

# CyberData

The IP Endpoint Company

## RingCentral Office

**RingCentral®**



Configuring CyberData Paging and Intercom Systems for Use with RingCentral Office



June 2020

To contact CyberData, please visit our website at [www.cyberdata.net](http://www.cyberdata.net) or call us at 831-373-2601, x334

## **RingCentral Office Configuration Guide**

### **Document #931759A**

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# Introduction

RingCentral does not currently offer native support for intercom and paging systems. CyberData's VoIP- and SIP-based intercom and paging systems work with RingCentral service as third-party devices. CyberData provides full support for these devices and we have documented the basic configuration laid out in this document. To learn more about CyberData devices, including where to purchase, please visit [www.cyberdata.net](http://www.cyberdata.net). Our website includes product videos and other information to help you learn more about the capability of our devices.

CyberData products are highly capable and flexible and can meet a variety of paging and intercom needs. In this document we discuss configuring CyberData products for basic use and connecting them to your RingCentral account. For more complex configuration and assistance, please review our documentation included with your CyberData product or contact CyberData and their authorized vendors.

The following products are covered in this document:

- **SIP Speaker**
  - The SIP Talk-back Speaker offers two-way communication, but requires a digital line.
- **SIP Paging Adapter**
  - A simple option to interface with existing analog speakers for overhead paging.
- **SIP Outdoor Intercom**
  - Configuration would be nearly identical for the indoor intercom and emergency indoor intercom
- **SIP IP66 Outdoor Horn**
  - Configuration would be nearly identical for the Speaker
- **SIP Paging Server w/Bell Scheduler**
  - Offers ability for zone paging, scheduled bells 7 announcements, line-in connection for background music

## What are the products?

### 011394 SIP Speaker

[The SIP Speaker](#) can broadcast announcements in offices, hallways and classrooms.



- Use it as its own extension or use multicast to aggregate several together with a VoIP paging server. If you need more than one speaker, use the VoIP paging server to aggregate your speakers or connect standard analog speakers to this speaker so you won't have to purchase additional VoIP lines.
- Configure it using a web interface.  
Runs using Power over Ethernet (PoE). You'll need a PoE-capable switch to power the device.
- Connect an additional analog speaker to extend the range and broadcast the same audio at lower cost. Use a speaker from CyberData, or a compatible speaker from a third-party. See the CyberData website for specifications of the wire gauge and speaker. Use the wired connection located on the back of the ceiling speaker for this hookup.
- Connect line-level output to an amplifier and run it to any number of additional speakers. These additional speakers will broadcast the same audio as the main speaker they are connected to. Use the wired connection located on the back of the ceiling speaker for this hookup.

## 011233 SIP Paging Adapter

The [SIP Paging Adapter](#) can bring an existing analog announcement system into the new VoIP based system.



- Use it as its own extension or use multicast to aggregate paging across several IP Based paging solutions with a SIP Paging Server.
  - Configure it using a web interface.
- Runs using Power over Ethernet (PoE). You'll need a PoE-capable switch to power the device.

- Two connection options make the SIP Paging Adapter an easy solution to connect with nearly any amplifier. The 'Page Port' tip and ring option for older systems and RCA line out for more modern amplifiers. The onboard relay can be utilized to signify higher priority audio if paired with a multi-input analog amplifier; that way background music will be seamlessly stopped for an announcement.
- CyberData maintains an ever-growing list of [analog amplifier compatibility](#) diagrams to connect the SIP Paging Adapter to an analog amplifier. If the amplifier that is being used is not on the list, reach out to [CyberData support](#) to determine how to connect to the amplifier.

## 011186 SIP Outdoor Intercom

The [SIP Outdoor Intercom](#) essentially serves the same role as a phone in the system, except that it dials a fixed number. So, a visitor can press the button, which will call the extension of your choice (a receptionist for example). The person who answers the phone can then speak with the visitor.



- Configure it using a web interface.
- Runs using Power over Ethernet (PoE). You'll need a PoE-capable switch to power the device. See our article on recommended switches.
- Integrate it with a buzzer or door opening system.
- You can also call the intercom from another extension. It will pick up automatically and initiate a two-way conversation.
- Requires its own extension on your RingCentral system (cannot be multicast).

## 011457 SIP IP66 Outdoor Horn

The [SIP IP66 Horn](#) provides an easy method for implementing a loud IP-based overhead paging system for loud areas, warehouses, manufacturing areas, and outdoor areas.



- Use it as its own extension or use multicast to aggregate several together with a VoIP paging server.
- Configure it using a web interface.
- Runs using Power over Ethernet (PoE). You'll need a PoE-capable switch to power the device. See our article on recommended switches.
- Second SIP extension enables Night Ringer function

## 011146 SIP Paging Server w/Bell Scheduler

Use the [SIP Paging Server](#) to aggregate several independent sets of VoIP enabled speakers (ceiling speakers or paging amplifiers) to one extension. This way you can use one RingCentral extension or line for paging. This device can control which speakers are activated when you dial the paging extension. Purchase this device to minimize your monthly line costs if you need more than 1 paging zone or want to use multiple VoIP speakers in one zone.



- Configure it using a web interface.
- Runs using Power over Ethernet (PoE). You'll need a PoE-capable switch to power the device. See our article on recommended switches.
- Supports multiple paging zones—when you dial the paging extension, the paging server answers. Then, simply press a number for the paging zone you want to page.

# System architecture

CyberData systems are extremely flexible and allow for a variety of configurations, whether you want to use new or existing speakers, or a combination of both. You can segregate the speakers into various zones or treat them as one zone. You can also use intercom devices for specialized needs, such as entry doors. Create a system for one-way announcements or use intercom or special talkback devices or two-way speakers for speakerphone-type conversation.

