

AC Infinity CTR75P

AC Infinity Controller 75 PRO User Manual

Model: **CTR75P** | Brand: **AC Infinity**

1. INTRODUCTION

The AC Infinity Controller 75 PRO is a digital outlet controller designed to provide smart environmental controls for HVAC or growing applications. This device enables independent programming for up to two connected devices, offering precise management of temperature, humidity, VPD (Vapor Pressure Deficit), and timing functions. It integrates with a mobile application via Bluetooth or WiFi for advanced programming, data monitoring, and notifications.



Image: The AC Infinity Controller 75 PRO unit displayed alongside its mobile application interface, showing real-time environmental data and control options.

2. PRODUCT FEATURES

- **Dual Device Control:** Powers up to two outlet devices independently or together, with a collective support of up to 1100W.
- **Comprehensive Programming:** Includes temperature, humidity, and VPD triggers, along with timers, cycles, scheduling, and custom buffer settings.
- **Wireless Connectivity:** Pair with the AC Infinity app via Bluetooth or WiFi for advanced program access, climate data viewing, and notification management.
- **Advanced Sensors:** Features a thermal-alloy probe for accurate, millisecond-level measurement of temperature, humidity, and VPD changes.
- **Power-Failure Memory:** Retains all settings and automatically resumes previous programs after a power interruption.



Smarter, Independent Programming



EXPANDED CONTROL

Easily automate up to two smart devices to regulate temperature, humidity, and VPD using cycles, schedules, and custom buffers.



ACTIVE MONITORING

Track climate readings on the clear backlit display in Fahrenheit or Celsius, via a 12 ft corded sensor probe.



APP CONNECTIVITY

Connect to the WiFi-enabled app for advanced programs in addition to history charts, custom alerts, and data export.

Image: A visual representation highlighting the smart programming capabilities of the Controller 75 PRO, including automated power, independent programs for two devices, program cycles, ON/OFF timers, schedules, customizable calibrations, Fahrenheit or Celsius display, and buffer settings.

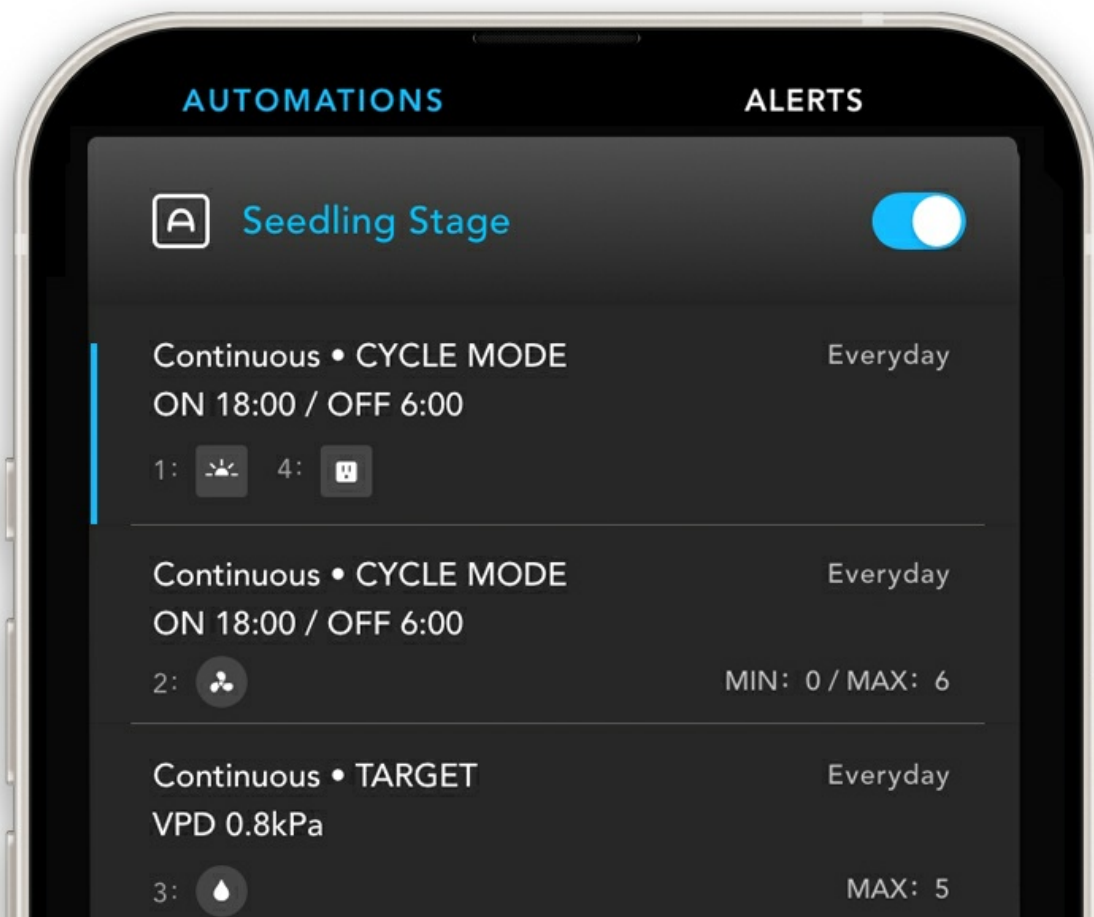


Image: Screenshots of the AC Infinity mobile application, demonstrating the app control and data monitoring features, including real-time climate data, historical graphs, and remote control capabilities.

