Total Connect[™] 2.0 Online Help Guide



Hints for use:

- After logging in, hit F11 to toggle full screen mode.
- Hover over icons for tool tip help.

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Before you start

Total Connect and your web browser

Total Connect works with all the popular web browsers. However there are some requirements based on operating system, browser and add-ons such as QuickTime and Flash. To ensure a smooth experience please check the web browser requirements.



Click for web browser requirements

Total Connect and IP video

For those users that have video services (IP cameras), please take the time to install/configure QuickTime player. This is necessary to view streaming video.

Click to configure the QuickTime player

In addition, we have a special topic on how to improve video captures using your IP cameras.

Click to learn more about improving video captures

IP camera firmware updates

As products improve the firmware for an IP camera may need to be updated. Typically these changes improve performance and response times, and may even add a minor feature.

Click to learn more about updating the camera firmware

New features

We've added a lot of new features and convenience items for a more connected experience with your security system. <u>Note that only those features that your system supports will appear</u>. Let's take a quick look at the new features.



5 Day Forecast – This is based on the security system's ZIP code, and is especially useful for multiple locations that span different regions.

News, **Traffic**, **and other information** (LYNX Touch L5100 only) – Optional pushed content based on the ZIP code and appears on the control display. The traffic information covers a 50 mile radius around the security system's location. (*Contact your security provider to get this optional "Information Services" feature.*)

Messages (LYNX Touch L5100 only) – These are security provider information messages that keep users abreast of the latest new products, features, technology upgrades, and special offers. Since there are a lot of new products and features in the pipeline this is an excellent way of staying informed.

Security

Security module – The keypad is now more compact, and we added detailed zone status and zone bypass control. (Not available for LYNX Plus L3000, or LYNX Touch L5000.)

Events, Rules & Notifications

Events, Rules & Notifications module – Now includes automation events for the LYNX Touch L5100 series control. We also added the ability to schedule the notification of events.

Users

Users module – To support automation, you can grant/deny access to the automation devices for each user. Further you can sync users between the control panel and Total Connect. (Not available for LYNX Plus L3000, or LYNX Touch L5000.)

Locations

Location module – Besides the normal options, you can now <u>sync panel data</u>, <u>configure information services</u> and add/edit a <u>slide show</u> for each location. The "Slide Show" feature is for those security systems that support picture slide shows (such as the LYNX Touch L5100 series) and is functional only when using Wi-Fi or the internet. (*Contact your security provider to get this optional "Information Services" feature*.)

Automation

Automation module (LYNX Touch L5100 only) – This module supports Z-Wave automation devices. Using Total Connect you can control the system's automation devices like; thermostats, lights, outlets, door locks, shades, etc. In addition you can create "scenes" to control your premises' automation devices when leaving, entering, going on vacation, or other occasions.

Synchronizing data

Syncing certain features is required to assure the <u>Total Connect</u> data and the <u>Security System</u> data are the same. There a few different "Sync" functions dependent on what type of security system you have. Sync requirements for the various security systems are defined below:

Sync Requirements	
LYNX Touch L5100	 Security Sync is done at the Location module. Total Connect will prompt you that a sync is required. When a sensor is added or removed. When a sensor name is added or changed.
	 User Sync is done at the <u>User</u> module. Total Connect will prompt you that a sync is required. When a user code is added or changed in Total Connect or at the LYNX control. The Master user in the LYNX control is assigned as the "Administrator" user in the Total Connect "User" module. This user must have the "Enable User Code Sync" check box enabled for the sync to work.
	 Automation Sync is done at the Location module. Total Connect will prompt you that a sync is required. When a device is included or excluded. When a device name is added or changed. When a "Scene" is added or changed at Total Connect. When a "Rule" or "Schedule" is added or changed at Total Connect. When a thermostat schedule is added or changed at Total Connect.
LYNX Touch L5000 LYNX Plus L3000	 Security Sync is done at the Location module. When you initiate a sync, you will be prompted for the Installer Code. When a sensor is added or removed. When a sensor name is added or changed. User Code management is not available for these products.
VISTA (TC2.0 compatible)	 Security Sync is done at the Location module. When you initiate a sync, you will be prompted for the Installer Code. When a sensor is added or removed. When a sensor name is added or changed.
	 User Sync is done at the User module. When a user code is changed at Total Connect. The Master user in the VISTA control panel is assigned as the "Administrator" user in the Total Connect "User" module. This user must have the "Enable User Code Sync" check box enabled for the sync to work.
	If a user code is changed at the VISTA control panel, Total Connect will not prompt you to perform a Sync. If you feel a "Sync" is required initiate the command to update Total Connect with the latest data.

Customizing your layout

You can customize the look of Total Connect by rearranging the modules. Simply drag the module's title bar to the desired position. This can be done with the module either expanded or collapsed.



Information area

This area provides weather and messages. This information is based on the security system's location. Click on the weather to pull up a 5-day forecast, or click on the message envelope to read important messages. These messages are from you security system provider and relate to service calls, new products, upgrades, and special offers.

	Fotal Connect [™] 2.0		Babylon Office	50° 41° Hum Femp 20 20 20
Getting your mobile apps			My Profile Mobile Apps	Help Log Out
Honeywell mobile apps are av or BlackBerry mobile devices.	vailable for your Apple, Andr Just click on Mobile Apps.	roid		

Security module

You can toggle between a quick look at your security system's status, or bring up a keypad to control your security system.



