RY-IP44
Input/Output Network Adaptor

Programming Manual

For use with IS-IP Series

For instructions on how to program the RY-IP44 with the IX2 Series, please go to www.aiphone.com/IX2-RYIP44

For instructions on how to program the RY-IP44 with the IPW-1A, please go to www.aiphone.com/IPW1A-RYIP44

ATTENTION:

This manual is for programming the RY-IP44 wiht the IS IP Series only. Refer to the IS IP Network Direct Installation and Setting Manuals for complete installation/programming information.

Package Contents

- RY-IP44
- Programming Manual
- 6 Screw Terminal Blocks
- MAC Address Label

Installation Requirements

- General understanding IS-IP Series programming
- 9-30V DC power supply (sold separately)
- Unique IP address for each adaptor

Overview / Description

The RY-IP44 is a Barix Barionet 50 with proprietary firmware installed for the device to function with the Aiphone IS-IP Series stations.

The 4 relay outputs can be programmed to trigger for door release, while calling, while communicating, or while calling and communicating.

The 4 contact inputs can be programmed to trigger a call with the IS-IP system. Examples of when this could be used are: an invalid card swipe, motion detector activation, or selective calling from multiple call buttons

The RY-IP44 is not a PoE device and requires a dedicated 9-30V DC power supply. Use the Aiphone PS-1208UL power supply (sold separately).
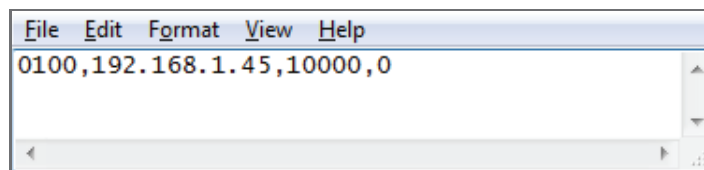
Creating the SIF.ini File

Important:
The intercom system should be fully programmed and operational prior to programming the RY-IP44 adaptor.

Creating a simple line of code, in the form of a .ini file, is required to allow an IS-IP station to communicate to the RY-IP44. The example below is shown using a common text editor (i.e. Notepad), and saving it with an .ini extension.

Program Type: A binary number between 0100 and 1111.

RY-IP44 IP Address: IP address assigned to the RY-IP44 (Must be unique for each RY-IP44).

Destination Port: Port number assigned on the RY-IP44. The default port is 10000. This can be set in the range from 1 to 65535 (Must be unique for each RY-IP44).

SSL Y/N : This device does not use SSL. Input 0 for no.

Example Text File:

0100,192.168.1.45,10000,0

| Program Type | RY-IP44 IP Address | Destination Port | SSL Y/N |

```
File   Edit   Format   View   Help
0100,192.168.1.45,10000,0
```

Save the SIF file with a .ini extension (.ini must be typed manually) to a location on the PC being used for programming the IX Series or IS-IP Series stations. This file must be uploaded to each device associated with the RY-IP44 using the instructions that follow.

File name:	SIF.ini
Save as type:	Text Documents (*.txt)
Browse Folders	Encoding: ANSI	Save	Cancel
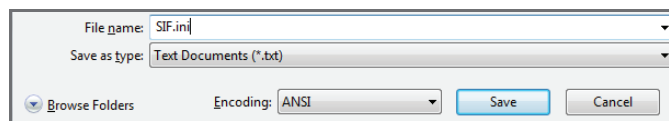
Uploading SIF.ini File

Upload the SIF.ini file to each IS-IP Series station associated with the RY-IP44 adaptor.
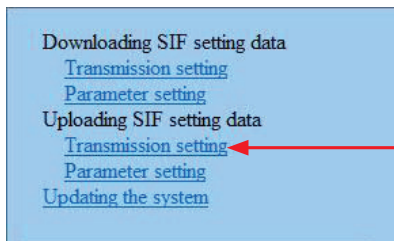⚠Note that the IP address for each station will be unique for your network settings.

Important:
The intercom system should be fully programmed and operational prior to uploading the SIF.ini file.

A. Open a web browser and type **https://[ip address]/sif** in the address bar.
    [ip address] = static IP address assigned to the station being programmed.