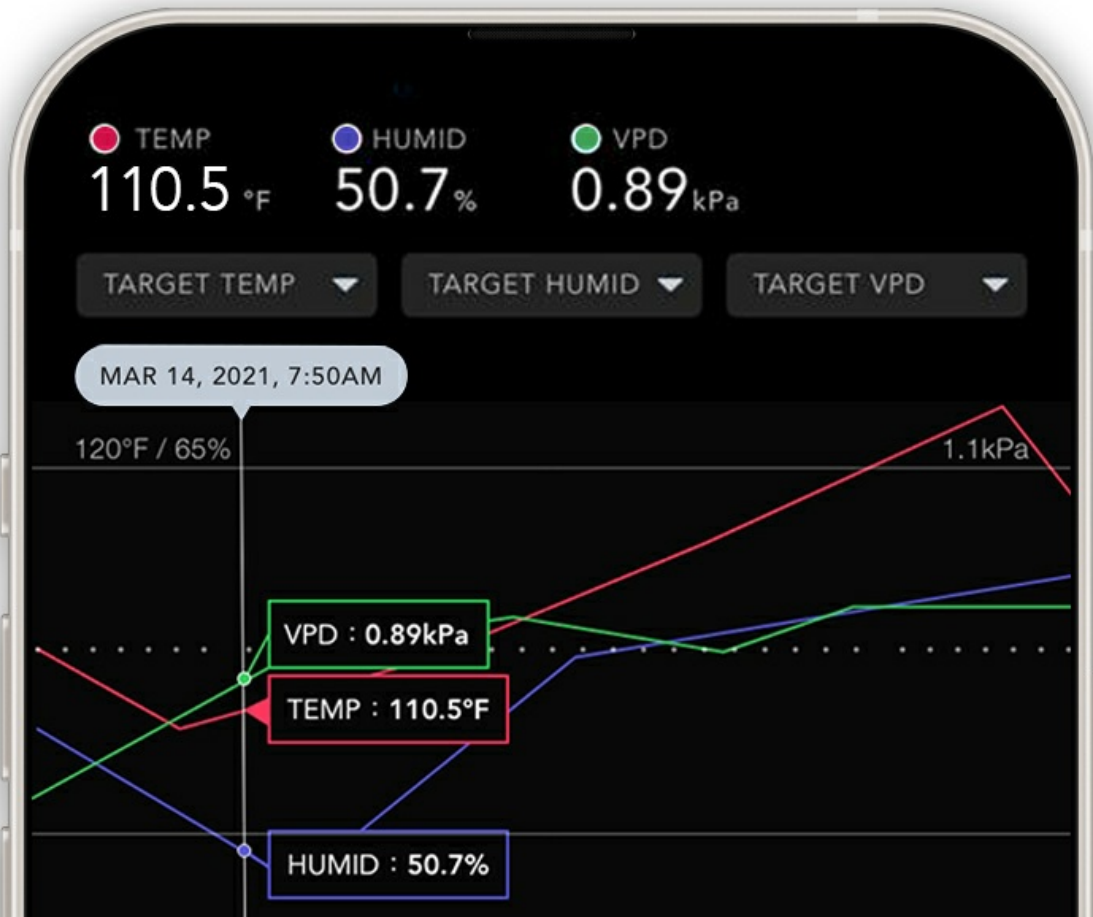


Image: An illustration detailing the advanced thermal-alloy sensor for precise temperature, humidity, and VPD detection, and the power-failure memory function that retains settings during outages.

