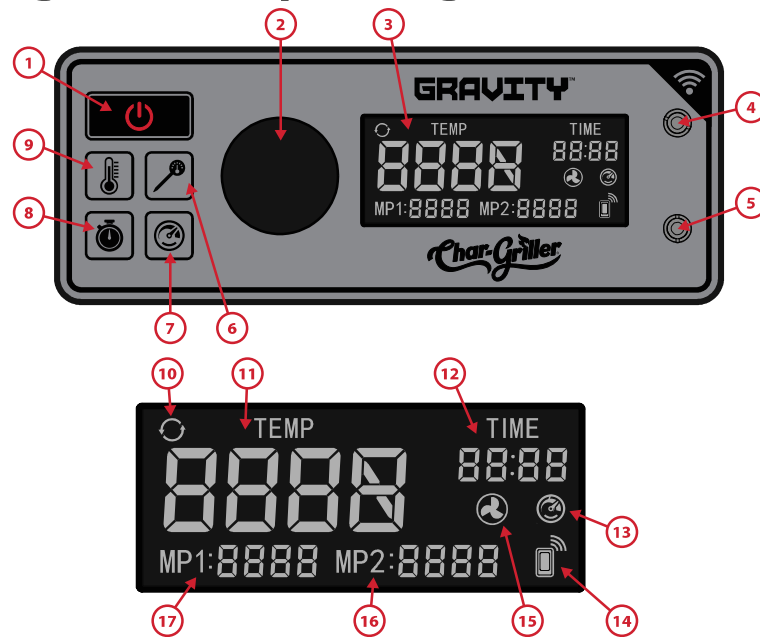


## Using the Gravity 980 Digital Controller



- |   |  |
|---|--|
| <p><b>1 Power On / Off:</b> Press 1 second to turn on. Press and hold for 2 seconds to turn off</p> <p><b>2 Control Dial:</b> Rotate to make a selection up or down. Press the center of the dial to confirm</p> <p><b>3 Status Screen</b></p> <p><b>4 Meat Probe 1 Jack</b></p> <p><b>5 Meat Probe 2 Jack</b></p> <p><b>6 Set Meat Probe Temperature Goal</b></p> <p><b>7 Turbo Fan Setting</b></p> <p><b>8 Set Countdown Timer</b></p> <p><b>9 Set Grill Temperature Goal</b></p> | <p><b>10 Door Open Indicator</b></p> <p><b>11 Grill Temperature Display</b></p> <p><b>12 Countdown Timer</b></p> <p><b>13 Turbo Mode Enabled</b></p> <p><b>14 Paired with Phone:</b> Will light up when a smartphone is paired with the controller</p> <p><b>15 Fan Speed Display:</b> Shows if the fan is running and at what speed</p> <p><b>16 Meat Probe 2 Temperature</b></p> <p><b>17 Meat Probe 1 Temperature</b></p> |
|---|--|



## Using the Gravity 980 Controller

### POWER

1. Ensure Controller Adapter is securely plugged in to GFCI outlet
2. Press Power Button to turn controller ON
3. Press and hold Power Button to turn Controller OFF

### SET GRILL TEMPERATURE

1. Press Grill Temp Button
2. Adjust desired temperature target by rotating Control Knob (max 700°F)
3. Press Grill Temp Button again to set desired grill temperature target

### SET MEAT PROBE TEMPERATURE

1. Insert Meat Probe Connector into Probe Jack (Controller can accommodate up to 2 meat probes)
2. Press Meat Probe Temp Button
3. Adjust desired internal meat temperature by rotating Control Knob (max 225°F)
4. Press Meat Probe Temp Button again to switch between meat temperature 1 and meat temperature 2
5. Alarm will sound when internal temperature is reached (press any button to stop alarm)

### SET TIMER

1. Press Timer Button
2. Adjust desired timer duration by rotating Control Knob (timer will change in 5-minute increments)
3. Press Timer Button to begin countdown
4. Alarm will sound when timer completes (press any button to stop alarm)