B. A security certificate error message will appear. Select "Continue to the website."

C. Enter the administrator ID and password.

Enter the administrator ID and password.	**Default ID:** aiphone
ID ___	**Default Password:** aiphone
Password ___	
Login	

D. Select **Transmission setting** under **Uploading SIF setting data** from the menu on the left side of the screen.

Downloading SIF setting data
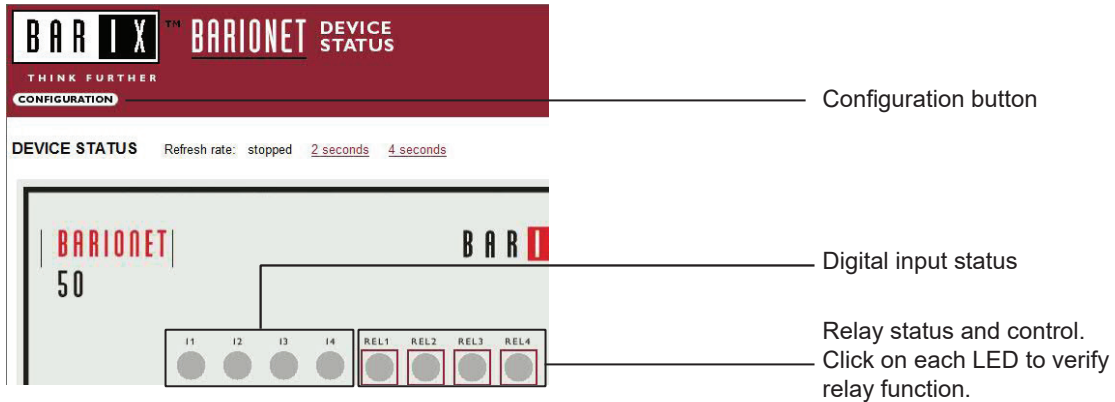   Transmission setting
    Parameter setting
Uploading SIF setting data
    Transmission setting ←
    Parameter setting
Updating the system

E. Click the **Upload** button. A new window will open.

Uploading SIF setting data
  Transmission setting
             Upload

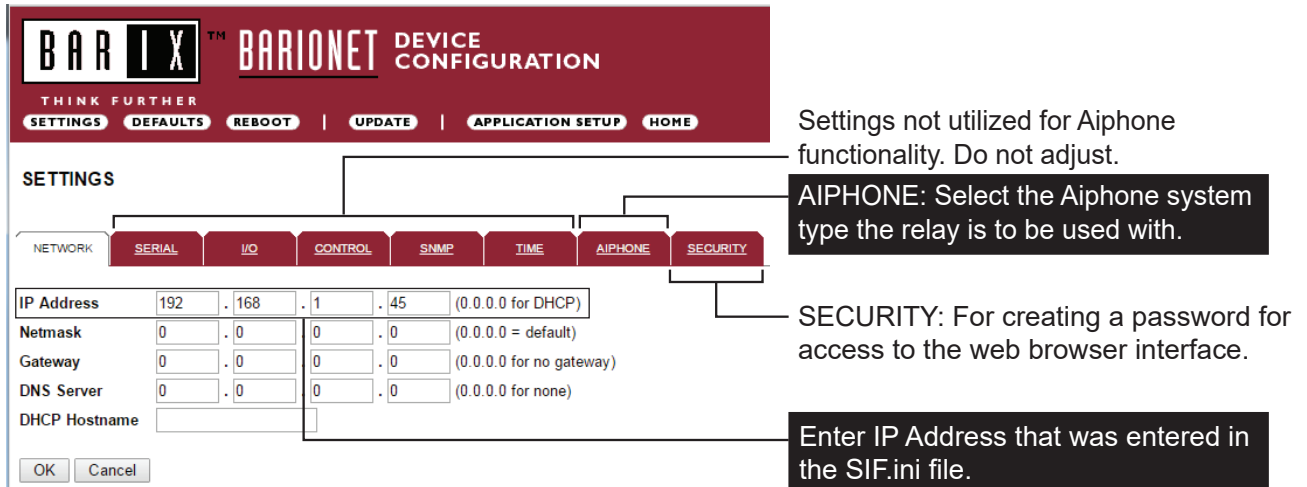F. Click the **Browse** button and navigate to the .ini file saved on the PC.

G. Click the **Upload** button. A message will appear stating the settings will not be applied until the system is updated.