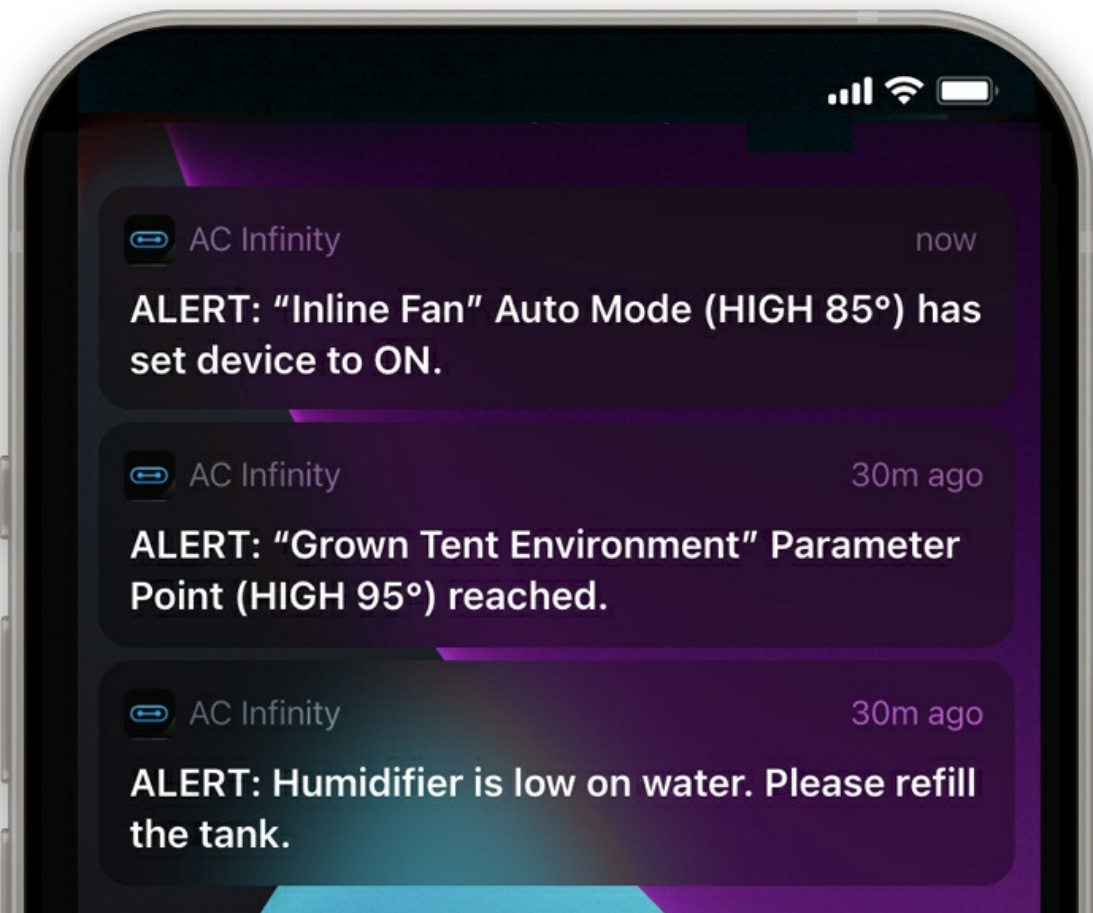


Image: A diagram illustrating the smart expansion capability, showing how the Controller 75 PRO can power and program two outlet devices simultaneously or independently, compatible with various AC Infinity products.

3. SETUP

1. **Unboxing:** Carefully remove the Controller 75 PRO and its components from the packaging. Verify all included components are present.
2. **Sensor Connection:** Plug the thermal-alloy sensor into the designated port on the controller. Ensure the connection is secure.
3. **Device Connection:** Plug your desired AC-powered devices (e.g., fans, heating mats) into the two outlets on the controller.
4. **Power On:** Plug the controller's power cord into a standard electrical outlet. The display should illuminate.
5. **App Download & Connection:** Download the AC Infinity app from your device's app store. Follow the in-app instructions to connect the Controller 75 PRO via Bluetooth or WiFi. This step is crucial for unlocking advanced programming features and remote monitoring.



Image: The AC Infinity Controller 75 PRO mounted on a wall, with its sensor extended and connected to a heat mat for seed starting, demonstrating a typical setup.

4. OPERATING INSTRUCTIONS

4.1 On-Device Controls

The Controller 75 PRO features an intuitive display and physical buttons for basic adjustments. Refer to the on-screen prompts and the included quick-start guide for initial setup and direct control of settings like target temperature or humidity.

4.2 Mobile App Control

For full functionality and advanced programming, utilize the AC Infinity mobile application. The app allows you to:

- **Set Independent Programs:** Configure distinct temperature, humidity, and VPD triggers for each of the two connected outlets.

- **Schedule Operations:** Create custom ON/OFF timers, cycle programs, and daily/weekly schedules for your devices.
- **Monitor Climate Data:** View real-time and historical data for temperature, humidity, and VPD.
- **Receive Notifications:** Get alerts for environmental changes, device status, or program completions.
- **Adjust Calibrations:** Fine-tune sensor readings for optimal accuracy.

