

# SETUP & USER GUIDE DWA0100

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#### 1 Product Overview

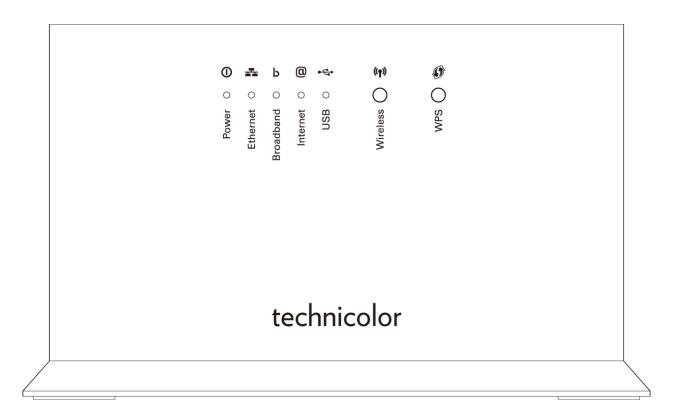
Thank you for choosing Technicolor® Media Access Gateway. This Wireless Gateway combines the functionality of a VDSL2 / ADSL2 modem and Internet gateway in one. The various security features, such as WPS, WPA2, SPI, and NAT, protect your data and privacy online. The web-based utility allows you to configure your Wireless Gateway easily.

#### 1.1 Features

- Compliant with ITU G.993.2 (VDSL2) standard
- Compliant with ITU G.998.4 (G.inp)
- Compliant with ITU G.993.5 (G.vector)
- Supports 8a, 8b, 8c, 8d, 12a, 12b, 17a, and 30a profiles
- Supports ATM and PTM modes
- Supports Ethernet WAN
- Supports 3G dongle
- Supports DLNA
- Supports Print Server
- Supports SAMBA
- Supports USB disk/USB flash
- Compliant with ADSL G.dmt (G.992.1), G.lite (G.992.2) standards
- Compliant with ADSL2 G.dmt.bis (G.992.3) and ADSL2 + G.992.4 standards
- Up to Up to 24Mbps downstream, 1.2Mbps upstream with ADSL2+ service
- IEEE 802.11b/g/n infrastructure operating modes
- Supports IPv4 and IPv6 protocols
- Supports web-based configuration
- Supports Command Line Interface (CLI) via Telnet
- Supports NAT, SPI
- Supports VLAN and QoS
- Supports firewall protection
- Supports up to 8 permanent virtual circuits (PVC)
- Supports Wi-Fi Multimedia (WMM)
- Supports Wi-Fi Protected Setup (WPS) for easy connection
- Supports wireless data encryption with 64/128-bit WEP standard
- Supports enhanced security for WPA-TKIP, WPA2-AES, WPA, and WPA2

#### 1.2 **Hardware Overview**

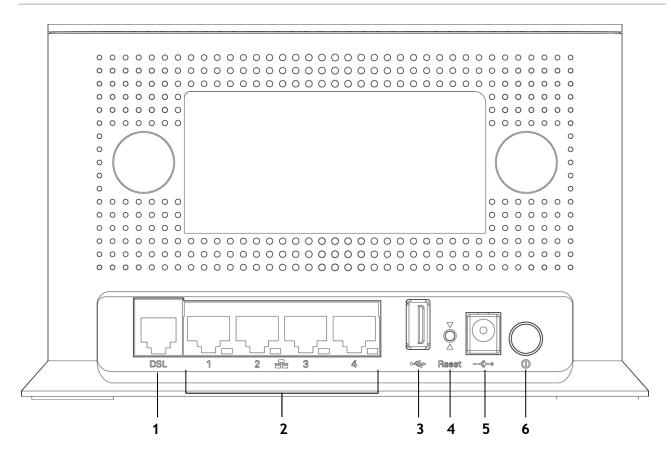
#### 1.2.1 **Front Panel**



Label	Description
Power	Lights up when the device is powered on.  Solid GREEN - Indicates normal operation.  Flashing GREEN - Firmware upgrade in progress.  Solid RED - Indicates malfunction.  Off - The device is powered off.
Ethernet	<ul> <li>Solid GREEN - A wired connection is established.</li> <li>Flashing GREEN - Data transmission is in progress.</li> <li>Off - No wired connection detected.</li> </ul>
Broadband	Lights up to indicate DSL connection status.  • Flashing GREEN (slow) - DSL line detection in progress.  • Flashing GREEN (fast) - Attempts to synchronize with DSL line.  • Solid GREEN - DSL connection is established.  • Off - Modem power is off.

Label	Description
Internet	Lights up to indicate Internet connection status.  Solid GREEN - Internet is connected but no activity.  Flashing GREEN - Data transmission is in progress.  Solid RED - Internet connection failed.  Off - No internet connection.
USB	Lights up to indicate USB device connection status.  Solid GREEN - A device is connected to the USB port.  Blinking GREEN - Negotiation or traffic.  Off - No device connected to the USB port.
Wireless	Press button 1 to 7 seconds to enable or disable WLAN.  Lights up to indicate wireless connection.  Solid GREEN - Wireless connection is established.  Flashing GREEN - Negotiation or data transmission is in progress.  Off - Wireless connection is disabled.
WPS	Press button for more than 8 seconds to enable WPS.  Lights up to indicate the Wi-Fi Protected Setup (WPS) connection status.  Solid GREEN - WPS is active.  Blinking Green: WPS negotiation  RED - WPS registration failed.  Off - WPS is off.

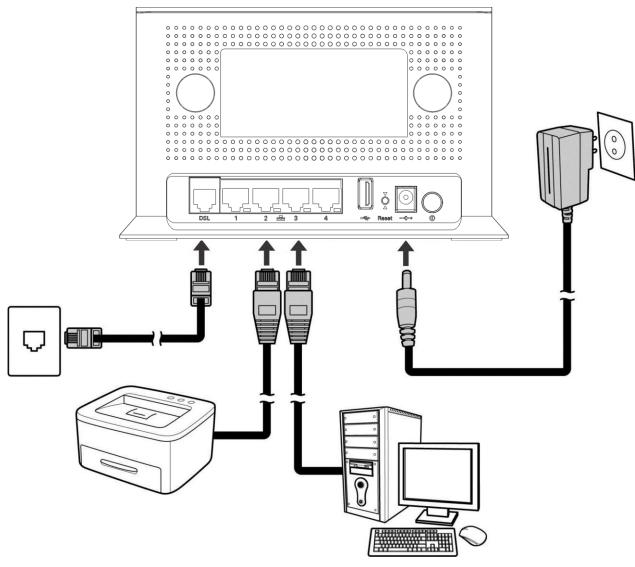
### 1.2.2 Rear Panel



No.	Ports / Buttons	Description
1	DSL port	Connects to the DSL line using the RJ-11 cable.
2	Ethernet ports and LEDs	Connects a computer and other Ethernet network devices to the Wireless Gateway using RJ-45 cables.
	1, 2, 3, 4	The LAN LED (1, 2, 3, 4) lights up when a device is connected to the Ethernet port (1, 2, 3, 4).
3	USB port	Connects a USB storage device.
4	Reset button	Press and hold this button for at least 10 seconds to restore your device to its original factory default setting.
5	DC In jack	Connects to the power adapter.
6	Power button	Press to turn your device on or off.

### 2 Installation

Make sure that all devices are powered off before starting installation.



Installation Diagram

### 2.1 Connect the Power

- 1 Connect the power adapter to the DC In jack of your Wireless Gateway.
- 2 Plug the power adapter to a wall outlet or a power strip.



- Use only the supplied power adapter. Using other power adapters may cause damage to the device.
- Connect all devices to your Wireless Gateway before connecting the power adapter to a wall outlet.

#### 2.2 Connect Wired Devices



When setting up the Wireless Gateway for the first time, connect the host computer via Ethernet connection.

- 1 Connect one end of the RJ-45 cable to one of the Ethernet (1, 2, 3, 4) ports of your Wireless Gateway.
- **2** Connect the other end of the RJ-45 cable to the Ethernet port of the computer.
- 3 Repeat the above steps to connect other computers to the Wireless Gateway via Ethernet connection.
- **4** To connect more than four computers, use a hub or switch. Connect one end of an RJ-45 cable to the hub or switch and the other end to the computer.

#### 2.3 Connect Wireless Devices

Before connecting wireless devices to the Wireless Gateway, configure the wireless security settings of your Wireless Gateway (see "To Set up Security Settings on page 46"). Take note of the SSID and the password you have set, you need the SSID and the password to connect devices to your Wireless Gateway.

#### 2.3.1 WLAN

From the wireless device end, search for the Wireless Gateway network name (SSID), and enter the passphrase to connect.



The SSID and passphrase are the ones you have set in the Wireless Security Settings (see "To Set up Security Settings on page 46").

### 2.3.2 Wi-Fi Protected Setup (WPS)

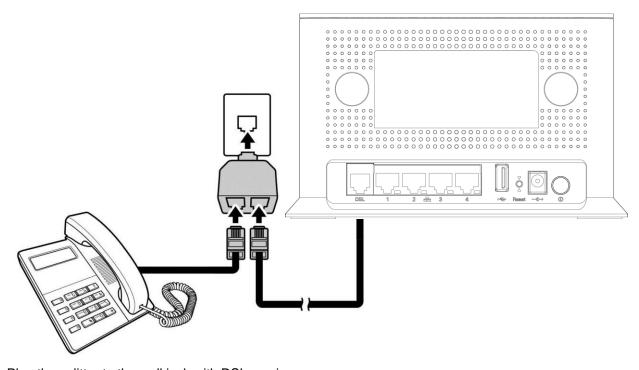
Press and hold the **WPS button** of the Wireless Gateway for at least 8 seconds and press the WPS button on the WPS-enabled device to start pairing.

