iPonic™ 624 Alert
990-0701-02
Dual-Room Cloud based monitoring and Alarm System Controller

User Manual
840-0101-00

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Introduction

Thank you for purchasing the newest edition of Link4's illustrious lineup of innovative hydroponic controllers. The iPonic™ 624 Alert is a cloud based monitoring and alarm system. With simple plug-and-play functionality, any grower can see what is going on in their facility – from any Internet connected device.

The iPonic Alert is ideal for the cultivator that is satisfied with their current controls, but wants the extra assurance of push notifications sent to their smart phone in the event anything should go wrong. The iPonic Alert comes with a Digital Integrated Sensor Module (DISM) that provides temperature, CO_2, light and humidity. Use your smart phone to monitor your grow and receive alerts.

With the iPonic 624 Alert you get the peace of mind while you're away.

- Get alerts for temp, lights, humidity, and CO_2
- Easy to use touch screen display
- Plug and play factory pre-sets
- UL Listed for safety

Customer Service

Link4 Has a well-trained customer support staff that is ready to help. Our customer service center is committed to your greenhouse business.

Technical Support service is available from 6:00am to 6:00pm Monday-Friday call 714-975-9474 or email support@link4controls.com. After hours leave a message and your call or email will be responded to next business day.

If a highly critical need arises after hours call our main office line at 866-755-5465 and leave a message. These calls are screened and if they meet the criteria for an emergency a call will be returned before the next business day.

Gold Package Customers

Please refer to your warranty letter private phone number to access emergency support after hours, on weekends and holidays.

Contact Us
866.755.5465

SALES: sales@link4controls.com

TECH SUPPORT: support@link4controls.com

Web:
www.link4controls.com

Address:
Link4 Corporation
175 E Freedom Ave
Fullerton, CA 92801

There is extensive online support for all Link4 products for registered users at www.link4controls.com. Registration is provided at no charge.

Terms and Conditions

Warranty – Link4 warrants that the goods sold under this contract will be free from defects in material and workmanship for a period of twelve (12) months after the date of purchase. This warranty will be limited to the repair and replacement of parts, and the necessary labor and services required.

It is expressly agreed that this warranty will be in lieu of all warranties of fitness, and in lieu of the warranty of merchantability.

Any description of the goods contained in this contract is for the sole purpose of identifying them, it is not part of the basis of the bargain and does not constitute a warranty that the goods will conform to that description. The use of any sample or model in connection with this contract is for illustrative purposes only, is not part of the basis of the bargain and is not to be construed as a warranty that the goods will conform to the sample or model. No affirmation of fact or promise made by Link4, whether or not it's stated in this contract, will constitute a warranty that the goods will conform to the affirmation or promise.

Link4 is not responsible for replacement(s) or repair(s), which become defective from user negligence, modification, abuse and/or any types of improper usage. The failure to comply with any of the specifications in the product manual will void the warranty. Our liability to the goods sold, whether on warranty, contract or negligence, will be released upon the expiration of the warranty period when all such liability terminates.

Link4 is not responsible for any loss or claims due to consequential damages caused by the Buyer. Link4 also reserves the right to make any necessary changes to features and specifications, and to the terms and conditions of this warranty.

Returns – Merchandise cannot be returned without a Return Merchandise Authorization (RMA) number from Link4. Requests for permission to return defective items must be made within fourteen (14) days after receipt of shipment. A Link4 RMA number for approved returns must appear on both the customer's shipping carton and the related receipt memo. Parts under warranty will be repaired at no charge. Other returned items will be subjected to the following restocking charges: 20 percent for no value-added items, 40 percent for value-added items and 75 percent for custom designs.

Repairs – A repair order must also have a Link4 Return Merchandise Authorization (RMA) number. Repairs that are not covered by the warranty will be billed on a material and labor basis. Items that require repairs must be sent to Link4 with a prepaid return shipping label. Link4 is not responsible for damage(s) due to improper packaging or the shipping and delivery of items returned for repair.

