Paranormal Investigations
Of Rockland County
www.pirc-ny.com

Equipment Orientation Training

This class is designed for members to review the types of equipment currently employed by PIRC and to help instruct members on their use.

Instruction will include how to turn on/off, how to change batteries, set up, play back and the proper way to use the piece of equipment during the investigation. Visual display of equipment operation will be conducted during the training session. This manual is meant to compliment the visual instruction and display and is indexed for your convenience.

1. Audio

Most people think of digital recorders as being the only source of audio devices employed on an investigation; however PIRC has 2 devices that rely on audible sound to react.

Digital Recorders

Function: Pirc utilizes digital records during preliminary and regular investigations to record the session and in hopes of capturing evps during that session.

Evps are sounds or voices not heard with the human ear during normal conversation but are encoded on the digital media and available during playback. It is believed that spirits can use their energy to encode words to simulate human voices, music or other sounds without the use of a physical body. No one actually understands how spirits are able to accomplish this.

Types: Pirc has many digital audio recorders. Among them are various Olympus models. All currently used models are stereo and therefore no longer require the use of an adapter.

Components: All our recorders have an on/off switch, volume controls, recording speed aka quality selection, internal microphones, ports for ear phones and external microphones and battery compartments. Most have folders, hold buttons, level recording functions and voice activation modes.

Usage: When placing a digital recorder you should turn it on; indicate the time and date, location and who is placing the device. The device should then have the 'hold' button turned on if available to prevent accidental turn off. All devices should be checked for the proper date and time prior to placement. If necessary the device may need to be reset, especially after battery replacement.

It is important to use tagging when on an investigation. Tagging is the method in which you identify audible sounds or the coming and going of people into and out of a location. If identifying people indicate the time and who is entering or exiting a room.

Many times recorders will be shut off and restarted to indicate the beginning of an evp session. Whether this is to be done or not will be discussed before the start of the investigation. Regardless of whether a recorder is restarted, you should always tag.

Examples: Types of sounds tagged: an external sound as a car or truck passing by, a loud bang caused by someone dropping something, someone's stomach growls or other personal sounds, a sigh, a group walking, clearing of the throat etc. Basically any sound made by the team or heard by the team should be tagged.

Sound Activated Geophone (AG)

Function: Similar to a vibration sensing geophone except this device has lights that are triggered when it hears a sound.

Type: Made from a Velleman kit and enclosed in a project box with a toggle switch.

Components: Device consists of a mini toggle switch, the completed circuit kit and battery component box.

Usage: The device would be placed at a distance in hopes of being triggered by footsteps or audible sounds not related to the team. Generally we place this in view of a team member or camera so that it can be monitored.

Examples: Team hears bangs, possibly a door or footsteps unrelated to the team and places the device on the floor or table in the general location of the sounds.

2. Video

Pirc utilizes many types of video recording devices.

- DVR

Function: The DVR or digital video recording system is used on investigations to monitor and record activity in various locations simultaneously. Since the cameras are night vision capable the system can monitor in total darkness. This system is used when ac current is available.

Type: This system is a 4 channel system which basically means there is a capacity for 4 cameras. This system is not a brand name system.

Components: The current DVR system consists of 4 night vision capable cameras, external audio inline microphones, bnc/rca cables, mouse, monitor, tripods and the dvr itself with a built-in hard drive that contains the software to run the system or back up evidence.

Usage: Once locations are identified by the tech managers the cameras are placed on tripods at a height desirable to view the area without obstructing the actual view. Wires are run to the designated locations and attached to the cameras. There are 3 hook ups on each camera. One is power, video and audio. Cameras are placed in such a way as to cover the widest area possible in that location.

The other ends of the wires are run to the dvr box or 'base station'. Each camera/wire combination is designated with a number (1-4). The camera is attached to the base station to its corresponding numbered audio and video input jack.

The base dvr is connected to a monitor for viewing. The monitor has the capabilities to show all 4 cameras at a time or just one. Audio may only be monitored from one camera at a time when in the 4 channel view. Clicking on a single camera brings up that audio.

The channel view display shows the date and running time. These are used to take notes during review so that extraction or review of evidence may occur.

