# technicolor



## Integrated Access Device



TELECOMDATAVOICEVIDEO

## Triple Play Box at Entry-Level Cost

The Technicolor TG703 is an entry-level Integrated Access Device allowing ADSL2+ connectivity while providing Voice over IP functions for residential users. It is also backwards compatible with ADSL offering autonegotiation capability. For local networking, the Technicolor TG703 offers next to 4 Ethernet ports, a wireless LAN interface (1x1 11n for enhanced b/g performance).

## **Triple Play**

This VoIP gateway can manage full triple play service: high-speed Internet access and video service together with telephony.

The Technicolor TG703 offers one phone connector to accommodate a phone or fax. Once the gateway is registered with a VoIP service, regular phone calls can be conducted over the Internet with all the benefits of IP Telephony. The gateway offers a wide rage of services like caller ID, CLIR, call waiting, call forwarding, 3-way conference and message waiting notification.

## Features at a Glance

- Integrated ADSL2+ modem
- 4 Fast Ethernet ports to connect multiple devices, such as PCs, laptops, set top boxes...
- Wireless networking on-board: 1x1 11n for enhanced b/g performance
- Wi-Fi Protected Setup
- Voice over IP
- 1 FXS port for phone and/or fax
- Remotely manageable TR-069, TR-104, TR-098, TR-111
- CoCv3 compliant
- Very low power consumption



## **Advanced in Security**

The integrated firewall guarantees users ultimate network security. The firewall minimizes undesired service impact and provides stateful inspection of packets. An integrated Denial of Service (DoS) engine monitors a wide range of attack patterns, and logs potential security breaches to a local cache or remote server.

The Technicolor TG703 also supports powerful wireless security mechanisms, such as Wi-Fi Protected Access (WPA), and a Wi-Fi Protected Setup (WPS) button. This allows users to communicate and access data with efficient link quality and the highest level of network security. Unwanted content filtering on the Internet is also integrated.

## WPS

With Wi-Fi Protected Setup your wireless home network is set up automatically with the highest level of security by just pushing a button.

It allows home users who know little of wireless security to configure a secure network, without any problems.

# Home Networking with Easy Installation

Like all Technicolor gateways, the Technicolor TG703 interoperates seemlessly with the Technicolor Gateway Setup Wizard, making the setup of a wireless home network as easy as clicking a button. No more helpdesk calls, just click and you are ready to go. The Technicolor Gateway Setup Wizard performs comprehensive system checks before and during the installation and setup process, and validates all user inputs to guarantee the end user a secured wireless connection to the Internet.

## **Easily Manageable**

The Technicolor TG703 is completely designed according to the TR-069 Data Model, through which the device can be configured remotely. In addition, TR-104 for VoIP is implemented for the configuration and management of all voice services.

TR-037 and TR-069 enable auto-configuration of network bandwidth according to service needs, allowing seamless integration with the network's provisioning system.

## TG703

Entry-level Integrated Access Device

## **Technical Specifications**

### Hardware Specifications

Interfaces WAN	RJ11 DSL line port
Interfaces LAN	4-port autosensing 10/100Base-T auto-MDI/ MDI-X Ethernet switch
	Wi-Fi IEEE 802.11b/g/n 1x1 on board
	1 FXS POTS port
Extras	WPS button
	Reset button
Dimensions	41 x 167 x 223 mm (1.6 x 6.6 x 8.8 in.) (h x d x w)
AC Voltage	100-240 VAC (switched mode power supply)
<ul> <li>Temperature</li> </ul>	0° - 40° C (32 - 104 F)
<ul> <li>Humidity</li> </ul>	20% to 80%

## **DSL** Modem Specifications

Supports Multi Mode Standard

ADSL	ANSI T1.413 Issue 2, ITU-T G.992.1 Annex A, B (G.dmt), ITU-T G.992.2 Annex A, B (G.lite), ITU-T G.994.1 (G.hs)
ADSL2	ITU-T G.992.3 Annex A, B, L, M (G.dmt.bis), ITU-T G.992.4 Annex A, B, L, M (G.lite.bis)
ADSL2+	ITU-T G.992.5 Annex A, B

