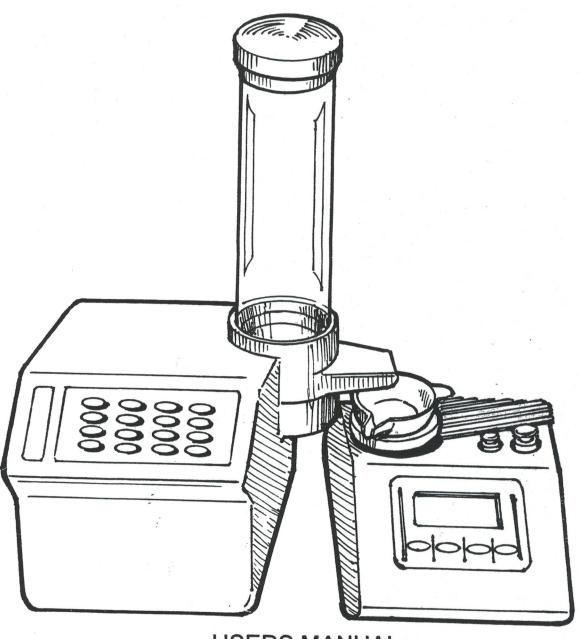
PACT DIGITAL PRECISION POWDER DISPENSER



USERS MANUAL NOVEMBER 1996

Introduction:

Your PACT Digital Precision Powder Dispenser working in conjunction with your PACT Digital Precision Powder Scale will dispense the exact amount of powder you've asked it for within the limits of accuracy of the scale (+ - .1 grains). While you don't really need to know how all this works in order to use the product, we've found that most shooters like having some understanding of how their equipment operates.

Your scale, when in "tric" mode, is constantly transmitting it's weight readings over the Infrared Data Port (the little "eye" next to the power plug). The dispenser reads the data sent by the scale and uses it to learn the characteristics of a given powder and as well as using the weight information to monitor things as the powder is being dispensed. This allows the Dispenser to turn the motors off at precisely the right time. This is a one way deal, no data is sent from the Dispenser to the Scale.

As many of our customers who've been calling us on a regular basis know, we've worked on this project for quite some time. We think you'll find that this thing is pretty goof proof, and will provide years of trouble free service. As you gain a familiarity and confidence in the Dispenser always keep in mind that it can't do better than the Scale, upon which it is dependent for accurate information. Be sure to carefully follow all of the instructions in your scale manual to the letter.

Set Up:

Note: The power supply for the dispenser is different from that of the scale. Don't mix them up! The Dispenser requires 9 Volts DC. The Scale requires 12 Volts AC.

Arrange the Dispenser and Scale as shown in drawing and plug both units in. The Scale light on the Dispenser will slowly blink and the scale will read "00.0." We need to get the Scale to start talking to the dispenser. Press the CALIBRATE/MENU button. The Scale will ask you if you want to calibrate, tell it no by pressing the ZERO/NO button. It will then ask you if you want to Print (Prnt), again tell it no by pressing the ZERO/NO button. Now the Scale will ask you if you want to go into trickle mode (tric) tell it yes by pressing the GRAMS/YES key. The Scale has now activated the Infrared Data Port. This will stay on until you power the scale down.

Over at the dispenser the SCALE light should have changed from blinking to solid on. If it is still blinking it is not receiving data from the scale, either because the scale is not in "tric" mode or the LED next to the power jack on the scale is not lined up well enough with the receiver (the small hole) on the side of the dispenser.

Note: The SCALE light on the dispenser must be on - not blinking - for the dispenser to operate. If the Dispenser is not receiving data from the Scale the SCALE light will blink and the dispenser will not function.

WARNING: The Dispenser and your scale are designed for use with smokeless powder only. <u>Do not use Black Powder</u> - the type used in muzzle loading firearms with these products! If Black Powder comes into contact with an electrical spark an explosion will result killing or maiming you and everyone around you.

Go ahead and check the calibration of your scale and re calibrate if necessary. Make sure the scale is in Grains mode and zero it with the powder pan on the Scale platen. Pour some powder into the dispenser.

You are now ready to <u>Calibrate the Dispenser</u>. This will take the <u>Dispenser</u> several minutes to complete. During this time the dispenser will start and stop several times - DON'T MESS WITH IT OR THE SCALE!

With the Scale in grains mode, zeroed with a powder pan on it and the SCALE light on the Dispenser on, press the Calibrate button on the Dispenser. The CALIBRATE light on the dispenser will begin to blink. After a few seconds the motors will come on. During the course of the calibration cycle the dispenser will start and stop itself several times. As long as the CALIBRATE light is blinking the Dispenser is still working, have patience. After around 150 or so grains have been dispensed the motors started and stopped several times the Calibrate light will change from flashing to on. Empty the powder pan into the dispenser and return it to the scale. The dispenser is now ready to use.

NOTE: When entering a weight on the Dispenser you *must* always include the decimal point and tenths of a grain, even if it's .0.

Your Scale should now be reading 00.0 with a empty powder pan on it. Your dispenser should have both the SCALE and CALIBRATE lights on. Press 25.0, ENTER. The MEMORIZE light should now be on. If it's not you either forgot to include the ".0", did not press the keys firmly enough or failed to press ENTER.

With the MEMORIZE light on press the DISPENSE button. The DISPENSE light will begin to blink and after a couple of seconds the Dispenser will begin to operate.

You'll notice that as the Scale gets closer to the target weight the Dispenser will begin to slow down. When the dispense light stops blinking and goes out the Dispenser is done. However, as you've learned if you've ever trickled powder onto the Scale, it takes a few seconds for the Scale to register small changes. You'll find the weight

displayed on the Scale will usually go up a tenth of a grain or two a few seconds after the dispenser stops and should finish up within a tenth of what you asked for.

If the charge weight is under what you wanted by a tenth or two you can press the DISPENSE button. The slow speed motor will rotate very slowly for as long at you hold the button. This allow you to "bump" the reading up. As you know, with some powders, a few kernels will equal a tenth of a grain. Every now and then they clump up in the tube with the result that the weight goes over the target by a tenth. If you can live with a tenth over fine, if not, it's probably quicker to reject the charge and dispense another one.

NOTE: If you switch powder you'll need to re calibrate the dispenser.

Tips and Tricks

- Pressing the MEMORIZE button will cause the dispenser to memorize whatever weight is displayed on the Scale. If you're working up loads and going to go from, for example 25.2 to 25.4, you could use the DISPENSE button to bump the last charge up to the new weight then push MEMORIZE.
- If your dispensing a large charge, you might use your manual dispenser to throw the bulk in allowing the Dispenser to finish the charge off for you.
- Hold your finger over the powder tubes when your pouring the powder back out of the dispenser. When the hopper is empty, dump the tubes out. Give it a few taps to make sure you've got all the powder out.
- While we've not run into this problem in testing, it is theoretically possible for extremely fine ball powder such as H110 to jam between the powder tubes and their bushings preventing their rotation. While we're not recommending against using these fine ball powders, you should keep an eye out for this problem.
- We have seen flake powder clump up in the powder tubes and block them on occasion. Again, no reason not to use them, just keep an eye out.
- You'll probably find that you want to work your press as the Dispenser is running.
 Make sure that the operation of the press does not jiggle the Scale. We'd suggest
 you set the Scale and Dispenser up on a separate surface. When the dispenser is
 done, pour the powder into your case and return the pan to the scale and press
 DISPENSE. By the time you have your bullet seated you'll have a new charge
 waiting for you.