

# MODEL 480i CT



**USER GUIDE** 

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#### Introduction

This guide compliments the Aastra Model 480i CT Installation Guide that is included with the phone. Please refer to the installation guide for information on hardware requirements, features and physical set up of your new 480i CT.

Software Prerequisites

- Permission to register at the IP PBX
- Access to a Trivial File Transfer Protocol (TFTP) server

#### Methods of installation

The software set up and installation for 480i CT can be through the user interface available from the phone itself or through the AASTRA 480i CT WEB CLIENT web interface.

When the 480i CT is initialized for the first time, DHCP is enabled by default. The DHCP server passes information to the IP phone so that it can configure itself for subsequent IP PBX address and normal runtime operations.

#### Note:

- If you are planning on using Dynamic IP addresses, make sure a DHCP server is running on your network
- If you are not planning on using Dynamic IP addresses, refer to section 5,"Configuring the 480i CT IP phone" on how to set up an IP address manually
- Make sure a TFTP server is set up on your network and can accept connections anonymously

**Warning:** Do not reset or turn off the phone while the phone is initializing or downloading firmware.

## Setting up the 480i CT

When the 480i CT is first plugged in or reset it will automatically download any firmware updates for the phone. The binary and configuration files that are required for the 480i CT are: firmware.st, aastra.cfg, <mac>.cfg. "Appendix A: Parameter Settings" on page 31 consists of all the parameters that can be set for the 480i CT phone. "Appendix B: Sample configuration files" on page 36 consists of some sample configuration files with all the basic parameters that need to be set in order to register the IP phone at the PBX.

- 1. Make sure the TFTP server's address is configured on the 480i CT. For details on how to set the TFTP server setting for the 480i CT, please refer to section "Configuring the 480i CT IP phone" on page 8.
- **2.** Copy the firmware file "firmware.st" to the root directory of the TFTP server. This firmware file is downloaded only when it is newer than the one the phone is currently using.
- 3. Copy the Aastra configuration file "aastra.cfg" and <mac>.cfg file to the root directory of the TFTP server.

Accessing the phone's Options list:

- **1.** Press the **Options** button on the phone to enter the options list
- 2. Use the  $\blacksquare$  and  $\blacksquare$  to scroll through the list of options
- 3. Press the Show softkey, the ▶ button or press the number corresponding to the option to select and option
- **4.** Use the softkeys to change a selected option
- 5. Press the Done softkey at any time to save the change and exit the current option
- 6. Press the Cancel softkey, the button or the Goodbye button at any time to exit without saving the changes

## Administrator level options in the 480i CT

From the phone, administrator level options include all settings under 8. Network, 9. SIP Settings and 4. Factory Default options found under 10. Phone Status option. When attempting to access these options, the phone will prompt for the administrator passcode before allowing access. The default password for the administrator is "22222".

#### Network

If DHCP is used/enabled, all the Network settings will be automatically configured. The 480i CT's firmware allows the network settings to be manually entered if for any reason the phone cannot populate any of the settings with DHCP enabled. If DHCP is not used/ disabled the following network settings can be configured.

- 1. DHCP Turns DHCP on or off. IP Address, Subnet Mask and Gateway options are automatically populated and are read only when DHCP is used. DHCP is used by default
- 2. IP Address The phone's IP address. To assign a static IP address to the phone, disable DHCP
- 3. Subnet Mask To assign your own subnet mask to the phone, disable **DHCP**
- 4. Gateway To assign your own gateway IP address, disable DHCP
- 5. DNS To assign your own DNS addresses, disable DHCP
- 6. TFTP Server The IP address of the TFTP server. To assign your own TFTP server's IP address, disable **DHCP**

#### SIP Settings

If you have a proxy server or have a SIP registrar present at a different location than the PBX server, the following settings may need to be changed.

- Proxy IP The proxy server's IP address
- 2. Proxy Port SIP proxy server's port number. By default this number is set to 5060
- **3. Registrar IP** Set this to the IP address of the registrar
- **4. Registrar Port** SIP registrar's port number. By default this is set to 5060
- 5. Log IP The IP address of the computer to which the messages should be sent. This setting is used for debugging purposes only.
- **6. Log Port** The port number that the log messages will be sent. This setting is used for debugging purposes only
- Note: Configuring the Log IP and Port does not log the messages sent to or received by the phone automatically. A software application that listens to the port and at that Log IP is necessary to handle the data that is sent.
- User Name This is used for communication purposes in the SIP protocol
- 8. Display Name The string that should be used to display on the 480i CT. Some PBX systems use this for the display and some overwrite this with the string that is set in the system
- Auth Name The authorization name that is used to register at the IP PBX
- **10.Password** The password that is used to register at the IP PBX

Note: The IP PBX administrator creates the Auth Name and Password. Contact your IP PBX administrator to obtain this information.

#### Phone Status

#### 1. Network Status

Shows the network status of the two Ethernet ports at the back of the phone. You can also view the phone's IP and MAC addresses.

- a. IP Addr Shows the IP address of the phone
- b. MAC Addr The MAC or the hardware address of the 480i CT's Ethernet card

#### 2. Firmware Version

Gives the firmware version information that is installed currently on the 480i CT

#### 3. Reset Phone

Reboots the phone. A reset may be necessary when the network settings or the settings for the extension on the IP PBX system are modified

#### 4. Factory Default

Sets the phone back to the factory default settings including the network settings. Performing this operation will lose all modified settings

Note: For information on other settings in the options list of the phone, please refer to the *Aastra 480i CT Installation Guide* provided with the 480i CT.

## **Customizing Your 480i CT Cordless Handset**

When in an idle state, pressing the Menu key 🛡 of the handset will present the following list of options. Once in the menu list the user can scroll up (a) and down w using the scrolling keys to see each option.

Item #	Menu list
1	Intercom
2	Language
3	Ring tone
4	Custom name
5	Timer Off
6	Vibrate Off
7	Hset pairing
8	Key lock Off
9	Backlight Off
10	Silent Alert

Note: The display will return to idle if no action/activity is initiated within 20 seconds.

## **Accessing Options**

Pressing the W key will access the options list menu. This action results in displaying a Menu list header with brief list navigation instructions.



Navigation of the menu is performed using the down arrow (♥ key) or the up arrow (♠ key). Shortcut to the menu item can also be performed by pressing the corresponding menu item number. Two digits numbered items can be short-cutted by pressing the digits within a one second time span.

Pressing the \* key will quit the Menu and return to the idle mode or call mode.

#### Intercom

The 480i CT supports intercom function between a 480i CT base and any of its paired cordless handsets, and vice versa.

Pressing Select while viewing this option will bring up a list of base and paired handsets available for intercom. To select a handset or base to intercom, navigate to the desired handset or the base using the **W** key or the key. Then press the Call soft key. Shortcut to any handset or base in the list is permitted by pressing the corresponding numeric key digit; the order of the list is numbered from zero (0) for the base (0) and four (4) for the 4th handset in the list.

### Language

The prompt on 480i CT handset can be personalized to English, French, or Spanish language. A checkmark beside the language indicate the currently selected language prompt.



## Ring Tone

There are 4 selectable Ring tones available on the 480i CT handset. A checkmark beside the ring tone number indicate the currently selected ring tone.



#### Custom name

Custom name allows the user to personalize the name/label for the cordless handset. In a multi-handset environment, this is an ideal option to personalize each handset to its user or extension number.

To customize the name:

- 1. Press 関 .
- 2. Navigate to Custom Name or press 4.
- 3. Press the Change softkey.
- Press the Edit softkey. If a custom name already exists, the Delete softkey will be presented.
- 5. Using the keypad, type out a new label or use the scroll keys and to move the cursor to the desired display position or to erase text.
- The ChCase softkey is available to toggle between upper and lower case text entry.
- Press the Save softkey to save the name.
- 8. Press the Goodbye ? key to return to the main idle screen.

