



TravelNet Data/Voice Cellular Router Installation Guide

ATTENTION INSTALLER

Parts List:

- TravelNet Data/Voice Cellular Routers (Models TN-2301/TN-2303/TN-2305)
- Green battery pack
- 110 volt power adapter
- Power line cord
- Edimax BR-6204WG WiFi Preconfigured Router
- 110 volt adapter with plug connector
- 3 foot Ethernet Cable
- RJ11 Phone Cable
- (2)External Antenna (white)
- (2)External Antenna mount with 14' cable
- (2)Stainless Antenna Mounts
- (2)SMA to TNC adapters
- Cable Entry Cover
- Aluminum Ground Plane (7 x 7)
- Customer Package (clear envelope)
 - o 7 foot Blue Ethernet Cable
 - o (2)Black TNC Antenna
 - o TravelNet Quick Start,
 - o TravelNet User CD
 - User Manual
 - Troubleshooting Guide

Other items not included:

- Sealant (Consult your vehicle manufacturer for the best sealant for your roof material.)

***TravelNet's Cellular Router System is Preconfigured
And Ready to Install with these Easy Steps***

Installation Instructions: (Models TN-2301/TN-2303/TN-2305)

1. Install the TravelNet Router and Edimax Router equipment in a convenient place such as upper cabinet (Velcro works well on the base of the each unit). Mount the unit so that the **diagnostic lights** can be viewed without moving the TravelNet Router and the Edimax Wireless Router.

2. Locate the 2 antennas on the roof away from other obstructions
Also, you will need sealant as recommended by your coach manufacturer, stainless screws (4) to anchor the aluminum ground plane to roof, cable clips to anchor cable, cable entry cover plate.

Warning – You must connect antennas to the SMA style antenna connectors on the TravelNet Cell Router before turning it on. Failure to do this could result in erratic start up behavior and could possibly damage the unit.



Figure 1

Position the antennas near the cable entry point. Here the TravelNet unit was located in the front overhead (Figure 1) with the antennas mounted close by on the roof.



Figure 2

Note that the antenna mounts are anchored to the 7" x 7" aluminum ground plane and that everything is well sealed.

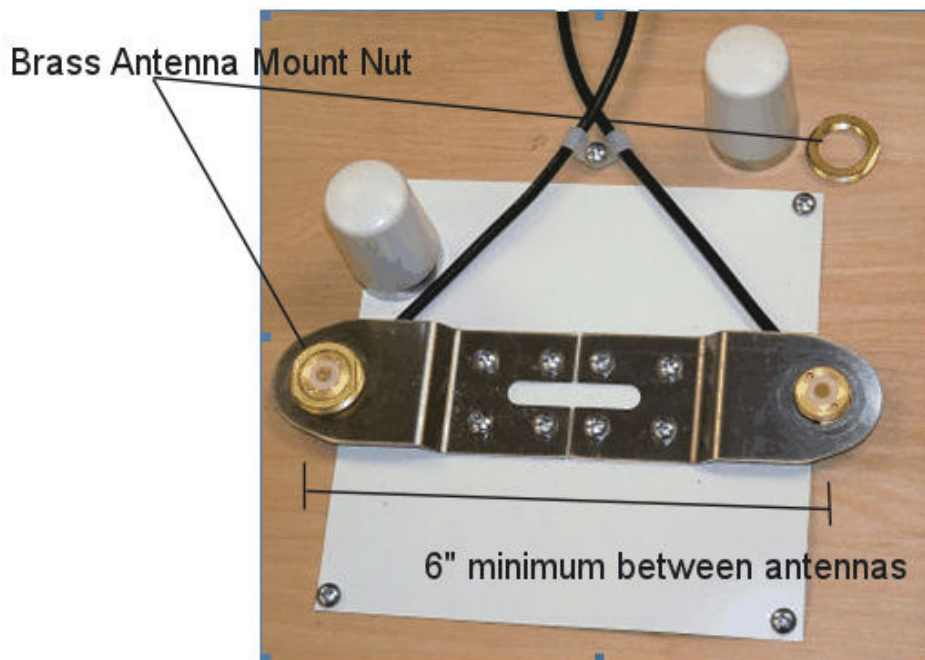


Figure 3

3. Insert the small end of the cable through the $\frac{3}{4}$ " diameter hole in the stainless antenna mount and feed the cable through. Next screw the brass antenna mount nut to the antenna mount as shown above, with the O-ring down, and attach the Antennas. Locate the antenna mounts as shown, and attach the stainless Antenna

mounts securely to the ground plane and coach roof as shown. Secure the antenna cable to the roof as shown.