H. Click **Updating the system** from the menu on the left. Click the **Update** button and the unit will update and restart itself.

I. Repeat this process for each door and master station associated with the RY-IP44 adaptor.

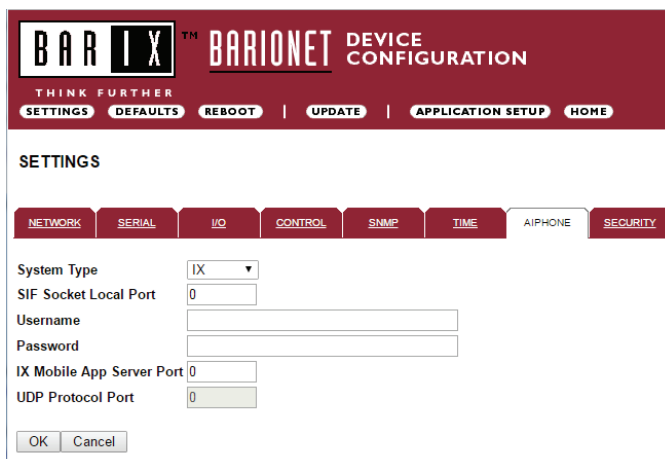## Configuring the RY-IP44 *(assigning IP address and system use)*

The RY-IP44 has a default IP address of 192.168.1.45. Open a web browser and point the address bar to **192.168.1.45** for access to the adaptor. The first screen to appear will be the **Device Status** screen.

BARIX™ BARIONET DEVICE STATUS

THINK FURTHER
CONFIGURATION ———————————————————— Configuration button

DEVICE STATUS   Refresh rate: stopped   2 seconds   4 seconds

BARIONET
50   BAR

————————————— Digital input status

I1 I2 I3 I4   REL1 REL2 REL3 REL4
————————————— Relay status and control.
Click on each LED to verify
relay function.

Click the **CONFIGURATION** button to open the **Device Configuration** screen. This is where a unique **IP Address**, **Netmask**, and **Gateway** can be assigned to the adaptor. Consult with your IT department for these settings.

BARIX™ BARIONET DEVICE CONFIGURATION

THINK FURTHER
SETTINGS DEFAULTS REBOOT | UPDATE | APPLICATION SETUP HOME

SETTINGS

Settings not utilized for Aiphone
functionality. Do not adjust.

| NETWORK | SERIAL | I/O | CONTROL | SNMP | TIME | AIPHONE | SECURITY |

AIPHONE: Select the Aiphone system
type the relay is to be used with.

IP Address	192	.	168	.	1	.	45	(0.0.0.0 for DHCP)
Netmask	0	.	0		0	.	0	(0.0.0.0 = default)
Gateway	0	.	0		0	.	0	(0.0.0.0 for no gateway)
DNS Server	0	.	0		0	.	0	(0.0.0.0 for none)
DHCP Hostname							

SECURITY: For creating a password for
access to the web browser interface.

OK   Cancel

Enter IP Address that was entered in
the SIF.ini file.

The Aiphone system type that the adaptor is being integrated with will need to be selected. Click the **AIPHONE** tab. Use the drop down by **System Type** to select the appropriate system. Enter the **SIF Socket Local Port** number that was assigned in the SIF.ini file (Destination Port). When done, click OK. Click **Reboot** on the next screen to restart the adaptor.

BARIX™ BARIONET DEVICE CONFIGURATION

THINK FURTHER
SETTINGS DEFAULTS REBOOT | UPDATE | APPLICATION SETUP HOME

SETTINGS

| NETWORK | SERIAL | I/O | CONTROL | SNMP | TIME | AIPHONE | SECURITY |

System Type	IX ▼
SIF Socket Local Port	0
Username	
Password	
IX Mobile App Server Port	0
UDP Protocol Port	0

OK   Cancel

System Type: Select IS

SIF Socket Local Port: Enter the port number that was entered in the SIF.ini file. Leave at "0" to use default 10000 port.

Username & Password: Enter system's username and password. Leave blank if using default (aiphone).

Linked Stations Table

The RY-IP44 has 4 relays that can be programmed to trigger when a specific door station is calling, while in communication, or while calling and communicating. The relays can also be programmed for door release from one or multiple IP master station(s).

