

# CRESTRON-APP/CRESTRON-APP-PAD

## Control App for Apple® iOS® Operating System

### 1 Introduction

The CRESTRON-APP and CRESTRON-APP-PAD apps provide a Smart Graphics® touch screen user interface on Apple® devices running the iOS® operating system. Fully integrated with Crestron Studio®, VT Pro-e®, and SIMPL Windows programming software, the apps are available for download from the App Store® app.

The Crestron® apps are available for free from the App Store app. The free apps provide a limited number of pages. Upgrade to the Pro versions via an in-app purchase for unlimited pages and the ability to insert streaming video objects onto a screen.

Crestron recommends that an authorized Crestron installer download the app and configure the device for the customer according to the instructions in this guide. If this is not practical, the installer should complete the Crestron App Setup form at [www.crestron.com/crestronmobilesetup](http://www.crestron.com/crestronmobilesetup). The customer will receive emailed instructions to install and start the app.

**NOTE:** Software versions greater than 1.05 do not support Apple Watch®. Programs with Apple Watch controls that were created prior to the release of version 1.05 will not display Apple Watch controls.

**NOTE:** CRESTRON-APP-PAD for iPad® requires 1 GB of RAM.

### 2 Download the App

**NOTE:** This section provides instructions for downloading the app from the App Store app on an iOS device.

#### Prerequisites

- A cellular data network (iPhone® and cellular-equipped devices only) or Wi-Fi® network that is connected to the Internet. Refer to [support.apple.com/kb/TS1398](http://support.apple.com/kb/TS1398) for Wi-Fi network information.
- An Apple ID. Refer to [support.apple.com/kb/HT2731](http://support.apple.com/kb/HT2731) for information about creating an Apple ID.

#### Download the App from the App Store

1. On the device's home screen, tap the **App Store** icon (🍏).
2. Search for the app:
  - a. Tap **Search**.
  - b. Tap the search field and enter the search term **Crestron**.
  - c. Tap **Search**. The Crestron apps are listed.
3. Tap the desired app and follow the prompts to download it. The app downloads to the device. The app icon (🍏) appears on the home screen and shows the download and installation status.

### 3 Upgrade the App

The free version of the app limits the size and complexity of the project. For complete functionality, upgrade to the Pro version via an in-app purchase.

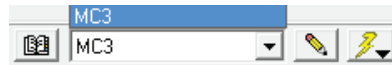

**NOTE:** An iTunes account is required to upgrade to the Pro version.

To upgrade to the Pro version:

1. On the device, tap 🍏 to start the app. A list of systems is displayed.
2. Tap **UPGRADE** and follow the instructions.

### 4 Upload the Crestron Studio/SIMPL Windows Program

Use Crestron Toolbox™ software to upload the Crestron Studio or SIMPL Windows program to the control system(s):

1. Locate the sample Crestron Studio or SIMPL Windows program for the device at [www.crestron.com/exampleprograms](http://www.crestron.com/exampleprograms) and download it.
2. Modify the program as required (refer to the Crestron Studio or SIMPL Windows online help for information).
  - a. Select **System Info** from the **Tools** menu.
  - b. Select the target control system from the Address Book's drop-down list.
  - c. Click the **Quick function access** button (🔧), and select **SIMPL Program**.
  - d. Browse for and select the program, and then click **Open**.
  - e. Click **Send**. The **Confirmation** window opens asking to overwrite the default IP table of the control system with the default IP table of the SIMPL Windows program.
  - f. Click **Yes**, and then in the **SIMPL Program** window, click **Close**.

**NOTE:** Do not close Crestron Toolbox. It is required in section 5.

### 5 Upload the VT Pro-e® Project

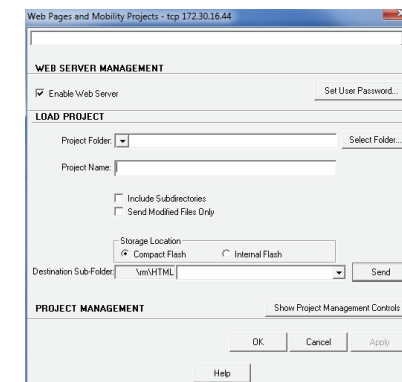
1. Locate the sample VT Pro-e project for the device at [www.crestron.com/exampleprograms](http://www.crestron.com/exampleprograms), and download it.
2. Modify or create a project and compile the project.