Additional Costs – It is expressly agreed that the Buyer will reimburse Link4 for any additional costs attributable to changes in the specifications, directions or design of the items furnished, which are requested or approved by the Buyer at Link4's listed retail prices in effect at the time such changes are ordered.

Governing Law – The validity of this contract and any of its terms and conditions, as well as the rights and duties of the parties under this contract, will be construed pursuant to and in accordance with the laws of California. The parties specifically agree to submit to the jurisdiction of the courts in California.

Installation

Inspect Your Package

The package should come complete per the items listed below. Upon arrival, check the contents with the packing list to ensure that you have all the items, all associated hardware and the necessary tools to begin installation. Make sure nothing is damaged or missing. If there is any visible damage or missing parts, please contact your point-of-purchase customer service department immediately.

Contents

iPonic™ 624	Qty: 1
Sensor modules with 16 ft. cable	Qty: 2
Preinstalled Internet Communication Module	Qty: 1

Grow Room 1   **Grow Room 2**

*D.I.S.M 50ft. Extension cable available from Link4
P/N 995-0020-00

Mount Your iPonic™ 624 Alert

Find a secure location outside grow room to mount your iPonic™ 624 Alert controller. The location should be away from direct sunlight and grow lights. Make sure the area is dry with no condensation, moisture, humidity, rain and extreme temperatures. Make sure the controller is in an easily accessible location. Leave at least ten (10) inches of workspace below the unit.

There are four (4) mounting holes on the outside of the iPonic™ 624 Alert enclosure to help you attach it to a suitable surface. Make sure you use appropriate tools.

The iPonic™ 624 Alert comes with a 115 VAC power cord. Make sure there is an outlet within approximately six (6) feet. Do not use an outlet that is not shared with other high-voltage equipment. Disconnect all equipment from the iPonic™ 624 Alert before its initial start-up.

Safety Warning: The iPonic™ 624 Alert can only provide a total of 115 volts with a maximum of 15 amps. The recommended maximum is 12 amps or less. This rating is for both rooms. To avoid electric shock, always keep the hinged door closed and locked when the controller is turned on.

Connect the Indoor Sensor Modules

The iPonic™ 624 Alert comes with two (2) Digital Integrated Sensor Modules (DISM) – one for each room.

The sensors measure temperature, humidity, CO_2 and lighting. They come with a 16-foot cable. It is recommended that each sensor is hung in a central location within the greenhouse facility. Ideally, you will want to hang the module near the crop level, near to the center of the controlled environment to get accurate readings. Keep the module away from irrigation emitters, unit heaters and any other type of equipment that may affect the accuracy of the sensor.
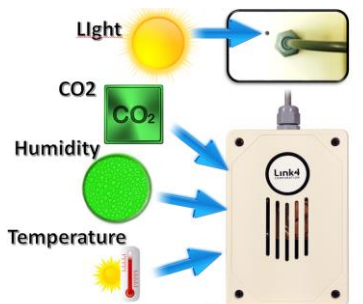
Connect the sensor modules at bottom of the iPonic™ 624 Alert and make it is tightly fastened. For accurate light sensor readings, make sure the light sensor on top next to cable is facing upward toward your lights in room.   Because of the sensitivity of the sensors, you may want to experiment with different places and positions to determine which provides a more accurate reading of your lighting sources.

You may lengthen and extend the sensor cable as needed but be sure to use Link4 extension cables, junction boxes and wire. Cutting and splicing could result in unstable sensor readings and sensor failure. Keep the cables away from high-voltage wiring, power inverters, motor controllers


and mercury arc or sodium lamp circuits.
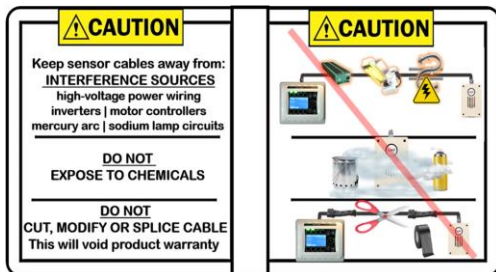
Connect To the Internet

The iPonic™ 624 Alert comes with a preinstalled **Communication Module**. The controller can be used to access the Internet with a standard CAT 5 cable that can be linked to your router.