Set the RY-IP44 for use with the IS-IP Series (refer to page 5).

From the **Device Configuration** screen, click **APPLICATION SETUP**.

— Application Setup button

Linked Stations Table:

Enter the IP address and TermID for each IS-IP station in the IS configuration. This table is used as a reference for each station in the system that will be able to communicate with the RY-IP44 adaptor.

Definition: TermID

A TermID identifies the location of an IS-IP station in the IS Series configuration. It also distinguishes between master stations and door stations. A master station TermID will be xx-001 and a door station TermID will be xx-101. "xx" represents the line in which the station resides under "IP Unit Registration" in the IS Host programming.

Example:
  01-101: Door station in address location 1.

  03-001: Master station in address location 3.

Imported IP units list		
	Station type	MAC address
1	IP video door station	00:0B:AA:0C:08:0D
2	IP master station	00:0B:AA:0B:01:20
3	IP master station	00:0B:AA:0B:01:30

Linked Stations

N.	IP ADDRESS	Term ID	N.	IP ADDRESS	Term ID
1	192 . 168 . 0 . 41	05 - 001	17	0 . 0 . 0 . 0	00 - 000
2	0 . 0 . 0 . 0	00 - 000	18	0 . 0 . 0 . 0	00 - 000
3	0 . 0 . 0 . 0	00 - 000	19	0 . 0 . 0 . 0	00 - 000
4	0 . 0 . 0 . 0	00 - 000	20	0 . 0 . 0 . 0	00 - 000
5	0 . 0 . 0 . 0	00 - 000	21	0 . 0 . 0 . 0	00 - 000
6	0 . 0 . 0 . 0	00 - 000	22	0 . 0 . 0 . 0	00 - 000
7	0 . 0 . 0 . 0	00 - 000	23	0 . 0 . 0 . 0	00 - 000
8	0 . 0 . 0 . 0	00 - 000	24	0 . 0 . 0 . 0	00 - 000
9	0 . 0 . 0 . 0	00 - 000	25	0 . 0 . 0 . 0	00 - 000
10	0 . 0 . 0 . 0	00 - 000	26	0 . 0 . 0 . 0	00 - 000
11	0 . 0 . 0 . 0	00 - 000	27	0 . 0 . 0 . 0	00 - 000

After inputting each IP address and TermID, click **Apply Settings** at the bottom of the page to save the settings to memory. Return to the Application Screen or reboot adaptor by clicking the **Reboot** button. Rebooting must occur to update adaptor settings.

Relay Output Programming

Relay Functionality:

Enter the TermID for the door station to be associated to the relay.
Select the relay action from the drop down menu.

Relay Action options:

- Door Release - Normally-Open
- Door Release - Normally-Closed
- Active while Calling from source
- Active while in Communication with source
- Active during Calling and Communication

When the relay action is set for the "Door Release" options, the relay will trigger when the associated door station is in communication, and a master station within the configuration list requests door release.

When the relay action is set for any of the "Active While" options, the relay will trigger when the associated door station calls or communicates at any priority level.

After the Door TermID and Relay Action has been set, click **Apply Settings** at the bottom of the screen to save the settings to memory. Return to the Application Screen or reboot adaptor by clicking on the **Reboot** button.

Relay Output Functionality

Relay	Door TermID	Relay Action	
1	01 -101	Door Release: Normally-Open ▼	Configure
2	02 -101	Door Release: Normally-Open	Configure
3	02 -101	Door Release: Normally-Closed	
		Active While Calling From Source	
4	01 -101	Active While Communicating	
		Active While Calling From Source And Communicating	

To program a master station to control door release, click on the **Configure** button. A new window will open and the table shown below will be populated based on the entries made in the Linked Stations Table (see page 8).

Allowed Stations for Output 4

#	IP Address	TermID	Flag
1	192.168.1.41	05-001	☑
2	Not Configured		☐

Check the **Flag** box beside each master station that will be "allowed" to trigger this relay for door release. Once all master stations have been checked, click **Apply Settings** at the bottom of this window to save the settings to memory. Reboot to update adaptor settings.
Note: *The IS-SOFT software master stations can NOT be enabled for door release using the RY-IP44.*

Input Programming

The RY-IP44 adaptor has 4 inputs that can be programmed to trigger a call-in from a specific door station to a specific master station or group of master stations (max. 20). The RY-IP44 inputs can have different calling rules than the default calling rule set under Advanced Station Settings in the IS Host Programming.

