

The Electrifying Walther SSP

I have to confess to a weakness when it comes to handguns and that is a liking for purpose-built rimfire precision target pistols and no-one can do it better than the Europeans.

Germany, Switzerland, Austria, Italy, France and Russia have completely dominated the precision paper punching market since the 1960's when US pistol makers simply abandoned the challenge with their only .22 offerings being the superannated Colt Woodman Target, the S&W Model 41 and the High Standard target models. Nothing much has changed in the meantime as US pistol shooters do not appear to have much interest in rimfire target pistols or the international matches in which they are used.

The game changed in 1968 when Walther introduced its radical GPS Standard Pistol with its forward-located magazine and removable and fully adjustable trigger group. In the early 1970's, the modular design of the GSP allowed a full kit to be offered in .22 Short for the International Rapid Fire match and the .32 S&W Long centrefire for the International Centrefire event.

It says something for the GSP's original concept and design that it is still available in upgraded form today in .22 LR and .32 S&W Long.

Even though Walther has its GSP, the company developed an even more advanced .22 target autoloader in the form of its SSP, following the International Shooting Sports Federation – the international body that governs the Olympic shooting sports – changing the rules of the ISSF Rapid Fire match in 2005 to eliminate the use of the .22 Short cartridge and set the pistol specifications to match those of the Standard Pistol and Sport Pistol matches. These require the use of the .22 Long Rifle cartridge, a minimum 1000g trigger pull and no barrel venting or muzzle brakes.

It also rendered a lot of very good, purpose-designed Rapid Fire pistols and their .22 Short ammunition obsolete almost overnight.

The Rapid Fire match is very demanding of the pistol's handling, as the match requires



Some of the ammo used to test the SSP – E. It shot best with European match ammo but functioned well with all types.

that one shot is fired on each of five targets in timed series of 8, 6 and 4 seconds. The heavier recoil of the .22 LR and the lack of barrel vents that were permitted on the original Rapid Fire pistols meant that recoil control was a priority.

Walther addressed these issues with a completely new design – the SSP. It was back to the drawing boards and the result was a target autoloader with a number of advanced features. These include

- a hammerless firing pin system to provide a more compact receiver and eliminate the torque effect of a hammer-based firing system.
- a pneumatic slide damping system.
- a 3D adjustable grip
- externally adjustable trigger
- high hand position with respect to the bore axis.

The SSP also comes with high performance target pistol features such as a position adjustable trigger, width adjustable front sight, fully adjustable rear sight including rear sight notch width adjustment and fully orthopaedic grips and three sizes for both right and left handed shooters.

The SSP has established a well-deserved reputation in international competition since its introduction, although on some forums, there were some issues with the pistol's trigger system, and after-market triggers were offered for the SSP by third-party suppliers.

The latest manifestation of the SSP is the SSP-E, that comes with an electronic trigger system that has eliminated the mechanical trigger arrangement. Electronic triggers on target firearms have been around for a long time and are not uncommon on bench rest rifles.

1. The complete outfit includes battery charger, hex spanner tool, special dismantling tools, safety flag, plastic chamber dry fire insert and extra front sight and trigger unit.
2. Top view – the front sight is mounted at the maximum allowable sight radius. Rear sight adjustments need to be done with a hex spanner.
3. One of the two triangular foresights supplied. Rotating these sights changes the width.
4. The underside of the SSP – E reveals the mini-B USB charging port for the lithium ion battery. All electronic trigger adjustments are accessible externally.



Hammerli's Model 162 Free Pistol came with an electronic trigger. I had one of these Free Pistols for a while and while it handled beautifully, the electronic trigger was not its best feature and was not particularly reliable. If my fading memory serves me correctly, there was also an air pistol that had an electronic trigger option.

Electronics, and particularly batteries, have come a long way and the system used on the SSP-E has incorporated the latest technology in this respect.

The main advantage of an e-trigger is that there is no mechanical connection between the trigger and the sear and firing pin system. The trigger is simply a switch that delivers a charge to a solenoid that operated the firing pin release. The e-trigger ensures wear-free operation and exact trigger settings for up to 500,000 rounds, according to Walther

The lithium-ion battery is built into the Walther and is charged via a Mini-B USB-type connection in the frame in front of the trigger guard, with the standard USB plug at the other end being able to be attached to any device that can supply a charge, including any computer.

For those shooting seriously in away from home competitions, it would be worthwhile having a 240V USB charging adapter of a portable charging battery pack in the shooting kit.

A charging pack comes with the pistol

and I put the Walther on charge for a couple of hours after receiving the pistol from Frontier Arms. The manual states that 90 minutes is required for a full charge and a 1 minute charge is sufficient for 100 shot should the battery be fully discharged. A fully charged battery is stated to have a capacity of 6000 shots.

The comprehensive manual that comes with the SSP is based on the mechanical trigger version and a supplement is included that covers the unique features of the electronic trigger version.

The trigger adjustment info on the mechanical trigger version is quite comprehensive and this contrasts with the relative simplicity of the electronic trigger, the adjustment instructions for which are included in the supplement.

