

Direct Connection Set Up

Introduction	2
Controller: Connect to API	2
App: Set up Site & Connect Controller	3
WiFi Setup	3
Headgrower Hub/Client Setup	4
Start Trial / Subscription Setup	4
Update Controllers for Subscription	6
Upgrade from CIS	6
Connection FAQs	7

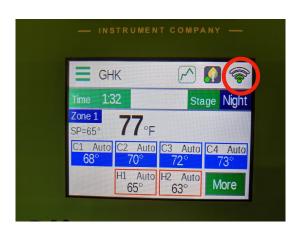
BARTLETT Instrument Company 1032 Avenue H, Fort Madison, IA 52627 1-(319)-372-8366 information@bartinst.com

Introduction

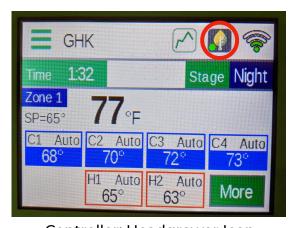
This manual is designed to help connect Bartlett, greenhouse, 'Boss series controllers to the Headgrower platform. If the menu options or buttons do not look familiar, please first try to update your firmware. You can do this by pressing the menu icon, at the top left of the home screen. Then press Configuration > WiFi > Update Firmware.

Controller: Connect to API

- 1. Check WiFi Configuration
 - a. If the WiFi symbol in the top right is green (below), skip to the next step
 - b. If it has a red X, press it and configure the WiFi. See **WiFi Setup section** in this document for details on how to configure WiFi.
- 2. Ensure latest firmware is installed
 - a. Press the menu icon (top left, three green bars).
 - b. Scroll to the end and press Configuration
 - c. Press WiFi
 - d. Press **Update Firmware** and follow prompts
- 3. Enable Headgrower
 - Once the beta software is installed & WiFi is set up, look at the Headgrower icon (leaf icon left of the WiFi symbol).
 - 1. Green: your controller is communicating correctly
 - 2. Yellow or red: need to check the configuration, press the icon to get to Headgrower Options
 - b. Set Headgrower Network
 - Press Headgrower Network; Press the WiFi checkbox
 - 2. If you are setting up a controller that will act as a hub (e.g. it is the only one or one of a few that have WiFi access), please see the **Headgrower Hub/Client**Setup section below. For example, many customers choose this option if they are setting up a WeatherBoss outside of the main office.
 - c. Hit Home icon to check the Headgrower icon now has a green dot



Controller: WiFi Icon



Controller: Headgrower Icon

App: Set up Site & Connect Controller

On Headgrower phone app or <u>headgrower.bartinst.com</u>. Step 1 is only needed if setting up on a computer

- 1. Copy Headgrower ID from controller*
 - a. Go to Headgrower Options
 - b. Press Headgrower ID
 - c. Write down ID & save
- 2. Create or edit site on Headgrower
 - a. Go to <u>headgrower.bartinst.com</u>
 - b. Click the Settings icon (top right)
 - c. Choose the option Manage Sites
 - 1. If you have not set up a site, set one up now
 - i. Enter **Site Name** in input box
 - ii. Click Create New Site button
 - iii. Click Connect a Controller
 - 2. If you have not set up a site, click **Connect a Controller**
 - d. Enter the **Headgrower ID** by either typing it (on a computer) or scanning the barcode (device)
 - e. Click **Next**
 - f. Enter the controller **Name** in the input box
 - g. Click **Connect**
 - h. Go to the home page and see the controller status information and set up any additional users to access the information. Not seeing any controller information?
 You may need to start your trial or set up your subscription. See the Start Trial / Subscription Setup section

WiFi Setup

If the WiFi icon (top right) is not green, these simple steps will enable communications between your controller and Headgrower.

- 1. On the Home screen, press the WiFi icon
 - a. Enable WiFi
 - 1. Ensure Enable WiFi reads Enabled
 - 2. If not **Enabled**, Press **Enable WiFi** and press the Enabled checkbox
 - b. Connect to WiFi
 - 1. Press WiFi Setup
 - 2. The controller will scan to find available networks
 - 3. Find and press your correct network
 - 4. Enter password, press **Save**
 - 5. Press **Home** button
- 2. Your WiFi icon should now be green.

