



The next generation Cisco TelePresence System team collaboration solution.

The Profile, the MX200, the Quick Set C20 and Quick Set C20 Plus, as well as solutions based on the Codec C Series, bring colleagues face-to-face at the touch of a button through a user-friendly touch screen interface.

Easily share presentations and multimedia to spark ideas and generate better discussions.

Cisco TelePresence Systems
Profile Series / Codec C Series / Quick Set C20 / MX200

Use with
Cisco TelePresence Touch



What's in this guide?

The top menu bar and the entries in the Table of Contents are all hyperlinks. Just click on them to go to the topic.

We recommend that you visit the Cisco web site regularly for updated versions of this guide. Go to: <http://www.cisco.com>

This document describes the use of the Cisco TelePresence Touch with the Cisco TelePresence System Profile Series, Codec C Series, MX200 and Quick Set C20.

For a description of the use of these video systems with the remote control Cisco TRC5 (not applicable to the MX200), we refer to the TC4.2 User Guide, Remote control version, which is available separately for download.

Getting started

- The basics of the Touch Controller 4
- Selfview and camera control 5
- Adding a near end camera preset 6
- Changing an existing near end camera preset 7
- Removing an existing near end camera preset 8
- Camera whitebalance, exposure, and backlight compensation 9
- Sound matters 10
- Receiving calls 10
- Ring tones and sounds 10
- Do not disturb 10

Placing calls

- Calling someone by entering the URI 12
- Searching and calling an entry in any of the lists 13
- Calling an entry in one of the lists 14
- Calling more than one 15

Using Favorites, Directory and History

- History 17
- Searching 17
- Directory 17
- Favorites 17

In-call features

- Features in a call—an overview 19
- Calling participants to add them to an ongoing call (Multisite) 20
- Calling participants to add them to an ongoing call (Multiway) 21
- Receiving another incoming call 22
- Features when putting someone on hold 22
- Transferring an ongoing call 23
- Near end camera control 24
- Far end camera control (in a call only) 24
- Using Touch Tones (DTMF) in a call 24
- Near end camera presets 24

- Sharing contents—conducting presentations 25
- Layout control 26

The Settings

- Gaining access to the Settings 28
- System Information 29
- Call Status 30
- Camera Control & Settings 31
- Ringtone & Sound Settings 32
- Administrator settings—Date, Time & Location 33
- Administrator settings—Call settings 34
- Administrator settings—IP settings for the codec 35
- Administrator settings—IP settings for the Touch controller 36
- Administrator settings—Pairing 37
- Administrator settings—H.323 settings 38
- Administrator settings—SIP settings 39
- Administrator settings—Provisioning 40
- Administrator settings—Multiway Settings 41
- Administrator settings—EMC Resilience mode 42
- Administrator settings—Reset 43



Chapter 1

Getting started

The basics of the Touch Controller



Basic operating principles



Selfview and camera control



You may want to check how you appear on the screen. To do this, tap **Selfview** ...



... then tap **More**.



Tap **Camera control** to gain access to the *Camera control* menu.



Entering **Camera Control** will also cause the system to show selfview, so if you know that camera adjustments are needed, you do not have to activate selfview first.



Use **+** and **-** to adjust the zoom and the arrow keys to adjust the camera's angle. You may also define or edit camera presets in this menu, see ► "Adding a near end camera preset" on page 6 for details.



Tap **Back** to go one level back, or tap anywhere outside to exit the menu.

Adding a near end camera preset

Use Camera presets to quickly change your camera's pan, tilt and zoom—for example to change between participants and whiteboard presentation.



Tap **More ...**



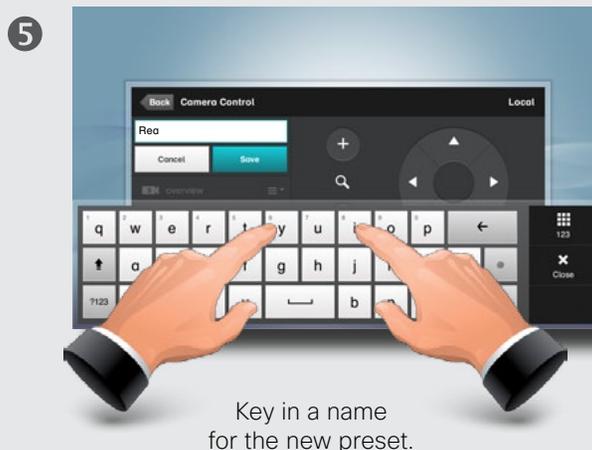
... then tap **Camera Control.**



Adjust camera pan, tilt and zoom, as required.



Press **Add new Preset.**



Key in a name for the new preset.



Tap **Save (1)** followed by **Back (2)** to exit the menu.

Changing an existing near end camera preset



Tap **More ...**



... then tap **Camera Control**.



Adjust camera pan, tilt and zoom, as required.



Tap the field to the right of the preset to be changed.



Tap **Update to current position** to change the preset.



Tap **Back** to exit the menu.

Removing an existing near end camera preset



Camera whitebalance, exposure, and backlight compensation



You may want to adjust the camera's whitebalance, exposure and backlight compensation.

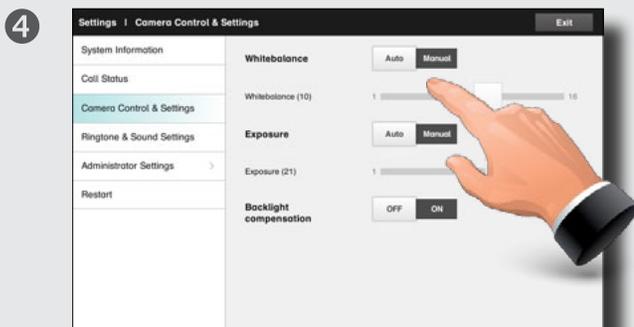
To do this, tap **More** ...



... then tap **Settings** to open the **Settings** menu.

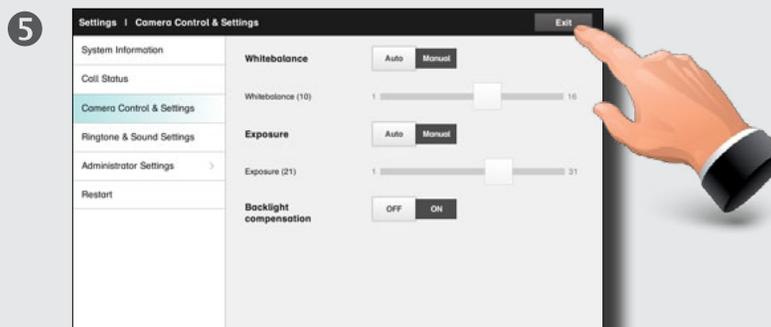


Tap **Camera Control & Settings** to open the menu.



... then tap the **Manual** setting of **Whitebalance** and **Exposure** to adjust the settings or set them to **Auto** to let the system decide.

Backlight compensation improves the outgoing image when there is a strong light behind you.



Tap **Exit** when done.

Sound matters

You may deactivate the microphone for privacy reasons, if needed (1).

Tap as outlined (2) to adjust the sound volume.



Ring tones and sounds

To set ringtones and sound, tap More (1) followed by Settings (2). Then tap **Ringtone & Sound Settings** (3).

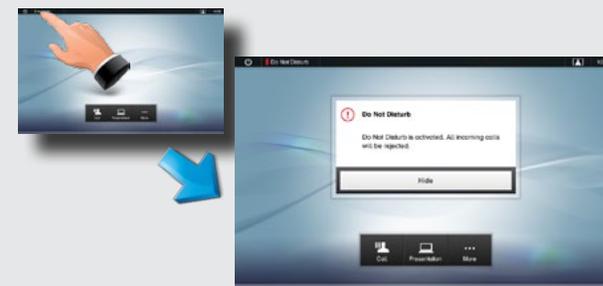


Set **Keytones** to **On** or **Off**, the **Ringtone volume** and select the ringtone of your choice. Tap **Exit** to go back.

Do not disturb

When set to **Do Not Disturb**, ringtones are muted and call attempts made by others to reach you will appear as missed calls.

You may, however, place calls as much as you like. To activate Do Not Disturb, press the **Available** icon as outlined. Press again to deactivate.



You may also hide the Do Not Disturb poster by tapping **Hide**. This will not deactivate the Do Not Disturb, as such.

Receiving calls

When someone calls you, the below display will appear. Tap **ACCEPT** to take the call or **DECLINE** to reject it.

