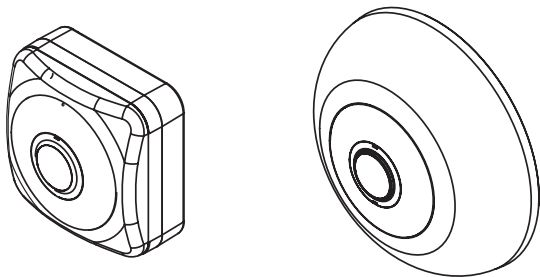


TAMRON®

Panorama Camera **180-View**

Model 130NT-P-CM

Owner's Manual - Setup



Thank you for using the TAMRON Panorama Camera 180-View. To get the best efficiency, read carefully all instructions in this manual before use, and keep this manual for reference. If you have any problems with this camera, contact your supplier to service.

● About the Owner's Manuals

The owner's manuals are organized into two books — this manual and the "Owner's Manual - Installation".

This manual explains how to set up the equipment and configure the image settings. For information on installing the equipment, see "Owner's Manual - Installation". Adobe®Reader® from Adobe Systems is required for reading the PDF file.

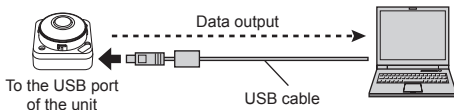
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Before Setting Up

Connecting the Camera to the Computer

Start up the computer, and connect the camera to the computer with a USB cable. Then turn on the power for the camera.



* Please supply your own USB cable.

Use caution not to pull on the the rubber cap on the the USB port too much, as it will completely detach. In addition, to maintain its water and dust resistance, always reattach the rubber cap when the camera after use, and check that it is flat on the main unit without any of it sticking out.

Operational Environment

Please check if your computer meets the requirements below:

Item	Operational Environment
Operating System	Windows XP Professional Version 2002 SP2/SP3, Windows Vista
RAM	256MB or more
Hard Disk Space	1GB or more

■ Motion-Detecting Alarm

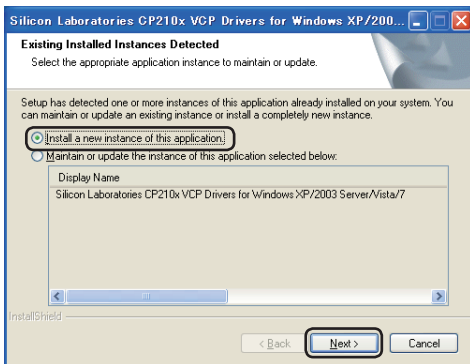
The alarm turns on when a moving subject is detected. The alarm output uses an NPN open collector output. Please use the alarm at a drive capability that is less than its maximum, 50 mA at DC 12V.

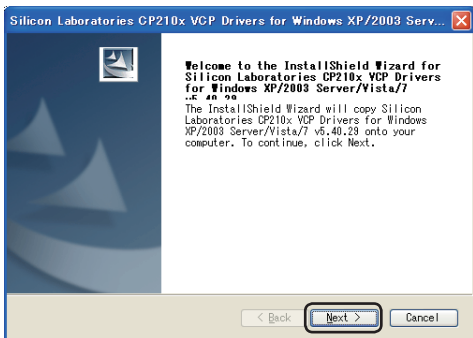
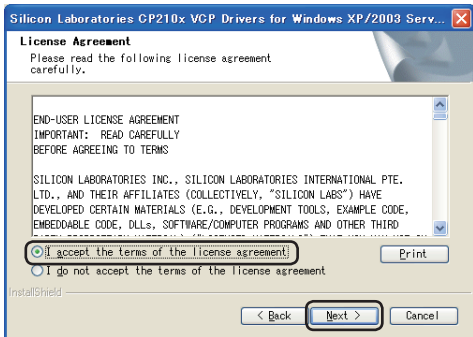
Installing the Software

1. Start the computer and insert the supplied CD-ROM into the CD-ROM drive.
2. Copy the following files from the CD-ROM to any folder on your computer.
 - 130NT-P-CM Parameter Setting Ver1.0.exe (camera controller software)
 - CP210x_VCP_Win_XP_S2K3_Vista_7.exe (USB/RS232C conversion software)
3. Double-click the file "CP210x_VCP_Win_XP_S2K3_Vista_7.exe".

