

# RCBS

## RangeMaster 750 Scale



### PRODUCT INSTRUCTIONS

# RCBS

**PRECISIONEERED® RELOADING EQUIPMENT**

*We think that we make the very best reloading equipment in the world.  
If you agree, please tell your friends. If you disagree, tell us – we want to do something about it!*

#### Customer Service

1-800-533-5000 (US or Canada) or 530-533-5191

Hours: Monday – Friday, 6:30am – 4:00pm Pacific Time

e-mail: [rcbstech@atk.com](mailto:rcbstech@atk.com)

Web site: <http://www.rcbs.com>

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# IMPORTANT SAFETY INFORMATION

## IMPORTANT: PLEASE READ ALL INFORMATION FIRST

Like any scale, you control the accuracy of your RCBS RangeMaster Scale. Before using the scale, read this instruction manual carefully to fully learn how to safely operate the scale. **Failure to properly operate the scale can result in severe personal injury and/or equipment damage.** If you have read these instructions and still do not understand some operation, call us at **1-800-533-5000** and a technician will assist you. This instruction manual contains specific safety and operating information. It should be considered a permanent part of your reloading equipment and remain with the equipment at all times for easy reference.



## SAFETY

Reloading is an enjoyable and rewarding hobby that can be conducted safely. However, as with any hobby, carelessness or negligence can make reloading hazardous. This product has been designed from the beginning with the user's safety in mind. When reloading, safety rules must be followed. By observing these rules, the chance of a hazardous occurrence causing personal injury or property damage is minimized.

## GENERAL

- Use all equipment as the manufacturer recommends. Study the instructions carefully and become thoroughly familiar with the operation of the product. If you do not have written instructions, request a copy from the equipment manufacturer.
- Do not take short cuts. Attempting to bypass established procedures is an invitation to an accident.
- Keep tools and components neat, clean and orderly. Promptly and completely clean all primer and powder spills.
- Reload only when you can give your undivided attention. Do not reload when fatigued or ill, or under the influence of medications or alcohol. Develop a reloading routine to avoid mistakes which may prove hazardous. Don't rush – load at a leisurely pace.
- Always wear adequate eye protection to protect your eyes from flying particles. You assume unnecessary risk when reloading without wearing safety glasses.

## PRIMERS AND POWDER

- Store primers and powder beyond the reach of children and away from heat, dampness, open flames and electrical equipment. Avoid areas where static electricity is evident.
- Do not use primers of unknown identity. Discard unknown primers in accordance with applicable regulations.
- Keep primers in the original factory container until ready to use. Return unused primers to the same factory packaging for safety and to preserve their identity and shelf life. Primer packaging is designed to provide safe storage.
- DO NOT store primers in bulk. The blast of just a few hundred primers is sufficient to cause serious injury to anyone nearby.
- DO NOT force primers. Use care in handling primers.
- DO NOT have more than one can of powder on the bench at one time. Powder cans should be stored away from the bench to avoid picking up the wrong one.
- DO NOT use any powder unless its identity is positively known. The only positive identification is the manufacturer's label on the original canister. Discard all mixed powders and those of uncertain identity.
- DO NOT store powder in the unit after a reloading session. Over time the powder will corrode the powder hopper.
- If you use a powder measure, replace the lids on both the powder hopper and powder can after the powder hopper has been filled.
- When using a powder measure, settle the powder in the powder hopper before charging any cases. Throw and check the weight of at least ten charges. This will assure you that the correct powder charge is being thrown.

## LOADING DATA

- DO NOT SMOKE WHILE RELOADING
- OBSERVE ALL WARNINGS ABOUT THE USE OF MAXIMUM LISTED LOADS.
- Use only laboratory tested reloading data. We recommend the SPEER Reloading Manual.



## WARNING

This digital scale is for use with smokeless powders only. **Do not use with black powder** (used in muzzle loading firearms). If black powder should come in contact with an electrical spark, an explosion may occur, resulting in serious injury or death.

## CALIBRATION

Check calibration prior to each use of the scale and re-check frequently during use with the calibration weights provided. A spot check can easily be made during operation with an RCBS Scale Check Weight Set. If accuracy is found to be out of tolerance, the scale must be recalibrated as explained in the CALIBRATION section of this instruction manual. A scale with improper calibration will cause an incorrect charge weight which may exceed the maximum recommended load.

This instrument must be serviced only by a trained, qualified factory technician to insure warranty and safety. For repair information, call: 1-800-533-5000



## PRECAUTIONS

Digital scales are very reliable devices. However, here are some events which may result in an inaccurate reading:

- Change in temperature. If the temperature changes more than a few degrees, you must recalibrate the scale. Allow scale to stabilize for 20-30 minutes prior to use.
- Changes in scale location or an un-level working surface.
- Un-centered weights on the platen.
- Jarring of the scale during operation.
- Use only the two calibration weights supplied for accuracy.
- Weight accuracy is crucial. Keep weights clean and carefully stored. If dropped or damaged, have weights inspected against known standards. Contact RCBS Customer Service.
- Static electricity can cause the scale to "jump around". If static build-up is evident, wipe scale with an anti-static sheet, or use anti-static spray. Spray on clean soft cloth first. Do not allow spray to get into mechanism.
- If powder should get inside the unit, stop operation immediately and do not use scale until it has been serviced. Contact RCBS Customer Service.

