BT-1 *Bluetooth*® Wireless Webcam
Product Manual

Documentation © 2010 Ecamm Network
Check http://www.BT-1.com for the latest information and updates.

System Requirements

The BT-1 Wireless Webcam requires a Mac running Mac OS X 10.5 or newer and a Bluetooth module capable of Bluetooth v2.0+EDR or better. Most Macs include a built-in Bluetooth module.

Quick Start

Charge The Battery

Fully charge your new BT-1 by connecting it to your Mac using the included USB cable. The charging indicator light above the USB port will shut off when charging is complete.

Install Software

Download the BT-1 Software. Run the installer, and follow the on-screen instructions. The installer will confirm that the software has been installed successfully. You'll see the BT-1 camera icon appear in your Mac menu bar.

Turn On BT-1 If Needed

If the status indicator light above the power button (see diagram on next page) is lit up solid, or flashing every 4 seconds, the BT-1 is already on. If not, press and hold the button for 2 seconds. You'll see the indicator light flash rapidly to show that the camera has been powered on.

Select Camera and Microphone

Select **BT-1 Wireless Webcam** as a camera and microphone in the settings of your favorite video application.

Pairing

Enter **0000** when prompted for a Bluetooth passcode. You will only have to do this the first time you use your BT-1 with a new computer. See the section "Set Bluetooth Passcode" for instructions on settings your own custom passcode.
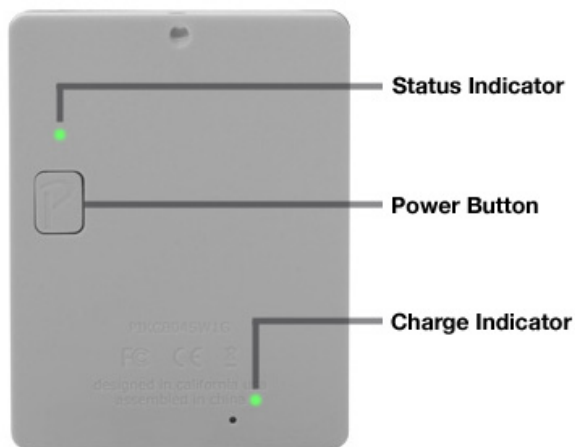
About the Camera
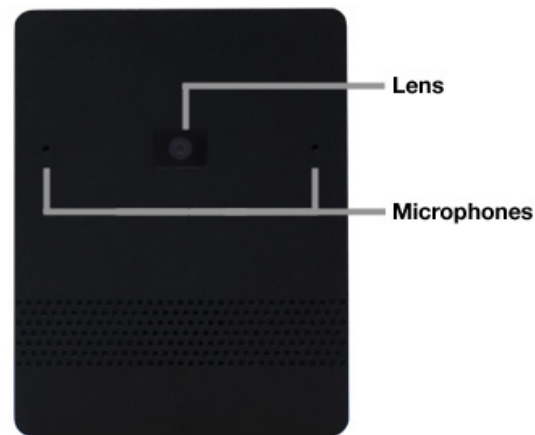
BT-1 Features

Summary
The BT-1 webcam streams video and sound wirelessly to your Bluetooth equipped Macintosh running OS X 10.5 or later. Its internal battery charges using a USB cable, and allows for up to 4 hours of continuous use between charges.

Power Button and Indicator Light

The power button is a rectangular button labeled with a P on the back (gray) side of the camera. The status indicator light is located ¼ inch above the power button and is visible through the plastic case when illuminated. To power on, press and hold the button until you see the status indicator light begin to flash rapidly (about 2 seconds). Follow the same steps to power off.

Camera

The cameras lens is located behind the clear glass area in the center of the camera. Be sure to keep the area around the lens clean and free from smudges or scratches.