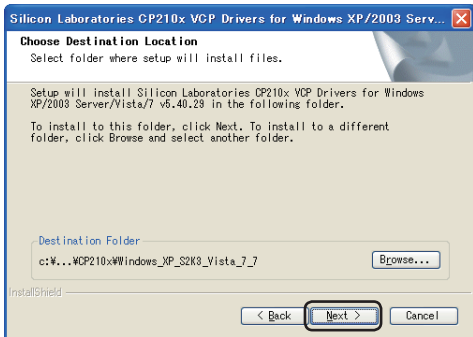


4. Select "Install a new instance of this application" and click [Next >].

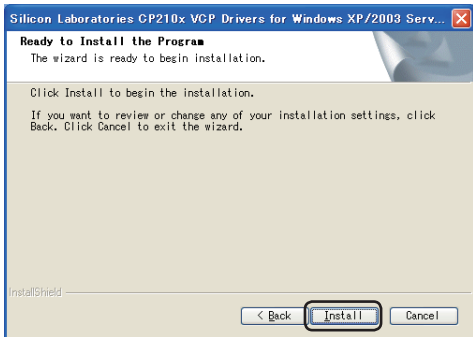


5. Click [Next >].**6. Select "I accept the terms of the license agreement" and click [Next >].**

7. Click [Next >].

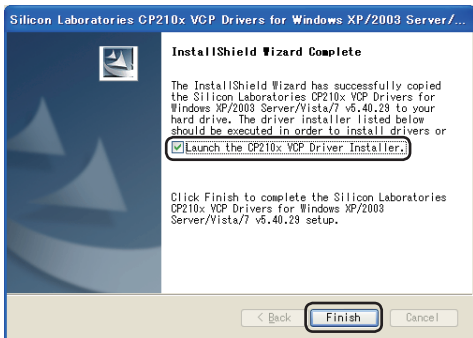


8. Click [Install].



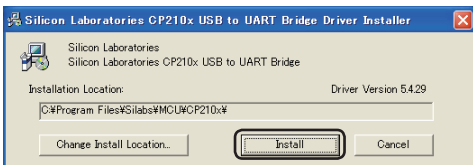
The installation begins.

9. Check that "Launch the CP210x VCP Driver Installer." is checked, and click [Finish].



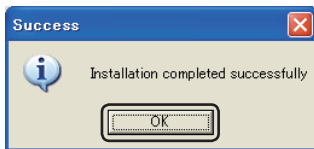
The driver installation window appears.

10. Click [Install].



The install complete window appears.

11. Click [OK].



12. Remove the CD-ROM from the CD-ROM drive.

■ Uninstalling

- On Windows XP

Click on this software from [Start] → [Control Panel] → [Add or Remove Programs] to remove the program.

- On Windows Vista

Click on this software from [Start] → [Control Panel] → [Uninstall a Program] to remove the program.

Starting the Software

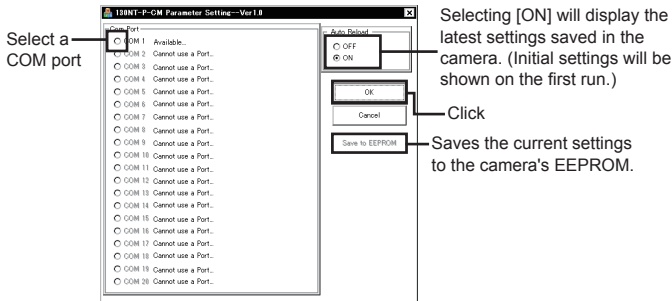
Turn on the power for the camera that is connected to the computer.

1. Double-click on the "130NT-P-CM Parameter Setting Ver1.0.exe" icon that you copied onto your computer.



A window for selecting the COM port appears.

2. Select the COM port connected to this computer, and click [OK].



The main configuration window appears.

■ Checking the COM Port to Use

- ① Right-click on [My Computer] and select [Properties].
- ② In the [System Properties] window, select [Hardware] → [Device Manager].
- ③ In the [Device Manager] window, verify that "Silicon Labs CP 11x USB to UART Bridge (COMxx)" is displayed under [Ports (COM & LPT)].

The COM port [comxx] can be used.