Events, Rules & Notifications module

This enables you to view events that result from your; <u>security system</u>, <u>rules & notifications</u>, <u>IP video cameras</u>, and <u>automation devices</u> (Z-Wave devices).

<u>Security events</u> are stored for 90 days, and <u>Video events</u> are stored for 90 days or a maximum of approximately 100 MB. In either case, older events are deleted to make room for new events.

Recent Live events.	Search Filter.	Click to set up event notifications.
-	Events, Rules & Notifications	Search Admin Logs Setup
Disarmed 03 / 13 / 2012 09:55:14 AM EDT Panel User To Thermo Heat Set Point - Main Thermo 5 03 / 12 / 2012 07:59:46 AM EDT Automation P	Toggles between Live 5 Degrees F Events, and Admin Le	e ogs. 2 6 3
Video Event 03 / 12 / 2012 06:29:47 AM EDT Office Camera	a 1	
Click to play video event.	Enable note to Enables lockin to prevent de Click to hi	s attaching a o the event ng the event letion. de the event
Filtering events		
After clicking the Search icon, the	following choices appear.	
Search Filter. –		Check to show all hidden events.
-	Events, Rules & Notifications	🚹 Live Events 🛛 🗃 Admin Logs 🛛 🖓 🗲 Setup
Type All	Start Date 01/18/2012 End Date 04/18/2012	12 T AM PM
Sensor Open - Sensor 2 : Front Door 04 / 10 / 2012 11:33:16 AM EDT Security Pane	el	🔽 🔓 🧋

Switch Off - Outlet 1

Setting up event notifications

This is where you choose which events will be reported to a particular user group.

Before setting up event notifications for "Sensor Open" or "Sensor Close" conditions, ensure a session with the security system's Control Panel is not active. The best way to assure this is to log-off of Total Connect, then log in again to setup the event notifications.

Take the time to explore each notification category and become familiar with the event types that can trigger notifications.

Event categories may have expandable sub-categories. Categories that are not supported by your security system will not appear. Further, the Admin category will not appear if the user does not have Admin rights.

Example 1 – System Event Notification

In the example below; a Security system event (AC Loss) was chosen to notify the Default Group of users. When an AC Loss occurs, each member of the Default Group will be notified.

1. On the Events, Rules & Notifications bar, click the Setup icon.





- 3. From the <u>Security > System</u> event category, choose the event (AC Loss) to be notified of.
- 4. At the right, click **Notification**. The notification info window appears.
- Enter a <u>Subject</u> name for the notification. Then from the <u>Send To</u> drop-down menu, select the user group to notify. (Ensure the **Enabled** box is checked.) To add another user group to be notified, click **Notification** again and repeat.
- 6. Repeat for all events that require notifications.
- 7. Click **Save**. The "Default Group" will be notified whenever an AC Loss condition occurs.

Example 2 – Sensor Open Event Notification

In the example below; a Sensor Open condition (Flood) was chosen to notify the Default Group of users. This type of notification might be used when you want to be notified when a security cabinet, special room, flood or other sensed condition within the premises occurs.

When the Sensor Open condition occurs, each member of the Default Group will be notified.

1. On the Events, Rules & Notifications bar, click the Setup icon.





- 3. From the <u>Security > Sensor Open/Close</u> event category, choose the event (Flood) to be notified of.
- 4. At the right, click Notification. The notification info window appears.
- 5. Enter a <u>Subject</u> name for the notification. Then from the <u>Send To</u> drop-down menu, select the user group to notify. (Ensure the **Enabled** box is checked.) Since this is a Flood condition, you would always want to be notified, therefore at the <u>Sched/State</u> drop-down field select **Always**. To add another user group to be notified, click **Notification** again and repeat.
- 6. Repeat for all events that require notifications.
- 7. Click Save. The "Default Group" will be notified whenever a Flood condition occurs.

Example 3 – No Disarm Event Notification

In the example below; a No Disarm event was chosen to notify the Default Group of users. This type of notification might be used when you want to be notified when a child is due home from school by a certain time; and did not arrive at the home. When the No Disarm condition occurs (by the specified time), each member of the Default Group will be notified.

1. On the Events, Rules & Notifications bar, click the Setup icon.





- 3. From the Security > Arming event category, choose the event (Disarmed) to be notified of.
- 4. At the right, click Notification. The notification info window appears.
- Enter a <u>Subject</u> name for the notification. Then from the <u>Send To</u> drop-down menu, select the user group to notify. (Ensure the **Enabled** box is checked.) Since you want to be notified if this event DOES NOT occur, ensure the **Notify me when this event does not occur** is selected.
- 6. Since this is a time dependent event, click the Sched/State Edit button to setup the schedule.

-		Events, Rules & Notifications	
	New Schedule 2 + Add Schedule	Name Arrive Home Days Weekdays Start Time 4 00 End Time 4 30 Me PM End Time 4 Delete	
		Save X C	Cancel

- 7. Set the schedule parameters, then click **Save**.
- 8. The "Default Group" will be notified whenever a Disarmed condition DOES NOT occur by 4:30 pm on any weekday.