## RECORD KEEPING

- Keep complete records of reloads. Apply a descriptive label to each box showing the date produced, and the primer, powder and bullet used. Labels for this purpose are packed with SPEER bullets. Never attempt to guess at the identity of your ammunition.

**NOTE:** The scale was shipped in protective packaging. Save and use for transporting or long-term storage of the unit. This instrument may only be serviced by a certified technician. See back cover for address and Too-Free Customer Service phone number.

## GENERAL INFORMATION

Handloaders know quality reloads begin with RCBS products and one of the most important pieces of equipment is the RCBS RangeMaster 750 Digital Scale. With features like a 750-grain capacity, clear and easy to read display that reads in grains or grams, quick repeatability and an easy re-zero feature, the RCBS RangeMaster is the perfect choice for serious shooters that demand the best.

If the scale has been sitting at a cool temperature, remove it from the carton and allow it to sit at room temperature for about 20 to 30 minutes before using.

Carefully unpack the scale. Look for and identify the following items:

- Scale with platen
- AC Power adaptor
- One 20 gram weight and one 30 gram weight
- Powder pan
- Under the scale is the cover for the battery (not supplied)
- Instruction Manual
- Warranty Card

The scale was shipped in protective packaging which should be saved and used for transporting the scale. This packaging is also recommended for long term storage of the unit.

### POWER SUPPLY (ADAPTOR):

- (1) Input: 120 VAC 60 Hz  
Output : 9V DC 100 mA
- (2) Input : 230 VAC 50 Hz  
Output : 9V DC 100 mA

### POWER SUPPLY (ADAPTOR):

9V DC batteries

### POWER CONSUMPTION:

Average current consumption in use: DC 15 mA

Average current consumption in standby: DC 10  $\mu$ A

**Notice:** When the low-power indication appears on the screen, the batteries need to be replaced.

### SPECIFICATION:

750.0 GN / 0.1 GN  
50.00 g / 0.01 g

### IMPORTANT:

Treat the scale as you would any fine instrument. The RangeMaster 750 is physically very fragile and the load cell can be damaged by the following:

- Pushing down or dropping the scale.
- Pulling up on the platen in such a way that it binds in the load cell.
- A sudden, violent physical shock to the scale.

### SCALE - KEYPAD

#### FUNCTION DESCRIPTION

GN/GMS	ZERO	CAL	ON/OFF
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**GN/GMS:** This is the key to change the scale from grains to grams. The scale defaults to grains GN. When in the grams mode it will show 0.00 and a lower case g will be in the upper right hand corner. When the scale is in grains mode, it will show 0.0 and there will be an upper case GN along side of the 0.0

**ZERO:** This is the key that will re-zero your scale and remove the weight of the pan from the platen. To tare the weight of the pan from the scale, place the pan on the platen and press Zero. This will remove the weight of the pan. When you remove the pan it will show a negative number. When the pan is placed back on the scale it will show 0.0 GN and you are ready to weigh.

**CAL:** This is your calibration key. You should calibrate your scale each time you begin a new reloading session. See the calibration section to calibrate your scale.

**ON/OFF:** Power on / Power off

### SET UP

Your Scale is powered by a 9 Volt DC transformer or you can use a 9 volt battery (not supplied with the scale). Choose a quality 9 volt battery or use the transformer supplied with the scale.

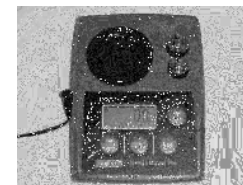
### CALIBRATION

Always calibrate your scale before use. This must be done WITHOUT the powder pan on the platform. To calibrate the scale, follow the steps below:

- Step 1. Be sure the powder pan has been removed from the platen and then press the ON key. When you turn the scale on, the display will show 88888 across the display for a few seconds and then displays 0.0 GN (grains mode). The arrow will be pointing to "stable" when ready to proceed with calibrating. SEE PICTURE #1
- Step 2. Next press the CAL key on the scale. The display will read C 0 with a lower case g n in the upper right hand corner of the display. When the display shows C 0 press the CAL key again. SEE PICTURE #2
- Step 3. When the display shows C 20 place the 20 gram weight on the platen (the smaller of the two) and press the CAL key. SEE PICTURE #3
- Step 4. When the display shows C 50, add the 30 gram weight to the platen and press the CAL key. SEE PICTURE #4
- Step 5. Now the display will show 50.00 g. SEE PICTURE #5. Remove both weights from the platen and replace them to their holders. The display will automatically switch to 0.0 GN (grains)
- Step 6. Next place the powder pan on the platen and press the ZERO key to zero the weight of the pan. The display will now show 0.0 GN and is now calibrated and ready to operate.

### AUTO POWER OFF FUNCTION:

1. This function is only works when the battery power is used. With no weight on powder pan and without pressing any key for 5 minutes, the scale will automatically shut down.



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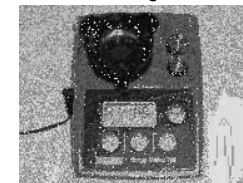
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