

Kegtron Pro: Installation & Setup Guide

Introduction

The Kegtron Pro smart keg monitoring system brings data tracking, visualization and remote access capabilities to your kegs. This advanced system uses wireless data transfer to ease installation and a connection to the cloud to give you remote access from any location.

Since network connectivity is a fundamental piece of the system, your keg monitors will need to be properly installed and connected online before they can be used. This document describes how to get your installation up and running quickly.

Requirements

Before proceeding, please ensure you have the following components and information ready:

- 1. Keg Monitors This guide applies specifically to "Kegtron Pro" models KT-420 and KT-220.
- Fitting Adapters Your keg monitors will accommodate 3/8" (9.5mm) OD tubing or 3/16" (4.76mm) ID tubing with the included adapters. If you have different size requirements, please see the Adapter Selection of this document for additional options.
- 3. **AC Power** Your installation will require permanent access to a 110-220VAC power source that is within reach of your keg monitor installation site.
- 4. **AC/DC Adapter** An AC/DC power adapter is included with each keg monitor. If you will be installing more than 4 keg monitors at a single site please contact Kegtron so that we may advise on a suitable higher-current adapter.
- 5. Low Voltage Wire A 10' (3m) 2-conductor wire is included with each keg monitor. This may be replaced with a longer wire if additional distance is required between the keg monitor(s) and the AC/DC adapter.
- 6. Screwdrivers A small flathead screwdriver and a medium Philips screwdriver will be needed.
- 7. **Mobile Device** A smartphone, tablet or laptop PC will be needed during the installation & setup process.
- 8. **WiFi Access** Your keg monitor installation site will require 2.4GHz WiFi coverage. You will need to have the WiFi network name (SSID) and password ready before proceeding.

Electrical and Network Setup

Before You Proceed

It is recommended that you connect your keg monitors to the network **before** connecting keg lines. This will ease network troubleshooting should it be necessary.

WiFi Coverage

Your keg monitor will require WiFi access to operate. Before installing any hardware, ensure that you have suitable 2.4GHz WiFi coverage at your installation site. The easiest way to confirm wireless coverage is to use a phone or tablet.

- Make sure your phone is connected to the same WiFi network that you plan to use for your keg monitors.
- Place your phone in the approximate location of your keg monitor installation site and verify suitable WiFi coverage by checking your signal strength indicator:
- If possible, close the door to your walk-in cooler before taking note of your signal strength
- If you have a poor or non-existent signal at your installation site, please do not proceed further until you are able to improve your WiFi coverage (e.g. adding a WiFi extender, moving your WiFi router, etc.). Contact Kegtron if you need specific advice or assistance.

Electrical Connections



- 1. Connect your AC/DC wall adapter to an AC outlet (your adapter may differ from the unit shown above). If you choose to hard-wire an AC/DC adapter to the AC mains make sure to work with a licensed electrician.
- 2. Run 16-22AWG low voltage, 2-conductor copper power wire from your AC/DC adapter to your keg monitor installation site. Use color-coded wire to ensure that proper polarity can be maintained at both ends. Larger gauge wire is recommended for longer runs and/or multiple keg monitors.
- 3. Connect one end of the power wire to your power adapter terminals. Take care to note the adapter polarity vs. wire color: Red = Positive (+), Black = Negative (-)



4. Connect the other end of the power wire to your keg monitor power terminals. Take care to match the wire color to the proper +/- polarity markings on the keg monitor cover.



5. Place the cable shroud over the power terminals as shown below to protect from splashes. The included zip tie may be used to help secure the shroud in place if needed.



6. If you are connecting more than one keg monitor, power should be connected in a daisy-chain fashion as shown:



NOTES:

- Each keg monitor includes one power adapter, but **only one is needed** when keg monitors are daisy-chained together. Spare power adapters may be discarded or recycled.
- Please contact Kegtron if you need to daisy chain more than 4 keg monitors
- 7. If everything is connected properly the orange (i) info indicator will be active. If not, check your wiring connections and polarity.