Headgrower Hub/Client Setup

Don't have WiFi in all of your greenhouses? We have a hub / client network option available with our RadioLink host so you can have select controllers act as communication hubs between Headgrower and the rest of your controllers.

For any Hub controller(s) - the controller with WiFi access:

- 1. Press the Headgrower icon (leaf)
- 2. Press Headgrower Network
- 3. Press Hub checkbox (if not already checked)
- 4. Connect RadioLink to the hub controller. Please note the channel of the RadioLink.

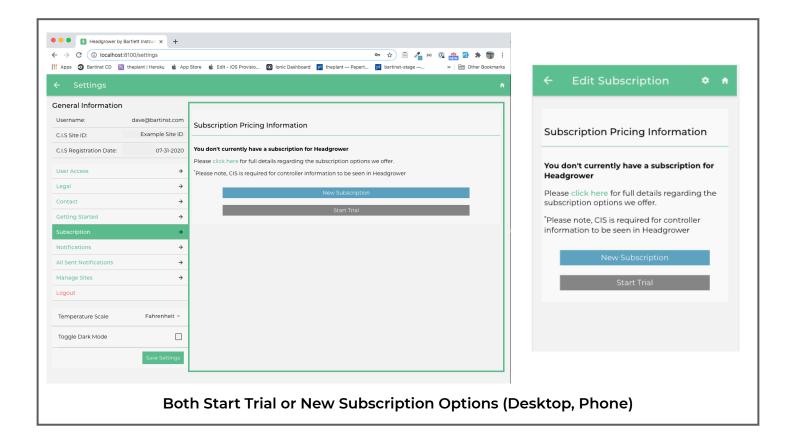
For any Client controller(s) - without WiFi access (must repeat for all Client controllers):

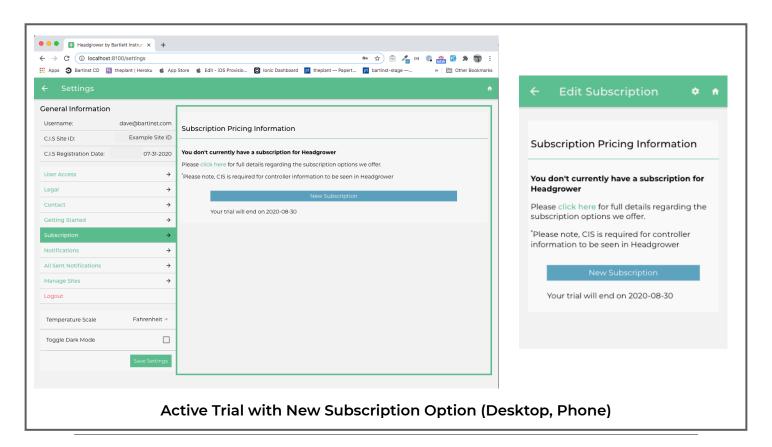
- 1. Press the Headgrower icon (leaf)
- 2. Press Headgrower Network
- 3. Press Client checkbox (if not already checked)
- 4. Check the RadioLink is connected to the controller
- 5. Ensure the RadioLink's channel is the same as what was configured for the Hub's Radio-Link
 - a. Select Radio Link Channel
 - b. Enter the RadioLink channel you entered for the Hub controller.
 - c. Press Save.
 - d. You will get a message saying the radio settings have been changed successfully.

Start Trial / Subscription Setup

Not seeing your controller information? You probably have not started your 30 day trial or your trial may have expired and now a subscription is needed. The following instructions will help you with both, as well as screenshots below.

- 1. Log into <u>headgrower.bartinst.com</u> **OR** open the Headgrower app on your device.
- 2. Press the Settings icon (top right)
- 3. Press Subscription (even if you're just starting your 30 day trial)
 - a. If you haven't started your 30 day trial, you will see a Start Trial button
 - b. If your 30 day trial is active or has expired and you have not filled out payment information for a subscription, you will see a New Subscription button. Additionally, the date your trial ends will be shown.
- 4. Press the appropriate button.
- 5. If you are starting a subscription, complete the required information on the Set Up Subscription page and press Purchase.
 - a. We use Braintree, a PayPal service, as our payment processor.

