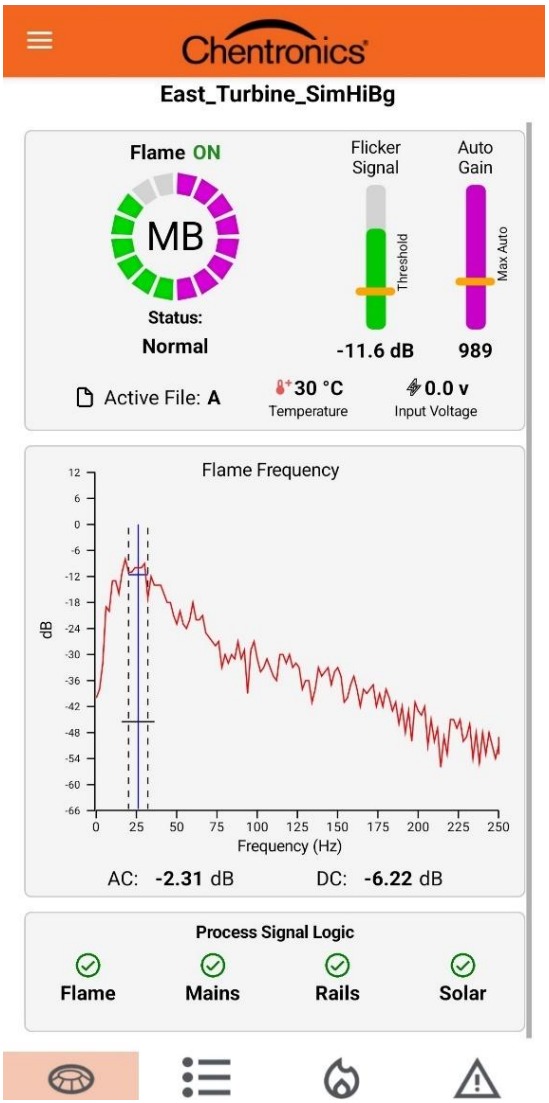
iScan® Live MOBILE APP USER MANUAL



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1 INTRODUCTION

The iScan Live mobile app is designed for Bluetooth-enabled iScan3+ and later Chentronics® flame scanners. Users can view and record scanner data, including flame frequency, operational status, and first-out events.

In addition to monitoring, the app provides the following features:

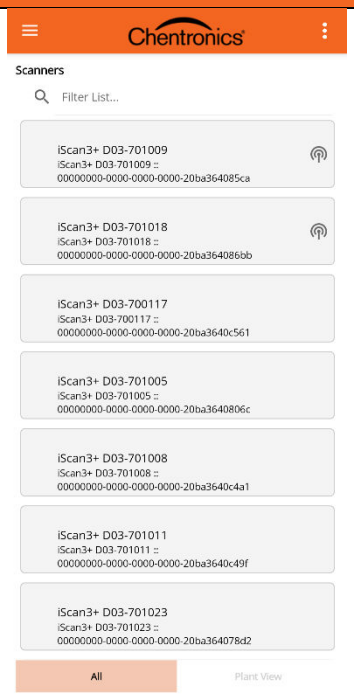
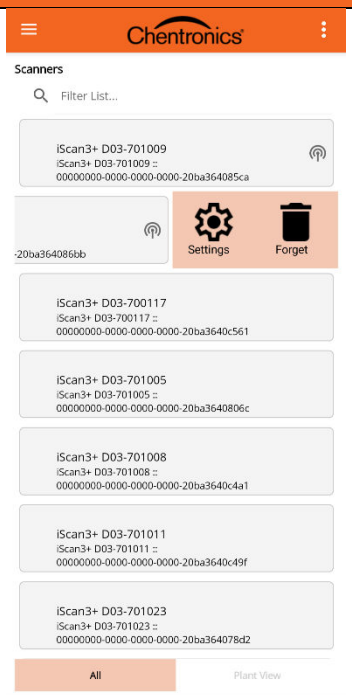
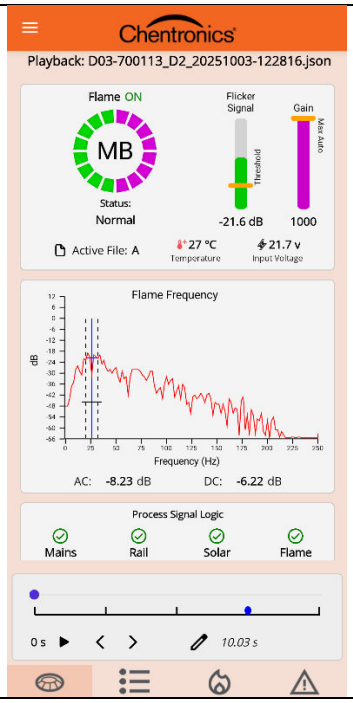
- Capture screenshots of live data.
- Save live data recordings and add comments.
- Share data with Chentronics and other mobile app users.

