

CONNECTING RAD-80211... RADIOS AND PANASONIC IP CAMERA

Configuring RAD-80211... Radios to Interface with Panasonic IP Cameras

INTERFACE

Application Note

2395_en_A

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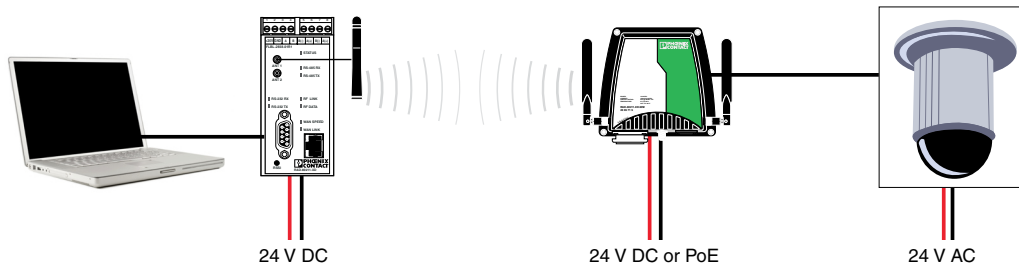


Figure 1. Panasonic IP Camera

Introduction

This document describes the steps for configuring RAD-80211... radios to operate in Bridge Mode with a Panasonic IP Camera.



NOTE: The following steps configure the Ethernet radios in Bridge Mode. The radios can also be configured in Access Point/Client Mode. Refer to the Ethernet radio Quick Start Guide for Access Point/Client Configuration.

Configuration of Ethernet Radios

1. Connect a PC to one of the RAD-80211... radios using an Ethernet cable.
2. Apply power to the transceiver and open a web browser, such as Internet Explorer, on the connected computer.
3. Enter the following IP address into the "Address" field of the browser:

192.168.254.254



NOTE: The computer must be in the same subnet as the radio. Refer to Ethernet radio Quick Start Guide for proper setup.

4. On the screen that appears, enter the default case-sensitive credentials:
User name: Admin
Password: admin
5. Check the box to agree to the terms and conditions and click the "Sign In" button.

The screenshot shows the web-based sign-in interface for the RAD-80211-XD radio. The page title is "RAD-80211-XD 501 - Version 1.2 Build 1". It features a login form with a "Username" field containing "Admin" and a "Password" field with masked characters. A checkbox labeled "I agree to the terms and conditions below" is present, along with a "SIGN IN" button. Below the form, there is a "Terms and Conditions" section and a copyright notice: "Copyright © 2005 PHOENIX CONTACT & OMNEX Control Systems Inc. All rights reserved."

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Figure 2. Sign In Window

6. Select the "LAN... IP Configuration" menu to set the Bridge interfaces to the LAN.
7. From the "LANLink" combo box, enter the speed of the LAN or select "Auto" to have the software determine network speed automatically.

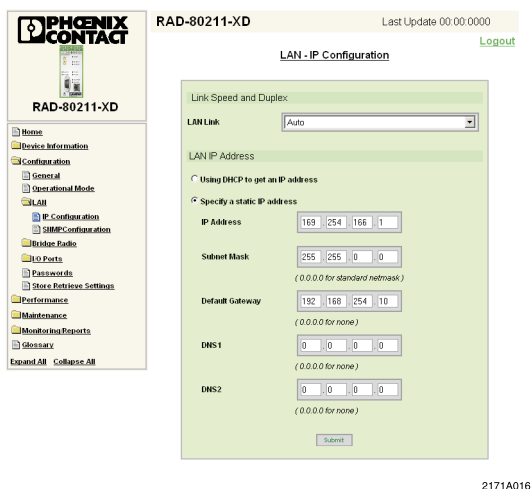


Figure 3. LAN-IP Configuration

8. If the network does not support DHCP (Dynamic Host Configuration Protocol), specify a static IP Address, Subnet Mask and Default Gateway.
9. Click the “Submit” button to activate the new LAN settings.
10. Select the “Configuration... Operational Mode” menu. Choose Wireless Bridging and click the “Submit” button.

