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1. Precautions

When you use the Stoker, you are dealing with fire and appropriate precautions must be taken. The Consumer Product Safety Commission reports that every year about 20 deaths and 400 injuries are treated resulting from carbon monoxide poisoning from charcoal grills.

The following tips will help make your barbecue/smoker experience a safe one:

- Due to the production of carbon monoxide when charcoal is burned, barbecue/smokers should not be used inside homes, vehicles, tents, or campers, even if ventilation is provided. Carbon monoxide is odorless and colorless. You will not be alerted to the danger until it is too late.
- Make sure the barbecue/smoker is at least 10 feet away from your house, garage, trees, or other materials.
- Keep children away from the barbecue/smoker.
- Have a fire extinguisher, a garden hose attached to a water supply, or at least 4 gallons water close by in case of a fire.
- Use long handled barbecue tools and/or flame resistant mitts.
- Keep alcoholic beverages away from the barbecue/smoker.
- When finished, remove the charcoal ashes from the barbecue/smoker and place them into a metal container with a tight fitting metal lid. Add and mix in water with the ashes, and set aside for several days. Dispose of the mixture in accordance with the local sanitation guidelines.
2. Introduction

Thank you for purchasing the Stoker from Rock’s Bar-B-Que. The Stoker is a power draft control system for your barbecue/smoker. The Stoker will allow you to control your barbecue/smoker like you would control your oven.

Basic System

The Basic Stoker System consists of four components: The Stoker, Temperature Sensor, Blower, and Power Supply. The Stoker is a versatile electronic controller housed inside a rugged powder coated steel enclosure. The Temperature Sensor is a fast responding thermocouple housed inside a stainless steel tube. The Blower supplies the draft and is available in different sizes to fit different barbecue/smokers. The Power Supply plugs into standard American electrical outlets and powers all of the components.

How It Works

A Temperature Sensor is placed inside your barbecue /smoker at the location where you want the target temperature maintained. A blower is installed so it blows air directly into the firebox. The Stoker compares the Temperature Sensor measurement to the target temperature setting in order to control the blower. When the measured temperature is lower than the target temperature, the blower turns on. When the measured temperature goes above the target temperature the blower turns off. This cycle continues hundreds of times during your cook to maintain the target temperature.

Below is a list of some of the key features:

Alarm Features

The Stoker has alarms that you can configure for each Temperature Sensor. You can choose a “Fire Alarm” that gives you both a high alarm to make sure your fire is not getting to hot, and a low alarm to make sure your fire is not going out. You can also set a “Food Alarm” to notify you when your food is done.

Food Measurement Features

The Stoker can also monitor the temperature of the food you are cooking without the need to open the barbecue/smoker. These sensors can also alarm you when food is done.

Controls Several Barbecues/Smokers

The Stoker is capable of controlling several barbecues/smokers all at once. The Stoker has 6 device ports but can easily be expanded with a “Device Port Expander”. You need 2 device ports for each barbecue/smoker you want to control; one port for a Temperature Sensor and one port for a Blower.

Built-in Web Server

Connect the Stoker to a network using the built-in wireless capabilities or an Ethernet cable and you can control your Stoker from anywhere you have network access. No special software is required to use your web browser to monitor and control your Stoker. The web server is also available as a read-only page which allows you to share the information with the world without fear of someone altering your settings.
3. First Look

Stoker Front Panel

[Diagram showing front panel with labels such as Liquid Crystal Display, Main Temp Control, User Interface Buttons, and Device Input Ports]

Stoker Rear Panel

[Diagram showing rear panel with labels such as Power Input, Network Ethernet, and Network WiFi]
4. Devices

One of the most versatile features of the Stoker is the way the Temperature Sensors and Blowers connect to the Stoker. There are six (6) device ports on each Stoker; three (3) ports on the front and, three (3) ports on the back. All of the Device ports are identical and accept any devices that are compatible with the Stoker.

For convenience, you can plug in and unplug devices at any point during the cook. The Stoker needs to be turned off before inserting or removing any devices. Your settings and configurations will not be lost while the Stoker is off. This allows you to add additional Temperature Sensors or barbecues/smokers throughout your cook.

Caution: Only plug devices from Rock’s Bar-B-Que into the Stoker.

Temperature Sensors

Rock’s Bar-B-Que offers a variety of Temperature Sensors; Fire Pit Temperature Sensors (Pit Sensors) for measuring your fire temperature, and pointed Temperature Sensors for monitoring internal temperatures of food (Food Probes). The Temperature Sensors are Teflon coated K-type thermocouples housed inside a stainless steel closed-end tube. Temperature Sensors can be used for temperatures up to 450°F. The Temperature Sensors have a special high temperature silicone rubber strain relief where the lead wire comes out of the tube. Care should be taken when cleaning not to pull off or damage the strain relief. Do not submerge the plug end of the Temperature Sensors into water! The plug has electronics inside that can be damaged.

*** Please Note: Temperature Sensors should not be used for cooks above 450°F

Fire Pit Temperature Sensors (Pit Sensors)

When measuring the internal temperature of your barbecue/smoker, pay close attention to the placement of the Pit Sensor. The temperature inside your barbecue/smoker can vary greatly from one location to another. The greatest temperature difference will be vertically.

Pit Sensors come with an attachment clip to mount the Temperature Sensor in your barbecue/smoker. The Temperature Sensor has a high temperature silicone rubber sleeve that thermally isolates the tip of the Temperature Sensor from its mounting, so you get fast and accurate measurements.

The Pit Sensor should be placed at the same level of, and a few inches away from the food you are cooking. The optimal place for the attachment clip is on the grill that your food is on. Be careful to place the Pit Sensor so it is not touching anything and juices from food does not drip on it. The Pit Sensor should also be positioned to protect the probe wire from direct flame.

*** Please Note: Temperature sensors should not be used for cooks above 450°F
Food Temperature Sensors (Food Probes)

Food Probes allow you to monitor the internal temperature of food while it cooks. Rock’s Bar-B-Que’s Food Probes are made from food grade 304 stainless steel. They have a moderate point for easy insertion into food.

For proper temperature measurement, the tip of the Food Probe should be inserted into the thickest part of the food. The Food Probe should also be positioned to protect the probe wire from direct flame. A Food Alarm can be set to notify you when the food is done. Food should be cooked in accordance with USDA Recommended Safe Minimum Internal Temperatures: www.IsItDoneYet.gov

*** Please Note: Temperature sensors should not be used for cooks above 450°F

Blowers

The Blower provides the draft to stoke your fire. Selecting the proper blower size can have strong effects on temperature stability. If the blower is too large, you will experience poor fine control and greater temperature swings. If the blower is too small, it will run constantly and increase your fuel consumption. The standard 5 Cubic Feet/Minute (CFM) Blower is a good choice for most backyard barbecue/smokers. We also offer 10CFM and 25CFM blowers.

The Blowers come standard with a door that automatically opens and closes when the blower cycles on and off. Since the blower door automatically closes and seals off the natural draft, the Stoker is able to maintain very low temperatures.

The blowers also have a pause feature which will turn the blower off for 5 minutes. This allows you to open the smoker and tend to your meat, without causing the blower to run and cause overshoots. Each blower can be paused to allow the Stoker to keep running without affecting other barbecues/smokers.

More Device Types to Come

Currently the devices we offer are limited to Temperature Sensors, Blowers, and Device Expanders. In the future we will possibly offer other devices like louder alarms, damper controls, and things we have not thought of yet!
6. Stoker User Interface

Power Input

The first user interface required is plugging in the power. The power input is located in the rear of the Stoker. The power supply is 5 Volts and plugs into standard American wall outlets. The Stoker requires a minimum of 2 Amps to run. A larger power supply may be needed if you are running multiple blowers on one unit. Use only Rock's Bar-B-Que approved power supplies.

The next interaction is turning the power on. The power switch is located on the rear panel of the Stoker. The Stoker has many tasks to do on power up. It takes about 10 seconds for the Stoker to complete a self-test and check for attached devices. About three seconds after the power is turned on the LED back light illuminates. About 7 seconds later the Stoker LCD will show the opening menu and you are ready to go.

User Interface Buttons

The Stoker has 5 buttons to navigate menus and input information in the Stoker. The user interface is similar to what is used on many consumer electronic devices, like fax machines and computer monitors. At first it may seem a bit slow, however once you get used to it, you will find it easy to use. We recommend playing with it on your kitchen table for a few minutes to get familiar with the controls.

Here is a brief description of the buttons:

LED back light. Turns LED back light on and off.

Menu. Takes you back to the previous menu.

Up Arrow. Scroll Up/Increments numbers and characters.

Down Arrow. Scroll Down/Decrements numbers and characters.

Select. Selects the current menu item/saves settings.

The Liquid Crystal Display (LCD) on the front of the Stoker provides visual feedback of the status of the Stoker. With the five buttons and the LCD you can control all of the functions of the Stoker.

Main Menu

Pressing the button cycles you through the four Main Menu options.

<table>
<thead>
<tr>
<th>Main Temp Control</th>
<th>Temperature Sensor setup and control.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Blowers</td>
<td>Blower naming and 5 minute shut off.</td>
</tr>
<tr>
<td>Main System Info</td>
<td>General system information and user preferences.</td>
</tr>
</tbody>
</table>
Network connections and controls.

