# **Advanced Cable Gateway**



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# **Technical Specifications**

#### **Technical Specifications for Advanced Cable Gateway**

Model Type	ACG905 C
Operating Voltage	120V AC / 60 Hz / 0.5A
Typical Power Consumption	25W max
Weight	0.872 lb / 0,395 kg
Dimensions (W x H x D)	7.79 x 7.68 x 3.94 Inch
Operating Temperature Range	59 to 113° F / 15 to 45°C
Storage Temperature Range	- 4 to 158°F / - 20 to 70°C
Remote Control Battery Type	Li-Ion 11.1V 2,150 mAh

#### **Technical Specifications for Handset**

Free Field Range	Up to 984 feet*	
Indoor Range	Up to 164 feet*	
Number of Handsets	1 supplied	
	The base may be used with up to 5 handsets	
Electrical Connection	Powered from charger or direct to handset ( <i>black power adapter unit</i> ): Input: 100-240V AC 50/60 Hz Output: 5V DC 200 mA	
Rechargeable Battery	2 x 1.2V / 750 NIMH rechargeable batteries	
Operating Temperature Range	0 - 50°CC	

\* Varies according to environment.

# Safety Recommendations

# **Using Equipment Safely - Gateway**

Your Advanced Cable Gateway has been manufactured to meet American safety standards, but care must be taken to ensure proper performance.

It is important that you read this booklet completely, especially the safety instructions below. If you have any doubts about the installation, operation, or safety of the Gateway, please contact your Customer Service.

#### Avoiding the Risk of Electric Shock

- Disconnect the Gateway from the power source before you connect the Gateway to (or disconnect it from) any other equipment. Avoid any contact with the power source, which can be lethal or cause severe electric shock.
- Do not remove the cover of the Gateway. Should the Gateway fail, contact Customer Service for repair or service.
- Do not insert anything into any opening of the case.
- Do not block the Gateway's ventilation slots; do not place it on unstable surfaces like carpets.
- Do not put anything on the Gateway which might spill or drip into it (e.g. lighted candles or liquids containers). Do not splash it with a liquid. If an object or liquid does get inside the Gateway, unplug it immediately and contact Customer Service.
- Do not store the Gateway in excessively hot, cold, or damp conditions. The Gateway is intended to operate at a temperature of less than 45 degrees and a maximum humidity level of 75%.
- In case of a thunderstorm, it is recommended that you unplug the Gateway from the power source and the antenna from the Gateway.
- Locate this equipment in such a way that the plug and power source are easily accessible. That way you can disconnect quickly.

#### **Connecting to the Power Supply**

- This Gateway is designed to operate at 120VAC, 60Hz.
- If you are in any doubt about the power source, the plug, or connection, please consult Customer Service.

#### Ensuring optimum performance

- Leave 3 to 4 inches of clearance around the Gateway to ensure proper ventilation to the Gateway.
- Always place Gateway vertically.
- To clean the Gateway, use a dry, clean soft cloth with no cleaning solvent or abrasive products. Clean the ventilation openings regularly.

#### **Environmental Information**

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

#### FCC Compliance Statement



This device complies with part 15 of the FCC rules. Operation is subject to the following 2 conditions: 1. This device may not cause harmful interference; 2. This device must accept any interference received, including interference that may cause undesired operation. Responsible party (contact for FCC matter only):

THOMSON Inc. 101 W. 103rd St. Indianapolis, IN 46290 U.S.A.

#### FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

#### **Base Station:**

#### **Radiofrequency radiation exposure Information:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

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

#### Portable Part (Phone):

Radiofrequency radiation exposure Information:

The radiated output power of the device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

#### North American Cable Installer

This reminder is provided to call your attention to Article 820-40 of the National Electrical Code (Section 54 of the Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

WARNING: TO PREVENT FIRE OR ELECTRICAL SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



#### Safety

# **Using Equipment Safely - Handset**

In order to understand the key features of your TH58 Handset, it is recommended that you read this guide carefully, including all the safety instructions, before using the product. It is recommended that you inform other members of your family (especially your children) of the detailed warnings given in this guide.

#### **Telephone Jack Requirements**

To use this phone, you need an RJ11C type modular telephone jack, which might look like the one pictured here, installed in your home. If you don't have a modular jack, call your local phone company to find out how to get one installed.

