APPLICATION

Your PPG30 Phasor Property Guard System is capable of operating in three modes. Mode1 is at a frequency that is known to produce paranoia, nausea, disorientation and many other physiological effects. Mode2 allows use of the system as an audible alarm to frighten off intruders or warn the user of an intrusion to obtain a weapon or device for protection. Mode3 is a manually operated panic alarm mode, where a member of the household or area protected carries a small wireless transmitter similar to those you would use for an automobile. The unit can be triggered by simply the push of a button and return to normal by the push of another button from anywhere in the house. You may be up to several hundred feet away from the main unit for total control. This is a very useful function as the device can be made portable with battery operation and used when demonstrating model homes, etc.

Three separate jacks allow detection of broken trip wires, window contact foil, window and door switches, pressure or actuating switches, and a positive voltage level pulse obtained from other detection equipment such as those listed in our catalog. The use may think of other schemes of detection or use the many other detection items on the market that can produce a signal level to activate the system.

A WORD OF CAUTION

Any type of a device that is intended to be used as a human deterrent to matter how harmless may cause secondary reactions allowing the criminal or perpetrator to sue the property owner or victim for damages claimed. People living in depressed and high crime areas are often made out to be “victims” where committing these acts are not their fault.

Ultrasonic is a gray area in many respects when application involves the control of animals or even as a human deterrent to unauthorized intrusion. It is always best to consult with local municipal and state laws before using this device to protect home or property. REMEMBER MANY STATE LAWS LEAN MORE TOWARDS THE RIGHT OF THE CRIMINAL RATHER THAN THE VICTIM.

INSTRUCTIONS

1. Check the units for any damage. Verify that you have all components:
   - 3 RCA PHONO plugs with 12-inch strip and tin leads attached for splicing to detection functions, J1,2,3
   - 4 transducers with prewired components
   - 10 small wire nuts
   - 2 shorted mating RCA PHONO plugs for J3&J4
   - 12VDC2AR wall adapter with DC plug.
   - Spool of wire with prewired RCA PHONO mating plug J6
   - 4 transducer assembly mounting brackets
   - Remote transmitter
   - Special sale item may not contain transducer mounting kit or wall adapter.

2. The position of the transducers should be as to direct as much energy to the points of intrusion or access. They can all be directed to one single target area or be placed in separate areas for multiple targets. Do not point at sound absorbing materials such as curtains or carpet, see chart to get idea of radiation pattern. The power unit should be placed in a central easy to access area where the user can reset the device and preset the controls for maximum effect. See FIG showing the connections to rear panel and controls.

3. Install the transducers using brackets. Use small container such as coffee can to protect transducers from the elements if mounted outside. It is suggested that transducers used outside get mounted under eaves or other overhead protected spots.

4. Connect wires using small wire nuts to make connections.

5. Set up and test unit using controls as described. Note J3 must have a shorting plug to simulate a closed connection.
**FRONT PANEL**

**CONTROLS/FUNCTIONS**

- FUSE
- S4
- R9/S1 FREQ
- R2/S2 SWEEP
- LED
- J1
- J2
- J3
- J4
- J5
- J6

**REAR PANEL**

**CONTROLS/FUNCTIONS**

- FUSE HOLDER
- S5
- TEST
- J6
- J1
- J2
- J3

J3 is for normally-closed sensor inputs so must be shorted with P3 if no sensors are attached.

J4 is for a wired remote control, and must be shorted with P4 for device to operate with wireless remote.

**TRANSDUCER**

**WIRE DIAGRAM**

P4 SHORTING PLUG

P3 SHORTING PLUG
**FRONT PANEL DESCRIPTION**

LED- Indicates unit is turned on.
R9/S1- Turns power on and adjusts the output frequency.
R2/S2- Turns on sweep and adjusts sweep rate.
S4- Resets unit after it has been tripped by an intrusion or the S5 test switch.