Example 4 – Video Triggered Event Notification

In the example below; a video camera will detect motion when the security system is armed away. Any detected motion will be used to trigger a notification to the Default Group of users. This type of notification might be used when you want to be notified if there is motion in a store after hours.

When video motion occurs, each member of the Default Group will be notified.

NOTE: For configuring the camera become familiar with the "*Edit camera settings*" topic, and particularly the information on "*Event Detection Areas*" as needed.

1. On the Events, Rules & Notifications bar, click the Setup icon.





- 3. At the left, choose the event category <u>Video > Video Events > Camera 3</u>.
- 4. From the Sched/State drop-down field, choose Armed Away.
- 5. The "Default Group" will be notified whenever camera 3 detects motion when the security system is Armed Away.

Example 5 – Scheduled Event Notification

In the example below; when the High Value Tool Room is opened during the night shift, a notification will be sent to the Default Group of users. This type of notification might be used when you want to be notified of an event that might occur during a certain time schedule when the security system is disarmed. When this event occurs (during the scheduled time), each member of the Default Group will be notified.

1. On the Events, Rules & Notifications bar, click the Setup icon.



2. You start by picking from the event categories; Security, Video, Automation, GPS, Admin, or Schedules.



- 3. From the Security > Sensor Open/Close event category, choose event Sensor Open, then HV Tool Room.
- 4. At the right, click **Notification**. The notification info window appears.

-	- Events, Rules & Notifications				
	Arming Sensor Open/Close	1 : Door	Subject	Sensor Open - HV Tool Room	
	Sensor Open	2 : Front Door 2	Send To	Default Group	
•	Sensor Closed	3 ; HV Tool Room	Sched / State	Always Edit 🛞	
	Sensor Left Open			Notify me when this event occurs Notify me when this event does not occur	
	System (Enabled	d Delete	
Č			+ Notificati	ion + Trigger Scene + Video Capture	
				Save X Cancel	

5. Since this is a time dependent event, click the Sched/State **Edit** button to setup the schedule. Click **Add Schedule**. The schedule window appears.

	Events, Rules & Notifications
New Schedule	Name HV Tool Room Days Daily Start Time & 00 & AM @ PM End Time 11 & 55 & AM @ PM
	Save X Cancel

- 6. Enter a Name for the schedule (such as HV Tool Room). Then set the schedule parameters and click **Save**.
- 7. Repeat steps 2 thru 4.

_	- Events, Rules & Notifications						
	Arming Sensor Open/Close		1 : Door		Subject	HV Tool Room	
	Sensor Open		2 : Front Door	2	Send To	Default Group Ed	it 🐉
	Sensor Closed		3 : HV Tool Room	1	Sched / State	HV Tool Room Ed	it 🖉
	Sensor Left Open				9) Notify me when this event occurs	
	Sensor Other						
-					Enabled	×	Delete
Ò					+ Notification	on + Trigger Scene + Video	Capture
						Save	Cancel

- 8. Enter a <u>Subject</u> name for the notification. Then from the <u>Send To</u> drop-down menu, select the user group to notify. (Ensure the **Enabled** box is checked.)
- From the Sched/State drop-down menu, select the schedule (i.e., HV Tool Room) you just created then click Save. The "Default Group" will be notified whenever the High Value Tool Room is opened on the night shift.

Users module



Adding or editing users

Notes:

User Name: 6-80 character length (not case sensitive) Password: 6-32 character length (case sensitive) Valid Entries: 0-9, A-Z and ? ! @ # \$ % ^ * - _ = + . 4. Enter the control **Panel User** number assigned for the user. This is for email and event logs when the system is armed/disarmed and will display the user's first and last name.

If the <u>Enable User Code Sync</u> is checked, the "Panel User" field will be grayed out and the "Panel User" number cannot be changed.

5. Enter the 4-digit User Code, so this user will not be prompted for it when arming / disarming the security system. Check the desired boxes to grant access to devices.

If master user, refer to the Enable User Code Sync Rules on the next page.



User Rights	
Administrator	Admin rights grant the ability to add and control other users as well as to configure and edit notifications.
Security Professional Access	Allows the security professional one time access to the users Total Connect account with full access to edit settings and help troubleshoot problems. (User codes cannot be changed, and video cannot be viewed.) Once access is granted the Master user will receive an email. The granted access will expire after 60 minutes.
Enable User Code Sync See detailed rules below.	Allows you to manage panel users from Total Connect. Note, the LYNX Touch L5000, and L3000 do not allow managing users.
Prompt for user code	When checked the user must enter their panel User Code.
Display User Codes	When checked the Panel User number and User Code are displayed.

Enable User Code Sync Rules

Only the Master User that is assigned to the control panel can synchronize user codes. When synchronizing users for the first time, the Master User Code in the Total Connect database must match the Master User Code programmed in the security system's control panel.

When the Master User changes a user code and performs a sync, a successful change can be verified by checking the <u>Events Rules & Notifications</u> (Admin Logs) for a synchronization event.