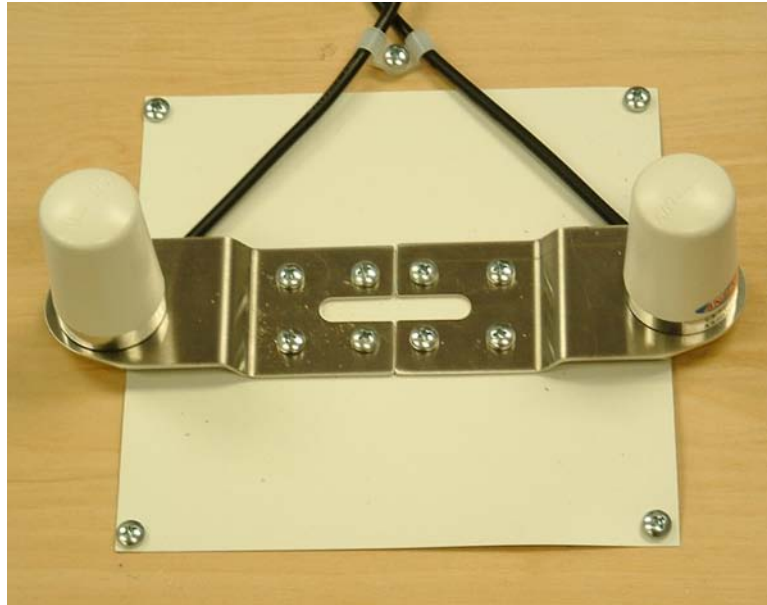


Figure 4

4. Route the 2 antenna cables to the cable entry hole in the coach roof. Securely attach the cable entry cover over the cable entry point on the coach roof using screws and caulk (Figure 5) Antenna cables should be directed to the TravelNet Router.



Figure 5

Setup the TravelNet Data/Voice Terminal

Setting up your Carrier Account.

Your TravelNet-DV requires both a data plan for internet service and a voice plan for analog phone service. Locate the "Account Application" (yellow sheet) in the "End User Envelope".






| | | | | |
|--|---|--|---|---|
|  | | For office use only: IIM router Activated yes no Date: _____ | | |
|  | Account Application Fax completed form to 847-991-3328 | | | |
| Select One Of Each TN2301DV- Only: 2 - Year term Data Plan 5 GB 2 - Year term Voice Plan _____ Minutes | | Select One: Personal liable <input type="checkbox"/> Corporate liable <input type="checkbox"/> | | |
| + Customer Information | | | | |
| Primary contact name: _____ Title: _____ Company name: _____ Street Address: _____ City/State/Zip: _____ Phone number: _____ Email: _____ FEIN (corporate liable) _____ SSN (personal liable) _____ Date of birth (personal liable) _____ Drivers license # (personal liable) _____ Drivers license expiration date: _____ Current Carrier/Acct # (if applicable) _____ _____ Dealer Name: _____ | | | | |
| Router Information (for office use only) | | | | |
| Model No: TN-2301 Serial No: 08443109SF IMEI: 352679013180794 Mobile Number: _____ Acct #: _____ WIFI Model: BR-5204WG | | | | |
| Take the information above to your local AT&T store; ask your representative to provision a Data Connect 5 GB line of service and a voice plan with your choice of minutes. Once you have the SIM card proceed to Activation Guide. | | | | |
| <table border="1"> <tr> <td>  </td> <td> Winegard Company TravelNet Support: Phone: 877-475-7771 Fax: 847-991-3328 </td> </tr> </table> | | |  | Winegard Company TravelNet Support: Phone: 877-475-7771 Fax: 847-991-3328 |
|  | Winegard Company TravelNet Support: Phone: 877-475-7771 Fax: 847-991-3328 | | | |

Figure 6

Sprint Customers (TN-2303) fill out the top half of the form and fax back to TravelNet Tech Support. Tech Support will set up the line of service with Sprint and contact you with the provisioning information required to activate the TravelNet system.

AT&T Customers (TN-2301) to take the Account Application form to your local AT&T store; ask your representative to provision a Data Connect 5 GB line of service and a voice plan with your choice of minutes. Once you have the SIM card proceed to installation instructions

Verizon Customers (TN-2305) fill out the top half of the form and fax back to TravelNet Tech Support. Tech Support will set up the line of service with Verizon and contact you with the provisioning information required to activate the TravelNet system.

| | |
|-----------------------------|---|
| Attention Installer: | AT&T systems (TN-2301) can be installed without the AT&T SIM card, the SIM maybe installed later. Convenient access to the bottom of the TravelNet Data Voice unit would make installing the SIM at a later time much easier. |
|-----------------------------|---|

1. Remove Battery Compartment Door on the bottom of the unit.



Figure 7

2. Installing the AT&T SIM (Sprint and Verizon users skip to Step 3)



Figure 8

Install the **SIM Card** into the SIM card holder in the battery compartment.