**NOTE:** Select the following when creating the project in VT Pro-e:

- For **Panel Type**, select **Crestron App**.
- For **Device**, select the target device that is to run the app.
- For **Orientation**, select the orientation of the completed project.
- For **Version**, select the version of the app that is installed on the device.

**NOTE:** When used with the free app, the VT Pro-e project is limited to two pages. Upgrading to the Pro version removes this limit and allows the use of embedded streaming video objects.

3. Use Crestron Toolbox to load the project to the control system or the device:
  - a. Load the project to the control system.
    - i. Establish communication with the control system as described in the control system's operations guide.
    - ii. Select **Web Pages and Mobility Projects** from the **Functions** menu of the System Info tool. The **Web Pages and Mobility Projects** window is displayed.



- i. Verify that **Enable Web Server** is checked.
- ii. Browse for and select the project folder, and then click **OK**.
- iii. Click **Send**, and then click **OK**.

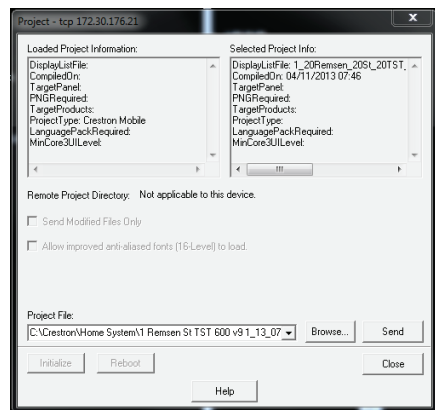
**NOTE:** Do not close Crestron Toolbox. It is required in section 6.

# CRESTRON-APP/CRESTRON-APP-PAD

## Control App for Apple® iOS® Operating System

### 5 Upload the VT Pro-e Project (Continued)

- Load the project to the device (Wi-Fi only).
  - a. On the device, tap to start the app. A list of systems is displayed. Tap to view the device's Wi-Fi IP address.
  - b. In Crestron Toolbox, use the System Info tool to establish communication with the Wi-Fi IP address from step a.
  - c. Select **Functions > Project** to display the **Project** window.



- d. Browse for and select the project folder, and then click **OK**.
- e. Click **Send**, and click **Close**.

**NOTE:** Do not close Crestron Toolbox. It is required in section 6.

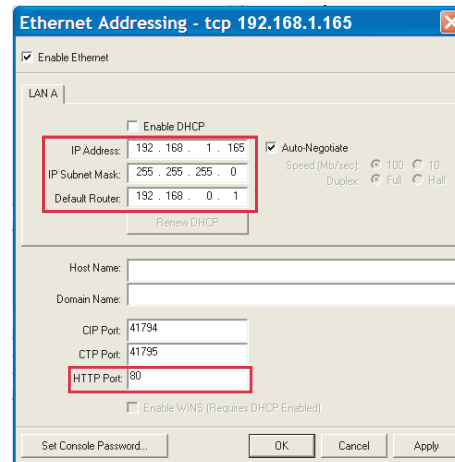
### 6 Configure a Connection to the Control System(s)

**NOTE:** To use the app with a cellular data connection, a DNS host name must be obtained from the customer's ISP or a service such as mycrestron.com. For information on setting up a host name, refer to Answer ID 4863 in the Online Help section of the Crestron website ([support.crestron.com](http://support.crestron.com)).

#### Configure the Control System

Configure the Ethernet addressing parameters of the control system with Crestron Toolbox:

1. Select **Ethernet Addressing** from the **Functions** menu of the System Info tool. The **Ethernet Addressing** window is displayed.