User Synchronizati 05 / 22 / 2012 01:41:27	on Successful IGSMV and V20P
LYNX Touch L5100	If the Master User is enabled for <u>User Code Sync</u> , any user they disable cannot log into Total Connect, and will be deleted from the control panel.
	If the Master User is NOT enabled for <u>User Code Sync</u> , any user they disable cannot log into Total Connect, but will be able to use the control panel.
LYNX Touch L5000 LYNX Plus L3000	If the Master User is NOT enabled for <u>User Code Sync</u> , any user they disable cannot log into Total Connect, but will be able to use the control panel.
VISTA (TC2.0 compatible)	If the Master User is enabled for <u>User Code Sync</u> , any user they disable cannot log into Total Connect, and will be deleted from the control panel.
	If the Master User is NOT enabled for <u>User Code Sync</u> , any user they disable cannot log into Total Connect, but will be able to use the control panel.

Email Definitions	
SMS (short message service)	Limited to under 160 characters, this is the most basic concise message. It arrives along with the users other text messages.
	This is a good choice for users that just want the most brief notification, and work extensively with text messaging.
Text Email	A very basic email that does not contain any formatting, or graphics. It may contain an internet link.
	This is a good choice for basic cell phones that support email.
HTML Email	A feature rich email that exhibits text formatting, graphics and anything else that may be contained on a web page.
	This is a good choice for smartphones where the user prefers a rich HTML presentation.
Text w/ Attachment	A very basic email that does not contain any formatting, or graphics. It may contain an internet link, and may contain an attachment.
	This is a good choice for smartphones where the user prefers brief condensed emails but may want to view attachments.
HTML w/ Attachment	A feature rich email that exhibits text formatting, graphics and anything else that my be contained on a web page. This choice allows attachments.
	This is a good choice for smartphones where the user prefers a rich HTML presentation with the ability to view attachments.

Creating an event notification group and adding members

This is where you configure which notifications are sent to each user group. Some important points are:

• Each member must be assigned to a group (a group can contain one or more members). Also the master user is a predefined group (default group).

You can select only certain

- Within a particular group you can choose ALL members, NO members, or only certain members.
- The notification list can be enabled or disabled as needed.
- 1. Select from an existing group or click Add Group.
- 2. Enter a <u>Name</u> for the group, then check **Enable This List**.
- 3. If desired, select only certain members within the group.
- 4. Click Save.

		members in a group.	
This Location Only Synchronize Users	Users		
Phil Chris New Notification List Safety Team + Add Group	Safety Team Enable This List Select All Select NONE Send Test Email to Group X Delete	Chris Phil jim	
		Save	X Cancel

Locations module

This is where you can edit information on a particular location.

Configure Information

Edit Slide Sho



Fahrenheit

Celsius

(GMT-04:00) Cuiaba

(GMT-04:00) Santiago

4. Click Save.

Save

(GMT-04:00) Georgetown, La Paz, Manaus, San

X Cancel

Configure information services

This feature allows you to add weather information to the Total Connect information area, and content such as weather, news, traffic, and notes to the LYNX Touch L5100 display.



Edit slide show

(Contact your security provider to get this optional "Information Services" feature.)

This tool supports the LYNX Touch L5100 control slide show feature. It allows you to add, crop, and delete photos. Pictures are cropped to 480 x 272 pixels.



 Click to add a picture from your PC.

- 2. Click "Choose Photo" and navigate to the file on your PC.
- **3.** Position and resize the crop box.



4. Click Save.

- The files must be either .JPG or .PNG and under 2 MB.
- Up to 13 MB of space is available.
- The LYNX Touch L5100 must be communicating using Wi-Fi.

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Automation module

This module is for those security systems that support Z-Wave automation devices. Security systems such as the LYNX Touch L5100 support Z-Wave automation devices.

Automation allows control of door locks, lights, outlets, shades, and thermostats. In addition to manual control of these Z-Wave devices through Total Connect you can create a "Scene" that would control a group of Z-Wave automation devices when a specific condition occurs. (Control of automation devices is restricted to users that are granted permission. See the topic "*Users*" for more information.)

Conditions such as arming and disarming a security system can trigger a "Scene" to be run.

Let's look at the Automation module.



In the next topics we will explore Thermostat scheduling and creating an Automation Scene. Note, that whenever you save a created or edited a scene you will receive a temporary pop-up reminder to synchronize your panel. This will send the new scene information to the control panel.





After getting familiar with the Automation module, please read the "*Automation helpful hints*" subtopic later in this document.

Thermostat scheduling

- 1. Click the clock icon to open the thermostat scheduling.
- 2. The scheduling window appears.



If the temperature falls outside the threshold limits, an email notification is sent. (Needs to be setup, see the *"Setting up event notifications"* topic.)

Drag the slide buttons to set the time.

Click the slide button to pop up a temperature setting box.

In this example since <u>Week Days</u> was selected, your settings will apply to all the highlighted days.

Select the days of the week to set.

Another choice is to just load the "Energy Star Defaults" for – your thermostat.

501				
-		Automation		
	Thermo	ostat schedule for Main Thermo		
Monday				Threshold
Tuesday				Monitoring
Wednesday				-
Thursday				81°
Friday				
Saturday	Awake			
Sunday	6:30 AM			
 3 AM	65° 🔽 85° 🔽 Indi	12 РМ З РМ 6 РМ 9 РА	а 12 ам	45°
	Enable			-
Weekdays	Weekends All Days	Heat Set Points Cool Set Po	ints Times	
Load Energy Star D	Defaults Load Therr	mostat Schedule	Save	X Cancel
		Click	and hold any of	f thasa

This appears when there are multiple thermostats. It enables you to duplicate the schedule of the first thermostat to other units. Click and hold any of these - momentary buttons to display specific information.