### Management

- User Friendly GUI via HTTP and HTTPS
- GUI-embedded Easy Setup wizard
- On demand Remote GUI assistence (helpdesk)
- Web-browsing Intercept (install / diagnostics)
- PC (Wireless) Technicolor Gateway Setup Wizard
- TR-069 CPE WAN Management Protocol
- TR-104 Voice Service Provisioning
- TR-098 Internet Gateway Device Management
- TR-111 Home Network Device Management
- TR-140 Storage Service Provisioning
- TR-064 LAN Side Configuration
- Zero-Touch Auto-Provisioning

## Wireless Performance and Security

- Wi-Fi IEEE 802.11b/g/n 1x1 access point
- Wi-Fi CERTIFIED<sup>®</sup>
- WPA<sup>™</sup>-Personal / WPA2<sup>™</sup>-Personal , WEP<sup>™</sup>
- Wi-Fi Multimedia (WMM<sup>®</sup>)
- Wi-Fi Protected Setup (WPS<sup>™</sup>)
- Up to 4 virtual SSID APs support
- Security and service segregation per SSID
- Dynamic rates switching for optimal wireless rates
- Manual/auto radio channel support

### **Firewall Security**

- Stateful Packet Inspection Firewall (SPIF)
- Customizable firewall security levels
- Intrusion detection and prevention (DoS, SYN Flood, Ping of Death, Fraggle, LAND, Teardrop, etc.)
- Website URL and Content-based filtering
- DMZ

## **Enabling Technologies**

- Quality of Service: ATM, Ethernet, Wi-Fi, IP
- FLEXIBundLE: Multi Role User Authorization
- Hyper-Nat: Symmetrical NAT with Application Helpers
- Game and Application Sharing NAT PortMaps
- «SIM-lock» Provider Locking
- DHCP Conditional serving & relay, DNS server & relay
- IGMPv3 proxy (FastLeave)
- IGMP snooping (Full routed)
- Flexiport (any Ethernet port bridged IPTV)
- IEEE802.1q VLAN bridging, Multiple bridge instances

TG703 Entry-level Integrated Access Device

## **Technical Specifications**

### Voice over IP Features

 Voice Functionality

 Supplementary and Advanced Services

Signalling: SIP, MGCP (optional), H.323 (optional) Codecs: G.711, G.726, G.729, T.38 Interopable with main market softswitches Call waiting (on call basis) Caller Identification Call forwarding (No answer/Busy/Unconditional) Call transferring Call hold, call return CLIP (Calling Line Identification Presentation) CLIR (Calling Line Identification Restriction) CNIP (Calling Name Identifiation Presentation) CNIR (Calling Name Identifiation Restriction) Fax transparency 3-way conference MWI (Message Waiting Indicator) Missed call e-mail Click to dial Warm line Call Completion to Busy Subscriber Abbreviated number Common number in/outgoing call Anonymous Call Rejection **Distinctive Ringing** Voice Mail on No Reply Support for Secondary Outbound Proxy DNS NAPTR, DNS SRV

### Content of the Box

- Entry-level wireless-n VoIP Multi-User ADSL2+ Gateway
- Power supply unit
- ADSL cable (RJ11)
- Ethernet cable (RJ45)
- Setup CD and Leaflet
- Filter or splitter (optional)



Technicolor TG703 back panel

Technicolor Professional Services are available to address your demands for qualified technical support & warranty, product maintenance, access to training courses and tailor-made solutions to specific product evolution. For more information, please ask your usual contact person.

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SALES CONTACT

For more information please get in touch with your usual sales representative or use the following email:

telcosales@technicolor.com



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#### SAFETY INSTRUCTIONS AND REGULATORY NOTICES

## BEFORE YOU START INSTALLATION OR USE OF THIS PRODUCT, CAREFULLY READ THESE INSTRUCTIONS



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.
- Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use this product to report a gas leak in the vicinity of the leak.

