

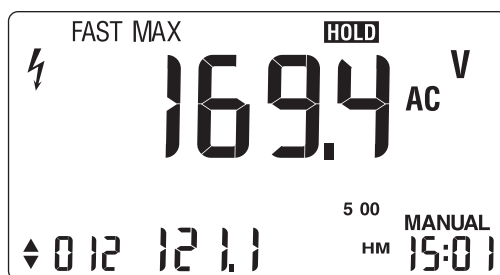
## Recommended procedure for use

First and foremost, read the instruction manual and follow all safety precautions and use safe work practices.

### Using FAST MN/MX or Peak Min/Max function for event capture

1. Select the appropriate meter function for the measurement to be monitored.
2. Attach the test probes to the test points using suitable alligator clips or other connection devices that will allow for a solid connection while the monitoring process is underway.
3. Once the leads are attached to the signal to be monitored, push the SHIFT button then the MIN MAX pushbutton once. This starts the FAST MN/MX recording process. The FAST MAX symbol will appear, along with the present MAX value, in the display.
- 3a. On the Fluke 87V, once the leads are attached to the signal to be monitored, push the MIN MAX button then the ~ (continuity) pushbutton once. This starts the Peak Min/Max recording process. The Peak Min/Max symbol will appear, along with the present MAX value, in the display.
4. The monitoring process is now underway and the meter is now locked into the manual range providing the best resolution for the measurement. Make a mental note or record on paper the time of day the process was started (187 only). Remembering the time of day recording was started is not necessary if the readings are stored in saved memory in the 189.

**Note:** The Fluke 87V does not have the elapsed time clock capability.



FAST MN/MX screen in progress.

### A note about peak readings

When using FAST MN/MX or Peak Min/Max function for ac voltage or current monitoring, the display shows peak values for the minimum and maximum readings and the rms value (187, 189 only) for the average reading. For ac signals that are sinusoidal in shape the peak value is 1.414 times the rms value. For example, a standard sinusoidal 120 volt rms signal should have a peak value of 169.7 volts. An rms-to-peak ratio of less than 1.414 would indicate a flat topped signal, and a ratio greater than 1.414 would indicate the signal is more peaked than a pure sine wave. The rms-to-peak ratio is also referred to as the crest factor.

### Viewing captured readings (Fluke 87V or 187)

Viewing the captured high and low readings at any time during the monitoring process is easy. Each press of the MIN MAX pushbutton allows the user to cycle through each of the minimum, maximum and average (187, 189 only) values temporarily stored.

Once the monitoring process is complete, but before disconnecting the test leads from the circuit, press the HOLD pushbutton. This retains the minimum, maximum and average values for viewing (187), or for saving the recorded values to the Saved Readings memory (189) for upload later into FlukeView® Forms software. To save each of the captured readings to the 189's Saved Readings memory, simply push the SHIFT pushbutton and then the SAVE pushbutton for each reading (minimum, maximum or average) to be stored in memory. The readings are automatically stored in the unit's next available empty memory location. If the user doesn't press the HOLD button before disconnecting the leads, the MIN value will be lost and the AVG value compromised.