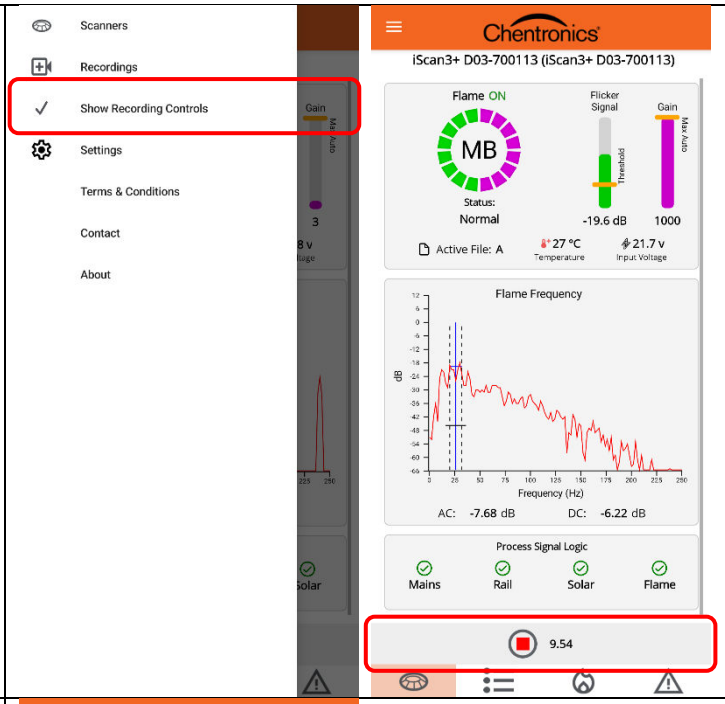
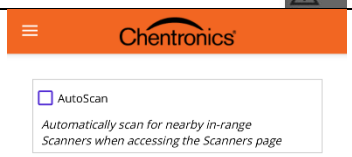
Reminders and Caveats:

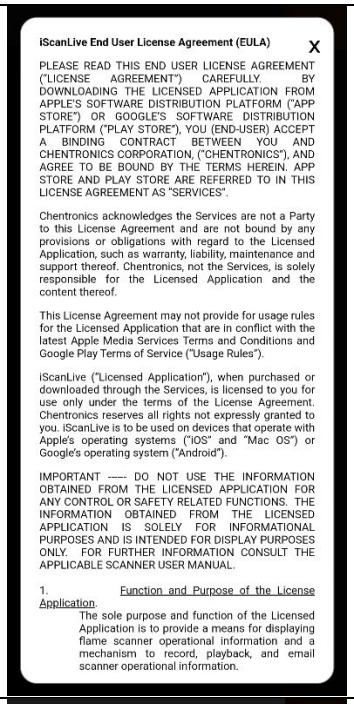
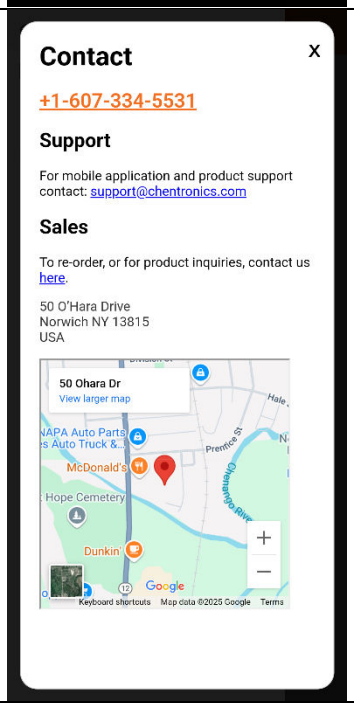
- All data presented within the app is not for safety-critical flame proving, but only for informational purposes.
- Data is subject to interpretation; users should apply judgment when reviewing results.
- Parameters displayed assist in making informed operational decisions, not as definitive indicators of system safety or performance.

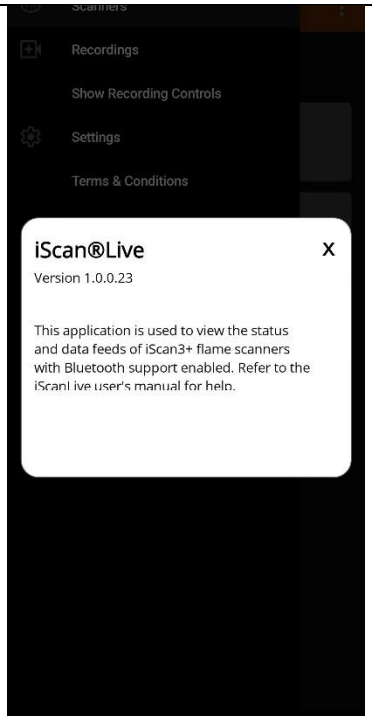
Use of this app is contingent upon use of the scanner according to the product manual and all applicable safety instructions and guidelines. Manuals for Chentronics® flame scanners can be found here: Literature & Product Support.

2 Home Screen & Main Menu Options

Menu Option	Description	Screenshot
Scanners	Default Home page. Can also be accessed by pressing the ≡ icon. Select a scanner to pair with while in connection range to view its scanner detail tabs. Swipe left on a scanner to set a custom name or forget the scanner. Lists scanners in two sections ordered as follows: ◆ Previously connected, then by Serial Number. ◆ Not previously connected, then by Serial Number.	 
Recordings	Accessed by pressing the ≡ icon. Shows previous recordings. Swipe left on a recording to share or delete. Select a recording to open playback menu. ◆ Play/Pause button allows for pausing of playback ◆ Forward/Backward arrows move between frames of recording ◆ Pencil button adds or edits notes	

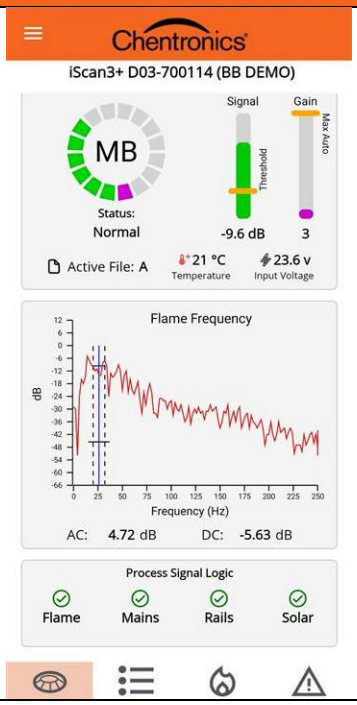
Show Recording Controls	Accessed by pressing the ≡ icon. Selecting this option adds a small recording bar to the scanner detail tabs. ◆ Recording Button can be used to start and stop recording of scanner data	
Settings	Accessed by pressing the ≡ icon. ◆ AutoScan will scan for nearby scanners when opening the Scanners page	