With the momentary "Heat Set Points" button depressed, the temperatures are displayed.



Creating an automation scene

Here we will use the Automation module to create a simple scene to control your automation devices during a vacation. In this scene you want the following scenario to take place when you leave the premises for a vacation:

- When you leave, the automatic front and rear door locks will lock.
- The living room light will be dimmed to 80%.
- The kitchen light will be dimmed to 80%.
- The porch light will be dimmed to about 25%.
- The electric porch heater will be set to off.
- The main thermostat will be set back to 62 degrees to save energy.

To create the Vacation scene:



1. Click **Create New**. Then in the Scene Name field, enter the name "Vacation", then choose an icon.



- 2. In the device area, ensure the ALL filter is activated so you can see every device. Use the scroll left and right arrows if necessary to find the automation device.
- 3. Since we want the front and rear door locks in the locked mode, check the box by each lock to include it in this scene. Click the front and rear door lock icons to attain the LOCKED state.
- 4. Find the living room light device, and check the box to include it in the scene. Set the dimmer slide to about 80%. Repeat this for the kitchen light, and the porch light, using the dimmer slide to the desired illumination level.
- 5. Find the porch heater and check the box to include it in the scene. Click the icon to attain the OFF state.
- 6. Look at each device and ensure only those devices to be included in this scene have their box checked.
- 7. Set the thermostat to 62 degrees and click the hold button.
- 8. Save the scene.
- 9. Click the green Run button to verify the automation devices action. Make any changes as necessary.

Using the scene:

When you leave for vacation you would arm the security system in the normal manner. Then after leaving the premises use your smartphone or other device to log into Total Connect. At the Automation module, select the "Vacation" scene and click run.

Automation helpful hints

There are many configuration options in the Automation module, some can be configured at the LYNX Touch control, but it is much easier to perform all these tasks from Total Connect. Manual control of your automation devices is easily done from the automation module. The same is true for creating and editing simple scenes.

However there are times when a more detailed scene is desired. As you get familiar with creating and running simple scenes, you will be ready to create more detailed scenes. Below are a collection of functions that more advanced users should be aware of.

General:

- Only those features offered by the Z-Wave device will appear.
- When necessary, left and right scroll arrow buttons will appear to view more devices.

Thermostat:

- Thermostat name is limited to 13 characters.
- Thermostat and Fan mode buttons will toggle through their different modes. If the mode button is held a pop-up list of possible modes will appear.
- When auto mode is selected, Dual set points will appear.
- When a thermostat set point is changed, the thermostat will stay at that temperature until the next set point time.
- If the Hold button is selected, the thermostat will stay at that temperature until either the hold button is pressed again, or any other thermostat property is changed. In that case the Hold button will deselect.

Locks, Switches, Dimmers, and Outlets:

- These devices can be dragged to the desired order.
- An "X" will appear for any device that is not connected.

Scenes:

- You can create up to 20 scenes with a total limit of 47 devices. Each scene is limited to 4 locks, 3 thermostats, and 40 lights/switches. (Actual limits are determined by the LYNX Touch control.)
- After creating a new scene, use the green run button to test the scene.
- When in the "Quick Control" mode (button on the Automation module), the you will see a series of scenes. Just click on the scene to run it.



Video module

Total Connect lets you monitor up to six cameras, providing thumbnail images for each one (Thumbnails are updated every 10 to 20 seconds). In turn, each thumbnail image can be double clicked to open a resizable real-time streaming video viewer window.



The various cameras each have different features that can be controlled. When a particular camera is selected, only the Tool buttons for that model camera will appear.

The table below highlights the features of each internet camera model:

Camera		Features	
	iPCAM-WI Camera	wired or wirelessfixed lensvideo motion detection	
	iPCAM-WI2 Camera iPCAM-W12B	wired or wirelessfixed lensvideo motion detection	sleek designcomes in black, or white
	iPCAM-PT Camera	wired or wirelessfixed lensvideo motion detection	PIR motion detectionpan and tilt with presetsaux lighting
	iPCAM-WO Camera	wired or wirelessfixed lensvideo motion detection	PIR motion detectionoutdoor use
	ACU Wireless Analog Converter Unit	Allows any camera that outputs NTSC video to be used with Total Connect.	 provides a video output for a local NTSC video monitor

Refer to the topics that follow for details on the viewer windows, tool buttons and how to set your camera preferences.

Viewer windows

Working from the thumbnails you can open one or more viewer windows by double clicking the thumbnail. Each viewer window;

- displays video in real time.
- can be resized, and arranged by dragging.
- displays the tool buttons based on the camera features. For information on the tool icons, refer to the "Tool buttons" topic.



About Network Bandwidth . . .

Since the IP cameras are network devices, they depend on the network's ability to transfer data. This ability is referred to as bandwidth. Although you can stream up to 6 cameras you are limited by the network bandwidth supplied by your internet provider. In addition, be aware your <u>actual network bandwidth</u> will decrease depending on your local network traffic and transport servers.