Wires are taped down using blue painters tape (this leaves no residue) to avoid accidental tripping or damage to the system.

Examples: Camera's would be run on any investigation where space allows providing it has AC access. Generally the locations with the highest reported activity would be given priority.

➢ Stand Alone Cameras

Function: Stand alone cameras are commonly known as ‘drop cameras’ because these cameras maybe ‘dropped’ off at any given location due to their portability. The Go Pro clones can take both still photos and video. The twin camera captures 180 degrees of footage all on one screen. The 2.7" split LCD Screen allows for viewing both camera's live. Both styles split recordings into 2 minute segments for ease of review.

Type: We currently have 3 models of standalone cameras. They are Go Pro clones with and without Wi-Fi, and a Twin Camera recorder.

Components: The cameras are of a one-piece design; all require SD cards. They utilize Go Pro style batteries and the Twin Cam uses standard AA batteries. The cameras utilize SD cards, a mini USB connection, battery and charging unit. The Go Pro clones record in full spectrum as well. All cameras have LCD screens to monitor what you are recording. These cameras are light weight in nature and easy to operate. The built-in software allows for quality selection; which affects recording time and a variety of selectable options, most of which we do not currently employ. The camera’s video may be reviewed using the LCD screen, exported from SD card for review on a computer. Date and time should be checked prior to usage.

Usage: These cameras are used when: no AC access is available, to cover additional locations beyond the drv system's cameras or attached to brackets and carried by investigators to monitor and record individual/independent sessions. Reviews are completed via pc software. Any item of interest is recorded with the camera #, location, file # (where applicable), date and time of the anomaly so that it may be evaluated or extracted later. The twin cam can also be helpful when trying to capture hard angles in a hallway or in a small bedroom.

Examples: Investigation site has no AC or has more locations to be monitored than the dvr system can support, has a location that would otherwise be inaccessible to the drv cameras or Investigator wants to monitor their location remotely.

- Full Spectrum Cameras

Function: Used to film or photograph a location. A normal camera can record only the visible spectrum. This camera has the ability to film beyond the visible light spectrum including IR and Ultraviolet light spectrum: hence filming in the full spectrum of light. Visible light covers from 400nm – 700nm. UV light is in the 300 nm range and IR light is in the 800 nm range. Therefore a full spectrum camera covers from 300 nm – 800 nm.

"Full-spectrum light is light that covers the electromagnetic spectrum from infrared to near-ultraviolet, or all wavelengths that are useful to plant or animal life." Taken from Wikipedia.

Type: We use a SVP model T718 high definition Full Spectrum camera and a modified Sony Cybershot.

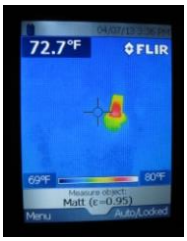
Components: Consists of the camera, battery, charger and a SD card. SVP Camera turns on/off when LCD screen is opened/closed or via manual button. Sony has an on/off button.

Usage: Camera is generally used on either a tripod or L shaped bracket in conjunction with a specialized IR/UV light. To utilize the full spectrum capabilities this specialized light must be uses. The camera can shoot video or still shots. When shooting still shots the camera is set to take 3 photos consecutively. This is a selectable option. When reviewing FS photos it is important to look for subtle changes within the photo and from photo to photo. Even the smallest change should be carefully examined. Care should be taken to hold the camera absolutely still to avoid blurring during the 3 shot succession.

When reviewing FS video care must be taken to look for subtle changes in viewing frames. It is not uncommon to stop and restart review multiple times on a given selection. Because this camera will pick up shadows cast from any of our IR lights an analyst must make sure that no other light source was available either from another camera or investigator which was inadvertently cast in the direction of the subject of the FS camera. Movement from another camera can falsely give the impression of shadow movement due to the sensitivity of this camera.

Examples: Highly desirable where shadows or shadow people are reported. Due to its portability and specialized function we use the Full Spectrum on all investigations whenever possible.