#### Phone Installation

#### **Digital Security System**

Your cordless phone uses a digital security system to protect against false ringing, unauthorized access, and charges to your phone line.

INSTALLATION NOTE: Some cordless telephones operate at frequencies that may cause or receive interference with nearby TVs, microwave ovens, and VCRs. To minimize or prevent such interference, the base of the cordless telephone should not be placed near or on top of a TV, microwave ovens, or VCR. If such interference continues, move the cordless telephone farther away from these appliances. Certain other communications devices may also use the 1.9 GHz frequency for communication, and, if not properly set, these devices may interfere with each other and/or your new telephone. If you are concerned with interference, please refer to the owner's manual for these devices on how to properly set channels to avoid interference. Typical devices that may use the 1.9 GHz frequency for communication include wireless audio/video senders, wireless computer networks, multi-handset cordless telephone systems, and some long-range cordless telephone systems.

#### **Important Installation Guidelines**

- Avoid sources of noise and heat, such as motors, fluorescent lighting, microwave ovens, heating appliances and direct sunlight.
- Avoid areas of excessive dust, moisture and low temperature.
- Avoid other cordless telephones or personal computers.
- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch non-insulated telephone wires or terminals, unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.

When your Handset is connected to the Internet, you may download software updates for the base and handset. Applying these updates and the improvements they contain may slightly modify the menus.



#### Interference Information

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.

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.

Privacy of Communications may not be ensured when using this product.

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 (that is, the antenna for radio or television that is "receiving" the interference).
- Reorient or relocate and increase the separation between the telecommunications equipment and receiving antenna.
- Connect the telecommunications equipment into an outlet on a circuit different from that to which the receiving antenna is connected.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions. Also, the Federal Communications Commission has prepared a helpful booklet, "How To Identify and Resolve Radio/TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Please specify stock number 004-000-00345-4 when ordering copies.

**NOTICE:** The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# Hearing Aid Compatibility (HAC)

This telephone system meets FCC standards for Hearing Aid Compatibility.

#### Licensing

Licensed under US Patent 6,427,009.

#### FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter."

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# About your Advanced Cable Gateway

#### **Key Features**

Thank you for choosing the ACG905, the new generation of Thomson Gateways with enhanced functionalities. The Advanced Cable Gateway offers the following services:

- Multi-Line Capability, Up to 5 Handsets\*
- Access to Voicemail, Address Book, News, Weather and other features via your Handset(s) *varies depending upon offerings from your service provider*
- Built-in router functionality for home networking
- WiFi

#### **Main Technical Characteristics**

- DOCSIS 2.0 and PacketCable 1.5 Compliant
- Built-in DECT Technology
- Wireless (Add-On WiFi Card included)
- 2 Ethernet Ports, 1 USB2.0 and 1 RJ11 Telephone Line
- Battery back-up
- Security Through Built-In Firewall and WEP, WPA, WPA2, BPI+ Protocols
- Easy Access to Advanced Diagnostics Web Pages
  - \* Refer to page the Thomson Webpage URL for ordering information.

#### **Computer Requirements**

For the best possible performance from your Advanced Cable Gateway, your personal computer must meet the following minimum system requirements:

	IBM PC COMPATIBLE	MACINTOSH
CPU	Pentium preferred	Power PC
Operating System	Windows NT/2000/Me/XP/Vista, Linux	Mac OS 10.4xor higher
Video	VGA or better (SVGA preferred)	VGA or better (SVGA built-in preferred)
Ethernet	10BaseT or 100BaseT	10BaseT or 100BaseT
	your computer to pass data to and from t card and software drivers installed in your d Ethernet cable to connect the Ethernet	
Software	A TCP/IP network protocol for each ma later or Mozilla Firefox.	achine Microsoft Internet Explorer 6.0 or

# **Before You Start**

#### **Box Contents**



# Become Familiar with Your Gateway and Handset 1. Gateway Front Panel



Ċ	POWER	Power
[]	BATTERY	Battery Back-Up Level (low / full / empty or no battery detected)
$\downarrow\uparrow$	DS/US	Cable DOCSIS State; LED ON during start-up operation
¢	ONLINE	Internet Active
<b>\</b>	LINK	CPE Activity LED ON when a PC is connected to the Ethernet port
S	TEL	Voice Over IP Information

