



2006-7 Catalog



Sandpiper Technologies, Inc.

**WILDLIFE RESEARCH EQUIPMENT
VIDEO SURVEILLANCE EQUIPMENT
REMOTE POWER SYSTEMS**



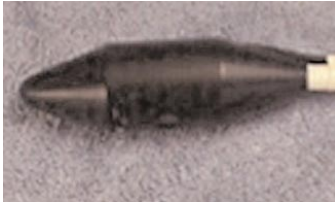
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TreeTop Telescoping Video Inspection System

CAMERAS



Color Cavity Camera™

P/N 2003.0 \$1,835

This camera is the system standard for cabled and wireless TreeTop systems.



Nuthatch Color Camera™

P/N 2004.0

This smaller camera fits inside most tiny nests.



Multipurpose Camera™

P/N 2025.0

Multi-use color camera scans tree bark, rooftops during daylight use.



IR/White Combo Camera™

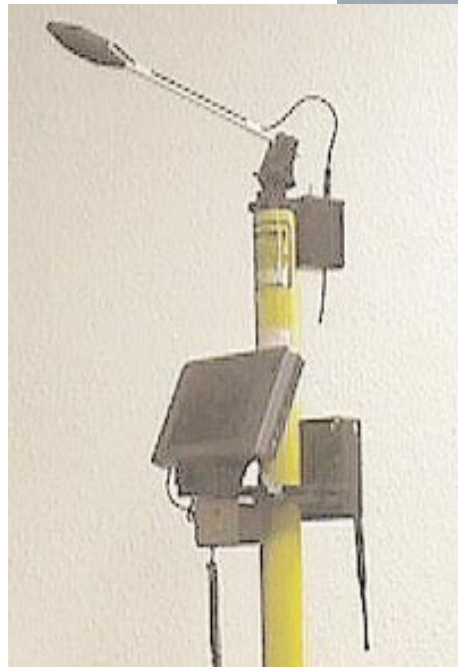
P/N 2027.0

Switches easily between white light and infrared for day or nighttime use.

Thermal Camera™

P/N 2031.0

Our latest TreeTop Peeper camera is a work in progress. Call for details.



TOP: A cabled TreeTop (CTT3) inspects a cavity nest.

ABOVE: Side and frontal views of the Wireless TreeTop (WTT4). The TreeTops shown at top and left feature the Color Cavity Camera. The TreeTop to the right shows the new IR/White Combo Camera used for day or night inspection of tree bark and other elevated positions.

TreeTop extends view to 50 feet

CABLED TREE TOP PEEPER™ SYSTEM (CTT3)

P/N 2000.0

The Cabled TreeTop Peeper™ System revolutionized the study of high-nesting avians and mammals. *No more ladders!*

- This system increases operator safety by dramatically reducing climbing requirements.
- Reduced personnel costs—lower accident rates and less personnel needed in the field.
- Inspection speeds have reportedly increased more than tenfold.

The TreeTop system is used to survey locations up to 50 feet high.

- Biologists inspect open cup and cavity nests.
- They study amphibians, bats and other critters nesting in high, hard-to-reach locations.
- Foresters survey foreign species, conduct gender studies and count eggs and chicks.
- Arborists and Foresters use this device to inspect trees for insect and fire damage.
- Law Enforcement officers use the TreeTop with special L.E. cameras to inspect rooftops and crawl spaces.

The system includes

- Color Cavity Camera; the system's standard camera is pictured to the left.
- Choose from five cameras to customize the TreeTop for your site needs.
- Telescoping pole extends up to 50 feet, collapsing to less than 6 feet.
- LCD monitor mounted on the base of the pole displays color images.
- 10-hr. battery pack with rapid charger powers the system.
- Battery level indicator shows the remaining battery level to help schedule recharges.

WIRELESS TREE TOP PEEPER™ SYSTEM (WTT4)

P/N 2001.0

STI engineering takes pole-mounted video inspection the next step by combining wireless technology with the field-proven TreeTop (CTT3). The Wireless TreeTop facilitates even faster and easier nest inspection in a tangle-free environment.

New system features

- Time savings from quicker pole extensions as researcher moves from nest to nest.
- Optional STI Wireless Viewing Station serves as a powerful training tool. Educators can add a remote monitor for training and group viewing of Watchable Wildlife.

The system includes

- Color Cavity Camera, the system's standard camera.
- Choose from five cameras to customize the TreeTop for your site needs.
- Telescoping pole extends up to 50 feet, collapsing to less than 6 feet.
- LCD monitor mounted on the base of the pole displays color images.
- 10-hr. battery pack with rapid charger, 2 transmitter battery packs and charger.
- Wireless TreeTop transmitter has two lightweight quick-change rechargeable battery packs to operate the camera, lights and wireless transmitter.
- Video output for optional recording to ELF TreeTop Companion for pictures or videos.
- Battery level indicator displays the remaining battery level to help schedule recharges.

TREE TOP CONVERSION PRICES

Prices include parts which are traded in for new, upgraded parts. Call to schedule.

CTT2 to WTT4 From black and white to color and wireless P/N 2001.1

CTT3 to WTT4 From color to a wireless system P/N 2001.2

Accessories



Belt Mounted Battery Pack

P/N 9000.0

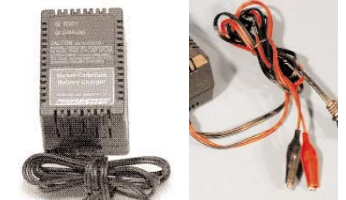
12v battery operates the CTT3 and WTT4 monitor and/or wireless receiver.



Camera Battery Pack

P/N 9000.6

This battery pack operates the wireless camera and transmitter.



Dual Rate Battery Charger

P/N 9000.2

Charges 12v batteries without overcharging. Ideal for overnight and weekends.



ELF TreeTop Companion

P/N 3050.2

Digitally record the inhabitants of the nest. WTT4 Only.