- If applicable, remove the SIM Card from the larger plastic card holding it.
- Remove the battery compartment door from your TravelNet unit.
- Carefully slide the SIM Card into the SIM card holder inside the battery compartment.

It will slide lengthwise as shown below, with the gold contact surface facing into the TravelNet and the corner notch matching the plastic SIM holder outline.

NOTE; Do not touch the gold-colored areas of your SIM Card.

3. Install the Battery & Secure the compartment door.

Install the **Rechargeable Battery Pack** into the battery compartment. Remove the battery compartment door, insert the battery connector into the battery terminal, arrange the battery pack in the compartment, and replace the battery compartment door. (As pictured above, the clipped corner of the battery connector will be on the left side.)

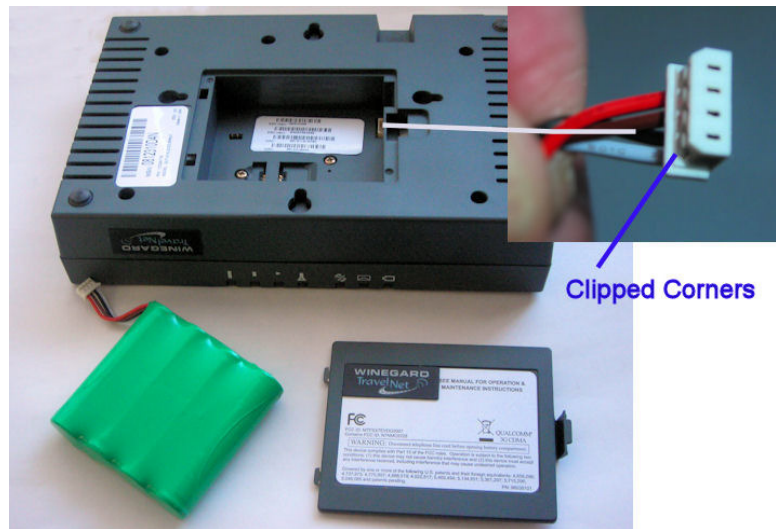


Figure 9

4. Attach Antenna cables



Figure 10

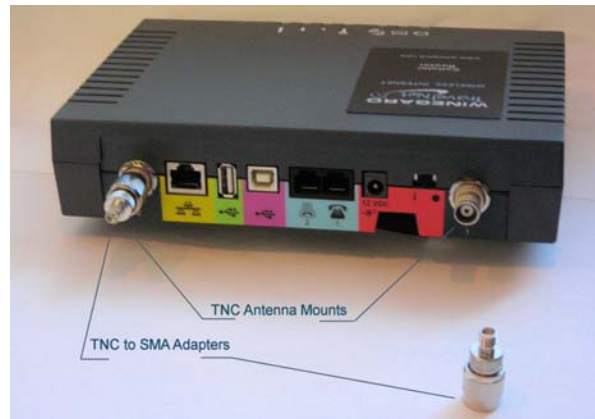


Figure 11

Carefully attach the 2 SMA-to-TNC adapters to the TravelNet router TNC antenna mounts.

Carefully attach the antenna cables to the SMA-to-TNC adapters on the TravelNet router. Caution should be taken to not over tighten the SMA cable connectors. Hand tighten only.

5. Attach Ethernet Cable to Cell Router and Edimax.

Connect Ethernet cable to the Ethernet port on the TravelNet Network Port (as shown) and to the Edimax WAN port (as shown)

Antenna cables not shown for clarity.



Figure 12

6. Attach Phone Cable

Connect an **RJ-11 Phone** cable from a standard phone to the Phone input (J1



Figure 13

7. Attach power cable

Connect the **Power Supply Adapter** to the unit's Power Input and connect the **Power Line Cord** to the Power Supply Adapter. Then, connect the Power Line Cord plug into a power outlet. When a 12 VDC source, order the appropriate pigtail accessories and please save the 12 volt power supply for the coach owner. Note that if using RV's DC power, the power inputs are polarity sensitive. NOTE: The lead with the white stripe is +12 VDC.