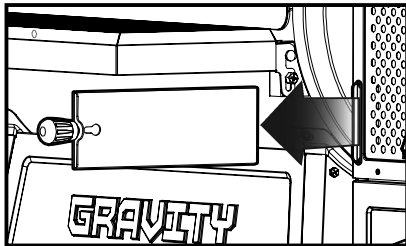
### TURBO FAN

1. Press Turbo Fan Button for increased fan performance

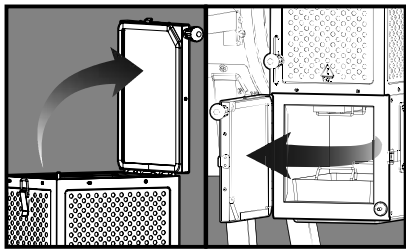
### NOTES

- Controller will automatically maintain your set temperature target for duration of cook
- Set temperature is a target and some fluctuation is normal. (+/-5%) Any significant fluctuation may be the result of outside temperature, humidity, direct sunlight, fuel type used, rear damper not fully open, lid being open, other doors not securely closed
- Hopper Lid and Ash Pan Door must be closed for controller to begin operation
- If desired, all settings can be updated after your cook has started

## Lighting Instructions



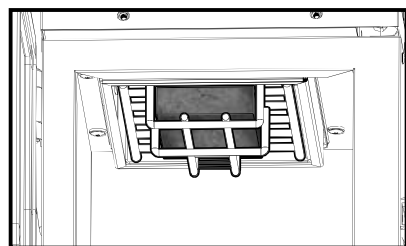
1. Open/remove fire shutter. Open rear damper to fully open. Grill will reach set temperature fastest, with damper set fully open.
- See notes at end of instruction for more detail.



2. Open hopper lid and ash door
3. Shake hopper charcoal grate to ensure any loose charcoal falls into hopper ash pan
4. Remove and empty hopper ash pan and replace



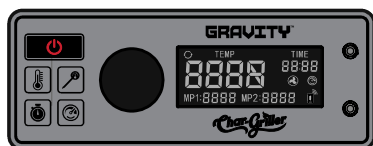
5. Open the fan cover
6. Fill hopper with charcoal
- Hopper charcoal capacity:  
Briquettes = 16 pounds, Lump = 7 pounds



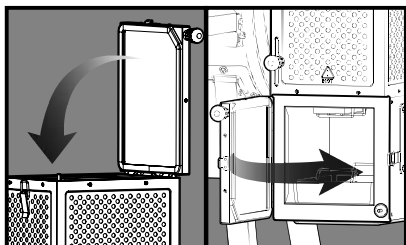
7. Insert food safe fire starter into slot in bottom of hopper charcoal grate (*Fire starter NOT included*)
- If a food safe fire starter is not available, one standard sized paper towel twisted into a rod shape may be used
8. Light fire starter and allow it to ignite charcoal for 3-5 minutes
- Note: Turning controller on before 3-5 minutes can cause delay in charcoal activation or starter can extinguish before activation occurs.



## Lighting Instructions Cont.



9. Turn on grill controller and set all desired temperatures and timers (see pages C3-C4)



10. Close and latch hopper lid and ash door. Ensure grill lid is closed and grill will automatically maintain temperature target
11. Wait for grill to reach desired temperature
12. Insert meat probe into cut of meat and place on grill grate (be sure to immediately close grill lid)

### NOTES

- Do not use gasoline, kerosene, lighter fluid or alcohol for lighting charcoal. Use of any of these or similar products could cause an explosion possibly leading to severe bodily injury.
- Rear Damper may be adjusted for enhanced smoking and heating performance. When damper opening is reduced, smoke and heat will be retained in the cooking chamber for longer periods of time. This can extend fuel performance.  
*Note: This may alter grill's ability to maintain the controller set temperature. Adjust set temperature as needed to maintain desired grill temperature.*
- When in use, grill will be hot. Do not touch areas of grill, except handles, without heat resistant gloves.