### 2.4 Connect the Broadband (DSL)

- 1 Connect one end of the RJ-11 cable to the DSL port of your Wireless Gateway.
- 2 Connect the other end of the RJ-11 cable to a wall jack with DSL service.

### 2.4.1 Use a Splitter

You need a splitter when connecting the Wireless Gateway to the wall jack that also connects to a telephone.



- 1 Plug the splitter to the wall jack with DSL service.
- 2 Connect one end of the RJ-11 cable to the DSL port of your Wireless Gateway.
- 3 Connect the other end of the RJ-11 cable to the splitter.
- **4** Connect the telephone to the splitter using another RJ-11 cable.

### 2.5 Check the Installation

To ensure that all devices are properly connected, check the LED indicators on the front of your Wireless Gateway. For basic installation, the following LEDs must be lit:

- Power LED
- Ethernet LED
- DSL LED

The lighted LED indicators vary depending on the type of connection that you make. See "Front Panel" on page 5 for more information about the LED indicators.

## 3 Configure the Computer

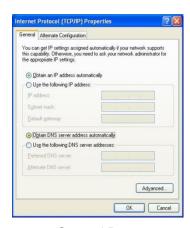
This chapter will guide you on how to configure your computer according to the operating system you are using.

- Windows® XP, see below.
- Windows® Vista, see page 11.
- Windows® 7, see page 12.
- Windows® 8, see page 12.

#### 3.1 Windows XP

If you are using Windows® XP, follow the instructions below to configure your computer.

- 1 Click Start > Control Panel > Network Connections.
- 2 Right-click Local Area Connection, then click Properties.
- 3 On the network components list, make sure that Internet Protocol (TCP/IP) is checked. If not, check it to enable the Properties button.
- 4 Select Internet Protocol (TCP/IP), and then click Properties.
- 5 On the General tab, select Obtain an IP Address automatically and Obtain DNS server address automatically.
- 6 Click OK.



General Page

### 3.2 Windows Vista

If you are using Windows® Vista, follow the instructions below to configure your computer.

- 1 Click Start > Control Panel > Network and Internet Connections > Network Connections.
- 2 Right-click Local Area Connection, then click Properties.
- 3 On the General tab, make sure that Internet Protocol (TCP/IP) is checked. If not, check it to enable the Properties button.
- 4 Select Internet Protocol (TCP/IP), and then click Properties.
- 5 Select Obtain an IP Address automatically and Obtain DNS server address automatically.
- 6 Click OK.



General Page

#### 3.3 Windows 7

If you are using Windows® 7, follow the instructions below to configure your computer.

- 1 Click Start > Control Panel > Network & Sharing Center.
- 2 Click Local Area Connection.
- 3 Click Properties.
- **4** On the network components list, make sure that Internet Protocol (TCP/IP) is checked. If not, check it to enable the Properties button.
- 5 Select Internet Protocol (TCP/IP), and then click Properties.
- 6 On the General tab, select Obtain an IP Address automatically and Obtain DNS server address automatically.
- 7 Click OK.



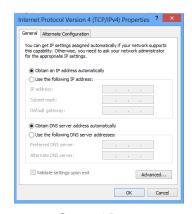
General Page

#### 3.4 Windows 8

If you are using Windows® 8, follow the instructions below to configure your computer.

- 1 On a PC, move the cursor to the bottom or top right corner of the screen and click **Settings**. On a tablet, swipe left from the right side of the screen and tap **Settings**.
- 2 Click Control Panel.
- 3 Change the display style from Category to Large icons or Small icons.
- 4 Click Network and Sharing Center.
- 5 Click Change adapter settings.
- 6 Right click the Ethernet connection click Properties.
- 7 On the network components list, make sure that Internet Protocol Version 4 (TCP/IPv4) is checked. If not, check it to enable the Properties button.
- 8 Select Internet Protocol Version 4 (TCP/IPv4), and then click Properties.
- 9 On the General tab, select Obtain an IP address automatically and Obtain DNS server address automatically.

10Click OK.



General Page

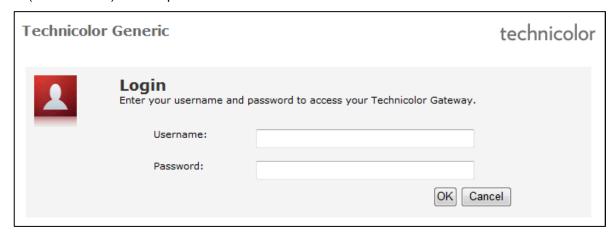
## 4 Access the Wireless Gateway

Use the Web Configurations utility to configure your Wireless Gateway.

### 4.1 Login

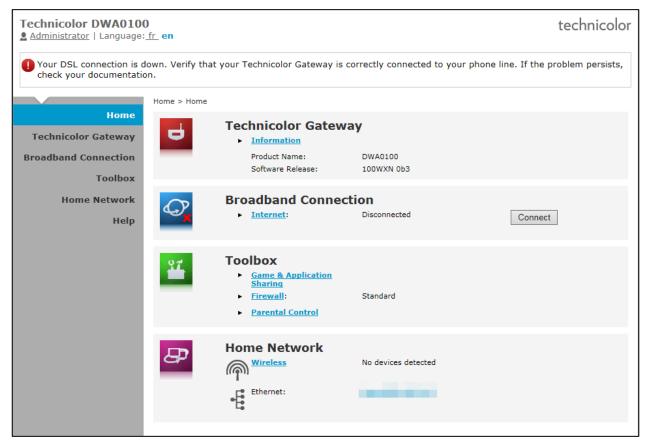
For more advanced configuration, access the Technicolor web configuration utility.

- 1 Launch the web browser.
- 2 On the address bar, type <a href="http://192.168.1.1">http://192.168.1.1</a>, and then press Enter.
- **3** A login screen displays if you have already set the administrator password. Enter the user name (Administrator) and the password.



#### 4.2 The Interface

Once connected, the **Home** screen appears. The **Home** screen provides quick access to the most common functions of your Wireless Gateway. Click an option to access the function.



To quickly change passwords or switch users, click the user name on the top-left corner of the screen (in the above example, "Administrator").

In some screens, shortcut items are available on the bottom of the screen. Click a shortcut to access the page. See example below.



### 4.3 Using the Menu

For more advanced users, use the main menu, located on the left panel of the screen, to configure your Wireless Gateway.

Click a menu item, then a submenu to display the page.

The following menu items are available:

- Home Displays the Home screen.
- Technicolor Gateway Allows you to configure your Wireless Gateway, such as system date and time, and to view event logs.
- Broadband Connection Allows you to view the DSL connection status of your Wireless Gateway
  and configure a dial-up connection and establish or terminate the Internet connection.
- **Toolbox** Allows you to configure more advanced functions, such as remote assistance, firewall, filter, parental control services, and others.
- Home Network Allows you to view the devices connected to the network of your Wireless Gateway.

### 4.4 Configuration Wizard

For first time users, you may want to use the wizard to set up your Wireless Gateway. Perform the following:

- 1 On the main menu, click **Technicolor Gateway**.
- 2 Click the Setup my Technicolor Gateway shortcut at the bottom of the screen.



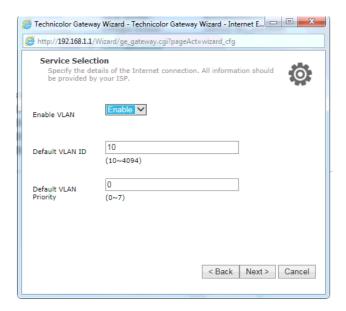
1 The Technicolor Wizard screen appears. Click Next to continue.



- The required information on the succeeding screens must be obtained from your Internet Service Provider (ISP).
- 2 Select the DSL account service: Bridge or Routed PPP. Then click Next.

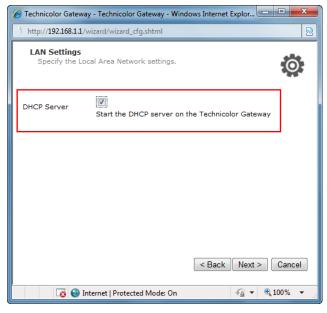


3 If the ISP requires you to use a specific VLAN ID and priority for the VDSL connection, select **Enable** and enter them. Click **Next**.



If you selected Routed PPP, skip to step 5.

4 If you have a DHCP server on your LAN, clear the DHCP Server check box. Otherwise, keep it selected. Click **Next** to continue.

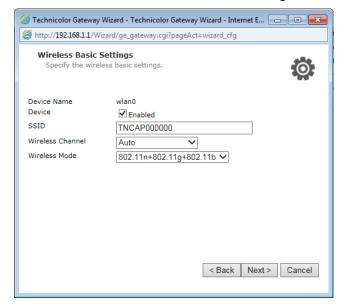


Skip to step 6.

5 The Internet Account Settings screen appears. Obtain the necessary information from your ISP.



- a Type your Internet account user name in User Name.
- **b** Type your Internet account user name in **User Name**.
- c Type your account password in Password and Confirm Password and click Next.
- 6 Enter or take note of the basic wireless settings.



- a Check Enabled to enable the wireless access point.
- **b** Enter the wireless network name (**SSID**) to show to wireless devices to connect to your network.
- c Select a Wireless Channel manually or automatic channel selection.
- d Wireless Mode Select the types of wireless devices to allow to connect and then click Next.