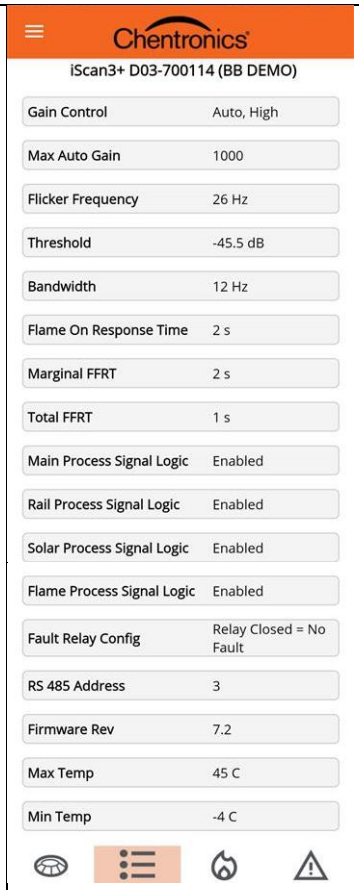
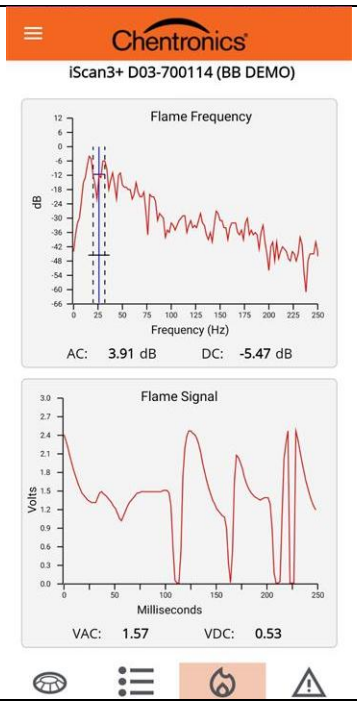
Terms & Conditions	Accessed by pressing the ≡ icon. ◆ iScan Live End User License Agreement (EULA)	 **iScanLive End User License Agreement (EULA)** X PLEASE READ THIS END USER LICENSE AGREEMENT ("LICENSE AGREEMENT") CAREFULLY. BY DOWNLOADING THE LICENSED APPLICATION FROM APPLE'S SOFTWARE DISTRIBUTION PLATFORM ("APP STORE") OR GOOGLE'S SOFTWARE DISTRIBUTION PLATFORM ("PLAY STORE"), YOU (END-USER) ACCEPT A BINDING CONTRACT BETWEEN YOU AND CHENTRONICS CORPORATION, ("CHENTRONICS"), AND AGREE TO BE BOUND BY THE TERMS HEREIN. APP STORE AND PLAY STORE ARE REFERRED TO IN THIS LICENSE AGREEMENT AS "SERVICES". Chentronics acknowledges the Services are not a Party to this License Agreement and are not bound by any provisions or obligations with regard to the Licensed Application, such as warranty, liability, maintenance and support thereof. Chentronics, not the Services, is solely responsible for the Licensed Application and the content thereof. This License Agreement may not provide for usage rules for the Licensed Application that are in conflict with the latest Apple Media Services Terms and Conditions and Google Play Terms of Service ("Usage Rules"). iScanLive ("Licensed Application"), when purchased or downloaded through the Services, is licensed to you for use only under the terms of the License Agreement. Chentronics reserves all rights not expressly granted to you. iScanLive is to be used on devices that operate with Apple's operating systems ("iOS" and "Mac OS") or Google's operating system ("Android"). IMPORTANT ------ DO NOT USE THE INFORMATION OBTAINED FROM THE LICENSED APPLICATION FOR ANY CONTROL OR SAFETY RELATED FUNCTIONS. THE INFORMATION OBTAINED FROM THE LICENSED APPLICATION IS SOLELY FOR INFORMATIONAL PURPOSES AND IS INTENDED FOR DISPLAY PURPOSES ONLY. FOR FURTHER INFORMATION CONSULT THE APPLICABLE SCANNER USER MANUAL. 1. Function and Purpose of the License Application. The sole purpose and function of the Licensed Application is to provide a means for displaying flame scanner operational information and a mechanism to record, playback, and email scanner operational information.
Contact	Accessed by pressing the ≡ icon. Offers multiple contact options for product support. ◆ For mobile application and product support, contact: support@chentronics.com ◆ To re-order, or for product inquiries, click on the link to navigate to our online contact form.	 **Contact** X +1-607-334-5531 **Support** For mobile application and product support contact: support@chentronics.com **Sales** To re-order, or for product inquiries, contact us here. 50 O'Hara Drive Norwich NY 13815 USA 50 Ohara Dr View larger map NAPA Auto Parts McDonald's Hope Cemetery Dunkin' Google Keyboard shortcuts Map data ©2025 Google Terms

About	Accessed by pressing the ≡ icon. ◆ Details iScan Live app version.	

3 Scanner Detail Tabs

- Select a scanner in the Scanner view to see its scanner details
- Scanner details can be navigated by clicking any of the four icons at the bottom of the screen.
- You can go back to the Scanners view or other menu options by clicking the menu icon (≡) in the top left corner.