We've provided several common, but not all, configuration setups. Contact a CyberData installation professional for additional setup information. Reference this document when consulting a CyberData installation professional to help them understand how to interface your CyberData system with your RingCentral account.

## One-zone system using existing speakers

Figure 1. One-zone system using existing speakers

One RC User Required



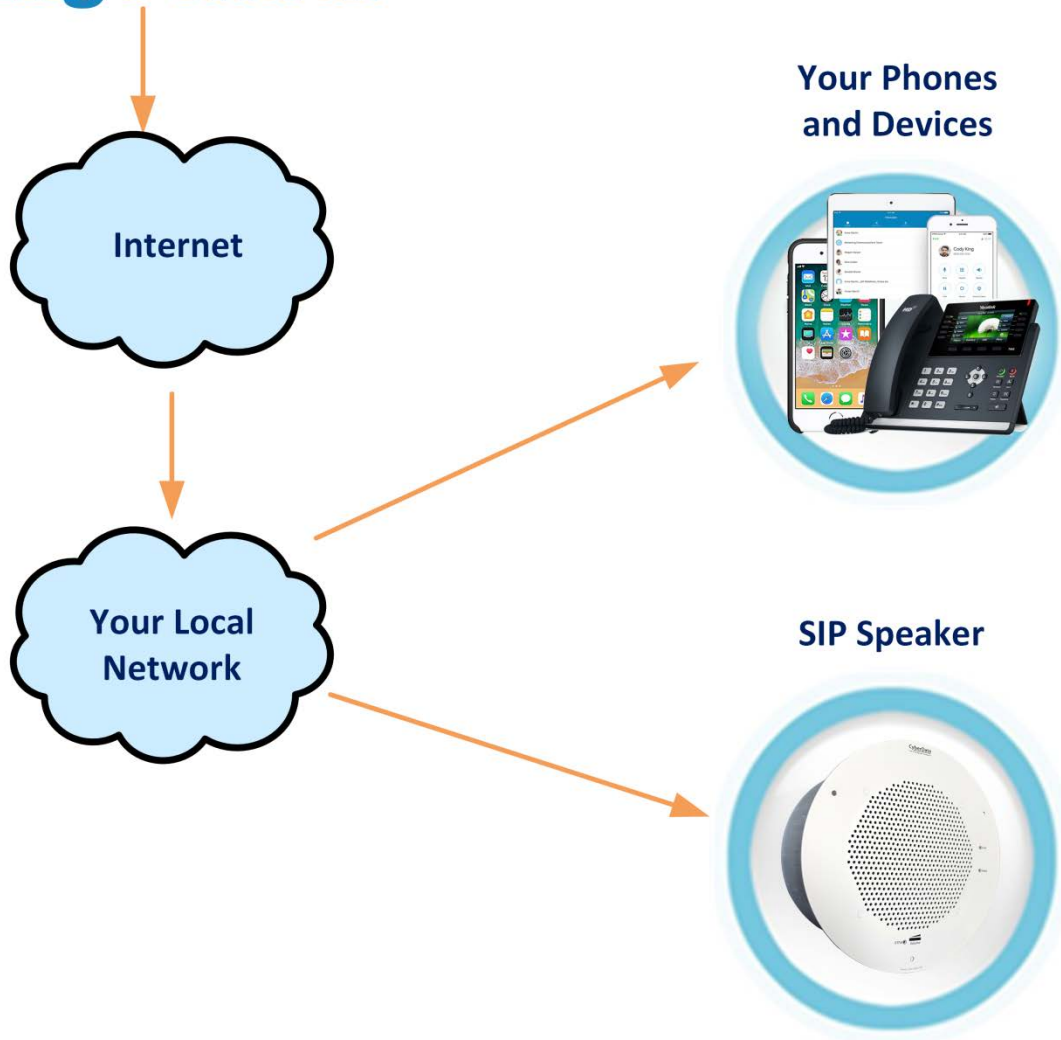


