RATH®

Installation & Operations Manual

IP Interface 2100-VOIP2CS

2 YEAR WARRANTY

Thank you for purchasing RATH's IP Interface. We are the largest Emergency Communication Manufacturer in North America and have been in business for over 35 years.

We take great pride in our products, service, and support. Our Emergency Products are of the highest quality. Our experienced customer support teams are available to remotely assist with site preparation, installation, and maintenance. It is our sincere hope that your experience with us has and will continue to surpass your expectations.

Thank you for your business,

The RATH® Team

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Items Needed

The RATH® 2100-VOIP2CS is an IP interface meant to convert an extension on an IP based phone system or Internet Telephony Service Provider to an analog signal to use with RATH® 2100 Series Phones or Area of Refuge Systems.

• RATH® 2100 Series Analog Phone or RATH® Area of Refuge System
• Static IP Address for IP Interface (provided by building)
• IP Address of SIP Server or Web Address of ITSP (Internet Telephony Service Provider) (provided by building)
• Name, Authentication Password, and Authentication IP for SIP Extension (provided by building)
• Battery backed up 120vac power source (RATH® RP7700100)
• Standard Analog Telephone

IP Interface Set-Up

1. Supply power to the IP Interface using battery backed up 120vac power source
2. Connect the Ethernet port of the 2100-VOIP2CS to either a laptop or network using supplied Ethernet Cable
   Note: If plugging the 2100-VOIP2CS into the network make sure computer is also connected to the same network.
3. Turn off wireless card on computer (if applicable)
4. Change Computer IP Address
   a. Navigate to **Control Panel**
   b. Open **Network and Sharing Center**
   c. Click **Change Adapter Settings** from left-hand side menu
   d. Right click on **Local Area Connection** (or Ethernet) then click **Properties**
   e. Double-click on **Internet Protocol Version 4 (TCP/IPv4)**
   f. Click dot next to **Use the Following IP Address**
   g. Set the IP Address to 1**92.168.1.100**
   h. Click in **Subnet Mask**, should auto-populate to 255.255.255.0
   i. Click **"OK"** at the bottom of the window
   j. Click **"OK"** in the **Local Area Connection Properties** window
5. Log into IP Interface
   a. Enter IP Address of 2100-VOIP2CS (192.168.1.160) into web browser (Google Chrome or Mozilla Firefox preferred)
   b. Log into interface (**LOGIN:** admin **PASSWORD:** admin)
6. Under **QUICK SETUP** in Line 1 section enter SIP Server information
   a. Enter IP Address of SIP Server or web address of ITSP into *PROXY* box
   b. Enter extension name in **DISPLAY NAME**
   c. Enter Authentication ID in **USER ID**
   d. Enter Authentication Password in **PASSWORD**
   e. Click **SUBMIT** at the bottom of the page (unit will automatically reboot)
   Note: If using both ports on 2100-VOIP2CS, repeat above steps in Line 2 section of **QUICK SETUP** (Line 2 will require a different Name and Authentication ID than Line 1).
7. After unit reboots, change IP settings on 2100-VOIP2CS
   a. Click **Network Setup** under the menu options on the top of the screen
   b. Enter desired **IP Address, Subnet Mask**, and **Default Router** for IP Interface
   c. Click **SUBMIT** at the bottom of the page (unit will automatically reboot)
   Note: If the 2100-VOIP2CS is plugged directly into computer, plug it into the network at this time. Computer needs to be connected to the network as well.

8. After unit reboots, follow instructions in Step 4 to change IP Address of Computer to an address in the same net work scheme as 2100-VOIP2CS.

9. Log back into IP Interface using IP Address assigned to the unit in Step 7

10. Click on **VOICE** under the menu options on the top of the screen

11. Under Line 1 Status, verify next to Registration State unit shows **Registered**. If unit shows Registered, it is ready for use. If unit shows Not Registered please verify SIP information or see Troubleshooting Section.

Testing the IP Interface

1. Plug analog telephone into Phone 1 port on the 2100-VOIP2CS.

2. If the test call is successful, the unit is ready for operation.

3. Unplug analog phone from Phone 1 port then connect the RATH® 2100 Series Analog Phone or Area of Refuge.

Reset Button

To reset all information entered into the 2100-VOIP2CS, unplug the Ethernet cable from the Ethernet port then press and hold the red reset button for 20 seconds. THIS WILL DEFAULT THE UNIT TO DHCP (you will no longer be able to log into the device using 192.168.1.160). The 2100-VOIP2CS will have to be connected to a network capable of DHC. Plug Ethernet cable back into the Ethernet port on the 2100-VOIP2CS then to log back into the unit. Perform one of the following steps:

1. Set the Network Interface Card of the PC to **"Obtain an IP Address Automatically"** (see Step 4 under IP Interface Set-Up above). Use a network scanner loaded onto the PC to search for the device on the network (name of device will display as SPA112 or SPA191). The network scanner should display the address the unit it now using.

2. Plug an analog telephone into the Phone 1 port on the 2100-VOIP2CS.

    a. Lift the handset on the analog phone and dial ***, *, *, ***

    b. Dial **110** then **#** (phone will state IP address of unit)

    c. Dial **120** then **#** for Subnet Mask

    d. Dial **130** then **#** for Gateway

    e. Hang up analog phone

Troubleshooting

Problem	Possible Cause & Solutions
Device won't show as registered:	• Verify the SIP extension settings entered into the 2100-VOIP2CS match the SIP Server. • Double check the Authentication Password (verify password meets complexity requirements is applicable). • Verify the IP Address isn't being blacklisted or blocked by network. • Verify nothing else on the network is sharing the same IP Address as the 2100-VOIP2CS. • Verify you can PING the SIP Server from the same network switch that the 2100-VOIP2CS is connected to. • Verify Firewall on network isn't blocking device. • If using an ITSP, verify they do not require any additional information to be entered into the device. • Power down the unit by unplugging the power plug then waiting 30 seconds before reconnecting it.
Can't login to device:	• Verify Ethernet port on computer is set to an address that is in the same network scheme as the 2100-VOIP2CS and is connected to the same network. • Verify Ethernet port on computer isn't set to same IP Address as the 2100-VOIP2CS. • Plug an analog telephone into the Phone 1 port on the 2100-VoIP2CS and perform the following to verify IP information entered into device: **1.** Lift the handset on the analog phone and dial ***, *, *, *** **2.** Dial **110** then **#** (phone will state IP Address of unit) **3.** Dial **120** then **#** for Subnet Mask **4**. Dial **130** then **#** for Gateway **5.** Hang up analog phone
Device was working, but now is not:	• Verify nothing was changed on the network (such as IP scheme or network equipment). • Verify port on network switch that 2100-VOIP2CS is connected to doesn't have a power save mode that disabled the port. • Verify SIP server can be pinged from the same network switch that the 2100-VOIP2CS is connected to. • Verify device is not being blocked by building's firewall. • Verify device was not blacklisted or blocked by the SIP server.