Network Provisioning

- **NOTE:** For this section, you may use a phone, tablet or laptop PC to connect your keg monitors to the network. A desktop PC will not be suitable as WiFi is required.
 - 1. On your phone scan the following QR Code:



...which will take you to the following URL: <u>https://dashboard.kegtron.com/</u>



2. The following page will be opened in your browser:

Kegtron Cloud Dashboard
Email
Password
➡ Sign In
No account yet? Register Forgot Password? By using this service, you agree to the terms



3. Click Register, enter your email address and click "Send invitation"

Cloud Dashboard
Email
Password
♦) Sign In
No account yet? Register 👻
Email
Send invitation
By using this service, you agree to the terms

This will be the email address that will be associated with your Cloud Dashboard account.

4. You should receive a confirmation email from Kegtron at the address specified above. If you don't receive it within a few minutes, check your spam folder and/or try again.



5. Click on the link within the email to activate your account. You should see the following Cloud Dashboard page open in your browser:



6. Click Add Device (keg monitor) at the bottom of the screen:



7. After clicking Add Device the following screen will appear:



8. Open the WiFi Settings on your phone and connect to the Kegtron-XXXX network ('XXXX' will match the last four digits of your keg monitor's serial number).

A		/ 🖉 🖥 51% 7:	:42 PM	7:38 🕫		ISGE
÷	Wi-Fi		:	Settings	Wi-Fi	
						_
	On			Wi-Fi		
	Kagtrop 6020			 Kegtron-6928 Unsecured Network 		≉ (j́)
▼	Connected			MY NETWORKS		
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				Allow this device to an personal hotspots who	utomatically discov en no Wi-Fi netwo	er nearby rk is available.
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Android



9. Return to your browser and click the **Scan** button



10. If successful, a **Found new device!** message will appear as shown below. If the Scan arrow continues to spin without finding a device, revisit Step 8 above and ensure your phone is connected to the Kegtron WiFi network.

Ac	d Device	G logout
← back		
Found new device!		
WiFi network na	me	
WiFi password		
	Configure device V	ViFi
Sites	Add Device	Account



11. Enter the WiFi network name (SSID) and password that your keg monitor will connect to.

Take care to use <u>exact spelling and case</u> to prevent the need to reset the device! If in doubt, test your WiFi credentials on your phone before applying to the device.

When ready to proceed, click the **Configure device WiFi** button to write WiFi settings to the device.

	Add Device	🕒 logout
← back		
Found new devic	e!	
my-network		
my-password	I	
8	Configure device Wi	Fi
A Sites	Add Device	Account

12. Your keg monitor will reboot and attempt to connect to your WiFi network and then connect to the cloud. This process may take 1-2 minutes.

Please note the following network status indicator states:

- Fast Constant Blink WiFi credentials not configured
- Fast Double Blink WiFi configured but no connection
- o Slow Blink
- WiFi connected, not connected to cloud
- Solid Green Connected to WiFi and cloud
- 13. Go to your phone or PC's WiFi settings menu (shown in Step 8) and reconnect to your normal WiFi network. Return to your browser and click the **Register device** button.

	Add Device	🕞 logout
← back		
WiFi configuretion Join back to your V Return to this scree	applied. Go to your pl ViFi network, en and press on Regis	none settings, iter device.
	Register device	
ñ	0	4
Sites	Add Device	Account

14. After registering your device, the **Sites** page will load and you will see a **NewSite** appear in your site list as shown below:

	Sites		G logout
Site	Kegs	Low	Empty
NewSite	4	0	0
			-

Your keg monitor is now online and ready for use!

NOTES:

- To add additional keg monitors, repeat Steps 6-13 for each device.
- Once all devices are on the network, you can use any phone, laptop or desktop PC to access the Cloud Dashboard

WiFi Reset

It may be necessary on occasion to change the WiFi name (SSID) and/or password after a keg monitor has been provisioned. This could be needed due to a typo during initial configuration, moving a device to a new network, etc.

- Remove the clear splash guard by squeezing and pulling upward.
- To reset the WiFi settings, you must apply a shorting jumper across the RST terminals as shown below. A paperclip works well.