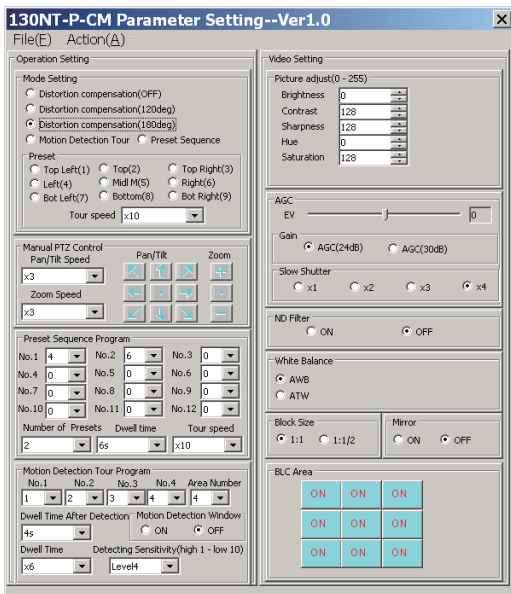
Caution

Make sure that the port in the Parameter Setting window matches with the computer.

If there is a mismatch, you will not be able to control the camera.

3. From the menu, select [Action (A)] → [Reload (R)].

The initial settings of the camera are loaded and reflected in the main configuration window.



To configure the settings, proceed to "Configuring the Camera and Image Settings" on page 12.

To Exit the Software

1. From the menu, select [Action (A)] → Write to [EEPROM (W)].

The settings displayed in the main configuration window are written to the EEPROM of the camera.

When the write process is complete, "Successfully Loaded" is displayed on the dialog box. Click [OK] to close the dialog box.

Note:

Performing a [Write to EEPROM] will overwrite the initial settings with the current settings. When performing a [Write to EEPROM], acquire the latest camera settings using [Reload (R)]. (The COM port must be set. For setting the COM port, see "Checking the COM Port to Use" (page 9).)

2. Click on the on the top right of the main configuration window.

If the message "Save to EEPROM?" appears, this means that the settings have not been written yet. Click [Yes].

When the write process is complete, "Successfully Loaded" is displayed on the dialog box. Click [OK] to close the dialog box.

The "130NT-P-CM Parameter Setting Ver1.0.exe" closes and finishes the configuration.

Creating a Backup File

1. From the menu, select [File (F)] → [Save file (S)].

The settings displayed in the main configuration window are exported and saved to a file.

Loading a Backup File

1. From the menu, select [File (F)] → [Open file (O)].

2. Select the backup file to load, and click [Open].

The settings are reflected in the main configuration window, and the settings are also updated in the camera.

Note: Do not load any file created by any other procedure than that described here.

Configuring the Camera and Image Settings

130NT-P-CM Parameter Setting--Ver1.0

File(E) Action(A)

Operation Setting

Mode Setting

- Distortion compensation(OFF)
- Distortion compensation(120deg)
- Distortion compensation(180deg)
- Motion Detection Tour Preset Sequence

Preset

- Top Left(1) Top(2) Top Right(3)
- Left(4) Midl M(5) Right(6)
- Bot Left(7) Bottom(8) Bot Right(9)

Tour speed x10

Manual PTZ Control

Pan/Tilt Speed Zoom

x3 [Left] [Up] [Right] [Down]

Zoom Speed [Left] [Up] [Right] [Down]

x3 [Left] [Down] [Right] [Up]

Preset Sequence Program

No.1 4 No.2 6 No.3 0

No.4 0 No.5 0 No.6 0

No.7 0 No.8 0 No.9 0

No.10 0 No.11 0 No.12 0

Number of Presets Dwell time Tour speed

2 6s x10

Motion Detection Tour Program

No.1	No.2	No.3	No.4	Area Number
1	2	3	4	4

Dwell Time After Detection: 4s ON OFF

Dwell Time: x6 Detecting Sensitivity(high 1 - low 10): LevelH

Video Setting

Picture adjust(0 - 255)

Brightness 0

Contrast 128

Sharpness 128

Hue 0

Saturation 128

AGC

EV 0

Gain AGC(24dB) AGC(30dB)

Slow Shutter

x1 x2 x3 x4

ND Filter

ON OFF

White Balance

AWB ATW

Block Size

1:1 1:1/2

Mirror

ON OFF

BLC Area

ON	ON	ON
ON	ON	ON
ON	ON	ON

Camera-related settings (pages 13 - 15)

Image-related settings (pages 16 - 18)

① Mode Setting (Output Screen Selection)

Here, you set the ON/OFF status of the following features: Screen distortion compensation, motion detection tour, auto sequence. In addition, you can configure the distortion compensation per screen block.