7 Enter or take note of the wireless security settings.



a Select the type of wireless security to use.

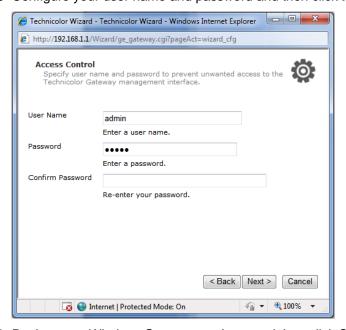
Select WPA2 for the strongest security. Older devices may not be able to connect.

Select WPA+WPA2 to let newer and slightly older devices connect.

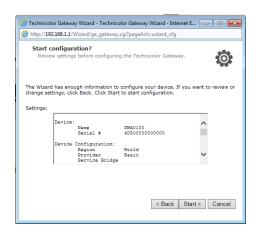
Select WPA if you only have devices that support WPA.

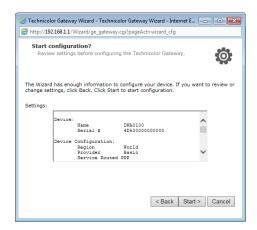
Select **WEP** to use the weakest security if you have to connect old devices that do not support WPA2 or WPA. See "To Set up Security Settings on page 46" for details on the WEP encryption settings.

- **b** Type the **Phassphrase** (password) users enter to connect to the wireless network and click **Next**.
- 8 Configure your user name and password and then click Next.



**9** Review your Wireless Gateway settings, and then click Start to apply the settings.

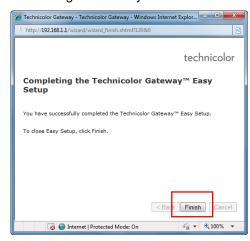




**Bridge Connection** 

**Routed PPP Connection** 

10The configuration may take a while to finish. When complete, click Finish.



11Close the web browser.

## 5 Technicolor Gateway

The **Technicolor Gateway** menu allows you to view the system information and configure the Wireless Gateway. This menu is divided into three sections: **Information**, **Configuration**, and **Event Logs**.



### 5.1 System Information

The System Information page displays the product name, device serial number, and software release information. To view the **System Information** page, do one of the following:

- 1 On the main menu, click **Technicolor Gateway > Information**.
- 2 From the Home screen, click Information.

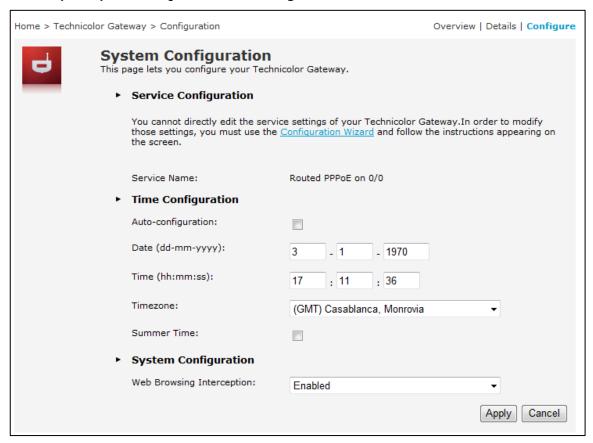


### 5.2 System Configuration

The **System Configuration** page allows you to configure the Internet service and the system date and time, and enable web browsing interception.

To view the System Configuration page, click Technicolor Gateway > Configuration.

To modify the system configuration, click Configure.



### 5.2.1 DSL Service Configuration

To modify the DSL service configuration, click **Configuration Wizard** and then follow the instructions on the screen. See "Configuration Wizard on page 15".

## 5.2.2 Time Configuration

To modify the time configuration, do the one of following:

#### Manual Configuration

To manually set the date and time, enter the date and time values in the corresponding fields. Select a **Timezone** or enable **Summer Time** for applicable areas.

#### **Auto Configuration**

To synchronize the date and time with a time server, do the following:

1 Check the Auto-configuration box.

- **2** Enter the values of the applicable items in your location:
  - ▶ Timezone Enter the time zone in your location.
  - ▶ **Summer Time** Check if summer time is applicable in your location.
- 3 Enter the time server to sync the Wireless Gateway with. You can type up to five timer servers.
- 4 Click Apply to save changes.

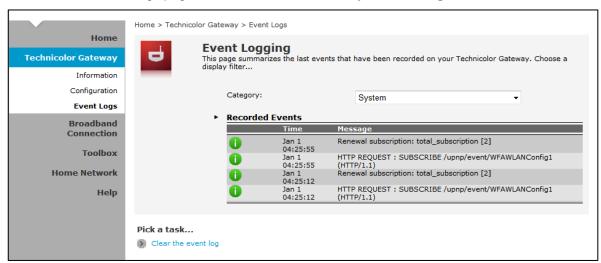
### 5.2.3 Web Browsing Interception

- 5 On the Web Browsing Interception box, select one of the following:
  - ▶ Enabled (default) To enable web browsing interception.
  - Disabled To disable web browsing interception. When disabled, address based filtering is also disabled.
- 6 Click Apply to save changes.

### 5.3 Event Logs

The **Event Logs** page allows you to view and clear system logs.

To access the Event Logs page, click Technicolor Gateway > Event Logs.



You can filter the list by selecting a category from the drop-down lists.

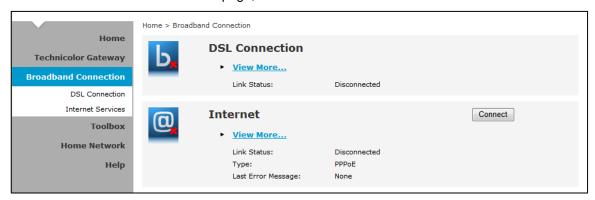
The log is automatically refreshed every 10 seconds.

To clear the log, click Clear the event log on the bottom of the page.

### 6 Broadband Connection

The **Broadband Connection** menu allows you to view and modify the Internet service configuration of your Wireless Gateway. This menu is divided into two sections: **DSL Connection** and **Internet Services**.

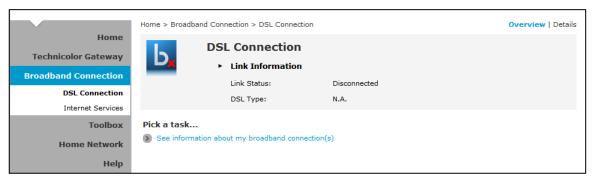
To view the Broadband Connection page, click Broadband Connection.



#### 6.1 DSL Connection

To view the DSL connection status, do one of the following:

- On the Broadband Connection page, click View more under DSL Connection.
- On the main menu, click Broadband Connection > DSL Connection.

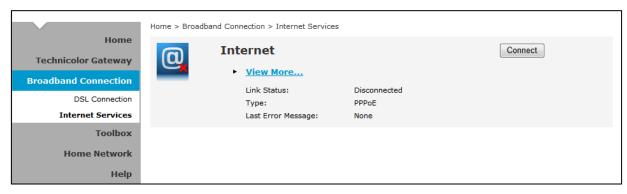


DSL connection cannot be modified from this point. To modify the DSL connection, see "5.2.1 DSL Service Configuration on page 22".

#### 6.2 Internet Services

Use the **Internet Services** page to configure the settings and connect to the Internet. To view the **Internet** page, do one of the following:

- From the Home screen, click Internet
- On the Broadband Connection page, click View more under Internet.
- On the main menu, click Broadband Connection > Internet Services > View More

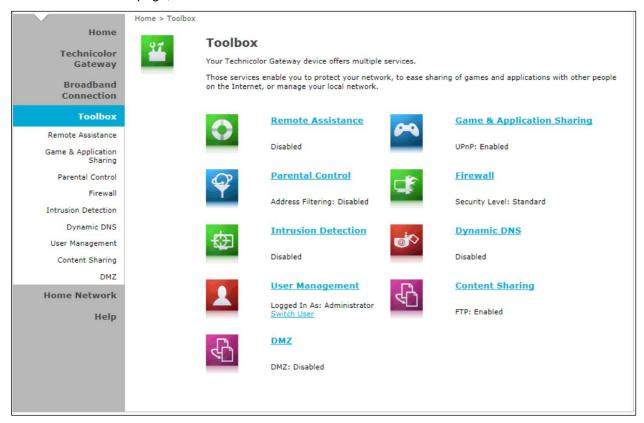


- ▶ To connect to the Internet, click Connect.
- To modify the account username and password, re-type the information on the corresponding boxes, and then click Connect.
- ▶ To view more connection details, click **Details** on the upper corner of the page.

### 7 Toolbox

The **Toolbox** menu allows you to protect your network, share games and applications with other people on the Internet, and manage your local network. This menu is divided into nine sections: **Remote**Assistance, Game & Application Sharing, Parental Control, Firewall, Intrusion Detection, Dynamic DNS, User Management, Content Sharing, and DMZ.

To view the **Toolbox** page, click **Toolbox** on the main menu.



#### 7.1 Remote Assistance

To enable remote assistance, you must be connected to the Internet.

The Remote Assistance page allows you to make your Wireless Gateway remotely accessible.

### 7.1.1 Enable Remote Assistance

- 1 Select the remote assistance **Mode**:
  - ▶ **Permanent Mode** Once remote assistance is enabled, the remote session only ends when users disable this feature or when the Wireless Gateway is restarted.
- 2 Enter the URL address to use to remotely access your Wireless Gateway.
- 3 Take note of the automatically generated User Name and Password that will be used to access your Wireless Gateway remotely. If desired, modify the password.
- 4 Check Enable Remote Assistance to enable this function.