- Hold the jumper in place for at least 3 seconds until you see the orange **Info** (i) status light blink. Once this happens, the unit will reboot and the WiFi SSID and password will be erased.
- Replace the splash guard by pushing into place.
- After the unit has rebooted, a new WiFi name and password can be applied as described in the steps 5-12 above.

Cloud Dashboard Setup

Once you have your keg monitor(s) online you're ready to set up your dashboard and provision kegs for use.

Device Setup

When you bring a new keg monitor online, you can assign it to a site. Specifying a site allows you to group your keg monitors by physical location.

1. Open the Cloud Dashboard page (<u>https://dashboard.kegtron.com</u>) on your phone or PC browser to return to the same site you used to set up your devices. Click the **Sites** button on the bottom row to see a top-level view of all of your sites.





2. New devices will be assigned a default name called "NewSite". Click on the site name to open up the site page. You can change the site name later (see Step 5).

' a'	Sites		🕞 logout
Site	Kegs	Low	Empty
NewSite	4	0	0
*	0		A

3. On the site page you will see a list of all the keg names associated with this site and device:

Name	Status	Level			
			Vol Served	Vol Remain	Servin Remai
Port 4	online	100%	0.0 gal	15.5 gal	124
Port 3	online	100%	0.0 gal	15.5 gal	124
Port 2	online	100%	0.0 gal	15.5 gal	124
Port 1	online	100%	0.0 gal	15.5 gal	124
1			-		



4. To configure the settings for a device, click the gear icon on any of the keg rows:





5. At the top of the **Settings** page you can configure common parameters for this specific keg monitor device. Common settings such as Site Name, Alert Email and thresholds and Units apply to all kegs connected to this device. Fields colored in grey are read-only.

IMPORTANT: Assign a new name to Site Name. If you have more than one keg monitor, use the same name for each device.

🗲 back	Settings / NewSite / device67 / 1	(→ logout		
Site Name	Site Name			
Ports	4			
Hardware Rev	20200610			
Firmware Rev	20200520			
Serial Number	2018010004			
Model	KT-420			
Display Units	US Customary	~		
Cleaning Mode	Disable	~		
Device Beacon	Disable	~		
Auto Keg Reset	Enable	~		
Time	5			
🖺 Save Configuration				
☆ Sites	OEAddReports	Land Count		

6. After changing settings, click the blue **Save Configuration** button at the bottom of the screen.

Keg Setup

With your keg monitor configured, the final step is to configure each keg before use.

1. To configure the settings for a keg, click the gear icon. You may need to scroll to the right depending on your screen size & orientation:



2. Scroll to the port you wish to configure. Important parameters to configure include: Tap Handle Number, State, Name, Keg Size and Keg Volume Start (equal to Volume Size by default). All other parameters are optional.

When done, click the blue "Save Configuration" button to save your settings.

IMPORTANT: State must be set to "In Use" otherwise all servings will be ignored!

← back	Settings / NewSite / (+) device67 / 1 logout
Port 1	
Tap Handle Number	Tap Handle Number
State	In Use 🗸
Name	Name
Description	Description
Maker	Maker
Style	Style
ABV %	0
IBU	0
Keg Size	1/2 Barrel (15.5 gal) 🗸
Keg Volume Start (gal)	15.499
Serving Size	US Pint (16 oz) 🗸
Cal. Offset %	0
Date Tapped	mm/dd/yyyy 🗖
😭 Sites	Add Reports Account

3. Repeat the configuration for each keg and save.

4. When tapping a new keg, it is very important to click the **Reset Keg Volume** button. This is critical to ensure the keg monitor counter is synchronized with the actual keg level.