Note: In editing mode, the Volume Bar can be used in place of the 🖹 and 🖫 keys to control the screen cursor. Pressing the Lower end volume bar for Backspace/Erase; and pressing the Higher end volume bar to add a Space.

#### Call timer

When the call timer is enabled, the timer starts from the first call and continues until all calls have been released.

Note: The call timer is not usable for call accounting since the timer continues to increment even when the call is on hold.

#### Vibrate

The Vibrate option allows the handset to signal an incoming call by vibrating as well as ringing. By default, this option is always Off.

- To enable this feature, press the Change softkey and the display will indicate "Vibrate On" and "confirmed-" and will quickly return to the previous menu display.
- Once the Vibrate is On, # icon is shown beside the ringer icon on the top right line of the display.
- Pressing the key will return you to the main idle display screen.

## Handset Pairing

All handsets must be paired to a 480i CT base before it can be used. Please refer to the section entitled "Pairing and Unpairing Cordless Handset to Base" on page 27.

#### Key Lock On or Off

The key lock option enables the user to lock the keypad keys. This prevents accidental activation of the phone.

To lock the keys from the key lock option page:

 Press Change softkey to turn Key lock ON or OFF. The screen will display Key lock On or Key lock Off -confirmed-.

Pressing the have key will return you to the main idle display screen.

Note: You can activate the Key Lock Off or On by pressing only the ∰ and then the key from the idle screen.

## Backlight

The Backlight option allows the user to turn on or off the backlit light on the LCD display.

Press Change softkey to turn Backlight ON or OFF.

Once the Backlight option is chosen, the screen will display Backlight On or Backlight Off -confirmed-.

#### Silent Alert

The Silent Alert option will activate an internal hardware vibrator instead of a regular ringer during an incoming call. By default, the Silent Alert is automatically set to Off.

To activate Silent Alert from the option display:

- Press Change softkey to turn alert On or Off. The display will show -confirmed-.
- Once the Alert is On, 🗖 icon is shown on the top line of the display.

Note: You can activate or deactivate the Silent alert by pressing only the key and then the (#) key.

Note: The Ringer Icon does not appear on the display when the Silent alert is On.

#### Aastra 480i CT Web Client

To access the AASTRA 480i CT WEB CLIENT, open your web browser (supports Internet Explorer and Gecko engine based browser like firefox or mozilla) and enter the phone's IP address into the address field, starting withthe web prefix http://



In the side menu of the AASTRA 480i CT WEB CLIENT, there are three main categories: **STATUS**, **USER** and **ADMIN**.

- The STATUS category contains read only status information for sub-categories Network, Hardware and Firmware.
- The **USER** category contains user configurable sub-categories Reset and Password. This section is accessed through their user level or the administrator level user name and password (You'll be prompted when one of these options is selected). For more information, refer to the *Aastra 480i CT Administrator Guide*.
- The ADMIN category contains administrator only configurable sub-categories: Network and Firmware. This section is accessed through the admin level user name and password (You'll be prompted when one of these options is

selected). For more information, refer to section "Configuring the 480i CT IP phone" on page 8.

For the administrator, the default user name is "admin" and password is "22222", and for the user, the default user name is "user" and the password field is left blank. The passwords can be changed using the web client or by using the phone's SIP Settings option.

## Configuring the 480i CT IP phone

The Network and SIP options within the 480i CT phone can be configured from the phone or from the AASTRA 480i CT WEB CLIENT web interface. Administrator level options are password protected in both the phone and the web interface. User level options are password protected within the web interface only.

#### Network

DHCP automatically sends the IP address, Subnet Mask and Gateway network (also DNS and TFTP Server) information to the 480i CT phone during initialization when the phone is first powered up or reset. By default, the DHCP setting is enabled. Keep in mind that the network settings cannot be changed when DHCP is used.

## To change whether DHCP is used: From the 480i CT Phone

- 1. Press the **Options** button to enter the Options List
- 2. Select option 8. Network
- 3. Enter the password. The default (if it was never changed) password is
- 4. Press the Enter softkey
- Select option 1. DHCP
- 6. Press the Change softkey to indicate whether DHCP should be used or not.

#### From the web client

- 1. Click on the Network sub-category under the ADMIN main category
- 2. Enter the administrator user name and password
- 3. In the web page that has just opened check the Use DHCP check box provided, to use DHCP and uncheck to indicate that you do not want to use DHCP

Click on the Set Values button to save the changes that you just made

If you are not using DHCP, you need to enter the network information for the phone manually.

### To configure the networks settings: From the 480i CT Phone

- 1. Press the **Options** button to enter the Options List
- Select option 8. Network
- **3.** Enter the password. The default (if it was never changed) password is 22222
- Select option 2. IP Address to change the IP address
- 5. Select option 3. Subnet Mask to change the subnet mask
- 6. Select option 4. Gateway to change the gateway address
- 7. Select option 5. DNS to change the

Note: When an IP address has been assigned to the phone, you have the option to either continue configuring the 480i CT through the button on the phone or to start using the Aastra 480i CT Web Client.

#### From the web client

- Click on the Network sub-category under the ADMIN main category
- 2. Enter the administrator user name and password
- 3. In the web page that has just opened enter the IP address of the phone, the Subnet Mask and the Gateway IP address in their corresponding fields.

Contact your network administrator to obtain information on the Subnet Mask, Gateway and DNS addresses.

## **TFTP Server settings**

The 480i CT Phone uses the TFTP to update the phone's firmware and it's configurations.

#### To set the TFTP server's address:

#### From the 480i CT Phone

- **1.** Press the **Options** button to enter the Options List
- 2. Select option 8. Network
- **3.** Enter the password. The default (if it was never changed) password is 22222
- **4.** Select option **6.** TFTP Server to change the TFTP server

#### From the web client

- Click on the Firmware sub-category under the ADMIN main category
- **2.** Enter the administrator user name and password
- 3. In the new web page enter the name of the firmware file and the IP address of the TFTP server
- 4. Click the **Download Firmware** button if you wish to download the firmware on to the phone. Performing this action will download the firmware. You will have to reset the phone to use the currently downloaded firmware.

## **Programming Feature Key**

The Feature key permits the programming of the following functions. The default functions are marked in **bold**.

Label	Key Function
None	No function is selected – this key is empty, no label.
Line 1	Line 1 key - Selects line one
Line 2	Line 2 key - Selects line two
Line 3	Line 3 key - Selects line three
Line 4	Line 4 key - Selects line four
Icom	Intercom key – Enter handset list to select handset to call
Dir	Directory key – Activate directory feature
Callers	Callers key – Activate callers feature
Xfer	Transfer key - Activate transfer feature
Conf	Conference key - Activate conference feature
Public	Public key – Toggle between public & private call mode
Line 5	Line 5 key (if available) - Selects line five
Line 6	Line 6 key (if available) - Selects line six
Line 7	Line 7 key (if available) - Selects line seven
Line 8	Line 8 key (if available) - Selects line eight
Line 9	Line 9 key (if available) - Selects line nine

## **Programming Guideline**

The following is a guideline to use when programming the Feature key: All handsets will have the same programmed functions since the web interface apply to all the handsets that are paired with the base.

A newly registered handset or handset that was out-of-range during the programming will need to perform a "off-hook and on-hook" sequence in order for the newly programmed function to be broadcasted to the affected handsets. Simply press the key from the idle state to go off-hook. Then, press the . key to go back on-hook.

