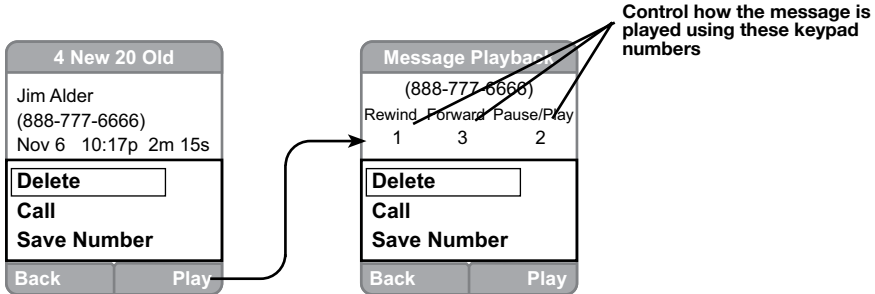


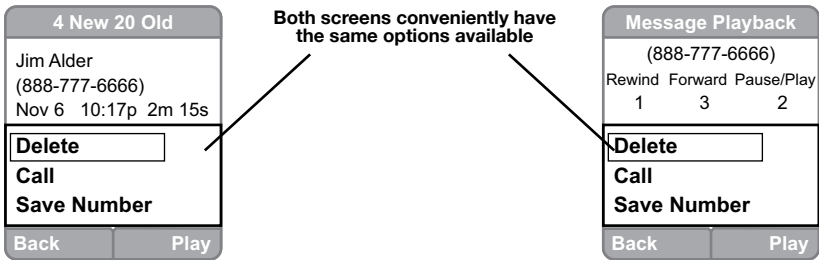
Press the **Play** softkey to listen to the voicemail. As you listen, the “Message Playback” screen will display the phone number and those keypad presses that will effect the voicemail as it is playing.

**Press 1** to Rewind; **Press 2** to Pause/Play; **Press 3** to move the message Forward.

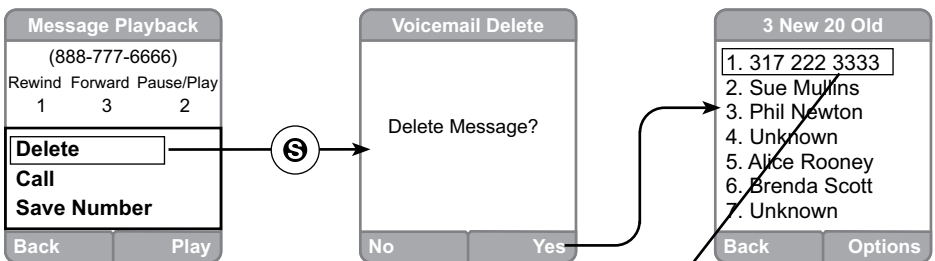


### Delete the Voicemail

If you highlight Delete with the *navkey* and confirm by pressing the **Select** key, the next screen will ask for a confirmation.

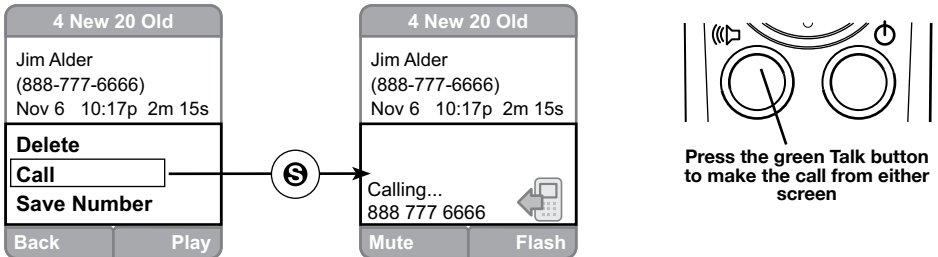


Press the **Yes** softkey if you wish to delete this voicemail. Now, when you view the listing of voicemails, the message you just removed will be gone.



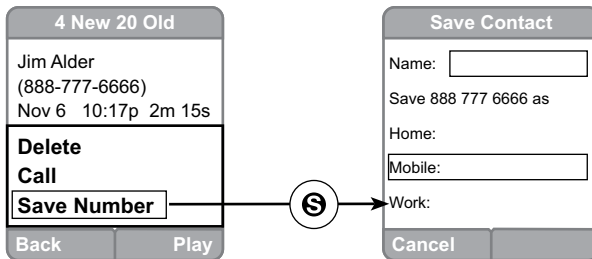
## Call the Voicemail Back

If you highlight Call with the *navkey* you can call that number by pressing the Talk (green) key. The screen will change to a calling screen.