Page Option	Description	Screenshot
Active Scanner Landing Page	◆ Default landing page when connecting to scanner ◆ Shows key information about the connected scanner, including current flame status	

Scanner Status	◆ Detailed status information of the scanner ◆ See § 3.1 Scanner Status Definitions below for more information	
Scanner Flame Graphs	◆ Complete flame graphs from the scanner ◆ Includes flame frequency analysis and flame signal	

First Out Events	◆ Displays twenty-five previous first-out events ◆ First-out events refer to events when flame relays open ◆ Refer to the iScan scanner manual for First Out Event descriptions	

3.1 Scanner Status Definitions

The iScan Live app does not allow for changing any of the below values. iScan Live allows for viewing of these parameters. The iScan Desktop App can be used to change certain values, refer to Section 7 for more information.

Table 1: Definitions	
Gain Control	Displays current Gain mode. Depending on iScan model, can be changed between Auto or Manual and High or Low modes.
Max Auto Gain	Maximum allowable gain value when Gain Control is set to Auto mode. Changing Gain Control to Low will cap Max Auto Gain to 100.
Flicker Frequency	“Flicker” or “Flicker Frequency” refers to the modulation of flame intensity due to micro-explosions. Shown in app as the vertical black bar on Flame Frequency graph.
Threshold	The level the Flicker Signal must exceed for the scanner to declare “Flame On”. Shown in app by the horizontal black bar on Flame Frequency graph.
Bandwidth	The range of frequencies around the Flicker Frequency over which the flame's energy is summed to determine the Flicker Signal strength. Shown in app by the vertical blue lines on Flame Frequency Graph.
Flame ON Response Time (FORT)	The time it takes the flame relay contacts to close after the flame signal rises above the set threshold.
Marginal Flame Failure Response Time (MFFRT)	The time it takes the relay contacts to open after the flame signal drops below the set threshold.

Total Flame Failure Response Time (TFFRT)	The time it takes the flame relay contacts to open after the complete loss of a sensed flame.
Process Signal Logic	Process Signal Logic are four additional checks on the flame signal to ensure that extraneous sources do not result in a false indication of flame. The possible Process Signal failures are: - Power Mains Signal Detected (50/60 or 100/120 Hz) - Flame Signal at Maximum or Rail Condition - Strong Solar-Like signal - Non 1/f Flame-Like Signal
Fault Relay Config	Fault Relay can be configured to be Normally Open or Normally Closed. The app shows current Fault Relay Configuration.
RS485 Address	Each iScan flame scanner is shipped with its Comm Address set to "1". To enable RS485 communication, each scanner must be assigned a unique address (1–127) before communication with all scanners on the network can be established.
Firmware Rev	The version of the flame scanner firmware.
Max Temp	Maximum temperature experienced by the scanner during operation, initially set to a factory default of 45 °C.
Min Temp	Minimum temperature experienced by the scanner during operation, initially set to a factory default of 15 °C.

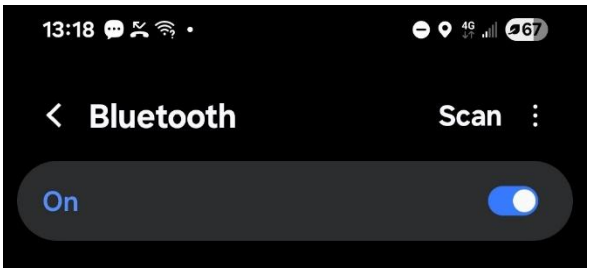
4 Connecting to a Scanner

It is recommended to complete the initial pairing process to scanners individually, as the mobile app can only communicate with and connect to one scanner at a time.

4.1 How to connect using Android OS

- Open device Settings menu

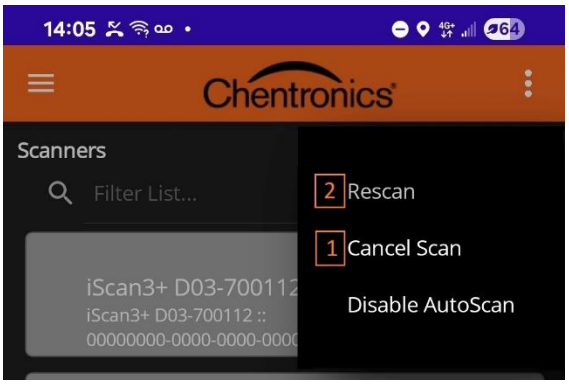
- Navigate to Bluetooth settings and confirm Bluetooth is on
- Scan for devices (may also be called pair new device or connect new device)



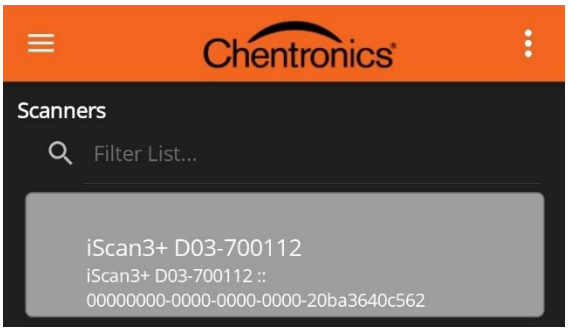
- Once the scanner you are looking for appears, select it to pair (for new devices, see "Available Devices")
- The message "An app is needed for this device" may pop up when trying to pair

- An app is needed to use this device.
  - Ensure you have the iScan Live mobile app installed. If message is still shown, ignore and continue to the next step.
- Enter Bluetooth Passcode
  - For new or previously unpaired scanners, enter the passcode then tap pair. The default passcode is the last 6 digits of the serial number. A scanner's passcode may be changed using the Windows iScan Software.
  - If the scanner was previously paired, iScan Live will automatically connect to it. However, if the scanner's passcode has changed since the last connection, iScan Live will prompt you to enter the new passcode.
- Press Pair
- Open the iScan Live mobile app