8. Turn on Cell Router Power using switch.

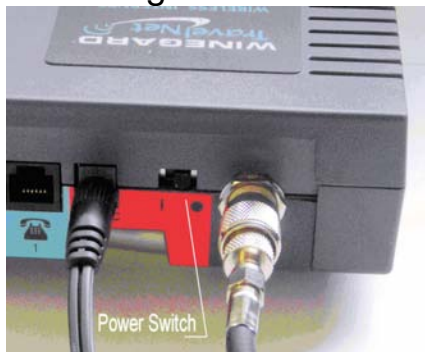


Figure 14

9. Understanding the LED Lights

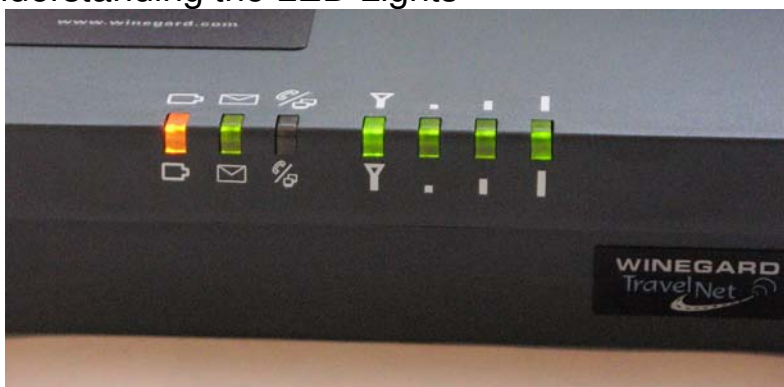


Figure 15

Note: LED's are tricolored, Green, Amber and Red and this corresponds to the background colors of the table below.

LED Status Table




| LED Status | Power | Messaging | Phone | Service /SIM | Signal Strength 1 | Signal Strength 2 | Signal Strength 3 |
|---------------|------------------|-------------|-------------------|---------------------------------|-------------------|-------------------|-------------------|
| Off | No Power | No Messages | On Hook / No WAN | | | | |
| Solid | AC/Batt Normal | Voicemail | On Hook/WAN | Service / 2G | 1 Bar | 2 Bars | 3 Bars |
| Slow Flashing | Batt Only | SMS | | Service / 2.5 G | 1 Bar | 1 Bar | 2 Bars |
| Fast Flashing | | Both | On-Hook / WAN Tx | Service / 3G | | | |
| Solid | AC/Batt Charging | | Off-Hook / WAN | Roam / 2G | | | |
| Slow Flashing | Low Batt | | Off-Hook / No WAN | Roam / 2.5G | | | |
| Fast Flashing | | | Off-Hook / WAN Tx | Roam / 3G | | | |
| Solid | Batt Fault | | Off-Hook / WAN | No Service | | | |
| Slow Flashing | Batt Critical | | Off-Hook / No WAN | PIN Locked | | | |
| Fast Flashing | | | Off-Hook / WAN Tx | SIM Error / No SIM / Net Reject | | | |

Attention Installer: Place “User Envelope” in cabinet or drawer for your customer.

TravelNet Data/Voice (TN-2303) Terminal Setup

Activate your Sprint TravelNet Data/Voice on the Sprint Network

Your TravelNet Data/Voice requires a data plan for internet and a voice plan to hook up the analog phone. Locate the “Account Application” (yellow sheet) in the “End User Envelope”. Fill out the top half of the form and fax to TravelNet Tech Support. Tech Support will set up the line of service with Sprint and contact you with the provisioning information required to activate the TravelNet system.

| | | |
|---|---|---|
|  |  | |
|  | Account Application Fax completed form to 847-991-3328 | For office use only: IIM router Activated yes no Date: March 20, 2009 |
| TN2300DV-S Only. | Select One: 2 - Year term <input type="checkbox"/> \$9.99 Unlim Ited V&D 2 - Year term <input checked="" type="checkbox"/> \$9.99 450 Min <u>Vs Unlim D</u> | Select One: Personal liable <input checked="" type="checkbox"/> Corporate liable <input type="checkbox"/> |

Customer Information

| | |
|--|--|
| Primary contact name: | John Doe |
| Title: | |
| Company name: | |
| Street Address: | 4950 Brown Deer Road |
| City/State/Zip: | Brown Deer, WI 55345 |
| Phone number: | 414-222-3333 |
| Email: | jdoe@comcast.net |
| FEIN (corporate liable) | |
| SSN (personal liable) | 123-45-6789 |
| Date of birth (personal liable) | 02/12/49 |
| Drivers license # (personal liable) | D12345678 Wisconsin |
| Drivers license expiration date: | 02/12/11 |
| Current Carrier/Acct# (if applicable) | |
| **Account PIN Code (6 to 10 numbers) | 123456 |
| **Account Security Question (Make of first car, 1 st Employer, Street you grew up on) | Street you grew up on? |
| **Account Security Answer | Oak Street |
| Dealer Name: | Camping World - Ft Meyers |
| Router Information (for office use only) | |
| Model No: | TN-2303 |
| Serial No: | 0812310D4N |
| ESN Dec: | 09603984163 |
| ESN Hex: | 603CCB23 |
| MDN: | 708-331-2281 4b |
| MSID: | 708-466-3945 4c |
| OTKSL: | 395682 4a |
| Acct#/Username: | |
| WiFi Model-S/N: | BR-6204WG |