## Save Number

If you highlight Save Number with the *navkey* and confirm by pressing the **Select** key in the center of the *navkey*, the "Save Contact" screen will open.



Use the *navkey* to place the cursor in the Name box and type your content using the *keypad*. Use the *navkey* to highlight the category you wish to store the number under. When you are ready to confirm your selection, press the **Select** key in the center of the *navkey* (see more information about saving contacts on page ??).

**Note:** Refer to page ?? for how to enter text using the keypad.



## Yellow Pages

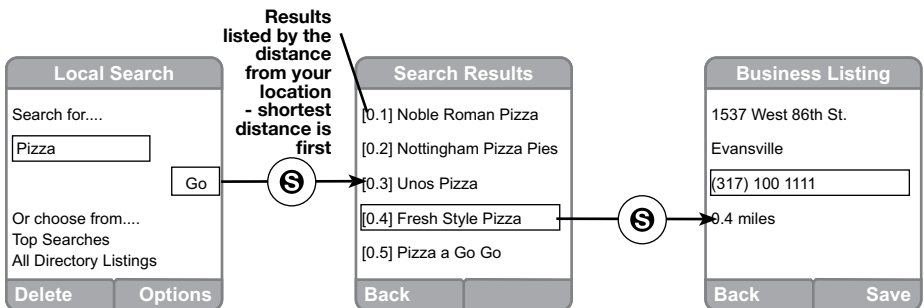
This feature allows you to search yellow page listings.

Highlight the **Yellow pages**  icon from “Idle” Screen or the “Menu” screen. Confirm your choice by pressing the **Select** key in the middle of the *navkey*.



The “Yellow Pages - Location” screen allows you to enter the Street / Intersection / Airport information (*not required*) and the City & State OR ZIP code information. Use your *navkey* to move around the screen as needed and the *keypad* to type the information. Press the **Ok** softkey so that your search can move on to the next screen (“Local Search” screen).

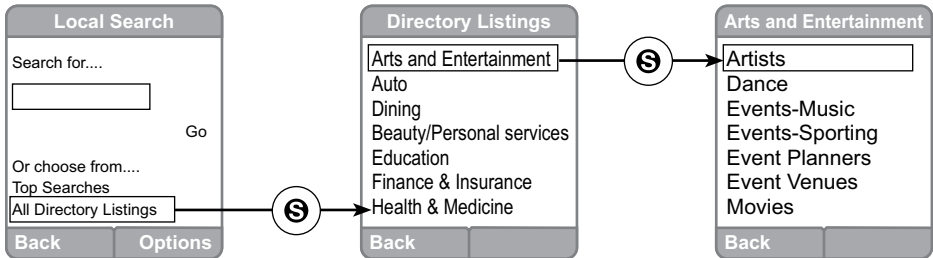
On this screen you can enter key words that will help you narrow your search. Use the *keypad* again to enter keyword text into the box. Highlight **Go** using the *navkey*; press the **Select** key to confirm your choice. The screen that follows will list the search results.



If your search is successful you could have several choices. Highlight your choice using the *navkey* and confirm by pressing the **Select** key. The “Business Listing” screen displays the address, phone number, and distance from your location.

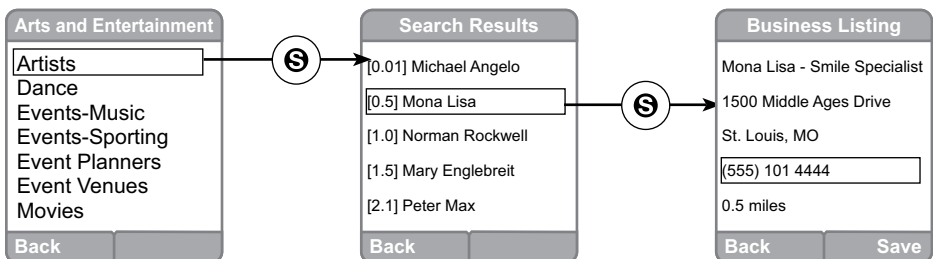
## All Directory Listings Search

Another search of the Yellow Pages can begin from the “Local Search” screen (see *previous page*).



This time, instead of typing text, use the *navkey* to select the All Directory Listings at the bottom of the screen.

