

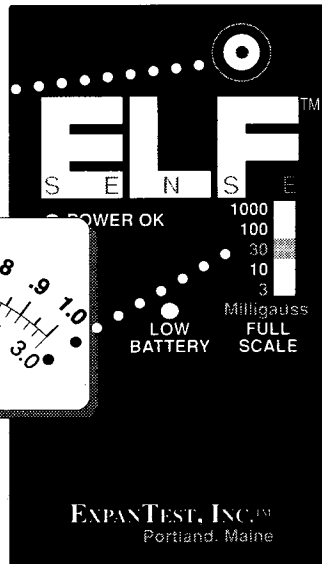
# ELF SENSE™

ELF Sense™ consists of two components connected by a 3 foot cable - a sensor and electronics unit and an analog meter readout.

This arrangement allows you to manipulate the sensor while you watch the meter to determine the maximum field direction and strength at a particular point.

Our illustrated instruction manual explains the measurement procedure, the characteristics of magnetic field sources, and the techniques for locating the fields of most significance in typical situations. You'll quickly be taking accurate readings at multiple points near the ELF sources in your environment.

Manipulate the unit's sensor and watch the meter, too.



Each position of the "FULL SCALE" switch is color-keyed to one of the two meter scales

EXPANTEST, INC.™  
Portland, Maine

## ELF Sense™ SPECIFICATIONS

### Configuration:

Two hand-held units:  
1) Sensor and electronics  
2) Analog meter readout  
Units are connected by a 3 foot cable.

### Ranges:

Five ranges: 0 - 3.0, 10, 30, 100, and 1000 milligauss.

### Accuracy:

± 5% of reading, ± 5% of full scale, 45 Hz to 600 Hz.

### Response to non-sinusoidal wave forms:

True root-mean-square (RMS).

### Noise:

Less than 0.1 milligauss equivalent.

### Sensitive Area:

ELF Sense™ has a sensor with an effective diameter of less than 0.5 inches. Its location is clearly marked on the unit. This permits you to make a measurement at a precise distance from a source. A small sensor is required for a meaningful measurement since magnetic fields can drop off as rapidly as  $1/\text{Distance}^3$  as the measuring point is moved away from the source.

### Power:

Standard 9-V battery (supplied). Average current draw less than 2 mA.  
Two "power on" indications: Green flashing lamp indicates power OK. Red flashing lamp indicates low battery.

### Size:

Sensor-electronics: 4.60 L x 2.75 W x 1.04 H (inches).  
Switches add 0.08 inch to height.  
Meter readout: 3.34 L x 2.20 W x 1.90 H (inches).

### Weight:

10 ounces.


Specifications are subject to change without notice.  
1/1/91

### ExpanTest, Inc.™

ELF Sense™ is designed and manufactured by ExpanTest, Incorporated, a Maine company.

## Extremely Low Frequency Magnetic Field Meter:



The two  component system that makes it easy to seek the maximum field strength and read the result.

# ELF Sense™

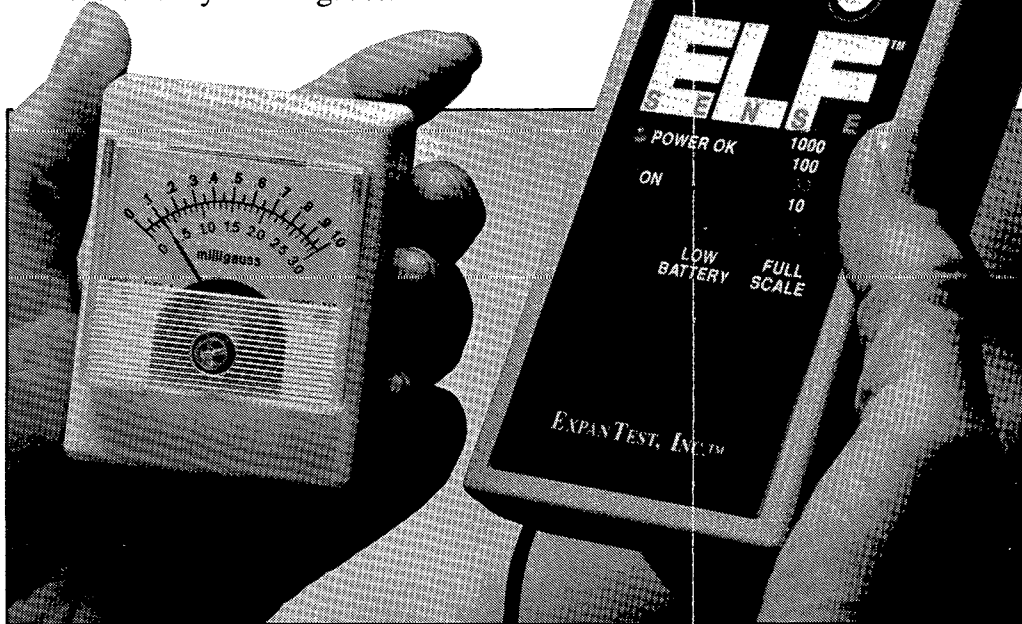
## Extremely Low Frequency Magnetic Field Meter