Pressing the \( \uparrow \) button cycles you back through the four Main Menu options.

**Temp Control Menu**

The Temperature Control Menu is the first Menu displayed on startup. This menu contains the settings for each Temperature Sensor plugged into the Stoker. Each Temperature Sensor has its own individual settings menu. You must have a Temperature Sensor plugged in to your Stoker to access the Sensor Menu. After you select a Temperature Sensor you can select a Blower, set the Target Temperature, and configure the Alarms.

**Temperature Sensor Scan Menu**

This menu will continuously cycle through all temperature sensors plugged into the Stoker.

<table>
<thead>
<tr>
<th>Main</th>
<th>Temp Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp Control Scan</td>
<td></td>
</tr>
<tr>
<td>Sensor 1</td>
<td>Temp: 240</td>
</tr>
<tr>
<td>Sensor 2</td>
<td>Temp: 160</td>
</tr>
<tr>
<td>Sensor etc...</td>
<td>Temp etc...</td>
</tr>
</tbody>
</table>

To Scan all of the Temperature Sensors plugged into the Stoker:
From the Main Menu Press the Sel button to choose the Temp Control option.
Press the Sel button again to Automatically scan through all of the Temperature Sensors connected.
Press the \( \uparrow \downarrow \) buttons to scroll through the Sensors manually.
Press the \( \Box \) button to return to the previous menu.

*Note: Temperature Sensors were identified at the factory as “Sensor 1”, “Sensor 2” etc… This manual refers to your Temperature Sensors as “Sensor 1”, “Sensor 2” etc… If you have renamed your Temperature Sensors the “New Name” would be displayed.

**Temperature Sensor Settings Menu**

Each Temperature Sensor has its own individual setting menu.

<table>
<thead>
<tr>
<th>Sensor 1</th>
<th>Temp: 240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor 1 Blower</td>
<td></td>
</tr>
<tr>
<td>Sensor 1 etc...</td>
<td></td>
</tr>
</tbody>
</table>

To change the settings for a particular sensor:
Press the \( \uparrow \downarrow \) buttons to scroll to the Sensor you wish to modify.
Press the Sel button to select the Temperature Sensor Settings Menu. The Temperature Sensor Settings menu is displayed when the LCD reads “Sensor 1, Blower”.
Press the \( \uparrow \downarrow \) buttons to cycle the Temperature Sensor options.
Press the Sel button to select the option displayed.
Press the \( \Box \) button to return to the previous menu.
**Blower**

This menu allows you to associate a blower to a temperature sensor. The blower must be associated to a sensor in order for the Stoker to maintain the target temperature.

To assign a blower:
- Press the Sel button to display the available Blowers.
- Press the ▲▼ buttons until the desired Blower is displayed.
- Press the Sel button to select the Blower. The * indicates the Blower is assigned to the Sensor. Press the Sel button again to deselect the blower.
- Press the ▼ button to return to the previous menu.

*Note: A blower can only be assigned to one Sensor at a time. Be careful not to assign the blower to any sensor not controlling the cooker temperature.

**Alarm Type**

This menu allows you to configure Fire and Food Alarms. A Fire alarm has a high and low alarm for monitoring the fire. A Food alarm is a target only alarm for monitoring food.

To select an alarm type:
- Press the Sel button to display the available alarm types.
- Press the ▲▼ buttons until the desired alarm is displayed.
- Press the Sel button to select the displayed alarm type. The * indicates which alarm option is selected. Only one alarm type at a time per sensor is allowed.
- Press the ▼ button to return to the previous menu.

*Note: press any button to silence alarms.

**BBQ Hi Temp**

This alarm helps indicate when your fire is too hot.

Press the Sel button to select the BBQ High Temp option.
- Press the ▲▼ buttons to set to the desired alarm temperature.
- Press Sel to save the desired alarm temperature.
- Press the ▼ button to return to the previous menu.

*Note: This menu requires the Fire Alarm option.

**BBQ Lo Temp**

This alarm helps indicate your fire is going out.

Press the Sel button to select the BBQ Lo Temp option.
- Press the ▲▼ buttons to set to the desired alarm temperature.
- Press Sel to save the desired alarm temperature.
- Press the ▼ button to return to the previous menu.

*Note: This Menu requires the Fire Alarm option.
Target Temp
This menu is where you set the temperature that you want the Stoker to maintain.

To set a target temperature:
Press the Sel button to select the Target Temp option.
Press the ↑ ↓ buttons to set to the desired target temperature.
Press Sel to save the desired target temperature.
Press the • button to return to the previous menu.

Rename
All of the Sensors can be named to personal preferences.

To rename a Sensor:
Press the Sel button to select the Rename option.
Press ↑ ↓ the buttons to select a character.
Move to the next characters by pressing the Sel button.
Move to the previous character by pressing the • button. When you have completed setting all 12 characters, press the Sel button to save changes.
Press the • button to return to the previous menu.

Calibration
All Temperature Sensors can be calibrated. For more information about the calibration procedure, please see the FAQ at the end of this manual.

To change the calibration number of a sensor:
Press the Sel button to select the Cal option.
Press the ↑ ↓ buttons to set to the desired Calibration number.
Press Sel button to save the Calibration number.
Press the • button to return to the previous menu.

*Note: The Stoker Temperature Sensors are calibrated at the factory. If you purchase another Sensor it will come calibrated from the factory. It is a good idea to record the new Sensor and calibration number in the back of this manual. You can contact the factory to get calibration numbers for all sensors manufactured.
Blowers Menu
The Blowers Menu is where you can pause each blower for 5 minutes when you need to open the barbecue/smoker. You can also rename your blowers in this menu.

Blower Select Menu
Each Blower has its own individual setting menu.

<table>
<thead>
<tr>
<th>Blowers Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blowers</td>
</tr>
<tr>
<td>Blower 1</td>
</tr>
<tr>
<td>Blower 2</td>
</tr>
<tr>
<td>Blowers etc..</td>
</tr>
</tbody>
</table>

From the Main Menu Press the Sel button to select the Blowers option.
Press the ↑ ↓ buttons to cycle through the Blowers that are connected.
Press the Sel button to select the Blower.
Press the □ • button to return to the previous menu

*Note: Your Blowers were identified at the factory as “Blower 1”, ”Blower 2” etc… This manual refers to your Blowers as :”Blower 1”, ”Blower 2”etc…If you have renamed your Blowers the “New Name” would be displayed instead of “Blower 1”etc…

Blower Pause
The 5 minute pause is used to temporarily halt the Blower when you want to open your cooker. The Blower will start in its normal control cycle after the 5-minute pause.

To pause a blower:
Press the ↑ ↓ buttons to cycle to the correct blower.
Press Sel to select the Blower Pause option.
Press the ↑ ↓ buttons to cycle through the Blower Pause Options.
Press the Sel button to select the option desired.
Press the □ • button to return to the previous menu.

Blower Rename
All of the Blowers can be named to personal preferences.

To rename a Blower:
Press the Sel button to select the Rename option.
Press ↑ ↓ the buttons to select a character.
Move to the next characters by pressing the Sel button.
Move to the previous character by pressing the □ • button. When you have completed setting all 12 characters press the Sel button to save.
Press the □ • button to return to the previous menu.
**System Info Menu**
The System Info menu is where you set user preferences. Once you have set your preferences and stored them to memory, you will seldom need to visit the System Info menu.

**System Info Select Menu**
There are several items under the System Info Menu. Each menu item can be configured to suit personal preferences.

<table>
<thead>
<tr>
<th>Main System Info</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Info</strong></td>
</tr>
<tr>
<td><strong>Units</strong></td>
</tr>
<tr>
<td><strong>System Info etc...</strong></td>
</tr>
</tbody>
</table>

To access the System Info menu:
From the Main menu press the Sel button to choose the System Info option.
Press the ↑ ↓ buttons to cycle through the System Info options.
Press the Sel button to choose the option desired.
Press the □ button to return to the previous menu.

**Units**
This menu allows you to change the unit of temperature.

<table>
<thead>
<tr>
<th>System Info Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Units</strong></td>
</tr>
<tr>
<td>Fahrenheit</td>
</tr>
<tr>
<td>Celsius</td>
</tr>
</tbody>
</table>

To change the unit of temperature:
Press the Sel button to choose the Units menu.
Press the ↑ ↓ buttons to choose either Fahrenheit or Celsius. Press the Sel button to select which temperature unit you prefer.
The * is displayed in the window of the selected unit.
Press the □ button to return to the previous menu.

**Audible**
This menu allows you to enable/disable the audible alarms.

<table>
<thead>
<tr>
<th>System Info Audible</th>
</tr>
</thead>
<tbody>
<tr>
<td>**Audible **</td>
</tr>
<tr>
<td>Enable</td>
</tr>
<tr>
<td>Disable</td>
</tr>
</tbody>
</table>

To enable or disable the audible alarms:
Press the Sel button to enter the Audible settings menu.
Press the ↑ ↓ buttons to cycle through the Audible options.
Press the Sel button to select the option desired.
Press the □ button to return to the previous menu.
Time Zone

Press the Sel button to select the Time Zone menu.
Press the ⬆️ ⬇️ until the desired zone appears.
Press the Sel button to select it.
An * will appear on the time zone selected.
Press the ▪• button to return to the previous menu.