- 5 Click Apply to save changes.
- 0
- Only one remote session is allowed at a time.
- The Wireless Gateway also supports dynamic DNS host names for remote access. See "7.6 Dynamic DNS" on page 34.

#### 7.1.2 Disable Remote Assistance

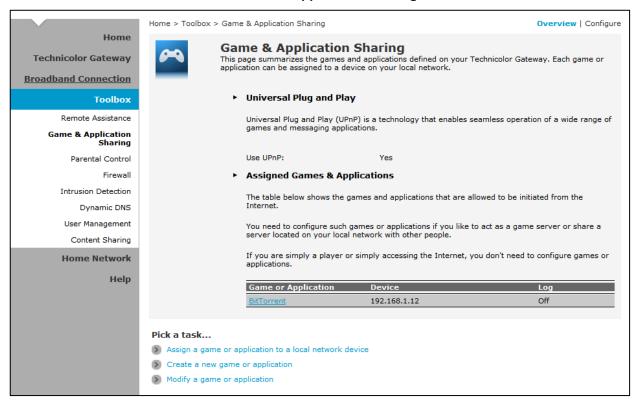
Click **Disable Remote Assistance** to disable this function.

### 7.2 Game & Application Sharing

The **Game & Application Sharing** page allows you to create new games and applications and assign games or applications to the network devices.

To view the Game & Application Sharing page, do one of the following:

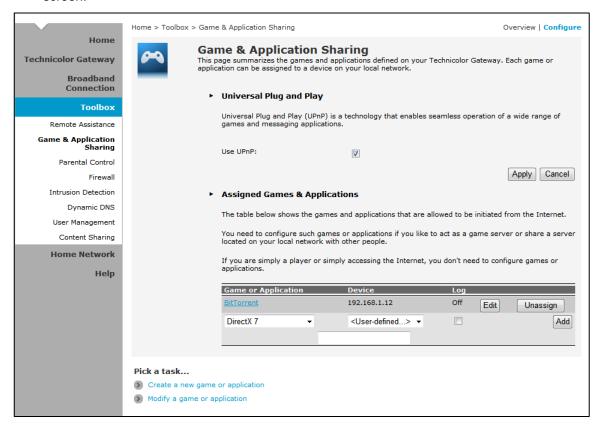
- From the Home screen, click Game & Application Sharing under Toolbox.
- On the main menu, click Toolbox > Game & Application Sharing.



### 7.2.1 Assign a Game or Application

Your Wireless Gateway comes with predefined games and applications. Each game or application can be assigned to a network device.

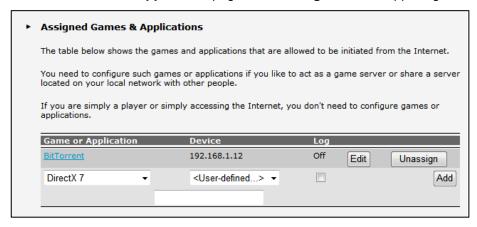
- 1 To assign a game or application, do one of the following:
  - ▶ Click **Configure** on the upper-right corner of the screen.
  - Click the Assign a game or application to a local network device shortcut at the bottom of the screen.



- 2 To enable Universal Plug and Play (UPnP) function, check the Use UPnP box and then click Apply.
- 3 On the **Assigned Games & Applications** table, select a game or application on the **Game or Application** field.
- 4 On the **Device** field, select the network device to assign the game or application to.
- 5 To log access, check the **Log** box.
- 6 Click **Add** to add the assigned entry to the table.

### 7.2.2 Modify Assigned Game or Application

- 1 On the main menu, click Toolbox > Game & Application Sharing.
- 2 From the Game & Application page, click Configure on the upper-right corner of the screen.



- 3 On the Assigned Games & Applications table, click the Edit button of the game or application you want to modify.
- 4 Modify the necessary info.
- 5 Click Apply to save changes.

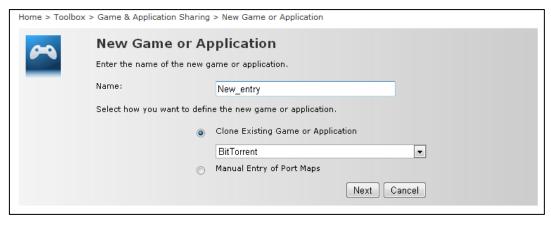
### 7.2.3 Create a New Game or Application

If the game or application is not included in the predefined list, you need to create the game or application.

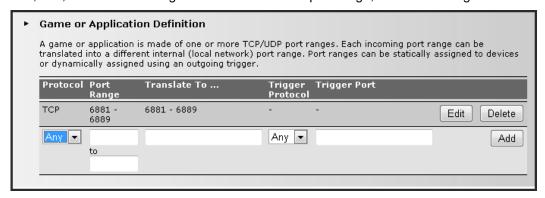
- 1 On the main menu, click Toolbox > Game & Application Sharing.
- 2 From the Game & Application page, click the Create a new game or application shortcut at the bottom of the screen.



**3** On **Name**, type the name of the game or application.



- 4 Select how you want to define the new game or application:
  - ▶ Clone Exiting Game or Application Select an existing game or application to clone its protocol and TCP/UDP port range settings.
  - Manual Entry of Port Maps To manually select the protocol and enter the port range of the new game or application.
- 5 Click Next to continue.
- 6 If Clone Exiting Game or Application is selected on step 4, skip to step 8.
- 7 If Manual Entry of Port Maps is selected on step 4, configure the parameters of the Game or Application Definition table. A preset incoming port range is set by the Wireless Gateway. You may add, edit, or delete this range. To add a TCP/UDP port range, do the following:



- a Select the protocol.
- **b** Enter the incoming port range and the outgoing trigger port.
- c Click Add to save the settings.
- 8 Creating of game or application is complete.

### 7.2.4 Modify a Game or Application

- 1 On the main menu, click Toolbox > Game & Application Sharing.
- 2 From the Game & Application page, click the Modify a game or application shortcut at the bottom of the screen.



- 3 The list of games and applications appear. Click the Edit button of the game or application you want to modify.
- 4 Modify the necessary information.
- 5 Click Apply to save changes.

To delete a game or application, click the **Delete** button of the game or application you want to delete.

#### 7.3 Parental Control

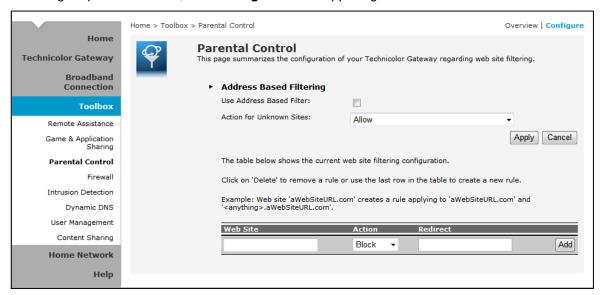
The **Parental Control** page allows you to filter web sites that a network device may access or be denied access.

To view the **Parental Control** page, do one of the following:

- From the Home screen, click Parental Control under Toolbox.
- On the main menu, click Toolbox > Parental Control.



To configure parental control, click **Configure** on the upper-right corner of the screen.



- Use Address Based Filter Check to filter web sites by address.
- Action for Unknown Sites Select whether to Block or Allow unknown sites.
- Click Apply to save changes.
- Web Site Enter the URL of the web site to block or allow.
- Action Select one of the following options:
  - ▶ Block: To block the web site.

- ▶ Allow: To allow access to the web site.
- Redirect: To redirect to another web site if the web site defined on the Web Site field is being accessed.
- Redirect If Redirect is selected in Action, enter the URL address to where you want to redirect the site.
- Click Add to save the changes to the table.

#### 7.4 Firewall

The Firewall page allows you to set the firewall security of your Wireless Gateway.

To view the **Firewall** page, do one of the following:

- From the **Home** screen, click **Firewall** under **Toolbox**.
- On the main menu, click Toolbox > Firewall.



### 7.4.1 Change Firewall Security Level

- 1 On the Firewall page, click Configure on the upper-right corner of the screen.
- 2 Select the desired security level:
  - ▶ Block All Block all traffic from and to the Internet.
  - ▶ Standard Block all incoming traffic but allow outgoing traffic.
  - Disabled Disable firewall security, all traffic is allowed.
- 3 Click Apply to save changes.

## 7.4.2 Create a New Security Level

- 1 On the Firewall page, click Configure on the upper-right corner of the screen.
- 2 Click the Create a new Security Level shortcut at the bottom of the screen. The New Firewall Level screen appears.

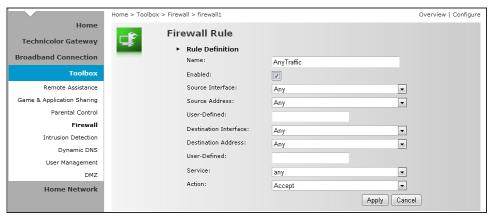


- 3 Enter the name for the new firewall security level.
- 4 Select a security level.
- 5 Click Apply to save changes.

#### 7.4.3 Set Filter Rules

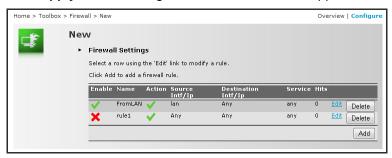
After you create a new security level, you can set firewall rules.

- 1 On the Firewall page, click Configure on the upper-right corner of the screen.
- 2 Click Edit. The Firewall Settings appears.
- 3 On the Firewall Settings table, click Add.