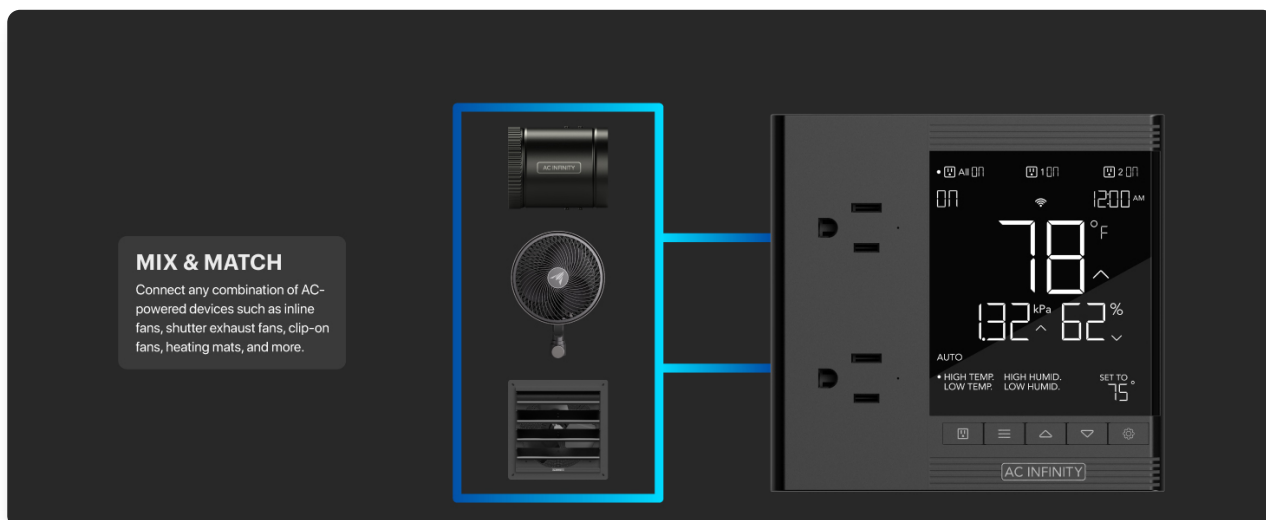


Image: A graphic demonstrating the advanced programming features available through the AC Infinity app, including expanded control, active monitoring, and app connectivity for history charts, custom alerts, and data export.

5. MAINTENANCE

- **Cleaning the Controller:** Use a soft, dry cloth to wipe the surface of the controller. Avoid abrasive cleaners or solvents. Ensure no liquid enters the device.
- **Sensor Care:** Keep the thermal-alloy sensor clean and free from debris. If necessary, gently wipe the sensor tip with a damp cloth and allow it to dry completely before re-use. Avoid bending or damaging the sensor probe.
- **Storage:** When not in use for extended periods, store the controller and sensor in a cool, dry place away from direct sunlight and extreme temperatures.

6. TROUBLESHOOTING

- **Controller Not Powering On:**
 - Ensure the power cord is securely plugged into both the controller and a functional electrical outlet.
 - Check the circuit breaker for the outlet.
- **Devices Not Responding:**
 - Verify that the devices are properly plugged into the controller's outlets.
 - Check the controller's display and app to ensure the programs are active and the outlets are set to ON.

- Confirm the devices themselves are functional by plugging them directly into a wall outlet.

- **Inaccurate Sensor Readings:**

- Ensure the sensor probe is clean and unobstructed.
- The sensor may require calibration. Use the AC Infinity app to access calibration settings and follow the instructions for temperature, humidity, or VPD calibration.
- Avoid placing the sensor in direct airflow or near heat/cold sources that do not represent the general environment.

- **App Connectivity Issues:**

- Ensure your mobile device's Bluetooth and/or WiFi is enabled.
- Verify the controller is within range of your WiFi router or mobile device for Bluetooth connection.
- Restart the AC Infinity app and/or your mobile device.
- If using WiFi, check your network connection and ensure the controller has been properly configured to your WiFi network.

If issues persist, please refer to the AC Infinity support resources or contact customer service.

7. SPECIFICATIONS

Feature	Specification
Model Number	CTR75P
Part Number	CTR79P
UPC	819137024458
Brand	AC Infinity
Voltage	230 Volts (AC)
Device Output	Up to 1100W (collective for two outlets)
Sensors	Temperature, Humidity, VPD
Probe Length	12 Feet
Operating Temperature	32 Degrees Fahrenheit (minimum)
Product Dimensions	4.64 x 4.84 x 1.18 inches
Item Weight	1.68 pounds
Material	Plastic
Display Type	LCD
Special Features	Programmable

Feature	Specification
Included Components	Controller
Batteries Included?	No
Batteries Required?	No

SPECIFICATIONS

MODEL | CONTROLLER 75 PRO (CTR75P)

DEVICES SUPPORTED | 2 Devices

SENSORS | Temp, Humidity, & VPD

PROGRAMMING | Independent

DEVICE OUTPUT | 1100 W

PROBE LENGTH | 12 Feet



Image: A detailed diagram outlining the physical dimensions of the Controller 75 PRO, along with specifications for power cord length and sensor probe length.





8. WARRANTY AND SUPPORT

The AC Infinity Controller 75 PRO is covered by a manufacturer's warranty. Please refer to the warranty card included with your product or visit the official AC Infinity website for detailed warranty terms and conditions.

For technical support, troubleshooting assistance, or warranty claims, please contact AC Infinity customer

service through their official website or the contact information provided in your product packaging.