Duplicate function can exist in the Feature key as there is no filtering or duplicate checking done on the handset or the base.

If no line keys are programmed for the Feature key, the handset will be restricted to intercom calls only.

If all 12 programmable functions have been programmed to "None", the user will be presented with a List empty message when the Feature key is pressed.



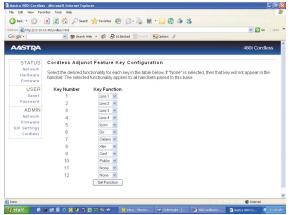
For security reason, the user has 180 seconds (3 minutes) to complete the programming. Otherwise, the phone will respond with the following error: \*\* Error \*\*: Session expired, Please reload page.

For security reason, the user must submit the page from the same browser that was used to load the page. If the user tries to submit the page from any other IP address, the error: \*\* Error \*\* Session invalid. Different Client IP Addresses.

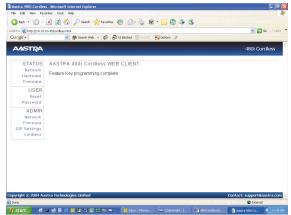
— Please reload Page will be displayed.

#### **Feature Key Web Interface**

All Feature key functions are programmable via the 480i CT web interface only. To access the web interface, enter the IP address of the 480i CT phone in your browser. Then, select the **Cordless** link under the **Admin** menu.



Once the functions are programmed, click on the **Set Function** button at the bottom of the page. This action will send the programming information to the phone and the key programming will be sent out to the cordless handsets. Any key programmed to "None" will not appear in the handset's list.



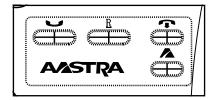
## Web Page Language Support

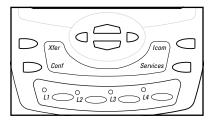
The "Cordless" web page will display on of the three languages – English, French, and Spanish – supported by the phone. However, the web page will be presented in the language as set on the base unit. The functions in the Feature Key labels will appear on the handsets in the language selected on the individual handsets.

## Using your 480i CT Base Station

## Hard keys

There are Hard keys on your phone, such as Hold , Redial , Xfer Xfer, Icom lcom and Conf **Conf** that are configured for the call handling features. These keys are static and cannot be reprogrammed or changed. They are located in two different areas on the phone.





## Softkeys

Your 480i CT has 6 softkeys, 3 on either side of the phone's display. These softkeys are pre-programmed for call handling and extension management features of the SIP system. The softkey menus will change depending on the phone's state, displaying relevant softkeys only.

Note: The softkeys outlined in this section represent the default arrangement of softkeys within the various screens.

#### **Idle State**

The idle state menu appears when the 480i CT phone is not in use. The softkeys in the idle state menu allow

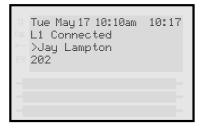
you make calls, pickup calls, check voicemail, and manage the phone's extension and more.



MM: Message Waiting Icon

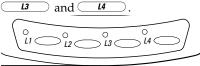
#### **Connected State**

The Connected State Screen will appear when you are talking to someone on the phone. Connected State functions are available as softkeys on the connected state screen, as well as hard keys on the phone. These softkeys and hard keys allow you to handle calls, such as transferring, conferencing, placing calls on hold and more.



## Multiple Line and Call **Appearances**

The 480i CT has 4 line/call appearance buttons each with a corresponding status light: 🤇 L1



These line/call appearance buttons and lights can represent physical lines, calls for the phone's extensions or calls

from group that the extension is a part of. By pressing a line/call appearance button, you connect to the line or a call it represents.

The line/call appearance light shows the status of that line or call. When the phone is taken off-hook, the phone will automatically select a line for you.

Line/Call Appearance Light Behaviour	Line/Call Appearance Status
Off	Idle line or no call activity
Light flashes quickly	Ringing
Light is solid	Connected
Light flashes slowly	Hold

#### **Services**

The services key on the 480i CT will access enhanced features and services provided by third parties. Availability of this feature will depend on your phone system or service provider.

Two built-in services that are currently offered with the 480i CT are Directory and Callers List. Directory allows you to store up to 200 entries locally on the phone. Whereas the Callers List will store up to 200 calls received – answered and unanswered.



## **Icom Key**

On the 480i CT base, the **lcom** key functions to access the cordless intercom feature. This feature allows the base to talk to any registered cordless handsets.

#### **Redial Key**

The Redial list contains 100 items. While on-hook, pressing the Redial list. While off-hook, the Redial list. While off-hook, the Redial key functions as a "hot redial" where the last number dialled is dialled again.

## Using the 480i CT Cordless Handset

#### **Idle Mode**

During idle mode (i.e. no incoming call, no active call, or no call on hold), the handset name, date & time, status messages, and status icons are present on the display.



Note: The phone name label (Angela in the diagram above) can be edited in the Options list.

#### **Handset Icons and Status Messages**

#### Screen Icons

	Bettern Change State
IIID-	Battery Charge State
	4 bars for battery full and the battery icon flashes when charging
	Reception (Radio Link)
T	On - Within Range: Ready for use
•	OFF - Out of range/no radio link
4"	Feature Key Activation
#	Indicates the phone is off hook or a call is in progress
ø	Silent Alerter
	Silent alerter activated
	Ringer Volume
	This icon is available only when the phone is in idle mode to indicate
	the ringer volume level. The box will go from empty to fully black to
	represent from off to low to high volume.
	Receiver Volume
duo	This icon is available only when the phone goes off-hook to indicate the
-4	receiver audio volume. The box will go from empty to fully black to
	represent from low to high volume; there are 10 volume levels total.
	Directory List
447	This icon located just above the softkey allows access to the Directory
	List feature.
	Callers List
	This icon located just above the softkey allows access to the Callers
	List feature.

#### Status Messages

Display Message	Description
Microphone mute	Indicates when the Mute button has been Activated
Out of range	Appears briefly when pressing a key if out of range of the base station

## **Handset Keys**

## Softkeys ( or )

Your 480i CT cordless handset has 2 softkeys directly under the LCD display. The softkey menus will change depending on the phone's state, displaying relevant softkeys only. These softkeys are pre-programmed for the call handling and extension management features.

## 

The Talk/Hold key 🕜 is a multi-purpose key with the following uses:

- To initiate a call by seizing the line or through pre-dial.
- To answer a call during ringing.
- To place a call on hold during an active call.

## Hold Key

Pressing the hold key while on a call will place the call on hold. While a call is on hold, and if there are no other active calls, the LED will flash at the hold rate and the display will present the Call is on hold prompt. In addition, held call reminder tone will be played in the form of a short ring burst (flash ring).

This handset is equipped with an auto-hold feature. While on an active call, pressing any other line key will result in the current line being placed on hold and the new line being seized.

## Release Key ( > )

The release key is a multi-purpose key with the following uses:

To end a call.

Note: If handset is placed in the charger cradle, it will also end the call.

- To silent the ringing during an incoming call.
- To exit feature such as Menu (options), Directory, Callers, Redial, Predial.

Note: Pressing this key in a feature will not terminate an active call.

## Mute Key (🕲 )

Use the mute key when you want to be able to hear a caller but have them not hear you. Press the less key to mute the handset. Press the less key again to disengage mute. The Microphone mute prompt is displayed when mute is activated.

## Redial Key (®)

The Redial key displays a list of the last 10 calls made from the handset. Use the and  $\P$  to scroll through the list.

#### Feature Key List ( 🖹 )

The 480i CT cordless handset supports a programmable feature key list for easy access to common features. The available features include line keys, intercom, directory, callers log, transfer, conference, and public/private call mode.