Camera Specifications:
    Maximum Frame Size: 640x480 (VGA)
    Frame Rate: 15 Frames Per Second
    Angle of View: 66° Horizontal
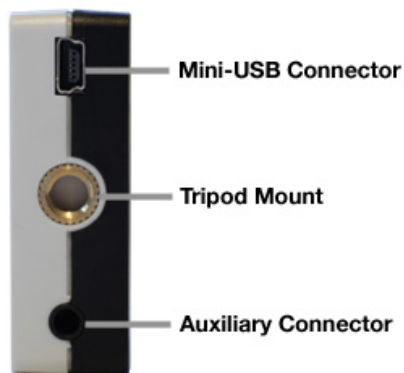   Fixed Focus Lens (10 inches - Infinity)

Microphone

The BT-1 has two built-in microphones, providing stereo audio. They're located behind the small holes to the left and right of the camera lens.

Microphone Specifications:
    Sample Rate: 48 KHz
    Channels: 2 (Stereo)

Mount

There is a tripod mount on the bottom of the camera. This is a standard ¼"-20 tripod mount and can be connected to most camera tripods.

Ports and Charge Indicator Light

The rectangular port on the bottom of the camera is a standard mini-USB plug. Connect the camera to your computer's USB port using the included cable for charging and operations such as changing the passcode or upgrading firmware. You can also charge the battery by connecting to a USB hub or any 5 volt mini-USB charger.

The round port is an auxiliary connector, which is not currently used.

There is a charge indicator light on the back on the camera just above the USB port. This light is on when the camera is charging and will turn off when the camera is fully charged.

Mini-Tripod

The BT-1 comes with a mini-tripod. To attach the BT-1, turn it onto the tripod screw mount, and finish tightening by turning the round mounting base until it stops. Do not over-tighten.

The tripod's ball joint allows the camera to be aimed up or down as needed. You can also extend the telescoping legs as needed.

Care and Maintenance

You should treat your BT-1 as you would any computer accessory. Protect against exposure to water, temperature extremes and falls.

Software

Downloading

Download the latest BT-1 Driver Software from the BT-1.com website.
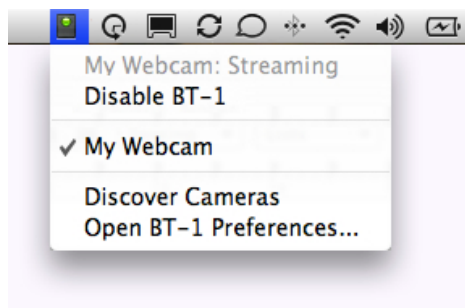
Installing

Run the installer and click Install to proceed. Follow any on-screen instructions. When prompted for your password, enter the password you created when setting up your Mac. The installer will confirm that the software has been installed successfully. You'll see the BT-1 icon appear in your menu bar.

Video applications that are already open must be quit and relaunched before they will recognize the BT-1.

Uninstalling

To completely remove the BT-1 drivers, run the installer and click Uninstall. When prompted for your password, enter the password you created when setting up your Mac. The installer will confirm that the software has been uninstalled successfully. You'll need to quit and re-launch any open applications before changes will take effect.

Status Menu

The BT-1 status icon will appear in your menu bar, on the right side. This makes it easy to see the status of your BT-1:

No Color:	BT-1 is not streaming.
Yellow Flashing:	Searching/starting BT-1.
Green:	BT-1 is streaming audio and video.

Click on the status menu to reveal the follow information and options:
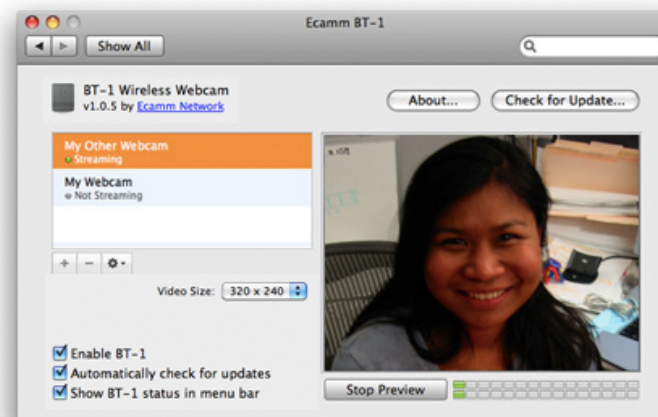
The current status of your camera.