## One-speaker system using a new speaker

Figure 2. One-speaker system using a new speaker

One RC User Required

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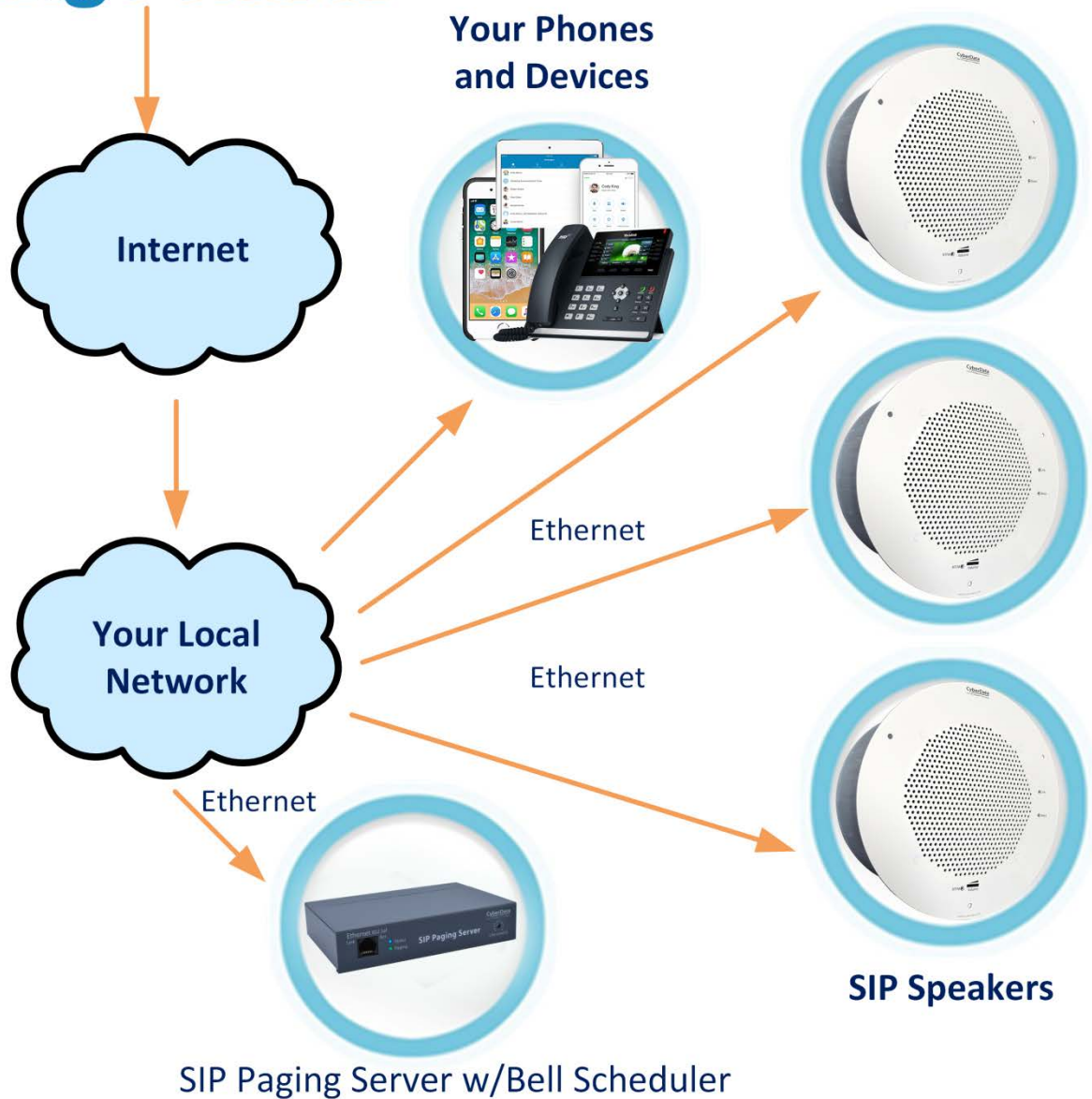


### Multi-speaker system using new IP speakers

Figure 3. Multi-speaker system using new IP speakers

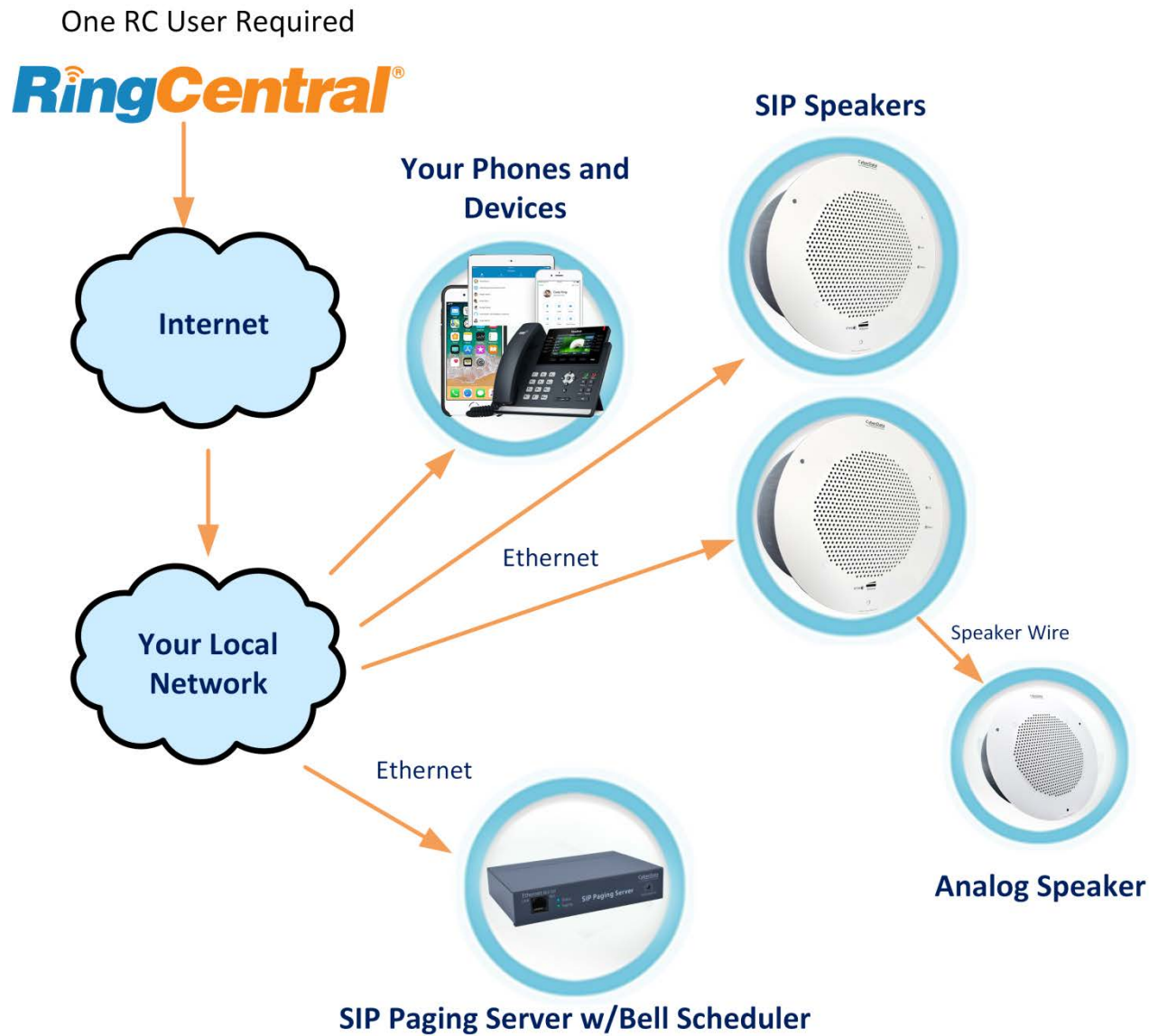
One RC User Required

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### Multi-speaker system using IP and analog speakers