Choose the Call-In priority level for each input using the **Priority** drop down menu. Enter the target IP address of the door station for remote call-in.

Click **Apply Settings** to save the changes. Do not reboot the adaptor at this time.
Click **APPLICATION SETUP** to return to the Application Configuration screen.

Remote Call-In		Station Placing Call					Setup
Relay	Priority	Target Door IP					
1	Normal ▼	192	. 168	. 1	. 40		Destinations
2	Normal / Priority	0	. 0	. 0	. 0		Destinations
3	Urgent	0	. 0	. 0	. 0		Destinations
4	Normal ▼	0	. 0	. 0	. 0		Destinations

- Click on **Destinations** next to the input being configured. A new window will open.
- Enter the TermID for each master station to be called (see page 8 for TermID information). A maximum of 20 master station TermID's can be entered.
- Check the **Enable** box beside each TermID entered to allow the master to be called.
- Once all master station TermID's have been entered and enabled, click **Apply Settings** at the bottom of this window to save the settings to memory. Reboot to update adaptor settings.

Destinations for remote call-in, input 1

Station N.	Term-ID		Enable
1	05	- 001	☑
2	00	- 000	☐
3	00	- 000	☐
4	00	- 000	☐

RY-IP44 Dimensions

Depth: 1-1/4"

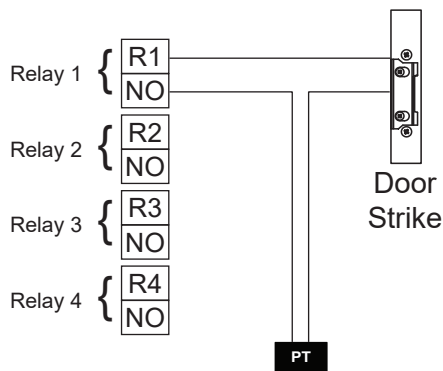3-5/16"

4-1/8"

Mounting:

The RY-IP44 adaptor mounts to an Aiphone W-DIN11 mounting rail (sold separately).
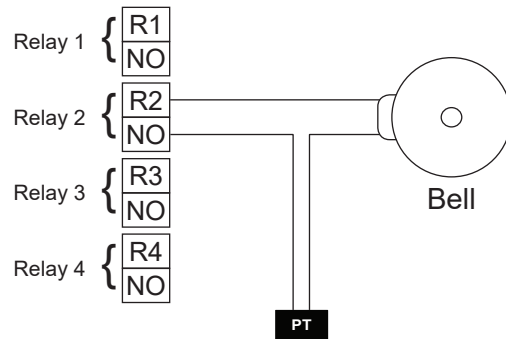
RY-IP44 Wiring

PT = Power Transformer (use proper power for the strike, mag lock, or external signaling device being used).
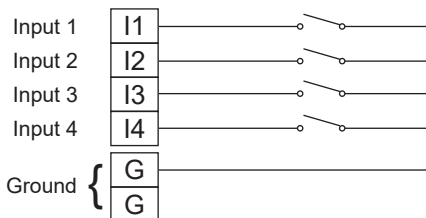
Relay contact rating: 30V DC, 0.5A.

Door release:

Relay 1 { R1 / NO

Relay 2 { R2 / NO

Relay 3 { R3 / NO

Relay 4 { R4 / NO

Door Strike

PT

External signaling:

Relay 1 { R1 / NO

Relay 2 { R2 / NO

Relay 3 { R3 / NO

Relay 4 { R4 / NO

Bell

PT

Inputs:

Connect a normally open (N/O) contact across any input and ground.

Input 1 | I1
Input 2 | I2
Input 3 | I3
Input 4 | I4

Ground { G / G

Power:

Use a 9-30V DC (300mA @ 12VDC) power supply to power the RY-IP44 adaptor. Use the Aiphone PS-1208UL power supply (sold separately).

PS-1208UL

Power { + / -   + / -

FCC WARNING:
This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference that may cause undesired operation.
•   For proper regulatory compliance, the drain wire should be disconnected at the power supply end of the cable.
•   Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.