Note: The ethernet port for the internet is inside the iPonic™ 624 Alert. Before proceeding, make sure the ethernet cable is functioning properly. Perform the following steps to connect your iPonic™ 624 Alert to the internet:

- Power down the controller
- Open up the hinged door
- Route cable through opening at the base
- Locate the ethernet port in the upper left corner
- Plug in the cable to the ethernet port
- Plug in the other end to your router
- Close and lock the controller door
- Power up the controller
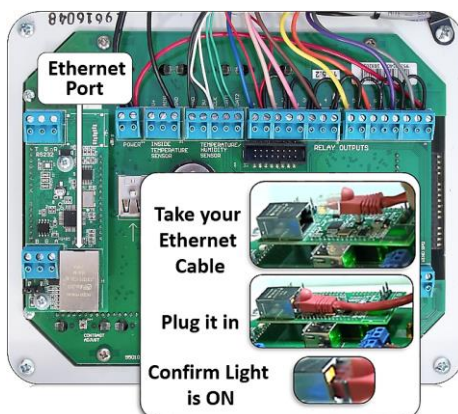
Once you're connected to the Internet, the controller will automatically link up to the **Link4 Cloud Server** (iponic.link4cloud.com) and the Server Setup Screen connection status will display **"Check Account".**

Once you add your controller on the iPonic Cloud the connection status will display **OK**. Use the instructions below to access the controller serial number and registration passcode which you will need in order to add your controller to the iPonic Cloud.

- From the Main Menu, Press **Soft Button No. 3** or use the **Navigation Menu** to highlight **System Setup**
- Press **Soft Button No. 7** or use **Navigation Menu** to highlight **Communication Setup**
- Press **Soft Button No. 2** or use **Navigation Menu** to highlight **Server Setup**
- View your **Serial Number** and **Registration Passcode**

Go to the Browser on your computer or mobile phone and visit the **Link4 Cloud** iponic.link4cloud.com). If you haven't done so already, please create an account.
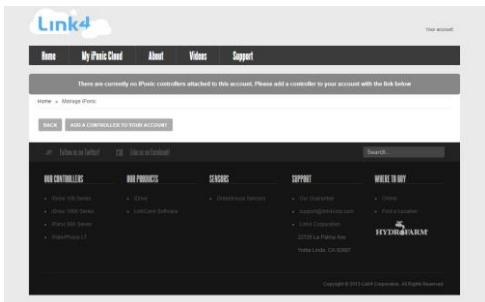
Remote Access

To set up your controller for remote access through your computer or smartphone, please follow the three (3) easy steps below:
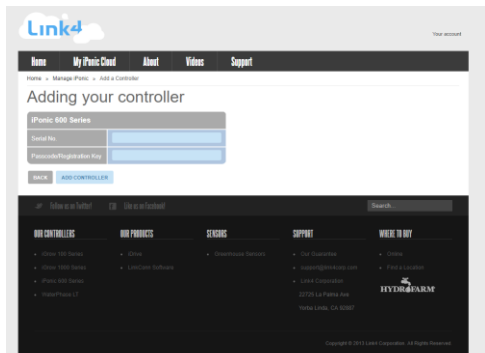
Step 1 – Log in to your Link4 Account and click on my iPonic cloud.
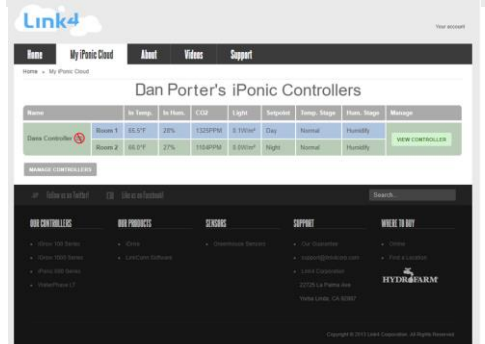

Step 2 – Click on Add a controller to your account

Step 3 – Enter the Serial Number, Registration Passcode and select ADD CONTROLLER

Congratulations! You can now remotely access your controller through your computer or smartphone.

