CamRanger Settings for Mac and Windows

Use of the CamRanger Settings Application

The CamRanger Settings application for Mac and Windows computers can be used to setup and adjust networking settings, and most notably establish bridging into an existing WiFi network while being connected to the CamRanger. The CamRanger creates its own WiFi network however, it is possible to bridge into an existing network to extend the WiFi range, post images to the Internet immediately, or use the CamRanger Launch application (which allows multiple camera and CamRanger control from one computer). Changing the WiFi password may be beneficial when using the CamRanger Share app since the CamRanger user will have to distributing the password to clients, directors, or students who are using the CamRanger Share app on their personal devices. Hiding the SSID may be useful for various situations when one does not want the CamRanger network to be present. The IP Address can also be changed if one would like to connect to an existing wired network. Additionally, "auto-sharing" can be configured to have images automatically saved to an FTP server or printed to a DNP printer. This auto-sharing is done without having a tablet, phone, or computer connected to the CamRanger.

These instructions are intended for people who are familiar with networking. Concepts discussed may require further research for those not familiar with the topic.

General Setup

For the CamRanger Settings application to function properly, the CamRanger must have firmware version 6 and up. For the firmware download and instructions, refer to http://camranger.com/firmware-upgrade/. The ability to change the IP address requires firmware version 8 or higher. Configuring auto-sharing requires firmware version 9 or higher.
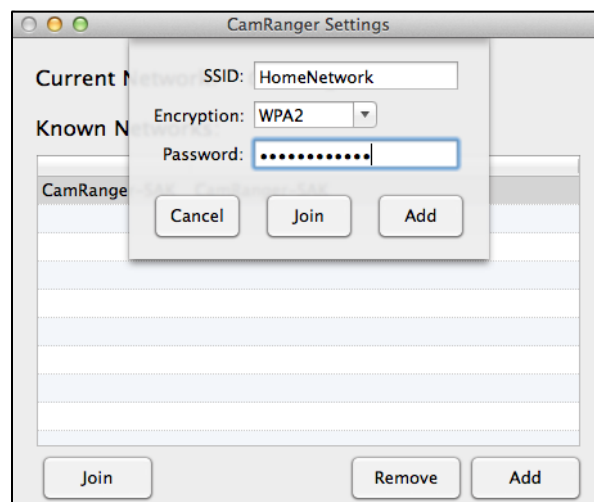
The user can download and install the CamRanger Settings application on the Mac or Windows computer from CamRanger.com/downloads. Power on the CamRanger and connect the CamRanger to the computer via an Ethernet cable. Once connected, start the application. The *Current Network* and *Known Networks* listed on the top of the application screen will display the CamRanger network. If the CamRanger fails to connect, close the application and reconnect the CamRanger before starting the application again.

Setup for Windows

When using a CamRanger application on a Windows computer by default the Windows Firewall can prevent connection when on a bridged network. There are two possible options. The Windows Firewall can be temporarily disabled. Or the firewall can be modified to allow multi-cast pings. This is a somewhat advanced configuration and can be done by creating a new firewall rule to allow all ICMPv4 communication for any CamRanger applications. Please email support@CamRanger.com if exact instructions are desired.

Adding a Network

To add a network to the *Known Network* list, select the "Add" button. Enter the SSID and password and select the proper encryption. Select the "Join" button to connect to the network or the "Add" button to add it to the *Known Networks* list. Note that all networks have to be entered manually.
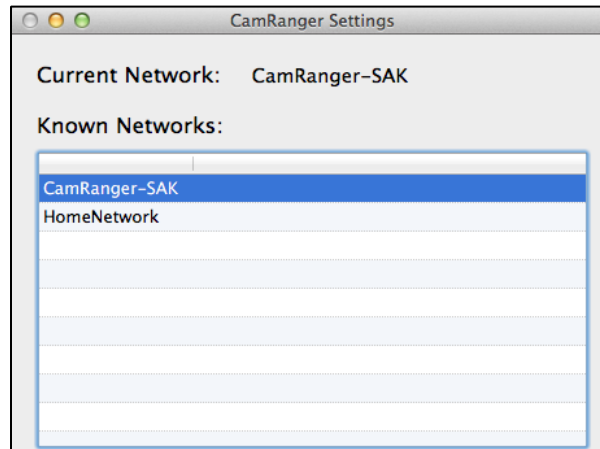

Once the network is added to the Known Networks list, it will be saved and can be selected to join whenever in range or can be deleted.

Each time the CamRanger is turned on, it will search for available WiFi networks and try to match any to any known networks. For example, a "home" and "office" network could be added to the known network list. Then if the CamRanger is turned on at home, it will bridge with the home network, and if the CamRanger is turned at the office, it will bridge with the office

network. If the CamRanger disconnects from the bridged network, such as going out of range, then it may be necessary to turn the CamRanger off and back on to reestablish connection to the bridge network.