## **Pairing the Grill with a Smart Device**

1. Download the Char-Griller® app from the App Store (Apple or Google Play). For more information about the App, supported devices, and more - go to [CharGriller.com/gravity/app-support](http://CharGriller.com/gravity/app-support).
2. After installation is completed, open the App.
3. Bluetooth:
  - a. Go to Settings page
  - b. Click on Bluetooth
  - c. Select "Gravity980-XXXX" from List
  - d. Pairing is complete
4. Bluetooth+Wifi:
  - a. Follow step 3
  - b. Click on Wifi
  - c. Select preferred wifi network from list

**NOTE:** Device only works on 2.4Ghz networks. (Device will not work on 5Ghz networks or networks that use 2.4Ghz and 5Hz frequencies simultaneously. If your wifi network does not segregate the 2.4Ghz wireless frequency, Bluetooth will be the only connection option)



## Grilling Styles

Your Char-Griller® Gravity 980 can be used to smoke, grill or sear your food. By using the digital controller, charcoal and wood flavor, you can customize your culinary experience as desired. The following descriptions provide two of the most common ways you can cook with your Char-Griller® Gravity 980 charcoal grill and smoker.

### Sear

Quickly cook with heat at high temperatures (450°-700°F).

1. Refer to Using the Gravity Controller and Lighting instructions on C-3 through C-6.
2. Once the grill is at the desired temperature, you may begin to cook by placing food directly onto the cooking grates.
3. Food will cook quickly. Cook each side 3-4 minutes and then bring to desired internal temperature.

NOTE: Always sear with the grill lid open to prevent damage to exterior finish.

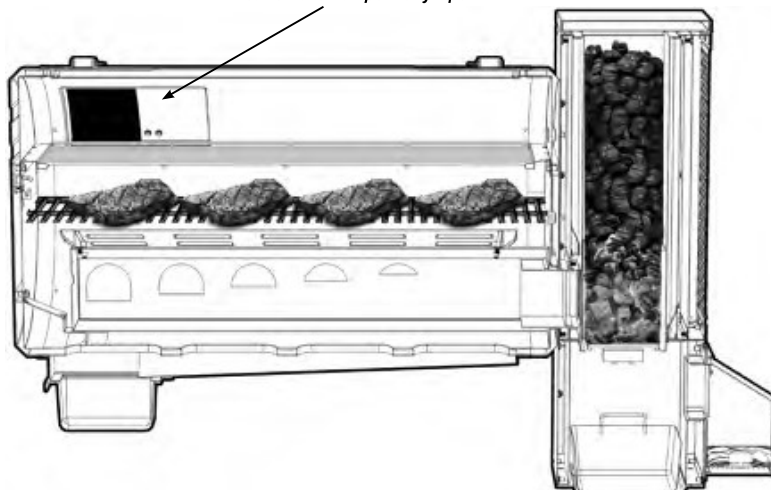
NOTE: Wood chips or chunks may be used in addition to charcoal to add smoke flavor as desired. Refer to C-9 Adding Wood Smoke.

NOTE: Searing foods can occur at temperatures as low as 550°F. To reach conserve fuel, consider searing meats at 600°F.

#### SEAR (HI-TEMP DIRECT HEAT) - 450°-700°F

Up to 16 lbs. of Briquettes or 7 lbs of Lump Charcoal should be placed in the hopper.

*Rear Smoke Damper Fully Open*



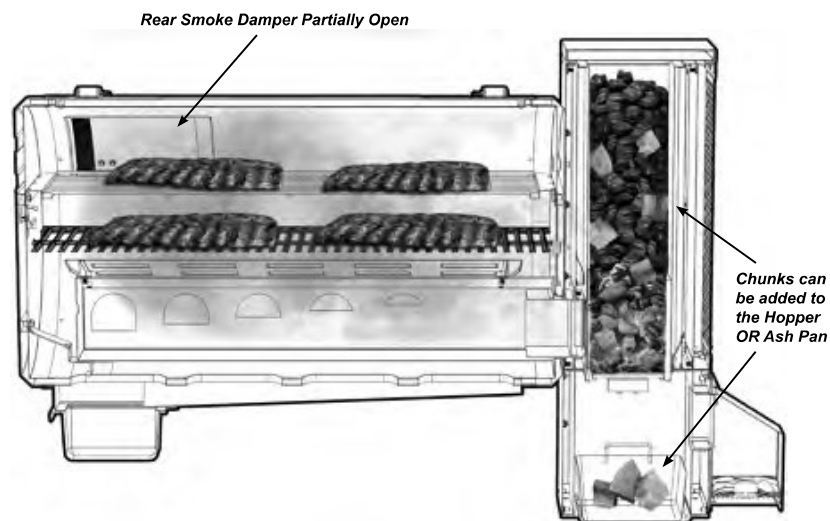
## Smoking

Cook at low temperatures (200°-250° F). Use natural wood chunks to add smoke flavor. See C-9 for Adding Wood Smoke.