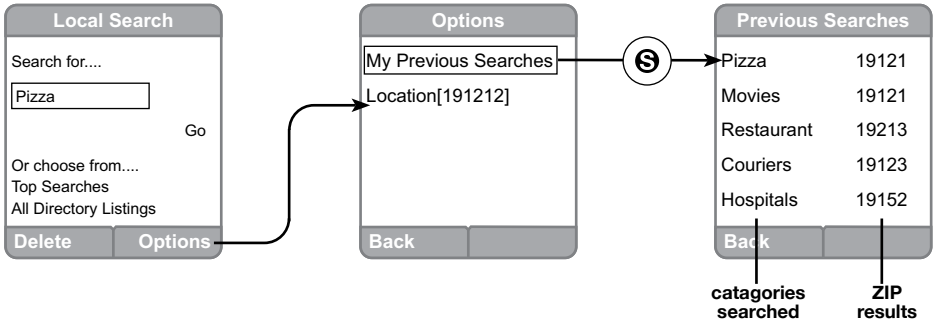
Push the **Select** key in the middle of the *navkey*. The next screen will be the “Directory Listings” screen. By highlighting one of the categories and pressing the **Select** key again, that category will be further subdivided into more categories. Highlighting and selecting again will lead you to the “Search Results” screen.



You can dial your search results from either the “Business Listing” or “Search Results” screen. You can save your search results from the “Business Listing” screen. Refer to pages?? for more information on dialing and saving searches.

## Local Search Options

If you get screens that say “No Results Found” or “Please enter Valid ZIP code”, it may be a good time to press the **Options** softkey available to you in the “Local Search” screen. Use the **Options** softkey to open the “Options” screen.

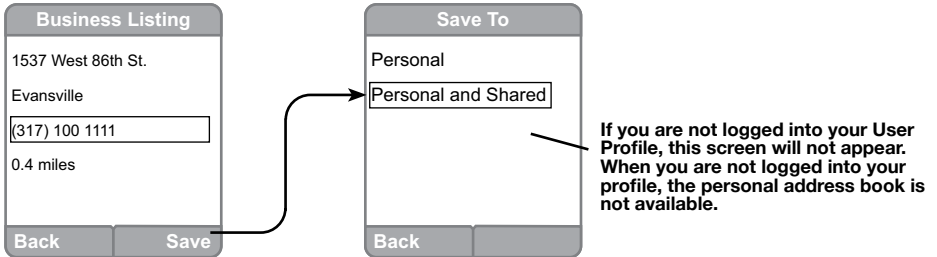


There are two choices on this screen. The first is My Previous Searches. To reach this screen highlight the topic using the *navkey* and confirm your choice by pressing the **Select** key in the center of the *navkey*. A list of catagories and successful ZIP codes are listed on the screen.

Pressing the Location choice will take you to the “Search Location” screen. There are Four choices on this screen Current Location, Previous Location, Enter Full Address and a Zip Code Only box to fill.

## Saving Search Results

From the “Business Listing” screen you can, by pressing the **Save** *softkey*, place the listing into your Address Book.

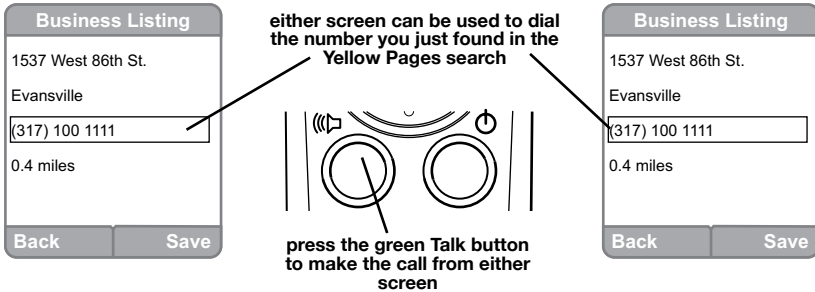


Pick which address book (described on page ??) you wish to save this business listing into by highlighting it with the *navkey*. Confirm your choice by pressing the **Select** key. You will see a confirmation screen that this has been done for you.

If you are not logged into the user profile at the time you save the “Business Listing” you will only be able to save to the Personal and Shared address book and the “Save To” screen will not appear.

## Dialing Search Results

You can use the same “Business Listing” or the “Search Results” screen to dial the number that you just found.




Use the *navkey* to highlight the number on the screen; press the **Talk** (green key) and the call will be dialed.