There are three measurements that affect the quality of network service:

Upload Speed – The amount of data that can be transferred from the transmitting premises (where the cameras are located) in a period of time. This is measured in bits per second.

Download Speed – The amount of data that can be transferred from the receiving premises (where the Total Connect application is running) in a period of time. This is measured in bits per second.

Ping Time – Internet transfers do not go directly from the source to the destination server, instead they hop from available server to available server to reach the destination server. With each hop there is a response lag referred to as "Ping Time." Depending on the number of hops, this lag can add up.

To attain maximum video quality and frame rate from your IP camera it requires a transfer speed of 1.5 Mbps for both Upload and Download paths. Therefore to achieve this for six IP cameras it requires 9 Mbps for both Upload and Download paths. Many internet providers easily exceed this bandwidth.

If the necessary bandwidth is not available, the resolution and frame rate will decrease. If this situation occurs, consider having less viewer windows open. That will free up bandwidth for the important IP cameras you want to monitor.

Below are some examples of viewer windows.

Pan/Tilt Camera, initial view



Use the Enlarge button to bring up a larger dedicated viewing window.

Pan/Tilt Camera, expanded to full screen



The tool buttons displayed are based on the camera features.



- You may use the arrow buttons to position a PT (pan & tilt) camera.
- Use single clicks and allow time for the camera to attain the new position.
- Use the center Home button to command the camera to its home position.
- Refer to the detailed description in the "*Tool buttons*" topic.

Tool buttons

Button	Function
	How the camera's "Home" position is determined.
	• If no video detection areas have been set up, the camera's home position is centered in its vertical and horizontal axis.
	 If a video detection area has been set up, that view <u>now becomes the home</u> <u>position</u>.
	 When a camera has been moved to <u>other than the home position</u>, after 5 minutes of no movement the camera will always return to the home position.
	arrow buttons – Click to incrementally position the camera in a vertical or horizontal direction.
	center home button – Click to drive the camera to its home position.
	preset buttons 1, 2, 3, 4 – These buttons are used to quickly drive the camera to a preset watch area. (Up to 4 preset watch areas can be set.) Just "single-click" the button to go to the preset watch area.
	To set a preset watch area, use the arrow buttons to drive the camera to the desired area. Then press and hold the desired 1, 2, 3, or 4 button for about 3-seconds. A checkmark will briefly appear to confirm the preset is saved.
÷.	enlarge – Used to toggle the viewer window between full screen and previous view.
- 66 -	movie camera – Used to manually capture video clips. When clicked, a <u>10 second</u> <u>video clip</u> is captured, based on the pre-capture and post-capture settings stored in the camera. The video clip will be stored as an event, and may trigger an email notification if desired. (Refer to the " <i>Edit camera settings</i> " topic.)
	Note, if a scheduled period has been setup for video motion detection, this feature is restricted to the scheduled period. If no schedule has be setup, there is no restriction (operates 24/7).
	still camera – Used to manually capture still pictures. You will be prompted to save the picture if desired.
	light – Used to toggle on or off the camera's auxiliary lighting LEDs. Depending on the ambient low light conditions, the auxiliary LED lighting can improve video quality up to 15 feet.
	auto pan – Causes the camera to swing through its entire horizontal range. At the end of the panning motion, the camera will return to the starting position. After 5 minutes of no movement the camera will always return to the home position.
	stop/play – When clicked, this button toggles between stopping and starting the live video stream. When stopped, the video image is replaced by a blank screen.
	Note, if you inadvertently click on the live video screen, the video may go blank. You can use this button to restart the live video.

Edit camera settings

Note, the settings for each camera are configured separately. On each camera preview window there is a <u>Tool icon</u> in the lower right corner, click this icon to configure the camera. It is important to know that configuration settings are stored in the camera and are retrieved when a video session is opened.

To understand the various configuration settings we will look at the settings for a typical camera. Refer to the screen shots that follow to understand how to configure each camera settings. Most settings use drop-down menus or check boxes.



Name and Date/Time

You can assign the camera a descriptive name. Up to 15 characters may be used. The new name will appear when the next video session is initiated. You can also set your date and time preferences.

-		Video		
Name and Date/Tir	le	Camera Name:	PT Back	
Event Capture Set	ng	Time Zone:	(GMT-05:00) Eastern Time (US &	Canada)
Event Notification		12/24 Hour Format:	24 Hour	
Event Schedule		Date/Time Format:	YYYY-MM-DD	
Event Detection An	as	Adjust for Daylight Savings:		
Other Features		Timestamp Visible:		
			Sa Sa	ave X Cancel

Event Capture Setting

This enables you to define the video capture window.

-	Video	
Name and Date/Time		
Event Capture Setting	Attachment Type;	Video Clip
Event Notification	Pre-Capture Length:	5 Seconds
	Post-Capture Length:	5 Seconds
Event Schedule	Interval:	1 minute
Event Detection Areas		
Other Features		
		Save X Cancel

• Attachment Type – If you want an email notification, choose between sending a <u>Video Clip</u> or <u>Snapshot</u> attachment. Note, this choice also determines what will be stored in the Event History. If no choice is made, a Video Clip will be stored in the Event History.

