How-to Guide

Using the Avi-on *ZoneScanner with Pro*

Use your smartphone to scan Avi-on QR Stickers→ Assign Control Zones → Install Fixtures

Want a digital copy of this guide?
Click THIS LINK or scan QR →

What's in this Guide?

Zone Scanner

For Avi-on *Pro* Technicians ONLY

The following sections are available for qualified Avi-on Pro Technicians ONLY

Complete *ZoneScanner Guide* for PMs →	*ZoneScanner* Cue Card for Electricians →	Steps Requiring Avi-on Pro		Commission Avi-on Controls
		Import *ZoneScanner* Data →	Diagnose & Resolve Power, Wiring, & Fixture Issues →	
Click THIS LINK *or scan QR→*	*Click* THIS LINK *or scan QR→*	*Click* THIS LINK *or scan QR→*		

To save time, Avi-on recommends using the ZoneScanner from the start
Starting over means returning to site to manually access and reset fixtures

ZoneScanner data cannot be imported into the Avi-on Mobile Commissioning App
Project Manager is responsible for using documentation to answer their questions

Zone Scanner

Why *ZoneScan?* Save time and money

Want a digital copy of this guide? [Click this link](#) or scan QR at right → → →

Use the Avi-on *ZoneScanner Tool* on your smartphone to rapidly scan fixture QR codes and assign control zones

PROJECT MANAGER → *Setup ZoneScanner*	ELECTRICIAN *Scan QR Stickers→ Assign Zones→ Install Fixtures*	PROJECT MANAGER *Import ZS Data, Program Settings*
Verify fixture assembly & QR sticker placement **Use *ZoneScanner* to setup zones** Train electricians to Scan→Zone→Install	On smartphone, click email invitation to download *ZoneScanner Tool* **Turn on your phone's Wi-Fi or data** **Select correct 4-digit *location* for building** **Scan QRs→ Zone→ Install** **Successful ZoneScan is a flashing BLUE light** Fix power, fixture, & wiring issues before leaving	**Use *Pro* to IMPORT & ADD *ZoneScanner* data,** then assist Electrician in fixing power, fixture, & wiring issues **Commission (program) settings**

Project Manager is responsible for training & managing on all steps

We recommend using the ZoneScanner from the start
Starting over means returning to site to manually access and reset fixtures
ZoneScanner data cannot be imported into the Avi-on Mobile Commissioning App

Zone Scanner

Room-by-Room: *ZoneScanner* Workflow

Do not duplicate project *locations*. Devices cannot be transferred. Starting over means manually accessing & resetting devices

Steps for Project Manager (PM)	Steps for Electrician
I. **Double-check fixture assembly: verify QR codes match inside & out**	↓
II. **Set up *ZoneScanner*: link your Avi-on *username* to project's *location*** ○ Request access to the Project's Avi-on *location,* or, if you are certain there is no *location*, use *Pro* to create a new *location* III. **Create control zones–see details below** IV. **Invite Electricians to *ZoneScanner Tool* –*see details below***	↓ ↓ ↓
V. **Lead electricians in *ZoneScanner* set-up & scanning practice ← →**	1. **Look in email for an invitation to project's Avi-on *location* & download the *ZoneScanner Tool* to your phone** 2. **Use correct Avi-on *4-digit location* for scanning** 3. **Scan→Assign Zone→Install Fixture (verify BLUE light)** 4. **Locate controls & take notes**–*see instructions*
VI. **Use Avi-on *Pro* to ADD & IMPORT *ZoneScanner* data** VII. **Use *Pro* to DIAGNOSE & resolve power, wiring, & fixture issues ← →** VIII. **Use Avi-on *Pro* to commission controls (aka "program settings")**	5. **BEFORE LEAVING ROOM: resolve power, wiring, & fixture issues. If you need help, ask Project Manager to assist with *Avi-on Pro***

Zone Scanner

PM Step I: Double-check fixture assembly: verify that QR codes match inside & out