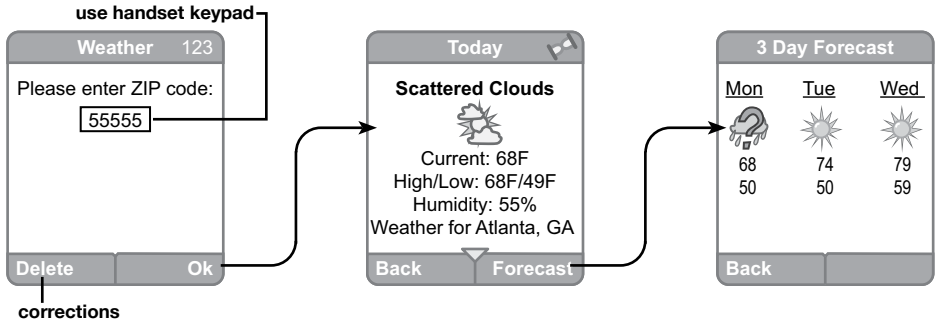


## Weather Updates

This feature allows you access to weather updates based on the zip code you enter into the system. Here is how it works:

From the either the idle screen or the menu screen, use the *navkey* to highlight the **Weather**  icon and confirm with the **Select** key.

In the “Weather” screen, simply use your *keypad* to enter the ZIP code for the location of the weather conditions to be checked out. After entering the ZIP code, press the **OK** *softkey* to confirm. If you need to change the numbers, use the **Delete** *softkey* to correct your entry.




The ZIP code entry box will be empty when it is first used. The ZIP code last entered will appear in the box thereafter.

For the weather forecast (*up to three days*) select the **Forecast** *softkey*.

The **Back** *softkey* will take you back to the previous screen.

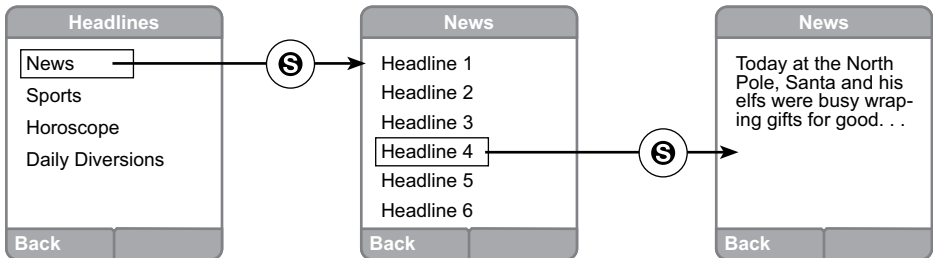
## Headlines

This feature allows you to browse through internet content such as: news headlines, sports scores, horoscope and even daily diversions. Here is how to access this information:

From the “Menu” screen, use your *navkey* to highlight the **Headlines**  icon and confirm by pressing the **Select** key.

In the “Headlines” screen there will be options displayed. Use the *navkey* to highlight the option of your choice and confirm using the **Select** key again.

## News



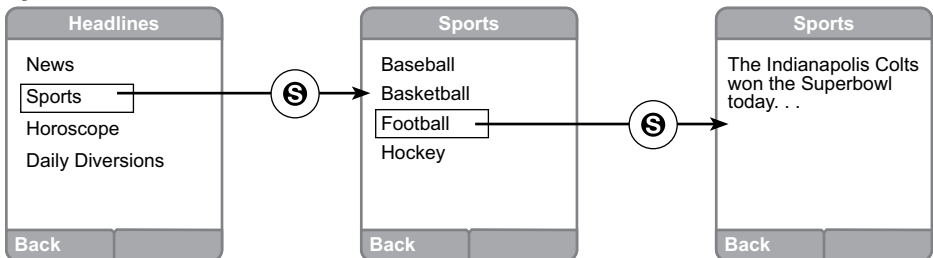
If you choose **News** and confirm (**Select** key), you will be presented with a list of news events.

Highlight the event of your choice and confirm with the **Select** key in the middle of the *navkey*.

That news story will be presented on the next screen.

The **Back** softkey will take you back to the previous screen.

## Sports



If you choose **Sports** and confirm with the **Select** key, you will be presented with a list of sports.

Highlight the sport of your choice and confirm using the **Select** key.

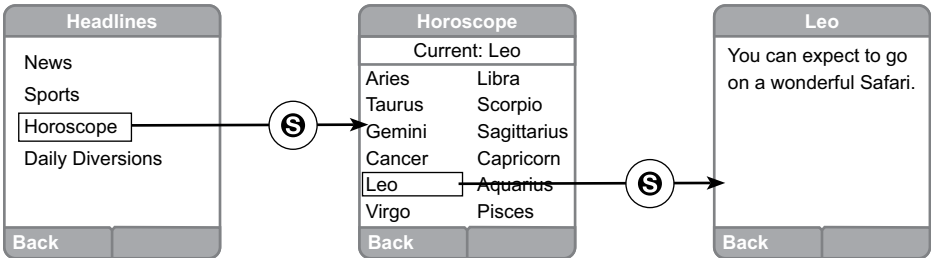
That sport event will be presented on the next screen.