Related Documents - CTR75P

	<p>AC Infinity Controller 69 PRO+ Quick Start Guide</p> <p>A concise guide to setting up and operating the AC Infinity Controller 69 PRO+, an 8-port environmental controller for grow tents.</p>
	<p>BN-LINK 6-Outlet Digital Timer Yard Stake - Outdoor Weather-Resistant Programmable Timer</p> <p>User manual and specifications for the BN-LINK 6-Outlet Digital Timer Yard Stake. Learn how to set up, operate, and safely use this weather-resistant outdoor timer for lighting and devices.</p>
	<p>STC-3028 Dual LED Temperature Humidity Controller</p> <p>Specifications, wiring, and settings for the STC-3028 AC 110-220V 10A Dual LED Temperature and Humidity Controller. Features include a wide measurement range, high accuracy, and relay outputs for heating and cooling applications.</p>
	<p>AC Infinity Hydronex Series Dehumidifier Quick Start Guide - DHT2411X1</p> <p>Quick start guide for the AC Infinity Hydronex Series dehumidifier (model DHT2411X1). Learn how to set up, power, drain, clean, and program your dehumidifier for optimal environmental control in grow tents.</p>
	<p>AC Infinity 69 PRO Control System Setup Guide</p> <p>A comprehensive setup guide for the AC Infinity 69 PRO Control System, detailing how to automate devices using temperature and humidity triggers, and configure buffer settings via the controller or mobile app.</p>
	<p>Dräger Infinity Acute Care System Monitoring Accessories: Instructions for Use</p> <p>Comprehensive guide to Dräger's Infinity Acute Care System monitoring accessories, detailing ECG, IBP, SpO2, NIBP, CO2, and temperature monitoring components with part numbers and usage information.</p>

AC Infinity Inc.

Section 2.911(d)(7) USA Agent for Service of Process

Company name: AC Infinity Inc.
Address: 21880 Baker Parkway, City of Industry, CA 91789 USA
Product Name: CONTROOLLER 75 PRO
FCC ID: 2AXMF-CTR75P
Model(s): CTR75P

2.911(d)(7) USA Designated Agent for Service of Process

We, [AC Infinity Inc.] ("the applicant") designate [AC Infinity Inc.]⁽¹⁾⁽²⁾⁽³⁾ for the purpose of accepting service of process on behalf of the applicant.

Applicant consent: We acknowledge our consent to accept service of process in the United States for matters related to the applicable equipment, and at the physical U.S. address and email address of the designated agent and acknowledge our acceptance of our obligation to maintain an agent for service of process in the United States for no less than one year after either the grantee has permanently terminated all marketing and importation of the applicable equipment within the U.S., or at the conclusion of any Commission-related administrative or judicial proceeding involving the equipment, whichever is later.

Agent obligation: We acknowledge our obligation to accept service of process in the United States for matters related to the applicable equipment at our physical U.S. address and email address for no less than one year after either the grantee has permanently terminated all marketing and importation of the applicable equipment within the U.S., or at the conclusion of any Commission-related administrative or judicial proceeding involving the equipment, whichever is later.

USA Agent

Company name: AC Infinity Inc.
Address: 21880 Baker Parkway, City of Industry, CA 91789 USA
FRR Number: 003000339
Contact Name: Jimmy Liu
Telephone No: 909-569-8014
Email: jimmy@acinfinity.com

Signature: 

Title: CTO
Date: Jun. 12, 2024

Applicant

Company name: AC Infinity Inc.
Address: 21880 Baker Parkway, City of Industry, CA 91789 USA
FCC Grantee Code: 2AXMF
FRR Number: 003000339
Contact Name: Jimmy Liu
Telephone No: 909-569-8014
Email: jimmy@acinfinity.com

Signature: 

Title: CTO
Date: Jun. 12, 2024

NOTE 1: An applicant located in the United States may designate itself as the agent for service of process.

2.911(d)(7) USA Agent v.4

[pdf]

2 911 d 7 US Agent for Service of Process v1 4 AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p
AC Infinity Inc. Section 2.911 d 7 USA Agent for Service of Process Company name:
AC Infinity Inc. Address: 21880 Baker Parkway, City of Industry, CA 91789 USA
Product Name: CONTROOLLER 75 PRO FCC ID: 2AXMF-**CTR75P** Model s :
CTR75P 2.911 d 7 USA Designated Agent for Service of Process We, AC I...
lang:en score:32 filesize: 92.2 K page_count: 2 document date: 2024-06-13



[pdf] User Manual Instructions

SMART OUTLET 29 mag 2024 — Read all instructions before installing and using this product 3 When cutting or drilling into a wall ceiling do not damage electrical wiring other 240524 SOT2405X1
CONTROLLER 79 75 Manual acinfinity content |||
SMART OUTLET WELCOME Thank you for choosing AC Infinity. We are committed to product quality and ... ATION Los Angeles, CA 3 MANUAL CODE SOT2405X1
PRODUCT CONTROLLER 75 PRO CONTROLLER 79 PRO MODEL **CTR75P**
CTR79P UPC-A 819137024458 819137024441 4 MANUAL INDEX Manual Index
.....
lang:en score:32 filesize: 1.92 M page_count: 52 document date: 2024-05-24

AC Infinity Inc.