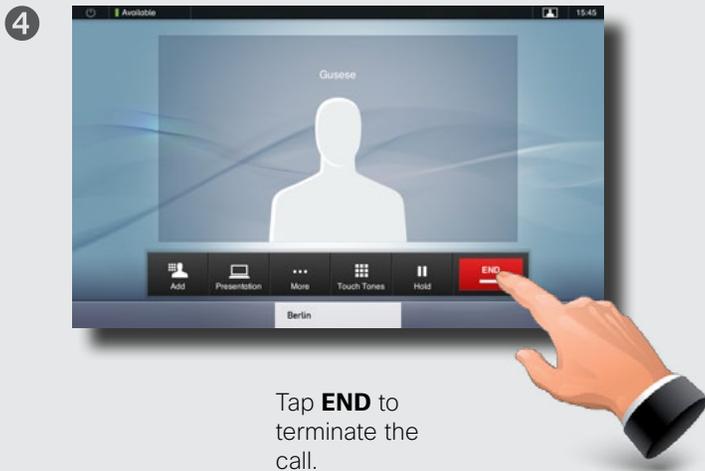




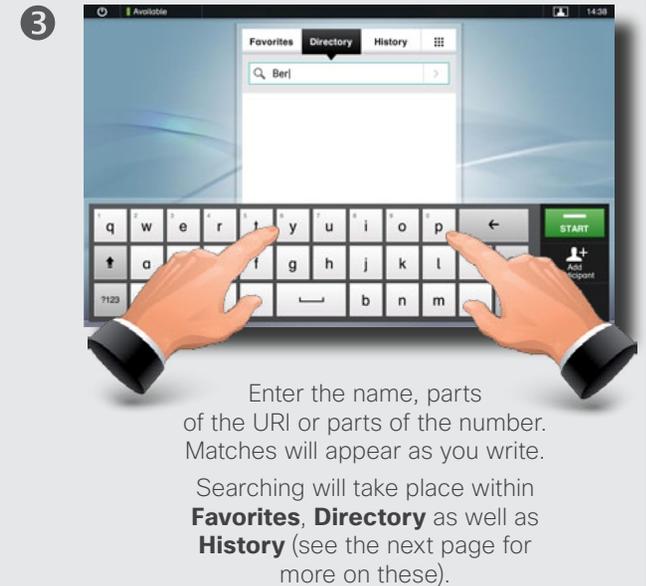
Chapter 2

Placing calls

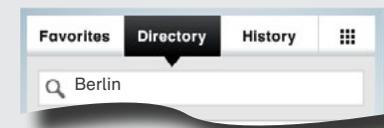
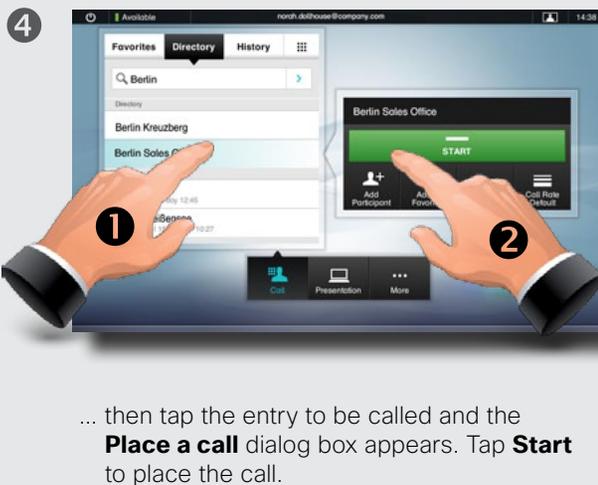
Calling someone by entering the URI



Searching and calling an entry in any of the lists



Calling an entry in one of the lists



Favorites. The list of favorites is your own shortlist of people and places you frequently call or otherwise want to have easy access to.

Directory. The directory serves as your corporate phone book. This directory cannot be edited by you. You may, however, copy entries to your list of favorites and edit them there.

History lists the received, placed and missed calls since the last time the list was cleared.

Keypad. Tap the keypad icon to produce the keypad to enter a number or URI.

Calling more than one

1



Calling several to initiate a video conference is an optional feature. If your system permits conferencing, you may set up a list of several participants and then call them all in one go. Ask your system administrator, if in doubt.

Enter a number or URI, or pick an entry from the **Directory**, the list of **Favorites**, or from the **History**.

2



Tap **ADD PARTICIPANT** as outlined to add the entry to the list of participants to be called.

3



Locate the next to be called.

4



Tap **Add participant** again. The maximum number of participants permitted will depend on your system configuration. Ask your system administrator, if in doubt.

5



When all have been added (two in this example), tap **START** to call them all.

6



Tap **END** to terminate the entire conference. To disconnect just one of the participants, tap the participant's name along the bottom line and then tap **END**.



Chapter 3

Using Favorites, Directory and History

History

History lists the received, placed and missed calls since the last time the list was cleared.

Tap **History** to produce the list ...



... then tap an entry.

You will now be able to:

- Call the entry by tapping **Start**.
- Add the entry to an ongoing call (optional feature).
- Add the entry to **Favorites**.
- Edit the entry information and then place the call.
- Change the call rate settings.
- Remove the entry from the list.
- Clear the entire list. To do this, scroll as outlined beyond what appears to be the top of the list. A **Clear List** button will then appear as outlined.



Directory

The **Directory** serves as your corporate phone book. This directory cannot be edited by you. You may, however, copy entries to your list of favorites and edit them there.

Tap **Contacts** (if needed) and then tap **Directory**. The directory is typically organized as folders.



Tap a folder (1) to show its contents, scroll (2) if needed to locate a folder or an entry within a folder.

Once located, tap the entry to call, edit or add to your list of favorites in the same way as with the history list.

It may happen that an entry copied from the directory to the list of favorites later is updated in the directory. This update will not be reflected in your list of favorites—you must then manually update the entry in the list of favorites.

Favorites

Favorites is your own shortlist of contacts you frequently call or otherwise want to have easy access to.

Adding to Favorites. To add someone to the list of favorites, locate the entry in **Directory** or **History** (as outlined) and tap it (1). This will produce a dialog box which allows you to tap **Add to Favorites** (2).



You may now edit the entry, if needed—just tap a field and the keyboard will be produced. Tap **Save** to put changes into effect..



Favorites should be considered as an editable directory and is used in the same way as **History**.

Searching

You may search for entries (numbers or URIs). Searches will be conducted within all the folders, i.e. within the **Favorites**, the **Directory** and the **History**.

Tap in the **Search or Dial** field and key in the name, URI or number. Matches will appear as you search.

Once located, tap the entry to call, edit or add to **Favorites**.



When searching within the corporate **Directory**, the search will apply to the current directory folder and its subfolders only. To go one level up, tap **Back**. To make the search apply to the entire corporate directory, do not enter (tap) any folder before the search is commenced.



Chapter 4

In-call features

Features in a call—an overview



Do not disturb
on or off

Selfview
on or off

Camera control lets you pan and zoom your own camera as well as define and use camera presets

Layout lets you change the layout of images on the display (MultiSite only)

Gain access to **Settings**

Use **Touch Tones** (DTMF) e.g. for extensions and pin codes to conferences

Add participants to create a conference (optional feature)

End the ongoing call

Tap here in the white field to control the far end camera of this participant and to exclude this participant from the call

Share contents (PC, video, doc. camera etc)

Tap here to display upper row of options

Put any of the participants on hold

Tap here in the white field to control the far end camera of this participant and to exclude this participant from the call

Calling participants to add them to an ongoing call (Multisite)

Calling more than one using Multisite is an optional feature that may, or may not, be present on your system. If in doubt, ask your System Administrator.



While in a call you may add participants provided that your system permits to do so. Tap **Add** ...



... then select, in the usual way, whom to add to the ongoing call.



Once you have selected someone, tap **Start** to include this participant in the meeting.

4 Repeat the procedure to include more participants, if needed.
The maximum number of participants possible will depend on the system used, consult your System Administrator, if in doubt.
Note that even voice-only participants may be added.



Tap **END** to terminate the entire conference. To disconnect just one of the participants, tap the participant's name along the bottom line and then tap **END**.

Calling participants to add them to an ongoing call (Multiway)

Calling more than one using Multiway is an optional feature that may, or may not, be present on your system. If in doubt, ask your System Administrator.