- Thermal Imager



Function: Thermal imaging cameras detect radiation in the infrared range of the electromagnetic spectrum (roughly 9,000–14,000 nanometers) and produce images of that radiation, called thermo grams. Since infrared radiation is emitted by all objects above absolute zero according to the black body radiation law, thermography makes it possible to see one's environment with or without visible illumination. The amount of radiation emitted by an object increases with temperature; therefore, thermography allows one to see variations in temperature. When viewed through a

thermal imaging camera, warm objects stand out well against cooler backgrounds; humans and other warm-blooded animals become easily visible against the environment, day or night.

Type: Flir model I5 – this particular model does not record video but instead takes single images. Many models can take continuous video.

Components: Flir imaging camera with LCD display, SD card, charger and software. The Flir imager has built in software that allows for selecting 3 different settings to view the image: B&W, Iron or Rainbow view. Different conditions dictate which setting is more desirable. The unit also has the ability to lock the current heat range thus making it easier to detect heat signatures. The higher temperatures show as red while the lower temperatures show as dark blue. This unit has a rechargeable battery and comes with specialized software for thorough examination.

Usage: Used to detect the possible heat signature of a spectral object or being. Can detect where these beings have touched or been by leaving a thermal footprint or image. Spirits while sometimes visible on a thermal imager may not display 'hot' as would a warm-blooded being.

The Flir settings are set via a drop down menus on the unit.

It is important to decide which setting applies to your particular situation. Sometimes it is better to try multiple settings till you find the one that will help you distinguish between the 'hot' and 'colder' images. To take a picture you depress the button on the handle and the image is recorded to the SD card. This image can later be evaluated using specialized software. This model self calibrates continually throughout its use unless locked.

Examples: Used to monitor a location to look for any possible spectral signs at which time you would take the picture. Monitor changes in a location or used to locate a warm blooded being.

3. EMF Detectors

Function: An *EMF detector* is a scientific instrument for measuring electromagnetic fields. EMF measurements are measurements of ambient (surrounding) electromagnetic fields that are taken with particular sensors or probes, such as EMF meters. The electromagnetic field is a physical field produced by electrically charged objects.

Man made EM fields are everywhere, they are created by electronic devices available on the market such as: automobiles, appliances, general electronics and more. There are also natural sources of EMF that exist such as the earth's magnetic field, rock formations, deep space radiation, bio-electric fields from human and animal species and yes, ghosts and other paranormal activity. Your basic EMF meter comes in two different Configurations: Single Axis or Triple Axis also known as Trifield.

Usage: Used to measure electromagnetic frequencies during baseline readings and during the investigative process. Measurements are general taken in milligauss or tesla. Meters can be used during an investigative session for yes/no answers. Also used to detect a momentary presence or pass by or a constant presence. We use these meters to also debunk non-paranormal readings. If we find a constant reading, we go to extraordinary lengths to find the source of those readings.

All the meters have similar functionality but different sensitivity. Those meters with additional functionality will have a more detailed description.

All emf detectors should be held steady or placed on a solid surface. Quick movement can give you a 'false' reading.

Current Meters:

• Type: MEL 8704R Meter – Multi-function – single axis– our Mel measures emf, temperature and has additional functions such as Rem detection (radiating antenna em detection), ATDD (ambient temperature disturbance detection) and SDD (shadow disturbance detection). Additionally it has a night vision light that can be turned on.



Components: The MEL meter has an external radiating antenna, fast response type 'K' thermal couple temperature sensor and shadow detection probes (2). Mel meter measure in 200; 2000 or 20,000 mGauss or 20; 200

or 2,000 tesla. These are selectable via the range and unit buttons but typically we use the most sensitive setting in mG.

The unit is capable of recording readings to the internal memory.

Since it is believed that spirits emit an extremely low frequency (ELF) EM field, which commonly registers between 2.0 and 7.0 mG in strength, the Mel was designed to address this ELF range at 30Hz, and is actually 20Hz lower than a KII's 50Hz bandwidth. Anything below 40Hz is considered ELF em.

The 9v battery is changed by removing screw on the battery compartment and sliding the door.

Usage: The unit's functions are powered on in various ways.