- Press to open top right menu, select Cancel Scan[1]
- Select Rescan[2] and let it complete

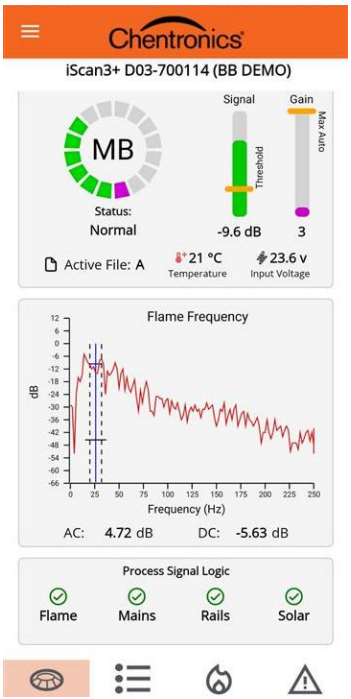


- The scanner will appear at the bottom of the list in grey, with no Wi-Fi icon



- Press on the scanner tile and wait for it to connect

- When connection has been established, the scanner detail page will appear



- To disconnect from the scanner, open hamburger menu (≡) in top left and select the 'Scanners' menu option

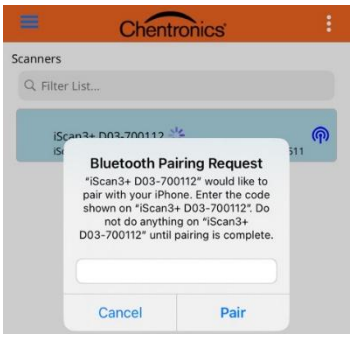
4.2 How to connect using iOS

- From the iPhone home screen:
  - Launch the Settings app.

- Tap Bluetooth to enter Bluetooth Settings and ensure Bluetooth is on.

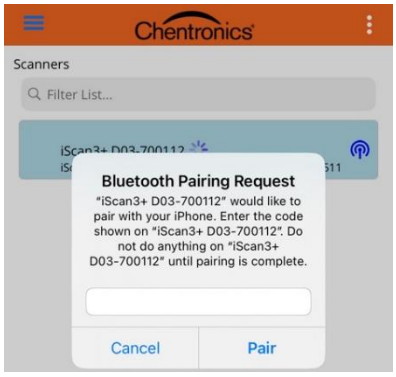
- Return to the home screen and Launch the iScan Live app.

- On first launch, allow the app access to Bluetooth when asked.



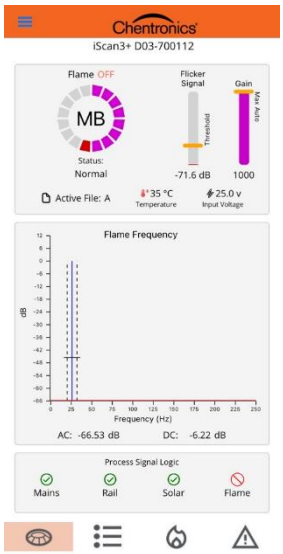
- The app will scan for devices and display those found. It will also display those previously connected even if not in range.
- Tap on the desired device to initiate connection.

- For new or previously unpaired scanners, enter the passcode then tap pair. The default passcode is the last 6 digits of the serial number. A scanner's passcode may be changed using the Windows iScan Software.



- If the scanner was previously paired, iScan Live will automatically connect to it. However, if the scanner's passcode has changed since the last connection, iScan Live will prompt you to enter the new passcode.

- When connection has been established, the scanner detail page will appear



- To return to the app home page, open the hamburger menu (≡) in top left and select the 'Scanners' menu option

5 Pro Tips

5.1 Flame sighting

- Proper flame sighting is essential for effective flame scanner detection and discrimination. The view through the sight port should display the entire flame, as illustrated in **Figure 1**.

Figure 1: Sight Port View

5.1.1 Aiming an SB/SB4 Model

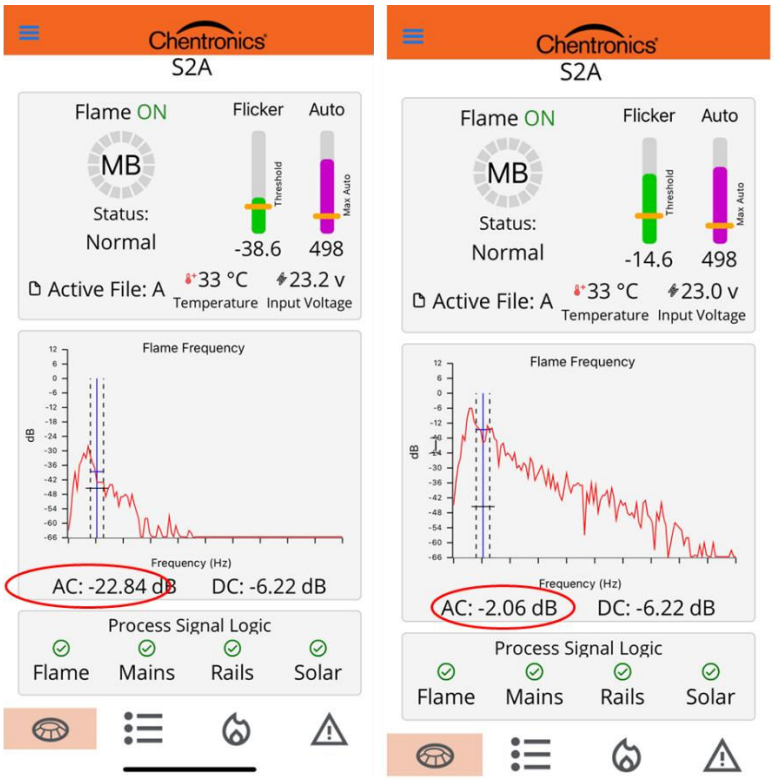
- With the target flame on, aim the scanner to have a full view of the flame, as shown in **Figure 1**.
- Automatic gain is enabled on SB models, so iScan3+ gain output increases or decreases to maintain a predetermined AC level. This will be based on the amount of UV/IR light hitting the detector.
- Using the Ring of Light as a guide, aim the scanner until the Ring of Light (RoL) displays as many green bars as possible. The opposite is true for the purple gain side; however, this largely depends on fuel being fired. Gaseous flames are less bright, so it is typical to see most of the purple bars light up, whereas bright flames like oil or coal will display fewer.
- Align the scanner to maximize green LEDs on the Ring of Light, indicating optimal flame targeting. Fewer purple LEDs are preferred, but their behavior varies by fuel type. Gaseous flames typically illuminate more purple LEDs due to lower brightness, while brighter fuels like oil or coal result in fewer. Refer to the Advance Aiming Section for more info.