Section 2.911(d)(5)(ii) Certification – Applicant (Covered List)


Company name: AC Infinity Inc.
Address: 21880 Baker Parkway, City of Industry, CA 91789 USA
Product Name: CONTROLLER 75 PRO
FCC ID: 2AXMF-CTR75P
Model(s): CTR75P

2.911(d)(5)(ii) Applicant Filing

We, [AC Infinity Inc.] ("the applicant") certify that, as of the date of the filing of the application, the applicant is not **disqualified** ⁽¹⁾⁽²⁾ on the "Covered List" ⁽¹⁾⁽³⁾ established pursuant to §1.100002 of this chapter, as an entity producing covered communications equipment.

You're sincerely,

Name: Jimmy Liu

Signature: 

Date: Jun. 19, 2024

Title and Company name: CTO / AC Infinity Inc.

NOTE 1
Device option not applicable to this application.

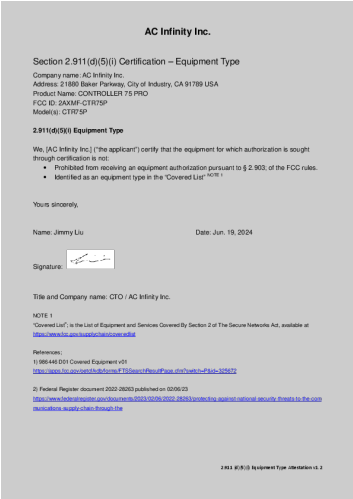
NOTE 2
"Covered List" is the List of Equipment and Services Covered by Section 2 of The Secure Networks Act, available at <https://www.fcc.gov/document/covered-list>

References:
1) 488-448-001 Covered Equipment v11
<https://www.fcc.gov/document/covered-list>
2) Federal Register document 2022-26203 published on 09/06/22
<https://www.federalregister.gov/documents/2022/07/06/2022-12679-1-protection-against-national-security-threats-to-the-communications-supply-chain-through-1st>

2.911(d)(5)(ii) applicant certification v.3

[pdf]

Microsoft Word 2 911 d 5 ii Certification Applicant v1 3 Administrator CertificationApplicantv1 AC Infinity
Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p
AC Infinity Inc. Section 2.911 d 5 ii Certification Applicant Covered List Company
name: AC Infinity Inc. Address: 21880 Baker Parkway, City of Industry, CA 91789
USA Product Name: CONTROLLER 75 PRO FCC ID: 2AXMF-**CTR75P** Model s :
CTR75P 2.911 d 5 ii Applicant filing We, AC Infinity Inc. ...
lang:en score:32 filesize: 54.54 K page_count: 1 document date: 2024-06-19



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AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p

AC Infinity Inc. Section 2.911 d 5 i Certification Equipment Type Company name: AC
Infinity Inc. Address: 21880 Baker Parkway, City of Industry, CA 91789 USA Product
Name: CONTROLLER 75 PRO FCC ID: 2AXMF-**CTR75P** Model s : **CTR75P** 2.911 d
5 i Equipment Type We, AC Infinity Inc. the applican...

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[pdf] User Manual Instructions

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CONTROLLER 79 75 Manual acinfinity content |||

SMART OUTLET ENVIRONMENTALLY CONTROLLED USER MANUAL WELCOME
Thank you for choosing AC Infinity. W ... ATION Los Angeles, CA 3 MANUAL CODE
SOT2312X1 PRODUCT CONTROLLER 75 PRO CONTROLLER 79 PRO MODEL
CTR75P CTR79P UPC-A 819137024458 819137024441 4 MANUAL INDEX Manual
Index

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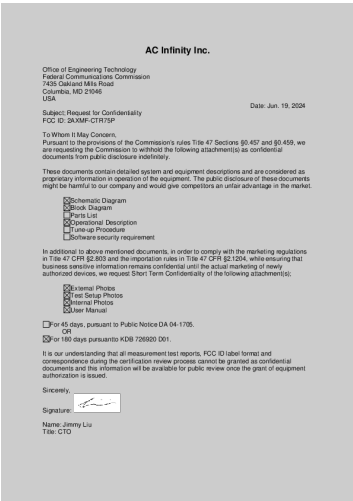


[pdf] Agent Authorization

Microsoft Word Agent Authorization Rev 1 0 Administrator AC Infinity Inc CTR75P 2AXMF
2AXMFCTR75P ctr75p

AC Infinity Inc. Agent Authorization Company: AC Infinity Inc. Address: 21880 Baker
Parkway, City of Industry, CA 91789 USA Product Name: CONTROLLER 75 PRO
Model Number s : **CTR75P** Product Description: CONTROLLER 75 PRO We
authorize MiCOM Labs Inc., 575 Boulder Court, Pleasanton, California 94566, US...