Note that the SSID of the existing network must be less than 32 characters and cannot contain an apostrophe or quotation mark.

Joining/Bridging into a Network

To join a network from the *Known Network* list, select the network and press the "Join" button. By joining a known network on the list, the CamRanger network will bridge with this network, assuming that it is within range and has been configured correctly. Once bridged into the existing network, the *Current Network* listed on the top of the screen will indicate this existing network. In the above image, if one selects to joining the "HomeNetwork," the *Current Network* would display "HomeNetwork" and the user would be connected to the CamRanger network and HomeNetwork.

Removing a Network

To remote a network from the Known Network list, select the network and press the "Remove" button.

Changing the Default WiFi Settings

All changes made within the Default Settings will be programed to the CamRanger unit. Therefore, if one changes the password on the Mac and then connects with an iPhone the password will be the new password.

Default Settings

WiFi Password: [_____] ☐ Edit

Channel: [1 ▼]

☑ Broadcast SSID

[Set]

- **WiFi Password:** The user has the option to change the WiFi password. After typing in the new password the "Edit" button must be selected before selecting "Set" located on the bottom of the application screen. There is no way to check the existing password for the CamRanger network, however the password can be reset using this application. WiFi passwords must be at least 8 characters long and cannot contain an apostrophe or quotation mark.   Note that the serial number is not modified when changing the password, the 8 letter serial number is still required when registering devices.
- **Channel:** Broadcast channels available range from 1 to 11, with 11 being the default. One can select the channel number of interest within the settings. Typically this does not need to be changed, but the option is available.
- **Broadcast SSID:** If the Broadcast SSID is selected the SSID name will be publicly broadcast. If this option is not selected, the SSID will not be displayed and be a hidden network.

After making changes to the settings, one must press the "Set" button on the bottom of the settings section to establish the changes on the CamRanger unit.
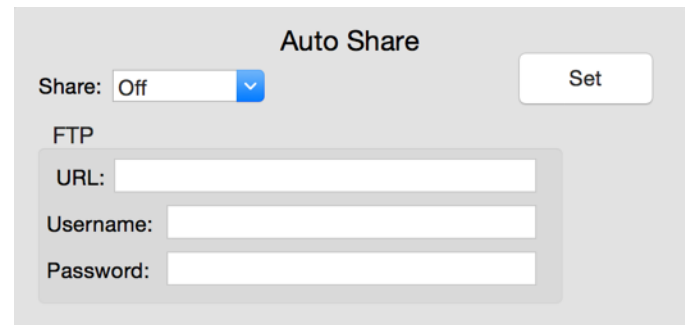

Ethernet Settings

The IP Address should only be changed if the user is familiar with networking protocols. The address listed is the current CamRanger IP Address. With this feature available, the photographer may change the IP address if they want the CamRanger connect over an existing wired network. The valid IP addresses include the following ranges:

Ethernet Settings

IP Address: [192.168.83.1]

[Set]

    10.0.0.0 - 10.255.255.255
    172.16.0.0 - 172.31.255.255
    192.168.0.0 - 192.168.255.255

NOTE: The vast, vast majority of scenarios where the user believes the CamRanger IP address needs to be changed, it does not. The IP address should not be changed to perform bridging. Nearly the only time changing the IP address is needed is when connecting the CamRanger to an existing *physical* network and a static IP is required.

Auto Share

The CamRanger is capable of of transferring or printing images automatically as they are taken without any need for a tablet, phone, or computer. The following Auto Share settings can be selected from the dropdown control.

NOTE: Images must have a file size of 5MB or less to be auto shared.

- **Off**: No special sharing. This is the default behavior.
- **FTP**: Images are transferred to an FTP server after capture. The FTP server's URL, username, and password my be entered. The CamRanger will need to bridged into a WiFi network that is able to access the FTP server. When automatic FTP transfer is enabled and a camera is connected to the CamRanger, the Ethernet light blinks with following light patterns to indicate status:
    - Slow, steady blink: FTP server is connected, but idle
    - Fast, steady blink: Image is uploading to FTP server
    - Repeating two blinks, then pause: An error occurred
- **Printer**: Images will be printed after capture. This requires a DNP WPS-1 and compatible DNP printer. The CamRanger will need to be bridged into the WPS-1 WiFi network. The printer and WPS-1 must be configured. It is a fairly simply process, but please refer to the DNP instructions for more information. It is important to remember the order: turn on printer, connect WPS to printer, turn on WPS.

Note that the smaller the image file the faster is will be transferred or printed.

Refresh

All of the settings can be reloaded by clicking the 'Refresh' button on the bottom of the application window.

Trouble Shooting

- Make sure the unit is connected directly to the computer via Ethernet when using this application and that the computer's network adapter is set to be assigned an IP address (DHCP).
- Make sure that the CamRanger firmware has been updated. The update can be found at http://camranger.com/firmware-upgrade/
- Contact support@CamRanger.com with questions.