1. Prepare up to 16 lbs of briquettes or 10 lbs of lump charcoal in the gravity fed hopper.
2. Add wood chips, chunks, or pellets as desired to add smoke flavor. (See C-9)
3. Once the grill is at the desired temperature, begin to cook.
4. Place food on the main cooking grates or the warming rack above. Food on the cooking grates will cook faster.
5. NOTE: Opening the smoking chamber will extend cooking time.

### SMOKING - 200-250°F

Up to 16 lbs. of Briquettes or 7 lbs of Lump Charcoal should be placed in the hopper. See C-9 for Adding Wood Smoke.





## **Adding Wood Smoke**

OPTION 1: Place wood chunks or charcoal in the ash tray to add flavor before setting temperature. As the charcoal in the hopper burns, the hot embers will fall onto the wood/charcoal in the tray, causing it to burn at a slower rate and release more flavor into the grill.

NOTE: Never add more than ½ lbs at a time. Additional chunks or charcoal should not be added until any previously added have ceased generating smoke.

OPTION 2: Mix wood chunks in the hopper with charcoal.

NOTE: Never use more than 1.5 lbs of wood chunks throughout the hopper. A small amount of wood can go a long way in flavor. Too much wood can result in excessive smoke and unwanted flavors.

## **Adding Charcoal to the Hopper**

IMPORTANT: This grill maintains temperature by controlling the airflow into a completely sealed chamber. Opening the hopper lid will result in additional oxygen to fuel reaching the fire, causing flames to rise from the hopper. Use great care when following these instructions.

DO NOT add charcoal when the Grill Temp is set greater than 250°F.

ALWAYS wear heat resistant gloves

1. Open hopper lid – CAUTION: HOPPER LID WILL BE HOT
2. Stand back from hopper as flame rises – CAUTION: DO NOT PUT FACE OR UNPROTECTED HANDS OVER HOPPER
3. Wait approximately 30 seconds for flames to equalize
4. Pour additional charcoal into hopper
5. Close hopper lid immediately

## **Turning Grill OFF**

1. ALWAYS wear heat resistant gloves
2. Turn controller OFF by pressing and holding Power Button for 2 seconds
3. Unplug grill from power source
4. Ensure main grill lid, hopper lid and ash pan door are securely closed
5. Close the Rear Smoke Damper and Fan Door
6. Insert Fire Shutter
7. Allow grill to cool completely before covering

NOTE:

- Do not use gasoline, kerosene, lighter fluid or alcohol for lighting charcoal. Use of any of these or similar products could cause an explosion possibly leading to severe bodily injury.

**C-10** Once grill is cool, empty ash pan after every use.



## Care & Maintenance

In order to keep your grill in the best shape, it's important to keep it clean and maintained. Continued cleaning and care are key to ensuring a long life for your Char-Griller® grill. Have questions? Call, email or chat online with Char-Griller® Customer Service!

### FINISH UP



- When you are finished grilling, clean your grates with the Char-Griller® Grate Scrape and then lightly coat your grates with flaxseed or other vegetable oil
- Next close the lid, hopper, damper and place the fire shutter back in the slot allowing the fire to suffocate (See C-9)
- Wait until coals and ash have completely cooled before attempting to clean up or remove

### CLEAN UP



- Wait until the fire is completely extinguished and the grill is cool to the touch before emptying the ashes
- Open the bottom hopper door and remove the ash pan from the grill
- Give the charcoal grate a firm tap to loosen any ash than may be stuck.
- Dump the ashes in a metal container and cover with water to ensure there are no lit coals, then you can dispose of the ashes

### COVER UP



- Extend the life of your grill by using a Char-Griller® custom fit grill cover to protect it from the elements
- Weather resistant polyester material protects against birds, dust, wind, rain and snow

**\*\* ONLY EMPTY ASHES WHILE GRILL IS NOT IN USE AND COOL TO TOUCH \*\***

**IMPORTANT:** Charcoal is porous and holds moisture. DO NOT leave charcoal in your grill while you are not using it. Charcoal and ashes left inside the ash pan may reduce the life of your grill.