- Pre-Capture and Post Capture Length These two settings determine the beginning and end of the 10 second period that is captured when motion is detected. For video a 10 second clip is captured, and for snapshots a series of 10 are captured.
- Interval Choose from 1 to 15 minutes before the next video motion can be captured. This setting helps reduce excessive notifications.

Event Notification – This enables you to set which Triggers will be used to cause certain actions. Depending on the camera type, features that are not supported will be grayed out. Triggers can be from a security system control panel Input, the camera's PIR detector, or video Motion. One or more may be selected.

-		Video		
Name and Date/Time	Triggered By:	Capture	Output Port	White Light LED
Event Capture Setting	Input:			
Event Notification	PIR:			
Event Schedule	Motion:			
Other Features				
			Save	Cancel

Choose the triggered input(s) that will capture video:

- Input Triggered by the security system's control panel. Such a trigger may come from a door opening, safe opening, etc. (This Feature is Reserved for Future Use.)
- PIR Triggered by the camera's PIR sensor. Will trigger on movement within the PIR sensor view. There are no masking, sensitivity levels or adjustments. DO NOT choose if Motion detection is going to be used.
- Motion Triggered by video analytics within four user defined "Event Detection Areas". Motion is determined by comparing current and previous video frames. DO NOT choose if PIR detection is going to be used.

Determine what action results from the triggered input:

- Capture The video or snap shot is stored in the Event History and can be sent as an email notification if desired.
- Output Port Connector port on the camera can be used to turn on light or sounder, etc. (This Feature is Reserved for Future Use.)
- White Light LED The camera's white light LEDs turn on for the 10 second video motion capture period.

Event Schedule – This allows setting schedules that define when a motion event can be detected. Schedules may be deleted by clicking the "X" adjacent to the schedule.

_	Video			
Name and Date/Time	Create Item:	Added	Schedules:	
Event Capture Setting	Start Time (hh:mm)	Every D	ay, 12:00 AM thru 08:00 AM	x
Event Notification		Every D	ay, 5:00 PM thru 11:55 PM	x
Event Schedule		M		
Event Detection Areas	Effective Time Frame:		After the camera's sched	lule is
Other Features	Weekdays (M-F)		set up, click Save.	
	Add Reset			
			Save X Cancel	

Event Detection Areas – This allows setting up to 4 detection areas where the video motion Activity Threshold can be adjusted. When an area is activated by checking the box, a transparent colored <u>Detection Area</u> will appear on the screen. You can drag and resize the box as desired. Click **Done** when all the areas are configured. Motion detected in any area will trigger a video event and store a video clip or series of snapshots.



NOTE: After setting up the detection areas, go to the topic "*Setting up event notifications*" and ensure all the desired notifications are enabled. Also refer to the next topic "*Improving video captures*" to learn how to get optimum capture results.

Improving video captures

Adjust the capture box to concentrate on the specific area – Think about the likely scenario where a person is going to enter or exit through a door. In the example below, the capture box frames the door area and a little more. This way the person becomes a larger percentage of the capture box, improving the capture results.



Be aware of a poor lighting, or a low contrast situation – This typically occurs outdoors at dusk or at night. The existing lighting might be a simple porch, pole lamp, or moonlight. In either case the contrast will be poor, and colors will be muted.

The same situation can also exist in a lobby or store area after hours when full lighting is not provided. These situations make for poor capture results.



Nighttime Scene – Improve capture success by:

- adding more lights
- distributing the lighting so as to reduce shadows
- using brighter lights

Dusk scene. Poor contrast and muted colors.





Dusk Scene – Improve capture success by:

- adding pathway lighting
- adding overhead flood lamps to fill shadows

Other Features

	Video	
Name and Date/Time	White Balance:	Auto
Event Capture Setting	Brightness:	Normal
Event Notification	Sharpness:	Normal
Event Schedule	Ceiling Mount:	
Event Detection Areas	Pan/Tilt Speed:	- O +
Other Features	Status LED Operation:	
		Save X Cancel

- White Balance, Brightness, Sharpness Enables adjusting the video parameters as desired.
- Ceiling Mount For cameras that are ceiling mounted, check the Ceiling Mount box to invert the image.
- Pan/Tilt Speed Allows choosing the camera panning speed. Note, a slower speed will give clearer video.
- Status LED Operation Uncheck this box to turn off the camera's status LEDs for stealth operation. Although the camera will appear as not operating, all functions are working.

Updating the camera firmware

If your camera is not running the latest firmware an <u>Update icon</u> will appear.



- 1. Click on the <u>Tool icon</u> in the lower right corner.
- 2. The <u>Firmware</u> update window appears.

-	Video
PTCam	
Firmware	The software update process should take approximately five minutes
Name and Date/Time	 During the update process the camera will not be available to view or respond to any user actions After the software update has completed the camera configuration settings
Event Capture Setting	may be restored to factory defaults Before proceeding please confirm your camera configuration settings Citied by ta presended as please and to return to provide a series of the setting section.
Event Notification	Click Ok to proceed or click cancel to return to previous screen
Event Schedule	
Event Detection Areas	Update
Other Features	
	Save Cancel

- 3. Click the **Update** button. A confirmation message appears. Click **OK** to the confirmation message to proceed.
- 4. During the firmware update process the video image will be replaced with a tool image. You can continue using other cameras. When the firmware update completes, normal operation for that camera is restored.