- The regular emf and temperature function is turned on by the *'power'* button on the front. This illuminates the dial with a 'red' IR friendly light so you can see the readings in the dark. The backlight may be switched off by holding down the *'backlight/set'* button.
- You can remove the temperature probe and turn off the temperature function by holding down the *'range/fast'* button.
- The unit has a 'red' navigator flashlight function that will not interfere with night vision cameras. You switch this on/off by clicking the *'power'* button.
- The *SDD* (shadow detection) function does not require the unit to be powered on from front. Instead this function is selectable under the stand on the back via a push button. The SDD will work with green or red leds, laser grids, flashlights or laser pointers. The unit comes with 2 9v powered red leds. The sensitivity may be changed. See sheet for set up.
- The *Rem* function (radiating em field) is switched on via a push button under the stand in back. The REM field can ONLY be influenced by materials and objects with high electron mobility (many free electrons) in other words conductive properties.

Based on conductive source, proximity & strength, the EM field can be easily changed causing some field distortion. When this happens the 4 LED lights and sound that will activate. The visual and audible response is proportional and correlates directly to the REM field disturbance. The stronger the influence within the REM field, the more intense the LED's

and Sound response. The REM feature is immune to Radio Waves, AC/DC EMF and other nuisance influences that may lead to a false positive response. When the REM circuit is activated, an independent discreet EM field is created around a mini telescopic antenna.

The unit may be hand held (keep fingers away from antenna) or placed. If is placed down it should be on a non-conductive source.

• The *ATDD* function is switched on via a push button under the stand on the back. The *Ambient Temperature Deviation Detection* (ATDD) monitors hot & cold spot changes and converts the changes into an audible alarm using a one octave step for each degree change, thus allowing your ears and others to easily discern each degree change. There is an ATDD button on the side to zero/clear the function so you can start monitoring fresh.

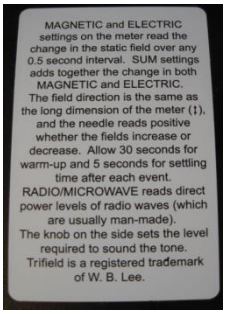
• Type:KII meter – single axis – measures emf fluctuations

Components: The KII meter measures from 1.5 mG – 20+ mG and is displayed via 5 led lights. It runs at 50Hz. The 1.5 mG range is depicted as lowest 'green' and as the signal intensifies the lights will illuminate up max 20+ mG 'red'.

The 9v battery is changed by removing the screws on back and opening the case.

Usage: This unit has an on/off button. (Earlier models needed to be held in on position.)

Type:Tri-field Meter – 3 axis



Components: The tri-field meter has a knob that turns the meter on and is a selection switch for the function you wish to run the meter. The choices are a test of the battery, magnetic mode, sum mode (combination of magnetic & electric modes), electric mode and radio/microwave testing. The silver knob on the side selects the units' sensitivity. The unit measures in hz, mG & volts/meter. See the units spec sheet for additional information.

Usage: The Tri-Field Natural EM Meter was designed to do field measurements for special research. It detects changes in extremely weak static (DC or "natural") electric and magnetic fields, and signals with both a tone and the movement of a needle-type gauge if either the electric or magnetic field changes from previous levels. Because man-made AC electric and magnetic fields are very common and could interfere with readings of static fields, the meter has been designed to ignore AC fields.

It is important that you let the meter warm up before using. When switched to your setting it will take a few seconds for the meter to adjust to its surroundings during which time the needle will activate and sound. It is at this time you should set the sensitivity of the meter.

Magnetic Mode: The meter is sensitive to changes of as little as 0.5% of the strength of the Earth's magnetic field, and the tone will sound whether the field increases or decreases. It can also detect if something is magnetized.

The Natural EM Meter can detect geomagnetic storms caused by unusual solar activity interacting with the ionosphere (which results in rapid changes of up to 10% in the Earth's magnetic field), as well as the electrical activity of ordinary thunderstorms.

Sum Mode: The SUM setting *adds together the electric and magnetic fields* and detects if either field changes. Our model (model1) is used to find a disturbance in either type of field, but in the SUM setting (see electric below) it can generally *detect if a person approaches to within five or ten feet, even on the other side of a wall.* For this reason, Model 1 is preferred for parapsychological research, when, for example, a room to be measured is known to be vacant for an extended period (except for experimenters, who remain relatively still for that period).

Electric Mode: When the dial is set to ELECTRIC, the meter is sensitive to electric fields as weak as 3 V/m (volts per meter). By setting the minimum sensitivity to change at 3 V/m, we have designed the meter to disregard this "background noise".

Human beings and animals usually emit an electric field which is easily detectable using the Natural EM Meter. *In fact, the meter can be used as a motion-activated intruder alarm.* It is so sensitive that it can detect the presence of a person through a wall. Every type of detectable physical manifestation requires a certain amount of energy, although it is not foolproof in this capacity since some people do not emit an electric charge.

Radio/Microwave mode: The radio/microwave detector is sensitive from 100,000 to 2.5 billion oscillations per second (100 KHz to 3 GHz)

The 9v battery is changed by removing the screws and opening the case.

- Type:Ghost Meter – single axis

Components: Meter and battery compartment. Meter measures in mG in the range 0 – 5 mG

Usage: Meter is switched via a button on the front. When the unit is triggered it displays a flashing red light and sound. It comes with a selectable volume control which is located on the side of the unit.

The 9v battery is changed by removing the battery compartment cover on back.

- Type: EMF Field Tester model EMF-822A – single axis

Components: Meter can measure in milligauss or tesla via a selection switch. Meter has a range of 0.1m~199.9m gauss or 0.01μ~19.99μ Tesla.

9v battery is changed by removing the battery compartment cover on the back.

Usage: The unit is turned on via selectable switch on the front. You switch the unit to either Gauss or Tesla. We use the unit in the Gauss mode.

- Type: Gauss Master – single axis

Components: Meter measures milligauss in the 50/60 hz range which is 0-10 milligauss. This unit was modified to add a led and a on/off switch. The original timed off which was not conducive to leaving the meter on and in a location.

The 9v battery is changed via the removal of the battery compartment cover on the back.

Usage: The unit is switched on with a toggle switch.

4. Geophone

- We have 2 types. Both are home made.

Function: An electronic receiver designed to pick up seismic vibrations on or below the Earth's surface and to convert them into electric impulses that are proportional to the displacement, velocity, and acceleration of ground movement. Geophones detect motion in only one direction

Type: Made from seismic kit and installed within project cases. Most of the supporting components were improvised. If you look closely at the clear project box you will be able to see the internal components.

Components: Sensitivity will change depending on placement. The sensitivity can be adjusted via a screw on the led circuit board. It is accessible through the clear cover.

Both take 9v batteries. The clear box has the battery compartment on the outside. The white opaque box requires removal of the screws to change out the battery.

Usage: We would use geophones in areas where footsteps, door slams or movement noises are heard. It is preferable to place it in view of a camera or in the presence of an investigator. To use, find a location that is sensitive to sound or has been a known location of sounds, turn the geophone on via the toggle switch and put in place. You should test by tapping, banging or walking to ensure that the unit is not too sensitive.

5. External Light Sources

- IR Lights

Function: IR lights are used in conjunction with our low level camcorders to be able to see in darkness.

Infrared (IR) light is electromagnetic radiation with longer wavelengths than those of visible light, extending from the nominal red edge of the visible spectrum at 0.74 micrometres (μm) to 0.3 mm.

This light is outside the range of what is visible to humans. See comparison to visible light. (Commonly referred to simply as light is electromagnetic radiation that is visible to the human eye)

Name	Wavelength	Frequency (Hz)	Photon Energy (eV)
Infrared	700 nm – 1 mm	430 THz – 300 GHz	1.24 meV – 1.7 eV
Visible	380 nm – 700 nm	790 THz – 430 THz	1.7 eV – 3.3 eV

Type: We use a variety of IR lights, some are purchased and others are hand-made. Each has their own merit.

Components: Each unit has numerous IR leds, a battery compartment, hot shoe mount and on/off switch.

The 9v battery is changed either by removing the screws or a battery cover.

Usage: We attach the IR light to a bracket in which the camcorder is also attached. The camcorder must be in the night-shot or low light mode.

- UV/IR Lights

Function: UV/IR lights are used in conjunction with our full spectrum camcorder to be able to film in the full spectrum of light.

Full-spectrum light is light that covers the electromagnetic spectrum from infrared to near-ultraviolet. A full spectrum camera is a device used to pick up visible and near infrared light. This device can pick up non-visible ultraviolet (UV) and infrared (IR) light.

This light is outside the range of what is visible to humans. See comparison to visible light. (Commonly referred to simply as light is electromagnetic radiation that is visible to the human eye)

Name	Wavelength	Frequency (Hz)	Photon Energy (eV)
Ultraviolet	10 nm – 380 nm	30 PHz – 790 THz	3.3 eV to 124 eV
Visible	380 nm – 700 nm	790 THz – 430 THz	1.7 eV – 3.3 eV

Type: We use a variety of UV/IR lights, some are purchased and others are hand-made. Each has their own merit.

Components: The light has a mixture of IR and UV lights to cover the full spectrum.

The 9v battery is changed either by removing the screws or a battery cover.

Usage: We attach the UV/IR light to a bracket in which the full spectrum camcorder is also attached. The camcorder can take continuous movie or single pictures.

6. Spirit Box

Function: The P-SB7 utilizes a milli-second adjustable forward or reverse frequency "sweep" technique coupled with a high frequency synthetic noise or "white noise" distributed between frequency steps. The SB7 has an enhanced FM frequency sweep which includes an additional 119 frequencies from 76MHz to 87.9MHz. A seven step adjustable sweep rate provides user flexibility based on individual technique and session circumstances. The P-SB11 features user selectable single and dual AM/FM Sweep capabilities - 50msec through 350msec in 50msec increments, Adjustable Sweep Rates, Forward/Reverse Sweep, Dual Audio Outputs, built in high intensity Red LED Flashlight, Audio Mute while Sweeping, Visual & Audible Hot & Cold Spot Detection with selectable Sound.

Type/Components: P-SB7 and P-SB11 sold by ITC research have speakers and earphone jacks and various switches to control the different settings and functions.

Both spirit boxes use "AAA" batteries accessible through a battery compartment on the back.

Usage: We utilize a reverse sweep at the highest rate with the antenna collapsed to reduce the capabilities of picking up any ambient radio stations. We attach an external speaker via the earphone jack.

Examples: Spirit box sessions are conducted to get direct responses to questions. This device is highly controversial and care should be taken to try to validate any information obtained. We listen for responses that are relevant and for voice repetition, meaning if we hear the same voice responding multiple times it is more probably a paranormal response since the device is sweeping and it is highly unlikely we are picking up radio station interference.

7. Rem Pod

Function: Rem Pod With EM Radiating Antenna Detects Energy Disturbances & Fluctuations around the Antenna
Displays the Field Disturbance Using Multi-Colored Light Columns and Audible Tones

A mini telescopic antenna is used to radiate an independent EM Field around the instrument. This EM field can be easily influenced by materials and objects that conduct electricity. Based on source proximity, strength and EM field distortion. (4) LED light columns can be activated in any order or combination.

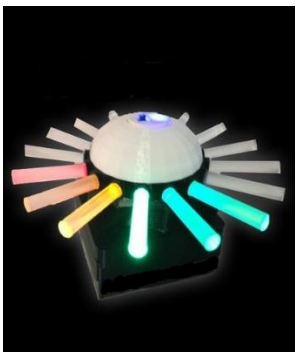
Type: This unit is made by ITC. The mini telescopic antenna provides 360 degree coverage with 3X Sensitivity. Response Time: 100msec.

Components: Self contained unit with telescoping antenna. The unit is turned on by pushing the button underneath the unit.

The 9v battery is changed by pulling out of holder. When installing new battery ensure that the battery not only seats properly but is snapped into place.

Usage: Based on conductive source, proximity & strength, the EM field can be easily changed causing some field distortion. When this happens the 4 LED lights and sound that will activate. The visual and audible response is proportional and correlates directly to the REM field disturbance. The stronger the influence within the REM field, the more intense the LED's and Sound response.