Control Panel

The iPonic™ 624 Alert has a **Navigation Menu** with four (4) **Soft Buttons** (**HOME**, **CANCEL**, **OK**, and **BACK**). The functions are as follows:

MENU

- Use the **Navigation Menu** to highlight a selection. Press **OK** to confirm the selection. The center of the **Navigation Menu** is **NOT** a button. If an alphanumeric field is highlighted, the **Navigation Menu** can be used to increase or decrease the value of the entry.

HOME

- Brings you back to the **Main** status screen. If changes have been made, the user will be prompted to save the data.

CANCEL

- Pressing **CANCEL** in the middle of an entry will bring the user back up a level without making any changes.

OK

- Pressing **OK** will prompt the system to accept the selected **MENU** entry or save the user input data.
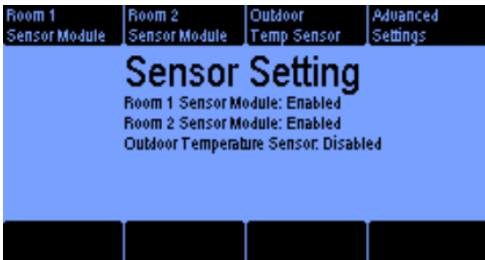
BACK

- **BACK** will take the user up one level. User will be prompted to save data if needed.
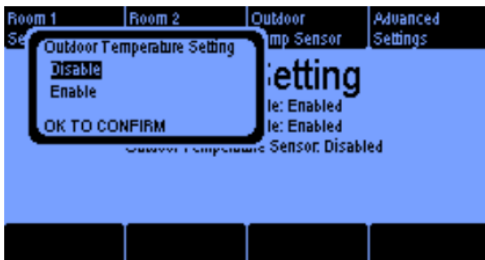
Sensor Setup

System Setup
Menu
1. Equipment Setup
2. Sensor Setup
Ok to select:
3. Alarms Setup
4. Time/Date Setup

Sensor Setup is the 2nd option from the **System Setup Menu**. It allows you to Enable/Disable, Map, and Calibrate your DISM sensor modules.

| Room 1 Sensor Module | Room 2 Sensor Module | Outdoor Temp Sensor | Advanced Settings |

Sensor Setting
Room 1 Sensor Module: Enabled
Room 2 Sensor Module: Enabled
Outdoor Temperature Sensor: Disabled

The **Sensor Setting** option allows you to map the sensor module that is used to read inside temperatures, humidity, CO2 and lighting.

| Room 1 | Room 2 | Outdoor | Advanced |

Room 1 Sensor Module Setting
Disable
Enable
OK TO CONFIRM
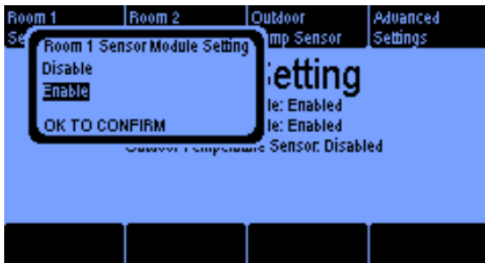
Sensor Module Settings can be **Enabled** or **Disabled**

| Room 1 | Room 2 | Outdoor | Advanced |

Outdoor Temperature Setting
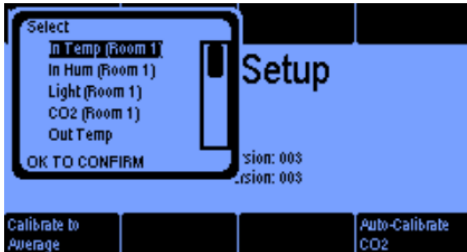**Disable**
Enable
OK TO CONFIRM