Wireless Viewing Station

P/N 2001.5

Additional monitor with wireless master receiver suitable for Watchable Wildlife. WTT4 only.

NEW!

Cheaper Peeper 16 - Wireless

Cheaper Peeper™ 16-Wireless

P/N 2020.0

Multipurpose wireless video system makes inspections easy.

- Multipurpose camera and video transmitter.
- The telescoping aluminum pole extends to 16 feet.
- Color LCD monitor and wireless video receiver mount to the pole.
- Packs easily in most car trunks.

This pole camera is used to

- Inspect hard-to-reach areas from 8 to 22 feet.
- Study bats under bridges.
- Inspect underneath cars or peek around corners.
- Check crawl spaces and drop ceilings.
- Speed home inspections—rooftops, gutters, attics.

This system includes

- Multipurpose Color Camera and illumination LEDs
- Wireless video transmitter
- 16-foot telescoping aluminum pole
- Wireless video receiver
- Color LCD monitor
- Rechargeable batteries and chargers

Options

- IR/White Combo Camera (Selectable visible or invisible illumination)
- IR Multipurpose Camera (Invisible 940nm illumination)
- Wireless Viewing Station



NEW!

IR/White Combo Camera™

P/N 2027.0

Switches easily between white light and infrared for day or nighttime use.

NEW!

IR Multipurpose Camera™

P/N 2029.0

Multi-use infrared camera scans in low light and no light conditions.

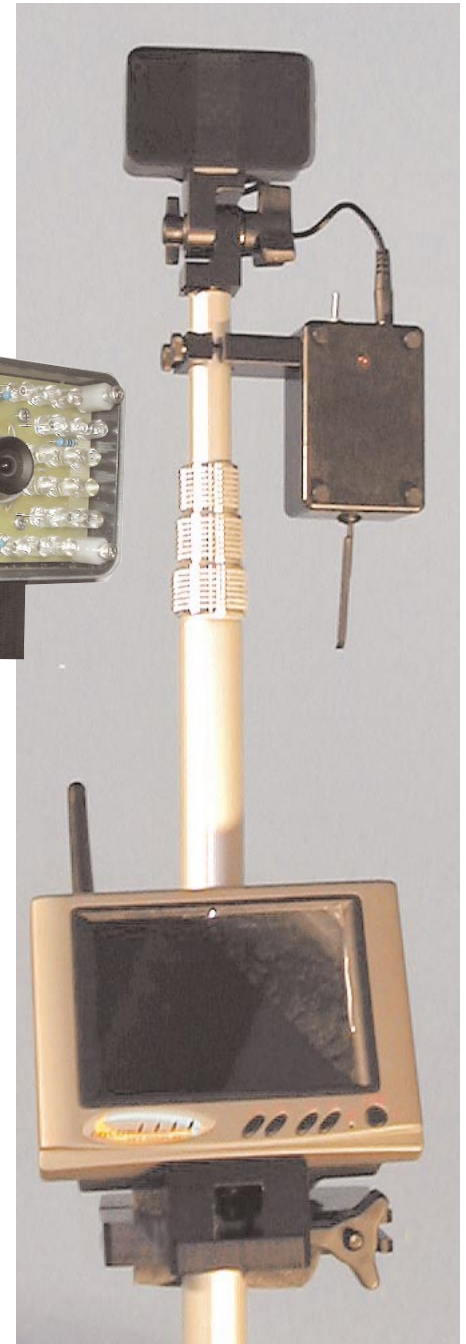


NEW!

Wireless Viewing Station™

P/N 2001.5

Additional monitor with wireless master receiver suitable for Watchable Wildlife.



ELF Companion DVR - Instant Digital Video Recordings



The ELF DVR was developed for Sentinel Systems but has proven to be highly popular with researchers using the wireless TreeTop (WTT4) and Peeper Video Probe systems. Biologists can now document population, behaviors and other nesting details with the lightweight digital video recorder. User-friendly features make it easy to view the recording on the computer or web. Researchers cut and paste into presentation software for slides, still pictures or video clips.

Plug and Play!

- Capture activities of the nest and inside the burrow.
- Document and archive inspections.
- Record dictation (audio) with onboard microphone.
- Collect training and educational material.
- Store video, audio (MP-3), digital images.
- Manage or store images on standard PC hardware.
- System runs for approximately four hours of continuous recording before requiring a battery recharge.
- Extract photographic quality still images from the digital video for publications or presentations.
- Produce web/Internet-friendly video clips.

System includes

- Digital Video Recorder (DVR)
 - Weighs 1 lb. (.45kg)
 - 24 hour video recording capacity
- Video Lab “Dock” for connecting to lab equipment
- 120 VAC power supply and charger
- All system video and interface cables needed to hook the system up
- Powered by built-in long life battery
- ELF TreeTop Companion includes a bracket to secure the ELF Companion to any wireless Sandpiper TreeTop (WTT4)

The same “Shirt Pocket” sized DVR used in our innovative Sentinel ELF Surveillance System is now available for TreeTop 4 and Peeper Video Probe users.

NEW ELF!

ELF TreeTop Companion DVR P/N 3050.2

Perfect accessory for wireless TreeTops. Collaborate with other researchers by sharing photos or video. WTT4 Only.

- Simple upgrade—Add the bracket to any TreeTop 4 in five minutes.

ELF Peeper Companion DVR P/N 3050.1

Peeper probe users have been asking us for years for a lightweight recorder that would provide still images or digital video clips. This is it.

- Upgrade existing Peepers in a snap.

NEW!

Levee Inspection System

P/N 1010.0

Levee maintenance crews become even more proactive when they use the new Levee Inspection System from Sandpiper Technologies. The system’s field-tested Peeper Video Probe System and head mounted video display provide hands-free use of the video probes. The new Levee system now includes two video probes (1.0 and 2.3 inch diameter) and the ELF Peeper Companion DVR, plus one year of “How to Support.”