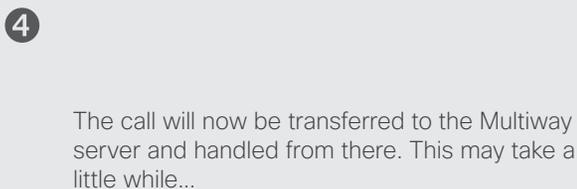
While in a call you may add participants provided that your system permits to do so. Tap **Hold** to put the ongoing call on hold...



... then select, in the usual way, whom to add to the ongoing call.



Once you have selected someone, tap **Start** to begin including this participant in the meeting.



The call will now be transferred to the Multiway server and handled from there. This may take a little while...



When everything is ready the **Join** button will appear. Tap this and the bottom line will change to read **Meeting**. This may take a little while.

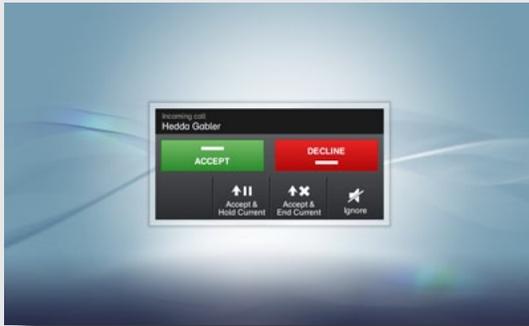
Since the calls have been transferred to the Multiway server you are still in a point-to-point call, but now with the Multiway server as the far end. This applies to all the other participants as well.

Tap **END** to disconnect yourself. The other participants must do the same to disconnect themselves from the Multiway server.

Receiving another incoming call

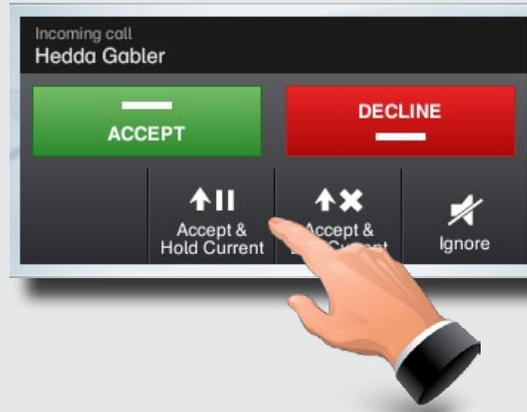
This is an optional feature that may, or may not, be present on your system. If in doubt, ask your System Administrator.

1



Assume that you are in a call. This call can be a point-to-point call or a multisite call. Furthermore assume that another person calls you.

2



You may now:

- Tap **Accept** to include the incoming call in the conference.
- Tap **Decline** to carry on as you did.
- Tap **Accept & Hold Current** to accept the call, while at the same time put the current call on hold.
- Tap **Accept & End Current** to accept the call, while at the same time end the current call.
- Tap **Ignore** to carry on as you did, without sending decline signal to the other end.

Even an entire group can be put on hold, so the above options apply equally well to point-to-point calls as to multisite calls.

Features when putting someone on hold

This is an optional feature that may, or may not, be present on your system. If in doubt, ask your System Administrator.

1



If you have put one on hold, tap that one to resume.

2



You may now:

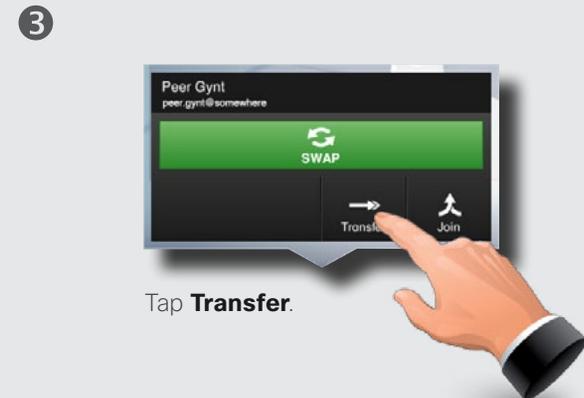
- Tap **Swap** to put the other on hold instead.
- Tap **Join** to include the one on hold in the current call.
- Tap **Transfer** to connect the one on hold to somebody else.

If you are in a point-to-point call only, you may still put the other party on hold and transfer the other party to someone else.

See ► “Transferring an ongoing call” on page 23 for more.

Transferring an ongoing call

This is an optional feature that may, or may not, be present on your system. If in doubt, ask your System Administrator.



Tap **Transfer**.

1 If applicable, tap the participant to be put on hold (1).

If you are in a call with just one, that is not needed.

Then tap **Hold** (2)

2 Tap the participant's name again.



4 Tap **Contacts** and select whom to transfer to in the usual way.

5 If you are in a call with more than one, you may also transfer the one on hold to the other participant of the current call. If you do so, you will be disconnected from the call, but the others will stay connected.

Near end camera control



Near end camera presets



Far end camera control (in a call only)

This works in point-to-point as well as in multisite calls, but only on systems with remotely controllable cameras.



Using Touch Tones (DTMF) in a call

Sometimes you may be urged to enter touch tones (DTMF) during a call, typically to reach extensions or to provide a pin code.



Sharing contents—conducting presentations

You may alter the screen layout when sharing contents—see the next page for more. You must be in a call to be allowed to do layout changes.

1



Contents can be shared in a call—or outside a call. In the latter case you will be using your video system to share contents in your local meeting room.

Make sure your presentation source is connected to the video system before you start.

2



In a call, or outside a call, tap **Presentation** ...

3



... then select source by scrolling horizontally, if needed ...

4



Tap **PRESENT** to start sharing contents.

5



Tap again to gain access to the stop sharing contents menu ...

6



... then tap **Stop Presenting** to actually stop sharing contents.

Layout control

This applies to multisite calls and to point-to-point calls with a presentation running.



You may alter the screen layout when you are in a call. To do this start by tapping **More** ...



... then tap **Layout** ...



... and finally select your preferred layout.



↑
Takes you one menu level back

↑
The one who speaks get the full screen. Nothing else is shown.

↑
The one who speaks gets the main frame. The others are shown as PiP (Picture in Picture).

↑
The one who speaks gets the main frame. The others are shown as images below the main frame.

↑
All participants are shown in frames of identical sizes.

When a presentation is included in a call, all participants will be shown **above** the presentation, instead of below. This will provide a better feeling of eye contact.

Full screen will show the presentation only.

Observe that changes to this set of layouts made by the TC-console utility are not supported and will be ignored.

The video endpoints whose use is described in this manual can be configured via the touch screen controller or via its web interface. For full access to all configurable parameters the web interface must be used—the Touch Controller provides access to a limited set of parameters only.

Chapter 5

The Settings

Gaining access to the Settings

Access the Settings as follows:



Tap **More** ...



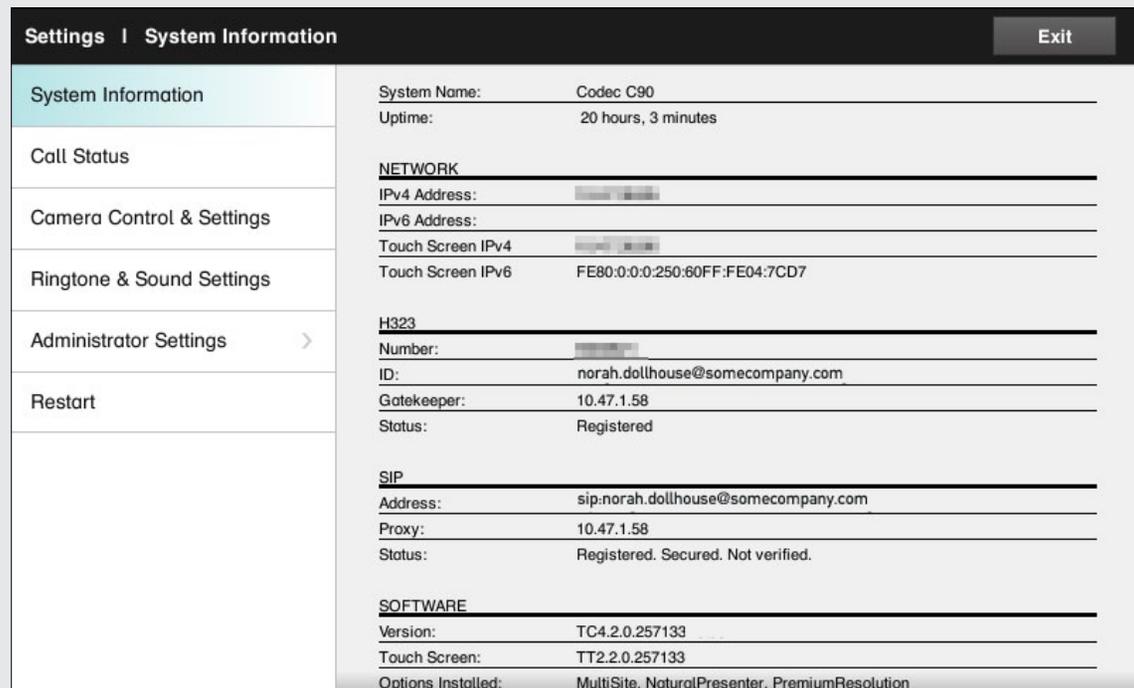
... then tap **Settings** ...