5.1.2 Aiming an MB Model

- Follow the steps above to aim the scanner. For multi-burner scanner set up and configuration, follow instructions as detailed in the iScan desktop software manual, (MNL-iScan Software, § 6.6, p. 27).

5.1.3 Advance Aiming

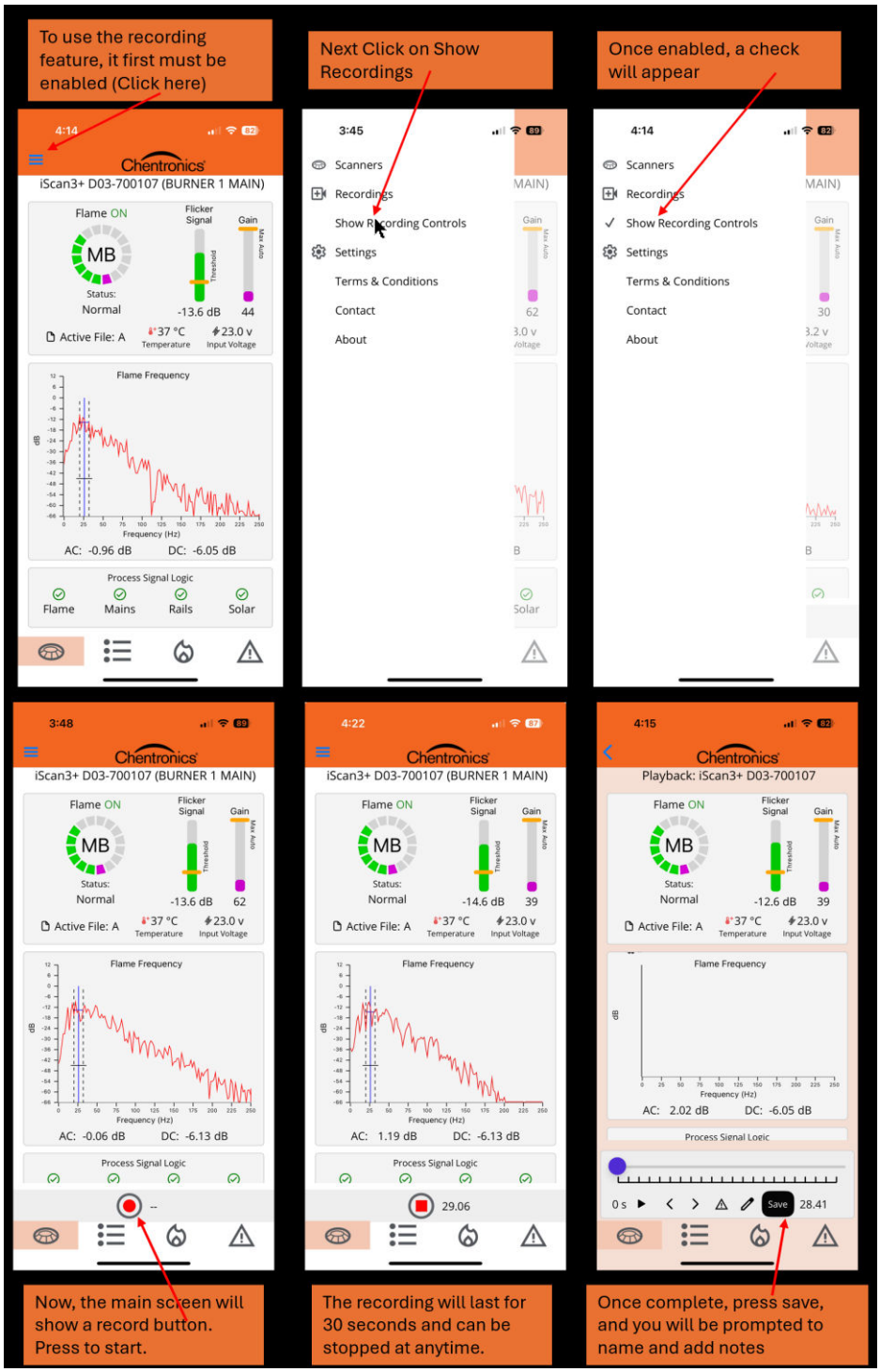
- When scanner gain is fully saturated (all purple LEDs ON) or manually set to a fixed value, fine-tuning alignment can be performed using the *iScan Live App* or *iScan® software*.
- Refer to the AC value reading (see screen captures below). A value closer to 0 indicates a stronger flame signal. As shown, flame frequency response can vary significantly even at the same gain setting, depending on flame characteristics.