- 4 Enter the necessary parameters:
  - ▶ Name Enter desired firewall rule name
  - ▶ Enabled Check this box to enable this firewall rule.
  - ▶ Source Interface Select the interface to apply the firewall rule.
  - ▶ Source Address Select the firewall source address.
  - ▶ **User-Defined** If the address is not listed in the Source Address box, enter a user-defined address here.
  - ▶ Destination Interface Select the destination interface.

- Destination address Select the destination address.
- User-Defined If the address is not listed in the Destination Address box, enter a user-defined address here.
- ▶ Service Select a service.
- ▶ Action Select the action to take: **Deny** or **Accept**.
- 5 Click Apply to save changes. The new firewall rule appears on the Firewall Settings table.



To edit a firewall rule, click Edit.

To delete a firewall rule, click **Delete**.

#### 7.5 Intrusion Detection

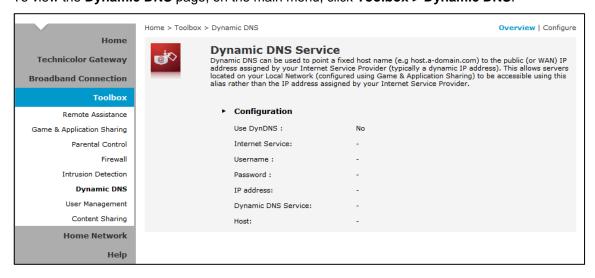
Your Wireless Gateway protects your network against malicious intrusions. The **Intrusion Detection** page shows you the intrusions that you are protected against. The **Protected Intrusions** table shows the number of times the Wireless Gateway actively protected your network against each intrusions.

To view the Intrusion Detection page, on the main menu, click Toolbox > Intrusion Detection.

### 7.6 Dynamic DNS

The Dynamic DNS (DDNS) service allows you to assign a fixed DNS host name to an Internet connection even if it is using a dynamic IP address. As soon as your Wireless Gateway internal connection gets a new IP address, the dynamic DNS service updates the host name entry to the new IP address. The dynamic DNS service relies on servers that link the public IP address to a subscribed DNS host name.

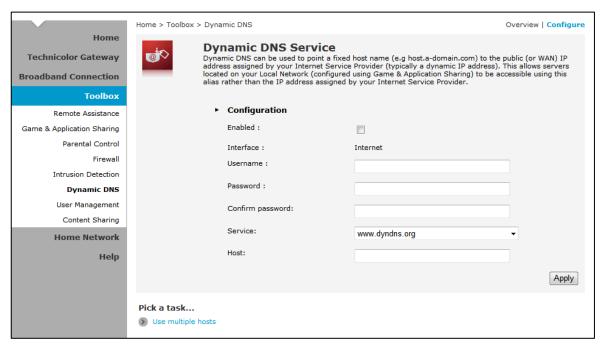
To view the **Dynamic DNS** page, on the main menu, click **Toolbox > Dynamic DNS**.



extraction and communication of its contents, is not permitted without written authorization from Technicolor.

In order to use a dynamic DNS service, you must first register and enroll for DNS service with a Dynamic DNS service provider. The DDNS service provider will provide the necessary parameters to complete your Wireless Gateway Dynamic DNS setup.

To configure the Dynamic DNS service of your Wireless Gateway, click **Configure** on the upper-right corner of the screen.



- Enabled Check this box to enable the DDNS.
- Interface The DDNS interface is the Internet.
- Username Enter the username provided by the DDNS service provider.
- Password Enter the password provided by the DDNS service provider.
- Confirm Password Re-type the password to confirm.
- **Service** Select the DDNS service provider where your account is registered.
- Host Type the host name.

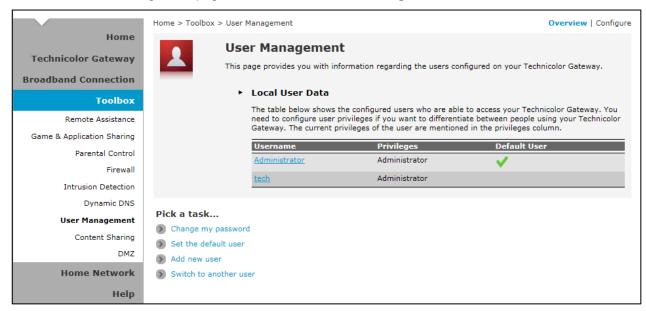
Click Apply to save changes.

To use multiple hosts, click the Use multiple hosts shortcut at the bottom of the screen. Then click **Add** to add host name.

### 7.7 User Management

The **User Management** page allows you to configure the users who can access the Wireless Gateway web configuration utility.

To view the User Management page, click **Toolbox > User Management**.



### 7.7.1 Add New User

- 1 Click the Add new user shortcut at the bottom of the screen.
- 2 On Name, type desired user name. This will be the login name and the password of the new user.
- 3 On Administrator Privileges, select the user privilege.
- 4 Click **Apply** to save changes.

### 7.7.2 Reset Password

To reset a password, on the User Management screen, click on the user account that you want to reset the password. Then click Reset Password.

Aside from resetting the password, no other setting can be modified unless by users of higher privileges.

## 7.7.3 Manage Users

To change the default user, click the Set the default user shortcut at the bottom of the screen.

To switch to another user, click the Switch to another user shortcut at the bottom of the screen. This brings you back to the login page, then login with the desired user account.

## 7.8 Content Sharing

The **Content Sharing** page allows you to share the contents on a USB disk connected to the gateway. You can share your files, music, pictures and movies towards your home network and towards the Internet.

To view the Content Sharing page, on the main menu, click Toolbox > Content Sharing.

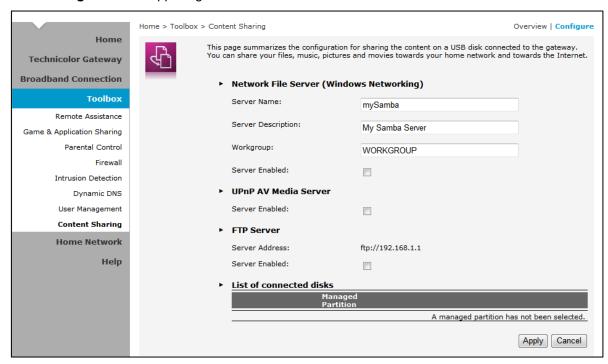


## 7.8.1 Setting up a Network File Server

### To Set Up a Network file Server

Proceed as follows (for Windows Networking only):

1 Click **Configure** on the upper right corner of the screen.



- 2 Under Network File Server (Windows Networking), click Server Enabled. It is also recommended to fill in the following fields:
  - Server Name
  - Server Description
  - Workgroup
- 3 Click Apply.
- 4 All users connected to the Technicolor Gateway can now connect to your USB storage device.

### To Access Your Shared USB Devices on Windows

Proceed as follows:

- 1 Open Windows Explorer.
- 2 In the address bar type \Technicolor or 192.168.1.254.
- 3 All storage devices that are attached to your Technicolor Gateway are listed as folders. If you attached more than one storage device the folder name will contains an index number (for example **device2**).
- 4 If you plan to frequently use this folder, it might be useful to map this folder as a network drive. For more information, see your operating system's help.

### To Access Your Shared USB Devices on Mac

Proceed as follows:

1 On the **Go** menu, click **Network**.

- 2 Double-click Technicolor.
- 3 The SMB Mount window appears.
- 4 Select the device you want to mount and click OK.
- 5 Double-click the **DEVICE** icon on your desktop.

## 7.8.2 Setting up the Technicolor UPnP AV Server

To set up the Technicolor UPnP AV Server, proceed as follows:

- 1 Under UPnP AV Media Server, click Server Enabled.
- 2 Click Apply.

## 7.8.3 Setting up an FTP Server

To set up and FTP Server, proceed as follows:

- 1 Under FTP Server, click Server Enabled.
- **2** Under **List of connected disks**, click the radio button next to the partition that you want to access using FTP.
- **3** The Wireless Gateway now creates **Media** and **Shared** folders on the selected partition. The **Shared** folder will be used as root location for FTP sessions.
- 4 Click Apply.
- As you may know the IP address of your Internet connection may change frequently. This implies that the link to the FTP server will also change every time the public IP changes. With Dynamic DNS you can assign a host name to the IP address (for example mygateway.dyndns.org). For more information, see Dynamic DNS.
- Make sure to unmount your device before unplugging it. Unplugging your device without unmounting it properly first can result in disk corruption. See Unmounting your device for more information.

## 7.8.4 Unmounting Your USB Device

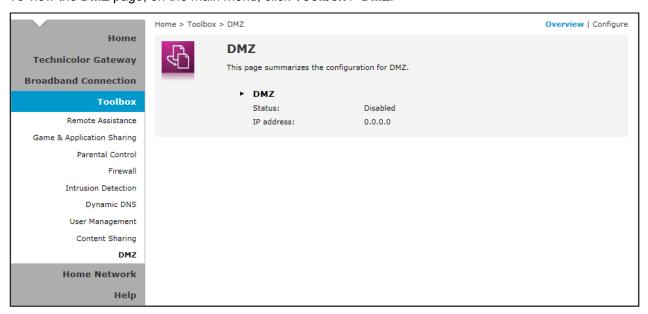
To unmount your USB device, proceed as follows:

- 1 In the Toolbox menu click Content Sharing.
- 2 Click Configure on the upper right corner of the screen.
- 3 In the List of connected disks, you can unmount the device you want to unplug by clicking Unmount.

### 7.9 DMZ

The **DMZ** page allows you to configure the IP address of a computer on your local network to which to forward incoming connections from the Internet that are not for the content sharing service.

To view the DMZ page, on the main menu, click Toolbox > DMZ.