The **Back** softkey will return you to the previous screen.



## Horoscope

If you choose **Horoscope** and confirm (**Select** key in the center of the *navkey*), the screen will list the 12 Zodiac signs. Use the *navkey* to highlight a sign; it will display as Current at the top of the “Horoscope” screen and you should confirm again with the **Select** key.

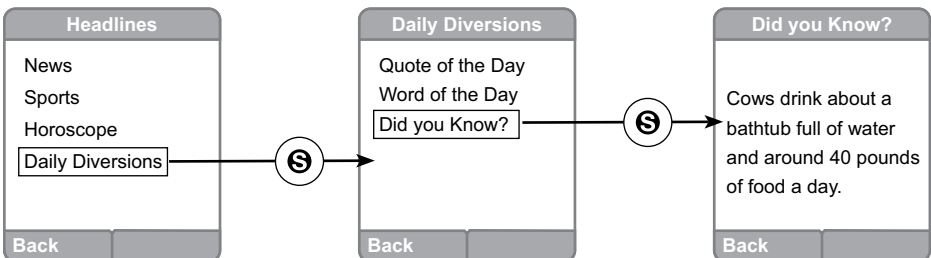


That sign's horoscope will display on the next screen.

The **Back** softkey will return you to the previous screen.

## Daily Diversions

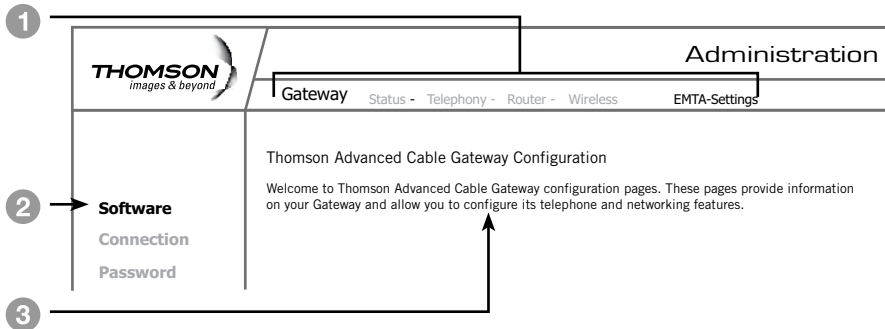
By choosing the **Daily Diversions** from the list you will have another set of choices: Quote of the Day, Word of the Day, and Did you Know?.



Just highlight your choice and press the **Select** key. The **Back** softkey will return you to the previous screen.

## Outline of Web Manager

The main screen will be shown as below.



<b>1</b>	<b>Main Menu</b>	The hyperlinks on the top of the page, including Gateway, VoIP, Router, Wireless, EMTA-Settings and several sub-menu items.
<b>2</b>	<b>Title</b>	The sidebar on the left side of the page indicates the title of this management interface.
<b>3</b>	<b>Main Window</b>	The current workspace of the web management containing configuration or status information.

Select a Main Menu **1** item first and the pages or groups of pages associated with that topic will appear in the sidebar **2**. This arrangement makes navigation easy.

# Gateway – Status Web Page Group

## 1. Software

**THOMSON**  
images & beyond

Administration

Gateway **Status** - Telephony - Router - Wireless EMTA-Settings

**Status**  
Software : This page displays information on the current system software.

**1** → **Software** → **Information**

Information	
Standard Specification Compliant	DOCSIS 2.0
Hardware Version	ACG90x rev 0
Software Version	cable ACG905 1.4.5.0
DOCSIS Software Version	2.0.0 alpha5
DECT Software Version	1252.64
Cable Modem MAC Address	00:1E:69:A0:01:9D
Cable Modem Serial Number	87003804790030

**2** → **Status**


Status	
System Up Time	0 days 0h:02m:10s
Router IP Address	

**1 Information** Section shows the hardware and software information about your Gateway.

**2 Status** Section shows how long your Gateway has operated since last time being powered up and some key information the cable modem received during the initialization process with your cable company.

## 2. Connection

This page reports **Current Connection Status** containing startup procedures, downstream and upstream status and so on. The information can be useful to your cable company's support technician if you're having problems.