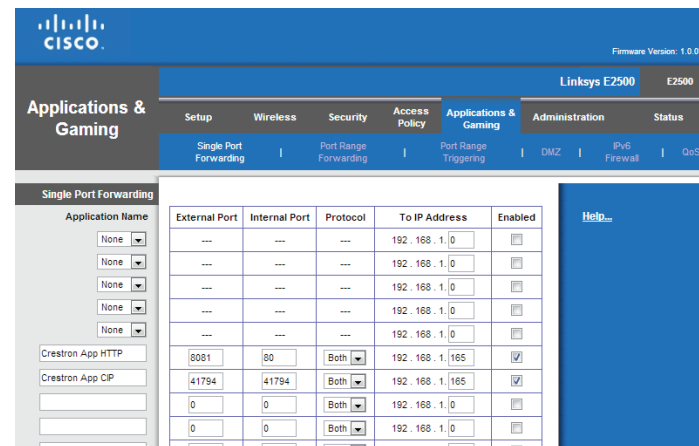


2. Enter a static IP address and other network details.
3. Note the values in the **HTTP Port** and **CIP Port** fields. They are needed in the following steps.
4. Click **OK**.

#### Configure the Router

Use the router's configuration utility to do the following:

1. Open and map a TCP control port to the control system using the following values:
  - For the **External Port**, use the **CIP Port** value of the control system listed in step 3 of "Configure the Control System." or another port value.
  - For the **Internal Port**, use the **CIP Port** value of the control system listed in step 3 of "Configure the Control System."



**NOTE:** The router configuration screen shown above is a sample screen only. The screen that appears for a particular router may differ from the sample screen shown.

2. Open and map an HTTP port to the control system using the **HTTP Port** field listed in step 1c.
  - The **External Port** should be a port value other than 80, which most ISPs block. Port number 8081 is the suggested value.
  - The **Internal Port** should be the **CIP Port** value of the control system listed in step 3 of "Configure the Control System."

#### Configure the App

1. On the home screen, tap to start the app. A list of systems is displayed. The first time the device is configured, the screen appears empty.

**NOTE:** If this is the first time using the app, accept the terms of use and privacy statement, and then click **I Agree**.

**NOTE:** To view a sample system, tap **Demo**.

2. Tap **+** to configure a system. The **Add Location** screen is displayed.

**NOTE:** A system configuration can be imported from a system on another device. For details, refer to section 10.

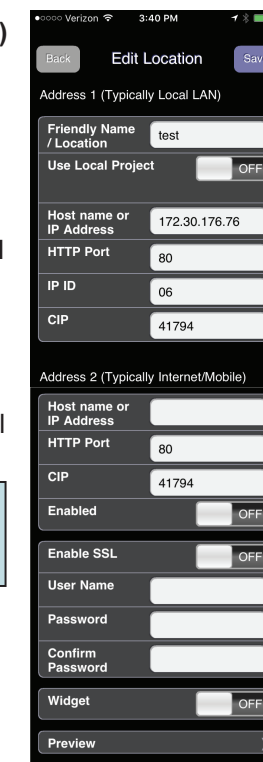
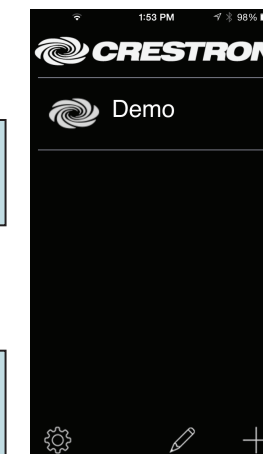
3. Enter the configuration information for a Wi-Fi connection in the **Address 1 (Typically Local LAN)** section.

- a. Tap the **Friendly Name / Location** field and enter the name or location of the control system to be connected. The field is for user reference only and is not a host name.
- b. If the device will host the project, tap **Use Local Project** to display **ON**. If the control system will host the project, tap **Use Local Project** to display **OFF**.

- c. Tap the **Host Name or IP Address** field, and enter the host name or IP address of the control system.

**NOTE:** If using DHCP, enter a host name rather than an IP address as the DHCP server may change the IP address periodically.

- d. Tap the **HTTP Port** field and enter the **HTTP Port** value used in step 3 of "Configure the Control System." Otherwise, the app assigns the default value 80.