To configure a default server for your Wireless Gateway, click **Configure** on the upper-right corner of the screen.



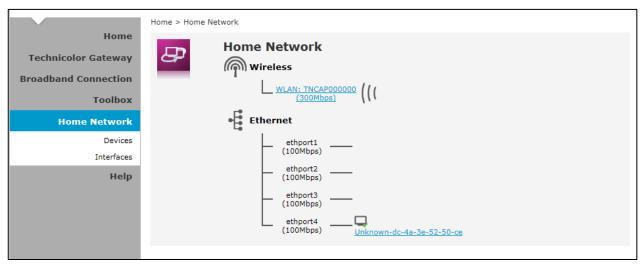
- Status Check this box to enable the default server.
- IP address Enter the IP address of a computer on your local network to which to forward incoming connections from the Internet that are not for the content sharing service.

Click Apply to save changes.

## 8 Home Network

The **Home Network** menu displays the network configuration of your Wireless Gateway, along with interfaces and connected devices. This menu is divided into two sections: **Devices** and **Interfaces**.

To view the Home Network page, click Home Network on the main menu.



### 8.1 Devices

This page displays the devices connected on your network via the Wireless Gateway Ethernet ports. You can do the following:

- View the device information, IP address and connection services
- Assign a public IP address to a device

To access the Devices page, click **Home Network > Devices**.



## 8.1.1 View or Modify Device Information

- 1 Click the device name. The device information is displayed on screen.
- 2 To modify the device information, click **Configure** on the upper right corner of the screen.

- 3 Type desired device name in New Name.
- 4 Select the device type in Type.
- 5 To assign a static IP address, check the Always use the same IP address box.
- 6 Click Apply to save changes.

## 8.1.2 Assign Game or Application to Device

- 1 Click the device name. The device information is displayed on screen.
- 2 Click Configure on the upper-right corner of the screen.
- 3 On the Connection Sharing section, select the game or application on the table.
- 4 Click Add.

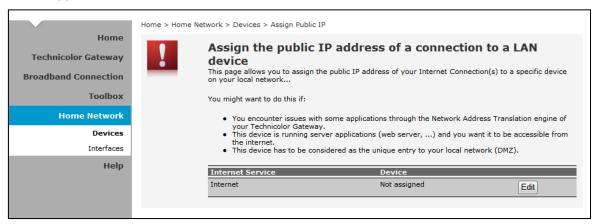
## 8.1.3 Remove a Shared Game or Application

- 1 Click the device name. The device information is displayed on screen.
- 2 Click Configure on the upper-right corner of the screen.
- **3** On the **Connection Sharing** section, click the corresponding **Unassign** button of to remove the shared game or application.

## 8.1.4 Assign a Public IP Address to Device

The Assign Public IP page allows you to assign the public IP address of your Internet connection to a specific device on your local network.

- 1 Click Home Network > Devices.
- 2 Click the Assign the public IP address of a connection to a device shortcut. The Assign Public IP screen appears.



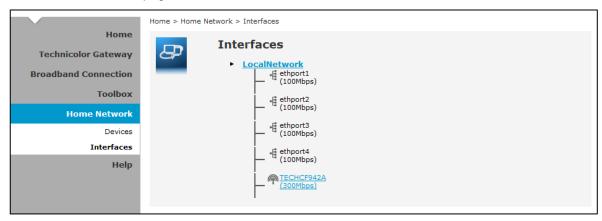
- 3 Click Edit.
- 4 On Device, select the network device that you want to assign the public IP address.
- 5 Click Apply.

Or, to remove the assigned IP address from a network device, click Unassign.

### 8.2 Interfaces

The **Interfaces** page allows you to configure the network device TCP/IP settings such as IP address subnet mask, assign a DHCP server, and configure the wireless network security settings.

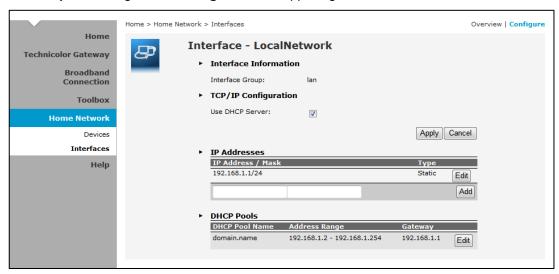
To view the Interfaces page, click **Home Network > Interfaces**.



### 8.2.1 Local Network Interface

Click Home Network > Interfaces > LocalNetwork to open the Local Network page.

This page displays the interface information including the TCP/IP configuration, IP Addresses, DHCP pool. To modify the settings, click **Configure** on the upper-right corner of the screen.



To use a DHCP Server, check the **Use DHCP Server** box and then click **Apply**.

#### To Add an IP Address

- 1 On the IP Addresses table, type the IP address you want to add on the first box.
- 2 Type the subnet mask on the second box.
- 3 Click Add.

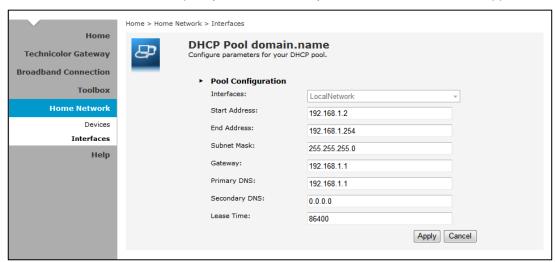
### To Modify the IP Address

- 1 On the IP Addresses table, click the corresponding Edit button of the IP address you want to modify.
- 2 Modify the IP address (first box) and the subnet mask (second box).

3 Click Apply to save changes.

### To Modify the DHCP Pool

1 Click the Edit button of the pool you want to modify. The LAN\_Private screen appears.

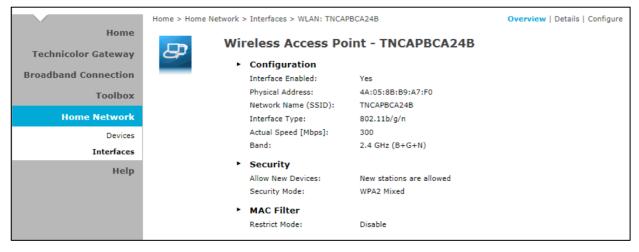


- ▶ Interface Displays the current network interface.
- ▶ **Start Address** Type the starting address of the DHCP pool.
- ▶ End Address Type the ending address of the DHCP pool.
- ▶ Subnet Mask Type the subnet mask.
- ▶ **Gateway** Type the gateway.
- ▶ **Primary DNS** Type the primary DNS.
- ▶ Secondary DNS Type the secondary DNS.
- 2 When done, click Apply.

### 8.2.2 Wireless Access Point

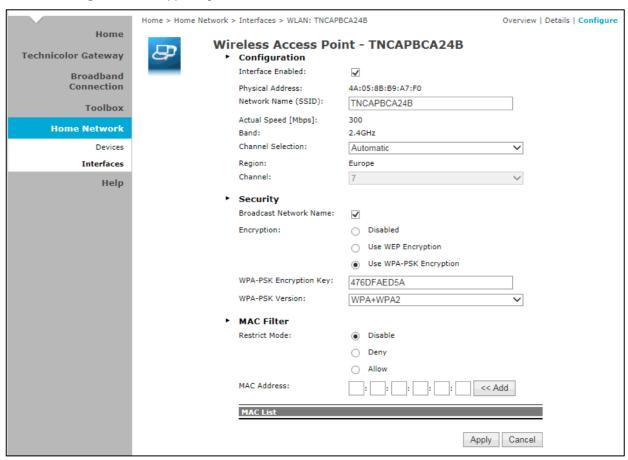
Click Home Network > Interfaces > TNCAP..... to open the Wireless Access Point page.

This page displays the information of your wireless network. To view the advanced settings, click **Details** on the upper-right corner of the screen.



### To Configure the Wireless Network

1 Click Configure on the upper-right corner of the screen.



- **2** Enter or take note of the following information:
  - ▶ Interface Enabled Check to enable the wireless access point.
  - ▶ Physical Address Displays the MAC address of the wireless device.
  - Network Name (SSID) Enter desired wireless network name. This is the name shown to other wireless devices to connect to your network.
  - ▶ Actual Speed Displays the network speed
  - ▶ Band Displays the channel band.
  - ▶ Channel Selection Select the automatic or manual channel selection.
  - ▶ Region Displays your current region.
  - ▶ Channel If Channel Selection is set to manual, select the channel from the list.
- 3 If necessary, configure the security settings; see "To Set up Security Settings" on page 46.
- 4 Click Apply to save changes.

### To Set up Security Settings

- 1 Click Home Network > Interfaces > WLAN to open the Wireless Access Point page.
- 2 Click Configure on the upper-right corner of the screen.
- 3 Under the **Security** section, check the **Broadcast Network Name** to enable wireless devices to see the SSID of your wireless network.
- 4 On Encryption, select an encryption method:
  - ▶ **Disabled** No encryption.
  - ▶ Use WEP Encryption To use WEP encryption.



- WEP Key Length Select the key length.
- WEP Encryption Key Type the desired encryption key. Users need to enter this passkey to connect to the wireless network.
- ▶ Use WPA-PSK Encryption To use a WPA-PSK encryption for more security.