... and then you get access to the settings available. Observe that there are several other settings available, but these can be accessed from the web interface only. See the Administrator guide for your Cisco product. This guide is available for download separately.

System Information

The **System Information** pane contains information on the system's software and hardware versions and connections, SIP and H.323 status etc.



The screenshot shows a web interface for 'Settings | System Information'. On the left is a navigation menu with options: System Information (highlighted), Call Status, Camera Control & Settings, Ringtone & Sound Settings, Administrator Settings (with a right arrow), and Restart. On the right, the 'System Information' section displays the following details:

- System Name:** Codec C90
- Uptime:** 20 hours, 3 minutes
- NETWORK**
 - IPv4 Address:** [Redacted]
 - IPv6 Address:** [Redacted]
 - Touch Screen IPv4:** [Redacted]
 - Touch Screen IPv6:** FE80:0:0:250:60FF:FE04:7CD7
- H323**
 - Number:** [Redacted]
 - ID:** norah.dollhouse@somecompany.com
 - Gatekeeper:** 10.47.1.58
 - Status:** Registered
- SIP**
 - Address:** sip.norah.dollhouse@somecompany.com
 - Proxy:** 10.47.1.58
 - Status:** Registered. Secured. Not verified.
- SOFTWARE**
 - Version:** TC4.2.0.257133
 - Touch Screen:** TT2.2.0.257133
 - Options Installed:** MultiSite, NaturalPresenter, PremiumResolution

Call Status

The **Call Status** pane provides information on call rate, encryption, as well as important video and audio parameters.

Settings | Call Status
Exit

System Information				
Call Status				
Camera Control & Settings				
Ringtone & Sound Settings				
Administrator Settings >				
Restart				

	Participant 1	Participant 2	
Call Rate:	768 kbps	Encryption Type:	None
Protocol:	sip	Encryption Status:	Off
VIDEO			
	Transmit	Presentation	Receive
Protocol:	H264	Off	H264
Resolution:	768x448	n/a	768x448
Frame Rate:	30	n/a	28
Channel Rate:	41 kbps	n/a	590 kbps
Total Packet Loss (%):	0.0%		0.0%
Current Packet Loss (%):	0.0%		0.0%
Jitter:	4 ms		2 ms
AUDIO			
	Transmit	Receive	
Protocol:	AACLD - Mono	AACLD - Mono	
Channel Rate:	63 kbps	63 kbps	
Total Packet Loss (%):	0.0%	0.0%	
Current Packet Loss (%):	0.0%	0.0%	
Jitter:	0 ms	0 ms	

Camera Control & Settings

The **Camera Control & Settings** pane lets you set the whitebalance and exposure of the camera. If you do not want to tweak this yourself, just leave it to the system by selecting **Auto**.

Backlight compensation comes in handy when there is much light behind you. Without compensation you will easily appear very dark to the far end.

Note how the settings chosen are indicated. In the example shown, Backlight compensation is set to Off.

The screenshot shows the 'Camera Control & Settings' interface. On the left is a navigation menu with the following items: System Information, Call Status, Camera Control & Settings (highlighted), Ringtone & Sound Settings, Administrator Settings, and Restart. The main area on the right contains three settings sections:

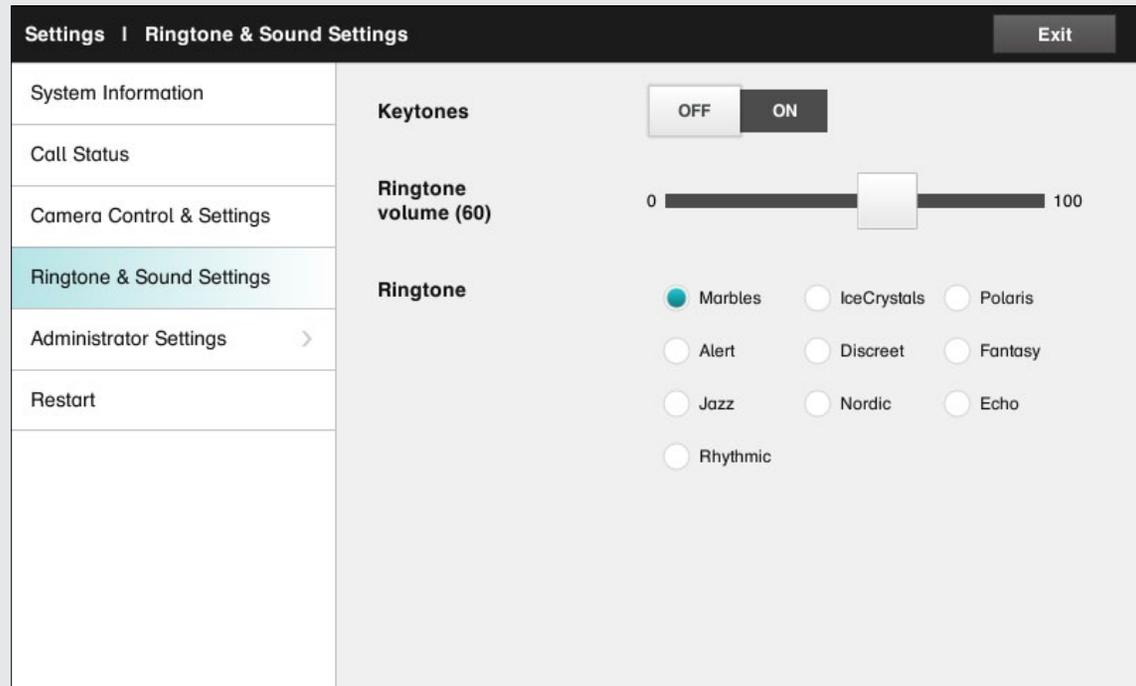
- Whitebalance:** Includes 'Auto' (selected) and 'Manual' buttons. Below is a slider for 'Whitebalance (10)' ranging from 1 to 16.
- Exposure:** Includes 'Auto' (selected) and 'Manual' buttons. Below is a slider for 'Exposure (21)' ranging from 1 to 31.
- Backlight compensation:** Includes 'OFF' (selected) and 'ON' buttons.

Ringtone & Sound Settings

The **Ringtone & Sound Settings** pane lets you specify:

- **Keytones** on or off. When set to on you will hear a sound every time you tap a field on the Touch controller.
- **Ringtone volume**. How loud your ringtone shall sound.
- **Ringtone**. Select among several ringtones. You will hear a sample every time you tap a ringtone.

Note how the settings chosen are indicated. In the example shown, Keytones is set to Off.