(Continued on the following sheet)

### 6 Configure a Connection to the Control System(s) (Continued)

- e. Tap the **IP ID** field and enter an IP ID to identify the device to the control system. The IP ID must match the IP ID specified in the control system program.
  - f. Tap the **CIP** field and enter the **CIP Port** value used in step 3 of “Configure the Control System.” Otherwise, the app assigns the default value 41794.
4. If using a cellular data connection, configure it in the **Address 2 (Typically Internet/Mobile)** section of the setup screen.
    - a. Enter the connection parameters entered in step 3 of “Configure the App” in section 5.
    - b. Tap the **Enabled** field to display **ON**.
  5. If using a password or Secure Sockets Layer (SSL) encryption between the device and the control system, perform the following procedure.
    - a. Tap the **Enable SSL** field to display **ON**.
    - b. Enter a user name and password in the **User Name**, **Password**, and **Confirm Password** fields if authentication is set on the control system side.
    - c. Enable SSL on the control system. For details, refer to the control system’s operations guide.

**NOTE:** If SSL is being used, the **HTTP Port** and **CIP** values automatically change to 443 and 41796, respectively.


6. Tap the **Widget** field to display **ON** to use the Notifications widget.
7. Tap **Preview** to preview the project (locally stored projects only). For details, refer to “Preview a System” in section 7.
8. Tap **Save**. The setup screen is displayed, listing the control system that has been added.

### 7 Select a System for Use

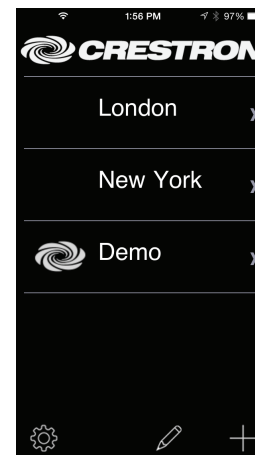
Once a system is saved, it can be selected for operation by the app. If the system’s project file is stored on the device (**Use Local Project** is set to **ON**), the system can be previewed on the device.

**NOTE:** The following assumes that either a) a system has only been configured on the device (not connected to it) or b) the **Auto-reconnect** function (described in section 11) has not been enabled.

#### Select a System

1. Tap  to start the app. A list of systems is displayed.
2. Tap the configuration to be used. When the device connects to the control system, it is ready for use as a Crestron touch screen.

**NOTE:** When multiple control systems are configured, the systems are displayed in a list. When the app is restarted, it automatically connects to the last connected control system (default setting). To allow the customer to select a system from the list of systems when the app is restarted, refer to section 11.





#### Preview a System

If the system’s project files are stored on the device (**Use Local Project** is set to **ON**), the system can be previewed for troubleshooting.

**NOTE:** This feature forgoes a connection to the control system and simply displays the project that is loaded. There is no control system functionality when previewing a system.




Preview a system on the device:

1. On the home screen, tap . A list of systems is displayed.
2. Tap  to enable system editing.
3. Tap the system to be edited. The system’s configuration screen is displayed.
4. Scroll to the bottom of the configuration screen.
5. Tap **Preview** to preview the system.
6. Exit the app to exit the preview.



### 8 Edit a System

A configured system can be deleted or edited.

#### Delete a System

1. On the home screen, tap . A list of systems is displayed.
2. Tap  to enable system editing.
3. Tap the delete icon () next to the system that is to be deleted.
4. Tap **Delete** to confirm deletion or **Cancel** to cancel.

#### Edit a System

1. On the home screen, tap . A list of systems is displayed.
2. Tap  to enable system editing.
3. Tap the system to be edited. The system’s configuration screen is displayed.
4. Make any desired changes.
5. Tap **Save** to save the changes or **Back** to cancel.

# CRESTRON-APP/CRESTRON-APP-PAD

## Control App for Apple® iOS® Operating System

### 9 Voice over IP (VoIP) Setup (Optional)

The device can be used as an intercom within a Crestron system (peer network) or as a VoIP phone that is part of a VoIP network. Perform the following to configure the device for use as a Rava® intercom device or VoIP phone.

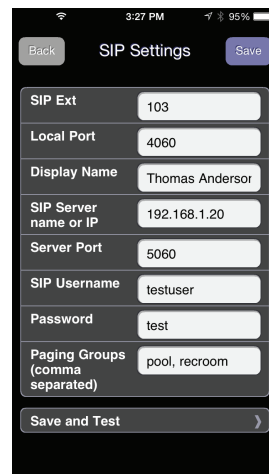
**NOTE:** The following assumes that either a) a system has been only configured on the device (not connected to it) or b) the **Auto-reconnect** function (described in section 10) has not been enabled.