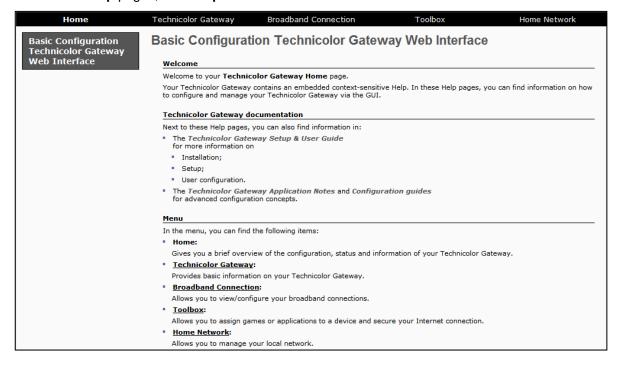


- WPA-PSK Encryption Key Type the desired passkey. Users need to enter this passkey to connect to the wireless network.
- WPA-PSK Version Select the WPA-PSK version to use.
- **5** Click **Apply** at the bottom of the page to save changes.

## 9 Help

Your Wireless Gateway contains an embedded context-sensitive Help. In these Help pages, you can find information on how to configure and manage your Wireless Gateway via the GUI.

To view the **Help** pages, click **Help** on the main menu.



## Appendix A Wireless Considerations

#### **Connection Performance**

A number of factors affect wireless connections. To ensure high-range and stable connectivity, do the following:

- 1 Keep the Wireless Gateway and other wireless devices away from obstructions, such as walls or buildings. Each obstruction can reduce the range of a wireless device.
- 2 Keep the Wireless Gateway and other wireless devices away from devices that produce radio frequency (RF) noise, such as microwave ovens or radios.
- **3** Keep the Wireless Gateway and other wireless devices away from any device operating on the 2.4GHz frequency, such as cordless phones or remote controls.

### **Security Checklist**

Wireless network signals can be intercepted easily. To prevent unauthorized users from connecting to your wireless network, follow the guidelines below.

- 1 Change the default wireless network name.
- 2 Your device has a default Service Set Identifier (SSID) which is the wireless network name. Change the SSID with a unique name to identify your network. The SSID can be up to 32 characters in length.
- **3** Change the default password.
- 4 Your device has a default password. You have to enter this password to change your network settings. Change the password to prevent unauthorized users from hacking into your network and changing the settings.
- 5 Enable encryption.
- **6** Your device supports Wired Equivalent Privacy (WEP), and Wi-Fi Protected Access (WPA/WPA2) encryption. To ensure a high level of security, enable the highest security encryption and use strong passphrases, avoid using words that can be found in the dictionary.

## Appendix B Safety Instructions

### Using equipment safely

Your ADSL Modem Gateway product has been manufactured to meet European and local safety standards, but you must take care if you want it to perform properly and safely.

It is important that you read this booklet completely, especially the safety instructions below.

Equipment connected to the protective earth of the building installation through the mains connection or through other equipment with a connection to protective earth and to a cable distribution system using coaxial cable, may in some circumstances create fire hazard. Connection to a cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11).

If you have any doubts about the installation, operation or safety of the product, please contact your supplier.

### To avoid the risk of electric shock

- Disconnect the ADSL Modem Gateway product from the mains supply before you connect it to (or disconnect it from) any other equipments. Remember that contact with Mains can be lethal or causes severe electric shock.
- Never remove the product cover. Should the product fail, contact the Customer Service to arrange repair or service.
- Never allow anyone to push anything into holes, slots or any other opening in the case
- Do not block the ventilation slots; never stand it on soft furnishings or carpets
- Do not put anything on it which might spill or drip into it (e.g. Lighted candles or containers of liquids). Do not expose it to dripping or splashing. If an object or liquid enters inside the ADSL Modem, unplug it immediately and contact the Customer Service.
- Do not store the ADSL Modem Gateway product in excessively hot, cold or damp conditions. It is intended to operate at an ambient temperature of less than 35 degrees Celsius and a maximum humidity level of 70%. In case of a storm, it is recommended that you unplug the product from the mains and from the PC set or other equipment.

Leave the mains socket accessible so that you can unplug the set quickly

### Connecting to the mains supply

- This appliance is designed to operate in the rated voltage 230V AC 50Hz.
- If you are in any doubt about the mains lead, the plug or connection, please consult the Customer Service.
- Only the power adapter supplied with the product has to be used.

### **Ensuring optimum performance**

- Leave 7cm to 10cm around the appliance to ensure that proper ventilation gets to it.
- Do not store your appliance on its side (if not allowed)
- To clean the appliance, use a dry, clean soft cloth with no cleaning solvent or abrasive products. Clean the ventilation openings regularly.

### Limiting the Human Body Exposure to the Electromagnetic Fields

 Under normal use condition the user shall keep at least 20cm distance from the ADSL Modem Gateway product.

#### **Environmental considerations**



This symbol means that your inoperative electronic appliance, and used battery when applicable, must be collected separately and not mixed with the household waste. The European Union has implemented a specific collection and recycling system for which producers' are responsible.

This appliance has been designed and manufactured with high quality materials and components that can be recycled and reused. Electrical and electronic appliances are liable to contain parts that are necessary in order for the system to work properly but which can become a health and environmental hazard if they are not handled or disposed of in the proper way. Consequently, please do not throw out your inoperative appliance with the household waste.

If you are the owner of the appliance, you must deposit it at the appropriate local collection point or leave it with the vendor when buying a new appliance.

- If you are a professional user, please follow your supplier's instructions.
- If the appliance is rented to you or left in your care, please contact your service provider.

Please help us protect the environment in which we live

### Energy savings - You have a role to play...

### Learn how you can use and explore ways for using your electronic equipment



The user manual detailed useful information on all the features of your product but also on energy consumption performances.

We strongly encourage you to carefully read the notice before putting your equipment in service to get the best service it can offer you.

By working together, we can reduce the impact we have on our earth!

### Main technical specifications

Please refer to the user manual for the technical specifications (Operating voltage range, Typical Power consumption, Standby Power consumption, Weight, Dimensions (W x H x D), Operating temperature range, Storage temperature range, AC adapter (or plug-in adapter) type, Wifi)

### Marking information



This symbol on your set guarantees that your product complies with the European Directive 1999/5/EC on Safety, Telecom, Electromagnetic Compatibility, with the 2009/125/EC Directive on Energy related Products and the Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment. This equipment is intended to be used indoor in a residential or office environment. This equipment may by operating in Europe

The CE Declaration of Conformity is available on the Website www.technicolor.com

### **Responsible Party**

### Technicolor Connected Home Rennes

975 AVENUE DES CHAMPS BLANCS CS17616 35576 CESSON SEVIGNE CEDEX , FRANCE

# Appendix C Specifications

User Interface	<ul> <li>Main chip: RTL8685SF</li> <li>AFE: RTL8275</li> <li>Wi-Fi: RTL8192ER</li> <li>DDR2: 64 MB (embedded in CPU)</li> <li>Flash: 128 MB</li> <li>VDSL2 (up to 30a, ADSL/ADSL2/ADSL2+ fall back): POTS</li> </ul>
	<ul> <li>2x2 IEEE 802.11n/g/b 2.4GHz single band</li> <li>4x 10/100 Base-T Ethernet LAN ports</li> <li>1 x USB 2.0 Host</li> </ul>
Buttons	<ul> <li>1 x Power ON/OFF button</li> <li>1 x WIFI/WPS BUTTON</li> <li>1 x Reset to default button</li> </ul>
LEDs	Front panel Power LED  Ethernet LED  Wi-Fi LED  WPS LED  USB LED  Internet LED  Internet LED  Back panel  4 x Ethernet LEDs
IO Ports	<ul> <li>1 x RJ-11 DSL connector</li> <li>4 x RJ-45 Ethernet connector</li> <li>1 x USB 2.0 USB type-A, female connector</li> <li>1 x DC In jack</li> </ul>
Antenna	Standard: 2 internal printed antennas
DC input	12VDC 1A
Temperature	Operating: 0°C ~ 40° C Storage: -10°c ~ 70°C
Humidity	Operating: 10% ~ 95%, RH, no condensation
PCB Dimensions	141 x 117 x 1.6 mm

Power consumption With full loading: 10.4W

In networked Standby mode: 4.86W

\*Standby mode conditions:

The functions of Fast Ethernet and WLAN are workable, but no traffic is being

transmitted.

The DSL link must be established, but no traffic is being transmitted.



#### SAFETY INSTRUCTIONS AND REGULATORY NOTICES

BEFORE YOU START INSTALLATION OR USE OF THIS PRODUCT, CAREFULLY READ ALL SAFETY INSTRUCTIONS

#### Applicability

These Safety Instructions and Regulatory Notices apply to:

Technicolor Cable Modems & Gateways

#### Using equipment safely



When using this product, always follow the basic safety precautions to reduce the risk of fire, electric shock and injury to persons, including the following:

- Always install the product as described in the documentation that is included with your product.
- Do not use this product to report a gas leak in the vicinity of the leak.
- Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

#### Used symbols

Following symbols may be found in this and accompanying documentation as well as on the product or accompanying accessories:



Indication

that uninsulated voltage within this product may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this product.

This symbol is intended to alert you



This symbol is intended to alert you of the presence of important operating and maintenance (servicing) instructions in the documentation that is included with your product.



This symbol indicates for indoor use only (IEC 60417-5957).

Symbol	Indication
	This symbol indicates Double insulated Class II equipment (IEC 60417-5172). Does not require an earth connection.
$\sim$	This symbol indicates Alternating Current (AC).
===	This symbol indicates Direct Current (DC).
<del>♦</del> •♦	This symbol indicates Electrical polarity.
$\Rightarrow$	This symbol indicates Fuse.

#### Directives

#### Product use

You must install and use this product in strict accordance with the manufacturer's instructions as described in the user documentation that is included with your product.