An option to enable/disable the BT-1 software.

The currently selected camera: You can select a camera here to switch between paired cameras. A check-mark will show next to the currently selected camera.

Discover Cameras: Select this option to search for additional BT-1 cameras. This option is only available when not streaming.

Open BT-1 Preferences: Select this option to open the BT-1 settings.

BT-1 Preferences Pane

To access the BT-1 preferences, select "Open BT-1 Preferences" from the status menu. If there is no status menu, you can select System Preferences from the menu, and then click Ecamm BT-1.

Start/Stop Preview

Click the "Start Preview" button to see the video from your BT-1. The level meters will show the audio levels. Click this button again to stop previewing. Enter **0000** if prompted for a Bluetooth passcode.

Options Menu

The options menu is the button with the small gear icon. It has the following options:

Camera Properties

Select this option to assign a name for your BT-1. This is useful for distinguishing between cameras when using multiple BT-1 cameras.

Set Bluetooth Passcode

Bluetooth wireless technology uses a passcode to ensure that only authorized users can access them wirelessly. The BT-1 comes preset with **0000** as a passcode. You should create your own passcode to prevent unauthorized use of your camera by other computers.

To set a passcode, connect the BT-1 to your computer using the USB cable, and choose "Set Bluetooth Passcode" from the options menu. Enter a new passcode and follow the instructions to continue.

Update Firmware

The BT-1 software can be updated to add new functionality or resolve issues. If an update is available, the "Update Firmware" option will become active.

Using Multiple Cameras

It's not possible to simultaneously use more than one camera, but you can pair more than one BT-1 with your Mac and switch between them.

Adding/Removing Cameras

To add and remove cameras from the system, use the **+** and **-** buttons. These options are only available when the BT-1 is not streaming video.

To add a camera, make sure the camera is powered on. Then click the **+** button. Wait until the camera shows up in the camera list.

Selecting a Camera

To select a camera, click on it in the camera list. The highlighted camera will be used. You can also select a camera using the BT-1 status menu at the top of the screen. A check-mark will show up next to the currently selected camera.

Check For Update/Automatically Check for Updates

If new BT-1 software becomes available, you will be automatically notified upon opening the BT-1 Preferences. You can turn off automatic notification using the "Automatically Check for Updates" checkbox. You can manually check for updates using the "Check for Updates" button.

Show/Hide Status Menu

You can choose to hide the BT-1 status menu by using the "Show BT-1 status in menu bar" checkbox.

Video Size Selector

Video size can be selected using the menu below the camera list. We suggest using 320x240 for most activities. Increase to 640x480 quality when a VGA frame size is needed. Switch to 160x120 when a smaller frame is acceptable. Smaller frame sizes will result in a lower data rate, which will increase the effective Bluetooth wireless signal range. Note that changing the video frame size will momentarily stop and start the video stream.

Enable BT-1 Checkbox

Use the "Enable BT-1" checkbox to enable/disable the BT-1 camera driver. Once disabled, the BT-1 will no longer show up as an option in your video software.

Usage

Charging

The BT-1 charges using the mini-USB port. The rechargeable battery is internal and cannot be removed. To charge the battery, connect the camera to your computer's USB port using the included cable. You can also connect to any powered USB hub or 5 volt mini-USB charger.

There is a charge indicator light on the back on the camera just above the USB port. This light is on when the camera is charging and will turn off when the camera is fully charged.

When the battery runs out of power, the BT-1 may turn off or work intermittently. A fully charged battery will last up to 4 hours before needing to be recharged. The BT-1 can be used normally when charging, regardless of the battery level.

