GENERAL®

MINI DIGITAL AIRFLOW METER

USER'S MANUAL

GENERAL®

Power　Hold　Max./Min.

Unit　DAF800

ANEMOMETER

CE

The Art of Measurement

DAF800

Please read this manual carefully and thoroughly before using this product.

TABLE OF CONTENTS

INTRODUCTION

Thank you for purchasing General Tools & Instruments' DAF800 Mini Digital Airflow Meter. Please read this user's manual carefully and thoroughly before using the product.

The DAF800 is an inexpensive one-piece vane anemometer that can accurately measure airflow speeds in ducts and at input and output grilles of HVAC/R systems.

KEY FEATURES

- Five available air velocity units: ft./min, m/sec, kmph, mph, knots
- Low-friction ball vane wheels provide high accuracy at all air speeds
- Min/max memory + data hold
- 10-minute Auto Power Off (disabled during Min/Max recording sessions)

- Small and light enough for one-handed operation
- