



Rural Operations

Turn-key Solutions & Products



About Our Solutions

We design, develop and manufacture dependable products that support real-world operational demands.

We draw from our years of operational experience as end users to ensure our products simply work when you need them to the most, our technical solutions are always designed to be user-friendly removing the functionality stress seen with other equipment on the market.

Our products are designed to be both stand-alone and/or to enhance partner technologies, why re-invent the wheel if we can make it more operationally suitable.

Our Rural Technical Surveillance turn-key solution has been carefully collated to stream-line tactical and covert efficiency.

**Zero affect on the natural host environment,
Maximum effect of target exploitation**



MEDIUM-RANGE STAY BEHIND SOLUTION [MR-SBS]



DESCRIPTION:

The Medium-Range Stay Behind Technical Solution is ideally suited to target stand-off from 10 meters to 500 meters for maximum effect, the largest focal lens will allow confirmation of movement [without PID] up to 900 meters in ideal environments.

CONTENT:

- OWL twin camera DVR / Bearer & all associated cables
- Low-light camera
- HD colour camera
- Medium-Range lens kit
- IR Illuminator kit
- RATS ground sensor system RF/GSM
- Deployment tool kit
- Drop down concealment kit

LONG-RANGE STAY BEHIND SOLUTION [LR-SBS]



DESCRIPTION:

The Long-Range Stay Behind Technical Solution bridges the gap where even greater stand-off is required [1.6km without PID] with its internal Pan/Tilt/Zoom capability means the entire system can be buried underground concealing it from possible threats.

CONTENT:

- Long-Range internal PTZ HD camera & all associated cables
- Ruggedised encoder / DVR / PTZ controller
- RATS ground sensor system RF/GSM
- Light weight tripod
- Sub-surface base plate
- Deployment tool kit
- Drop down concealment kit

OWL v2 RUGGEDISED TWIN DVR / BEARER

DESCRIPTION:

The OWL-V2 is a ruggedised long-term stay behind DVR, operating a twin camera set-up allowing the user to control multiple areas of interest simultaneously.

The system has inputs for activity alerts and outputs which enables the user to switch third-party devices on, such as our covert illuminators.



SPECIFICATIONS:

- Custom software
- Twin USB Camera
- Internal storage
- Power 12V DC
- Dimensions 135 x 90 x 40mm
- IP67 rated

KEY FEATURES:

- End-to-end encryption
- Input - Activation trigger / Activity alert
- Output – switching other devices on
- Over the horizon transmission
- Compromise alert

HAWK RUGGEDISED CELLULAR HUB

DESCRIPTION:

The HAWK is a ruggedised stay behind cellular hub which enables the end user unlimited transmission range of live target activity via remote access over the 3G/4G & 5G networks.



SPECIFICATIONS:

- 3G / 4G / 5G
- GPRS / GSM / WIFI
- Web interface features
- Power 12V DC
- Dimensions 145 x 110 x 40mm

KEY FEATURES:

- Secure end-to-end encryption
- Advance fire wall features
- Interchangeable SIM access
- IP67 anti-tamper enclosure

VOLE RUGGEDISED ENCODER, DVR & PTZ CONTROLLER

DESCRIPTION:

The VOLE system is a ruggedized stay behind encoder and PTZ camera controller. Its operating system has been designed in-house ensuring it is simple to use with no added complication on target, give it power, connect camera and dangle.

Video streams can either be watched live or stored via its' on-board memory and replayed or downloaded later.



SPECIFICATIONS:

- Custom software
- HD-SDI – USB encoder
- Single channel PTZ camera
- Dimensions 210 x 120 x 40mm
- Power 12V DC

KEY FEATURES:

- Internal storage
- IP67 rated
- No switches
- Secure end-to-end encryption
- Compromise alert

TICS RUGGEDISED USB CAMERA STREAMER

DESCRIPTION:

The TICS is a compact ruggedised single channel streaming device. Connected to any GSM dongle and compatible with all our USB cameras makes it simply plug and play.

Powered by 5 volts means any off-the-shelf power bank will work making it super operationally friendly at every level.