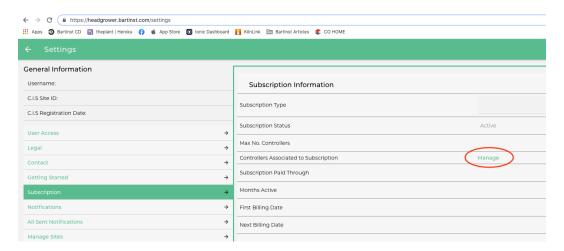




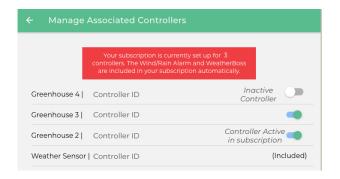
Update Controllers for Subscription

If some of your controllers aren't showing up, they may not be activated for your subscription. To remedy this situation, you can go to https://headgrower.bartinst.com.

Go to Settings > Subscription. In the table to you will see a link with the words Manage next to the label, **Controllers Associated to Subscription**. (See below)



Click "Manage" and you can toggle individual controllers as active or inactive with your subscription. Remember to save the changes and add any necessary comments. (See right).



Upgrade from CIS

Do you have controllers connected via CIS? The upgrade is easy.

- 1. Upgrade CIS to the latest version. Please email <u>molly@bartinst.com</u> for a link to the latest CIS
- 2. Swap the top! Swap your classic controllers to ClimateBoss models.
- 3. Your controllers are automatically connected to your site. You can view your site at Settings > Manage Sites. Click your site to view the controllers associated to the site.
- 4. After you have swapped all of your controllers, you can switch to using <u>headgrower.bartinst.com</u> instead of CIS.
- 5. If you have not swapped all of your controllers, you will have to continue using CIS for any classic controllers.

Connection FAQs

Having trouble? Here are some FAQs and common missteps we've troubleshooted with other customers.

Q: I am having trouble connecting to the internet. Help!

A: First, we recommend trying out connecting to a mobile hotspot, to see if we can narrow down the problem. One thing to note, *if you have an Apple device*, the default SSID (name) of your hotspot will have an apostrophe. You will need to remove special characters in order to connect.

Q: I have seen both a red exclamation point and a red X on my WiFi symbol. Can you tell me what each mean?

A: A red exclamation point means the controller WiFi is working, but there is an error with the selected, WiFi network. A red X means the controller WiFi has a problem. If you have a red X please press the WiFi symbol and go through the **WiFi Setup** process. If you still have a problem, try to the Reset WiFi option.

Q: I'm not seeing the menus or screens the way they are listed in this manual. What should I do?

A: Try going updating your firmware (Configuration > WiFi > Update Firmware).

Q: Can you explain the 4 Headgrower Network options?

A: Sure, the options are: Off, WiFi, Client, Hub and CIS.

Off: The controller will not try to connect and send/receive information with the Headgrower platform.

WiFi: This option is for a controller that connects to the Headgrower platform directly with WiFi *and* it does not communicate with other controllers via a Bartlett Instrument Radio Link. If you only have one Bartlett Instrument 'Boss controller, this is the option for you. If you have a classic model or multiple 'Boss controllers, see the options below.

Client: This option is for controllers who may not have WiFi access in the house or for any other reason you do not want them on WiFi. A client will communicate to the Headgrower platform via a Hub. By selecting this option, it is necessary for you to have one Hub in your network. It is also necessary that all Client controllers have a RadioLink.

Hub: This option is for a controller that will be connected to WiFi. We have found that for many of our clients the best option for a Hub is the WeatherBoss. The Hub will communicate with any Clients configured on the same RadioLink ID / PIN combination. It will also transmit information to and from the Headgrower platform.

CIS: This option works for you if you have a mix of Classic and 'Boss controllers and still want to view data on our desktop application, Headgrower CIS.