Outdoor Temperature Sensor can be **Enabled** or **Disabled**. You would need a Link4 Analog Probe wired to one of the controllers Analog inputs to get the Out-Temperature reading.
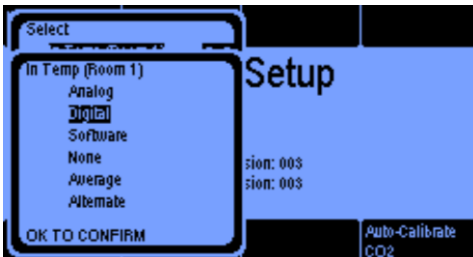
Sensor Setup

Room 1 Sensor Module FW version: 003
Room 2 Sensor Module FW version: 003

Calibrate to
Average
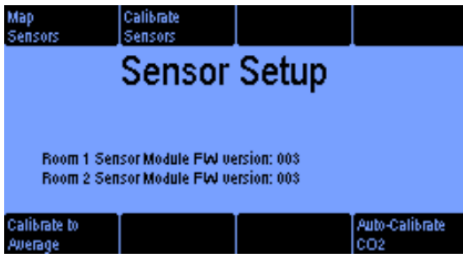
Auto-Calibrate
CO2

The **Sensor Setup** screen in the **Advanced** menu allows you to Map your sensors, Calibrate, Calibrate to Average and Auto Calibrate your CO2

Select
In Temp (Room 1)
In Hum (Room 1)
Light (Room 1)
CO2 (Room 1)
Out Temp
OK TO CONFIRM

Setup

sion: 003
rsion: 003

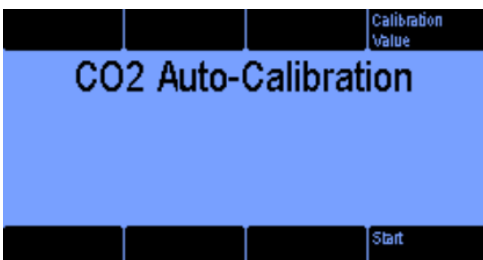Calibrate to
Average

Auto-Calibrate
CO2

Map Sensors allows you to manually assign sensors to inputs on your controller. **OK** or **Menu Wheel** allows you to scroll thru the various sensors. Once sensor is highlighted hit **OK.**

Select

In Temp (Room 1)
Analog
Digital
Software
None
Average
Alternate
OK TO CONFIRM

Setup

sion: 003
sion: 003

Auto-Calibrate
CO2

Another window will pop up which will give you sensor output options, your options are **Analog**, **Digital**, or if you want your reading to be a constant **Software** value. You can also select **None**, **Average** or **Alternate**.

Previous   Next   Edit

Sensor Calibration

SENSOR	RAW	CAL	ADJ
CO2 LSB (Room 1):	1.0	1.0	1.0
In Temp (Room 2):	76.9F	0.0F	76.9F
Humidity (Room 2):	43%	40%	83%
Light (Room 2):	0.1W/m2	16.6	1.4W/m2

The **Sensor Calibration** option allows you to manually adjust collected data. The **Raw** value is the direct reading from the sensor. The **CAL** value is added to the **Raw** value to generate the **ADJ** value. The **ADJ** value will be reflected in the Main Home screen.

Calibration
Value

CO2 Auto-Calibration

Start

From the **Sensor Setup** option, you can calibrate the sensor to a specific CO2 measurement reading. This is achieved by putting the sensor outside and pressing **Start**. It will automatically calibrate to the CO2 outside which is always a default setting of 400.

Alarms Setup

Alarms Setup is the 3rd option of the **Systems Setup Menu** that allows you to setup Alarm Thresholds for your Sensors which can trigger an Alarm Output as well as send notifications if controller is setup on the iPonic Cloud.

The **Alarm Settings** features 6 alerts that can be designated to warn you of high and low temperatures, high and low humidity, and high and low offset carbon dioxide levels. **Alarm Delay** is the amount of time an undesirable condition exists before the alarm sounds off to take corrective action.