# S. Gateay Rear Panel



PAGE	To ring <b>all</b> connected Handsets ( <i>short press</i> )		
	Add another DECT Handset to the Gateway ( <i>press</i> for more than 12 seconds)		
	or		
	Reset to factory settings ( press at power off; keep pressing for 5 seconds while powering on the Advanced Cable Gateway )		
USB	USB 2.0 Connector (master)		
RESET	Reset ( short press )		
ETHERNET 1	Ethernet 10/100 BaseT RJ-45 Connector		
ETHERNET 2	Ethernet 10/100 BaseT RJ-45 Connector		
TEL	Telephone RJ-11 Connector		
CABLE	Cable Input; F-Connector		

# 3. Handset Overview

#### Layout



(described on page 18)

# Setting up Your System

These are the steps to set up your system. They are described step by step in detail on the following pages; so, when you are ready, turn the page to get started. . .

# **Basic Set-up**

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Order Additional Handsets (up to 5 supported)	visit www.tbd.com

# Install the Wi-Fi Card

The Advanced Cable Gateway is ready to support Wi-Fi and comes with a card. Follow these instructions for installation:

**WARNING:** The Gateway **must** be unplugged from the wall socket **before** you attempt to install the Wi-Fi card.



# Install the Gateway Battery

Should the electricity go out, this will provide backup power to the Gateway:



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1. Ensure the power cord is unplugged. Remove the battery cover on the rear panel. There are two battery compartments. One battery is included with the Advanced Cable Gateway.

For an additional battery please contact your local operator.

2.Push the slider up/down to allow for battery insertion.

3.Insert the battery into the compartment marked "**Battery 1**".

4. Readjust the slider to prevent the battery from moving and replace the battery cover. Plug the power cord into an electrical outlet that is not controlled by a wall switch (this will assure that the unit has uninterrupted power). The battery will fully charge within **5 hours**.



# **Install the Handset Batteries**



**CAUTION:** To reduce the risk of fire or personal injury, use only the Thomson Inc. approved Nickel-metal Hydride (Ni-MH) battery model 5-2734, that is compatible with this unit.

**NOTE:** You must connect the handset battery before use.

- Slide the battery door off the back of the Handset.
- Insert the batteries (*included*) into the housing in the Handset being careful to align the + / ends correctly (*refer to the graphics in the housing*).



- Check that the screen lights up, then replace the cover.
- Wait for about 30 seconds to allow the system to start up.
- When your handset is registered to its base, the screen displays the number "1" alongside the *(green - has signal)* symbol.

#### **Battery Safety Precautions**

- Do not burn, disassemble, mutilate, or puncture. Like other batteries of this type, toxic materials could be released which can cause injury.
- To reduce the risk of fire or personal injury, use only the Nickel-metal Hydride battery listed in the User's Guide.
- Keep batteries out of the reach of children.
- Remove batteries if storing over 30 days.

NOTE: The RBRC seal on the battery used in your Thomson Inc. product indicates that we are participating in a program to collect and recycle the rechargeable battery (or batteries). For more information go to the RBRC web site at www.rbrc.org or call 1-800-8-BATTERY or contact a local recycling center.

# Charge the Handset with the DC Adapter

The DECT Handset will charge when securely placed in the Handset Dock so long as the dock has power.

The dock can charge your handset while attached to the front of the Advanced Cable Gateway or by using the DC adapter included with the Gateway.



Once installation is complete, you should leave the phone on the charger for at least 5 hours before using it for calls and browsing content in order to maximize battery performance and life.

#### **Changing the Battery**



**CAUTION:** To reduce risk of personal injury, fire, or damage use only the 5-2833 power adaptor listed in the user's guide. This power adaptor is intended to be correctly orientated in a vertical or floor mount position.

# Charge the Handset Docked to the Gateway

In this situation, the Advanced Cable Gateway will be charging your handset.



Conce installation is complete, you should leave the phone on the charger for at least **5 hours** before using it for calls and browsing content in order to maximize battery performance and life.

# Connecting Cables Connections Overview



#### Important Information:

Your cable company should always be consulted before installing a new cable outlet.

Do not attempt any rewiring without contacting your cable company first.