Figure 4. Multi-speaker system using new IP speakers and analog speakers

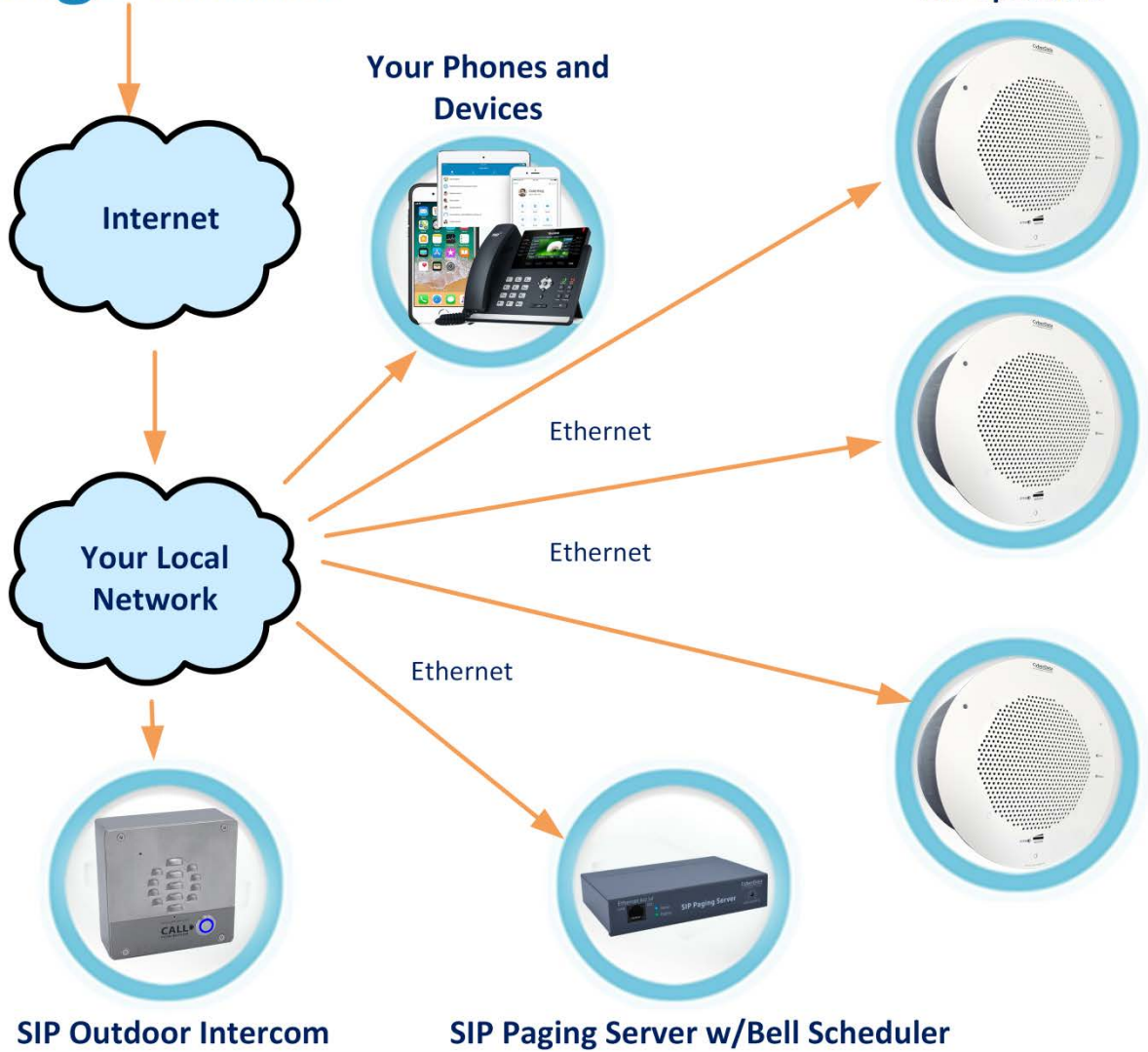


## Adding an intercom

Figure 5. Adding an intercom

One RC User Required

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# Configuring your RingCentral account

RingCentral has two different extension types that are used for CyberData products: '**Paging Device**' or a **Digital Line**.

**Paging devices** are one-way audio devices and are designed to be used with products like Speakers, SIP Paging Servers, IP66 Horns or any other one-way audio devices. There are some restrictions when dealing with paging extensions, there is a hard limit of 25 per account (they are free so there has to be some limit), audio can only be passed from the calling party (phone) to the paging device, and no DTMF (Dual Tone – Multi Frequency) tones can be passed to the device. There are some limitations to using a paging extension with your CyberData Device, such as not being able to select a paging zone on the paging server since no DTMF can be sent to select said zone.