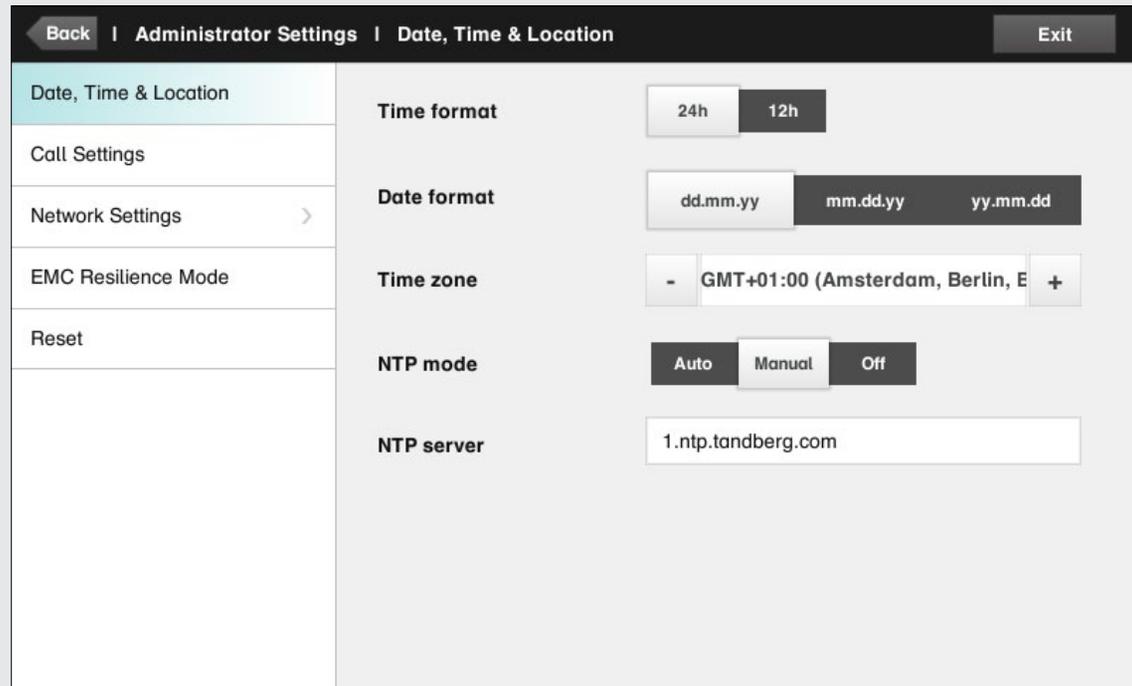


Administrator settings—Date, Time & Location

The **Date, Time & Location** settings let you specify:

- 24h or 12h time format.
- Your preferred date format.
- Your preferred time zone.
- Whether date and time shall be set automatically or manually.

Note how the settings chosen are indicated. In the example shown, Time format is set to 24h.

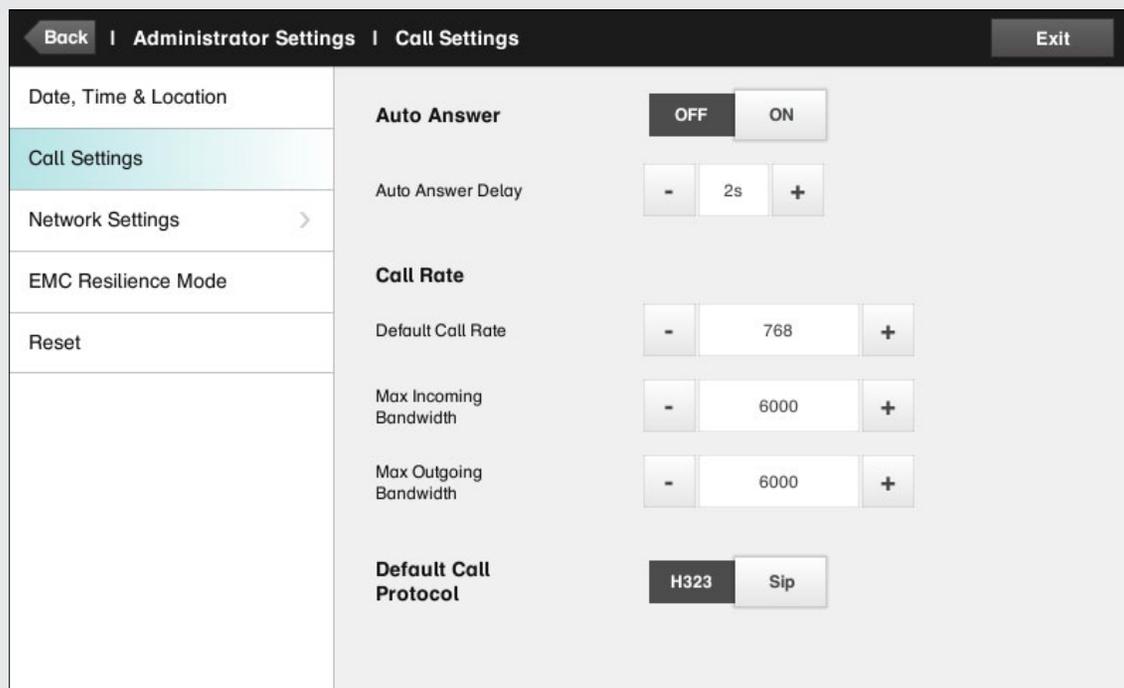


Administrator settings—Call settings

The **Call Settings** pane lets you specify:

- **Auto Answer** On or Off. If you set this to **On**, the system will respond automatically to incoming calls. Note that the microphone will NOT be muted. If risk of eavesdropping is an issue, you may want to set this setting to **Off**.
- **Auto Answer Delay**. Specify the time until your system actually responds to an incoming call.
- **Default Call Rate**. If your connection has limited capacity you may want to use this setting.
- **Max Incoming/Outgoing Bandwidth**. You may specify these separately. May come in handy if you are on an asymmetric connection.
- **Default Call Protocol**. Specify which protocol to use as default.

Note how the settings chosen are indicated. In the example shown, Auto Answer is set to Off.

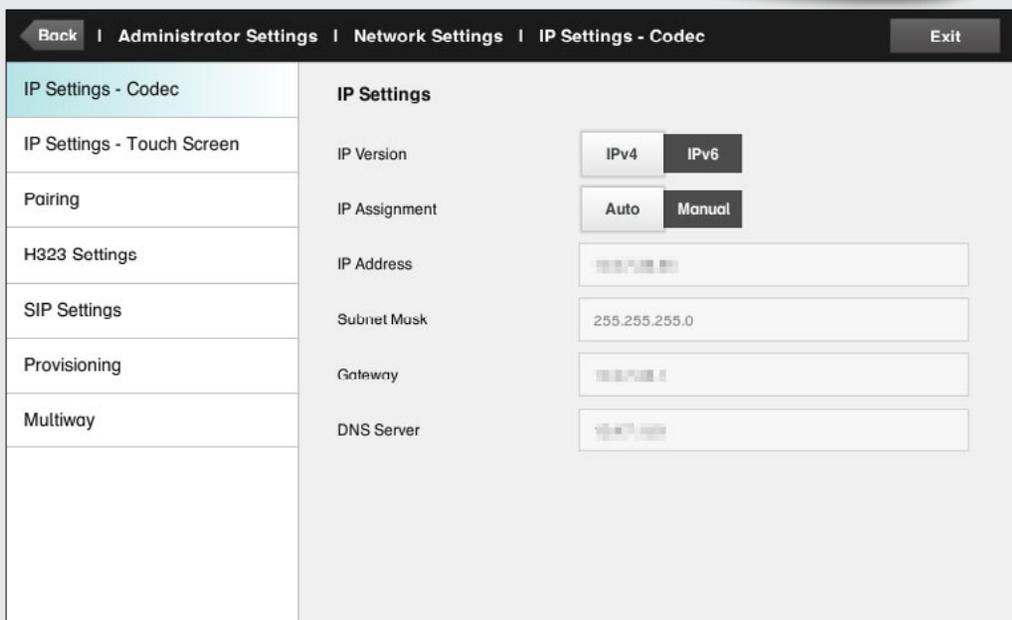


Administrator settings—IP settings for the codec

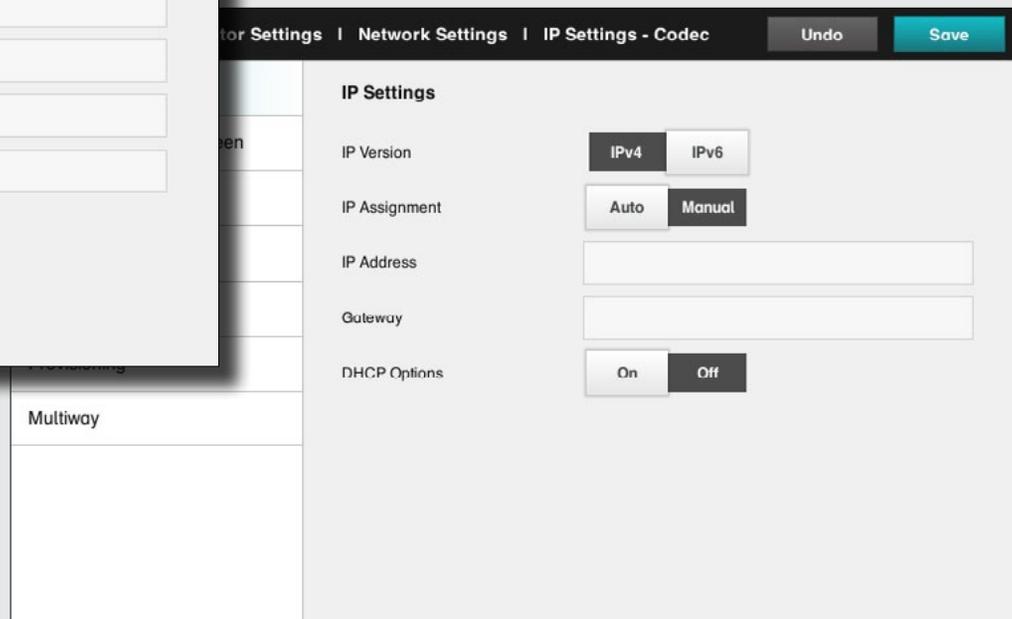
The **IP settings** pane for the Codec of the system lets you specify whether to use IPv4 (below left) or IPv6 (below right).