#### Menu List (♥)

The Menu list allows access to intercom calling, and personalization of handset including language, ring tone, vibrate, backlight and silent alert. Please refer to the section "Customizing Your 480i CT Cordless Handset" on page 4.

#### Multifunction Handset LED Indicator

The multifunction Handset LED provides the following user feedback:

- Flash: Message Waiting Indicator Slow
- Flash: Alerting Rapid
- Flash: Mute intermittent
- Flash: Hold Intermediate
- · Solid: On an active call

#### **Battery Charging**

The handset is powered by a nickel metal hydride battery pack. To install and charge the battery:

- **1.** Slide the cover of the battery compartment.
- 2. Place the battery pack in the compartment with the connector wires pointing towards the bottom of the handset.
- 3. Connect the battery terminal wire to the charging pins located in the compartment
- **4.** Slide the cover of the battery compartment back onto the handset
- 5. Place the handset, face up, in the charging cradle. The handset should easily slide into the charging cradel. If it does not, check the battery compartment cover to ensure it is in the proper position.

To confirm that the battery is charging, check the battery icon symbol on the handset display to see if the lines inside the icon are flashing left to right.

Note: The battery must be charged for a minimum of six hours prior to initial usage of the phone.

## Handset Battery Indicator & Status

The display provides "at a glance" information on the handset battery.

	The bars indicate the battery charge level — 4 for full, needs recharging when only 1 bar appear
(Z)·	The bars will flash when the battery is being recharged on the charger stand.

Note: The handset is designed to recharge the batteries automatically, when required and placed on the charger stand. The battery icon will not flash and the handset does not charge every time it is placed on the stand. If a defective battery is replaced, then the battery Icon is not identified until the new battery is charged for at least 2 minutes.

#### **Volume Control**

The volume key, located on the side of the handset, controls both the receiver and ringer volume.

**Note:** The volume key can also be used to adjust the right/left cursor to add spaces or to erase characters on the display when editing or creating names, key labels etc.

#### To adjust the receiver volume:

While on a call, press the top of the key to increase the receiver volume and
press the bottom of the key to decrease the volume. The receiver volume icon
on display will indicate the current volume level. In absence of a PBX, the
receiver volume returns to the default setting after each call. However, the PBX
directive can direct the handset default to the volume.

#### To adjust the ringer volume:

When the handset is not being used for a call, press the top of the key to
increase the ringer volume and press the bottom of the key to decrease the
ringer volume. The handset ringer will sound on each adjustment to reflect the
new setting and the ringer volume icon on display will also show the current
level chosen.

## Directory - 480i CT Cordless Handset

#### **Entering Characters and Numbers**

#### **Editing keys**

During alphanumeric entry, the volume control keys become edit keys. They are used to provide backspace and forward-space capability to the unit. For Backspace/Erase, press the Lower end of the volume bar. To add a space or to erase from left to right, press the higher end of the volume bar.

**Note:** The Down scroll key (marked  $\P$  ) or the Up scroll key (marked beta ) are also used to provide backspace and forward space respectively.

## **General Record Editing**

To accommodate adding and editing, use the available characters as labelled on the keypad. Pause key and special characters are also available:

## 0 key / Pause key

To allow the user to enter pause characters, the pause key is the 0 digit key in alphanumeric editing mode. Characters will appear in the following order: : 0,  $\blacksquare$ .

1 key

In the alphanumeric mode, the ① digit key will access several special characters. Characters will appear in the following order:

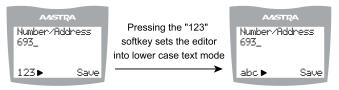
1	@		:	;	=	_	,	-	`	&	(	)
---	---	--	---	---	---	---	---	---	---	---	---	---

As can be seen, these special characters accessible through the  $^{\textcircled{1}}$  key allow URI and IP address data entry.

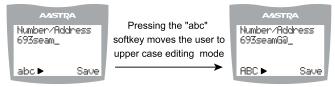
Note: To enter the dot/period in the IP address format, the star (\*) key is used when in numeric "123" editing mode. Alternatively, in text "abc" or "ABC" editing mode, use the (1) key to access the "•".

#### "123" — "abc" — "ABC" softkey

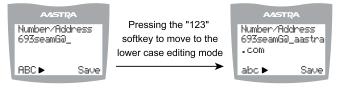
You can use the left soft key to toggle from numeric "123" editing mode to lower case text "abc" editing mode, to upper case text "ABC" editing mode.



Switch from Numeric to Lower Case Alphanumeric Mode



Continued Editing in Lower Case Text mode Then Switch to Upper Case Text Mode



Cycle Edit Mode Back to Lower Case and Finish Address Entry

#### Adding Record to Directory

The directory can store up to 50 names and numbers, which are displayed in alphabetical order. If no name is entered, the entries are sorted by number, at the beginning of the directory.

To add an item to the directory,

**1.** Press the soft key from the idle mode as shown below.

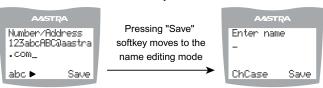


2. Press the Add soft key.



**3.** Enter the Number/Address information. Please refer to "Entering Characters and Numbers" on page 17.

4. Press Save to advance to the name entry screen.



- **5.** Enter a name for the Number/Address information. The name can have up to 15 characters, including spaces. Please refer to "Entering Characters and Numbers" on page 17.
- 6. Press the Save softkey. The display will show Item saved.

#### Callers List - 480i CT Cordless Handset

The Callers list stores the last 50 calls received. Items are stored in chronological order with new items being first in the list. Each call received is stored, no collapsing of records, and can be deleted or saved to a directory. Oldest call records are automatically removed from the list when the list is full and new items are received.

The following figure shows the header screen. On this screen, there is the title, the number of total items, the number of new items, instructions for viewing the items and two soft keys — Exit and Delete. The exit key quits the list and the delete key deletes the entire Callers list.



If there are no new items, then the  $\times$  New line is not displayed. Once items are viewed, they are marked as old and do not show up in the new item count or in the new item scroll list.

Once in the list, items are displayed as shown in the next figure.



The above screen shows the item number, the name and number of the caller, and the time the call was received. Also shown are two soft keys — Options and Line. Options allow the user to save to directory or delete the record.

#### Dialing from Callers List

To dial the caller back, the Line soft key can be pressed and the user is taken to the feature list where the configured lines can be chosen to place the call. The user simply scrolls to the desired line and presses Select. The call will then be placed on that line over the cordless link.

## Saving Item to Directory

From the Options softkey of the Callers List, scroll to the Save to Directory item and press the Select softkey. will be displayed upon successful saving to the directory.



#### Deleting Item from Callers List

From the Options softkey of the Callers List, scroll to the Delete item and press the Select softkey.



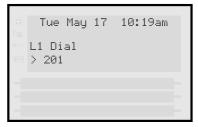
The user is prompted to confirm the delete action by pressing the Delete softkey.



## Making Calls from 480i CT **Base Station**

#### **Dialling a Number**

First, take the phone off-hook by lifting the handset, pressing the  $\bigcirc$ button or pressing a line/call appearance button. At the dial tone enter the number you wish to call. If you are unable to make calls within certain area codes, check with your system administrator for any toll restrictions placed on your extension that may restrict your access to long distance area codes or dialling prefixes.



## **Using Handsfree Speakerphone**

The handsfree feature allows you to speak to someone without using the handset or headset. Your phone must be in either the speaker or speaker/ headset audio mode.

- To dial using handsfree, first press and enter a number at the dial tone.
- To answer a call on the 480i CT Base Station using Handsfree, press .
- If in speaker audio mode, press < to switch between handsfree and handset.
- If in speaker/headset audio mode, press ( to switch between handsfree and headset.
- When the handset is on hook, press to disconnect a handsfree call.
- When handsfree is on, the speaker light turns on.

