[BETA] RBS Internet Installation/Usage Instructions

(Last Updated: 2025-12-05)

Usage

Note: These usage instructions assume that the <u>License Number is set and correct</u> under Settings --> Other --> License Number.

- (1) Attach an ethernet cable to a USB-to-Ethernet adapter and plug the adapter into the USB port on the Red Box before powering it up.
- (2) Power on the Red Box and wait for the green READY light to blink about 2 times a second, which indicates that the Red Box is ready to operate. This may take a few minutes, depending on the upload speed of the internet connection.
- (3) In a Chrome browser (preferably on a tablet or a laptop/computer), go to https://myredbox.live/[License Number]

Example: https://myredbox.live/1234567890

Note: It is important that the "s" of "https" be entered, as an unsecure connection to the Server will not work properly.

Features/Quirks/Notes

- (1) It is important to note that the Internet connectivity functionality for the Red Board System is currently in the "BETA" stage of development, and is to be used at the user's own risk.
- (2) As of the time of this writing, most Events, States, and Settings are updated on the Server from the Red Box in real-time. Although every reasonable effort has been made to ensure the accuracy and timeliness of this data, it is not guaranteed that the web client will represent the exact status of the Red Box with 100% accuracy.
- (3) As of this writing, although the Buttons, Menus and Settings appear to be "enabled" on the web client (i.e., in the Chrome browser), most of the Buttons, Menus and/or Settings are not functional with respect to the Red Box, even if they appear to change on the web client. At this time, the following Buttons and Settings are operational from the web client:
 - a. Stop button,
 - b. Cooldown button,
 - c. Manual vs Automatic setting,
 - d. Manual Plenum Temperature setpoint,
 - e. Manual Unload Rate setpoint, and
 - f. Target Moisture % setpoint.
- (4) The Internet functionality is designed to be "Plug and Play." Once connected via Ethernet, upon powering ON the Red Box, the Red Box assumes it will be assigned an IP address by the router on the user's network. As such, it is contemplated that the Red Box will be assigned an IP

- address by DHCP. Additionally, the Red Box can be <u>assigned</u> a static IP if desired, but the Red Box cannot request a static IP.
- (5) There have been mixed results with viewing the graphical user interface on phone-sized devices. Therefore, it is recommended to use a tablet or laptop/computer (using a Chrome browser) for a better experience.
- (6) If the data is not refreshing on the web client, try refreshing the page.
- (7) Multiple users can view the data on the Server concurrently. This allows, for example, for a user and a Dealer to be able to view a single Red Box at the same time, remotely.
- (8) It is important that the user not publish or give out the Red Box License Number unless the user wants others to be able to view Dryer data and/or to control the Dryer. It is contemplated to implement a user-settable passcode in a future software release to add extra security and privacy. However, this feature is not implemented as of the date of this writing.
- (9) Settings modified on the web client are stored on the Server. However, these Settings are not transmitted back to the Red Box itself. Thus, to avoid inconsistent states (between the Red Box and the Server), please do not change any Settings via the web client (besides the settings mentioned in bullet point (3)).
- (10) Note that the Server synchronizes with the Red Box during the bootup of the Red Box. If the bootup process is taking too long, it can likely be shortened by clearing the database under Dryer Config --> Database Settings on the Red Box, and then cycling power.
- (11) In general, the Server is software version agnostic. This means that, unless indicated otherwise, all internet-compatible versions of the Red Box (i.e., after v00.01.15) are supported by the Server concurrently for different users. This means that in general, users will not have to upgrade their Red Box software version every time a new version is released. This avoids unnecessary software upgrades to the extent that the user is satisfied with a given software version.

Troubleshooting

Problem/Issue	Possible Causes	Possible Solution(s)
The Red Box does not boot up at all when the Ethernet-to-USB adapter is plugged in.	(1) The network configuration is not set up correctly to allow the Red Box to fully connect to the Internet.	(1) First, try power cycling the Red Box and see if the problem fixes itself.
	(2) There is a software bootup error.	(2) To get the Red Box to boot up so that the user can at least run locally, power OFF the Red Box, unplug the Ethernet-to-USB adapter from the USB slot, and power ON the Red Box. (3) Set up the network so that the Red Box receives a DHCP (i.e., dynamic)
		address. (4) Make sure no firewalls are preventing access to/from the Red Box.
The website at https://myredbox.live/[License Number] is not populating data.	(1) The Red Box is not connected to the Internet.(2) The "s" in the "https" at the beginning of	(1) Make sure the network (ethernet) cable is plugged in, and that the network is functional.
	the URL address is missing.	(2) Include the "s" in the URL address. This provides a secure connection and allows the Red Box to transmit and receive data securely.