If IPv4 assignment is specified to be Auto, you must save your settings to put changes into effect.



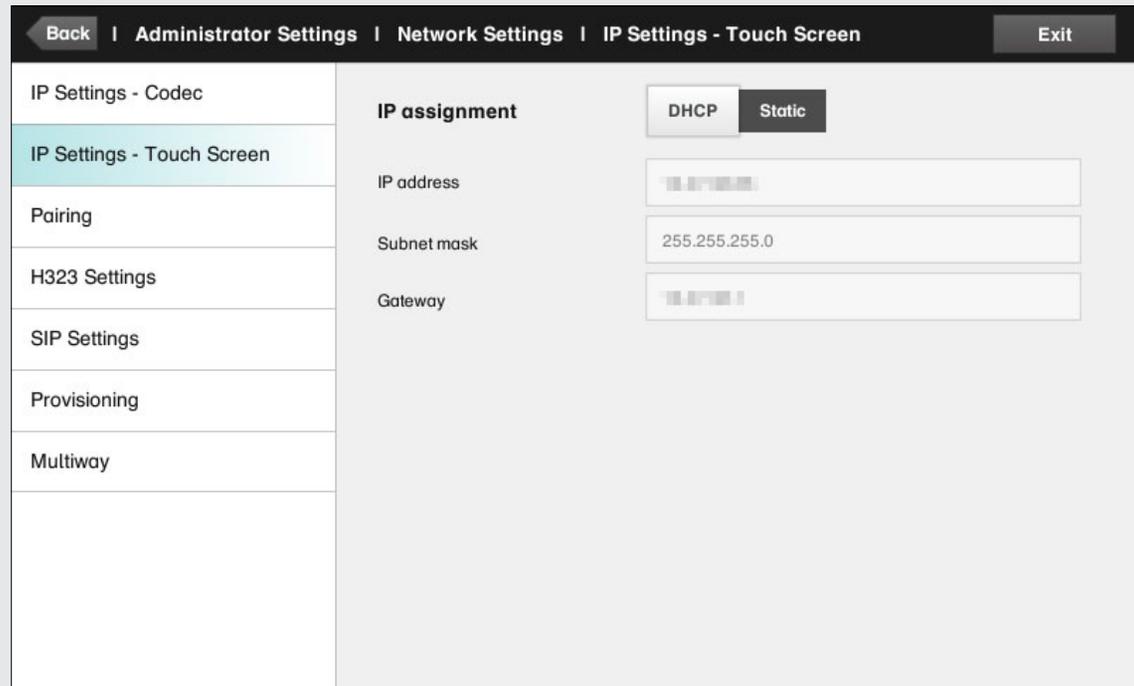
Remember to save your settings to put changes into effect.



Administrator settings—IP settings for the Touch controller

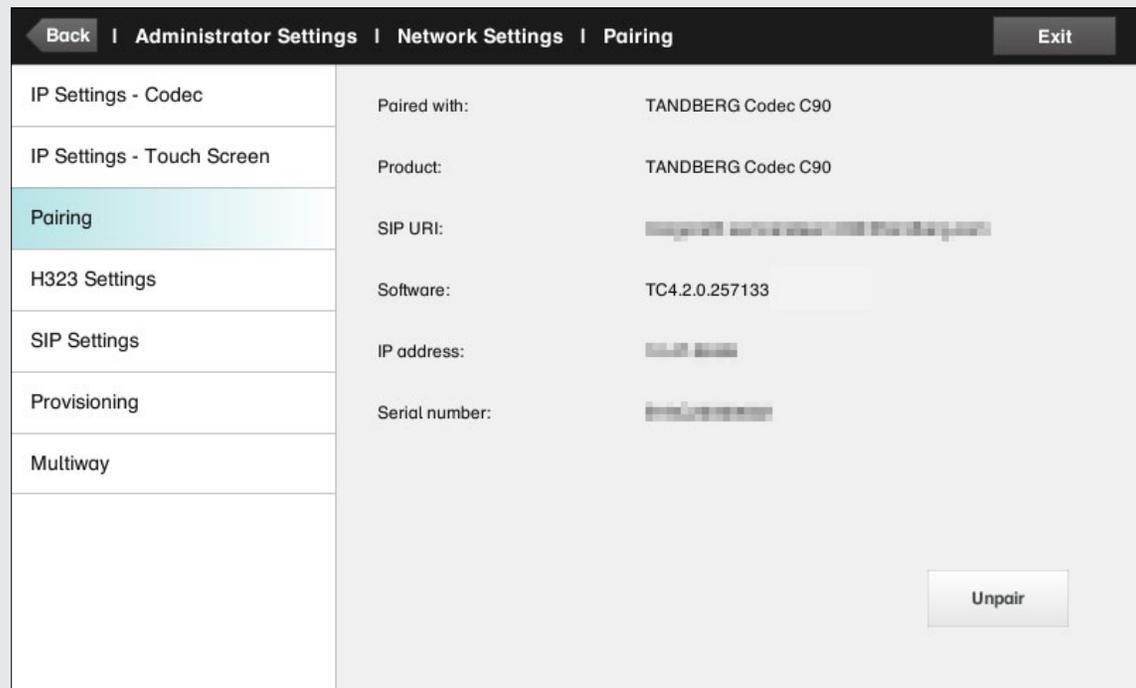
The **IP settings** pane for the Touch controller of the system lets you specify:

- The use of **DHCP** or **Static** IP addresses. If you decide to use **Static**, make sure you tap **Save** before leaving the menu.



Administrator settings—Pairing

The **Pairing** pane shows status on the pairing of the Codec and the Touch controller of your video system. It also provides you with the option of unpairing the two.



Administrator settings—H.323 settings

The **H.323 Settings** pane lets you specify:

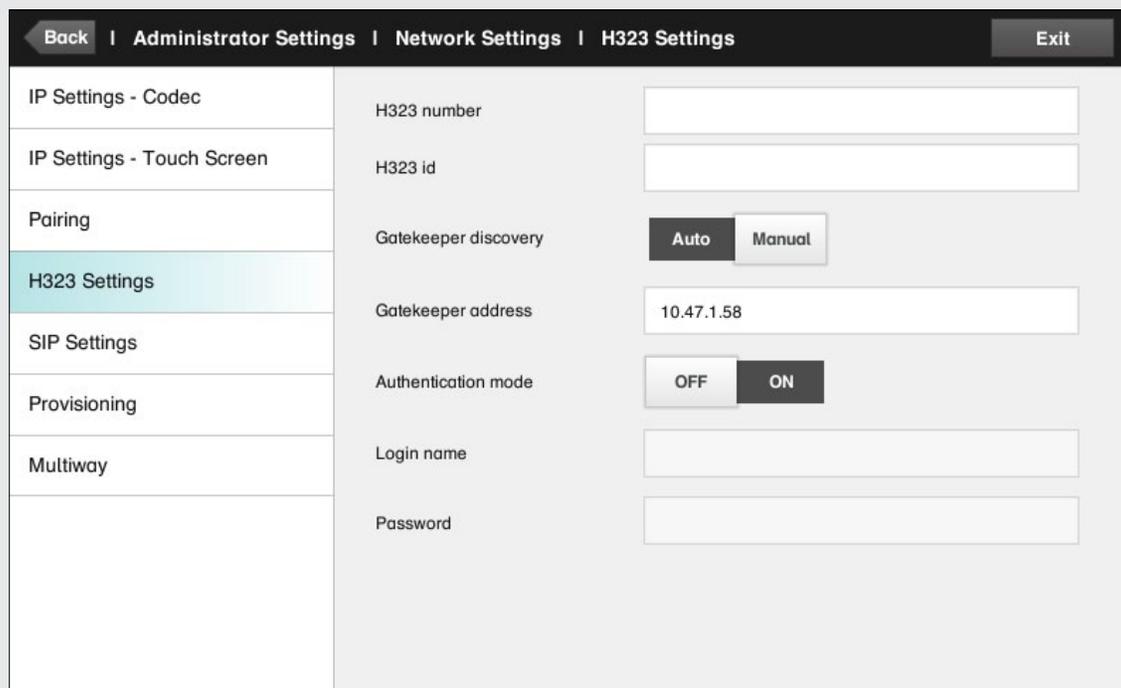
- An **H.323 alias**.
- Your **H.323 id**.
- **Gatekeeper discovery (Manual or Automatic)**.
- The **Gatekeeper address** must be specified by you if discovery has been set to manual.
- **Authentication mode On or Off**. If set to *On*, the video system will send **Login name** and Password to the Gatekeeper for authentication.