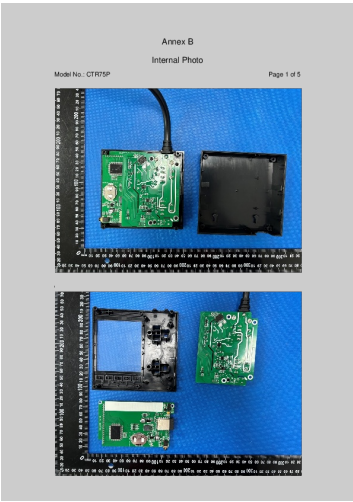
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[pdf] Confidentiality Request Letter

Microsoft Word FCC Short Long Term Confidentiality Request Rev4 1 Administrator AC Infinity Inc
CTR75P 2AXMF 2AXMFCTR75P ctr75p

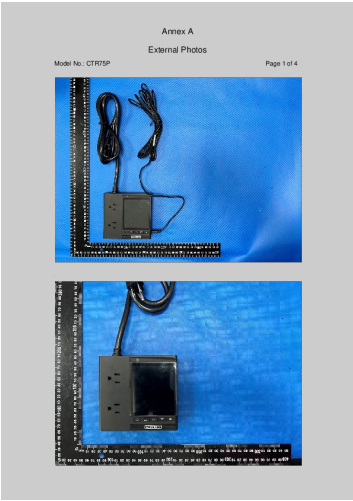
AC Infinity Inc. Office of Engineering Technology Federal Communications
Commission 7435 Oakland Mills Road Columbia, MD 21046 USA Subject; Request
for Confidentiality FCC ID: 2AXMF-**CTR75P** Date: Jun. 19, 2024 To Whom It May
Concern, Pursuant to the provisions of the Commission s rules Title 47 Se...
lang:en score:29 filesize: 13.83 K page_count: 1 document date: 2024-06-19



[pdf] Product Photos Teardown

Microsoft Word Internal photos Administrator Photos AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P
ctr75p

Model No.: **CTR75P** Annex B Internal Photo Page 1 of 5 Model No.: **CTR75P** Page 2
of 5 Model No.: **CTR75P** Page 3 of 5 Model No.: **CTR75P** Page 4 of 5 Antenna Model
No.: **CTR75P** Page 5 of 5 ...
lang:en score:29 filesize: 4.53 M page_count: 5 document date: 2024-06-19



[pdf] Product Photos

Microsoft Word External photos Administrator Photos AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P
ctr75p

Model No.: **CTR75P** Annex A External Photos Page 1 of 4 Model No.: **CTR75P** Page
2 of 4 Model No.: **CTR75P** Page 3 of 4 Model No.: **CTR75P** Page 4 of 4 ...
lang:en score:29 filesize: 3.69 M page_count: 4 document date: 2024-06-19

MPE ESTIMATION

FCC ID: 2AXMF-CTR75P

1.Per FCC Part 2.1091 Radiofrequency radiation exposure evaluation: mobile devices, the limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
300MHz---1.5GHz	F1500	30
1.5GHz---100GHz	1.0	30

Note: F= Frequency in MHz

2. Estimation Result

Mode	Frequency (MHz)	Max PK Output power(dBm)	Turn Up Power(dBm)	Max Turn Up Power(W)	Antenna Gain(dB)	Antenna Gain (linear)	MPE (mW/cm ²)
2.4G WIFI	2427	13.79	13±1(14)	25.12	3.16	2.07	0.01034
BLE	2480	0.48	0±1(1)	0.36	3.16	2.08	0.00052

Note:

RF as Power
dBS

Note: The estimation distance is 20cm

Note:

PK Output power: conducted power.

Conducted power see the test report**HK3406042927-1E (2E)**, antenna gain:3.16dB(2.4G WIFI), 3.16dB(BLE)

2.4G WIFI MPE (max): 0.01034 (mW/cm²)

BLE (max): 0.00052 (mW/cm²)

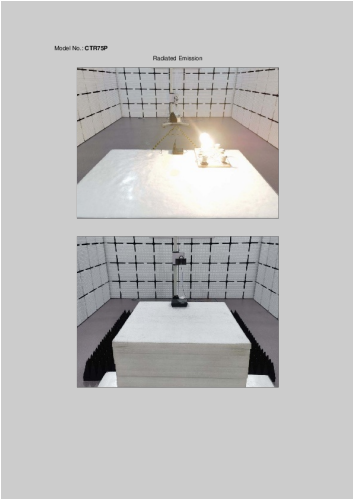
antennae gain MPE:0.01034-d, 0.00052-d, 0.0086m(W/cm²)

When the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.01086 mW/cm² which is < 1.0mW/cm², RF Exposure testing is not required.

-----The End-----

[pdf] Test Report SAR Rating

Microsoft Word MPE Report Administrator AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p
MPE ESTIMATION FCC ID: 2AXMF-**CTR75P** 1,Per FCC Part 2.1091 Radiofrequency radiation exposure evaluation: mobile devices, the limit for General Population/ Uncontrolled Exposures Frequency Power density mW/ cm2 Averaging time minutes 300MHz----1.5GHz F/1500 30 1.5GHz---100GHz 1.0 30 Note: ...
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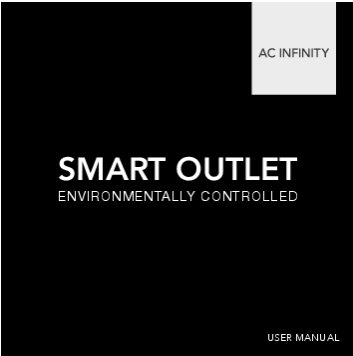