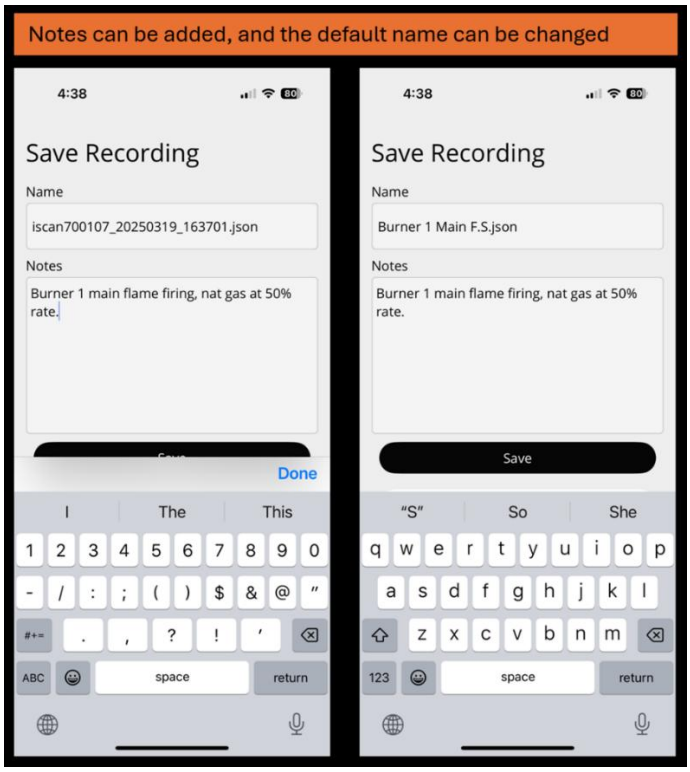


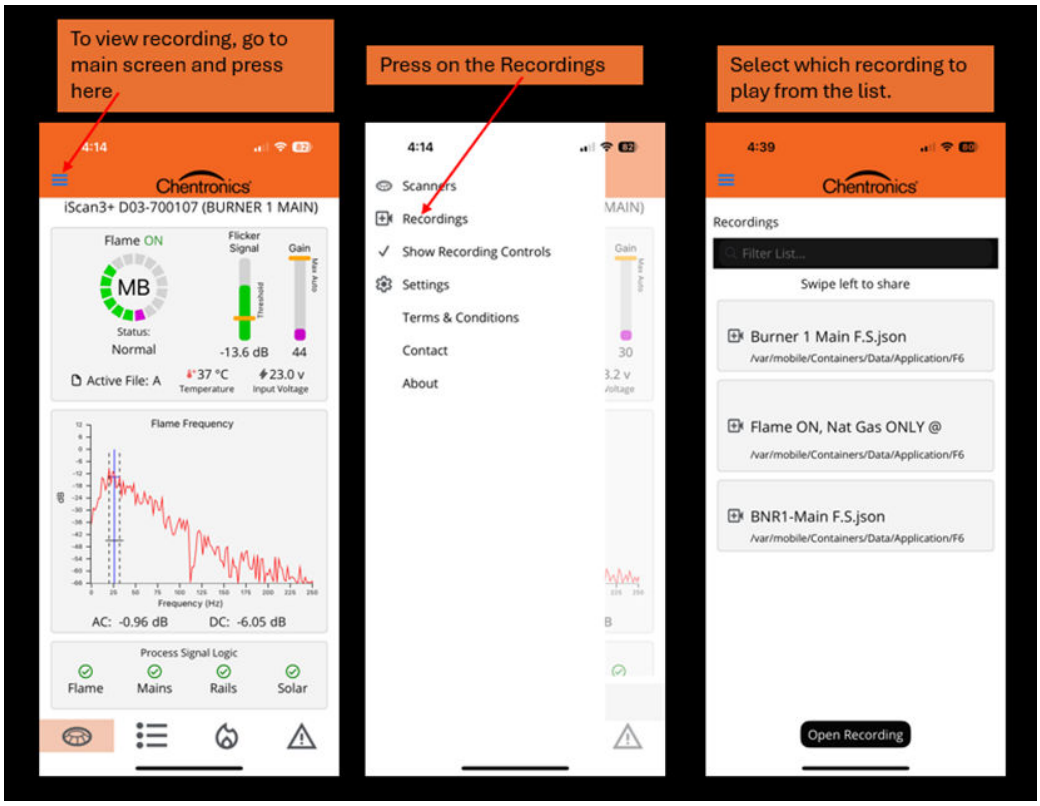
5.1.4 How to better aim the scanner

When aiming your iScan3+ while using the iScan Live App, use slow motions with pauses in between to check the app data. Adjust the scanner position in small increments and wait roughly 5 seconds for the data to stabilize. The key value is the AC dB. Getting that value as close to 0 will ensure your scanner is correctly sighted.