CyberData products that can use a paging device extension are: the [SIP Paging Adapter](#), [SIP Paging Server](#), [SIP Speaker](#), [SIP IP66 Horn](#), and [SIP Paging Amplifier](#).

A **Digital Line** is a full-fledged extension through RingCentral and will allow for all the features one would expect of a regular VoIP Phone. This includes full duplex (two way) communication, DTMF tones and inbound or outbound call generation. These additional features do warrant the additional cost as compared to the free paging device. One additional benefit is that it becomes possible to take full advantage of the features of the CyberData device, such as outbound call generation from the onboard intrusion sensor (intercom products).

CyberData Intercoms and Strobes **MUST** use a digital line to function as expected in a RingCentral environment. Device likes the SIP Paging Server and SIP Paging Adapter will be able to take advantage of zoning features that would not be usable with a paging device extension.

## Set up your RingCentral account

If you don't have a RingCentral account, set up your account, visit [ringcentral.com](https://ringcentral.com).

Once the type of extension to be used has been determined the subsequent steps must be taken to create the extension.

## Paging Device Extension Creation

RingCentral Admin Portal - CyberData

Phone System | Users | Meetings | Analytics | Call Log | Billing | Tools

Company Info | Phone Numbers | Auto-Receptionist | Groups | Phones & Devices | Shared Lines | Unassigned | Emergency Calling

Phones & Devices » **Paging Devices**

Search Paging Devices [ ] Status [ ] + Add Device

Status	Name	Assigned Groups	Operation
<input type="checkbox"/>	CyberData Paging Amp	Interop	Delete
<input type="checkbox"/>	CyberData SIP Paging Adapter		Delete
<input type="checkbox"/>	CyberData SIP Paging Server	Interop	Delete
<input type="checkbox"/>	CyberData SIP Speaker	CyberData Paging Group	Delete
<input type="checkbox"/>	Harry's Paging Server	Bogart	Delete
<input type="checkbox"/>	Ivers PServer	Ivers Paging	Delete
<input type="checkbox"/>	IVTBSPKR		Delete

From the Paging Device page press the Add Device button and name the paging device. After naming the device the configuration information will be presented.

### Configuration Information:

Add Paging Device

✓ Device Nickname

2 Provisioning Info

Provisioning information for CyberData paging devices

CyberData paging devices need to be programmed with the information given below to make them fully functional when assigned to paging group.

**Step 1**  
Open a web browser session to the CyberData device. Please consult the vendor documentation for details on how to determine the IP address of your device and how to enter the relevant login credentials.

**Step 2**  
Navigate to the Networking page and confirm that the device is configured for DHCP operation.

**Step 3**  
Navigate to the SIP Configuration page and enter the following settings in the appropriate fields and Click "Save". The device may reboot.

Field	Value
SIP Domain	sip.ringcentral.com
Remote SIP port	5060
Local SIP port	5060
Outbound Proxy	sip10.ringcentral.com
Outbound Proxy Port	5090
User Name	18312234700*802914304010
Authorization ID	802914304010
Password	

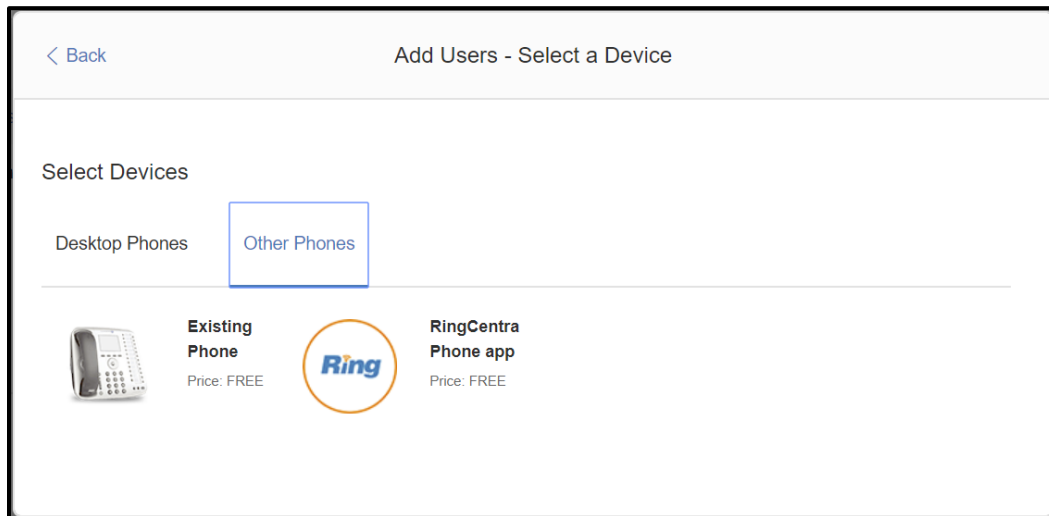
Done

## Digital Line Creation:

If a digital line is required to take advantage of all the features of the CyberData device, follow these instructions to create a user and device.

1. From the Users List press Add User.
2. Fill out the following pop-ups to create an extension.
3. Pick the number of extensions and the locale for the extension to be used.
4. When selecting the Device, select Other Phones and choose "Existing Phone"

## Existing Device



5. Continue to follow the pop-ups to finish creating the user and extension.
6. In the last Pop-Up write down the Phone Number to find the new extension.
7. Under User List select the sub section Unassigned Extensions, search for the extension that was just created.
8. Click on the "Ext. with Existing Phone" and fill out the relevant information for the CyberData Device.
9. Once the user creation portion is complete click the "Setup & Provision" Button to get the credentials for the CyberData Device.