(A) Review the fixture verification, assembly, and end-of-line test procedures with the manufacturer
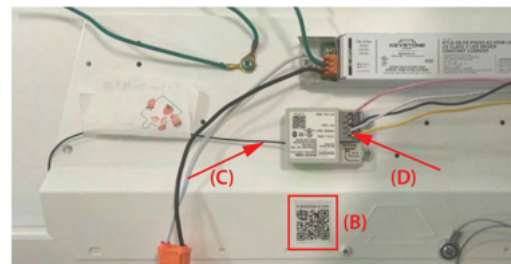
[Click this link](#) or scan the QR →

(B) Verify that the MAC address of the Avi-on device matches the QR stickers on the fixture

(C) Verify that the Avi-on antenna is undamaged

(D) Verify that wires in Avi-on node are seated firmly

PM Step II: Setup *ZoneScanner Tool* on your phone

(C) Use *Pro* to link your Avi-on *username* to the project's Avi-on *location*

If location is not listed, you need to ask for invitation to access it at [Avi-on.com/Contact](#) -or- if it doesn't exist, create a new *location*

DO NOT DUPLICATE LOCATIONS

New to Avi-on & need a personal username (aka "account")?
[Click LINK](#) or scan QR →

(D) If you don't have an invitation to a ZoneScanner location, use your PHONE to download the *ZoneScanner Tool* by clicking [THIS LINK](#) -or- scanning QR→

NOTE: The *ZoneScanner* is not available in app store

(E) If you asked for access in (C),

…Look in your email for an invitation to the project's LOCATION, then click on the link to activate your connection
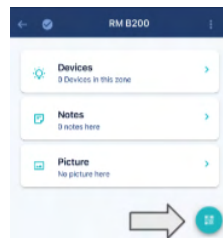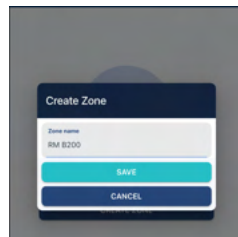

Zone Scanner

PM Step III: Create control zones

(F) In *ZoneScanner*, press the *Create Zone* button in upper right corner

(G) Name and save the new zone

(H) Practice adding a device to the zone: Click on the new zone, then press the QR code button in the lower right…scan device…and add to zone
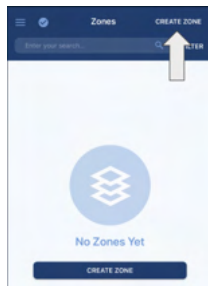
PM Step IV: Use *Pro* to invite electricians to download the *ZoneScanner Tool*

(I) Create a different 4-digit Avi-on *location* for each building or phase of the project

(J) Use the *Invite to ZoneScanner Tool* button in *Avi-on Pro* to email a 4-digit code to each installer

Always use the correct 4-digit location code for a building or phase
ZoneScanning to incorrect locations require manual resetting and re-scanning

PM Step V: Lead electricians in ZoneScanner set-up & scanning practice

Train electricians to ZoneScan using [Part III: ZoneScanner Quick Guide for Installing Electricians](#)
Make sure to have each electrician practice ZoneScanning and assigning zones with their phone

PM Step VI: Use *Pro* to ADD Devices, then IMPORT ZoneScanner Data into Avi-on Pro

SEE "Room-by-Room: Avi-on Pro Workflow" (below) for a detailed i workflow

If you are unable to "see" all of the devices that you have scanned, please ask all *ZoneScanner Tool* users to connect their phones to Wi-Fi, open the *ZoneScanner Tool*, and then sync their *ZoneScanner* data with the cloud
Please advise them to wait several minutes

At a high level, Avi-on recommends the following workflow for adding devices and importing *ZoneScanner* data

Use *Pro* to ADD *Devices*,
Commissioning → Add New Devices → Select All → Add Devices
Use *Pro* to IMPORT *ZoneScanner* data,
Installer Tools → ZoneScanner App Import → Sync Selected Zones