🗲 back	Settings / Moes Tavern (+) / device41 / 1			
Name	King Cobra			
Description	Don't let the smooth taste f			
Maker	Anheuser-Busch			
Style	Malt Liquor			
ABV %	6			
IBU	11			
Keg Size	1/2 Barrel (15.5 gal) 🗸 🗸			
Keg Volume Start (gal)	58.67			
Serving Size	US Pint (16 oz) 🗸			
Cal. Offset %	0			
Date Tapped	04/01/2020			
Date Cleaned	05/01/2020			
Beacon	Disable 🗸			
Volume	Reset Keg Volume			
Reset				
☆ Sites	OEAAddReportsAccount			

Your keg monitor is now configured and ready for use!

If you have multiple keg monitors, repeat the steps above for each keg on the device.

Liquid Connections

Once your keg monitors are powered up and online, it's time to connect your draft lines. Your keg monitor comes equipped with John Guest "Speedfit" push-to-connect fittings.

These fittings can be used directly with semi-rigid barrier line tubing, also known as "poly" (LLDPE or polyethylene), with an outer diameter (OD) size of 3/8" / 9.5mm.

Adapter Selection

For other types of lines, many adapters are available from John Guest to enable easy, leak-free connections.

Vinyl / PVC Lines

Hose barb to stem adapters are suitable for use with soft vinyl / PVC lines. Select an appropriate barb size to match the inner diameter (ID) of your lines. The stem size must always be 3/8" / 9.5mm OD.



John Guest Part Number	Stem OD	Barb
PI251208S *	3/8"	1/4"
PI251210S	3/8"	5/16"
PI251212S	3/8"	3/8"
PI251216S	3/8"	1/2"

* Included with each keg monitor

NOTES:

- For vinyl it is recommended to use a barb size that is slightly larger than the ID of the actual line to ensure a tight seal. **Example:** for 3/16" ID lines, use 1/4" barbs
- Always use hose clamps for barb adapters. Clamps are included with each keg monitor

Poly Lines

When adapting to different size poly lines a reducer/enlarger can be used.



John Guest Part Number	Stem OD	Tube OD
PI061206S	3/8"	3/16"
PI061208S	3/8"	1/4"
PI061210S	3/8"	5/16"
PI131216S	3/8"	1/2"

NOTE: Other adapter styles and sizes are available. Visit <u>johnguest.com</u> or their distributors for more information. In the US, consider <u>Fresh Water Systems</u> for a wide range of options available for online order.

Line Insertion

1. Liquids must flow from bottom-to-top as shown below. Take note of the keg monitor IN and OUT ports by locating the arrow molded onto the side of each flow sensor.

2. Remove red safety clip

- 3. Disconnect the keg coupler from your keg and cut the line between the coupler and faucet.
 - **NOTE:** For direct draw installations it is **highly recommended** to maximize the length of the line between the keg monitor OUT and the faucet. A good rule of thumb is 2X the line length on the OUT-faucet vs. the IN-coupler line length. If there is inadequate restriction on the OUT-faucet side, excessive foaming may result.

4. Ensure the line has a clean cut with an even edge. This is important to prevent leaks. A tubing cutter or razor blade is recommended rather than scissors.

5. Poly lines can be inserted directly into the flow sensor. Press firmly until the tube is fully seated. Partial insertion will result in leaks.

6. Insert the clip between the collet and flow meter body, then press the clip into place.

Adapter Insertion

- 1. Remove the clip as described above.
- 2. Slip a hose clamp over the tubing.
- Connect the liquid line to a suitable John Guest stem adapter. The stem size must be 3/8" (9.5mm) OD. Placing the tube end in hot water for 30-60 seconds will ease insertion.

- 4. Tighten the hose clamp to prevent leaks. A 6mm hex nut driver or screwdriver may be used.
- 5. Insert adapter into flow sensor. Press firmly until fully seated. Partial insertion will result in leaks. Reinstall clip as described above.

Line Removal

1. Remove clip

2. Press collet firmly from both sides using two fingers or a suitable wrench. With the collet pressed in, pull to remove tubing or adapter. A special release tool is optionally available from John Guest to assist in removals.

3. Reattach clip for future use

Support

Have questions? Need support? Please contact us!

Documentation:kegtron.com/proEmail:support@kegtron.comPhone / Text:+1.628.222.5744