- Inspect levees, dams and embankments for damage caused by rodent and animal burrows.
- Access a variety of burrows using the same proven burrow inspection tools that biologists use.
- Use the ELF DVR to help document compliance with agency policies and requirements, the Endangered Species Act and other recovery programs.

Peep-A-Roo Video Systems probe smaller burrows

ACCESSORIES

ROO SYSTEM ONLY



Peeper 2000 2.3-inch Probe

P/N 1003.2

The 2.3-inch diameter probe can be added to any Peep-A-Roo. Best used for small mammal-sized burrows and tortoises.

ACCESSORIES

ROO AND PEEPER 2000



ELF Peeper Companion

P/N 3050.1

This field-ready digital video recorder documents burrow occupants for both the Peep-A-Roo and Peeper 2000 probes.



STI 8-inch Color Monitor

P/N 8012.0

For Watchable Wildlife field outings.

**Improved
Head Mounted
Video Display!**



VISIT SEABIRDS WITH THE ROO PROBE.

Researchers use the STI probe in the Antarctic, Chile, Falkland Islands, Alaska's North Slope, Farallon Islands, Canada.

PEEP-A-ROO™ VIDEO PROBE SYSTEM (1.0-INCH DIAMETER)

P/N 1000.0

This versatile inspection probe flexes into narrow burrows of all manner of critters.

- Kangaroo Rats, Pygmy Rabbits
- Leopard Lizards, Tiger Salamanders
- Seabirds
- Snakes, insects and squirrels

*Your smooth sliding probe head
eases past obstacles....
It is the perfect balance of
ease-of-use and ruggedness.*

WATER DISTRICT MANAGER

Based on years of biologists' input, STI has refined the Peep-A-Roo to be easy to use, effective and lightweight.

- Carry weight is approximately 12 pounds without Pelican storage case.
- System includes the **improved** Head Mounted Video Display (HMD), probe(4 meter, 1-inch diameter), belt-mounted battery pack, video output, rapid battery charger.
- STI's exclusive, ergonomic HMD leaves the operator's hands free to navigate.
- The inspection probe is water and dirt resistant.
- The gooseneck probe uses rugged military spec cables and connectors.
- Night vision illumination (IR) system allows the operator to see in complete darkness.
- The illuminator is invisible to virtually all animals.
- The camera's image is in focus from 15 mm to 200 mm.

Peeper Probes help maintain levee systems



PEEPER™ VIDEO PROBE SYSTEM (2.3-INCH DIAMETER)
P/N 1001.0

**Improved
Head Mounted
Video Display!**

STI engineered this 2.3-inch flexible probe to be easier to maneuver through burrows with opening sizes of 4 to 12 inches. The Peeper 2000™ is designed to slide along the walls of the burrows as the operator feeds the camera deeper into the tunnel.

- Burrowing Owls and Desert Tortoises
- Foxes and other small mammal burrows
- Call for best lengths for Gopher Tortoises and Wolves.

STI has refined the Peeper Video Probe™ to be easy to use, effective and lightweight.

- Carry weight is approximately 12 pounds without the Pelican storage case.
- System includes the **improved** Head Mounted Video Display (HMD), video gooseneck (4 meter, 2.3-inch diameter), belt-mounted battery pack, video output, rapid battery charger.
- STI's exclusive, ergonomic HMD leaves the operator's hands free to navigate.
- The inspection probe is water and dirt resistant.
- The gooseneck probe uses rugged military spec cables and connectors.
- Night vision illumination (IR) system allows the operator to see in darkness—invisible to virtually all animals.
- The camera's image is in focus from 15 mm to 200 mm.

Built to Order Options

- Inquire about custom probe lengths (5 and 6 meters).
- Microphone with audio pickup.
- Daylight-viewable LCD monitor for Watchable Wildlife and training.

ACCESSORIES/OPTIONS
PEEPER 2000 SYSTEM ONLY



Peeper-A-Roo 1.0-inch Probe
P/N 1003.1
Add the 1.0-inch probe to your Peeper 2000 System.

Custom Probe Length
P/N 1000.4 per meter
Add an additional meter to the 4 meter standard length of the Peeper 2000 probe. Maximum probe length is 6 meters.

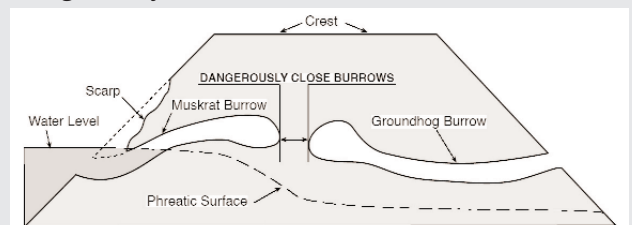
Probe Audio Pickup
P/N 1001.1
Audio mics are inserted at the time of manufacture. Peeper 2000 systems option only.

Levee Inspection System
P/N 1010.0

Levee maintenance crews become even more proactive when they use the new Levee Inspection System from Sandpiper Technologies. The system's field-tested Peeper Video Probe System and head mounted video display provide hands-free use of the video probes. The new Levee system now includes two video probes (1.0 and 2.3 inch diameter) and the ELF Peeper Companion DVR, plus one year of "How to Support."

- Inspect levees, dams and embankments for damage caused by rodent and animal burrows.
- Access a variety of burrows using the same proven burrow inspection tools that biologists use.
- Use the ELF DVR to document compliance with agency policies and requirements, the Endangered Species Act and other recovery programs.

Dangerously close burrows can cause levee breaks



Sentinel ELF 24 - Lightweight 24 Hour Digital Recorder

ACCESSORIES/OPTIONS ELF AND MAGNUM

ELF MICRO CAMERAS™

Our best field cameras ever! Waterproof, heat resistant with very low power consumption. Ideal for field studies. All IR/Color Micro Cameras use fixed-focus lens.



Standard Micro Camera™

P/N 4001.0
50° FOV—Perch camera above the nest at an easy distance.