SPECIFICATIONS:

- Completely sealed resin case
- End-to-end encryption
- Dimensions 100 x 50 x 20mm
- USB3 & USBC tails

KEY FEATURES:

- Compact
- No switches, just add power
- Will work in conjunction with any of our USB cameras

LONG-RANGE INTERNAL PTZ CAMERA

DESCRIPTION:

This unique method of positioning the Internal Pan & Tilt zoom lens provides the user with a capable long-range camera system in a compact ruggedized housing.

The unit remains stationary throughout its operation, meaning it can be buried in the ground or covertly deployed in a hide, providing a stable mounting platform.

The camera is sealed, and nitrogen purged to prevent water or dust ingress and provides a reliable solution even in harsh environmental conditions.



SPECIFICATIONS:

- 25-129mm 5x Optical zoom
- Sony Exmor R1 / 2.8 CMOS
- Weight 2.2Kg
- Power 12V DC
- Dimensions 237x80x85mm
- IP65 rated

KEY FEATURES:

- Internal pan / tilt / zoom
- Nitrogen purged to support rural use
- 4K HD camera option on request
- ICR auto cut filter
- Auto focus
- Digital zoom 12x extended function

RUGGEDISED LOW-LIGHT TACTICAL CAMERA

DESCRIPTION:

Our ruggedised low-light USB camera is compact and easily concealable above and below ground at close range.

Hosting the 0.0005LX sensor paired with a 100mm HD lens with an adjustable iris, we have integrated the system into a lightweight customised tactical chassis and sleeve.



SPECIFICATIONS:

- 100mm HD adjustable lens
- Ruggedised sensor chassis
- Built-in picatinny rail & tripod mount



EOSTRIX project ULTRA LOW-LIGHT RUGGEDISED CAMERA

DESCRIPTION:

The EOSTRIX camera project has been developed for those looking for a cost effective ultra low-light camera capability.

We have designed a number of ruggedised 3D printed enclosures to support the Canon ME20 sensor.

Our enclosures are custom designed and printed in industrial strength resin to house your specific lens requirements.

KEY FEATURES:

- Full face honey-comb panel [removeable]
- Built-in picatinny rail for laser attachment
- External anchor points for sub-surface deployments
- Custom printed to support your requirements

RUGGEDISED USB CAMERA SENSORS

DESCRIPTION:

To support all missions our USB camera range covers all eventualities, machined with a standard M12 lens mount makes them fully compatible with the Medium-Range Lenses. Our cameras come ruggedised ready to use direct from the case with our OWLv2 DVR.



LOW-LIGHT:

- 1/2.8" CMOS sensor 1080p
- 0.0005LX f1.2
- Frame rate 30ips



HD COLOUR:

- 1/2.8" CMOS sensor 1080p
- 0.025LX f1.2
- Frame rate 30ips

MEDIUM-RANGE LENS KIT

DESCRIPTION:

The Medium-range capture kit comprises of carefully selected 'fixed' focal lenses specially designed for medium range outdoor deployments.

SPECIFICATIONS:

- 20mm
- 50mm
- 70mm
- 100mm
- 150mm
- 250mm
- 90-degree adapter
- Honey-comb caps



MINIATURE - USB CAMERAS

DESCRIPTION:

Camera selection is normally dictated by the mission and the environment, to support all missions our optional USB camera range covers all eventualities.



MINITURE LOW-LIGHT:

- Sony STARVIS 2MP 1/2.8" CMOS sensor
- Dimensions 19.5x15x17mm
- M12 lens with 95-degree angle
- 1080p 30 FPS video



MICRO PCB:

- Simple video sensor with 640x480 output
- Dimensions 8x25x4.5mm
- Operating voltage 5v
- PCB format only



STUMPY BULLET:

- 1/2.8" CMOS sensor 1080p
- M12 lens – ideal for accepting larger lenses
- Dimensions 20x25mm [stumpy]



MINITURE THERMAL:

- Long-wave IR Thermal with 80x62 pixel array
- Dimensions 70x15x15mm
- NETD of 150mK RMS at a 1Hz refresh rate
- 25 frames per second

RUGGEDISED MICRO BULLET CAMERA

DESCRIPTION:

Our ruggedised mini FA camera is perfect for close-range collection due to its low-light capabilities and its ability to function through a 1mm aperture with up to 13mm of stand-off.

SPECIFICATIONS:

- Dimensions 35mm x 12mm
- Operating voltage 5 ~ 12v
- Potted alloy enclosure



RATS REMOTE AREA TRIGGERING SYSTEM

DESCRIPTION:

The RATS has been developed as an ultra-ruggedised stay behind Trigger / alerting system.