In addition there are:

- Two fields to enter **Login name** and **Password**. The alphanumeric keyboard will appear whenever needed.

Be sure to:

- Tap **Save** to put changes into effect.



Back Administrator Settings Network Settings H323 Settings		Exit
IP Settings - Codec	H323 number	<input type="text"/>
IP Settings - Touch Screen	H323 id	<input type="text"/>
Pairing	Gatekeeper discovery	<input checked="" type="radio"/> Auto <input type="radio"/> Manual
H323 Settings	Gatekeeper address	<input type="text" value="10.47.1.58"/>
SIP Settings	Authentication mode	<input type="radio"/> OFF <input checked="" type="radio"/> ON
Provisioning	Login name	<input type="text"/>
Multiway	Password	<input type="text"/>

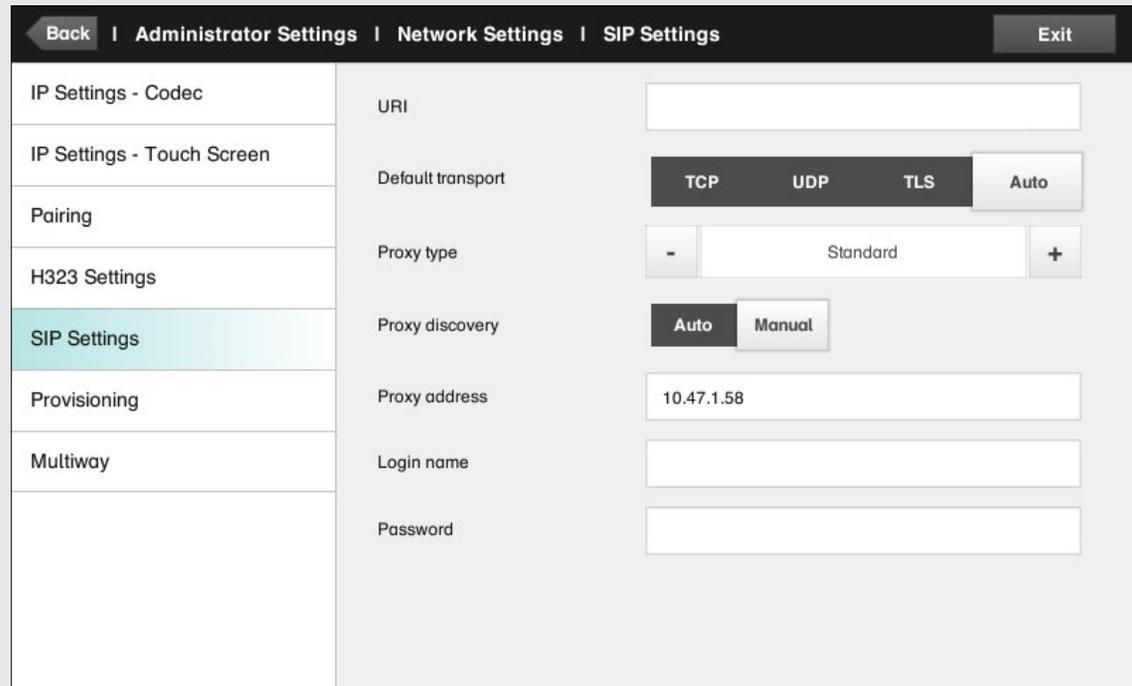
Administrator settings–SIP settings

The **SIP settings** pane lets you specify:

- Your **URI**.
- The **Default transport layer**, this can be set to **TCP**, **UDP**, **TLS** or **Auto**.
- The **Proxy type** can be set to **Standard**, **Alcatel**, **Avaya**, **Cisco**, **Microsoft**, **Nortel**, **Experimental**, **Siemens**.
The experimental setting is for testing purposes.
- **Outbound** is not used in this version.
- **Proxy discovery** can automatic or manual. In the case of manual the proxy address must be specified by you.
- **Login name** and **Password** is required by the VCS.

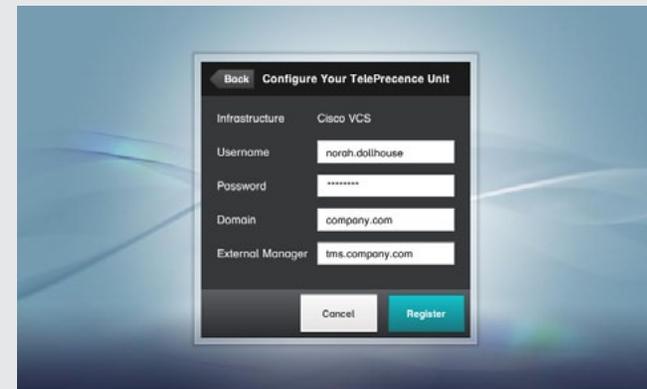
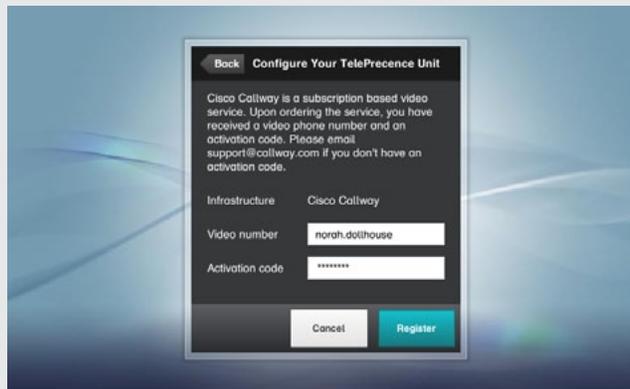
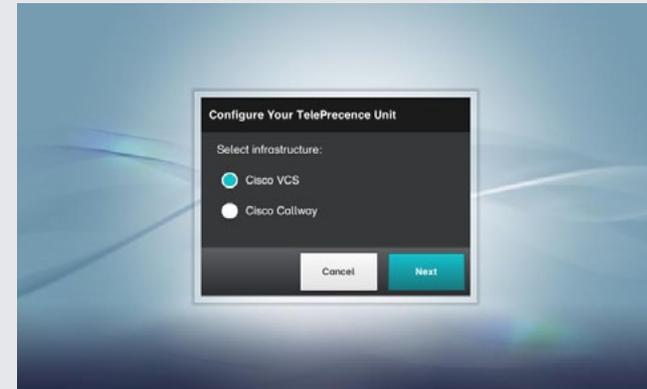
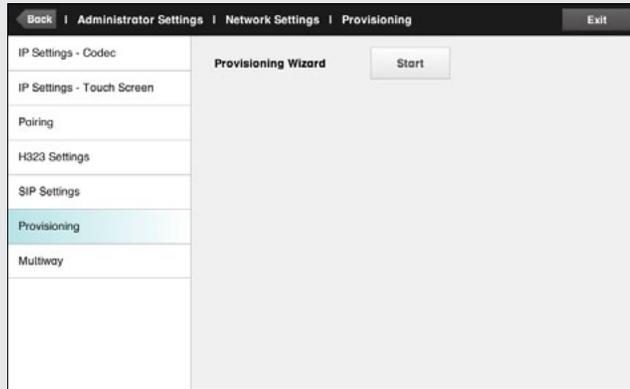
Be sure to:

- Tap **Save** to put settings into effect.



Administrator settings—Provisioning

Provisioning connects you to Callway or VCS. When either of these were ordered and received from Cisco you should also have obtained the necessary information and codes. Just follow the wizard.