## Troubleshooting


QUESTION	ANSWER
<b>WHY IS MY GRILL NOT TURNING ON?</b>	<ul style="list-style-type: none"> <li>Press the power button on the controller to verify, if controller will not turn on see next answer.</li> <li>Verify controller is plugged into an outlet and that the power cord is securely plugged into the digital controller wiring harness.</li> <li>Verify power at the electrical outlet. If the power cord is connected to a GFCI (ground fault circuit interrupter), check and reset if necessary.</li> <li>If power is working at the outlet, contact Char-Griller® Customer Service for assistance at 912-638-4724.</li> </ul>
<b>WHY IS THE FAN NOT RUNNING?</b>	<ul style="list-style-type: none"> <li>The Grill temperature has reached its temperature goal.</li> <li>The Hopper or Ash Door Lid are open. For safety, the Hopper and Ash Doors are equipped with shut off switches if either of these doors are opened. Closing the doors will return the grill to normal operation.</li> <li>The fan has been disconnected from the controller.</li> <li>The fan has been disconnected from wiring harness.</li> <li>Hopper Lid or Ash door switches have been disconnected.</li> </ul>
<b>WHY IS THE CONTROLLER TEMPERATURE NOT READING CORRECTLY?</b>	<ul style="list-style-type: none"> <li>Check if the Temperature probe inside the grill is Dirty, clean if necessary.</li> <li>Temperature probe not fully plugged into the proper Meat Probe Jack.</li> </ul>
<b>WHY IS THE TEMPERATURE OF MY GRILL FLUCTUATING?</b>	<ul style="list-style-type: none"> <li>Temperature fluctuations are normal. Any significant fluctuation could be the result of wind, air temperature, improper use, or lack of grill maintenance.</li> </ul>
<b>WHY IS MY GRILL SLOW TO HEAT UP?</b>	<ul style="list-style-type: none"> <li>Check if the Fire Shutter slide is removed.</li> <li>Check if Low Charcoal.</li> <li>Check if Grill Lid is open.</li> <li>Check if Fan is running. If Fan is not running see "Why is the fan not running?"</li> </ul>
<b>WHY IS THERE EXCESSIVE SMOKE LEAKING FROM THE HOPPER?</b>	<ul style="list-style-type: none"> <li>Check if the Hopper or Ash Doors are fully closed and the latches are locked.</li> <li>Check that the fire shutter slide is removed.</li> <li>Check the Hopper or Ash Door gaskets for any damage.</li> </ul>
<b>WHY IS THE APP IS CONSTANTLY SHOWING "CONNECTION LOST!" OR "OFFLINE"?</b>	<ul style="list-style-type: none"> <li>Wi-Fi signal could be weak. Try moving the grill closer to the router or the router closer to the grill, extending your wireless network, or connect to Bluetooth.</li> <li>Angle the Antenna on the back of the controller to point at the ground.</li> <li>Try turning your Grill controller off and on.</li> <li>Try re-pairing your grill with your WiFi Network or Bluetooth device.</li> </ul>
CODE	ERROR MESSAGE
<b>ERR</b>	<ul style="list-style-type: none"> <li>Check the Connection of the main temperature Probe, Unplug the Connection, and then reconnect. Then Unplug the grill and plug back in</li> <li>If error code persists, you may need to replace your probe. Contact Char-Griller® Customer Service for assistance at 1-912-638-4724.</li> </ul>
<b>ErH</b>	<ul style="list-style-type: none"> <li>Grill Temperature has exceeded 750°F</li> <li>Unplug Grill and Open the main lid to cool down</li> <li>Check for Cause of the overheat: Fan malfunction or grease fire</li> <li>Plug Grill in to clear message</li> </ul>
<b>ErF</b>	<ul style="list-style-type: none"> <li>Check the connection of the fan. Unplug the Connection, then reconnect. Then Unplug the grill and plug it back in</li> <li>If error code persists, you may need to replace your fan. Contact Char-Griller® Customer Service for assistance at 1-912-638-4724.</li> </ul>
<b>ErU</b>	<ul style="list-style-type: none"> <li>Incorrect Voltage detected if using the wrong power adapter. Check if using the supplied power adapter or for malfunction of power adapter</li> <li>If error code persists, you may need to replace your fan. Contact Char-Griller® Customer Service for assistance at 1-912-638-4724.</li> </ul>