The system is supplied with up to four [4] long-range PIR / Radar sensor units terminated on 1.5 meters of cable allowing concealment and elevation if required.



SPECIFICATIONS:

- Up to 6 months run time
- 2Km RF range
- Sealed in potting
- RFID / Global repeater unit
- Size 110x70x30mm
- IP67 rated

KEY FEATURES:

- Fully sealed with internal battery
- Powers up on sensor connection [no switches]
- LORA RF technology
- GSM global forwarding/alerts
- Works in conjunction with the OWL enhancing its ability to contain a large area of terrain remotely

940nm COVERT IR ILLUMINATOR KIT

DESCRIPTION:

Our close-range Covert IR Illuminators have been designed to offer covert lighting across the operational area:

Housed in lightweight but durable sleeves fully sealed protecting them from harsh outdoor environments.



SPECIFICATIONS:

- Power 5v DC
- Size 20x60mm
- IP65 rated

KEY FEATURES:

- Compact
- Lightweight
- 940nm



DROP DOWN CONCEALMENT BAGS

DESCRIPTION:

Our drop-down bags come in three sizes and are designed as a rapid method to conceal and weather-proof technical devices above or below ground.

The mesh enables the user to attach 3D foliage supplied enhancing its camouflage even further.

SPECIFICATIONS:

Sizes:

- Small 20 x 10 cm
- Medium 24 x 15 cm
- Large 35 x 25 cm



20 SECOND CONCEALMENT KIT

DESCRIPTION:

We have designed the ultimate 20 Second Concealment Kit. It is exactly as it sounds.

Our flexible tree bark is designed to wrap round any object instantly transforming and blending it into its natural setting.

The panel can also be stretched around a tree trunk, fixed in position concealing equipment elevated against a tree.

SPECIFICATIONS:

- Panel size 45cm x 35cm
- Realistic ivy to complete wrap
- Dry dirt powder
- Latex glue
- Scent distraction powder
- Fixing pop studs

Available barks:
Oak / Pine / Willow



CUSTOM & OFF-THE-SHELF DIGITAL MIMICRY

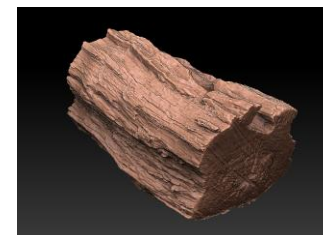
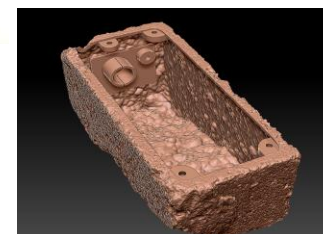


DESCRIPTION:

Within our in-house fabrication cell, we can re-create everything from rocks, tree branches, household bricks, discarded fruit and array of urban street furniture including metallic vehicle parts.

By using modern Computer Aided Design [CAD-CON] to 3D scan in detail and print custom enclosures we can rapidly produce an identical substituted for time sensitive operations.

We can supply ready to deploy concealments or if required digital CAD files only enabling the end user to manufacture their own enclosure while deployed in-country.



LONG-RANGE CAMERA NOSE CONE CONCEALMENTS

DESCRIPTION:

Our 3D printed nose cones have been designed to simply slide over the front of the long-range camera offering greater concealment and protection from sun-glare when deployed in operational environments.

With removeable honeycombs that can be replaced with ND filters or a combination off both. Printed in strong engineering strength resin [colour black]

OPTIONS:

- Area target rural
- Point target rural
- Low profile urban
- Designed to fit the Claresys BPATZ camera



RIGHT-ANGLED PRISM ATTACHMENT KIT

DESCRIPTION:

The right-angled prism attachment kit enables the long-range PTZ camera to be deployed vertically which opens new methods of concealment.

The attachment kit has an internal aperture size of 52mm allowing the fitment of various filters, such as polarising, ND and IR to mention a few.

SPECIFICATIONS:

- Easy fitment
- Aids concealment
- Enhances deploy-ability
- Attachment of filters
- Designed to fit the Claresys BPATZ camera



MEDIUM-RANGE LENS HONEYCOMB CAPS

DESCRIPTION:

Our medium-range push fit honeycomb caps are the perfect concealment enhancement to safeguard the risk of sun-light reflection on the glass.

