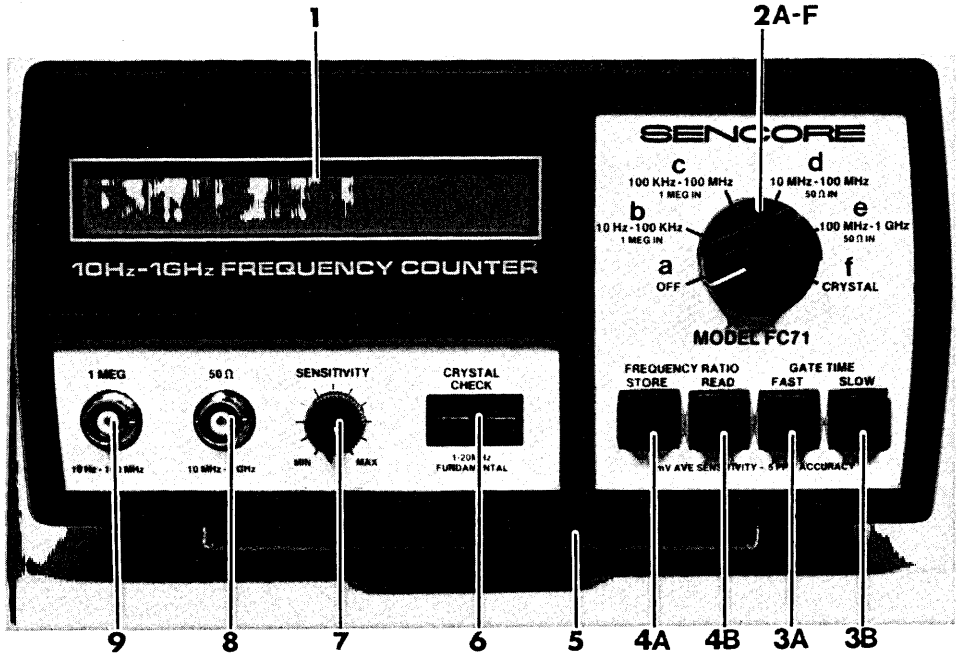

Fig. 1: Location of controls and features on the FC71.

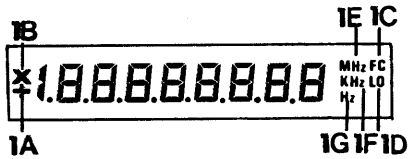

Fig. 2: The LCD annunciators simplify measurements.

1. (a-g) LCD Readout - Provides direct readout of any function selected by the FUNCTION switch (2).

1a. ÷ DIVIDE INDICATOR - Shows that the second frequency applied to the RATIO function (4) is smaller than the first frequency applied.

1b. X - MULTIPLY INDICATOR - Shows that the second frequency applied to the RATIO function (4) is larger than the first frequency applied.

1c. FC - FULL CHARGE INDICATOR - Shows the internal battery (optional) has 75% or more of its full charge capacity remaining. It has no meaning during AC or external DC operation.

1d. LO - LOW BATTERY INDICATOR - Shows that the internal battery (optional) has less than 25% of its full charge capacity remaining. It has no meaning during AC or external DC operation.

1e. MHz - MEGAHERTZ INDICATOR - Controlled along with the decimal point by the microprocessor to indicate the applied frequency is greater than or equal to 1.000000 MHz.

1f. KHz - KILOHERTZ INDICATOR - Controlled along with the decimal point by the microprocessor to indicate the applied frequency is between 1.00000 KHz and 999.999 KHz.

1g. Hz - HERTZ INDICATOR - Controlled along with the decimal point by the microprocessor to indicate the applied frequency is between 10.00 Hz and 999.99 Hz.

2. (a-f) FUNCTION SWITCH - Selects function, input, and frequency range to be counted.

2a. OFF - Removes power from the unit or resets Auto Off circuit when battery operated. The battery will continue to charge with the FUNCTION switch "off".

2b. 10Hz-100KHz - Provides resolution to 0.01Hz for frequencies below 10KHz and resolution to 0.1Hz for frequencies between 10 and 100KHz. Also provides extra noise filtering for signals below 100KHz that are applied to the 1 meg input.

2c. 100KHz-100MHz - Allows these frequencies to be counted to 1Hz resolution using the 1 meg input (9).

2d. 10MHz-100MHz - Provides 1Hz resolution for frequencies applied to the 50 ohm input (8).

2e. 100MHz-1GHz - Allows these frequencies to be counted to 10Hz resolution using the 50 ohm input (8).

2f. CRYSTAL - Measures the fundamental frequency of a crystal inserted into the CRYSTAL CHECK socket (6).

3. (a-b) GATE TIME - Selects the rate at which the readings update.