#### Wireless

In case this product is equipped with a wireless transceiver, it uses Direct Sequence Spread Spectrum (DSSS) / Orthogonal Frequency Division Modulation (OFDM) radio technology. As such it is designed to be inter-operable with any other wireless DSSS/OFDM type product that:

- Complies with the IEEE802.11b/IEEE802.11g/IEEE802.11g Standard on Wireless LANs, as defined and approved by the Institute of Electrical and Electronics Engineers.
- Is Wi-Fi<sup>®</sup> CERTIFIED<sup>™</sup> as defined by the Wi-Fi<sup>®</sup> Alliance.

#### Directive

Unless express and prior approval by Technicolor in writing, you may not:

 Disassemble, de-compile, reverse engineer, trace or otherwise analyse the equipment, its content, operation, or functionality,

or otherwise attempt to derive source code (or the underlying ideas, algorithms, structure or organization) from the equipment,

or from any other information provided by Technicolor, except to the extent that this restriction is expressly prohibited by local law;

- Copy, rent, loan, re-sell, sub-license, or otherwise transfer or distribute the equipment to others;
- Modify, adapt or create a derivative work of the equipment;
- Remove from any copies of the equipment any product identification, copyright or other notices;
- Disseminate performance information or analysis (including, without limitation, benchmarks) from any source relating to the equipment.

Such acts not expressly approved by Technicolor will result in the loss of product warranty and may invalidate the user's authority to operate this equipment in accordance with FCC Rules.

Technicolor disclaims all responsibility in the event of use that does not comply with the present instructions.

#### Environmental information

#### WFFF directive



This symbol means that your inoperative electronic appliance 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 guality 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.

#### Energy consumption

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

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



The notice detailed useful information on all the features of your product but also on energy comsumption.

ECO 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 the earth!

#### Safety Instructions

#### Climatic conditions

This product:

- Is intended for in-house stationary desktop use; the maximum ambient temperature may not exceed 40°C (104°F).
- 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 (Environment where there is no pollution or only dry. nonconductive pollution).

#### Cleaning

Unplug this product from the wall socket and computer 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 hot one, may cause condensation on some of its internal parts. Allow it to dry by itself before re-starting the product.

#### Interface classifications

The external interfaces on the rear panel of the product are classified as follows:

- DSL, ADSL, SHDSL, VDSL, Line: TNV circuit, subjected to over voltages (TNV-3)
- ISDN: SELV circuit
- PSTN, FXO: TNV circuit, subjected to over voltages (TNV-3)
- Phone, VoIP, FXS: TNV circuit, not subjected to over voltages (TNV-2)



#### WARNING

- The Phone, VoIP, FXS port will be classified as a *TNV-3* circuit when connected internally to the PSTN, FXO port, for example, when the device is powered off.
- If the product is equipped with a USB interface (slave and/or master) or any type of connector with
  metallic shielding, then it is not allowed to connect the Phone, VoIP, FXS port with the PSTN, FXO or the
  DSL, ADSL, SHDSL, VDSL, Line port by any means, for example with an external telephone cable.
- All other interface ports (e.g. Ethernet, 10/100Base-T/MDI(-X), USB, Console, Craft, etc.), including the low voltage power input from the AC mains power supply. SELV circuits.

#### Electrical powering

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

The power supply must be Class II and a Limited Power Source in accordance with the requirements of IEC60950-1/ EN60950-1, Clause 2.5 and rated as indicated on the label on your product. It must be tested and approved to national or local standards.

For US and Canada: This product is intended to be supplied by a Listed Direct Plug-in, or Desktop Power Unit marked "Class 2" and rated as indicated on the label on your product.

The use of other types of supplies is prohibited. If you are not sure of the type of power supply needed, consult the product's user documentation or contact your local product dealer.

ISDN



#### WARNING

For US and Canada: Do not use the ISDN port; do not attempt to connect this port to the network at anytime.

#### USB

The device is to be connected to an identified USB port complying with the requirements of a Limited Power Source.

#### Telephone cable



#### CAUTION

To reduce the risk of fire, use only No 26 AWG wire size or larger telecommunication line cord.

Connect the telecommunication line cord only in the PSTN, FXO, DSL, ADSL, SHDSL, VDSL or Line port of the product. Never plug the telecommunication line cord in another receptacle of the product.