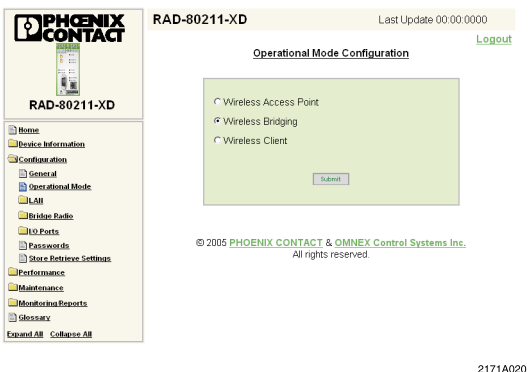


Figure 4. Operational Mode Configuration

11. Select “Bridge Radio... Radio Settings” from the left-side menu.

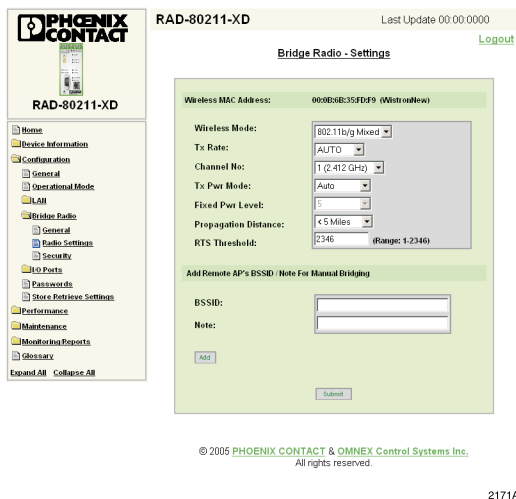


Figure 5. Bridge Radio Settings

12. From the “Wireless Mode” drop-down menu, choose a Wireless Mode (802.11a, 802.11b, 802.11g, or 802.11b/g mixed). All transceivers in a network must have the same Wireless Mode.
13. From the “Channel No.” drop-down menu, choose a Channel No. All transceivers in a network must use the same Channel No.



NOTE: For 802.11b/g, Channels 1, 6 and 11 have the least channel overlap.

14. Enter the MAC Address of the corresponding radio in the “BSSID” field. Add a note, if desired, and click the “Add” button.



NOTE: The BSSID can be found under “Device Information... General.” Be sure to use the WLAN MAC Address.

15. Click the “Submit” button to enable the settings. The radios will attempt to link. The RF Link LED on the radio will light if bridging is successful.
16. Repeat this procedure for the other Radio.

When both radios are configured, communication can be confirmed by pinging the radios from the PC. The Ethernet radios must have RF Connection IP Addresses not assigned to any other device on this network. If communication between the radios is not established, refer to the Ethernet radio Quick Start Guide.

Configuration of Panasonic Color CCTV Security Camera

1. Figure 6 illustrates the connection of the camera to the RAD-80211, an AC power supply and any sensors and indicators.

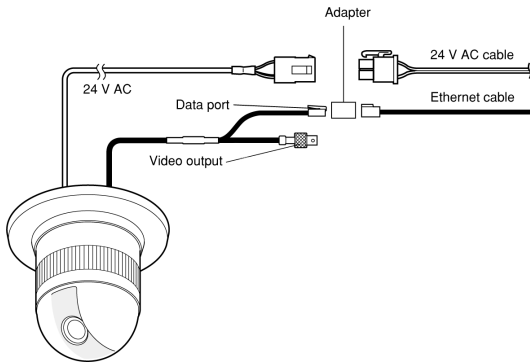


Figure 6. Wiring Camera Connections

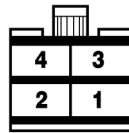
24 V AC Power Supply Connection

Recommended Wire Sizes for 24 V AC Line

Copper Wire Size (AWG)		#24 (0.22 mm ²)	#22 (0.33 mm ²)	#20 (0.52 mm ²)	#18 (0.83 mm ²)
Length of cable (approx.)	(m)	20	30	45	75
	(ft)	65	100	160	260

Power Connector Information

Pin No.	Power Source
1	24 V AC LIVE
2	24 V AC NEUTRAL
3	Ground
4	Not use



How to Assemble the Cable with the Power Connector

Strip back the cable jacket approx. 3 mm (0.1 inch) and separate the individual conductors.