3a. FAST - Provides fast update for troubleshooting and adjustments.

3b. SLOW - Provides one extra digit of resolution (at a slower update time) when maximum resolution is needed.

4. (a,b) FREQUENCY RATIO - Automatically calculates the ratio of two frequencies applied to the FC71's inputs, (8) or (9). The FUNCTION switch (2) must be set to the range of the applied frequency.

4a. STORE (Momentary Push Button) - Stores the first frequency into the FC71's memory.

4b. READ - (Latching Button) - Displays the ratio of the second frequency to the stored frequency when depressed.

5. SIMPLIFIED INSTRUCTIONS - A pull out chart provides a brief summary of operation and use.

6. CRYSTAL CHECK SOCKET - Provides a universal socket for testing crystals out of circuit when the FUNCTION switch is in the "Crystal" position (2f).

7. SENSITIVITY CONTROL - Used with either the 1 meg input (9) or the 50 ohm input (8) to provide variable input sensitivity to obtain stable readings when measuring especially noisy signals.

8. 50 OHM INPUT - Provides a 50 ohm input to terminate coaxial cable to prevent ringing and false counting. A protection fuse and two spare fuses are located inside the unit.

9. 1 MEG INPUT - Provides a 1 megohm impedance input for minimum circuit loading when troubleshooting circuits operating below 100MHz.

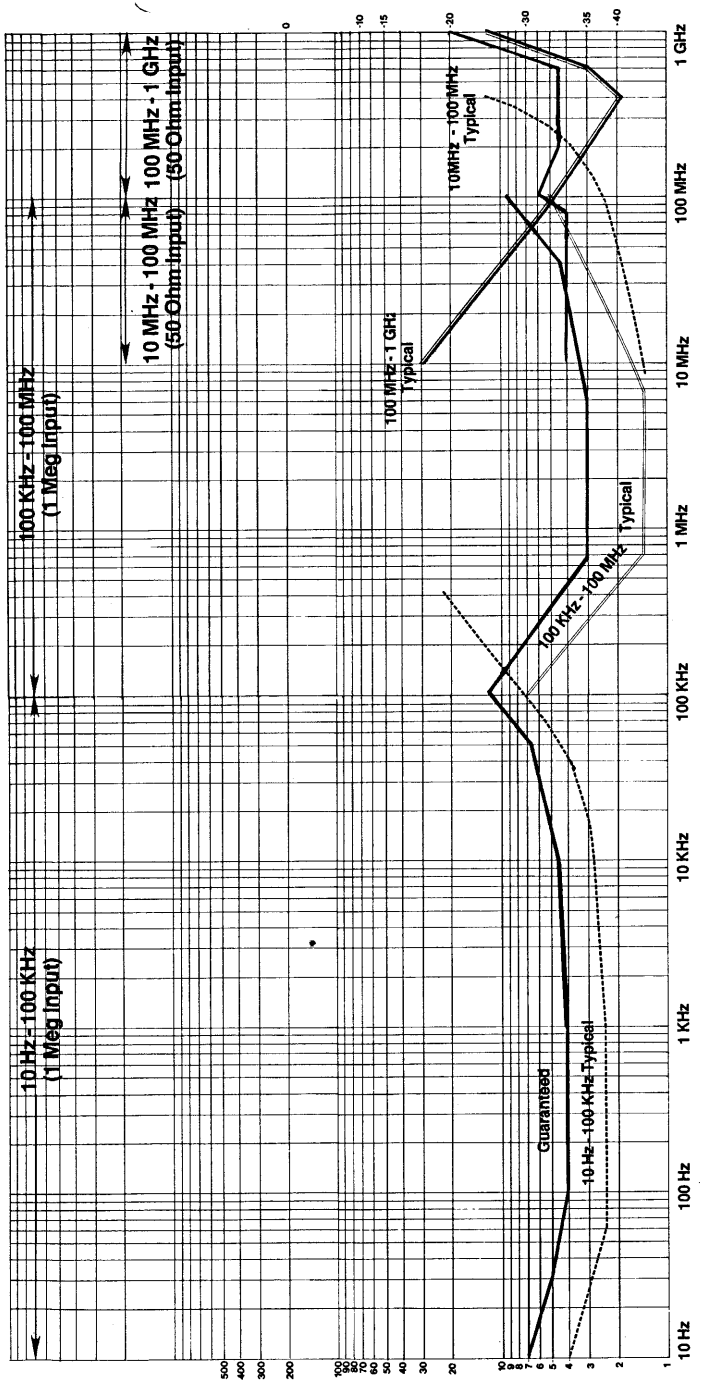

TABLE 1: Guaranteed and typical sensitivity curves for the FC71.

Guaranteed Sensitivity - Table 1

Controls

Fold out for description

Fold back