	Administration																							
	Gateway	Status -	Telephony -	Router -	Wireless	EMTA-Settings																		
Software Connection Password	<b>Status</b>																							
	Connection: This page displays information on the status of the cable modem's H FC and IP connectivity																							
	<table border="1"> <thead> <tr> <th colspan="2">Startup Procedure</th> <th colspan="2">Status</th> </tr> </thead> <tbody> <tr> <td>Acquire Downstream Channel</td> <td></td> <td></td> <td>Complete</td> </tr> <tr> <td>Connectivity State</td> <td></td> <td></td> <td>Complete</td> </tr> <tr> <td>Boot State</td> <td></td> <td></td> <td>Complete</td> </tr> <tr> <td>Configure File</td> <td></td> <td></td> <td>Complete</td> </tr> </tbody> </table>				Startup Procedure		Status		Acquire Downstream Channel			Complete	Connectivity State			Complete	Boot State			Complete	Configure File			Complete
	Startup Procedure		Status																					
	Acquire Downstream Channel			Complete																				
Connectivity State			Complete																					
Boot State			Complete																					
Configure File			Complete																					
<table border="1"> <thead> <tr> <th colspan="4">Downstream Channel</th> </tr> </thead> <tbody> <tr> <td>Lock Status</td> <td>Not Locked</td> <td>Modulation</td> <td>Unknown</td> </tr> <tr> <td>Channel ID</td> <td>0</td> <td>Symbol rate</td> <td>Unknown</td> </tr> <tr> <td>Downstream Frequency</td> <td>253000000 Hz</td> <td>Downstream Power</td> <td>-6.300000 dBmV</td> </tr> <tr> <td>SNR</td> <td>23.200000 dB</td> <td></td> <td></td> </tr> </tbody> </table>				Downstream Channel				Lock Status	Not Locked	Modulation	Unknown	Channel ID	0	Symbol rate	Unknown	Downstream Frequency	253000000 Hz	Downstream Power	-6.300000 dBmV	SNR	23.200000 dB			
Downstream Channel																								
Lock Status	Not Locked	Modulation	Unknown																					
Channel ID	0	Symbol rate	Unknown																					
Downstream Frequency	253000000 Hz	Downstream Power	-6.300000 dBmV																					
SNR	23.200000 dB																							
Upstream Channel																								


## 3. Password

This page is used to **Change the Password** that enables you to access the Gateway web pages next time.

**Note:** The default **User Name** is: \_\_\_\_\_ (leave the field blank)

**⊙⊙⊙** The **Password** is: **admin**


The user name and password can be a maximum of 15 characters and are case sensitive.

	Administration				
	Gateway	Status -	Telephony -	Router -	Wireless
Software Connection Password	<b>Status</b>				
	Password: This page allows administration of access privileges and the ability to restore factory defaults to the system.				
	User Name	<input type="text"/>			
	Password	<input type="password" value="*****"/>			
	Re-Enter Password	<input type="password" value="*****"/>			
<input type="button" value="Apply"/>					

# Gateway – Telephony Web Page Group


## 1. Base

This page displays information on the DECT Handset base station

	<b>Administration</b>				
	<b>Gateway</b>	Status -	<b>Telephony-</b>	Router -	Wireless EMTA-Settings
<b>Base</b> <b>Handsets</b>	<b>Telephony</b>				
	Base : This page displays information on the DECT base system.				
	<b>Information</b>				
	Standard Specification Compliant		PacketCable 1.0		
	Software Version		1249		
EEPROM Revision		64			
REPI		00FS400930			

## 2. Handsets

This page displays information on the DECT Handsets subscribed to the ACG

	<b>Administration</b>				
	<b>Gateway</b>	Status -	<b>Telephony-</b>	Router -	Wireless EMTA-Settings
<b>Base</b> <b>Handsets</b>	<b>Telephony</b>				
	Handsets : This page displays information on the DECT handsets.				
	<b>Subscribed Handsets</b>				
	Handset 1 subscribed, narrowband Handset 2 subscribed, narrowband Handset 3 subscribed, narrowband Handset 4 subscribed, narrowband Handset 5 subscribed, narrowband				
	<input type="button" value="Subscribe a Handset"/> <input type="button" value="Update Status"/> <input type="button" value="Clear all Subscriptions"/>				

# Gateway – Router Web Page Group

## 1. LAN

By default the DHCP server function for the LAN is activated.


LAN settings can be modified on this page.

With this function activated, your cable company's DHCP server provides one IP address for your Gateway.

Your Gateway's DHCP server provides IP addresses to your PCs within the range of addresses specified in the DHCP range start and stop address fields.

A DHCP server leases an IP address with an expiration time.

For example, to change the lowest IP address that your Gateway will issue to your PCs, enter it into the **DHCP Range Start Address** box and then click **Apply**.