8. Static Energy Detector



Function: This device is basically a triboelectric energy detector which is the principal of static electricity. This meter visually follows triboelectric fields horizontally. The triboelectric effect is not very predictable and therefore this device is not a consistent detector as say an emf detector might be.

- The **triboelectric effect** (also known as *triboelectric charging*) is a type of contact electrification in which certain materials become electrically charged after they come into friction contact with a different material. Rubbing glass with fur, or a comb through the hair, can build up triboelectricity. Most everyday static electricity is triboelectric.
- **Static electricity** is an imbalance of electric charges within or on the surface of a material. The charge remains until it can move away by means of an electric current or electrical discharge. The effects of static electricity are familiar to most people because people can feel, hear, and even see the spark as the excess charge is neutralized when brought close to a large electrical conductor. The familiar phenomenon of a static shock–more specifically, an electrostatic discharge–is caused by the neutralization of charge.

Components: The detector consists of rods extending in a 360◦ circle that will track the existence of triboelectric energy as it passes the detector. The detector operates on 2 9v batteries for extended time duration or a single 9v battery.

Usage: We would use this device as a visual aid in a room, hall, or doorway.

9. Ovilus X with DTD screenVideo

Function: The Ovilus X is an electronic speech-synthesis device which utters words depending on environmental readings, including electromagnetic waves.

Type: Ovilus X by Digital Dowsing

Components: The Ovilus has an embedded database of words. It contains an EMF Meter, among several other environmental sensors. These readings are combined to create a number, and this number is used to reference the database of words. The Ovilus then "speaks" that word.

The Ovilus can also operate in a phonetic mode that reacts to EMF variations to create words that are not in the database.

The DTD is a digital text display that will show the words being spoken when used in dictionary mode. It has no function in the other modes. The DTD is attached to the Ovilus X via a 3.5mm cable.

The Ovilus X operates on 3 AAA batteries and may be changed via the battery compartment.

Usage: The Power Switch is on the end of the Ovilus X. To turn ON, slide the switch up toward the top of the unit. Slide it down toward the back to turn OFF.

The Ovilus X will announce the current mode it is in.

To change modes, press the Mode switch on the front. (Note: when changing modes, hold the mode button down until the Ovilus X begins to announce the next mode.)

- Mode 1: *Dictionary Mode* - Words are created out of the on-board data base. These words may be changed by the user by creating new words and uploading them, using the Ovilus X software. The entire database is written phonetically, allowing the user to create any word in most any language.
- Mode 2: *Phonetic Mode* - Speech is formed by using phonemes, the basic blocks of human speech.
- Mode 3: *Reverse Phonetic Mode* - Speech is formed by using phonemes, the basic blocks of human speech then played in reverse order.
- Mode 4: *Touch Mode* - The Ovilus X will make a ping sound when touched.
- Mode 5: *Energy Mode* - Energy Mode produces a small EMF output "EM Pump."
- Mode 6: *White Noise Mode* - Creates a low volume White noise for EVP sessions.
- Mode 7: *Say Last Word Said* - The Ovilus X will say all the words it has spoken in Mode 1.

There are anywhere from 512 words to over 2048 in the database

When used in dictionary mode the odds of this device saying a word that is contextually correct is 1:2048

In Phonetic mode, the odds of a related response are 1:71.

10. EM Pump

Function: The EM Pump creates a low level magnetic field, a magnetic white noise if you will. Since the frequency and duration changes, it is thought of as a beacon or trigger device.

Type: This unit is a self made unit.

Components: The unit is turned on via a toggle switch which illuminates a blue led. There may be a slight hum due to the vibrations.

Usage: The em pump is placed on a flat secure surface and left to run to *'seed'* the air with an em field. Set the device in an area where you are trying to capture EVP or photographic evidence. Simply set the device down, turn it on and let it run.

The unit runs on 2 AA batteries and can be accessed in the battery compartment contained on the side of the unit.

11. Flash Box

Function: This is a PIRC creation to replace the use of the loose back *'flashlight'* for interacting with entities. The potential for a false positive with the flashlight was high. This device has removed any opportunity for a false positive.