Wide-angle Micro Camera

P/N 4001.1
65° FOV—Get the “big picture” of a field, or set in a nest box.

Telephoto Micro Camera

P/N 4001.2
26° FOV—This camera is ideal for “up close and personal” nest observations.

ZOOM CAMERAS

Adjust zoom camera lens to suit your needs. Tripod included.



Tele-Zoom Color Camera

P/N 4005.0
Provides superb color images, adjustable settings.

Ultra Low Light Zoom™

P/N 4010.0
Captures black and white images in expansive areas, 24/7.

Starlight Color Zoom™

P/N 4015.0
Accurate color video at near total darkness. 8-46 FOV.

NOTE: Higher power zoom cameras may require additional batteries or power. Call STI for consultation.



SENTINEL ELF™ 24 DIGITAL VIDEO RECORDING SYSTEM

P/N 3041.0

Two DVR Starter System—Enough field and lab gear to record everyday

The Sentinel ELF 24™ DVR System captures 24 hours of digital high frame-rate action—ideal for predation, behavior and similar studies. In the field, the ELF weighs 12 pounds, including 24 hour battery made possible by its low-power digital electronics. Compare this to heavy analog systems that weigh 25 pounds or more and require a 70-pound battery.

Try the ELF and we bet you'll never use analog recorders again!

- STI combines digital video technology with MPEG-4 audio video compression.
- Sentinel ELF records 24 hours of 25 fps (near full-motion) video and optional audio.
- Transfer video to your PC in minutes with the high-speed USB 2.0 interface.
- Extract pictures for inclusion in reports or presentations. Extracted video clips can easily be viewed on a computer, included in presentations and shared over the web.

ELF 24 Starter System Equipment Kit

- One (1) ELF Power-Camera-DVR Management Micro-computer (shown above)
 - Two (2) ELF Digital Video Recorders—One field data collection, one data retrieval
 - One (1) Dual Rate Battery Charger™
 - Two (2) 12Amp-Hr Batteries to power the system (one battery per day)
 - One (1) Converted Pelican case with waterproof camera and aux-power connectors
 - One (1) Transport Pelican Case to carry the DVR and battery to/from the field
- Note:** Additional batteries/power sources may be needed for use with certain accessories, options or cameras. Call STI for a consultation.

ELF 24 DVR includes

- Pocket-sized Digital AV Player/Recorder (MPEG-4)
- Vivid 3.5-inch color LCD screen for immediate viewing of recorded video.
- Integrated microphone, speakers, 3.5 hour lithium battery (for use without Starter Kit).
- The LCD screen helps the operator set up and easily position camera in the field.
- ELF DVR records audio when equipped with optional standalone or camera microphone and Audio and Video cables (see page 9).

Call 209-239-7460

Sentinel ELF 120 & Sentinel *Pixie* - Research DVRs

SENTINEL ELF™ 120 DIGITAL VIDEO RECORDING SYSTEM

P/N 3042.0

Two DVR Starter System - Multi-day high frame-rate predation and behavior studies

The ELF 120 is the right choice for study sites requiring high-quality video recording where daily access is impractical or impossible. The Sentinel ELF 120™ DVR System captures 120 hours (five full days) of digital high frame-rate action—ideal for multi-day predation, behavior and similar studies. The Sentinel ELF 120™ is aptly named for its light field weight and breakthrough MPEG-4 format technology for use in wildlife research.

- Same general capabilities as the Sentinel ELF 24 plus ... (Page 8)
- The ELF 120 differs from the ELF 24 with extended recording time of five days.

Note: Additional batteries/power source will be needed for multi-day recording or with use with certain accessories, options or cameras. Call STI for a consultation.

ELF 120 Starter System Kit

- Same Starter System equipment as ELF 24, except the ELF 120 DVR (120 hour) replaces the ELF 24 DVR (24 hour).

ELF 120 DVR

- Similar to ELF 24 DVR, except ELF 120 DVR is slightly thicker and heavier (Page 8).
- ELF 120 DVR records continuously for up to 120 hours.

NEW!

SENTINEL *Pixie* MOTION DETECTING DVR SYSTEM

P/N 3060.0

Starter System - Motion Detecting or triggered low frame-rate studies

The Sentinel *Pixie* is the smart budget choice for study sites requiring low frame-rate/picture recording rates and/or require a cost effective DVR for simultaneous study of multiple sites. The Sentinel *Pixie*™ DVR System captures up to 1 GB (memory card) of digital action with 8 levels of recording quality, recording rates from 10 images/sec to 1 image/5 minutes. Recordings may start via daily or weekly schedule, external trigger (optional device) or by video motion detection. Extremely low power consumption for long field life. Compatible with STI's research grade ELF Micro cameras and the low cost Sentinel *Pixie* Color NanoCam with built-in IR LEDs.

ACCESSORIES ELF ONLY

ELF Audio Capture

P/N 4095.1

Requires Premium A/V Cables.

ELF Day/Night Recording

P/N 4095.2

Records exclusively during daytime or nighttime.

ELF Motion Detection

P/N 4095.3

Add motion detection to ELF and motion triggered recording.

ELF Custom Program

P/N 4095.4

Custom recording program.

ELF Auxiliary Battery Pack

P/N 7200.0

Extra 24 Amp Hr. battery.

ELF AND MAGNUM

Fuel Cell Power System

Expand the ELF's recording capability or recharge batteries with a Fuel Cell (page 11) and/or Solar Panels (page 12).

IR Spotlight

P/N 4080.0

Spotlight provides additional IR lighting for nighttime recording.

NEW cable lengths!

Premium A/V Cables

100 feet P/N 4051.1

200 feet P/N 4051.2

EconoCables (Video Only)

100 feet P/N 4061.1

200 feet P/N 4061.2

NEW!

Cable Range Extender

P/N 4030.0

Increase the separation/range between your camera and Sentinel DVR system up to 600 feet or use a higher power camera with ELF/MAGNUM DVRs.