#### **Connect One or Two Computers with Ethernet Cables**

Make the connections to the modem in the following sequence:





**Note:** Make sure that the Ethernet cable is straight-wired (not "null" or crossover-wired).

However, you will need a crossover-type cable if you are connecting the Gateway to a hub or a hub within a port switch that provides the same 14 function.

#### **Connect More Than Two Computers with Ethernet Cables**

If you want to create hard wired connections to the ACG for more than two computers, you will need to purchase a Hub (Switch) for that purpose and the cabling necessary for those additional connections. Although a 10BaseT Hub or Switch can be used, it is not recommended. A 100BaseT Hub or Switch is recommended. Follow the installation guidelines that accompany this equipment.

#### Connect Telephone or Fax with Standard Analogue Phoneline

When properly connected, most telephone devices can be used with the Advanced Cable Gateway. Here is how to make that connection



Connect a standard phone line cord directly from the phone (fax machine, answering machine, caller ID box, etc.) to the TEL port on the Gateway.

To make a normal telephone call, pick up the handset; listen for a dial tone, then dial the desired number using this new connection. For services such as **call waiting**, use the hook switch (or FLASH button) to change calls.

**Note:** There is only one TEL connection available on the rear panel of the Gateway.

**Note:** If you have any questions concerning telephone connection, please contact your service provider.

# Activate the Advanced Cable Gateway

**Note:** To activate your advanced cable gateway, please consult the activation instruction provided by your service provider.

After installation of the Gateway, each time you turn it on (*each time the modem is reconnected to the power*), it goes through several steps before it can be used.

Each of these steps is represented by a different pattern of **flashing lights** on the front of the modem.

If DS/US, ONLINE, and LINK leds flash simultaneously it means the Gateway is automatically updating its system software. **Please wait for the lights to stop flashing**. You cannot use your modem during this time. Do not remove the power supply or reset the Gateway during this process.

LED	5	n	
label	ON	OFF	FLASH (Blinking)
Power	AC Power Good with Good/Low/Bad Battery	AC Power Failure with Bad Battery	AC Power Failure with Good Battery/Low Bat- tery
Battery	AC Power Good/ Good Battery	AC Power Good/ Bad Battery AC Power Failure/ Good Battery/Bad Battery	AC Power Good/ Low Battery AC Power Failure/ Low Battery
DS/US	Normal	AC Power Failure	Initialization OR Error (if Blinking persists)
Online	Normal	AC Power Failure	Initialization OR Error (if Blinking persists)
LINK	Ethernet/Wi-Fi Link	No Ethernet/Wi-Fi Link	Ethernet/Wi-Fi Traffic
Tel	All Lines Good	Telephone lines(s) not avialable	One or More Telephones Off hook

#### Wi-Fi Light Indicators on the Front Side of the Card

After the WiFi card is inserted and the Advanced Cable Gateway is plugged back into the power outlet, you will know that the connection is successful when the **PWR** LED on the front of the Wi-Fi Card shows a green light.

*Also*, when you first turn the Gateway back on, the **Link** LED will blink a green light - *fast*; when the card connects to the network sucessfully, it will blink - *slowly*.



# Setup Wireless Access for Your Laptop, PC or Other Device

Wi-Fi on you Advanced Cable Gateway is preconfigured with a network name (SSID) and WPA key (a security password to prevent others access to your wireless network). This information is printed on the label on the outside of your Gateway as shown in the following diagram:



In order to take advantage of the Wi-Fi connection available to you with the Gateway you will need to setup your computer. Setup will be different depending on the year, brand, model and installed software of your computer. Please follow the instructions received with you computer that explain how to connect to a wireless network. If you are using a recent version of Microsoft Windows, one of the following methods may apply (consult your computer/laptop instructions if one of these methods does not work)

#### Method 1:

- Click on "Wireless" icon in the bottom right hand portion of your screen
- Select,"View Wireless Networks"
- Highlight "SSID" from the list and press "Connect"
- When prompted, enter the WPA key twice and press "Connect"

#### Method 2:

- · Go to "Start" "Control Panel" "Network Connections"
- Double click "Wireless Network Connections"
- Highlight "SSID" from the list and press "Connect"
- When prompted, enter the WPA key twice and press "Connect"

#### Method 3:

- Go to "Start" "Network Connections"
- Double click "Wireless Network Connections"
- Highlight "SSID" from the list and press "Connect"
- When prompted, enter the WPA key twice and press "Connect"