

External Signaling

Introduction

Many IXG Series stations offer relay outputs that can be used for external signaling when certain trigger conditions are met. This is commonly used to activate external devices such as sounders, access control systems, and security systems. This guide covers how to configure the output when using the outputs directly and when using an IXW-MA(A) IP relay.

Compatible Station Types

IXG-2C7 offer two relay outputs for external signaling. Each requires a separate GT-RY relay.

The relays on IXG-DM7-HID(A) entrance panels cannot be used for external signaling.

IX-DV, IXG-MK, IX-MV7, and IX-SSA stations offer two outputs, which allows the station to provide outputs for both door release and external signaling.

IX-RS, IX-EA, IX-DVM, and IX-SS-2G stations only have a single output available, which means the stations cannot be used for door release and external signaling at the same time.

The settings in this guide are not available for legacy IX-DA or IX-BA door stations. They are also not available if using the legacy RY-IP44 IP relay adaptor.

Station Configuration Steps

Navigate to **Option Input/Relay Output Settings**, **Relay Output**. By default, the **Display Settings** will be set to **Relay Output 1**. Use the drop-down under **Display Settings** to change to **Relay Output 2**, if needed.



The screenshot shows a configuration window with a 'Row' label, 'Previous' and 'Next' buttons, a text input field for 'Enter Station Number', and an 'Apply' button. A dropdown menu labeled '[Display settings]' is open, showing 'Relay Output 2' selected.

For each station to be configured, use the drop-down menu to change the **Function** to **Status Output**. Choose the desired trigger conditions for each station.

01	113	Guard Station1	Status Output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
01	114	Master Station1	Status Output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>							

Choosing Trigger Conditions

There are several conditions that can be used to activate a relay output on a station. Multiple conditions can be active on a station at once. Not all conditions are available for all stations, and IXG Support Tool will only display valid options for each station.

Outgoing Call: The station is calling out to another station.

Incoming Call: The station is receiving a call.

Communication: The call has been answered and the station is in an active call with another station.

Outgoing Page: The station has initiated a page.

Incoming Page: The station is receiving a page from another station.

Monitor: The station is being monitored by another station.

Normal/Priority/Urgent: These are call priority levels that apply to certain calling and paging trigger conditions.

Applying Settings

If an IP Relay will not be used, click **Save**. Navigate to **Connection**, **Upload Settings**, and upload settings to all stations.

i The **Save** button may be labeled **Update** in some editions of IXG Support Tool.

IXW-MA/IXW-MAA Configuration Steps

IXW-MA(A) IP relay adaptors mirror programmed outputs on other stations. To use them for external signaling, first program a door or master station's output like on the previous page.

First, the other stations will need to be configured to signal the IP relay. Navigate to **Function Settings**, SIF.

Building Nu	Unit Number	Station Name	Function Settings								
			SIF					No.01			
			SIF Functionality	SIP URI Format	SIF Settings	Program Type	IPv4	IPv6	Destination P	SSL	Connectio
01	112	Handset Sub Station2	Disable	Disable	0100	Enter the IXW-MA IP address		65014	Enable	Socket	
01	112	Video Door Station1	Disable	Disable	0100	Enter the IXW-MA IP address		65014	Enable	Socket	
01	114	Master Station1	Disable	Disable	0100	Enter the IXW-MA IP address		65014	Enable	Socket	
01	114	Handset Sub Station2	Disable	Disable	0100	Enter the IXW-MA IP address		65014	Enable	Socket	
01	115	Video Door Station1	Disable	Disable	0100	Enter the IXW-MA IP address		65014	Enable	Socket	

Set the SIF settings for the mirrored station as follows:

- SIF Functionality:** Enable
- Program Type:** 0100
- IPv4:** IP address of the IXW-MA(A)
- Destination Port:** 65014
- SSL:** Enable
- Connection:** Socket

i Depending on the version of IXG Support Tool used, some SIF settings may already be configured by default. If there is no SIF settings menu, download a newer version of the IXG Support Tool at <https://www.aiphone.com/ixg>.

i IXG-2C7 stations are not able to send SIF signals to an IXW-MA(A).

Scroll right and check off **Change contact** for each door or master station that will signal the IXW-MA(A). Click **Save**.

If the IXW-MA(A) has not already been added to the system, navigate to **Site Settings**, I/O Adaptor Registration. For each IXW-MA(A) to be used, check off the **Enable** column. Click **Save**.