#### Configuration

- On the home screen, tap . A list of systems is displayed. When the device is configured for the first time, the screen appears empty.
- Tap to display the **Settings** screen.
- Tap **VOIP**. The **SIP Settings** screen is displayed:
  - Configure the device for intercom use.

- Enter a Session Initiation Protocol (SIP) extension (10 digits max) in the **SIP Ext** field. Each device must have a unique SIP extension.
- Enter a local port number for use within the peer network in the **Local Port** field.

**NOTE:** Port 4060 is the default port assignment. If another port is to be used, avoid using ports 4050 and 5060, as they are reserved for other functions.



- Enter the name that is displayed on other devices in the peer network when making calls in the **Display Name** field.
- Enter the names of the paging groups to which the device is to be assigned in the **Paging Groups** field. If a device belongs to multiple groups, the group names should be separated by commas.
- Tap **Save** to save the configuration or **Save and Test** to save the configuration and display the test screen. For details, refer to "Test the Configuration" in the following column.

- Configure the device for VoIP use via a SIP server.
  - Enter an SIP extension (10 digits max) in the **SIP Ext** field. Each device must have a unique SIP extension.
  - Enter the local port number to be used within the SIP network in the **Local Port** field.

**NOTE:** Port 5060 is the default port used by most SIP servers. Check with the VoIP network administrator for port availability.
  - Enter the name that is displayed on other devices when calling in the **Display Name** field.
  - Enter the host name or IP address of the SIP server in the **SIP Server name or IP** field.

**NOTE:** If this field is left blank, the device acts as an intercom device.
  - Enter the port number used by the SIP server to communicate with VoIP devices in the **Server Port** field. The default port number is 5060, which is used by most SIP servers.
  - Enter the user name and password in the **SIP Username** and **Password** fields.
  - Tap **Save** to save the configuration or **Save & Test** to save the configuration and display the test screen. For details, refer to "Test the Configuration" below.

#### Test the Configuration

- Tap **Save & Test** to display the **SIP Test** screen. The field below the **SIP addr** field shows the device's SIP address.
- Enter the extension (intercom) or the full SIP address of the extension to be called (VoIP) in the **SIP addr** field.
- Tap **Dial** to call the extension or SIP address specified in the **SIP addr** field. The **Active** indicator lights to show that a call is in progress.

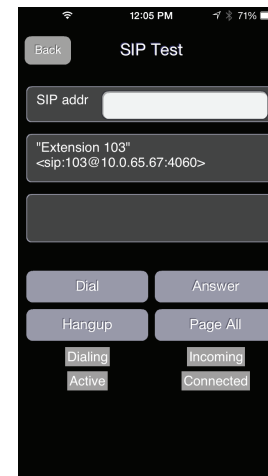
Tap **Answer** to receive a call.

Tap **Hangup** to end a call.

Tap **Page All** to test the intercom paging function. Crestron devices on the intercom network's subnet indicate a page from the device.

During testing, the following indicators show the device's status:

- Dialing** indicates that the device is dialing the extension or address specified in the **SIP address** field.
- Incoming** indicates that the device is receiving a call.
- Active** indicates that a call is in progress.



- Connected** indicates that the device is connected to a SIP server.
- Tap **Back** to return to the previous screen.

### 10 Export and Import System Configurations

#### Export System Configurations

Once a device has been configured for use, the configured systems can be exported to other devices that use the app.

**NOTE:** Configured systems can be exported for use on Android™ devices running the CRESTRON-APP-ANDROID app and iOS devices running the CRESTRON-APP or CRESTRON-APP-PAD app.

Perform the following to export system configurations:

- Tap to display the **Settings** screen.
- Tap **Export Settings**. An e-mail message opens with the settings attached in a CAS file.
- Address the e-mail to the target device.
- Send the e-mail message.

#### Import System Configurations

System configuration files are received via e-mail as an attached CAS file. To import a system configuration, open the e-mail, and then open the attachment. The system configurations are automatically imported into the app.

### 11 App Controls

Controls for the app are used to configure its operation:

- On the device's home screen, tap the **Settings** icon (). The **Settings** menu is displayed.
- Scroll through the list until the name of the desired app appears and tap it. Controls for the app are displayed.