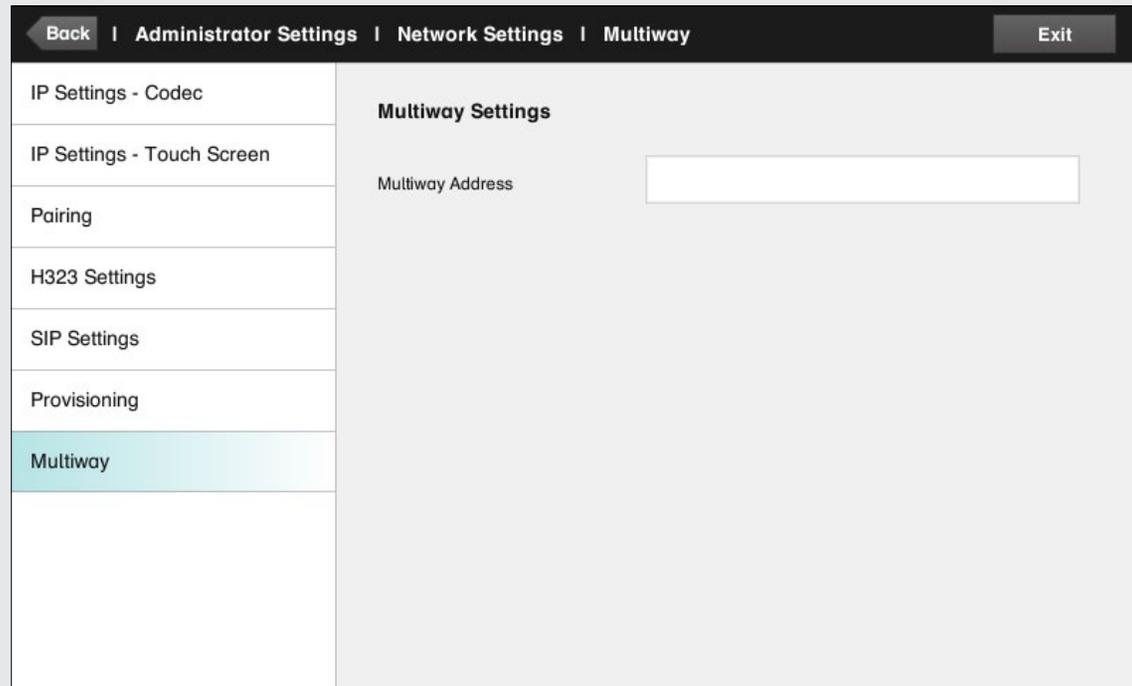


Administrator settings—Multiway Settings

All endpoints using the TC series software offers Multiway as a means of creating video conferences with more than just two participants.

Note that a successful use of Multiway requires the presence of certain infrastructure products and installations. If in doubt, consult your Cisco partner.

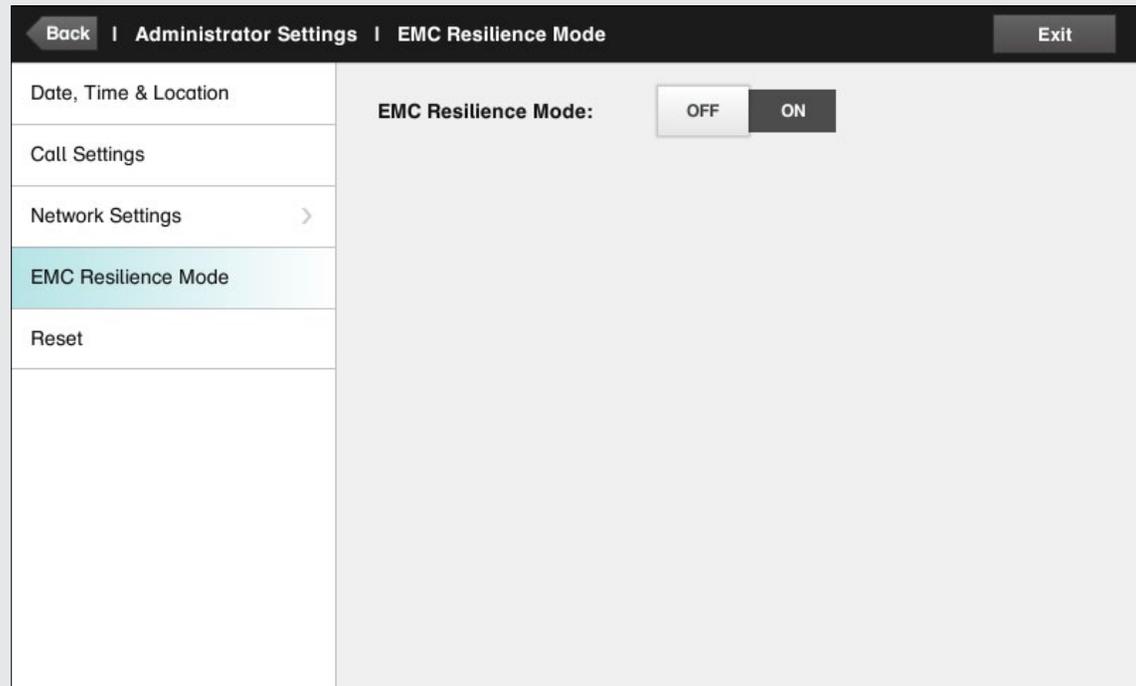
This page of the Settings offers the ability enter the path to the Multiway enabled MCU. This is required to make the Multiway functionality work.



Administrator settings—EMC Resilience mode

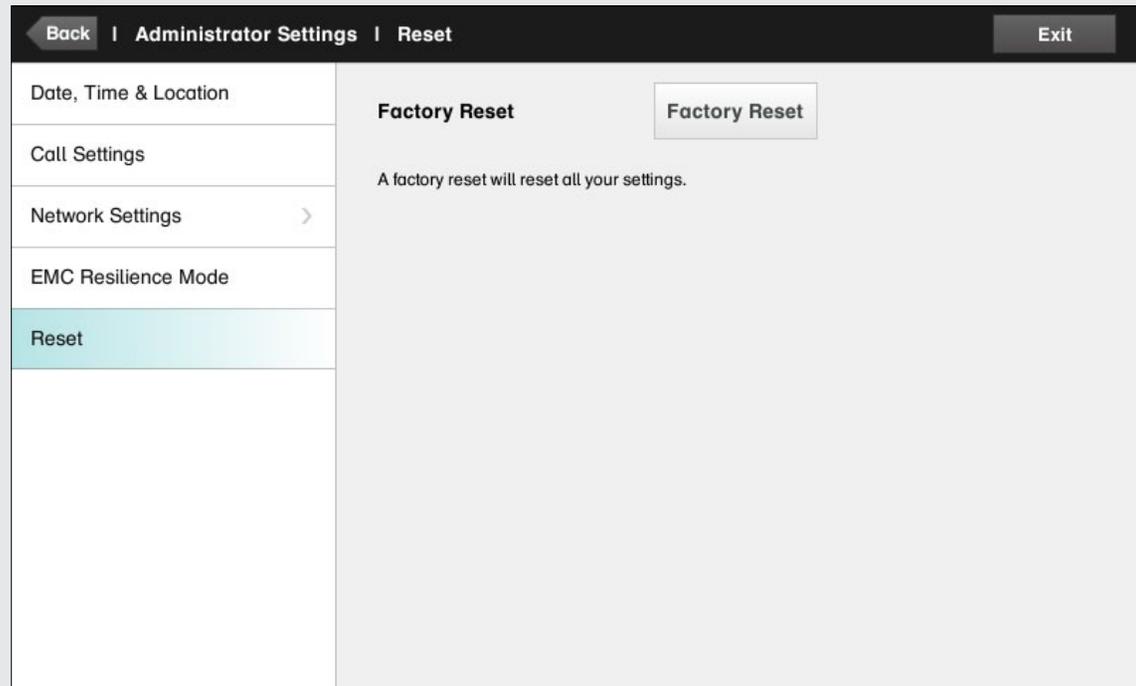
If the Touch controller is used in environments with considerable amounts of electromagnetic noise present, you may experience an appearance of false signals—as if someone tapped the Touch controller when nobody obviously did so.

To cope with this you may set the **EMC Resilience Mode** to **On**. You must then press and hold for a little while, rather than just tap, in order to make the system aware of your tapping. This will avoid the appearance of false signals.



Administrator settings—Reset

You may want to reset your video system. Note that you will lose all configurations, the call history and your local list of contacts. Release keys and options installed will be retained.



THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.



On our web site you will find an overview of the worldwide Cisco contacts.

Go to: <http://www.cisco.com/web/siteassets/contacts/index.html>

Corporate Headquarters
Ciso Systems, Inc.
170 West Tasman Dr.
San Jose, CA 95134 USA