Compatible with existing Sandpiper Econo Cables, but may require additional batteries or aux-power supply.

NEW!

Video/Power Cable Coupler

P/N 4033.0

Couple or connect up to three Econo Cables to reach a maximum of 600 feet.

Cable length greater than 200 feet require the Cable Range Extender for best results.

NEW!

Single DVR ELF

ELF 24SD

P/N 3043.4

ELF 120SD

P/N 3043.0

Don't need to record every day? Don't need two ELF DVRs? These single DVR systems give either 24 hour or 120 hour recording capacity.

Sentinel MAGNUM 4 - STI's BEST Multi-purpose DVR!

ACCESSORIES

MAGNUM SYSTEM ONLY

Controllers and M4 Timer
Optional MAGNUM 4 Timer or Controllers tailor recording periods, save power and extend recording time. Call STI for a consultation on Magnum 4 Controllers and M4 Timer.

Day/Night Controller

P/N 4090.0

Records during the day or nighttime exclusively.

Sunrise/Sunset Controller

P/N 4090.1

Captures events during sunrise and sunset for more efficient recording times.

M4 Timer

P/N 4090.4

A set and forget programmable 24 hour timer. Multiple on/off settings every 24 hours.



Video Capture Kit

P/N 4095.0

This PC software and hardware enables the user to extract still images from the digital video.

MAGNUM Removable HD

80 GB P/N 6004.8

100 GB P/N 6004.1

Camera Field Setup Kit

P/N 4070.0

Researchers use this accessory to simplify positioning their cameras in the field (or in a tree).

PC-Link Software

Work faster and be more productive with the updated PC-Link Software. With proper camera and recorder setup, the software will enable quick identification of areas of possible interest. This allows researchers to fast-forward through uneventful periods and concentrate on the portions with significant activity.



SENTINEL MAGNUM 4™ - MULTI-CAMERA SYSTEM

Starter System P/N 3040.0

Add On Field System P/N 3040.1

The MAGNUM 4 (M4) is STI's best multi-purpose digital video recording field system. The lightweight system offers superb miniaturization with continuous recording of up to 960 hours of net recording time and consumes very little power.

- (1) Multi-camera system with good frame-rate capture for predation/behavior studies.
- (2) The highest frame-rate single-camera system offered by Sandpiper Technologies.
- (3) A single or multi-camera system to record extended periods of days, weeks or months at low frame-rates. Great for "presence absence" studies at one or two frames per second or "super slow-motion" studies at less than 1 frame per second.

MAGNUM 4 Starter System Highlights

- A 30 frame/second maximum recording rate is easily shared with up to four cameras.
- Flexible configuration capability to fit most recording needs and patterns.
- Video data is limited only by the size of the removable hard drives (upgradable).
- Program the recording periods and prioritize between these trade-offs:
 - image quality (good, better, best)
 - frames per second (individually set per camera or divvied equally across cameras)
 - recording duration (hours, days, weeks, months)
- Place up to four cameras within 600 feet of the MAGNUM DVR with our **NEW Cable Range Extender** and **Video/Power Cable Coupler** (page 9).
- Mix and match any assortment of Sandpiper cameras (page 8).
- Select from any ELF Micro or Zoom Cameras for telephoto close-ups, wide-angle overviews and everything in between, all attached to one Magnum 4 DVR.

MAGNUM 4 Starter System Kit

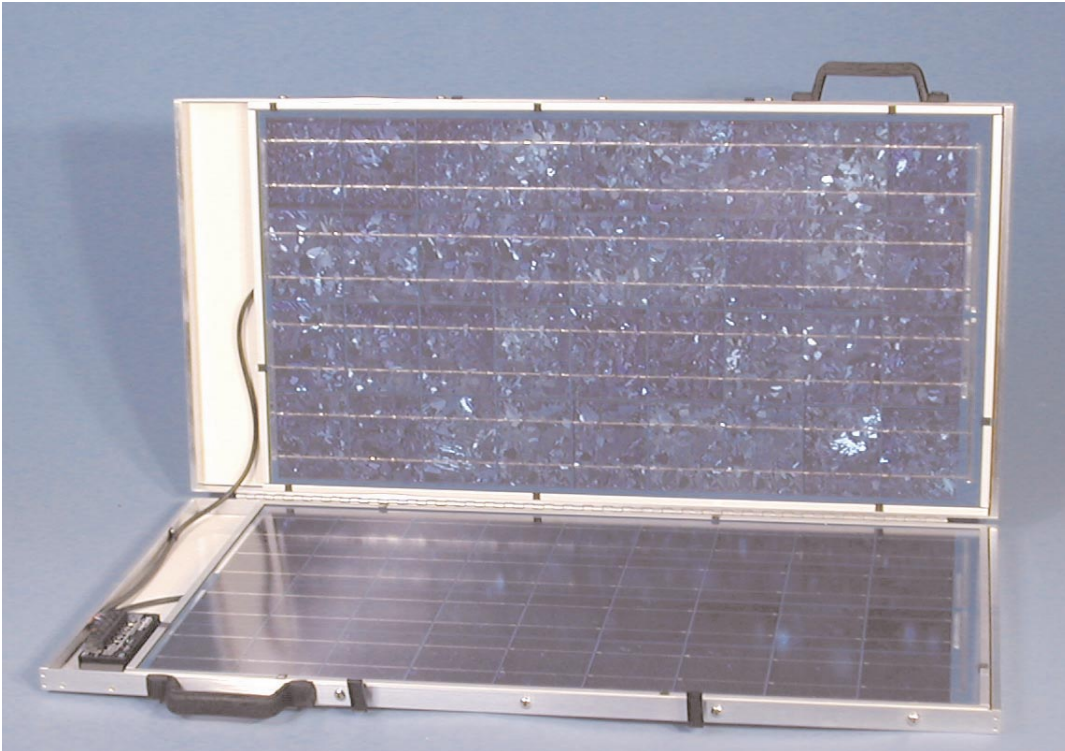
- One (1) Programmable/Configurable Multi-Camera Digital Video Recorder
- Two (2) 60 GB removable hard disk cartridges for swapping
- One (1) Pelican case with four waterproof camera inputs and aux-power connectors
- One (1) MAGNUM 4 Lab Kit (see below)

MAGNUM 4 Lab Equipment Kit

- One (1) Hand-held playback and DVR "Programmer-Reviewer" with built-in:
 - Color LCD playback monitor
 - DVR setup and control interface
- One (1) USB hard drive cartridge computer interface
- One (1) PC-Link Software (PC CD-ROM)
- One (1) 120 volt AC power supply

Note: Batteries are not included, but STI can make recommendations on a power source.