(Continued on the following sheet)

# CRESTRON-APP/CRESTRON-APP-PAD

## Control App for Apple® iOS® Operating System

### 11 App Controls (Continued)

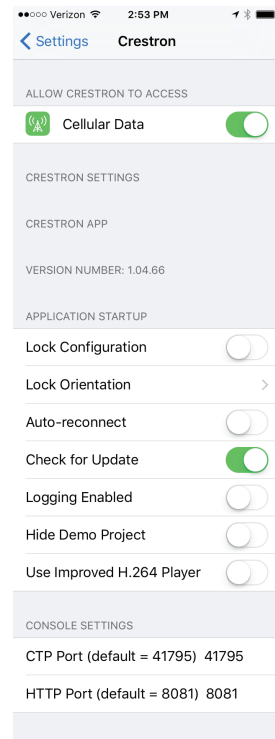
3. Adjust the settings as required.

- The **Cellular Data** specifies the app's ability to use cellular data during operation.
- The **Lock Orientation** setting specifies how the app is displayed (portrait, landscape, or none) when the device is rotated.
- The **Auto-reconnect** setting allows the app to automatically connect to the last connected control system. The default setting (enabled) is recommended when only one control system is configured. When multiple control systems are configured, **Auto-reconnect** should be disabled to allow the user to select the control system to be reconnected.
- The **Check for Update** setting allows the app to check for an updated VT Pro-e project on the control system upon startup. If an updated project is found, the project is automatically loaded to the device. If the function is disabled, the app uses the last project that was loaded.


**NOTE:** While developing and testing projects, make sure that the **Check for Update** function is enabled (set to **ON**) so that project changes can be viewed after a new project has been uploaded.

- The **Logging Enabled** setting enables and disables the event log that is used for troubleshooting.
- The **Hide Demo Project** setting is used to hide or display the demo system in the system list.
- The **Use Improved H.264 Player** setting specifies whether the app should use the newer version of the H.264 player. The new player provides lower latency H.264 playback and uses memory more efficiently on the device.
- The **Console Settings** section specifies the CTP and HTTP ports that are used by VT Pro-e or Crestron Toolbox to upload projects for system configurations that use a local file.

4. Tap **Settings** to return to the previous screen.

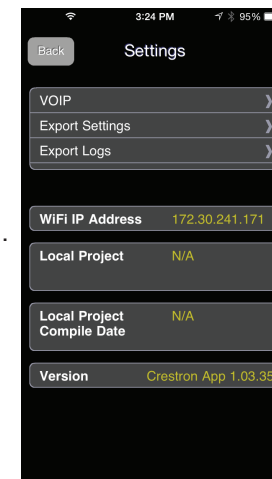


### 12 App Settings

The app's **Settings** screen is used to configure VoIP, export system configurations and event logs, upgrade the app, and view information about the device, local project, and software. Tap  to display the **Settings** screen.

- Tap **VOIP** to configure the device for use as a VoIP device or Rava intercom device. For details, refer to section 9.
- Tap **Export Settings** to e-mail all of the system configurations that are stored on the device.
- Tap **Export Logs** to e-mail the event log.
- Tap **Upgrade to Pro** to upgrade the app to the professional version. For details, refer to section 8.

The **Settings** screen also contains information about the device's IP address, the local project file (if present), and the software version.



Product warranty can be found at [www.crestron.com/warranty](http://www.crestron.com/warranty).

The specific patents that cover Crestron products are listed at [www.crestron.com/legal/patents](http://www.crestron.com/legal/patents).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

Crestron, the Crestron logo, Crestron Studio, Crestron Toolbox, Rava, Smart Graphics, and VT Pro-e are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Apple, Apple Watch, App Store, iPad, iPhone, and iTunes are either trademarks or registered trademarks of Apple, Inc. in the United States and/or other countries. Cisco, IOS, and Linksys are either trademarks or registered trademarks of Cisco Systems, Inc. in the United States and/or other countries. Android is either a trademark or registered trademark of Google, Inc. in the United States and/or other countries. Wi-Fi is either a trademark or registered trademark of Wi-Fi Alliance in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

This document was written by the Technical Publications department at Crestron.  
©2018 Crestron Electronics, Inc.