PM Step VII: Use *Pro* to assist in resolving power, wiring, & fixture issues

Use *Pro* to DIAGNOSE & resolve power, wiring, & fixture issues
Make sure your laptop is connected to the internet

- After creating the groups, test by turning on and off the entire group from *Pro*
- If any lights do not turn on or off, use ***discover devices*** and set TTL to max to see if a device did not make it to the cloud
- If group has correct number of devices, but some don't respond, select all→ cmd+D → Start Diagnose
- Work with the electricians to fix power, fixture, & wiring issues before they leave

Refer to *Pro* training about using the DIAGNOSE function in *Pro*

Zone
Scanner

avi-on
Bluetooth® Lighting Controls

Refer to your project's **building code requirements** and/or the published *Sequence of Operations (SOO),* then program the correct settings in *Pro*

Avi-on recommends using *Pro* to commission (program) controls in the following order. Functional details are in the *Avi-on Pro User Manual,* available to qualified and trained Pro technicians

Recommended Order of Commissioning

1. Groups
2. Wall Stations
3. Motion Sensors
4. Network Time Manager (NTM)
5. Schedules, Sensor Schedules (requires NTM)
6. High/Low End Trim
7. Super Controllers
8. UL924 Devices

ZoneScanner FAQs for Qualified *Avi-on Pro* Technicians Only

Q1: How does the *ZoneScanner* speed installation?

The *ZoneScanner* is like a 'smart notebook: electricians download the *ZoneScanner Tool* to a smartphone, then use the camera to scan QR codes, assigning the fixtures to specific project zones as they install

Q2: When using Avi-on Pro, why ADD devices before IMPORTing ZoneScanner data?

- **ADDing devices** to a project's account (aka 'claiming') embeds a unique security key in the device's memory. *Devices must be powered*
- **IMPORTing ZoneScanner data** will automatically convert zones into groups. Groups can be ASSOCIATED with sensors or wall stations so you can quickly program large areas
- **Always ADD devices before you IMPORT ZoneScanner data**

Q3: How should I name my Avi-on devices so that I can easily filter them later?

The *ZoneScanner* automatically names devices using the *Product Name + Last 4 Digits of MAC* on the QR sticker. The following info may help you to filter/program similar devices

- *Emergency devices:* Add **!** to end of device name
- *Daylight zones:* Add ***** to end of zone or group
- *Daylight harvesting controller:* Add ****** to end
  Devices w/ 3rd party wired sensors: Add **%** to end of device name

Example: [Class 0927]-3DC6-IFAC! = room number, the last 4 of the MAC, product, and that it is an emergency fixture

MAC: EC06I0..53DC6

Q4: What is the best way to SCAN-POWER-ADD-IMPORT?

1) Scan-Zone-Install ALL devices using *ZoneScanner*. *Devices do not have to be powered*

2a) Power devices in a SMALL AREA

2b) ADD ('claim') devices to the project's LOCATION. Login to Pro, and ADD everything that is powered and pinging (aka 'visible in Pro'). *This step may take several minutes*

2c) As devices ADD, check that they are operating properly: address any failures to ADD and follow prompts. At this stage, you can individually control on/off. *If you cannot ADD a device, then it is not powered. Use [Electrician's Checklist](#) to resolve power & wiring issues →*

2d) If Avi-on *Direct Connect Sensors* are installed after devices are added above, then you may need to use Pro to separately DISCOVER (FIND) sensors, bringing them into the *Location*

3) Repeat #2a-2d until all areas are powered & ADDed

4) [Download ZoneScanner data.](#) Once ALL devices are ZONESCANNED, POWERED, and ADDED, then use Pro to download the ZS data to your project's account (Mobile cannot download ZS data). *The ZoneScanner will automatically assign zones to groups. Details →*