Remote Power Systems and Field Battery Chargers



SENTINEL SOLAR CHARGER™ 100

P/N 7100.0

A self-contained, portable Sentinel Solar Charger™ utilizes a 100 watt solar cell with 12 Volt solar battery charger and PWM charging regulator. The rugged case allows for safe transport and easy deployment. This accessory will maintain battery charge of any system using less than 800 watt-hours of energy daily. STI offers one-year warranty on case and a 5 year prorated warranty on the solar cell and regulator.

STI manufactures a complete line of remote power systems for all environments. Solar panels, Fuel Cell and Hybrid power projects must be well thought out and planned properly for successful operation. Please call STI tech support for consultation and/or a quotation for a Remote Power System (RPS) to meet your requirements.

SENTINEL FUEL CELLS™

Basic Fuel Cell P/N 7102.1

Remote Power P/N 7102.0

The Sandpiper Solar Charger and 50 Watt Methanol Fuel Cell combination provides optimal energy use. On sunny days the solar panel runs the ELF digital recorder effortlessly and re-charges the battery. On overcast days or overnight the fuel cell keeps the equipment running and takes its turn re-charging the system battery. Depending on the equipment and latitude of your operation the solar panel and fuel cell combination could power your equipment for weeks, months or longer.



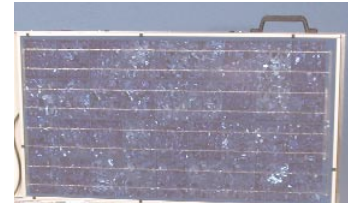
ACCESSORIES/OPTIONS



Solar Charger™ 30

P/N 7030.0

Provides up to 240 watt-hours of energy daily.



Solar Charger™ 50

P/N 7050.0

Provides up to 400 watt-hours daily—enough for most Sentinels.

50 Watt Direct Methanol Fuel Cell

ACCESSORIES/OPTIONS



Ultra-Pure Fuel Methanol, 10L Case

P/N 7103.0
Two 5.0 liter Methanol Cartridges for STI Fuel Cells. Pictured is one 5.0 liter jug.

Jumbo Fuel Cartridges Methanol, 10L Cartridge

Call STI
Double the run time of your fuel cell before changing cartridges. **NEW!**

Methanol, 28L Cartridge

Call STI
Quintuple the run time of your fuel cell before changing cartridges. **NEW!**

Monitoring Software Kit

P/N 7104.0
Software and hardware kit connects fuel cell with PC to monitor fuel cell.



SFC-50 METHANOL FUEL CELL™

P/N 7102.1

The STI SFC-50 Methanol Fuel Cell™ is the “basic” or DIY version of the STI 50 watt Fuel Cell RPS but without the weatherproof enclosure and power delivery accessories included with the Sandpiper Sentinel RPS version. SFC-50 Fuel Cell Overview:

- System supplies 12V DC up to a maximum of 50 watts continuous.
- Easily refueled with 5, 10 and 28 liter methanol cartridges.
- Powers field electronics for days, weeks or months without operator intervention.
- Saves labor, manpower, logistics and transportation costs.
- Environmentally friendly approach to provide needed field power.
- Rugged, reliable, quiet and easy to deploy.
- Used as a power source (replacing batteries) or as a fully automatic battery charger.
- This system is designed to supply power even during fuel cartridge changes!
- Extremely efficient fuel consumption varies with electrical demand. No waste!
- Suitable for indoor, vehicle, shed, hut or other customer protective packaging.



Hazardous Material Fee

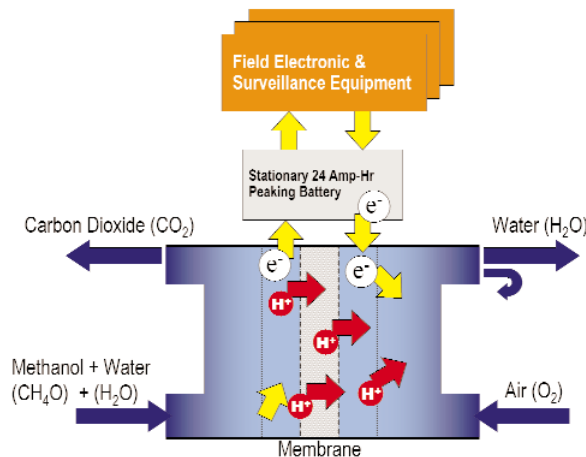
STI has established a special process for shipping methanol as a hazardous material. Hazardous material fees and charges apply to all commercial carrier shipping of methanol.

UN 1230, flammable 3, toxic 6



Note: DO NOT reship methanol on a commercial carrier without following proper hazardous materials regulations!