The push fit means they can be position giving different depths of stand-off between glass and honeycomb with no effect on the lens performance.

SPECIFICATIONS:

- Extra Large
- Large
- Medium
- Small
- Designed to fit the Claresys CT Lens range



DEPLOYMENT SCENT DISTRACTION POWDER

DESCRIPTION:

Our scent distraction powder has been developed and proven to safeguard technical deployments within the natural environment.

Our powder aids to disguises human trace scent and that of the ground disturbed when concealing the technical system.

SPECIFICATIONS:

- 10x scent packets
- 1x scent dispenser
- Storage pouch
- User guide



ADJUSTABLE CAMERA DEPLOYMENT GROUND SHEET & CONCEALMENT BLINDS

DESCRIPTION:

Our camera deployment work sheets are made from mil-spec fabric making them super hardwearing.

Their unique design allows the user to select the size of the required hole to be dug via the molly style selectors

The system can also be deployed as a concealment work screen when in high-risk locations close to a local population.

SPECIFICATIONS:

- 4x Panels 1000 x 750mm adjustable digging aperture
- 2x Panels 1500 x 750 – extender panels or concealment screen
- 6x Anchoring pegs
- Screen elevation cables



TECHNICAL RECONNAISSANCE TOOL KIT

DESCRIPTION:

Our technical reconnaissance kit has been developed over many years of technical deployments and contains all the required equipment to ensure a viable camera deployment above and below ground is achieved.

CONTENT:

- Covert IR camera / 18-45mm lens
- Ground probe
- Sample sacks x2
- Cable measure
- Rule & tape
- Laser pointer [IR]
- Sketch panel
- Marker pens
- Drop sheet



HEDGEROW DEPLOYMENT KIT

DESCRIPTION:

For many years, the hedgerow deployment kit has been the secret weapon of ours, used when concealing covert cameras at close range within a mature and/or overgrown hedge.

CONTENT:

- Fixing tap
- 2x Long rods
- 1x pivot rod
- 1x short rod
- 1x micro tripod head
- 1x clamping rod
- Covert drilling kit
- Scent distraction kit

KEY FEATURES:

Gives the technical operator the flexibility when deploying camera systems in thick hedgerows, removing the need to thin them out via cutting and/or working on the target side.



SUB-SURFACE CAMERA DEPLOYMENT TOOL KIT

DESCRIPTION:

Our sub-surface camera deployment tool kit is a turn-key solution containing all relevant tools and accessories for a successful camera deployment. Tools are stored in 4 separate pouches keeping organisation in order in low-light situations.

CONTENT:

- Adjustable ground sheet & concealment blinds
- Turf cutter & small trowel
- Short spade
- Cable cutter and anchors
- Soil sacks x2
- Leaf-litter sacks
- Hand brush
- Scent distraction kit
- Storage pouch



LIGHT WEIGHT TECHNICAL TRIPOD

DESCRIPTION:

Our lightweight technical tripod has been designed to support the compact Long-Range PTZ camera in rural settings. Its uniquely shaped legs machined from alloy work as individual ground spikes anchoring the tripod in position.

SPECIFICATIONS:

- Height 340mm
- Weight with head 980g
- 5Kg maximum load



TECHNICAL TREE MOUNT

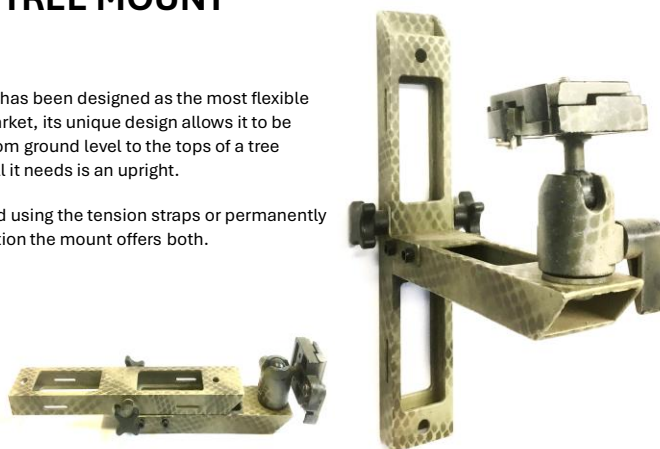
DESCRIPTION:

Our technical tree mount has been designed as the most flexible support system on the market, its unique design allows it to be mounted at any height, from ground level to the tops of a tree canopy, it has no limits, all it needs is an upright.