Follow the installation instructions in the sequence as outlined in the installation guide.

#### Central splitter / distributed filter(s) (if applicable)

If telephone service is required on the same line, a central splitter or distributed filter(s) must be installed for optimal DSL performance.

Depending on your DSL configuration and type of splitter / filters, installation must be carried out by qualified service personnel. Consult your telephone service company or DSL service provider for instructions.

#### Accessibility

The Direct Plug-in power supply, or the plug on the power supply cord serves as disconnect device. Be sure that the power socket outlet you plug the power supply into is easily accessible and located as close to the equipment as possible.

#### Overloading

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

#### Servicing

To reduce the risk of electric shock, do not disassemble this product. None of its internal parts are user-replaceable; therefore, there is no reason to access the interior. Opening or removing covers may expose you to dangerous voltages. Incorrect reassembly could cause electric shock if the appliance is subsequently used.

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

#### Damage requiring service

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

- When the power supply 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.

Immediately disconnect the product if you notice it giving off a smell of burning or smoke. Under no circumstances must you open the equipment yourself; you run the risk of electrocution.

#### **Regulatory Information**

You must install and use this device 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.

In some situations or environments, the use of wireless devices may be restricted by the proprietor of the building or responsible representatives of the organization.

If you are uncertain of the policy that applies on the use of wireless equipment in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use this device prior to turning on the equipment.

Technicolor is not responsible for any radio or television interference caused by unauthorized modification of the device, or the substitution or attachment of connecting cables and equipment other than specified by Technicolor. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Technicolor and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from failing to comply with these guidelines.

#### Europe - European Union

#### European Community Declaration of Conformity

CED Hereby, Technicolor, declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC of the European Parliament and of the Council.

This equipment can be used in all countries that are member of the European Union and that are member of the European Free Trade Association.

The Declaration of Conformity can be found on www.technicolor.com.

In case this product is equipped with a wireless transceiver:

- it is restricted to indoor use only.
- it complies with the basic restrictions and limits as defined in the European Council Recommendation (1999/519/ EC) on the limitation of exposure of the general public to Electromagnetic fields.

This product complies with:

- Commission Regulation (EC) No 1275/2008 implementing Directive 2005/32/EC: Ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment.
- Commission Regulation (EC) 278/2009: Ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies.

#### North-America - Canada

#### Notification of Canadian Radio Frequency Interference Statement

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

NOTICE: This product meets the applicable Industry Canada technical specifications.

NOTICE: The ringer Equivalence Number (REN) for this terminal equipment is 0.1. The REN is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed five.

#### Canada - Industry Canada (IC)

In case this product is equipped with an IEEE802.11b/IEEE802.11g/IEEE802.11m wireless transceiver, complying with RSS 210 and/or RSS 213 of Industry Canada, operation is subject to the following two conditions:

- 1 This device may not cause harmful interference.
- 2 This device must accept any interference received, including interference that may cause undesired operation of the device.

#### IMPORTANT NOTE: 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 20cm between the radiator and your body.

#### Restricted Frequency Band

In case this product is equipped with an IEEE<mark>802.11b</mark>/IEE<mark>E802.11g/IEEE802.11n wireless transceiver, it only uses channels 1 to 11 (2412 to 2462 MHz) on Canada territory.</mark>

#### North-America - United States of America

#### 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 guarantee 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 Inc., 10330 North Meridian Street, Indianapolis, IN 46290 USA, (580) 634-0151.

This equipment complies with Part 68 of the FCC Rules.

The 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) can be found at <u>www.technicolor.com</u>.

#### **RF-Exposure Statement**

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 20cm 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 20cm from the modem and must not lean on the modem in case it is wall-mounted.

With a separation distance of 20cm or more, the M(aximum) P(ermissible) E(xposure) limits are well above the potential this module is capable to produce.

The transmitter shall not be collocated with other transmitters or antennas.

#### Restricted Frequency Band

In case this product is equipped with an JEFE802.11b/IEEE802.11g/IEEE802.11n wireless transceiver, it may only use channels 1 to 11 (2412 to 2462 MHz) on U.S.A. territory.