The really novel feature of the SSP-E trigger is the ability to set it up for multiple dry-firing practice which is not possible with a mechanical trigger. Apart from the absence of recoil, the multiple dry firing feature allows the owner to simulate the handling and triggering of any of the matches for which the SSP can be used – ISSF Rapid Fire, Standard Pistol and Sport pistol.

I am not sure how the internals of the SSP-E do this, but according to the supplementary instructions, a special part called the Dry Fire Device SSP (part number 278 56 33) is available that is fitted to the right

hand (looking from the muzzle) cover screw hole, where this screw obviously needs to be removed prior to fitting this device.

Again, according the instructions, to set the SSP up for dry firing practice, the magazine should be removed and the slide pulled fully to the rear and then moved forwards into the battery position. The safety then needs to be put into the 'S'(safe) position and this will engage the sear and tell the electronics that the trigger is able to be actuated.

Whether by accident or design, I got around the need for a special device to activate the dry-firing mechanism. In the pistol's tool kit, a polymer chamber flag insert was provided. These are commonly supplied with many autoloading rimfire handguns and are design to (a) indicate that the chamber is empty and (b) prevent the firing pin from contacting the chamber wall when the trigger is released to unload the action. When this blue chamber flag was inserted in the SSP chamber, and the procedure to set the action up for dry firing followed, the operation of the trigger proceeded normally without actuating the firing pin/sear system.

To fire the SSP in normal live ammo mode, it is necessary to activate the trigger system. This is done by pulling the slide back until it locks into the open position with no magazine in the pistol. The trigger then needs to be pulled back until the LED under the safety catch begins to blink. With the safety moved to 'F', the loaded magazine can be inserted (it goes in from the top) and the breech can be closed by grasping the locking catches on each side of the slide and allowing the slide to close.

The battery system on the SSP-E will shut off if the pistol is not used. The system goes into standby mode for 20 minutes and the diode will flash every two seconds during this period. After another 3 minutes, the diode will flash more quickly – twice per second – for 3 minutes and then shut off.



SPECS

WALTHER SSP-E

Manufacturer:

Umarax – Walther

Model: Walther SSP- E

Calibre: .22 Long Rifle

Magazine: Top loading
5 shot capacity.

Barrel length: 153mm

Sight radius: 220mm

Weighty: 970g

Dimensions (L, W, H):
290mm/50-mm/135mm

Action: Blowback with pneumatic
recoil control damping system

Sights: Fully adjustable (windage,
elevation and notch width) rear. 6
width option for front sight.

Trigger: Electronic, fully adjustable

Grip: Orthopaedic walnut
– right hand medium

RRP: App. \$3500 – shop around

ABOVE: The dynamics of the SSP's design combined with the recoil damping system almost eliminates shot-to-shot recoil movement in any of the rapid fire stages of the ISSF matches for which the Walther is designed.

BELOW: The impressive 10-shot test group supplied with the SSP – E was shot with Lapua ammunition. The Walther comes with plenty of supporting documentation.

BELOW RIGHT: This illustration from the supplementary manual shows how the optional dry fire system works with the electronic trigger.



The system is also designed to show battery condition – remaining power, in other words. If the trigger is squeezed, the diode will emit a long flash followed by a series of short flashes, with each short flash indicating 1000 shots remaining. If the battery level is low, the diode will emit for short flashes followed by a pause.

The SSP-E was put through several shooting sessions with a variety of .22 LR standard velocity ammunition. The test group that came with the Walther (10 shots at 25m with Lapua ammunition) was one ragged hole.

As had been the case with high-grade rimfire target rifles that we have tested, the ammunition has a significant effect on accuracy and those purchasing a Walther SSP should do some testing with a variety of match ammunition to see what the SSP likes best.

Shooting the pistol from a steady 2-handed sandbag rest at 25m highlighted this variation in ammo performance. With ammunition that it liked, the

Walther delivered X-ring groups, and it had a distinct preference for European match ammo – RWS and Eley. The worst performer was Remington's .22 Target that we could not get to hold a 10 – Ring (50mm) group, largely because of fliers out of every magazine full.

Over the course of the test, over 300 rounds were shot through the SSP without a single malfunction. The handling characteristics of the SSP in rapid fire sequences are obviously very good, with very little vertical recoil movement. The orthopaedic grip that came with the test pistol was a perfect fit for me- I assume it was the standard size, right handed version.

The SSP weighs just under 1000g, which is relatively light, but with most of its mass well forward, it feels heavier and has enough inertia at the front end to hand steadily from the shooting hand – a feature that appeals to me. An aluminium barrel weight is supplied in the kit that fits in a dovetail under the barrel, and it also has its own dovetail so additional weight can be added if required.

A second front sight element is also supplied in the kit. These triangular units can be rotated to vary the width of the front sight, so there are six front sight width variations available, to mate with the width adjustable rear sight blade.

Walther has done a very good job putting this very innovative design together, and the addition of the electronic trigger should further enhance the reputation of this high-performance target handgun. For more information on Walther products, contact Frontier Arms Co, at www.frontierarms.com.au.