Video troubleshooting

If you are experiencing any difficulty with your video, please refer to the information below.

SYMPTOM – The thumbnails are working but there is no streaming video.

Cause: Your must have Apple QuickTime installed on your PC and updated to the latest version. Perform the following corrective steps. If you do not already have QuickTime Player installed please download and install it.

<u>http://www.apple.com/quicktime/download/</u> After the installation is completed and the PC has been rebooted, configure the player.

Configuring the QuickTime player

- 1. Open the player. Typically navigate **Start > Programs > QuickTime > QuickTime Player**.
- 2. From the **Edit** pull-down menu, navigate **Preferences > QuickTime Preferences**. The Preferences window appears.

QuickTime Preferences	
Register Audio Browser Update Streaming Advanced	
Streaming	
Transport Setup: Automatic	
RTSP Proxy Ser Custom	
Address: Port:	
Download Cache	
Size: 100 MB Empty Cache	
Video	
Safe mode (GDI only)	
DirectX Fnable DirectDraw acceleration	
Enable DirectDraw on secondary monitors	
Enable Direct3D video acceleration	
_ Media Encoding	
Enable encoding using legacy codecs	
Tray Icon	
Install QuickTime icon in system tray	
Media <u>K</u> eys	
OK Cancel Apply	

3. Select the **Advanced** tab. Then using the <u>Transport Setup</u> drop-down box, select **Custom**.

Streaming Transport	X
Transport Protocol:	HTTP
Port ID:	80 -
	OK Cancel

- 4. Ensure the <u>Transport Protocol</u> is set to **HTTP**, and the <u>Port ID</u> is set to **80**.
- 5. Click **OK**, then click **Apply**. Click **OK** to close.

SYMPTOM – Camera is not triggering on motion, or triggers too often.

Cause: A detection method must be selected or modified. Either PIR or Motion must be selected. If Motion is selected, then the camera analytics need to be adjusted. Perform the following corrective steps.

1. Log into Total Connect and open the "Video", then for the appropriate camera select the <u>Tool</u> icon.



2. Check the Event Capture Setting, Event Notification, Event Schedule, and Event Detection Areas settings.



You may have to adjust the <u>Pre-Capture</u> and <u>Post Capture</u> length settings. Use a test subject walking across the field to help in finding the best video capture parameters.

	-		Video		
	Name and Date/Time	Triggered By:	Capture	Output Port	White Light LED
	Event Capture Setting	Input:			
+	Event Notification	PIR:			
	Event Schedule	Motion:			
	Event Detection Areas				
	Other Features				
				Save	Cancel

Ensure that either PIR or Motion is selected. DO NOT select both.

PIR detection – works by using input from the camera's built-in PIR sensor. This is not adjustable.

Motion detection – works by analyzing frame-to-frame video differences. This is adjustable by clicking the EVENT DETECTION AREAS button, then adjusting the <u>Activity Threshold</u> for each detection area. Further attention should be given to the detection area size. See the guidelines below for setting the video analytics.

	- Video				
	Name and Date/Time	Create Item:		Added Schedules:	
	Event Capture Setting	Start Time (hh:mm)		Every Day, 12:00 AM thru 08:00 AM	x
	Event Notification	End Time (bb:mm)		Every Day, 5:00 PM thru 11:55 PM	x
	Event Schedule		🔘 АМ 🔘 РМ		
	Event Detection Areas	Effective Time Frame:			
	Other Features	Weekdays (M-P)			
		Add	Reset		
				Save X Can	cel

If you have an Event Schedule set up, be aware that triggering will only occur within the scheduled time frame.



In the Event Notification settings, ensure <u>Motion is selected</u> and PIR is NOT selected, then return to Event Detection Areas. The following screen appears to enable adjusting the Activity Threshold for each area. Using the information below, make the adjustments, then click **Done**.



- Adjusting the Activity Threshold to the + side will increase the amount of activity needed to trigger the camera.
- Select the position and size of each detection area carefully so as to exclude areas that may cause unnecessary triggering. Consider positioning tightly on the area, or a pathway that leads to that area.

- For indoor scenes, note that fans, curtains, changing light sources, shadows, and reflections off of other objects may produce false triggering.
- Consider repositioning the camera. The best detection is when motion is across the screen.
- When possible set the camera angle, and detection area height to avoid pets.
- For outdoor scenes, note that moving plants, and shadows may produce false triggering.

NOTE: In order for any change to take place you must click DONE to save the information for that camera.

Working with your Dealer/Installer to correct issues

There may be times when the quickest way to resolve a problem would be to grant permission for the Dealer/Installer to access you Total Connect account and check the configuration.

As a result of an issue or special configuration changes, your Dealer/Installer may contact you and ask that you grant them permission to access your account.

Be aware that this permission limits the Dealer/Installer to a 1 hour window for each session granted. During that session the Dealer/Installer CAN NOT view your video or passwords.

To grant permission:

- 1. Log into your TC2 account.
- 2. Open Users, and hover over the user. Click the Edit button.
- 3. Check the **Security Professional Access** box, and confirm the pop-up security message.
- 4. Click Save.



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