#### Using a Headset

The 480i CT accepts headsets through the modular RJ22 jack on the back of the phone. Contact your telephone equipment retailer or distributor to purchase a compatible headset. Customers should read and observe all safety recommendations contained in headset operating guides when using any headset.

#### Advanced Volume Controls for the Headset Mic

On the 480i CT, there are 3 options for the headset microphone volume. To change this volume:

- 1. Press Options
- 2. Use to scroll down the list of options to 7.Set Audio and press the Show softkey, or you can press 7 to jump directly to this option.
- 3. Press the Advanced softkey.
- 4. Use to scroll down the list or press the Change softkey to go to the next selection.
- 5. Press the Done softkey to save changes and exit.
- 6. If you do not wish to save changes, press the Cancel softkey.

Note: By default, the volume for the headset microphone is set to medium.

#### To Make and Receive Calls Using a Headset:

- 1. Ensure that you have selected a headset audio mode by accessing the Options menu.
- **2.** Plug the headset into the jack.
- **3.** Press the  $\bigcirc$ / $\bigcirc$  key to obtain a dial tone or to answer an incoming call. Depending on the audio mode selected from the Options menu, a dial tone or an incoming call will be received on either the headset or the handsfree speakerphone.
- **4.** Press the **Goodbye** to end the call.

#### Intercom (Yet to be Implemented)

To intercom another extension on the system:

- 1. Press the Icom
- 2. Enter the extension number of the person you wish to intercom or the BLF softkey for that extension.
- **3.** After a beep tone, your phone will automatically connect with the remote extension and you can speak through its speaker.
- **4.** To cancel intercom, press **Goodbye** or the Cancel softkey.
- 5. When you are finished speaking, hang up the phone by placing the handset back on-hook or by pressing Goodbye or the line/call appearance button for the active call. When you hang up, the remote phone will also hang up.

#### Redial

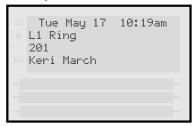
Press Redial to automatically dial the most recent number you dialled from the phone.

#### Mute

Press at any time to mute handset, headset or hands-free. The speaker light will flash slowly and you will hear the caller, but they will not hear you. Press 🕦 to toggle between mute and un-mute.

## Receiving Calls

When a call is ringing at your extension, you will see the Inbound Call Screen. The line/call appearance light will flash quickly for the incoming call.



#### Answering an Incoming Call

To answer the call:

- For handsfree operation, press the Answer softkey or the line/call appearance button for the incoming call.
- Press 🚺 / 🤉 for handsfree or headset operation. The setting you have selected in the Options List for Audio Mode will determine whether the call goes to handsfree or headset operation.
- Lift the handset for handset operation.
- When you answer the call, the screen will change to the Connected State menu. If you cannot answer the call, the caller will go to voice mail (if voice mail has been configured for your extension).

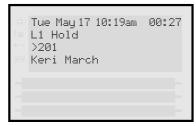
## **Handling Calls**

When you are connected to a call, you can use the softkeys or hard keys on the phone to transfer, conference or place a call on hold.

## Placing a Call on Hold

When you place a call on hold, only your phone can retrieve the call. To place a call on hold:

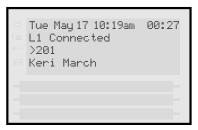
- **1.** Connect to the call (if not already connected).
- 2. Press the Hold softkey



The line/call appearance light will begin to flash slowly. The screen will display "Hold..." with the line number the call is held on the phone.

#### When on Hold

When you have been placed on hold, you cannot hear any voice from the caller. The call/line appearance light for the line you are on will remain solid to indicate that you are still connected.



#### Automatic Hold

When juggling between calls, you do not have to press the hold button to go from one call to the next.

The phone will automatically put your current call on hold as soon as you press a new line/call appearance button.

#### Retrieving a Held Call

If you have more than 1 call on hold, you can scroll through the held call information by pressing ◀ and ▶ navigation keys. To reconnect to a call press the line/call appearance button where that call is being held. If you press the call/line appearance button again, you will disconnect from the call.

## **Transferring Calls**

#### Blind Transfer

A blind transfer is when you transfer a call directly to another extension without consulting with the person receiving the call. To do this, simply complete the transfer before the receiving party answers the call.

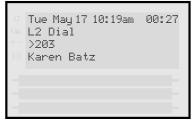
#### Consultative Transfer

You also have the option to consult with the person you are transferring the call to, before you complete the

transfer. To do this, simply remain on the line until the receiving party answers the call. After consulting with the receiving party, you can either complete the transfer or cancel the transfer to go back to the original call.

To transfer a call to another extension:

- Connect to the call you wish to transfer (if not already connected).
- 2. Press Xfer



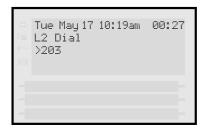
- 3. Press a line/call appearance button followed by the extension number of the person you wish to transfer the call to.
- 4. If you do not wish to transfer the call, press the line/call appearance button again to abort the transfer. This disconnects the new call, leaving the original call on hold. To go back to theoriginal call, press the line/call appearance button for this call.
- **5.** To complete the transfer, you can press Xfer again, or disconnect by placing the handset back on hook, pressing Goodbye or pressing the line/call appearance button for the active call.

## Conferencing Calls

The 480i CT phone system supports up to 3 parties (including yourself) in a conference call.

To create a conference call:

- Connect to the first party you wish to include in the conference (if not already connected).
- 2. Press Conf



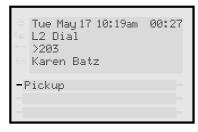
- 3. Press a line/call appearance button followed by the extension number of the person you wish to add to the conference.
- **4.** Wait for the new party to answer. You can consult with the new party first before adding them to the conference.
- **5.** If you do not wish to add the new party to the conference, press the line/call appearance button for this call. This disconnects the new party, leaving the original call on hold. To go back to the original call, press the line/call appearance button for this call.
- **6.** To add the new party to the conference, press **Conf** again.
- 7. To drop the new party from the conference, press more time.
- **8.** If you wish to exit the conference leaving the other two parties connected, disconnect by placing the handset back on-hook or by pressing Goodbye .

## Picking up Calls

Press the line/call appearance button for that call. If the phone is connected to a call, pressing one of the line/call appearance buttons will automatically place this call on hold before opening up a new line for the new call.

To pickup a call:

1. Press the line/call appearance button for that call.



2. Press Goodbye if you do not wish to pickup a call. This cancels the call pickup procedure.

## **Ending Calls**

To end a call, you first need to connect to the call if not already connected. Press Goodbye or the line/call appearance button of the active call. If connected through the handset, you can also place the handset back on hook to end the call.

#### Additional Features

#### Services

The Services key Services on the 480i CT can access enhanced features and services provided by third parties. Check with your system administrator on how to configure this button. Availability of this feature is dependent on your phone system or service provider.

The button gives you access to additional services as they become available in the future. Built through the diverse web based language of XML, such future services could range from a Directory list or Call list, to weather, stocks, or flight information, etc.

## Making Calls from 480i CT Cordless Handset

#### Pre-dialling a Number

Press the  $\bigcirc$  key to obtain dial tone and use the Keypad to dial the number. You can also make a call by pre-dialling a number. Pre-dialling lets you view a number before you dial. If the number is correct, press the  $\bigcirc$  key to dial the number. If the number is incorrect, use the  $\bigcirc$  key or press down on the volume key to erase digits from right to left. Calls can also be made directly from the Directory.