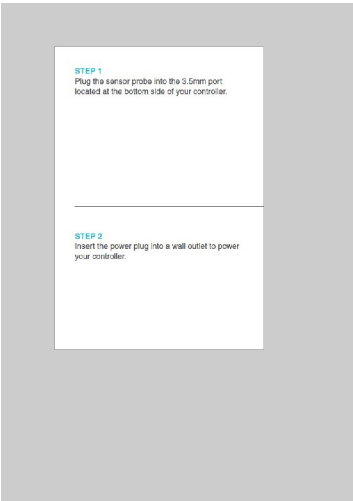
[pdf] Product Photos

Microsoft Word Test photos Administrator Setup Photos AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p
Model No.: **CTR75P** Radiated Emission Conducted Emission ...
lang:en score:26 filesize: 309.3 K page_count: 2 document date: 2024-06-19

[pdf] User Manual

AC Infinity CONTROLLER 79 Temperature and Humidity GARDEN SUPPLY GUYS231218 SOT2312X1 75 Manualacinfinity content 231218 Manual SMART OUTLET InfinityExtended cord length of 144 inches 12 feet for ease management flexible mounting options Shown PRO Page 9 PRODUCT CONTENTSAC GUYSSOT2312X1 Manual231218 srsItid AfmBOooZViyqFuB4 qgcAUmTa0O NBHMBU0 QU9UNIXZPlDU1kVwGkPzacinfinity InfinitySMART CONTENTSA If the pairing process isn t successful turn off your Bluetooth re enable it to try again When starting around multiple Bluetooth AC ManualSOT2312X1 AfmBOoq49L4f3aAlpg8 TVNwhbPfUUIrUK8tfX8T81RsboQD7cVWR1mNacinfinity ||| ||| SMART OUTLET ENVIRONMENTALLY CONTROLLED USER MANUAL WELCOME Thank you for choosing AC Infinity. We are committed to product quality and friendly customer service. If you have any questions or suggestions, please don t hesitate to contact us ||| SMART OUTLET ENVIRONMENTALLY CONTROLLED USER MANUAL WELCOME Thank you for choosing AC Infinity. We are committed to product quality and friendly customer service. If you have any questions or suggestions, please don t hesitate to contact us
SMART OUTLET ENVIRONMENTALLY CONTROLLED USER MANUAL WELCOME
Thank you for choosing AC Infinity. W ... ATION Los Angeles, CA 3 MANUAL CODE SOT2312X1 PRODUCT CONTROLLER 75 PRO CONTROLLER 79 PRO MODEL **CTR75P** CTR79P UPC-A 819137024458 819137024441 4 MANUAL INDEX Manual Index
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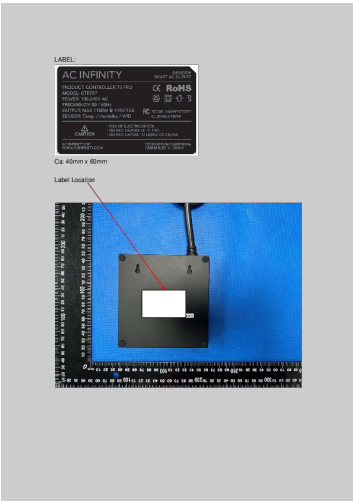


[pdf] User Manual Instructions

Administrator User Manual AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p

Warning: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1 this device may not cause harmful interference, and 2 this device must accept any interference received, including interference that may cause undesired operation. Chan...

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[pdf] Label

Microsoft Word Label and location Administrator AC Infinity Inc CTR75P 2AXMF 2AXMFCTR75P ctr75p

LABEL: Ca: 40mm x 60mm Label Location ...

lang:en score:15 filesize: 239.03 K page_count: 1 document date: 2024-06-19

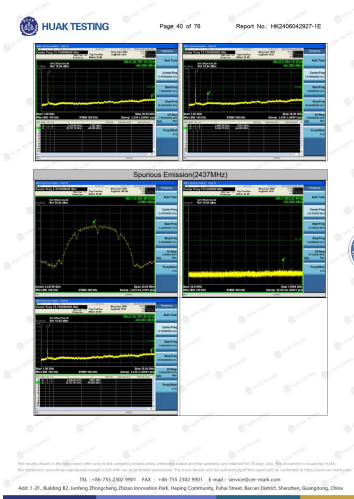


[pdf] Test Report

Microsoft Word CTR75P FCC ID 15 247 Test Report BLE Administrator AC Infinity Inc 2AXMF 2AXMFCTR75P ctr75p

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[pdf] Test Report

Microsoft Word CTR75P FCC ID 15 247 Test Report 2 4g WiFi Administrator 4Gwifi2 AC Infinity Inc
2AXMF 2AXMFCTR75P ctr75p

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lang:en score:13 filesize: 3.46 M page_count: 37 document date: 2024-06-25



[pdf] Test Report

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2AXMF 2AXMFCTR75P ctr75p

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