## **General Grilling Tips & Warnings**


- When cooking with oil or grease, have a type BC or ABC fire extinguisher readily available.
- In the event of an oil or grease fire do not attempt to extinguish with water. Immediately call the fire department. A type BC or ABC fire extinguisher may, in some circumstances, contain the fire.
- The grill and hopper heat shields are HOT while in use and will remain HOT for a period of time afterwards and during cooling process. Use CAUTION. Wear protective gloves/mitts.
- Hopper heat shield, hopper lid and latch, hopper ash door and latch are HOT while the grill is in use and during cooling. Wear protective gloves when working with and around these components.
- Grill has an open flame. Keep hands, hair, and face away from flame. Do NOT lean over grill when lighting. Loose hair and clothing may catch fire.
- Do not cover cooking grates with metal foil. This will trap heat and may cause damage to the grill.
- Never overfill charcoal hopper. This can cause serious injury as well as damage to the grill.
- When using electrical appliances, basic safety precautions should always be followed including the following: 1) Do not plug in the appliance until fully assembled and ready for use. 2) Use only approved grounded electrical outlet. 3) Do not use during an electrical storm. 4) Do not expose appliance to rain or water at any time.
- To protect against electrical shock do not immerse cord, plug or control panel in water or other liquid.
- Do not operate any appliance with a damaged cord or plug, or after appliance malfunctions or has been damaged in any manner. Contact Char-Griller® Customer Service for assistance at 912-638-4724.
- Extension cords may be used if care is exercised in their use. • If an extension cord is used: 1) The marked electrical rating of the extension cord should be at least as great as the electrical rating of the appliance; and 2) the cord should be arranged so that it will not drape over the counter top or tabletop where it can be pulled by children or tripped over unintentionally.
- The extension cord must be a grounding-type 3-wire cord.
- Outdoor extension cords must be used with outdoor use products and are marked with suffix "W" and with the statement "Suitable for Use with Outdoor Appliances."
- CAUTION - To reduce the risk of electric shock, keep extension cord connection dry and off the ground.
- Do not let cord hang on or touch hot surfaces.
- Do not place cord on or near a gas or electric burner or in a heated oven.
- To disconnect, turn controller "OFF" then remove plug from outlet.
- Unplug from outlet when not in use and before cleaning. Allow appliance to cool completely before adding/removing internal components.
- Do not clean this product with a water sprayer or the like.
- Never open hopper during use. If it is necessary to refill charcoal during use follow the specific reload instructions for this grill and always wear protective gloves.
- Never operate the grill with the temperature probe removed. This can cause the grill to overheat and cause serious personal injury and/or damage to the grill.
- Close Rear Smoke Damper and install Fire Shutter after every use.
- Open Rear Smoke Damper fully, open Fan Cover, and remove Fire Shutter before every use.
- Never operate the grill with the Fire Shutter installed in the grill. This can damage the grill.




## Cooking Guidelines

 <b>BEEF</b>	HEAT LEVEL	AVG. COOKING TIME
<b>SKIRT STEAK, MEDIUM</b> 1-INCH THICK		4-6 MIN.
<b>HOT DOG</b> 4 OUNCES		5-7 MIN.
<b>STEAK, MEDIUM</b> 1-INCH THICK - FILET MIGNON, RIBEYE, NEW YORK STRIP & PORTERHOUSE		6-8 MIN.
<b>BURGER</b> 3/4 - 1-INCH THICK		8-10 MIN.
<b>HANGER STEAK, MEDIUM</b> 1-INCH THICK		8-10 MIN.