#### Using a Headset

The 480i CT cordless handset accepts headsets through the 2.5 mm audio jack on the bottom of the phone. Contact your telephone equipment retailer or distributor to purchase a compatible headset. Customers should read and observe all safety recommendations contained in headset operating guides when using any headset.

## **Receiving Calls**

When a call is ringing at your extension, you will see the Inbound Call screen. Press the key to answer an incoming call or lift the handset out of the charging cradle.

## **Call Privacy**

In the 480i CT multi-handset system, it is possible to connect several cordless handsets together with each other or with the base as extensions to a call. This is just like an analog system with extension phones going off hook to join a call in progress. However, because this system is actually intended for use in an enterprise environment, some method of call privacy is required.

All calls, base or handset, will begin in the "private" mode. In this mode, no extensions will be allowed to join that handset or base call. There will be a user interface provided to toggle between the "private" and "public" modes.

## "Public" Feature Key

A feature key will be available in the feature list for the user to press to toggle between the "private" and "public" modes for a call. Pressing the Public feature key in the feature list anytime during a call will put the call into the public call mode. When the call is in public call mode, the triangle indicator will light in front of the Public label in the feature list. This will also cause that feature key to appear on an available soft key but with a different label – Private. The user can then press the Private soft key to toggle the call back to private or he can navigate into the feature list and press the Public feature key. Either way, the triangle indicator will clear and the call will be back in private mode. The figures of this section demonstrate the UI.



Private Call in Progress



Feature List View with the Public Key Selected but not Invoked



Public Call in Progress



Feature List View with the Public Key Invoked but not Selected

In the figure above, the left screen depicts a call that is public. The user can press the Private soft key at any time to make the call private – i.e. no extensions allowed to join. In the right screen, the right pointing triangle indicates the current call is in public mode. The user could also select this feature key to return the call to private.

Note: Any local caller on the call can convert the call. For instance, if one cordless caller is on an external call, he can press the "Public" feature key to make the call public. At that point up to three other handsets can join in on the call. If any of those joining handsets presses the "Private" soft key, then the call is made private and no other users can join the call unless the call was made public again.

## **Ending Calls**

To end a call, you first need to connect to the call, if not already connected, and press the \* key. You can also place the handset back on the charging cradle to end the call.

## Pairing and Unpairing Cordless Handset to Base

#### **Pairing Handset**

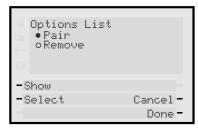
All handsets must be paired to a Base Station. This is performed from both the base and the cordless handset. Successful pairing will add the handset name to the handset list on the base and synchronize the handset list from the base to the newly paired handset. A total of 4 handsets can be paired to a single 480i CT base.

Note: When performing the handset pairing, it is recommended that thehandset be within 3 feet of the 480i CT base.

- **1.** On the 480i CT base press **Options**.
- 2. Select 11. Handset Pairing



3. Select Pair



Note: If there are already 4 handsets paired to the base, you will not be able to select the Pair option.

- **4.** On the 480i CT cordless handset press ♥.
- 5. Select 7- Hset Pairing

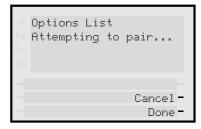


Note: If the handset has already been paired, the softkey will be labelled as Remove instead of Pair.

Ensure the handset being paired is within close proximity to the base. It is recommended that the handset be within 3 feet from the 480i CT base.

**Note:** It is recommended that both steps 6 and 7 be executed at the same time.

6. On the 480i CT base, select Done.



7. On the 480i CT cordless handset, press the softkey for Pair.



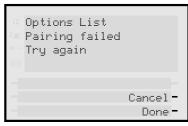
Upon success or failure of pairing, one of the following will be displayed on the handset and base, respectively:



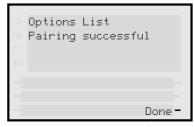
Successful Pairing of Handset



Failed Pairing of Handset



Pairing Failed Display



Pairing Success Display

## **Unpairing Handset**

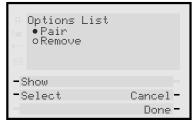
Unpairing of the handset can be done from either the cordless handset or the base. However, if the handset being removed is out of range from the base, the unpairing is only performed local to the device where the removal process was initiated.

If the unpairing is only successful from the local device, the unpairing procedure will need to be completed from the other device.

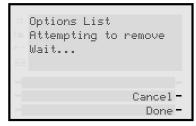
- 1. On the 480i CT base press
- 2. Select 11 Handset Pairing



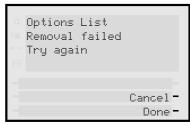
3. Select Remove



4. Select Done. The following will be displayed on the screen.



Upon success or failure of unpairing, one of the following screen will be displayed on the base:



Failed Removal



Successful Removal

**5.** If required, on the 480i CT cordless handset press .

#### 6. Select 7- Hset Pairing



Note: If the handset is not paired, the softkey will be labelled as Pair instead of Remove.

7. Press the softkey for Remove.



Upon success or failure of unpairing, one of the following screen will be displayed on the handset:



Successful Removal Attempts



Failed Removal Attempts

Note: Unpairing of the handset will return it to factory default state. All data including the functions in the Feature key will be removed.

## **Troubleshooting**

This section describes solutions to some most commonly occurring problems.

## How to reset the 480i CT phone? From the 480i CT Phone:

- 1. Press the Options button to enter the Options List
- 2. Select option 10. Phone Status to enter the Phone Status options list
- 3. Select option 3. Reset Phone
- 4. Press the Reset softkey to reset the phone
- 5. Press the Cancel softkey to cancel the current operation

#### From the web client:

- **1.** Click on the Reset sub-category under the USER main category
- 2. Enter the administrator level user name and password when prompted
- 3. On the web page that just opened click on the Reset button to reset the phone

## How to set the 480i CT phone to factory default?

#### From the 480i CT Phone:

- **1.** Press **Options** to enter the Options List.
- 2. Select option 10. Phone Status to enter the Phone Status Options list.
- 3. Select option 4. Factory Default .
- 4. Enter the administrator password and press the Enter softkey.
- Press the SetDefault softkey to restore the 480i CT to the factory's default settings.
- 6. Press the Cancel softkey to cancel the operation.

#### From the web client:

· Currently this feature is not available from the web client.

#### How to reset a user's password?

If a 480i CT user has forgotten the password the following steps can be performed to reset the password.

#### From the web client:

- Click on the Password sub-category under the **USER** main category
- Enter the administrator level user password in the Current password field. Enter the new password for the user (the user's name for whom the password is being modified is displayed beside the User Name field on the current page). Re-enter the password to confirm the new password.
- 3. Click on the Set Password button to complete the operation.

## **Appendix A: Parameter Settings**

Note: The parameter settings in the <mac>.cfg configuration file take precedence over the parameter settings in the aastra.cfg. Any text following a number sign (#) on a line is considered to be a comment, unless the # is contained within doublequotes. Currently, boolean fields used are 0 for false and 1 for true.

#### **Network Settings:**

This section consists of the network setting parameters and are selfexplanatory.

dhcp

Flag to enable or disable DHCP. (0: Disable, 1: Enable)

İP address of the device

subnet mask

The network's subnet mask

default gateway

The network's default gateway.

dns1

dns2 Primary and secondary dns server's IP addresses

tftp server

The IP address of the tftp server

sip nat ip sip nat port

Currently we do not have nat support. Phone can make calls but cannot receive them.

sip registration time

Indicates in secs, how often the sip phone should send a re-register request to the sip server.

example:

sip registration time: 300

## **Time Server Settings:**

The following section contains the parameters to configure settings specific to the time server

time server disabled

Should the time server be disabled? 0:

False, 1: True

example:

time server disabled: 0

time reserved not used

dst config

flag to enable or disable time serving

(0: disable, 1: enable)

time server1

primary time server's IP address.