		Administration	
		Gateway	<a href="#">Status</a> - <a href="#">Telephony</a> - <b><a href="#">Router</a></b> - <a href="#">Wireless</a> - <a href="#">EMTA-Settings</a>
<b>LAN</b> WAN Computer Firewall Forward DMZ	<b>Router</b> <p><b>LAN:</b> This page allows configuration and status of the optional internal DHCP server for the LAN.</p> <p>Network Configuration</p> <p>IP Address: <input type="text" value="192.168.0.1"/></p> <p>Subnet Mask: <input type="text" value="255.255.255.0"/></p> <p>DHCP Server <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>DHCP Range Start Address: <input type="text" value="192.168.0.10"/></p> <p>DHCP Range Stop Address: <input type="text" value="192.168.0.99"/></p> <p>DHCP Lease Time: <input type="text" value="24h"/></p>		

**Note:** *It is highly recommended that these setting not be changed.*




## 2. WAN

This page displays information on the WAN parameters of the Gateway.

	<b>Administration</b>
	<b>Gateway</b> Status -    Telephony - <b>Router</b> -    Wireless       EMTA-Settings
<b>Router</b> <b>WAN</b> : This page displays information on the WAN parameters of the gateway  WAN IP Address: <input type="text" value="10.22.15.7"/> Expires in: <input type="text" value="4d:15h:52m:2s"/>	<b>LAN</b> <b>WAN</b> <b>Computer</b> <b>Firewall</b> <b>Forward</b> <b>DMZ</b>

## 3. Computers

This page displays the status of the DHCP clients (*lists all computers connected to your computer*) - Computer name, IP address and mac address. In addition the interface of each computer is displayed.

	<b>Administration</b>
	<b>Gateway</b> Status -    Telephony - <b>Router</b> -    Wireless       EMTA-Settings
<b>Router</b> <b>Computer</b> : This page shows the status of the DHCP clients  DHCP Clients <input type="text" value="Computer Status"/> <input type="text" value="IP Address"/> <input type="text" value="MAC Address"/> <input type="text" value="Interface"/>	<b>LAN</b> <b>WAN</b> <b>Computer</b> <b>Firewall</b> <b>Forward</b> <b>DMZ</b>

## 4. Firewall


This page allows you to choose the firewall settings of the Gateway in order to protect the computers within your home network from malicious attacks from outsiders. In addition you can use this feature to restrict a computer within your home network from accessing certain Internet traffic by IP address and by logical ports.

3 security levels are proposed:

**Minimum** (*default*)

**Medium**

**Maximum**

	Administration				
	Gateway    Status - Telephony - <b>Router</b> - Wireless    EMTA-Settings				
LAN WAN Computer <b>Firewall</b> Forward DMZ	<b>Router</b> <b>Firewall</b> : This page allows you to restrict a computer within your home network from accessing certain internet traffic by IP address and by logical ports. Security <input type="text" value="Minimum"/> <table border="1" style="margin-left: 20px;"> <tr><td>Minimum</td></tr> <tr><td>Minimum</td></tr> <tr><td>Medium (filter input)</td></tr> <tr><td>Maximum (filter both input and output)</td></tr> </table>	Minimum	Minimum	Medium (filter input)	Maximum (filter both input and output)
Minimum					
Minimum					
Medium (filter input)					
Maximum (filter both input and output)					

### Minimum Level of Security

The minimum level allows all the incoming and outgoing traffic, **except** for:

- **Windows Ports:**

137, 138, 139. *These ports are used for local networks.*

So, the Firewall allows a minimum level of security.

### Medium Level of Security

This level of security blocks all the incoming traffic and allows all outgoing traffic.

**Already established connections are accepted.**



## Maximum Level of Security

This level blocks all the incoming and outgoing traffic with the following exceptions:

- **Connections to the following services (servers located on the WAN) are accepted:**
  - FTP (port 20/21)
  - www.(port 80) in TCP
  - http (port 443) in TCP
  - SMTP (port 25) in TCP and UDP
  - POP2 (port 109) in TCP and UDP
  - POP3 (port 110) in TCP and UDP
  - nntp (port 119) in TCP

All the packets of an already established connection are accepted.

## 5. Forwarding

For LAN / WAN communications, the Gateway normally allows you to originate an IP connection only with a PC on the WAN; it will ignore attempts of the WAN PC to originate a connection onto your PC. This protects you from malicious attacks from outsiders.

However, sometimes you may wish for anyone outside to be able to originate a connection to a particular PC on your LAN, if the destination port (application) matches one that you specify.