Setting		Details									
Distortion compensation (OFF)		When turned OFF, the distortion compensation is disabled, and the raw image from the fisheye lens is displayed.									
Distortion compensation (120deg/180deg)		Displays an image by compensating the horizontal angle of view by 120 or 180 degrees.									
Motion Detection Tour		Enables the motion detecting tour feature. In the MD Tour mode, when a moving object is detected in the selected area, that area is automatically displayed. → For setting the area, see "Motion Detection Tour Program" (page 15)									
Preset Sequence		Turns ON the auto-sequence feature. → For setting the area, see, "Preset Sequence Program" (page 14)									
Preset	Top Left (1), Top (2), Top Right (3), Left (4), Midl M (5), Right (6), Bot Left (7), Bottom (8), Bot Right (9)	Select the preset areas to display. <table border="1" data-bbox="422 809 927 995"> <tbody> <tr> <td>Top Left (1)</td> <td>Top (2)</td> <td>Top Right (3)</td> </tr> <tr> <td>Left (4)</td> <td>Midl M (5)</td> <td>Right (6)</td> </tr> <tr> <td>Bot Left (7)</td> <td>Bottom (8)</td> <td>Bot Right (9)</td> </tr> </tbody> </table>	Top Left (1)	Top (2)	Top Right (3)	Left (4)	Midl M (5)	Right (6)	Bot Left (7)	Bottom (8)	Bot Right (9)
	Top Left (1)	Top (2)	Top Right (3)								
Left (4)	Midl M (5)	Right (6)									
Bot Left (7)	Bottom (8)	Bot Right (9)									
	Tour speed	Set the panning and tilting speed when moving in the preset area.									

② Manual PTZ Control (Manual Pan, Tilt, and Zoom Adjustment)

Manually adjust the camera orientation and zoom.

Setting	Details	Range of Values
Pan/Tilt Speed	Setting for the speed of movement. The smaller the numeric value, the slower the speed, and larger the numeric value, the faster the speed.	x1 - x10
Zoom Speed		
Pan/Tilt	Clicking this moves in the specified direction.	-
Zoom		

③ Preset Sequence Program (Preset Sequence)

When Preset Sequence is turned ON in Mode Setting, specify the preset area.

Setting	Details	Range of Values									
No. 1 - No. 12	<p>When [Preset Sequence] is set to ON in Mode Setting, specify the preset area number here.</p> <p>Preset areas No. 1 - 9 (10 - 18)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>1 (10)</td> <td>2 (11)</td> <td>3 (12)</td> </tr> <tr> <td>4 (13)</td> <td>5 (14)</td> <td>6 (15)</td> </tr> <tr> <td>7 (16)</td> <td>8 (17)</td> <td>9 (18)</td> </tr> </tbody> </table> <p>0 : No distortion compensation 19 : Compensated image (180°) 22 : Compensated image (120°)</p> <p>Note:</p> <ul style="list-style-type: none"> When 10 - 18 is specified, the image is magnified by digital zoom, causing the image quality to be coarse. 	1 (10)	2 (11)	3 (12)	4 (13)	5 (14)	6 (15)	7 (16)	8 (17)	9 (18)	0 - 19, 22
1 (10)	2 (11)	3 (12)									
4 (13)	5 (14)	6 (15)									
7 (16)	8 (17)	9 (18)									
Number of Pre-sets	<p>Set the number of areas to display.</p> <p>[Example] When set to 4: The display order is No. 1 → No. 2 → No. 3 → No. 4 → No. 1 →..., and the order of area display is the setting that was entered (→ page 12), 4 → 6 → 0 → 0 → 4...</p>	2 - 12									
Dwell time	This is the retention time when switching modes.	0s - 10s									

Tour speed	Speed at which modes are switched. The larger the numeric value, the faster the speed.	x1 - x10
------------	--	----------

4 Motion Detection Tour Program

Configure the motion detection feature.