5) Program groups + individual devices according to project's *Order of Operations* per *Prewire Meeting*
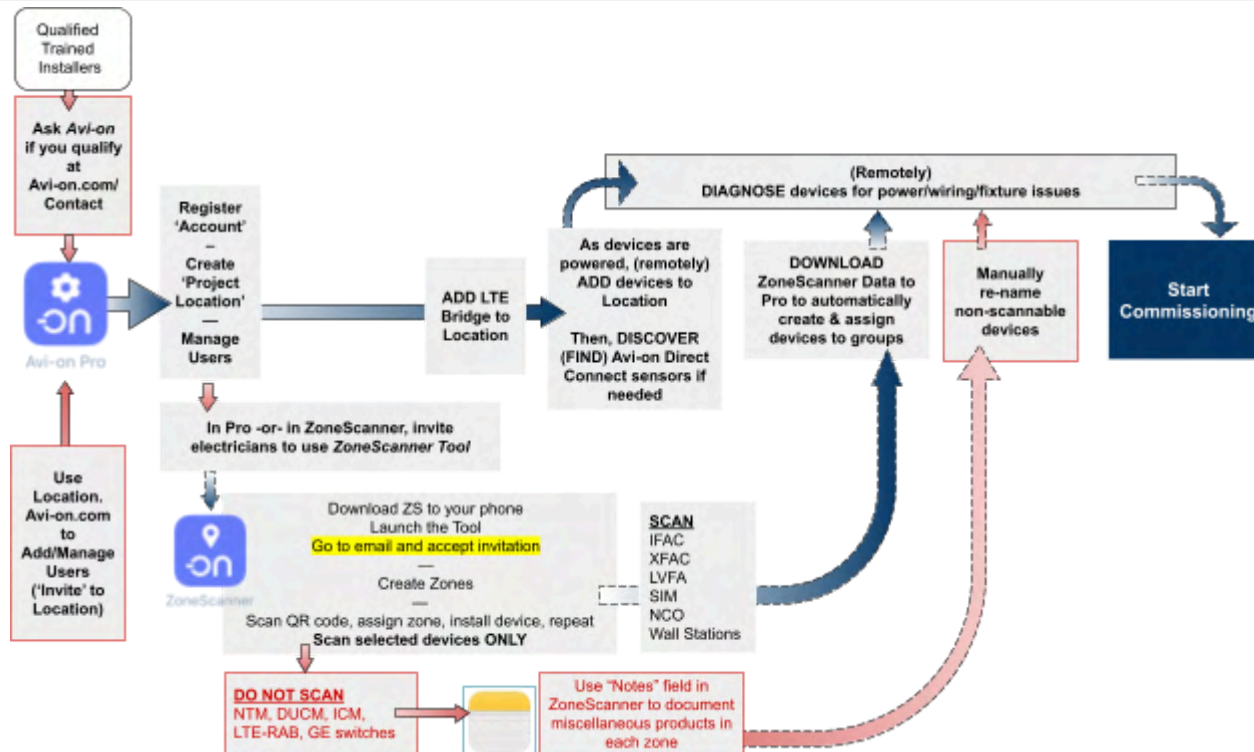
Zone Scanner

Avi-on *Pro + ZoneScanner* Flowchart

Want to check if a Location already exists? Go to Avi-on.com/Contact or scan the QR code →

Do not create duplicate locations, as they cannot be combined

Qualified Trained Installers

Ask *Avi-on* if you qualify at Avi-on.com/Contact

Avi-on Pro

Use Location. Avi-on.com to Add/Manage Users ('Invite' to Location)

Register 'Account' – Create 'Project Location' – Manage Users

In Pro -or- in ZoneScanner, invite electricians to use *ZoneScanner Tool*

ADD LTE Bridge to Location

As devices are powered, (remotely) ADD devices to Location

Then, DISCOVER (FIND) Avi-on Direct Connect sensors if needed

(Remotely) DIAGNOSE devices for power/wiring/fixture issues

DOWNLOAD ZoneScanner Data to Pro to automatically create & assign devices to groups