READY FOR THE FIELD SEASON STI Fuel Cells convert methanol into electricity



Just the Facts: Methanol Fuel Cell

SENTINEL 50 WATT FUEL CELL REMOTE POWER SYSTEM (RPS)

P/N 7102.0



A complete turnkey field-ready Remote Power System including a 50 watt methanol fuel cell, 24 Amp-Hour 12 Volt peaking battery, intake/exhaust manifolds, RPS monitoring meters, four independent fused 12 Volt power receptacles, and rugged field case. The Sentinel RPS includes all the basic features of the basic Fuel Cell (left) plus:

- STI rugged portable enclosure protects the fuel cell, DVRs and other electronics.
- The enclosure protects the fuel cell from extreme temperatures, water and dust.
- Offers a labor-saving alternative to continued replenishment of deep cycle batteries.
 - RPS weighs less than 65 pounds in a weatherproof field-ready case, excluding fuel.
 - Methanol Fuel cartridges weigh as little as 10 pounds and can last days, weeks, months.
 - Eliminates the charge/transport/re-charge cycle with 70-pound batteries.
- Powers campsite, radios, computers, cell phones, lights, wet labs, cameras, AC equipment (with option) and Sandpiper's wildlife surveillance/research equipment.
- All-in-One Marvel—Add a Sentinel ELF or MAGNUM DVR to Fuel Cell RPS (shown above).

When to use a Sandpiper Fuel Cell or Fuel Cell RPS?

- Grid Power is not available.
- Supplying power to project location difficult or not cost effective.
- Portable generator setup and fueling difficult or not practical.
- Noise restriction with portable generators.
- Solar radiation period insufficient or unavailable to project.
- Resupply of batteries a major hassle.

POWER UP!

CALCULATE YOUR FUEL CARTRIDGE NEEDS

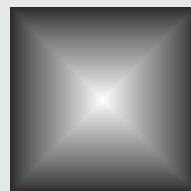
Daily use	5 Liter		28 Liter	
	24 hrs	12 hrs	24 hrs	12 hrs
Approximate run times (days)				
High (50watts)	3+	6+	17+	35+
Med (25watts)	6+	12+	35+	71+
Low (10watts)	15+	31+	88+	177+

Approximate Power Usage:

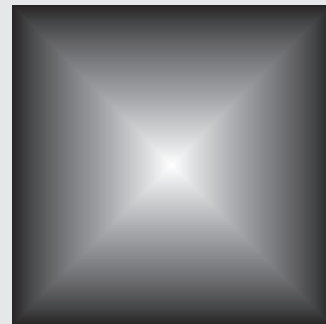
- ELF & 1 Micro Cam (5-7watts)
- MAGNUM 4 & 1 Micro Cam (11w)
- MAGNUM 4 & 4 Micro Cams (19w)



5 Liters



10 Liters



28 Liters

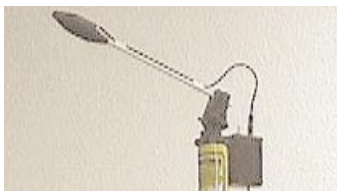
PICTURED TO LEFT:

The Sandpiper's fuel cell and fuel cell Remote Power System is a power source which converts methanol alcohol directly into 12V DC electricity to power electronic equipment or recharge batteries powering equipment in the field.

If you can run your equipment from a 12V deep cycle marine battery then chances are excellent that you can use a fuel cell too with less hassle. Using a fuel cell or adding a fuel cell to an existing battery or solar power system should not only provide power, but also offers potential for significant labor, manpower, logistics and transportation savings.

Rental / Grant Equipment Program

AVAILABLE EQUIPMENT



TreeTop Telescoping Inspection System

Cabled and Wireless, 35 and 50 foot systems



Sentinel ELF System

Digital Video Recorder with IR/Color camera



Peepor Video Probe

2.3 inch diameter gooseneck, from 3 to 7 meter probe length



Roo Video Probe (1.0 dia.)

1.0 diameter gooseneck, from 3 to 4 meter probe length



Methanol Fuel Cell

50 watt remote power systems based on methanol fuel cells



MicroProbe

Portable handheld probe with 180 degree articulating camera

Sandpiper Technologies rents many of its standard systems. The equipment rents for \$625 to \$1500 per week. Clients should speak with our sales engineer for Fuel Cell Systems rental rates, program details and hazmat information.

HOW TO RENT A SYSTEM

1. Download the STI rental form from the website:
www.Sandpipertech.com
2. Call Sandpiper to check system availability.
209-239-7460
3. Complete the rental form. Include a Visa/MC card.
4. Additional costs:
 - 10% Waiver (10% of the rental costs) provides additional insurance.
 - Shipping Costs: Client can charge shipping costs to agency account.
 - Insurance.
 - Clients shipping to, or those located within the State of California must pay sales tax.

Apply 50% of the rental fee towards future system purchase

EQUIPMENT GRANT PROGRAM

Each field season a portion of Sandpiper Technologies' rental fleet is made available to university students. **The deadline to apply is December 1** for the upcoming field season. Go to the Sandpiper website to review the proposal requirements for this grant program:
www.sandpipertech.com

Request a Sandpiper Quote

WE NEED THE FOLLOWING DETAILS TO PROVIDE A FAXED OR PDF QUOTE:

CONTACT INFORMATION

User Name and Agency Name
Billing Address and Shipping Address (street address, city/state/zip code)
Phone, Fax and E-mail address (We typically send PDF quotes via e-mail.)

LIST ITEMS YOU WANT TO HAVE QUOTED

Name of the Item and Sandpiper Part No.

HOW YOU PLAN TO USE THIS EQUIPMENT?

This is an optional question, but it helps us determine which of the Sandpiper systems, accessories and customizations are best suited for your job.

SOLE SOURCE INFORMATION

We know you write your own Sole Source Documents. Let us know if you require additional details describing what makes the STI system unique.

NEED MORE INFORMATION?

Send us an e-mail describing your project.

Sales@sandpipertech.com

Or call us at (209) 239-7460

We are happy to help select the best equipment for your needs.

Prices are subject to change without notice. Quotes are guaranteed for 30 days.

Terms and Conditions

ORDERS AND PAYMENT

Sandpiper Technologies Inc. (STI) accepts Purchase Orders from all government agencies and companies with approved credit. Payment can be made with check, Visa, Mastercard or wire transfer.