I/O Adaptor Number	Site Settings	
	I/O Adaptor Registration	
	Enable	Station Name
1	<input checked="" type="checkbox"/>	I/O Adaptor1

Navigate to **Network Settings**, IP Address. Enter an IP address, subnet mask, and other optional network information for the IXW-MA(A). Click **Save**.

Building Nu	Unit Number	Station Name	Network Settings										
			IP Address										
			Hostname	IP Version	Static / DHCP	IPv4 Address							
						IP Address				Subnet Mask			
			1	2	3	4	1	2	3	4			
01	113	Guard Station1		IPv4	Static	192	168	1	12	255	255	255	0
01	112	Handset Sub Station1		IPv4	Static	192	168	1	10	255	255	255	0
01	114	Handset Sub Station1		IPv4	Static	192	168	1	13	255	255	255	0
		I/O Adaptor1		IPv4	Static	192	168	1	16	255	255	255	0
01	114	Master Station2		IPv4	Static	192	168	1	14	255	255	255	0

IXW-MA/IXW-MAA Programming (continued)

Navigate to **Option Input/Relay Output Settings**, **Relay Output**. For each of the relays on the IXW-MA(A) adaptor to be configured, set the **Function** to Contact Change SIF Event. To switch to other relays, use the drop-down under **Display Settings**.

Row Previous Next [Display settings]
 Enter Station Number Apply Relay Output 2

Option Input / Relay Output Settings		
Relay Output		
Relay Output 1		
Station Name	Name	Function
Handset Sub Station1		Door Release
Video Door Station1		Door Release
Guard Station1		Door Release
Handset Sub Station1		Door Release
Master Station2		Door Release
Video Door Station1		Door Release
I/O Adaptor1		Contact Change SIF Event

Scroll right to the **Contact Change SIF Event** column. Click **Select Station** for the IXW-MA(A). Choose a station to assign to this relay and click **OK**. Click **Save** and repeat these steps for each relay output on the IXW-MA(A) to be programmed.

Building Nu	Unit Number	Station Name	Relay Output 1	
			Contact Change SIF Event	
			Station Nu	Select Station
01	112	Handset Sub Station1		Select Station
01	112	Video Door Station1		Select Station
01	113	Guard Station1		Select Station
01	114	Handset Sub Station1		Select Station
01	114	Master Station2		Select Station
01	115	Video Door Station1		Select Station
		I/O Adaptor1		Select Station

Select Station

Select Station

Station List					
Select	Building Nu	Unit Number	Station Nu	Station Name	Station Type
<input type="radio"/>	01	112	1120	Handset Sub Station1	IX-RS-*
<input checked="" type="radio"/>	01	112	1121	Video Door Station1	IX-DV,IX-DVF(-*)
<input type="radio"/>	01	113	1130	Guard Station1	IXG-MK
<input type="radio"/>	01	114	1140	Handset Sub Station1	IX-RS-*
<input type="radio"/>	01	114	1141	Master Station2	IX-MV7-*
<input type="radio"/>	01	115	1150	Video Door Station1	IX-DV,IX-DVF(-*)
<input type="radio"/>			00013995	I/O Adaptor1	IXW-MA

OK Cancel

If one of the master or door stations is using Relay Output 2 for its status output, see the optional step on the next page. Otherwise, once all settings are configured, navigate to **Connection(S)**, **Upload Settings** to push the settings to all stations.

Renaming the IXW-MA/IXW-MAA (Optional)

I/O Adaptor Number	Site Settings	
	I/O Adaptor Registration	
	Enable	Station Name
1	<input checked="" type="checkbox"/>	I/O Adaptor1/4.5.6

If any of the mirrored relays on the other stations are using Relay Output 2, the IXW-MA(A)'s name will need to reflect that. This is because by default, the IXW-MA assumes that it is mirroring the other station's Relay Output 1, and the name allows it to see Relay Output 2 on the station.

Navigate back to **Site Settings**, I/O Adaptor Registration. The first part of the name is arbitrary. Add a "/" to the IXW-MA(A)'s chosen name. Then, use numbers separated by periods to indicate which of its programmed relays will respond to another station's secondary relay.

Example: A site has three door stations that trigger an IXW-MA(A) when they place a call, which is being used to trigger a separate chime for each. On each door station, Relay Output 1 is being used for door release and Relay Output 2 is being used for external signaling. Relays 4, 5, and 6 on the IXW-MA(A) are connecting to the door chime system, and it needs to mirror Relay Output 2 on the door stations. So, **/4.5.6** is added to the name.

Once the IXW-MA(A) stations have their new names, click **Save**. Upload settings to all stations again.