Before you start installation or use of this product, carefully read the contents of this document for device specific constraints or rules that may apply in the country where you want to use this product. If you have any doubts about the installation, operation or safety of this product, please contact your supplier.

Any change or modification made to this product that is not expressly approved by Technicolor will result in the loss of product warranty and may void the user's authority to operate this equipment. Technicolor disclaims all responsibility in the event of use that does not comply with the present instructions.

#### Software and firmware use

The firmware in this equipment is protected by copyright law. You may only use the firmware in the equipment in which it is provided. Any reproduction or distribution of this firmware, or any portion of it, without express written consent from Technicolor is prohibited.





DSL3745762D

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DMS.\*S.AP.\*5.\*150 v.F.0



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#### Environmental information



Batteries (if applicable)

Batteries contain hazardous substances which pollute the environment. Do not dispose of them with other articles. Take care to dispose them at special collecting points.

Recycle or dispose of batteries in accordance with the battery manufacturer's instructions and local/national disposal and recycling regulations.

Energy efficiency Energy savings

The user documentation that is included with your product not only provides useful information on all the features of your product, but also on its energy consumption. We strongly encourage you to carefully read this documentation before putting your equipment in service in order to get the best service it can offer you.

#### Safety instructions



- Read these instructions.
- Keep these instructions.
  Heed all warnings and cautions.
- Follow all instructions.
- Follow all instruction.

#### Climatic conditions

#### This product:

- Is intended for in-house stationary use; the maximum ambient temperature must not exceed 40 °C (104 °F); the relative humidity must be between 20 and 80 %.
- Must not be mounted in a location exposed to direct or excessive solar and/or heat radiation.
- Must not be exposed to heat trap conditions and must not be subjected to water or condensation.
   Must be installed in a Pollution Degree 2
- environment (an environment where there is no pollution or only dry, non-conductive pollution). If applicable, batteries (battery pack or batteries installed) must not be exposed to excessive heat such as sunshine, fire or the like.

#### Ventilation and positioning

This product is intended to be used indoors in a residential or office environment.

- Remove all packaging material before applying power to the product.
- Place and use the product only in positions as described in the user documentation that is included with your product.
- Do not block or cover any ventilation openings; never stand it on soft furnishings or carpets.
- Never push objects through the openings in this product.
- Leave 7 to 10 cm (3 to 4 inches) around the product to ensure that proper ventilation gets to it.
- Do not install the product near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not put anything on it which might spill or drip into it (for example, lighted candles or containers of liquids). Do not expose it to dripping or splashing, rain or moisture. If a liquid enters inside the product, or if the product has been exposed to rain or moisture, unplug it immediately and contact your supplier or customer service.

#### Cleaning

Unplug this product from the wall socket and disconnect from all other devices before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

#### Water and moisture

Do not use this product near water, for example near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool. Transition of the product from a cold environment to a warm one may cause condensation on some of its internal parts. Allow it to dry by itself before using the product.

#### Electrical powering

The powering of the product must adhere to the power specifications indicated on the marking labels.

In case this product is powered by a power supply unit:

- For USA and Canada: This product is intended to be supplied by a UL listed Direct PluginPower Unit marked "Class 2" and rated as indicated on the label on your product.
- This power supply unit must be Class II and a Limited Power Source in accordance with the requirements of IEC 60950-1/EN 60950-1, Clause 2.5 and rated as indicated on the label on your product. It must be tested and approved to national, or local standards.



Only use the power supply unit that is supplied with this product, is supplied by your service provider or local product supplier, or a replacement power supply unit provided by your service provider or local product supplier.

The use of other types of power supplies is prohibited.

If you are not sure of the type of power supply needed, consult the user documentation that is included with your product or contact your service provider or local product supplier.

#### Accessibility

The plug on the power supply cord or power supply unit serves as disconnect device. Be sure that the mains supply socket outlet you use is easily accessible and located as close to the product as possible.

The power connections to the product and the mains supply socket outlet socket must be accessible at all times, so that you always can disconnect the product quickly and safely from the mains supply.

#### Overloading

Do not overload mains supply socket outlets and extension power cords as this increases the risk of fire or electric shock.

#### Handling batteries

This product may contain disposable batteries.



There is danger of explosion if the battery is mishandled or incorrectly replaced. Replace only with the same or equivalent type of battery. Do not disassemble it or attempt to recharge it outside the system.

Do not disassemble, crush, puncture, short the external contacts, dispose of in fire, or expose to fire, water or other liquids.

- Insert batteries correctly. There may be a risk of explosion if the batteries are incorrectly inserted.
- Do not attempt to recharge disposabal or nonreusable batteries.
- Please follow instructions provided for charging rechargeable batteries.
- Replace batteries with the same or equivalent type.
- Do not expose batteries to excessive heat (such as sunlight or fire) and to temperatures above 100 °C (212 °F).

#### Cable Distribution

For this apparatus, the cable shield/screen shall be grounded (earthed) as close as practical to the point of entry of the cable into the building. For products sold in the USA and Canada, this reminder is provided to call the system installer's attention to ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, Grounding of Outer Conductive Shield of a Coaxial Cable (or Canadian Electrical Code Part 1).



To reduce the risk of electric shock or electrocution, do not disassemble this product.

If service or repair work is required, take it to a qualified service dealer.

#### Damage requiring service

Unplug this product from the mains supply socket outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply, power cord or its plug are damaged.
- When the attached cords are damaged or frayed.
- If liquid has been spilled into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally.

- If the product has been dropped or damaged in any way.
- There are noticeable signs of overheating.
- If the product exhibits a distinct change in performance.
- If the product is giving off smoke or a burning smell

Protect the product when moving it Always disconnect the power source when moving the product or connecting or disconnecting cables.

Interface classifications (upon applicability)
The external interfaces of the product are
classified as follows:

- Cable (IN/OUT): TNV circuit, not subjected to overvoltages (TNV-1)
- Phone, FXS: TNV (Telecommunications Network Voltage) circuit, not subjected to overvoltages (TNV-2)

 MoCA, HPNA, RF: TNV circuit, not subjected to overvoltages (TNV-1)

 All other interface ports (e.g. Ethernet, USB,...), including the low voltage power input from the AC mains power supply: SELV (Safety Extra-Low Voltage) circuits.

#### Regulatory information

North-America - Canada

Notification of Canadian Radio Frequency interference statement

This Class B digital apparatus complies with Canadian ICES-003.

This product meets the applicable Innovation

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Canada - Radiation exposure statement
This equipment complies with IC radiation
exposure limits set forth for an uncontrolled
environment. This equipment should be installed
and operated with minimum distance 30 cm
(12 inches) between the radiator and your body.

Canada - Industry Canada (IC) In case this product is equipped with a wireless transceiver, this device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

#### Restricted frequency bands

In case this product is equipped with a wireless transceiver operating in the 2.4 GHz band, it may

only use channels 1 to 11 (2412 to 2462 MHz) on Canada territory.

In case this product is equipped with a wireless transceiver operating in the 5 GHz band, it is for indoor use only.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

#### North-America - United States of America Important safety instructions

- The cable distribution system should be grounded (earthed) in accordance with ANSI/ NFPA 70, the National Electrical Code (NEC), in particular Section 820,93, Grounding of outer Conductive Shield of a Coaxial Cable.
- Leave 5 to 8 cm (2 to 3 inches) around the product to ensure proper ventilation to it.
- Never push objects through the openings in this product.

## Federal Communications Commission (FCC) radio frequency interference statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no quarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Responsible Party: Technicolor, 101W. 103rd St., Indianapolis, IN 46290 USA, 317-587-5466.

#### RF exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in the product documentation.

When the product is equipped with a wireless interface, then it becomes a mobile or fixed mounted modular transmitter and must have a separation distance of at least 30 cm (12 inches) between the antenna and the body of the user or nearby persons. In practice, this means that the user or nearby persons must have a distance of at least 30 cm (12 inches) from the product and must not lean on the product in case it is wall-mounted.

With a separation distance of 50 cm (12 inches) or more, the M(aximum) P(ermissible) E(xposure) limits are well above the potential this wireless interface is capable to produce.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### Restricted frequency bands

In case this product is equipped with a wireless transceiver operating in the 2.4 GHz band, it can only use channels 1 to 11 (2412 to 2462 MHz) on U.S.A. territory.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.



# **Customer Information FCC Part 68**

Customer information required for Telephone Terminal Equipment ("TTE") approved for connection to the Public Switched Telephone Network ("PSTN"), pursuant to 47 CFR §68.218(b)(1)e

### FCC Part 68 Compliancy for equipment DWA0100

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

Based upon the information on the grant *US:* MSCDL01ADWA0100 , this equipment **DWA0100** uses Certification jack Universal Service Order Code ("USOC"): *RJ-11C*.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and the requirements adopted by the ACTA. A compliant telephone cord and a modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of the devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 01 is a REN of 0.1). For earlier products, the REN is separately shown on the label.

If this equipment DWA0100 causes harm to the telephone network, the telephone company will notify you in advance that the temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment DWA0100, for repair or warranty information, please contact: Technicolor, 101W. 103rd St., Indianapolis, IN 46290 USA, Phone: 317-587-5466.

If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

The equipment DWA0100 is not intended to be repaired by the customer.

Connection to party lines service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for the information.

If your home has specially wired alarm equipment connected to the telephone line, ensure that the installation of this equipment DWA0100 does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or qualified installer.

#### **Electrical Safety Advisory**

As Electrical surges, typically lightning transients, are very destructive to customer terminal equipment that is powered by AC power sources, the customer is advised to provide a surge arrestor on the AC mains supply.