Can be an ntp too.

time server2

secondary time server's IP address.

Can be an ntp too.

time server3

tertiary time server's IP address.

Can be an ntp too.

time format

(0: 12hr, 1: 24hr)

date format

0: WWW MMM DD

1: DD-MMM-YY

2: YYYY-MM-DD

3: DD/MM/YYYY

4: DD/MM/YY

5: DD-MM-YY

6: MM/DD/YY

7: MMM DD

example:

date format: 5

time zone name

time zone code

TI	ıe f	ollowi	ng ı	are i	the	name	oţ	the	tıme	zones	and	their	correspond	lıng	tıme zone co	des
----	------	--------	------	-------	-----	------	----	-----	------	-------	-----	-------	------------	------	--------------	-----

HKS

The joint wing the the name of the time zones t	indi ineir corresponding time
AD-Andorra CET	CA-Yukon PST
AG-Antigua AST	CH-Zurich CET
AI-Anguilla AST	CK-Rarotonga CKS
AL-Tirane CET	CL-Santiago CLS
AN-Curacao AST	CL-Easter EAS
AR-Buenos Aires ART	CN-China CST
AS-Pago Pago BST	CO-Bogota COS
AT-Vienna CET	CR-Costa Rica CST
AU-Lord Howe LHS	CU-Havana CST
AU-Tasmania EST	CY-Nicosia EES
AU-Melbourne EST	CZ-Prague CET
AU-Sydney EST	
AU-Broken Hill CST	DK-Copenhagen CET
AU-Brisbane EST	DM-Dominica AST
AU-Lindeman EST	DO-Santo Domingo AST
AU-Adelaide CST	EE-Tallinn EET
AU-Darwin CST	ES-Madrid CET
AU-Perth WST	ES-Canary WET
AW-Aruba AST	FI-Helsinki EET
BA-Sarajevo EET	FJ-Fiji NZT
BB-Barbados AST	FK-Stanley FKS
BE-Brussels CET	FO-Faeroe WET
BG-Sofia EET	FR-Paris CET
BM-Bermuda AST	GB-London GMT
BO-La Paz BOT	GB-Belfast GMT
BR-Noronha FNT	GD-Grenada AST
BR-Belem BRT	GF-Cayenne GFT
BR-Fortaleza BRT	GI-Gibraltar CET
BR-Recife BRT	GP-Guadeloupe AST
BR-Araguaina BRS	GR-Athens EET
BR-Maceio BRT	GS-South Georgia GST
BR-Sao Paulo BRS	GT-Guatemala CST
BR-Cuiaba AMS	GU-Guam CST
BR-Porto Velho AMT	GY-Guyana
BR-Boa Vista AMT	GYTHK-Hong Kong Hl
BR-Manaus AMT	HN-Tegucigalpa CST
BR-Eirunepe ACT	HR-Zagreb CET
BR-Rio Branco ACT	HT-Port-au-PrinceEST
BS-Nassau EST	HU-Budapest CET
BY-Minsk EET	IE-Dublin GMT
BZ-Belize CST	IS-Reykjavik GMT
CA-Newfoundland NST	IT-Rome CET
CA-Atlantic AST	JM-Jamaica EST
CA-Eastern EST	JP-Tokyo JST
	- 0
CA-Saskatchewan EST CA-Central CST	KY-Cayman EST
	LC-St Lucia AST
CA-Mountain MST	LI-Vaduz CET
CA-Pacific PST	

LT-Vilnius EET
LU-Luxembourg CET
LV-Riga EET
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MC-Monaco CET
MD-Chisinau EET
MD-Chisinau EET MK-Skopje CET
MO Mantiniana ACT
MQ-Martinique AST MS-Montserrat AST
MS-Montserrat AST
MT-Malta CET
MX-Mexico City CST
MX-Cancun CST
MX-Merida CST
MX-Monterrey CST
MX-Chihuahua MST
MX-Hermosillo MST
MX-Tijuana PST
MA-HJUUHU F51
NI-Managua CST
NL-Amsterdam CET
NO-Oslo CET
NR-Nauru NRT
NU-Niue NUT
NZ-Auckland NZS
3.77 61 41 67.74
NZ-Chatham CHA
NZ-Chatham CHA
PA-Panama EST
PA-Panama EST PE-Lima PES
PA-Panama EST
PA-Panama EST PE-Lima PES PL-Warsaw CET
PA-Panama EST PE-Lima PES PL-Warsaw CET PR-Puerto Rico AST
PA-Panama EST PE-Lima PES PL-Warsaw CET PR-Puerto Rico AST PT-Lisbon WET
PA-Panama EST PE-Lima PES PL-Warsaw CET PR-Puerto Rico AST PT-Lisbon WET PT-Madeira WET
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PA-Panama EST PE-Lima PES PL-Warsaw CET PR-Puerto Rico AST PT-Lisbon WET PT-Madeira WET PT-Azores AZO PY-Asuncion PYS RO-Bucharest EET RU-Kaliningrad EET RU-Kaliningrad EET RU-Moscow MSK RU-Samara SAM RU-Yekaterinburg YEK RU-Omsk OMS RU-Novosibirsk NOV RU-Krasnoyarsk KRA RU-Irkutsk IRK RU-Yakutsk YAK RU-Yakutsk YAK RU-Vladivostok VLA RU-Sakhalin SAK RU-Magadan MAG RU-Kamchatka PET RU-Anadyr ANA
PA-Panama EST PE-Lima PES PL-Warsaw CET PR-Puerto Rico AST PT-Lisbon WET PT-Madeira WET PT-Azores AZO PY-Asuncion PYS RO-Bucharest EET RU-Kaliningrad EET RU-Kaliningrad EET RU-Moscow MSK RU-Samara SAM RU-Yekaterinburg YEK RU-Omsk OMS RU-Novosibirsk NOV RU-Krasnoyarsk KRA RU-Irkutsk IRK RU-Yakutsk YAK RU-Yakutsk YAK RU-Vladivostok VLA RU-Sakhalin SAK RU-Magadan MAG RU-Kamchatka PET

SI-Ljubljana CET CET SK-Bratislava SM-San Marino CET SR-Paramaribo SRT SV-El Salvador CST TR-Istanbul EETTT-Port of Spain AST TW-Taipei **CST UA-Kiev** EET **US-Eastern** EST **US-Central** CSTUS-Mountain MST**US-Pacific** PSTAKS US-Alaska **US-Aleutian** HASUS-Hawaii **HST** UY-Montevideo UYS VA-Vatican CET YU-Belgrade CET

example:

time zone name: US-Eastern

time zone code: EST

time zone minutes

The minutes that the zone is behind/ ahead(can be negative or positive integer)

example:

time zone minutes: 60

dst minutes

The minutes to which the daylight savings time should be adjusted by. Should be a positive integer.

The following are self-explanatory and take integer values:

dst start relative date dst start month dst start day dst start week dst start hour dst end relative date dst end month dst end day dst end week dst end hour

#### SIP Settings:

The following section contains the settings specific to SIP.

