.net ESMTP Exim 4.67 #1 Sat, 05 Dec 2009 13:02  
:52 -0500  
220-NO UCE. EarthLink does not authorize the use of its computers or network  
220 equipment to accept, transmit, or distribute unsolicited e-mail.  
ehlo earthlink.net  
250-elasmtplib-galgo.atl.sa.earthlink.net Hello earthlink.net [69.204.176.177]  
250-SIZE 14680064  
250-PIPELINING  
250-AUTH PLAIN LOGIN CRAM-MD5  
250-STARTTLS  
250 HELP