Signature: _____

We request your personal information so that we may submit your application to Sprint PCS Vision for credit approval.

Figure 16

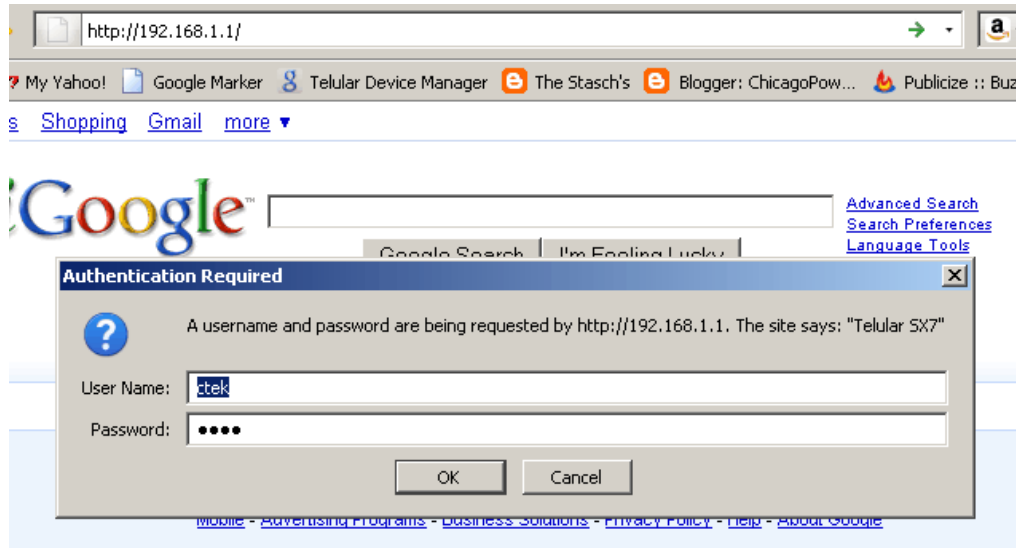


Figure 17

1. When all devices are connected and powered on, use your computer to connect to the **TravelNet Device Manager**.
 - Launch your Web browser (Internet Explorer or Firefox).
 - Go to the browser's address bar, type **http://192.168.1.1**, and press **Enter** or click the green Go arrow. A "Connect to" window will be displayed.
 - Enter the default **User name** ("ctek") and **Password** ("1234"). The **TravelNet Device Manager** will start and display the Home screen.



Figure 18

2. From the Home screen, click **Activation**
 - Wait 5–10 minutes to see if your unit will auto-register itself on the wireless network. If the **Activation Status** field displays **ACTIVE**, your TravelNet is ready for use.