These parameters are self-explanatory and should be

configured accordingly

sip proxy ip sip proxy port sip registrar ip sip registrar port

sip line1 auth name sip line1 password sip line1 group name sip line1 user name sip line1 display name sip line1 screen name sip line2 auth name sip line2 password sip line2 group name sip line2 user name sip line2 display name sip line2 screen name sip line3 auth name

sip line3 password sip line3 group name

sip line3 user name sip line3 display name

sip line3 screen name

sip line4 auth name sip line4 password

sip line4 group name

sip line4 user name

sip line4 display name sip line4 screen name

sip line1 mode

sip line2 mode

sip line3 mode

sip line4 mode

sip dial plan

The regular expression used to configure the dialplan.

example:

sip dial plan:

"011xxxxxxxxx | 101xxxx1xxxxx xxxxx | 1[2-9]xxxxxxxxx | [2-9]xxxxxxxxx | xx+\* | xx+# | \*xx

| #xx+#''

Where,

0, 1, 2, 3, 4, 5, 6, 7, 8, 9:

is a Digit symbol

'x': matches any digit symbol (wildcard),

'+': matches zero or more of the preceding digit symbol or [] expression

[]: Symbol inclusive OR

'-': used only with [], represent a range of acceptable symbols

'\*', '#' match the keypad symbols.

sip digit timeout

*Represents the time in seconds to* configure the timeout between consecutive key presses.

example:

sip digit timeout: 4

## **Softkey Settings:**

The following section contains the softkey settings specific to SIP. On the 480i CT phone with SIP seven softkeys can be configured. These parameters can be configured either in the Aastra.cfg or the <mac>.cfg file. The syntax is as follows:

softkeyN type: type softkeyN label: string softkeyN value: value

Where,

*N*: *is the softkey number (1-7) on the* phone that is being configured, type: can be any one of the following: line, blf (blinking light field), voicemail, forward or speeddial, and

Value: is the value of the soft key (depends upon the softkey context)

Examples:

#This example will configure the first soft key and label the softkey

#"Dial" with a "O" icon before it. When this softkey is pressed line #1 on the phone will go off-hook and will be ready for a number to be #dialled.

softkey1 type: line softkey1 label: "Dial"

softkey1 value: 1

#This example will configure the second softkey and label the softkey

#"L1/1234" with a phone icon before it. This softkey shows the status #of Line 1 for the extension 1234.

#BLF status checking is not yet implemented

#softkey2 type: blf

#softkey2 label: "L1/1234" #softkey2 value: 1/1234

#This example will configure the third softkey and label the softkey

#" VMail". When this softkey is pressed line 1 on the phone will go #off-hook and will dial 89 (\*89 is the number to access the voicemail at the IP PBX).

softkey3 type: voicemail softkey3 label: VMail softkey3 value: \*89

#This example will configure the phone to forward calls. Follow the #screen prompts to configure call forwarding to another device

#Call Forwarding functionality not yet implemented

#softkey4 type: forward #softkey4 label: FWD #softkey4 value: anything #This example will configure the fifth softkey and label the softkey #"911". When this softkey is pressed line 1 on the phone goes off-hook #and dials the number 911.

softkey5 type: speeddial softkey5 label: "911" softkey5 value: 911

## **Appendix B: Sample** configuration files

This section consists of the sample configuration files necessary to configure the 480i CT phones. The general format is similar to configuration files used by several unix-based programs. Any text following a number sign (#) on a line is considered to be a comment, unless the # is contained within doublequotes. Currently, Boolean fields use 0 for false and 1 for true.

## aastra.cfg

# This file contains generic settings for all phones.

time server disabled: 1 time server1: 131.107.1.10

dhcp: False

subnet mask: 255.255.255.0 default gateway: 192.168.0.1 tftp server: 192.168.0.129 #dns1: 192.168.0.5

sip proxy ip: 192.168.0.101 sip proxy port: 5060

sip registrar ip: 192.168.0.101 sip registrar port: 5060

#change this to suite your dial plan.

*sip dial plan:* "911 | [2-9]xxxxxxxx |

xx+\*|xx+#|\*xx|#xx+#"

softkey1 type: line softkey1 label: "pickup" softkey1 value: 1

softkey2 type: blf

softkey2 label: "L1/1234 Status"

softkey2 value: 1/1234 softkey3 type: voicemail softkey3 label: "Vmail" softkey3 value: \*89

softkey4 type: speeddial softkey4 label: "911" softkey4 value: 911

#### <mac>.cfg

# This file contains specific settings for the phone with the MAC

# address for which this file was named. Settings which have already

# appeared in aastra.cfg will be overridden by those in this file.

# Phone's IP address (may be necessary if you are not using DHCP) #ip: 192.168.0.200

#line info

#line 1

*sip line1 auth name: 5857501515* sip line1 password: 12345 sip line1 user name: 5857501515 sip line1 display name: Display-L1-5857501515 sip line1 screen name: ScreenName-L1-5857501515

#line 2

sip line2 auth name: 5857501515 sip line2 password: 12345 *sip line2 user name: 5857501515* sip line2 display name: Display-L1-5857501515 sip line2 screen name: ScreenName-L1-5857501515

#line 3

#Note: This line uses a different extension

sip line3 auth name: 7110 sip line3 password: 12345 sip line3 user name: 7110 sip line3 display name: *Display-L3-5857501515* sip line3 screen name: ScreenName-L3-5857501515

#line 4

sip line4 auth name: 5857501515 sip line4 password: 12345 *sip line4 user name: 5857501515* sip line4 display name: *Display-L4-5857501515* sip line4 screen name: ScreenName-L4-5857501515

## **Limited Warranty**

Aastra Telecom warrants this product against defects and malfunctions during a one (1) year period from the date of original purchase. If there is a defect or malfunction, Aastra Telecom shall, at its option, and as the exclusive remedy, either repair or replace the telephone set at no charge, if returned within the warranty period.

If replacement parts are used in making repairs, these parts may be refurbished, or may contain refurbished materials. If it is necessary to replace the telephone set, it may be replaced with a refurbished telephone of the same design and color. If it should become necessary to repair or replace a defective or malfunctioning telephone set under this warranty, the provisions of this warranty shall apply to the repaired or replaced telephone set until the expiration of ninety (90) days from the date of pick up, or the date of shipment to you, of the repaired or replacement set, or until the end of the original warranty period, whichever is later. Proof of the original purchase date is to be provided with all telephone sets returned for warranty repairs.

#### Exclusions

Aastra Telecom does not warrant its telephone sets to be compatible with the equipment of any particular telephone company. This warranty does not extend to damage to products resulting from improper installation or operation, alteration, accident, neglect, abuse, misuse, fire or natural causes such as storms or floods, after the telephone is in your possession.

Aastra Telecom shall not be liable for any incidental or consequential damages, including, but not limited to, loss, damage or expense directly or indirectly arising from the customers use of or inability to use this telephone, either separately or in combination with other equipment. This paragraph, however, shall not apply to consequential damages for injury to the person in the case of telephones used or bought for use primarily for personal, family or household purposes.

This warranty sets forth the entire liability and obligations of Aastra Telecom with respect to breach of warranty, and the warranties set forth or limited herein are the sole warranties and are in lieu of all other warranties, expressed or implied, including warranties or fitness for particular purpose and merchantability.

#### Warranty Repair Services

Should the set fail during the warranty period;

**In North America**, please call 1-800-574-1611 for further information.

**Outside North America**, contact your sales representative for return instructions.

You will be responsible for shipping charges, if any. When you return this telephone for warranty service, you must present proof of purchase.

#### **After Warranty Service**

Aastra Telecom offers ongoing repair and support for this product. This service provides repair or replacement of your Aastra Telecom product, at Aastra Telecom's option, for a fixed charge. You are responsible for all shipping charges. For further information and shipping instructions;

**In North America**, contact our service information number: 1-800-574-1611. **Outside North America**, contact your sales representative.

Note: Repairs to this product may be made only by the manufacturer and its authorized agents, or by others who are legally authorized. This restriction applies during and after the warranty period. Unauthorized repair will void the warranty.