**ELF Sense™** measures Extremely Low Frequency magnetic fields in various environments. Such fields are associated with the currents produced in the generation, transformation, transmission, and use of ordinary AC electric power. ELF fields are also produced by the vertical deflection systems used in television receivers and computer video display terminals (also called "monitors").

**ELF Sense** properly measures these ELF magnetic fields for the strengths normally encountered in the home and workplace.

### Accuracy and Ease:

- Probe for the actual maximum field strength while easily reading the result on the separate analog meter.
- Read directly in milligauss.



- Make accurate measurements close to concentrated sources (such as video display terminals and electric blankets) with unit's small sensor.
- Make accurate measurements at the field intensities of real importance. (Ranges are 0 - 3, 10, 30, 100, and 1000 milligauss.)
- Get direct "order-of-magnitude" response with full meaningful precision from the analog readout meter.
- Meter contains only two scales, with each scale color-coded to the selected range.
- Negligible erroneous reading from motion in the earth's magnetic field.

- Gives correct result from the sawtooth waveforms produced by video display terminals.
- Correctly measures fields produced by power line harmonics (through 10th).
- Low current drain from a single standard 9V battery (supplied).
- Green and red flashing lamps indicate power status.



Please send **ELF Sense™** to:

Name: .....

Position: .....

Company: .....

Address: .....

City: .....

State and Zip: .....

Telephone: (     ) .....

**ELF Sense** costs \$295.00. Price includes UPS ground shipment in the lower 48 United States. For more information or to order **ELF Sense** now, write or call:

ExpanTest, Inc.™  
232 St. John Street, Suite 316  
Portland, ME 04102

(207) 871-0224

Thursday, August 22, 1991

Zory R. Glaser  
NCMDRH/USFDA HFZ-110  
12709 Twinbrook Parkway  
Rockville, MD 20857

Dear Zory Glaser:

Thank you for responding to the product literature announcement in *Occupational Health and Safety* magazine for our ELF Sense™ magnetic field sensing meter. We welcome your interest.

I am enclosing a brochure-specification sheet for your examination.

ELF Sense is currently shipping from stock, and we would be pleased to accept a purchase order from the USFDA. Terms are net 30 days.

The price for the new Model 1A is \$295.00, including UPS ground shipment in the "lower 48" states. We have a few more units of the first production unit, Model 1, available. The price for this unit is \$250.00, including UPS ground shipment in the "lower 48". Add \$3.00 to these prices for UPS 2nd day shipment. Add an additional \$5.00 for C.O.D. All prices are guaranteed until December 31, 1991.

Model 1A has a few improvements over Model 1--a slightly shorter meter response time, somewhat brighter "On" and "Low Battery" indicators, slightly extended battery life and a thinner, more flexible cable. It is available now.

Incidentally, the photograph in the product announcement shows the Model 1, whereas the photo in the enclosed brochure shows the Model 1A.

Again, thank you for your inquiry.

Sincerely,



Robert R. Wagner  
President