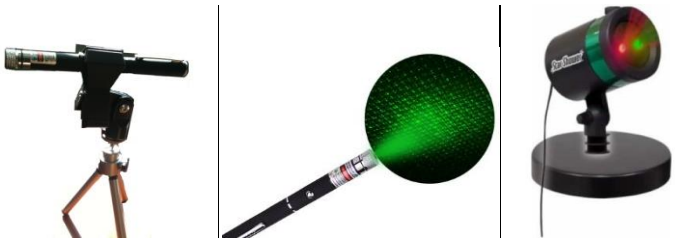
Type: This is a self made unit. This device has undergone several beta variations and we utilize several.

Components: Self contained in a project box the unit utilizes a momentary switch to activate the led.

The 9v battery is changed by removing the screws on the project box.

Usage: We would use this device when trying to get a spirit to trigger the light in response to questions.

12.Laser Grid Projectors



Function: The high powered laser pen and the star shower emit a grid of dots (color depends on unit) useful for detecting shadows or general visual disturbances during an investigation. Set it in front of a running camera to catch potential evidence.

Type: We use either a star shower or laser pen. There is no particular manufacturer for our laser pens.

Components: The lasers must be used in conjunction with a tripod and holder. Since the laser does not have an on/off switch you must use some type of device or mechanism to hold the laser in the on position.

The laser pen uses a AAA battery which is changed by unscrewing the top from the bottom. The star shower uses ac power.

Usage: The laser grid is used to detect movement in a room. The laser is set up by displaying the pattern on a wall or hall. You can adjust the size and shape of the object by turning the adjustable lens. Some lasers have interchangeable lens. The laser pen is inserted into a holder on a tripod and the star shower screws into a flat platform. Any disturbances in the light are indications of something breaking the plane.

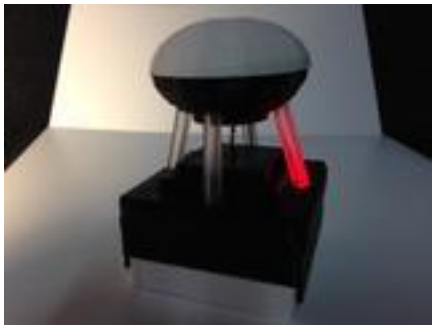
13.Motion Detector

Function: The device will detect an object up to 4 feet away using an lcd display on the front and it will indicate if the object is on the left or the right of the unit

Components: The device utilizes technology like the back-up Sensor's in vehicles. It uses 4 AA batteries.

Usage: This sensor does not work well in small rooms as it needs 5' of clear space on the left and right side to avoid false positives. If used in a smaller room care should be taken to give as much clearance to the right and left side where the sensors are located.

14.Visual Hot/Cold Temperature Deviation Detector



Function: This device is a visual ambient temperature sensor with 2 ambient probes that are constantly comparing the difference in air temperature. It picks up changes in the ambient air temperature and displays the change using a blue light for cold, and a red light for hot. The device automatically resets every 30 second's if the ambient air temperature has remained a constant temperature.

Components: Device has a probe in the center and operates on 4 AA batteries.

Usage: Useful for detecting changes in the air temperature.

15.Non -Contact Thermometer

Function: Used to take an instant temperature reading without having to let the device acclimate to the temperature.

Type: Ryobi

Components: The unit is self contained with an LCD display. The battery is a chargeable Ryobi battery.

The battery is charged via a Ryobi battery charger.

Usage: Point the device at a desired location or surface and depress the trigger. The temperature is displayed on the LCD screen.

Examples: Good for taking initial temperature readings and spot readings.

Things to remember

1. Always check your batteries. Make sure you have new or freshly charged batteries installed and on your person to avoid a disruption in the investigation.
2. Check the date and time on all pieces of equipment. Having the correct date and time stamp will make identification easier and in some cases can affect the piece of equipment.
3. Take base line readings before an investigation
4. Do your research
5. Know the moon phase and geological conditions of the investigation night
6. Tag – this is help on video and audio recordings. Get into the habit of tagging time, sounds, person's entering or leaving a location etc.
7. When in doubt ask an experienced investigator.

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