Setting	Details	Range of Values				
No. 1 - No. 4	<p>Specify the area number for the [Motion Detection Tour] in Mode Setting. The areas that can be specified are as follows.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> </tr> </table> <p>[Example] When the area settings are as follows: No. 1 = 1, No. 2 = 2, No. 3 = 3, and No. 4 = 4, the display order is No. 1 → No. 2 → No. 3 → No. 4 → No. 1 → ..., and the order of area display is the setting that was entered (→ page 12), 1 → 2 → 3 → 4 → 1...</p>	1	2	3	4	1 - 4
1	2					
3	4					
Area Number	Set the maximum number of tour user area.	2 - 4				
Dwell Time	Time required when switching areas. The smaller the numeric value, the faster the speed.	x1 - x10				
Dwell Time After Detection	When a moving object is detected in an area, the view switches to display the image in that area for the duration specified here.	1s - 10s				
Detection Sensitivity (high 1 - low 10)	<p>Set the sensitivity of motion detection. Decreasing the numeric value increases the sensitivity, and increasing the numeric value decreases the sensitivity.</p> <p>Note:</p> <ul style="list-style-type: none"> If you set this numeric value too low, the sensitivity may increase too much and lead to more false detections. 	Level 1 - Level 10				
Motion Detection Window	Set whether or not to display a frame around the subject when a motion is detected.	ON, OFF				

Configuring the Camera and Image Settings

5 Picture Adjust

Adjust the image display quality, such as brightness and contrast.

Setting	Details	Range of Values
Brightness	Set the brightness.	0 - 64
Contrast	Set the contrast.	0 - 255
Sharpness	Set the sharpness of the image.	
Hue	Set the hue.	
Saturation	Set the color saturation.	

6 AGC (Automatic Gain Control)

Set the auto gain control.

Setting	Details	Range of Values										
EV	Set the exposure value.	-9 - +9										
Gain	AGC (24 dB)	Amplifies the maximum gain up to 24 dB and displays it.	-									
	AGC (30 dB)	Amplifies the maximum gain up to 30 dB and displays it.	-									
Slow Shutter	Use this if AGC gain does not provide sufficient brightness. Prolongs the response time of the shutter and amplifies the image. Since this feature decreases the frame rate, the image will be out of sync when capturing a fast-moving subject. The behavior is as follows. <table border="1" data-bbox="319 987 752 1049"><tr><td>0 → 24 dB</td><td>⇒</td><td>×2, ×4</td><td>⇒</td><td>MAX 30 dB</td></tr><tr><td>AGC</td><td></td><td>slow shutter</td><td></td><td>AGC</td></tr></table>	0 → 24 dB	⇒	×2, ×4	⇒	MAX 30 dB	AGC		slow shutter		AGC	x1 - x4
0 → 24 dB	⇒	×2, ×4	⇒	MAX 30 dB								
AGC		slow shutter		AGC								

7 ND Filter

Configure the ND filter.

Setting	Details	
ND Filter	ON	ND filter will be used.
	OFF	ND filter will not be used.

8 White Balance

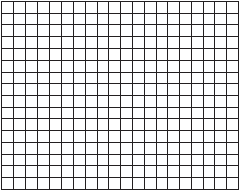
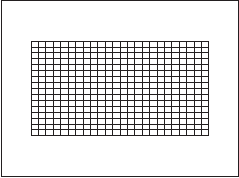
Configure the white balance.

Setting	Details
AWB	Automatically adjusts the white balance (within set color temperature).
ATW	Automatically adjusts the white balance (any color temperature).
One-Push	Enables the One-Push mode when set to ATW.

9 Block Size (Detection Block Size)

Sets the block size for motion detection.

Note: After setting the Block Size, restarting the camera enables the setting.

Setting	Details
1:1	<p>Divides the entire screen into a 20 × 16 grid.</p> 
1:1/2	<p>Divides half of the screen into a 20 × 16 grid.</p>  <p>Note:</p> <ul style="list-style-type: none"> • The start positions for grid splitting are 240 in the vertical direction and 256 in the horizontal direction. • No motion will be detected in areas outside of the block.

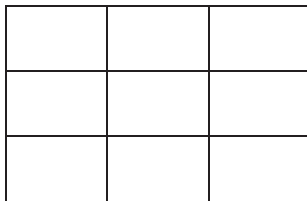
10 Mirror Mode

Horizontally flips and displays the image.

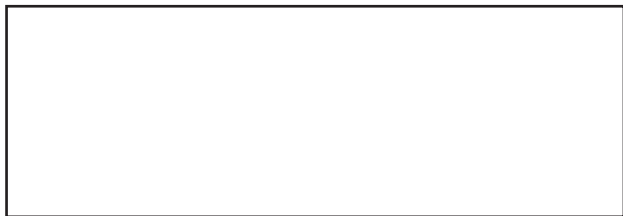
Setting	Details
ON	Turning this ON flips the image horizontally and displays it.
OFF	Displayed the image normally.

11 BLC Area (Back Light Compensation)

Splits the entire screen into 9 areas as shown below, and turns AE wave detection area ON/OFF.



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