

**Fast-Draw Mercantile
Manual for
Electronic Gun Conversion Kit,
Durango Kid™ Indoor Target/Timer**

Thank you for purchasing a **Fast-Draw Mercantile** Single Action Army (SAA), Electronic Gun Conversion Kit, with our **Durango Kid™** Indoor Target/Timer. We hope it will bring you many hours of enjoyment, and will help you increase your proficiency in the activity of Cowboy Fast Draw, this system was designed allow you to practice Cowboy Fast Draw indoors without the noise or the smoke and odor of spent primers.

Please familiarize yourself with the different components of this product.

Indoor Target/Timer
AC/DC Power Adapter
Electronic Cylinder
Electronic Infrared Module
CR2477N Battery
Insertion/Extraction Tool
5/64th Hex Key

The **Fast Draw Mercantile** Indoor Target/Timer

The **Fast-Draw Mercantile Durango Kid™** Indoor Target/Timer contains the Target (an infrared signal detector), the Timer (is a 4 digit LED display), and the stage/draw indicators (are discreet RED LEDs) in a single enclosure.

The **Fast-Draw Mercantile Durango Kid™** Indoor Target/Timer has an automatic start up cycle, when the AC/DC power adapter is plugged into the unit. The Target/Timer's stage/draw Red LED Indicators on the unit will cycle Dark-On-Dark-On-Dark-On-Dark, and the display will cycle through a sequence of numbers, and will end on 0.000. The internal clock will count down from a built in randomly selected time delay (from 2 to 5 seconds) upon reaching its internal 0.000, the stage/draw Red LED indicators will switch from *Dark to On*. The display will start counting up until the detector is struck with an input from the revolver. Upon detection the display will stop counting and the Stage/Draw indicator LED's will flash between *Dark and On* for a short period of time. The time shown on the display is your ET (elapsed time), after a random delay the cycle will begin again.

The **Fast-Draw Mercantile Durango Kid™** Target/Timer unit should be placed on a shelf, or hung on a wall with the electronic signal detector placed at about 42 to 44 inches off the floor. This dimension conforms to the target center heights of most fast draw originations.

The interaction geometry of the electronic signal detector and the output of the Electronic Infrared Module of the SAA conversion kit were designed to simulate 24 inch diameter target at a distance of about 16 feet for a .45 caliber revolver, and about 24 feet for a .38 caliber revolver. The closer to the Target/Timer unit you stand the smaller the simulated target becomes. There are a number of factors that have an influence over this design. The light pattern that comes out of the infrared diode, though similar, it is slightly different every time the Electronic Infrared Module is inserted. The length of the barrel of your SAA revolver and whether your revolver is stainless steel of blued steel seems to have an influence.

Because of this fact, we have designed tubes have different light shaping characteristics. Each tube has a series of groves machined in to their circumferences, as identifying markers. These tubes have 1 to 3 groves machined on the circumference of the tube for identification, 1 grove smallest light pattern, 2 groves middle light pattern, and 3 groves largest light pattern.

If you place your **Fast-Draw Mercantile Durango Kid™** Target/Timer on a shelf, be sure that the face of the Target/Timer is vertical, and is not canted up or down. This will cause an error in signal detection, because the case of the Target/Timer has 5° of taper on the front and back case halves.

Caution: The **Fast-Draw Mercantile** Electronic Cylinder operates using infrared light, like television/entertainment remotes, Xbox® and Wii® game consoles. Be sure to **NOT** to operate these devices in the same area, or at the same time that you are operating the Electronic Gun. Otherwise there may, or will be interference with each other.

The **Fast-Draw Mercantile** SAA Electronic Gun Conversion Kit:

Installation the battery into the Electronic Cylinder:

Remove the Rear Cylinder Cap, using the Hex Key remove the (2) Flat Head Cap Screws.

Remove the Cylinder Sleeve.

Find the battery holder, on the bottom side of the internal body.

Snap the battery into the battery holder.

Replace the Cylinder Sleeve, being careful not to pinch or cut any of the internal wiring.

Replace the Rear Cylinder Cap, using the Hex Key install the (2) Flat Head Cap Screws.
Be sure that the Electronic Module and the Firing Pin Cushion are on the same line.

Installation the **Fast-Draw Mercantile** Electronic Cylinder into your SAA revolver:

Caution: The Fast-Draw Mercantile Electronic Cylinder was designed and manufactured to fit a specific “stock” manufacture’s weapon. If your revolver has been modified, this system may not fit properly, in any case **DO NOT FORCE** the cylinder into or out of the frame of your weapon, or into a revolver that it was not designed for.

Check and be SURE that the weapon is **UNLOADED!**

Locate the loading gate on the right side of the frame, rear of the cylinder:

Open the loading gate.

With your finger OFF the trigger, using your thumb, pull the hammer rearward to the half-cock position.

Locate the base pin catch. This is a spring-loaded plunger located on the left side of the frame, forward of the cylinder.

Locate the cylinder base pin. The cylinder base pin is the shaft around which the stock cylinder rotates. It protrudes from the front of the cylinder frame forward of the cylinder, beneath the ejector rod.

While depressing the base pin catch, slide the cylinder base pin forward toward the muzzle and out of the frame.