*Note: The Stoker must be connected to a network with a time server for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

Date

Press the Sel button to select the Date menu.
Use the ⬆️ ⬇️ buttons to change the month, day and year.
Move to day/year by pressing the Sel button.
Press Sel to save date.
Press the ▪• button to return to the previous menu.

*Note: The Stoker must be connected to a network with a time server for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

Time

Press the Sel button to select the Time menu.
Press ⬆️ ⬇️ the buttons to change the hour/minutes.
Move to minutes by pressing the Sel button.
Press Sel to save time setting.
Press the ▪• button to return to the previous menu.

*Note: The Stoker must be connected to a network with a time server for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

Auto Time

Auto Update only works for setting date and time when connected to a network with a timeserver.

Press the Sel button to select the Auto Update menu.
Press the Sel button to have the Stoker get the time off of a network timeserver.
If you get the Success screen you are connected to a timeserver and your time has been set automatically.
If the Stoker could not locate a timeserver you will get the Failed screen and you will have to set the time through the Time input screen.

*Note: The Stoker must be connected to a network with a time server for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.
Version

Press the Sel button to display the Software version that is currently installed and running on the Stoker.

Press the \* button to return to the previous menu.

Clear DB

This menu will clear the memory and restore the Stoker to the factory settings.

To clear the Database:
Press the Sel button to clear the database.
Press the \ to select “Yes” then press the Sel button to clear the database.
Press the \* button to return to the previous menu.

Be careful when using this function. Before clearing the Database make sure all off the Temperature Sensor calibration numbers have been recorded.
**Network Menu**

**IP Addr**
This menu displays the IP address to access the built-in web server when connected to a network using an Ethernet cord.

Press the Sel button to choose the IP address menu. If the Stoker is in DHCP mode (Default), the IP address will be displayed when connected to a network.

To set a Static IP, press the ↑ ↓ to change the first 3 numbers. Press the Sel button to move to the next set and repeat. When finished with the 4th set press Sel to save.

Press the □• button to return to the previous menu.

*Note: The Stoker must be connected to a network for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

**Subnet Mask**

Press the Sel button to display the Subnet Mask.

Press the ↑ ↓ to change the first 3 numbers. Press the Sel button to move to the next set and repeat. When finished with the 4th set press the Sel button to save.

Press the □• button to return to the previous menu.

*Note: The Stoker must be connected to a network for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

**Gateway**

Press the Sel button to display the Gateway settings.

Press the ↑ ↓ to change the first 3 numbers. Press the Sel button to move to the next set and repeat. When finished with the 4th set press the Sel button to save.

Press the □• button to return to the previous menu.

*Note: The Stoker must be connected to a network for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

**DNS**

Press the Sel button to display the DNS settings.

Press the ↑ ↓ to change the first 3 numbers. Press the Sel button to move to the next set and repeat. When finished with the 4th set press the Sel button to save.

Press the □• button to return to the previous menu.

*Note: The Stoker must be connected to a network for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.
HTTP Port
To access the Stoker from outside your home network (over the internet) the Stoker needs to be set to receive HTTP requests through a designated port number. This port number is commonly port 80. The router needs to be set to forward HTTP requests to port 80.

<table>
<thead>
<tr>
<th>Network</th>
<th>HTTP Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTP Port</td>
<td>80</td>
</tr>
</tbody>
</table>

Press the Sel button display the HTTP Port currently selected.

To change the port number, press the ↑ ↓ . Press the Sel button to save the forwarding port.

Press the □ • button to return to the previous menu.

*Note: The Stoker must be connected to a network for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.

WiFi Enable
This menu allows you to enable/disable the wifi settings.

<table>
<thead>
<tr>
<th>Network</th>
<th>Wifi Enable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wifi *</td>
<td>Enable</td>
</tr>
<tr>
<td>Wifi</td>
<td>Disable</td>
</tr>
</tbody>
</table>

To enable or disable the built-in WiFi:
Press the Sel button to enter the Wifi settings menu.
Press the ↑ ↓ buttons to cycle through the Wifi options.
Press the Sel button to select the option desired.
Press the □ • button to return to the previous menu.

*Note: Make sure to enter your Router Security settings in the WiFi setup page before enabling the WiFi capabilities. Refer to Section 7 more information about networking.

WiFi IP
This menu displays the IP address to access the built-in web server when the Stoker connects wireless to your network.

<table>
<thead>
<tr>
<th>Network</th>
<th>Wifi IP (RO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP: 192.168.001.003</td>
<td></td>
</tr>
</tbody>
</table>

Press the Sel button to choose the Wifi IP address menu. If the Stoker is in DHCP mode (Default), the IP address will be displayed when connected to a network.

To set a Static IP, press the ↑ ↓ to change the first 3 numbers.
Press the Sel button to move to the next set and repeat. When finished with the 4th set press Sel to save.