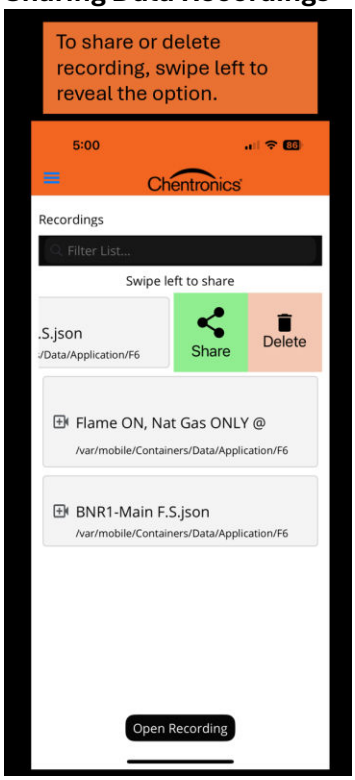
5.2 How to record Scanner and Flame Data




Notes can be added, and the default name can be changed
4:38
Save Recording
Name
iscan700107_20250319_163701.json
Notes
Burner 1 main flame firing, nat gas at 50% rate.
Done
4:38
Save Recording
Name
Burner 1 Main F.S.json
Notes
Burner 1 main flame firing, nat gas at 50% rate.
Save


To view recording, go to main screen and press here
Press on the Recordings
Select which recording to play from the list.
Chentronics
iScan3+ D03-700107 (BURNER 1 MAIN)
Flame ON
MB
Status:
Normal
Flicker Signal
Gain
-13.6 dB
44
Active File: A
37 °C
Temperature
23.0 v
Input Voltage
Flame Frequency
AC: -0.96 dB
DC: -6.05 dB
Process Signal Logic
Flame
Mains
Rails
Solar
Scanners
Recordings
Show Recording Controls
Settings
Terms & Conditions
Contact
About
Recordings
Filter List...
Swipe left to share
Burner 1 Main F.S.json
/var/mobile/Containers/Data/Application/F6
Flame ON, Nat Gas ONLY @
/var/mobile/Containers/Data/Application/F6
BNR1-Main F.S.json
/var/mobile/Containers/Data/Application/F6
Open Recording

5.3 Sharing Data Recordings



Recordings can also be shared between users. Click **Share** to send recording over email. Recordings from other users can be viewed by pressing the **Open Recording** button at the bottom of the screen as seen above and navigating to the saved recording on the device.

5.4 Naming a scanner

- In the Scanners list, swipe left and press Settings. Input the display name for the scanner. Note the device name will not transfer to the Desktop application device name field when re-named via iScan Live.

6 TROUBLESHOOTING

For any issues specific to the scanner and not the iScan Live mobile app, use the latest scanner manuals found in Section 7 for troubleshooting.

6.1 General

6.1.1 App border flashing while in scanner view

- The border will flash blue to indicate communication errors between the scanner and the app. This may be caused by weak communication between the scanner and the app. If possible, move closer to the scanner.

6.2 Android OS

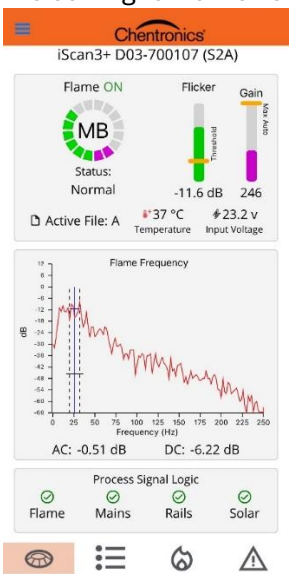
6.2.1 'Scanner time out' message

- If you receive the above message but:
  - you have previously connected to a scanner,
  - it's in the scanner list, and
  - it appears as connected in your BT settings, then
- Fully close the app, then re-open and re-connect to the scanner.

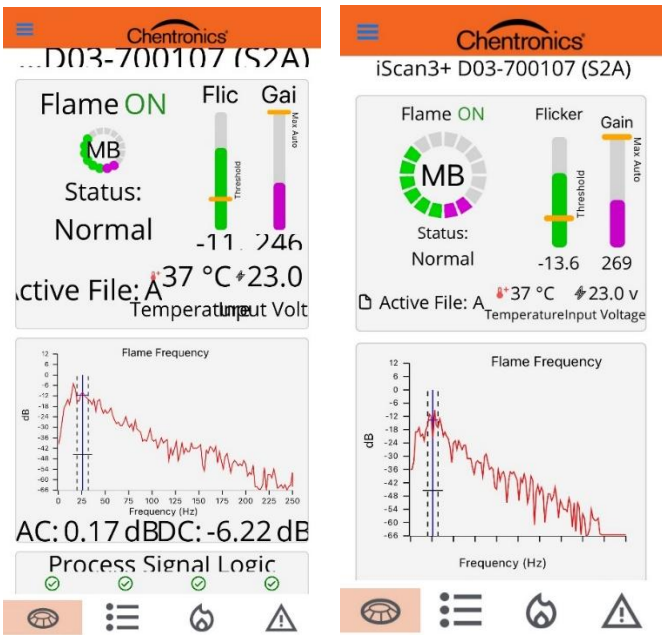
6.3 iOS

6.3.1 Font Display Issues

- iScan Live Mobile App does not support Dynamic Type. If you have not changed anything in the setting for text size or zoom display, it will look like the example below



- If you have increased your text size in SETTINGS > DISPLAY & BRIGHTNESS, your screen may look like the one shown below on the left.
- What resolves this is reducing the text down to default and then, under SETTINGS > DISPLAY & BRIGHTNESS, changing DISPLAY ZOOM to large text, which will look like the example below on the right.



7 Support & Informational Links

7.1 Support: **Contact - Chentronics**

7.2 Literature: **Literature & Support - Chentronics**

7.3 iScan3+ Flame Scanner

- Brochure: **iScan3+ Brochure_2025_08_27**
- Manual: **MNL-iScan3+ REVB.docx**

8 Contact Info

- Mailing Address:
  Chentronics, LLC
  50 O'Hara Drive
  Norwich NY 13815
  USA (Click for map)
- Phone Number: +1.607.334.5531
- Email: sales@chentronics.com

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