Positioning

The BT-1 is designed to be placed around the room where your computer is located. The Bluetooth signal can reach up to 30 feet. The actual range is determined by many factors, including the model of your Mac. Some Macs have more powerful Bluetooth radios and antennas. If your video or audio breaks up or stops, move the BT-1 closer to your Mac. For the best results, maintain an open line of sight between your BT-1 and your Mac. The wireless signal can pass though solid objects, but this will reduce the range.

Turning On/Off

While connected to a power source, the BT-1 will turn on automatically and cannot be turned off. The status indicator light will glow solid green.

When *not* connected to a power source, the BT-1 can be turned on and off by holding the power button for 2 seconds. The green indicator light will flash rapidly to indicate that the camera has been turned on or off.

When not connected to a power source and not being used for audio or video streaming, the status indicator light will flash every 4 seconds to indicate that the BT-1 is on and in stand-by mode. The BT-1 will automatically shut off after 20 minutes of inactivity.

Selecting in Applications

Selecting the BT-1 in your video applications varies by program. Generally, you need to find the program's camera and microphone settings, and select "BT-1 Wireless Webcam". A few examples of popular programs are given below.

iChat:

Select "Preferences..." from the iChat menu on the menu bar.
Click on the "Audio/Video" section.
If more than one camera is available, select "BT-1 Wireless Webcam" from the Camera menu. Select "BT-1 Wireless Webcam" from the Microphone menu.
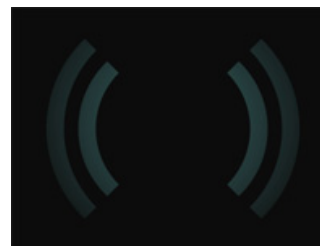
Skype:

Select "Preferences..." from the Skype menu on the menu bar.
Click on the "Audio" section.
Select "BT-1 Wireless Webcam" from the "Audio input" menu.
Click on the "Video" section.
Select "BT-1 Wireless Webcam" from the "Camera" menu.

Pairing

The first time you use your BT-1 with your Mac, or after you've changed your passcode, you'll be prompted to enter a passcode. If you haven't set your own passcode, enter **0000.**

Statuses/Starting

If you see the above graphic, or you see the yellow flashing indicator in the BT-1 menu, that means that an application is starting the BT-1. You should make sure your BT-1 is powered on and in range.

Troubleshooting

Camera Does Not Turn On

Press and hold the power button for 3 seconds. If you don't see the flashing indicator light, the camera probably needs to be charged. Follow the instructions above for charging the camera.

Troubleshooting (Continued)

Video Does Not Start

If you see the (( )) graphic, or see the yellow flashing indicator in the BT-1 menu, and it lasts for more than a few seconds, try the steps below:

Charge your BT-1.

Make sure your BT-1 is powered on. (Connect to a USB power source, or check for the flashing status indicator light.)

Make sure the BT-1 is in range of your computer. Try moving it closer to your computer.

If you have multiple BT-1 cameras paired with your computer, make sure the BT-1 you're trying to use is selected as the current camera. (See "Selecting a Camera")

Follow the instructions under "Turning On/Off" to turn your BT-1 off and back on again.

Video Freezes

Make sure the BT-1 is in range of your computer. Try moving it closer to your computer.

Follow the instructions under "Turning On/Off" to turn your BT-1 off and back on again.

Additional Troubleshooting and Support: http://www.BT-1.com

Warranty

The manufacturer (Pico Instruments) warrants that this product will be free from defects in materials and workmanship for the period of one year. This limited warranty shall commence from the date of purchase. Pico Instruments warranty is not transferable and is limited to the original purchaser. If the product is found to be defective then, as your sole remedy and as the manufacturer's only obligation, Pico Instruments will repair or replace the product. This warranty shall not apply to products that have been subjected to abuse, misuse, abnormal electrical or environmental conditions, normal wear and tear or any condition other than what can be considered normal use.