**REAR PANEL DESCRIPTION**

F1- 2A fuse holder.
S5- Test switch lowers frequency to audible level or manually triggers alarm.
J5- Input jack used for plugging in wall adapter transformer 115VAC to 12VDC. May also connect any source of 12 VDC able to supply 1.5 AMP non-regulated. May be replaced by red and black connection leads. **A 12V 2-amp regulated supply is included with the unit when purchased.**
J6- Output, connect to transducers using normal speaker wire. **A Spool of wire is included with mating plug for J6.**
J1- Connect to detectors and sensors producing a 5-15VDC level when triggered.
J2- Connect to normally open switches such as pressure devices, which close when stepped on.
J3- Connect to normally closed circuits such as window taping, trip wires, etc. (or use P3 shorting plug to disable if not in use).
J4- Remote control: attach wired remote control here, or use J4 shorting plug to operate with wireless remote.

**GENERAL INFORMATION ON ULTRASONICS**

There have been numerous requests for information on the effect of these devices on people. It should be made clear that no device such as this should purposely be used on humans and we discourage this due to the possibility of acoustically sensitive people being highly irritated.

None of these devices have the ability to stop a person with the same effect as a gun, club or more conventional weapon. They will, however, produce an extremely uncomfortable irritating, sometimes painful effect in most people. Not everyone will experience this effect to the same degree. Younger women are much more affected than older men due to being more acoustically sensitive. The range of the devices depends on many variables and is normally somewhere between 10-100 feet.

One possible use of the device (that deserves careful consideration) is the installing of all transducers, directed to an area desired to be protected against unauthorized intrusion. This produces an irritating and painful feeling to the intruder along with the condition of paranoia of not knowing what to expect next.
IF YOU SHOULD ENCOUNTER ANY DIFFICULTIES WITH YOUR REMOTE TRANSMITTER NOT WORKING, IT MAY BE DUE TO THE RECEIVER NOT RECOGNIZING THE TRANSMITTER:

**TROUBLESHOOTING**

1. Make sure the power switch for the PPG is in the OFF position.
2. Remove the cover for the PPG and disconnect transducers (J6).
3. Connect the power cord and plug into wall.
4. Turn PPG power switch on.
5. Push the remote transmitter’s ON button for one second then push the OFF button for one second. (Check that remote indicator light turns on for each button push. If light does not turn on and you do not hear the relay click, go to next step. If light does turn on and you do not hear the relay click, call us for further help.)
6. Hold the remote receiver’s push button for 1-3 seconds until indicator illuminates, release button and light will then start blinking slowly.
7. Press either button on remote transmitter. The indicator light on the receiver will go out.
8. Press either button on remote transmitter again. The receiver indicator light should blink rapidly to show that it has learned the remote transmitter.
9. Press the remote transmitter’s OFF button.
11. Press the remote transmitter’s ON button. Device should generate loud noise.
12. Press the remote transmitter’s OFF button. Loud noise should stop.
13. Turn PPG power switch OFF.
14. Remove power cord from PPG.
15. Reinstall cover for PPG.
16. Your PPG is now ready for normal operation.
FIG 10
SOUND PRESSURE CHART

EAR DAMAGE
160 db EXPLOSION, SHELL GRENADIES, OUTSIDE DESTRUCTIVE SHOCK-WAVE RADIUS
150 db

140 db M6 AUTO RIFLE DOWN RANGE 10°
130 db THRESHOLD OF PAIN

PAIN
120 db PP Gy TO INTRUDERS
110 db CIRCULAR SAW, FIRE SIREN
100 db SUBWAY STATION THUNDER

90 db BELT SANDER, VACUUM CLEANER
80 db NORMAL CITY STREET

70 db PHONE RING AT 6' NORMAL SPEECH
60 db AIR CONDITIONER

COMFORTABLE
50 db WINDOW FAN

QUIET
40 db NORMAL OFFICE
30 db LIGHT BREEZE

VERY QUIET
20 db RECORDING STUDIO
10 db LOW WHISPER
0 db THRESHOLD OF EAR FOR HEARING

SOUND PRESSURE INTENSITY CHART
DB RATINGS TAKEN AT 18" FROM SOURCE UNLESS OTHERWISE NOTED.

RADIATION PATTERN, SCALE 2.5°=40° USE A LAYOUT TEMPLATE