Grow Room 1 Notification & Alarms

| Alarms	Room 1		Room 2	
High Temperature Alarm	100	°F	100	°F
Low Temperature Alarm	50	°F	50	°F
Enable email notification for temperature alarm	☐		☑	
High Humidity Alarm	90	%	90	%
Low Humidity Alarm	20	%	20	%
Enable email notification for humidity alarm	☐		☑	
High CO2 Alarm	2000	PPM	2000	PPM
Low CO2 Offset Alarm	600	PPM	600	PPM
Enable email notification for CO2 alarm	☐		☑	
Hold Time before Alarm	60	seconds	60	seconds
Light Shutoff Time on Temperature Alarm	60	seconds	60	seconds

Email Notification	
Enable email notification	☐
Enable timeout notification	☐
Enable sensor error notification for room 1	☐
Enable sensor error notification for room 2	☐
Maximum emails per 12 hour period	10
Your primary email	g740sierra@yahoo.com CHANGE PROFILE

Secondary Email or Text Notification	
Your secondary email	
Select carrier to send texts (optional)	Select ▼

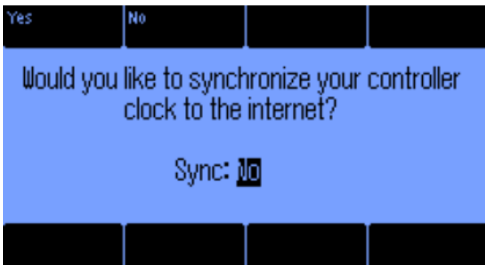**Setting up your Alarms Cloud View.**

Time/Date Setup

The **Time/Date Setup** is the 4th option of the **System Setup Menu**. This option allows you to change the time and date.
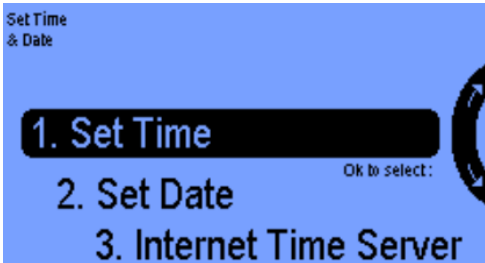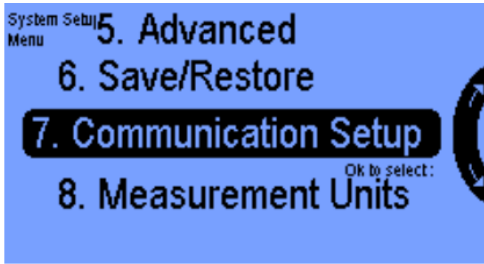
From the **Set Time & Date** option, you can **Set Time**, **Set Date**, and set it up with the **Internet Time Server.**

The **Internet Time Server** option allows you to synchronize the time and date of your controller with the time and date on the internet. This can only be done after you manually set up the time and date.
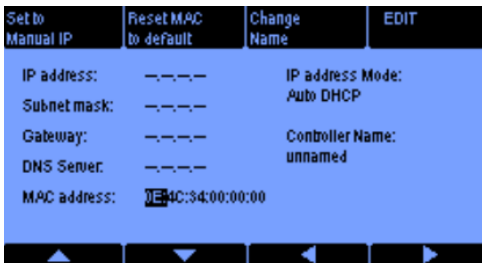
Communication Setup

Communication Setup is the 7th option in the **System Setup Menu** that allows you to configure your controller to connect to the Internet for remote access using the iPonic Cloud.

From the **Communication Setup Menu**, configure the controller to be accessible from your PC with the **IP Address** on your router.

The **IP Address Setup Screen** allows access remotely through the internet. Using **Auto DHCP**, Once ethernet cable is plugged in, the settings from the router will appear. **Manual IP** can also be used by pressing button No 1. then manually input the router information.
See Page 13 for more Info.

From the **Server Setup Screen** use **Registration Passcode** and **Serial Number** to add controller to the **Link 4 iPonic Cloud**. The connection status after adding the controller to cloud should change from Check Account to **OK**.