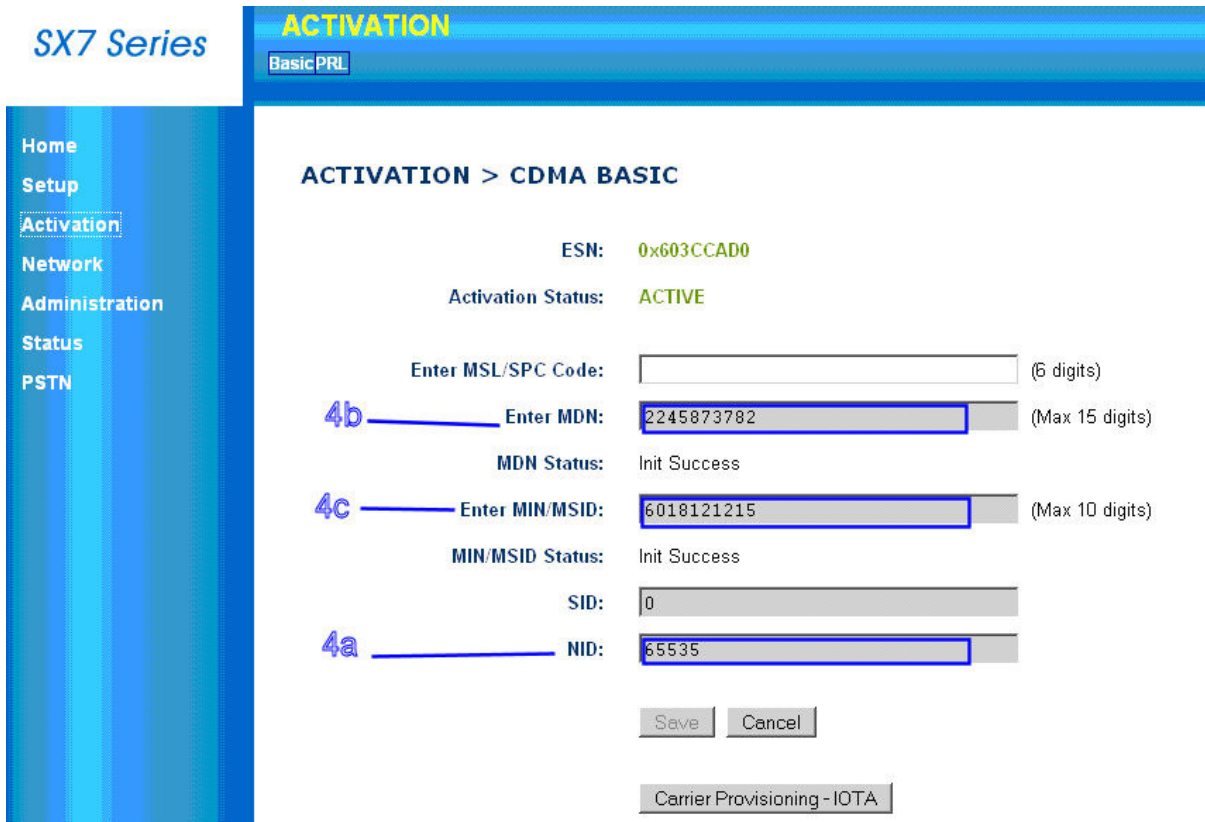


Figure 19

- Proceed to **Set Up a Wireless WAN Data Connection**.

TIP: Bookmark the **TravelNet Device Manager** access page (<http://192.168.1.1>).

3. For Sprint Activation, manually enter your **MSL/SPC Code** (4a), your **MDN** (10-digit wireless phone number) (4b), and your **MIN/MSID** (usually also your 10-digit wireless phone number) (4c).

4. Click **Save**. If you have no additional changes, click **Restart** to complete Activation. The TravelNet will power down and restart.



5. Click Setup, click Wireless WAN in the Setup menu.

6. PSD Auto Connect select **Always On**

7. Do a hard restart of all network devices in order, first the TravelNet Cellular Router, 2nd the WiFi Router, and finally laptop.

Activate your AT&T TravelNet Data/Voice (TN-2301) on the AT&T Network Set Up Your TravelNet

Your AT&T TravelNet (TN-2301) requires a data plan for internet service and a voice plan to connect the analog phone to . Locate the “Account Activation” Form (yellow sheet), it has all the information the AT&T store will require to setup your account and provide you a SIM card.

IMPORTANT: Power down your TravelNet system, and remove the green battery pack from the battery compartment before attempting to install SIM.

1. Install the **SIM Card** into the SIM card holder in the battery compartment.
 - If applicable, remove the SIM Card from the larger plastic card holding it.
 - Remove the battery compartment door from your TravelNet unit.
 - Carefully slide the SIM Card into the SIM card holder inside the battery compartment.

It will slide lengthwise as shown below, with the gold contact surface facing into the TravelNet and the corner notch matching the plastic SIM holder outline.

NOTE; Do not touch the gold-colored areas of your SIM Card.



Figure 20

2. Install the **Rechargeable Battery Pack** into the battery compartment. (Fig. 20 above)

- With the battery compartment door open, insert the battery connector into the battery terminal.
- Arrange the battery pack in the battery compartment, so the battery connector wire is in the top right of the compartment.
- Replace the battery compartment door.
- The battery connector will have the rounded corner side on the left when inserted into the battery terminal.

3. Connect and hand-tighten the **two Antennas** (see above).

4. Connect the **Power Supply Adapter** to the unit's Power Input and connect the **Power Line Cord** to the Power Supply Adapter. Then, connect the Power Supply Adapter plug into a power outlet.



Optional Ground

5. (Optional) For optimal performance and protection, you may elect to connect a copper wire (not included) to the protective earth **Ground Connector Screw** to ground the device.

- In a building environment, connecting to an earth ground (such as a cold water pipe) can protect the device and peripherals from static and conducted electricity. It can also reduce static or buzzing during voice calls.