Press the □ • button to return to the previous menu.

*Note: The Stoker must be connected to a network for this function to work. Refer to Section 7 for more information about connecting the Stoker to a network.
7. Network Connection

The Stoker has a built-in web server that allows you to monitor and control the Stoker on any device with network capabilities and a web browser. There are two methods to connect the Stoker to your network. You can use the built in wireless capabilities to communicate to your wireless router, or you can connect the Stoker to your network by using an Ethernet cable. Older versions of the Stoker can also be turned into a wireless 802.11x system by adding a Wireless Bridge or gaming adapter. They are available from many companies from $60 -$80 or so. Follow the directions of the Wireless Bridge Manufacturer for installation.

DHCP Ethernet Connection Setup

You can connect your Stoker to a “DHCP Server” to monitor and control the Stoker with your network capable device and Web Browser. The DHCP server/client is the most common configuration for home networks. If you have a Broadband connection (Cable Modem or DSL) you probably have a DHCP server/client network. The cable modem or DSL adapter acts as the DHCP Server. When your network capable connects to your network it requests an IP Address from the DHCP server. This identifies your computer on the network.

Ethernet connection is one of the easiest ways to connect your Stoker to your network. To connect the Stoker to your network using an Ethernet cord, plug one end of the cable into the Ethernet port on the Stoker. Connect the other end into an open port on your router (usually labeled 1-4). When the Stoker powers up, it requests an IP Address from the DHCP server. The IP Address that was assigned to the Stoker can be found in the System Info Menu on the Stoker.

To obtain the IP Address of your Stoker:

<table>
<thead>
<tr>
<th>Network IP Addr</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP: 192.168.001.002</td>
</tr>
</tbody>
</table>

Press Sel to enter the System Info Menu.
Press the ↑ ↓ buttons to cycle to the IP Address Menu.
Press the Sel button to display the IP address that was assigned on power up.
Press the □• button to return to the previous menu.

To access your Stoker using this IP address, launch your web browser and type the IP Address http://192.168.0.2 into the URL Address field. The Stoker will serve a Web Page which allows you to control and monitor your Stoker. When entering the IP into the URL, you do not need to enter any leading zeros. If the IP reads 192.168.001.002 you should enter 192.168.1.2; If it reads 192.168.000.003, enter 192.168.0.3.
Static IP Configuration (Ethernet)

By default, DHCP is used. However, a custom IP address can be chosen for personal preference. Make sure the Gateway, DNS, and Subnet Mask match those of your router. This information can be found on a Windows machine by opening command prompt, then type ipconfig/all and pressing enter. Make sure the network device you are using is connected to the same network as the Stoker.

To use a custom IP address:

1. Press Sel to enter the System Info Menu.
2. Press the ↑ ↓ buttons to cycle to the WiFi IP or IP Address Menu.
3. Press the Sel button to display the WiFi IP or IP Address that was assigned on power up.
4. Use the ↑ ↓ buttons to change the first three numbers. Press the Sel button to move to the next set and repeat. When finished with the 4th set press Sel to save.
5. Press the □• button to return to the previous menu.

When setting a Static IP, make sure the first 3 sets of numbers match those of your network. For the 4th set of numbers, make sure to select IP address that is not already reserved. Choosing a number above 100 will help minimize IP issues. Ex. 192.168.001.101. After saving the Static IP address, wait a few seconds for the network parameters to propagate through the system and to the network. From then on, every time the stoker is rebooted, this custom IP address will be used.

Re-Enabling DHCP (Ethernet)

The Stoker can be reset to DHCP mode with the following steps:

1. Press Sel to enter the System Info Menu.
2. Press the ↑ ↓ buttons to cycle to the WiFi IP or IP Address Menu.
3. Press the Sel button to enter the WiFi IP or IP Address Menu.
4. Use the ↑ ↓ buttons to scroll to 255 for the first set of digits in the address. Press the Sel button 4 times to move the cursor and save.
5. Press the □• button to return to the previous menu.

Wait a few seconds for the DHCP client to acquire a new IP address. From this point on, DHCP will be used.

For more information about Networking setup, please refer to our Documents and Videos pages on our website. www.rocksbarbque.com
Wireless Connection Setup

The Stoker has the ability to connect to your wireless network much like your laptop or PC. In order to enable the WiFi capabilities of the Stoker, it must first be connected to the network using an Ethernet cord. Ethernet connection is required to enter the Network information and security settings to allow the Stoker to connect to your network.