 <b>PORK</b>	HEAT LEVEL	AVG. COOKING TIME
<b>PORK CHOP, MEDIUM</b> 1-INCH THICK		8-10 MIN.
<b>SAUSAGE</b> 3-OUNCE LINK		10-13 MIN.
<b>PORK TENDERLOIN</b> 1 POUND		15-20 MIN.
<b>PORK SHOULDER/BUTT</b> 8 POUNDS		12 HOURS <small>APPROX. 90 MIN / LB.</small>

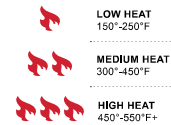
 <b>CHICKEN</b>	HEAT LEVEL	AVG. COOKING TIME
<b>CHICKEN BREAST OR THIGH</b> 4 OUNCES - BONELESS, SKINLESS		8-12 MIN.
<b>CHICKEN THIGH OR LEG</b> 3-6 OUNCES - BONE-IN*		35-45 MIN.
<b>CHICKEN BREAST</b> 10-12 OUNCES - BONE-IN*		35-45 MIN.
<b>WHOLE CHICKEN*</b> 8 POUNDS		3-5 HOURS

\*BONE-IN CHICKEN SHOULD INITIALLY BE COOKED OR "BROWNED" OVER DIRECT HEAT FOR SEVERAL MINUTES BEFORE BEING TRANSFERRED TO INDIRECT HEAT.

 <b>SEAFOOD</b>	HEAT LEVEL	AVG. COOKING TIME
<b>SHRIMP</b> LARGE		4-6 MIN.
<b>SCALLOP</b> 1 1/2 OUNCES		4-6 MIN.
<b>FISH, FILET</b> 1-INCH THICK		5-10 MIN.
<b>FISH, WHOLE</b> 1 POUND		15-20 MIN.

### HEAT KEY



### USDA SAFE MINIMAL INTERNAL TEMPS

**FISH & SHELLFISH:**  
**145°F**

**BEEF OR PORK STEAKS  
OR CHOPS: 145°F**

**GROUND BEEF OR PORK:**  
**160°F**

**CHICKEN:**  
**165°F**

*Cook times outlined in this chart are general guidelines that may vary depending on desired doneness, thickness, amount of each item being cooked, grill or grilling style, ambient temperature and/or weather. Char-Griller® recommends always using a cooking thermometer to gauge the internal temperature of all meat products.*








**FIND MORE  
RECIPES AT**  
**CHARGRILLER.COM**

## ENHANCE FLAVOR

### Wood Pairing Guide

Different wood varieties possess different flavors and Char-Griller® recommends pairing your woods with the meats you intend to cook.

WOOD	FLAVOR	 BEEF	 PORK	 POULTRY	 SEAFOOD	 VEGGIES
ALDER	MILD			✓	✓	
MAPLE	MILD			✓		✓
CHERRY	MILD		✓	✓	✓	
APPLE	MEDIUM	✓	✓	✓	✓	
PECAN	MEDIUM	✓	✓	✓	✓	✓
OAK	MEDIUM	✓	✓	✓	✓	✓
HICKORY	STRONG	✓	✓			
MESQUITE	STRONG	✓	✓			

## FAVORITE ACCESSORIES

FOR THE FULL LINE OF ACCESSORIES VISIT [CHARGRILLER.COM](http://CHARGRILLER.COM)

**SCAN**



**FOR MORE**



### **Custom Fit Cover**

Weather Resistant  
Protects Grill Finish

Model #9875



### **Grill Tool Kit**

Classic Trio of  
Grilling Essentials  
Stay Cool™ Handles  
great for every grill master

Model #8651



### **4-Piece Grill Skewers**

Stainless Steel Construction  
Flat, wide design keeps food  
from falling off

Model #8610



### **Folding Probe Thermometer**

Stainless steel  
fast-read probe accurately  
measures temperature  
Easily switch from °F to °C  
Auto ON/OFF feature for  
extended battery life

Model #6304



### **Char-Griller® Trucker Hat**

Cotton-poly blended front  
Nylon mesh back  
Adjustable snapback closure  
One Size Fits Most

Model #70100



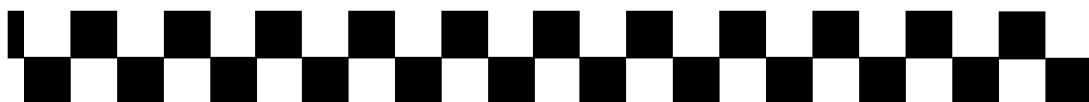
### **Original All-Purpose BBQ Rub**

Pairs well with all types  
of meat and fish

Model #85501



**P.O. Box 30864  
Sea Island, GA 31561  
1-912-638-4724  
[www.CharGriller.com](http://www.CharGriller.com)  
[Service@CharGriller.com](mailto:Service@CharGriller.com)**



FCC Caution.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.