- In a vehicle environment, grounding to the frame and battery or alternator can reduce static or buzzing during voice calls.

Connect the **Ethernet** (RJ-45) cable to the Ethernet Port on the TravelNet D/V. *(This cable will serve as the connection to your computer or WiFi Router or other network device in most configurations, including the primary Wireless WAN data connection.)*

Setting Up WiFi Security on the Edimax BR-6204WG

Refer to the Edimax users guide CD for additional information.

Once you have an internet connection and an unsecure WiFi connection established proceed to setup WiFi security for your Edimax router.

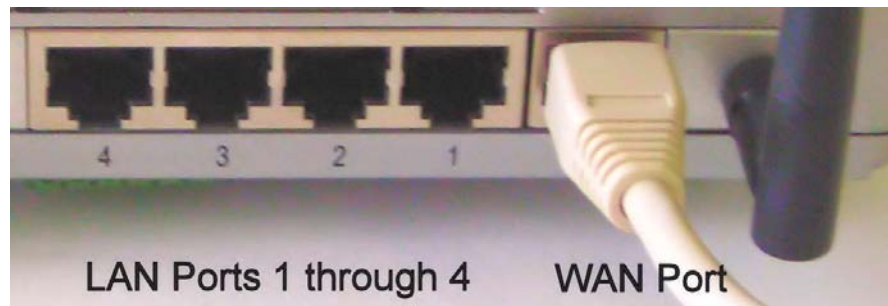


Figure 21

WEP Key Setup

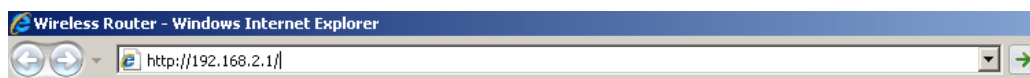


Figure 22

1. Log into the Edimax WiFi Router at 192.168.2.1
2. Enter the Username 'admin' and Password '1234'
3. Go to WIRELESS SETTINGS > SECURITY
4. Encryption type: select **WEP**
5. Key Length: **64-bit**
6. Key Format: **Hex (10 Characters)**
7. Default Tx Key: **Key 1.**
8. Encryption Key 1: Enter your 10 Characters Key- see chart below
9. **Do not place an "x" in the selection box labeled "Enable 802.1x Authentication"** for normal installations. If there are any questions call TravelNet Technical Support.

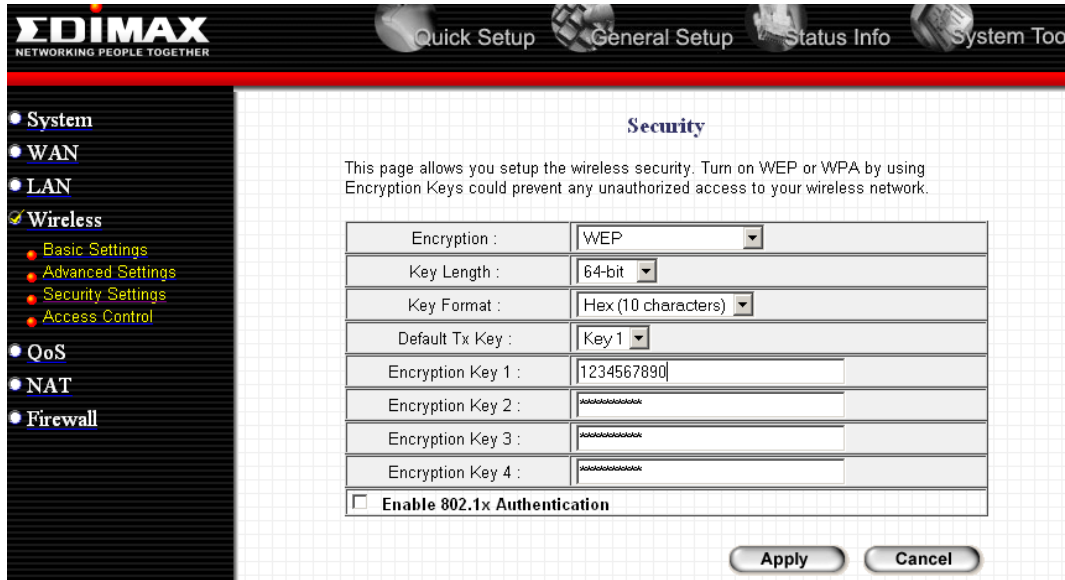


Figure 23

WEP Key Setup

| Parameters | Default | Description |
|------------|---------|--|
| Key Length | 64-bit | You can select the WEP key length for encryption, 64-bit or 128-bit. Larger WEP key length requires 26 hexadecimal characters |
| Key Format | | Use hexadecimal digits (in the "A-F", "a-f" and "0-9" range) to be the WEP Key. Examples: Hexadecimal Digits: 12345abcde or abcdef0123 |

10. Write key on piece of paper or on Edimax manual and keep in a safe place with other important documentation.
11. Click on the Apply Button and wait for the System to automatically Restart. Click OK button and security setup is complete.
12. Call TravelNet Technical Support (877) 475-7771 if there are questions concerning Apple Computers or if you prefer to use other encryption methods.