The screenshot shows the Thomson Gateway Administration interface. The top navigation bar includes 'Administration' and 'Gateway' with sub-options: 'Status - Telephony - Router - Wireless' and 'EMTA-Settings'. The main content area is titled 'Router' and contains a 'Forwarding' section. The 'Forwarding' section explains that it allows incoming requests on specific port numbers to reach web servers, FTP servers, mail servers, etc. Below this is a table with columns: 'Application Name', 'Source Port(s)', 'Protocol', 'IP Address', and 'Destination Port'. The table has two rows: one for 'HTTP' with source port '80', protocol 'TCP', IP address '192.168.0.5', and destination port '80'; and another row with empty fields for application name, source port '0', protocol 'Both', IP address '0000', and destination port '0'. At the bottom of the table are 'Apply', 'Cancel', and 'Remove All' buttons. On the left side of the interface, there is a vertical menu with options: 'LAN', 'WAN', 'Computer', 'Firewall', 'Forward', and 'DMZ'.

Application Name	Source Port(s)	Protocol	IP Address	Destination Port
HTTP	80	TCP	192.168.0.5	80
	0	Both	0000	0

This page allows you to specify up to 9 such rules. The IP address can be entered multiple times with different ports. For example, to specify that outsiders should have access to an HTTP server (HTTP on port =80) (HTTP port) and Protocol = TCP (HTTP runs over TCP)

- Create 1 rule with that address and with Source Port = 80 and Destination Port =80 (HTTP port) and Protocol = TCP (HTTP runs over TCP)
- click on “+” to enter this rule
- Click “apply” to validate the configuration
- This will cause inbound packets that match to be forwarded to that PC rather than blocked

Buttons + and – are used to add and remove a rule


Button apply is used to validate the rules entered

Button cancel is used to cancel the last action

Button remove all is used to remove all the rules


List of common applications and ports they use:

- AUTH : port 113
- DNS : port 53
- FTP : port 21
- FTP\_DATA : port 20
- FTP\_SRV : ports 1024 to 65535
- HTTP : port 80
- HTTPS : port 443
- IPSEC : port 500
- NTP : port 123
- POP3 : port 110
- PPTP : port 1723
- SMTP : port 25
- SSH : port 22
- TELNET : port 23
- TFTP : port 69
- VNC : port 5900
- VNC\_http : port 5800

**Note:**  For certain data transfer applications (FTP for example), you have to use firewall security levels minimum or medium because most of the traffic is blocked in the maximum level of security.


## 6. DMZ Host

Use this page to designate one PC on your LAN to be exposed to the Internet for use of a special-purpose service. **Internet Gaming or videoconferencing for example.** DMZ hosting opens all ports of a PC.

	Administration		
	Gateway	Status - Telephony - <b>Router</b> - Wireless	EMTA-Settings
LAN	<b>Router</b>		
WAN	<b>DMZ Host (Exposed Host)</b> : This page allows you to open all ports on one chosen computer. Warning, in the DMZ, the computer becomes exposed or visible directly from the Internet and, because of this, becomes more vulnerable to hackers.		
Computer	DMZ Address: <input type="text"/>		
Firewall	<input type="button" value="Apply"/> <input type="button" value="Remove"/> <input type="button" value="Cancel"/>		
Forward			
<b>DMZ</b>			

Warning: in the DMZ, the computer becomes exposed and visible directly from the Internet so becomes more vulnerable to hackers. (see the Router/forwarding section on page ? to open only specific ports on your PC)

## Gateway – Wireless Web Page Group

 *Important - Changes to the Wireless Web Pages should be made from a PC that is hard wired to the Gateway.*

The Wireless Web Pages Group enables a variety of settings that can provide secure and reliable wireless communications.

The Advanced Cable Gateway offers a choice of the following:

- WEP and WPA/WPA2 authentication of your PCs to the Gateway
- Encryption keys for communication between the Gateway and your PCs to **guaranty** security
- An Access Control List function that enables you to restrict wireless access to only your specific PCs.

### Performance

Because your wireless communication travels through the air, the default wireless channel setting may not provide optimum performance in your home if you or your neighbors have other interfering 2.4GHz devices such as cordless phones.

If your wireless PC is experiencing very sluggish or dramatically slower communication compared with the speed you achieve on your PC that is wired to the Gateway, try changing the channel number.

See the 802.11b/g Basic Web Page discussion below for details.

### Authentication

Authentication enables you to restrict your Gateway from communicating with any remote wireless PCs that aren't yours. The following minimum authentication-related changes to factory defaults are recommended.

See the 802.11b/g Basic and Access Control Web Page discussions below for details.

**Network Name (SSID)** – Set a unique name you choose

**Access Control List** – Enter your wireless PCs' MAC addresses