Either temporarily deployed using the tension straps or permanently screwed and fixed in position the mount offers both.

SPECIFICATIONS:

- Laser cut aluminium
- 40kg maximum load
- Compact design
- Dimensions:
00 x 00 x 00



BULLET CAMERA QUICK DEPLOYMENT MOUNTS

DESCRIPTION:

The bullet camera quick mounts have a flexible clip-in design allowing any bullet camera to be firmly held in position. By cleverly using the natural up-right, for example a hedgerow stump means the bracket has X – Y adjustment.

Secured in place using 3M adhesive pads while alignment takes place, once correctly positioned is held firm via two screws.

CONTENT:

- 5x mounting brackets
- 10x screws



CLARESIS MINI FA CAMERA QUICK DEPLOYMENT MOUNTS

DESCRIPTION:

Our Claresis mini-FA camera mounting bracket has been designed to support rural deployments of this highly respected camera.

Printed in high strength resin, and with a standard Whitworth mounting thread at the rear offers multiple deployment options, such as tree spike, tripod or our hedgerow deployment kit.

CONTENT:

- 5x mounting brackets
- Tripod not included*



Close-Range Rural Camera Deployment

Attendees will be taught in-depth concealment methodologies, specialist drilling techniques, and Trojan enclosures, which allow close-quarter footage to be obtained through pinholes with perfectly achieved arcs.

The ISTF Close-Range Camera Deployment training delivers proven methods, procedures, and bespoke techniques developed in-house. Coupled with our attention to tactical innovation, we are the leading training provider in this discipline.



Specialist in-house products supporting training & operational needs

Skills retained & returned to the unit:

- Have the knowledge to conduct operational planning and street level reconnaissance to ensure a robust cover plan is executed
- Be able to covertly insert over an urban threshold to conduct Detailed Technical Reconnaissance to confirm the feasibility of the close-range camera deployment
- Familiarised with a variety of covert camera technology and understand its limitations
- Configuration of stay-behind systems required to transmit live footage over the horizon
- Deployment of remote monitoring sensors for triggering and alerts of unwanted activity
- Conduct ground preparation for close-range camera deployments
- Conduct pre-deployment concealment methods
- Apply specialist drilling and Trojan techniques required to conceal close-range cameras above and below ground level
- Use 'scent distraction' and ground-sign management skills to mitigate risk of compromise
- Apply caretaking of long-term placements

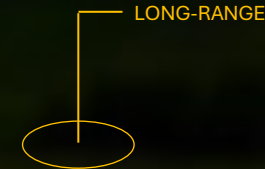
Long-Range Rural Camera Deployment

Attendees will be taught covert skills & tactical procedures that allow them to achieve greater target stand-off while still perfectly aligning their optics.

The programme covers in-depth methodology in the use of multiple cameras at various angles, creating different capture zones. This includes primary and secondary camera placements, technical anchors, and remote area protection.

Skills retained & returned to the unit:

- Have the knowledge to conduct operational planning and ground level reconnaissance of a discreet drop off circuit
- Be able to covertly insert over open terrain to conduct Detailed Technical Reconnaissance to confirm the feasibility of the long-range camera deployment
- Familiarised with a variety of covert camera technology and understand its limitations
- Configuration of stay-behind systems required to transmit live footage over the horizon
- Deployment of secondary cameras acting as security and over watching the deployment site
- Deployment of remote monitoring sensors for triggering alerts of activity
- Conduct ground preparation for long-range camera deployments
- Conduct pre-deployment concealment methods
- Apply the correct methods and techniques required to conceal long-range cameras below ground level
- Use 'scent distraction' and ground-sign management skills to mitigate risk of compromise
- Apply first light drills and caretaking of long-term placements



CLOSE-RANGE

ISTF SKILLS FACT:

With over two thousand successful camera deployments across the globe, we are professionally positioned to pass on our proven procedures, techniques and methodology.



**COVERT TACTICAL & TECHNICAL TRAINING
PRODUCTS AND DESIGN**

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