To connect your XP computer to your wireless network

Configuring the Windows XP Wireless Clients (With WEP)

Configuration of the Windows XP wireless clients for WEP key authentication depends on whether you are using Windows XP with SP2 or Windows XP with SP1 and whether the wireless network adapter driver supports Wireless Auto Configuration.

Wireless Network Adapter Driver Supports Wireless Auto Configuration with Windows XP with SP2

Use the following procedure to configure Windows XP with SP2 for your infrastructure mode wireless network when the wireless network adapter supports Wireless Auto Configuration:

1. When the computer is within range of the wireless router or Access Point (AP) operating in your home or small business, Windows XP should detect it and prompt you with a **Wireless networks detected** message in the notification area of your taskbar.
2. Click the notification message. If you are not notified, right-click the wireless network adapter in Network Connections, then click **View Available Wireless Networks**. In either case, you should see a **Choose a wireless network** dialog box with the name of your wireless network. (If the “TravelNet xxxx” wireless network is not displayed, it may be necessary to reset the unit by removing its power plug for 10 seconds, then reinsert the power plug and wait 45 to 60 seconds). Then select the “View Available Wireless Networks” again.
3. Double-click your wireless network name. Windows XP will attempt to connect to your wireless network.
4. Because Windows XP has not been configured with the WEP key for your wireless network, the connection attempt will fail and Windows XP will prompt you with a **Wireless Network Connection** dialog box. Type the WEP key in **Network key** and **Confirm network key**, and then click **Connect**.
5. If the status message for your wireless network in the **Choose a wireless network** dialog box is **Connected**, you are done. If the status message for your wireless network in the **Choose a wireless network** dialog box is **Authentication did not succeed**, click **Change the order of preferred networks** in the list of **Related tasks**. From the **Wireless Networks** tab of properties of your wireless network adapter, click the name of your wireless network in **Preferred networks**, and then click **Properties**.
6. In **Network Authentication**, click **WEP**.
7. In **Network key**, type the WEP key as configured on the wireless Access Point (AP). In **Confirm network key**, retype the WEP key.
8. Click **OK** to save changes to the wireless network.
9. Click **OK** to save changes to the wireless network adapt


To connect your Windows Vista computer to your wireless network

View and connect to available wireless networks



Applies to all editions of Windows Vista.

If you have a mobile PC, you can see a list of available wireless networks, and then connect to one of those networks, no matter where you are. The wireless networks appear only if your computer has a wireless network adapter installed and the adapter is turned on.

1. Open Connect to a Network by clicking the **Start** button , and then clicking **Connect to**.

2. In the **Show** list, click **Wireless**.

You'll see a list of the wireless networks currently available. If you do not see a network listing similar to this example: TravelNet 1234, it may be necessary to reset power on the WiFi router, wait 45 to 60 seconds and refresh the "View Available Wireless Networks".

You'll see a list of the wireless networks currently available.

3. Click a network, and then click **Connect**.

If you don't see the network you want to connect to, click **Set up a connection or network**. A list of options will appear that includes manually searching for and connecting to a network, as well as creating a new network connection.

Some networks require a network security key or passphrase. To connect to one of those networks, ask the network administrator or the service provider for the key or passphrase.

Enter WEP encryption key in same manner as described on previous page for Windows XP



Whenever possible, you should connect to security-enabled wireless networks. If you do connect to a network that is not secure, be aware that someone with the right tools can see everything that you do, including the websites you visit, the documents you work on, and the user names and passwords that you use.

After you're connected, you can close the **Wireless Network Connection** window. Now you're ready to browse the Web wirelessly. You can also create a wireless network in your home, RV or boat that connects your computers, printers, cameras, games, and other accessories for easy access and enjoyment.

QUESTIONS? CALL OUR SUPPORT LINE: 877-475-7771 or visit our website FAQ at <http://www.winegard.com>

TravelNet
Winegard Company
Support: (877) 475-7771
FAX: 847-991-3328