## Configuration Credentials

Field	Value
SIP Domain	sip.ringcentral.com:5060
Outbound Proxy	SIP10.ringcentral.com:5090
User Name	18312164431
Password	
Authorization ID	802858601011

Done



# Configure the components

## SIP Speaker

Install the ceiling speaker in the appropriate location following the instructions, connect a PoE-enabled Ethernet network cable to the device, and plug it into your voice or main network. The status light should be green. Use a paperclip or similar object to press and briefly hold the RTFM button on the front of the speaker. The speaker will read aloud the IP address of the device. If it does not, it is not properly plugged into a network with DHCP using a PoE-enabled switch and cable.

1. On a computer connected to the same network, open a web browser and go to the address read aloud by the speaker.
2. You will be prompted for a password. The default username and password are both admin (you can change the password on the initial screen).

There are tabs on the top for the various device configuration options:

**Device** – Control various speaker options. Most are self-explanatory. See the user manual for more information. These settings can be left with the default value for basic operations.

**Audio**– Control the different audio features of the speaker such as volume.

**Network** – Control how the device connects to the network. For most users, this can be left as the default value for DHCP. You are also able to change your network settings.

**Sip** – Configure how the speaker connects to a SIP account. If you use this speaker as a unit with the paging server, you must:

1. In the **Primary SIP Server** field enter the value from your RC account labeled **SIP Domain**, but do not include **:5060**. It should read **sip.ringcentral.com**.
2. Enter **5060** in the **Remote SIP Port** field.
3. Enter **5060** In the **Local SIP Port** field.
4. In the **Outbound Proxy** field enter the value from your RC account labeled **Outbound Proxy**, but do not include **:5090**. For example, it might read **sip10.ringcentral.com**. The number after sip will depend on the geographical location.
5. Enter **5090** in the **Outbound Proxy Port** field.
6. Enter the value from your RingCentral account labeled **User Name** In the **Primary SIP User ID** field.
7. Enter the value from your RingCentral account labeled **Authorization ID** in the **Primary SIP Auth ID** field.
8. Enter the value from your RingCentral account labeled **Password** in the **Primary SIP Auth Password**.
9. Make sure that the **Register with a SIP Server** box is checked.
10. Change the **Re-registration Interval (In seconds)** to **30**.
11. Change the **Keep Alive Period** to **0**.
12. Leave all other settings at their default values.
13. Select **Save**.
14. Select **Reboot**.



**Multicast** – configures how the speaker should respond to multicast packets. This option is for using the speaker as a member of a group using the Paging Server. If you are not using the paging server, leave this section at defaults. If you are using the paging server, configure it as follows:

1. Check the box **Enable Multicast operation**.

***Note:** The system has the capability to listen to multiple addresses at different priorities. For this configuration overview, we assume you are only using one and will put it on priority 8.*

2. In the row next to **8**, enter the multicast address you setup in your paging server into the address field.  
By default, it would be **239.168.3.9**.
3. In the same row, enter the port you setup in your paging server into the port field.  
The default value is **10000**.
4. Fill in the group name or leave it as default.
5. Click **Save**.
6. Click **Reboot**.

**Audiofiles** – Allows you to customize audio tones played by the device in various situations. All options can be left as default.

**Events** – Allows you to have the device notify a logging event server of various activities. All options can be left at default.

**Autoprov** – Leave all options at default.

**Firmware** – Allows you to update the firmware on the device. See CyberData manual for updating firmware if necessary.

For a more in depth look at setup and other features please review the RingCentral configuration guide for the product. The guide can be found at the [CyberData Compatible IP/PBX](#) page under RingCentral.

## SIP Paging Adapter

1. Connect the paging adapter to your network. It does not need to be physically connected to a speaker.
2. Use the [CyberData Discovery Utility](#) to scan the network and find the IP Address of the paging server  
**Note:** *The PC running the CyberData Discovery Utility must be on the same subnet/VLan of the paging server to be discovered.*
3. On a computer connected to the same network, open a web browser and go to the address of the paging adapter OR press the Launch Browser button in the CyberData Discovery Utility.
4. You should be prompted for a password. The default username and password are both admin. You can change the password by pressing the **Admin Settings** button at the bottom.

There are tabs on the top for the various device configuration options:

**Device** – Allows configuration of device related settings like Line-In, Relay activation and NTP Settings.

**Network** – Allows you to configure how the paging server connects to your network. We suggest static IP addressing. Change these settings to match your network.

**SIP** – Configures how the paging adapter connects to a SIP account. Your paging adapter will connect as a RingCentral extension. Input your RingCentral SIP account settings (see above for obtaining these settings) here.

1. In the **Primary SIP Server** field enter the value from your RC account labeled **SIP-Domain**, but do not include **:5060**. It should read **sip.ringcentral.com**.
2. Enter **5060** in the **Remote SIP Port** field.
3. Enter **5060** in the **Local SIP Port** field.
4. In the **Outbound Proxy** field enter the value from your RC account labeled **Outbound Proxy**, but do not include **:5090**. For example, it might read **sip10.ringcentral.com**. The number after sip will depend on the geographical location.
5. Enter **5090** in the **Outbound Proxy Port** field.
6. Enter the value from your RingCentral account labeled **User Name** in the **Primary SIP User ID** field.
7. Enter the value from your RingCentral account labeled **Authorization ID** in the **Primary SIP Auth ID** field.
8. Enter the value from your RingCentral account labeled **Password** in the **Primary SIP Auth Password**.
9. Make sure that the **Register with a SIP Server** box is checked.
10. Change the **Re-registration Interval (In seconds)** to **30**.
11. Change the **Keep Alive Period** to **0**.
12. Leave all other settings at their default values.
13. Select **Save**.
14. Select **Reboot**.