INTERNATIONAL ORDERS

All International Orders must be prepaid with either Visa/MC or funds transfer. Sandpiper issues Proforma Invoices upon request. A document preparation fee is included in the shipping charges as part of the handling cost. Certain products may not be exported from the U.S.A. without specific approval of the U.S. Department of Commerce and/or Department of State. It is the Buyer's responsibility, not the Seller's, to obtain the required licensing, unless otherwise agreed by STI.

SALES AND USE TAX

Any order or equipment rental shipped within the state of California is subject to California state sales tax, unless purchased for resale or as an otherwise tax exempt transaction. STI must have on file a valid tax exempt certificate or resale card. Client is responsible for paying Use Tax as per the laws of the State or Province in which delivery is made.

LATE ORDERS

STI, like all manufacturers, is subject to supply-chain delays. Every effort will be made to deliver orders on time; however, STI will not be liable for direct or indirect damages for late deliveries.

CUSTOM ORDERS

Custom built and special order items usually require a longer delivery period, and in some cases the order is delivered on a non-scheduled basis. Special design fees may apply.

EXPEDITED ORDERS

STI can expedite some orders at no additional charge when a faster turnaround does not impact the regular work flow. A 20% Rush Charge may apply to expedited orders when STI staff must work overtime hours to expedite the order. We must receive written authorization before applying these additional charges.

TECHNOLOGIES CHANGE

STI always incorporates the most appropriate technologies available. Should a substitute be required to complete an order, the substituted item will be of equal or greater value. STI reserves the right to alter or improve equipment designs.

PROTOCOL

Compliance with State/Federal protocol is the responsibility of the Customer. Biologists researching Endangered Species should review the required protocol with State and Federal agencies prior to purchase.

SHIPPING

All shipments are made F.O.B. Origin, Manteca, CA. Packaging, shipping and hazardous materials charges will be added to the order.

RETURNS

No merchandise will be accepted for return without a Return Authorization Number. All merchandise accepted for return and returned in the original packaging, may be subject to a restocking charge of up to 20% of the original invoice. Returns will only be granted within 30 days of the original purchase date. No returns allowed on custom built or special order items.

OTHER CONDITIONS

Typographical errors and omissions are subject to correction. Prices and specifications are subject to change without notice. Having no control over the use of any product in the buyer's possession, STI assumes no liability associated with its use. Under no circumstances will STI be liable for any loss, data loss, data corruption, damage or expenses of any kind out of the use or inability to use the products or the suitability of use for any particular task. STI cannot be held accountable for injury, strain or other work-related incidents due to unskilled or lack of "common sense" of the operator. All orders are subject to acceptance by STI. We reserve the right to refuse any order at any time. By placing an order the Buyer signifies and agrees to accept these terms and conditions of sale.

WARRANTY

STI warrants to the purchaser equipment manufactured by STI will be free of defects in material and workmanship for a period of one year from the date of purchase. Damage caused by misuse, abuse, accidents, modifications, negligence, unauthorized repairs and/or other causes beyond the control of STI are not covered by this warranty. Products distributed by STI are covered by the original manufacturer's warranty only. STI will assist in obtaining warranty repairs; however, we offer no advance replacements. THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

SERVICE CENTERS

FACTORY SERVICE CENTER—(Services all Sandpiper equipment) Call to request RMA form or download the RMA form from STI's website. Contact STI for return authorization number before sending equipment. Mark all goods with RMA No. as well as user's name, name of agency/company and return address.

Sandpiper Technologies, Inc. Phone: 209-239-7460

FLORIDA SERVICE CENTER—(Services TreeTops)

Longleaf Technologies Phone: 352-226-0086



Sandpiper Technologies, Inc.

535 W. YOSEMITE AVE.

MANTECA, CA 95337

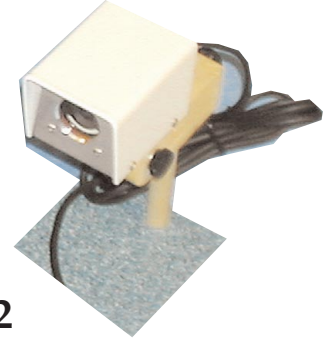
(209) 239-7460

E-MAIL: SALES@SANDPIPERTECH.COM

TIN: 77-0528780

SANDPIPER TECHNOLOGIES QUALIFIES AS:

- A WOMAN-OWNED BUSINESS
- A SMALL BUSINESS



What's inside

Elevating Inspection Systems

Page 2

Wireless and Cabled TreeTop Peeper systems for inspections to 50 feet.

- NEW • New cameras—IR/White Combo and Multipurpose cameras.
- NEW • Wireless Viewing Station—Large monitor for field classroom and group viewing.
- NEW • Cheaper Peeper 16-Wireless—Our new low-price alternative.
- NEW • ELF TreeTop Companion DVR provides still photo/video clips for presentations.

Underground Video Probe Inspection Systems

Page 6

Peeper and Roo Video Systems for probing burrows.

- NEW • ELF Companion Digital Video Recorder (DVR) easily documents field inspections.
- NEW • STI 8-inch Monitor for Watchable Wildlife field outings.
- NEW • STI's exclusive Head Mounted Video Display (HMD) has improved resolution.
- NEW • Levee Inspection System—two video probes, HMD and ELF Companion DVR.

Research Video Surveillance Systems

Page 8

Sentinel Systems—ELF, Pixie and MAGNUM digital video recording systems.

- Document behavior, predation, feeding and other wildlife behaviors.
- NEW • 50% more storage capacity with MAGNUM 4 DVR Systems.
- NEW • Sentinel Pixie Motion Detecting DVR System - Entry Research DVR.
- NEW • Our best field cameras—NEW Research-grade Micro Cameras.

Remote Power Systems & Battery Charging

Page 11

Power your remote equipment for extended recording and fewer backaches.

- Solar Power Panels
- NEW • Methanol Fuel Cells include more choices in fuel cartridge sizes.

Custom Engineering—Call for details—(209) 239-7460

We keep coming up with new products because of your excellent suggestions—Thanks!

Website: www.sandpipertech.com