Once connected to your network via Ethernet cord, obtain the Stoker’s network IP address as described above and in the IP Addr menu section. Enter the IP Address of the Stoker into the URL of your web browser with “/wifi.html” at the end.
Ex. 192.168.0.2/wifi.html

The following page will be generated:

To Enable the WiFi capabilities, you will need to know the SSID, security type, and passphrase for your network. The SSID is the name of your network. Ex. NETGEAR, 2WIRE235, or Rock’s Bar-B-Que. The Security type depends on your network settings. The passphrase is the code needed to allow additional devices access to your network. This information can be found in your network’s settings page of your router. Refer to your network equipment user manuals for more information about accessing the network settings page.

To Enable Wireless on the Stoker:
1) Click the box “Wireless enabled”.
2) Enter the SSID of your network.
3) Click the DHCP box if you want the network to assign an IP address to the Stoker. Otherwise, you will need the Subnet Mask, Gateway, and DNS server information for a Static IP.
4) Select the appropriate Security type for your router. For WPA/WPA2 use PSK.
5) Enter the passphrase for your network.
6) Click Save changes and wait 10 seconds before rebooting your Stoker.

Once the settings are saved, you will not need to access this page again unless your network settings change. When the Stoker boots up, you will need the WiFi IP address to access the built-in web server. The WiFi IP Address may be different than the Ethernet IP Address you used to enter the network information.
To obtain the WiFi IP Address:

Press Sel to enter the System Info Menu.
Press the ↑ ↓ buttons to cycle to the WiFi IP Address Menu.
Press the Sel button to display the WiFi IP address that was assigned on power up.
Press the □ • button to return to the previous menu.

To access your Stoker using the IP address, launch your web browser and type the WiFi IP Address http://192.168.0.3 into URL Address field. The Stoker will serve a Web Page which allows you to control and monitor your Stoker. When entering the IP, you do not need to enter any leading zeros. If the IP reads 192.168.001.002, you should enter 192.168.1.2. If it reads 192.168.000.003, enter 192.168.0.3.
**Ad hoc connection (direct device connection)**

Ad hoc connection allows communication directly between the Stoker and a wireless web enabled device. There is limited device support. Successful testing has been done on laptop and tablets however smartphones do not support Ad hoc connection. (If your phone is “Rooted” it may work)

Once connected to your network via Ethernet cord, obtain the Stoker’s network IP address as described above and in the IP Addr menu section. Enter the IP Address of the Stoker into the URL of your web browser with “/wifi.html” at the end. Ex. 192.168.0.2/wifi.html

The following page will be generated:

1) Click the box “wireless enabled”
2) Enter your desired SSID (this it the network name the Stoker will broadcast)
3) DHCP box should not be checked
4) Click the box “Ad hoc”
5) Set security type to “None”
6) Leave Passphrase blank
7) IP address, Subnet mask, Gateway and DNS server should all be set to 255.255.255.255
8) Click save changes and wait 10 seconds before rebooting the Stoker

When you reboot your WiFi ip should appear as 192.168.001.099. With your wireless device scan for the wireless network with the SSID that you set and connect. After connecting you will need to set a static IP address for the connected device. This procedure will be dependent on the operating system being run on the device. After setting a static IP you will be able to open your web browser and enter the Stokers IP address. The IP shows as 192.168.001.099 but should be entered in the address bar as 192.168.1.99.
8. Built-in Web Server

When you enter the IP address of the Stoker into the web browser of a network capable device, the Stoker will serve a web page that allows you to monitor and control the Stoker remotely. This page displays all of the settings for each Temperature Sensor currently plugged into the Stoker. Each setting (target temperature, alarms, blowers, sensor names) can be changed for each Temperature Sensor from this page.

Below is an example of the built-in Web Server page:

![Stoker Status](image)

The web page displays several important features for the Stoker. First, it displays the software version that is currently running on the Stoker. Make sure to use the most current version of the Software. Software updates are released for free on our website. Second, it displays the available Blowers that are connected to the Stoker. Third, it displays all of the Temperature Sensors that are connected to the Stoker. Each sensor’s settings can be changed from this page.

Temperature Sensors are categorized into three separate categories on this page.

- **Control Sensors**: Temperature Sensors that have blowers assigned to them.
- **Alarm Sensors**: Temperature Sensors that have a Fire or Food Alarm configured.
- **Monitoring Sensors**: Temperature Sensors that are just measuring temperatures.

For more information about the Built-in Web Server, check out our videos on our website at www.rocksbarbque.com
Securing Built-in Web Server

The built in web server has a security feature which allows you to make it a “read-only” page, allowing only those with the password to alter the settings of the Stoker. This feature will come in handy if you are at a BBQ contest or want to share your cooking experience with friends around the world.

To Secure the Built-in Web Server, type the IP address of the Stoker into the URL of a web browser with “/ro.html” at the end of the IP address to access the setup page.

Ex. 192.168.1.105/ro.html.