Remove the cylinder from the frame and from the loading gate side of the frame:

Install the **Fast-Draw Mercantile** Electronic Cylinder into your revolver, following the above disassembly steps in reverse. Be sure that the output connector of the **Fast-Draw Mercantile**, Electronic Cylinder is pointing down the barrel of your revolver, towards the cylinder.

Installation the **Fast-Draw Mercantile** Electronic Infrared Module into your SAA revolver:

Install the **Fast-Draw Mercantile** Electronic Infrared Module, by sliding it down the muzzle of your weapon, connector end first. The **Fast-Draw Mercantile** Electronic Infrared Module performs two functions, first this device is the Off-On power switch, and second it is the output source for the infrared light that is detected by the Target/Timer.

Slide the rounded end of the Insertion/Extraction tool down the muzzle of your weapon. With slight pressure on the tool, the **Fast-Draw Mercantile** Electronic Infrared Module will snap in to the cylinder. Remove the Insertion/Extraction tool.

Your weapon has now been converted, and is ready to be used in conjunction with the **Durango Kid™** Indoor Target/Timer. Enjoy and have fun. In using your **Fast-Draw Mercantile** SAA Electronic Gun, and you feel that the infrared light pattern is larger than to your liking, please contact either Equu-Pulse Company of Spencer Instrumentation, Inc. and we will help you solve this problem.

Installation the **Fast-Draw Mercantile** Light Shaping Tube into your SAA revolver: (Extra Cost Option)

Slide the threaded end of the Insertion/Extraction tool down the muzzle of your weapon. With slight pressure on the tool, turn the tool clockwise a couple of full turns. The **Fast-Draw Mercantile** Electronic Module will have been engaged by the Insertion/Extraction. Draw tool out of the muzzle of your revolver, and the Electronic Module will dis-engage from the Electronic Cylinder.

Remove the **Fast-Draw Mercantile** Electronic Module from the Insertion/Extraction tool. Screw the **Fast-Draw Mercantile** Light Shaping Tube on to the **Fast-Draw Mercantile** Electronic Module. Turn the Light Shaping Tube clockwise until it is seated on the Electronic Module.

Install the Electronic Module/Light Shaping Tube, by sliding it down the muzzle of your weapon, connector end first. Slide the rounded end of the Insertion/Extraction tool down the muzzle of your weapon. With slight pressure on the tool, the **Fast-Draw Mercantile** Electronic Module will snap in to the cylinder. Remove the Insertion/Extraction tool.

To return your weapon to its stock configuration, follow the following steps exactly.

Removal of the **Fast-Draw Mercantile** Electronic Module from your SAA revolver:

Slide the threaded end of the Insertion/Extraction tool down the muzzle of your weapon. With slight pressure on the tool, turn the tool clockwise a couple of full turns. The **Fast-Draw Mercantile** Electronic Module will have been engaged by the Insertion/Extraction. Draw tool out of the muzzle of your revolver, and the Electronic Module will dis-engage from the Electronic Cylinder. It is important to do this step, because the Electronic Module is also the Off-On switch for the system.

Removal the **Fast-Draw Mercantile** Electronic Cylinder into your SAA revolver:

Follow instructions for, *Installation of the **Fast-Draw Mercantile** Electronic Cylinder into your SAA revolver,*

Once the Fast-Draw Mercantile Electronic Cylinder has been removed, replace the original cylinder into your weapon, by following *Install the **Fast-Draw Mercantile** Electronic Cylinder steps in reverse.*

With the loading gate open, and the hammer in the half-cock notch, the cylinder should spin clockwise freely.

Even though once the Electronic Module has been un-plugged from the Electronic Cylinder, and the Electronic Cylinder is out of your revolver, thus turning electronics is now **Off**, it is highly recommend removing the battery from the Electronic Cylinder, and this will prevent any damage to the electronics, because batteries will sooner or later leak.

WARRANTY

Equu-Pulse Company/Spencer Instrumentation, Inc. warrants the SAA Electronic Conversion Kit, with our Indoor Target/Timer to be free from defective materials and workmanship for the life of the Product.

All items returned to **Equu-Pulse Company/Spencer Instrumentation, Inc.** that have been subject to abuse, misuse damage or accident, have been connected, installed or adjusted contrary to the instructions furnished by this manual or repaired by unauthorized persons will not be covered by this warranty.

Equu-Pulse Company/Spencer Instrumentation, Inc. reserves the right to discontinue models; change specifications, price or design of their devices at any time without notice and without incurring any obligation whatsoever.

The purchaser agrees to assume all liabilities for any damages and/or bodily injury which may result from the use or misuse of this device by the purchaser, or his agents.

Equu-Pulse Company/Spencer Instrumentation, Inc. shall not be liable in any way for the consequential damage resulting from the use or misuse of this device.

Equu-Pulse Company/Spencer Instrumentation, Inc. makes no warranty whether expressed, or implied as to the merchantability and fitness for a particular purpose of this product.

This warranty is lieu of all other warranties, expressed or implied, and of all other obligations or liabilities on the part of **Equu-Pulse Company/Spencer Instrumentation, Inc.** No person or corporation is authorized to modify this warranty or to assume any liability on behalf of **Equu-Pulse Company/Spencer Instrumentation, Inc.**

Items not covered under warranty expressed by **Equu-Pulse Company/Spencer Instrumentation, Inc.** are batteries, or damage from battery leakage.

If you have any questions, please contact:

EquuPulse Company

408-626-9360

or

Spencer Instrumentation, Inc.

949-786-4011

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