Manually re-name non-scannable devices

Start Commissioning

ZoneScanner

Download ZS to your phone Launch the Tool
Go to email and accept invitation
– Create Zones –
Scan QR code, assign zone, install device, repeat
Scan selected devices ONLY

SCAN
IFAC
XFAC
LVFA
SIM
NCO
Wall Stations

DO NOT SCAN
NTM, DUCM, ICM, LTE-RAB, GE switches

Use "Notes" field in ZoneScanner to document miscellaneous products in each zone

ZoneScanner: **Quick Guide for Installing Electricians**

Want a digital copy? [Click this link](#) or scan QR → → →

## Step 1 for Electrician: Download the *ZoneScanner Tool* & link it to the project's *location*

Download the *ZoneScanner Tool* and link it to the project's Avi-on location:

Check your email for an invitation to the project's LOCATION, download the ZoneScanner Tool, and use the 4 digit code to activate your connection

If you don't have an email invitation, please contact your Project Manager for access

ZoneScanner is not available in any app store

Using *ZoneScanner* saves time & money. *Failure to scan accurately can cause the loss of hundreds of man-hours to visit & correct on site*
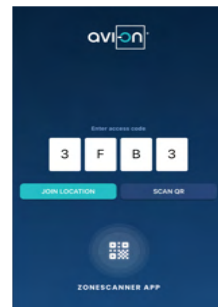
Step 2 for Electrician: Scan QR→ Assign Zone→ Install

- Scan QR sticker on outside of fixture, then add it to the correct zone
  - For best results, all phones need Wi-Fi or data ON
- Use *ZoneScanner* to scan devices (IFAC, LVFA, XFAC) as well as *most* wall stations
- >> THERE IS NO NEED TO SCAN SENSORS <<
- **Zonescanner 'names' the device** using the last four digits of the MAC address on the sticker. *See example of MAC → → →*
- ***FOLLOW YOUR PROJECT'S NAMING CONVENTIONS***

MAC: EC06I0253DC6

Zone Scanner
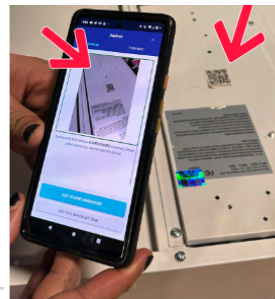
Use NOTES to record sensors & other devices
- Document stand alone Bluetooth sensors, and other devices in the NOTES section of each zone
- **If data or Wi-Fi is not available during scanning, all ZoneScanner users must periodically connect their phones to Wi-Fi or Data and open their *ZoneScanner* to sync.** This may take several minutes. *A check box will appear in the top left corner of the ZoneScanner when complete data is synced.* NOTE: Until data from ALL individual *ZoneScanner Tools* are synchronized with the cloud, devices will appear only on individual phones
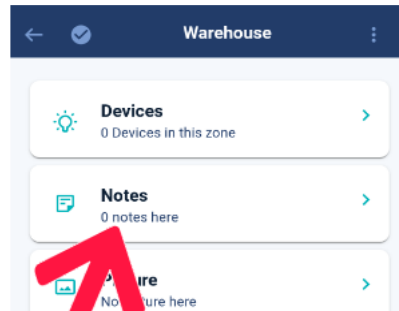
Step 4 for Electrician: Resolve Power, Wiring, & Fixture Issues BEFORE LEAVING SITE

Use the Electrician's Checklist to resolve power, wiring, fixture, & driver issues before you leave the site. *Click the link above scan QR at right →*

Need help? If you installed an Avi-on LTE Bridge when the site was powered, you can request assistance from an Avi-on Remote Technician at Avi-on.com/Contact *or scan QR at right →*

Project Managers
For a copy of the ZoneScanner Guide,
<u>*CLICK THIS LINK*</u> *-or- scan the QR →*

Avi-on Pro Technicians
Avi-on Pro for certified professionals
<u>*CLICK THIS LINK*</u> *-or- scan the QR →*

Zone Scanner