The following page will be generated:

Enter the password information and click the “Read-Only” box to turn this feature on. Once you access the web server, the temperature settings will be locked and cannot be changed without the password. If you forget your password, reset the database and the default settings will be restored.

In order to access this feature, the Stoker must be connected to a network. Refer to Section 7 for more information about networking.

Twitter

Every Stoker is equipped with a built-in Twitter function that will send “tweets” from your Stoker to your Twitter account. This allows you to receive updates from your stoker on the condition of the Temperature Sensors without being next to your cooker. You will need to create a Twitter account. Accounts are free and can be created at www.twitter.com. You will also need to use a third party website www.supertweet.net.

In order to use the Twitter feature, your Twitter account needs to be configured to accept information from the Stoker. First, log into your Twitter account and keep the browser open. In a new tab, go to www.supertweet.net and click “Sign in with Twitter”. This will take you to Twitter and then click on “Allow”. Once you have clicked allow, it will take you back to supertweet.net and then click “Activate”. Choose a new password (DO NOT USE YOUR TWITTER PASSWORD). Your Twitter account is now active to receive tweets from the Stoker!

For more information about using Twitter, please see the Documents and Video pages on our website at www.rocksbarbque.com
To enable the Twitter function type the IP address of the Stoker into the URL of the web browser with “/twitter.html” at the end of the IP address to access the setup page. Ex. 192.168.1.105/twitter.html.

The following page will be generated:

To Enable Twitter:
1) Click the Enable dot to turn on Twitter.
2) Enter your Twitter username and Supertweet.net password (Do not enter your real Twitter Password).
3) Set interval at which you wish to receive tweets. We recommend 20-30 minute intervals.
4) You can change the message header to fit personal preferences.
5) Do not change the OAuth Proxy.
6) Save the changes and your Stoker will begin Tweeting you!

You can also send custom updates to record notes about your cook.
9. Maintenance and Care

Stoker Electronics

The Stoker is an electronic device and it should be treated as such. The nature of BBQ requires use outdoors; however the Stoker control box is not waterproof and should be kept as dry as possible. If using the Stoker in poor weather, make sure the Stoker unit, plug ends, and blower are covered to keep as much moisture away as possible. To clean the Stoker, a damp cloth may be used. Avoid getting water into the connector holes.

Temperature Sensors

The plug ends of the Temperature Sensors have electronics inside and should not get wet. If it gets wet or soiled wipe it off with a cloth and dry it thoroughly. The probe end can be cleaned with dish soap and warm water.

Temperature Sensors should not be used for cooks above 450F. Subjecting the sensors to temperatures above this will cause the Teflon coating to melt and lead to inaccurate temperature readings. Care should be taken to ensure that the Teflon wire is not exposed to direct flame.

Blowers

The blowers are not waterproof and should be kept as dry as possible. Clean the blower with a damp cloth and dry thoroughly. The connector end of the Blower has electronics inside and should be kept dry.
10. Frequently Asked Questions

Q: How come there are no High and Lo alarm Menus?
A: You must select the “Fire” alarm in the Alarm Type menu first.

Q: My sensor is reading 32 degrees, is there something wrong?
A: The Stoker is still booting up. Return to the main menu and enter the Temp Sensor menu again.

Q: My sensors are only monitoring sensors, how do I make them control sensors?
A: Control sensors are those sensors that have had blowers assigned to them. Assign a blower to the sensor and it will become a control sensor.

Q: My temperature sensor is not at the target temperature and the blower is not on, what do I do?
A: Make sure the blower is assigned to that sensor.

Q: How do I calibrate the sensor?
A: Boil a pot of water and make sure it is boiling for 10 minutes. Place the Temperature Sensor probe end into the middle of the pot, making sure the probe end does not touch the sides or bottom of the pot. The sensor should read the correct boiling point for your altitude. If it is more than a few degrees off, adjust the calibration number until it reads the correct temperature.

Q: How do I reset my Stoker into DHCP mode?
A: Set the first 3 digits of the IP Address to 255. Press the Sel button 4 times until the Stoker reads “Please wait…”. Enter the IP Address menu again to obtain the IP Address.

Q: What should I set my exhaust vents at when using the Stoker?
A: The exhaust vents only need to be cracked to allow a small amount of smoke and heat to escape the smoker. If the vent is fully open, it can cause a strong draft that will feed more air into your smoker, causing fluctuations in temperatures.

Q: How should I set my air inlet vents on my smoker?
A: All air inlet vents should be 100% closed. The Stoker operates on the assumption that it is in a “closed” system. The blower should be the only source of air for the fuel.
## 11. Temperature Sensor Records

<table>
<thead>
<tr>
<th>Sensor Serial Number</th>
<th>Sensor Name</th>
<th>Cal #</th>
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<tbody>
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