**Multicast** – configures how the paging adapter should respond to multicast packets. This option is for using the paging adapter as a member of a group using the Paging Server. If you are not using the paging server, leave this section at defaults. If you are using the paging server, configure it as follows:

1. Check the box **Enable Multicast operation**.

**Note:** *The system has the capability to listen to multiple addresses at different priorities. For this configuration overview, we assume you are only using one and will put it on priority 8.*

2. In the row next to **8**, enter the multicast address you setup in your paging server into the address field.  
By default, it would be **239.168.3.9**.
3. In the same row, enter the port you setup in your paging server into the port field.  
The default value is **10000**.
4. Fill in the group name or leave it as default.
5. Click **Save**.
6. Click **Reboot**.

**Audiofiles** – Allows you to customize audio tones played by the device in various situations. All options can be left as default.

**Event** – Allows you to have the device notify a logging event server of various activities. All options can be left at default.

**Autoprov** – Leave all options at default.

**Firmware** – Allows you to update the firmware on the device. See CyberData manual for updating firmware if necessary.

For a more in depth look at setup and other features please review the RingCentral configuration guide for the product. The guide can be found at the [CyberData Compatible IP/PBX](#) page under RingCentral.

## Outdoor Intercom

Install the outdoor intercom in the appropriate location following the instructions, connect a PoE-enabled Ethernet network cable to the device, and plug it into your voice or main network. The front call button should illuminate blue, during the boot process the call button should begin to blink rapidly while the unit is looking for a DHCP address. If an address can be attained the front call button will then remain solid. However, if a DHCP server is not available the front call button will blink for 60 seconds and then go solid. If this occurred the device will default to 10.10.10.10.

There is a small yellow button on the back of the circuit board of the intercom, if that button is pressed the intercom will announce its IP Address. If it does not, it is not properly plugged into a network with DHCP using a PoE-enabled switch and cable.

1. On a computer connected to the same network, open a web browser and go to the address read aloud by the speaker.
2. You will be prompted for a password. The default username and password are both admin (you can change the password on the initial screen).

There are tabs on the top for the various device configuration options:

**Device** – Control various intercom options. Most are self-explanatory. See the user manual for more information.

**Network** – Control how the device connects to the network. For most users, this can be left as the default value for DHCP. You are also able to change your network settings.

**Sip** – Configure how the intercom connects to a SIP account. To register the intercom with RC you must:

1. In the **Primary SIP Server** field enter the value from your RC account labeled **SIP-Domain**, but do not include **:5060**. It should read **sip.ringcentral.com**.
2. Enter **5060** in the **Remote SIP Port** field.
3. Enter **5060** in the **Local SIP Port** field.
4. In the **Outbound Proxy** field enter the value from your RC account labeled **Outbound Proxy**, but do not include **:5090**. For example, it might read **sip10.ringcentral.com**. The number after sip will depend on the geographical location.
5. Enter **5090** in the **Outbound Proxy Port** field.
6. Enter the value from your RingCentral account labeled **User Name** in the **Primary SIP User ID** field.
7. Enter the value from your RingCentral account labeled **Authorization ID** in the **Primary SIP Auth ID** field.
8. Enter the value from your RingCentral account labeled **Password** in the **Primary SIP Auth Password**.
9. Make sure that the **Register with a SIP Server** box is checked.
10. Change the **Re-registration Interval (In seconds)** to **30**.
11. Change the **Keep Alive Period** to **0**.
12. Leave all other settings at their default values.
13. Select **Save**.
14. Select **Reboot**.

**Multicast** – configures how the intercom should respond to multicast packets. This option is for using the intercom as a member of a group using the Paging Server. If you are not using the paging server, leave this section at defaults. If you are using the paging server, configure it as follows:

1. Check the box **Enable Multicast operation**.

***Note:** The system has the capability to listen to multiple addresses at different priorities. For this configuration overview, we assume you are only using one and will put it on priority **8**.*

2. In the row next to **8**, enter the multicast address you setup in your paging server into the address field.  
By default, it would be **239.168.3.9**.
3. In the same row, enter the port you setup in your paging server into the port field.  
The default value is **10000**.
4. Fill in the group name or leave it as default.
5. Click **Save**.
6. Click **Reboot**.

**Audiofiles** – Allows you to customize audio tones played by the device in various situations. All options can be left as default.

**Event** – Allows you to have the device notify a logging event server of various activities. All options can be left at default.

**Autoprovisioning** – Leave all options at default.

**Firmware** – Allows you to update the firmware on the device. See CyberData manual for updating firmware if necessary.

For a more in depth look at setup and other features please review the RingCentral configuration guide for the product. The guide can be found at the [CyberData Compatible IP/PBX](#) page under RingCentral

## SIP Paging Server w/Bell Scheduler

1. Connect the paging server to your network. It does not need to be physically connected to the speaker.
2. Use the [CyberData Discovery Utility](#) to scan the network and find the IP Address of the paging server  
**Note:** *The PC running the CyberData Discovery Utility must be on the same subnet/VLan of the paging server to be discovered.*
3. On a computer connected to the same network, open a web browser and go to the address of the paging server OR press the Launch Browser button in the CyberData Discovery Utility.
4. You should be prompted for a password. The default username and password are both admin. You can change the password by pressing the **Admin Settings** button at the bottom.

There are tabs on the top for the various device configuration options:

**Device** – Allows configuration of device related settings like Line-In, Relay activation and NTP Settings.

**Network** – Allows you to configure how the paging server connects to your network. We suggest static IP addressing. Change these settings to match your network.

**SIP** – Configures how the paging server connects to a SIP account. Your paging server will connect as a RingCentral extension. Input your RingCentral SIP account settings (see above for obtaining these settings) here.

