Andrew shooting his custom 7mm at 800 yds using the LongShot LR-3 system in challenging windy conditions. He was pushing the 180gn Hornady ELD-Ms at 3250fps out of one of our wildcats. You can see the receiver on the right and the LabRadar in the centre

WRITTEN BY ~ GREG DULEY

LONGSHOT TARGET CAMERA SYSTEMS

As anyone who's done any shooting at longer ranges can attest, seeing where your bullets are hitting is one of the challenges

And when you're shooting at long range, you're often wanting to make elevation and windage corrections for the specific environmental conditions of the day - but to be able to do this, you need to know where your shot actually went in the first place! No matter how powerful your spotting scope, atmospheric conditions like mirage will dictate whether you can see your bullet holes or not.

In ideal conditions with a quality spotter you can usually see reasonable size bullets holes in the white of a target out to 600 yards, but beyond 300 yards they are impossible in the black. The bullet splash on a freshly painted gong can be seen a lot further out, but if you miss the gong due to misreading the elevation/wind correction required, you mostly can't see where the shot went to make that correction. **And you will have to keep painting the gong to see fresh bullet holes that go in or near existing ones.**

The acoustic target system we have on our home range is certainly superb, but reasonably expensive and not particularly portable. Assorted target cameras have been around for a while, starting with a simple little video camera set on a tripod down at the target that you then play back later and see what shot went where, but this obviously doesn't help you correct while you're shooting unless you drive up and down after every shot.

And now to the latest in the target camera genre being used more and more by the leading experts in the extreme range shooting field – the LongShot LR-3. Made in Texas in the good ol' US of A, this UHD camera system offers some serious advantages for anyone who spends any time punching paper at extended ranges. The guts of the system that puts it ahead of the simpler versions already discussed is it has a radio link that transmits what's going on down at the target back to your screen of choice at the shooting position – either a smart phone, tablet or Laptop with Wi-Fi capability, and provides a unique range of extremely useful features via the TargetVision app.

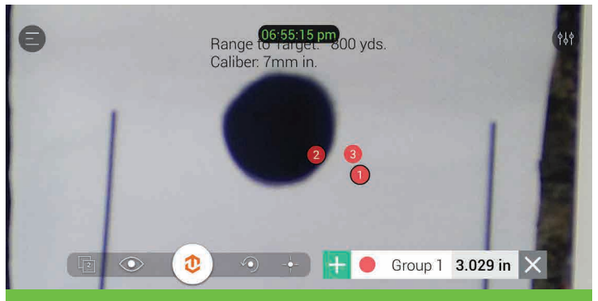
OPERATION

Simply, you set up the camera 8 to 16 feet away from your target, with the back of the unit pointing generally towards your shooting position. Connect the camera via Wi-Fi to your smart phone via the downloaded app, then aim the swivelable camera at your target using the image you now see on your screen. Then set up the receiver back at your shooting position pointing at the target, connect your smart phone to it instead of the camera, and you are in business. Depending on the particular unit chosen, this system will give you instant point of impact info out to 2 miles/over 3km away! The Long Shot Marksman camera on its own will transfer the image to your smart phone up to 300 yards away without needing the extra receiver, and there's also the Hawk spotting scope camera enabling you to use all the features of the app out to any distance at which you can see your bullet holes through your spotter without having to get up from your shooting position to look through the spotter. There is also an optional external antenna that connects to the camera from up to 75 yards away that allows you to protect the camera in front of the target with a steel plate or earth mound etc to prevent it getting shot by an errant round. Or you can pay about $50USD extra and LongShot offer an extra bulletproof 2 year warranty in case you accidently shoot it.

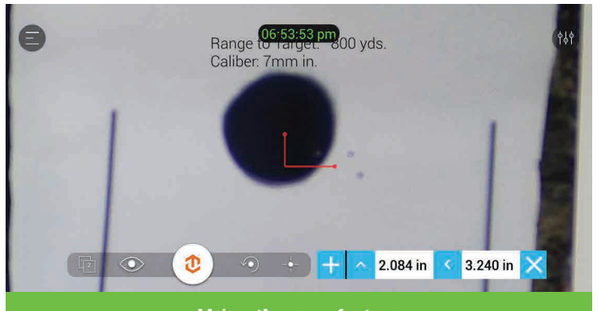
The Hawk spotting scope camera is self centreing and levelable as you zoom up the eyepiece

Examining the 800 yd target. LR-3 camera in the left foreground, 8 feet from the target. Ideally for best results try not to be shooting directly towards the sun, resulting in a backlit target and sun on the camera lens - and therefore also the objective lens of your scope – just common sense really!

The target as seen through the LR-3 camera system



Using the shot marker feature



Using the zero feature

FEATURES

Now to the features of the app:

BLINKER SHOT LOCATOR – if you touch the shot locator button after each shot, your most recent shot will blink making it easy to distinguish.

SHOT MARKING – after each shot you can touch your screen to place a consecutively numbered shot marker on each impact, making it easy to keep track of your group.

LIVE GROUP – if you first touch on your screen each side of a known dimension of your target eg your bullseye diameter or target frame width etc, then the app will tell you what your group size is after each shot.

ZERO MODE – if you tap and register the centre of your bullseye, then the app will tell you the required amount to zero after each shot, or of the whole group – in either inches, MOA or Mils depending on what you choose as the output.

You can take snap shots and video, and there is the full range of shooting session record keeping options, so you can go back at a later stage and review your shooting session shot by shot.

As you can see a lot of thought has gone into the software that makes the system extremely useful and user friendly. I was really impressed with the whole package and can see why the leading long range experts in the USA use the LongShot system almost exclusively. You can upgrade the Marksman to the LR-3 without having to buy a whole new system, and you can run up to four LR-3 cameras off the one receiver so you can monitor multiple targets and shooters at the same time. The self-centering and levelable Hawk spotter cam is also very well thought out. All the systems are powered by replaceable rechargeable batteries that give up to 9 hours run time. They come with chargers and tripods all stored in padded carry cases.

Owl Optics are the NZ distributors, and they also supply the LabRadar Doppler radar chronographs - which combined with the LongShot provide a superb one stop shop long range range shooting analytics package.

RRP

$479 - *Hawk spotting scope camera*
$959 - *Marksman 300yd camera*
$1799 - *LR-3 two mile system*
OWLOPTICS.NZ