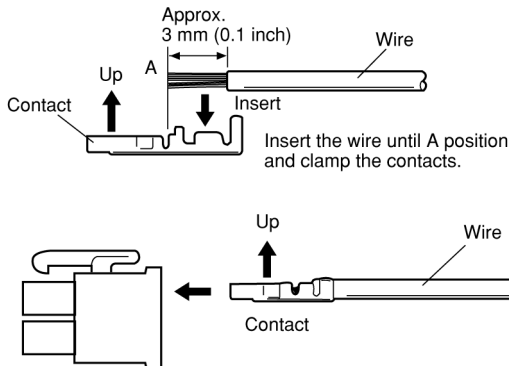


Figure 7. 24 V AC Power Supply Connection



NOTE: Once the wire is inserted into contact and crimped shut, it is important to enter the contact into the respective plastic slot.

2. Once finished wiring and connecting the power plug, connect the Ethernet cables to the radios and to the PC.
3. Enter the Panasonic Camera CD-ROM into this PC.
4. Open the CD-ROM and click the "IP Setup... IPSetup.exe" to access the Panasonic IP Setup configuration window.

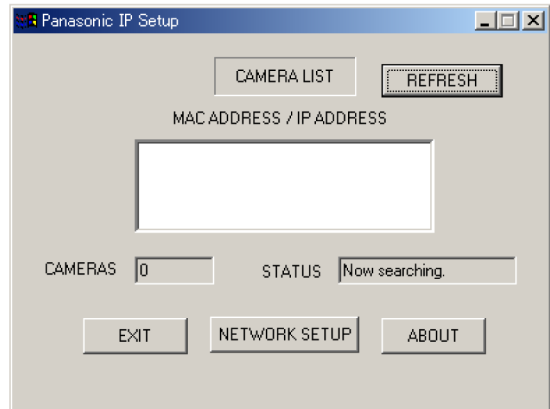


Figure 8. Panasonic IP Selection Window

5. In this window, the MAC Address and IP Address of the connected camera are displayed. Click the "Refresh" button to generate a list of addresses.
6. Click the MAC Address/IP Address of the camera to be configured.
7. Click the "Network Setup" button. In the setup screen, set the IP Address, Subnet Mask, Default Gateway and HTTP Port as displayed in Figure 9.

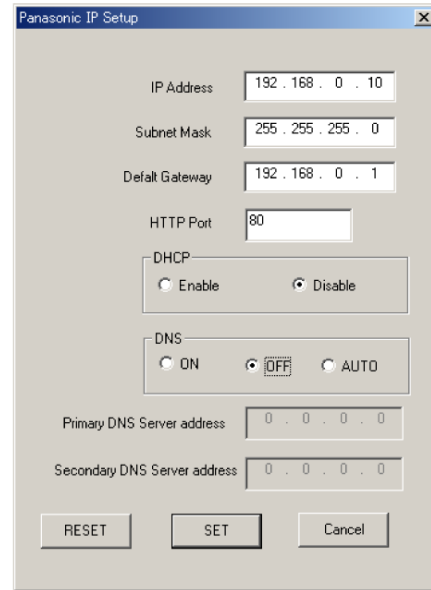


Figure 9. Panasonic IP Configuration Window



NOTE: Be sure to assign a unique IP Address to the device to prevent network conflicts.



NOTE: The DHCP and DNS Server settings are irrelevant. Use the default setting (80) for the HTTP port.

8. After addresses are correctly assigned, click the “Set” button at the bottom of the page.
9. To control the camera from the web pages, open Internet Explorer and enter IP address. Select the “Camera Control” tab at the upper left corner of the settings column.

Setup of the camera is complete. The PC can be disconnected and operation verified from the master PC across the RAD-80211... radios.