1. In the **Primary SIP Server** field enter the value from your RC account labeled **SIP-Domain**, but do not include **:5060**. It should read **sip.ringcentral.com**.
2. Enter **5060** in the **Remote SIP Port** field.
3. Enter **5060** in the **Local SIP Port** field.
4. In the **Outbound Proxy** field enter the value from your RC account labeled **Outbound Proxy**, but do not include **:5090**. For example, it might read **sip10.ringcentral.com**. The number after sip will depend on the geographical location.
5. Enter **5090** in the **Outbound Proxy Port** field.
6. Enter the value from your RingCentral account labeled **User Name** in the **Primary SIP User ID** field.
7. Enter the value from your RingCentral account labeled **Authorization ID** in the **Primary SIP Auth ID** field.
8. Enter the value from your RingCentral account labeled **Password** in the **Primary SIP Auth Password**.
9. Make sure that the **Register with a SIP Server** box is checked.
10. Change the **Re-registration Interval (In seconds)** to **30**.
11. Change the **Keep Alive Period** to **0**.
12. Leave all other settings at their default values.
13. Select **Save**.
14. Select **Reboot**.

**PGROUPS** – Configures how the paging server will communicate with your various paging speakers. You can configure several paging groups. Place a call to the extension of the paging server and enter a paging group number on your keypad to send it to that group. In this document, we will assume you are only using one paging group.

1. Click on the **Device** button at the top of the screen.
2. Click to enable **Bypass DTMF**.

**Note:** *This will automatically forward the paging server to paging group 0. If you want to use multiple paging groups, do not enable this option. A 'Digital Line' is required to use multiple paging groups.*

3. Enter a name next to zone 0. Change and take note of the multicast address and port if you like, but you can generally leave them defaulted. Each speaker that needs to be part of the paging group will need to have this information entered (see the section on configuring the speakers and amplifiers).

For a more in depth look at setup and other features please review the RingCentral configuration guide for the product. The guide can be found at the [CyberData Compatible IP/PBX](#) page under RingCentral.

## SIP IP66 Outdoor Horn

Connect the SIP IP66 Outdoor Horn to your network using a PoE-enabled Ethernet network cable and plug it into your voice or main network. Once the horn boots up, use small screwdriver to remove the plastic screw covering the RTFM button. Use a paperclip or similar object to press and hold the RTFM button to have the horn announce its IP Address.

**Note:** The speaker will read aloud the IP address of the device. If it does not, make sure it's properly plugged in and connected to a DHCP network using a PoE-enabled switch and cable.

1. Open a web browser using a computer connected to the same network and go to the address that was read aloud by the horn.
2. Enter the password when prompted. The default username and password are both admin (you can change the password on the initial screen).

There are tabs on the top for the various device configuration options:

**Device** – Edit various amplifier options, most are self-explanatory. Please see the CyberData manual for more information. Leave these settings at the default value for basic operation.

**Network** – Control how the device connects to the network. Most users can leave this value as defaulted for DHCP.

**Sip** – Allows the horn to register with a SIP account. If you plan to use this horn as a standalone extension connected to your RingCentral account without using a paging server, input your SIP account settings here.

1. In the **Primary SIP Server** field enter the value from your RC account labeled **SIP-Domain**, but do not include **:5060**. It should read **sip.ringcentral.com**.
2. Enter **5060** in the **Remote SIP Port** field.
3. Enter **5060** in the **Local SIP Port** field.
4. In the **Outbound Proxy** field enter the value from your RC account labeled **Outbound Proxy**, but do not include **:5090**. For example, it might read **sip10.ringcentral.com**. The number after sip will depend on the geographical location.
5. Enter **5090** in the **Outbound Proxy Port** field.
6. Enter the value from your RingCentral account labeled **User Name** in the **Primary SIP User ID** field.
7. Enter the value from your RingCentral account labeled **Authorization ID** in the **Primary SIP Auth ID** field.
8. Enter the value from your RingCentral account labeled **Password** in the **Primary SIP Auth Password**.
9. Make sure that the **Register with a SIP Server** box is checked.
10. Change the **Re-registration Interval (In seconds)** to **30**.
11. Change the **Keep Alive Period** to **0**.
12. Leave all other settings at their default values.
13. Select **Save**.
14. Select **Reboot**.

Your configuration is complete once you reboot your horn. You can now dial it using the extension or direct-dial number. The amplifier should answer, and you can make announcements over the speaker.



**Multicast** – Configures how the horn responds to multicast packets. Edit this option if you plan to use the amplifier as a member of a group using the Paging Server. If you are not using the paging server, do not edit this option. Otherwise, configure it as follows:

1. Check the box labeled **Enable Multicast Operation**.

***Note:** The system has the capability to listen to multiple addresses at different priorities.*

*For this configuration overview, we assume you are only using one and will put it on priority 8.*

2. In the row next to **8**, enter the multicast address you used to configure your paging server into the address field. The default value is 239.168.3.9.
3. In the same row, enter the port you used to configure your paging server into the port field. The default value is **10000**.
4. Enter the group name or leave blank.
5. Select **Save**.
6. Select **Reboot**.

**Audiofiles** – Allows you to customize audio tones played by the device in various situations. All options can be left as default.

**Events** – Allows you to have the device notify a logging event server of various activities. All options can be left at default.

**Firmware** – Allows you to update the firmware on the device. See CyberData manual for updating firmware if necessary.

For a more in depth look at setup and other features please review the RingCentral configuration guide for the product. The guide can be found at the [CyberData Compatible IP/PBX](#) page under RingCentral.

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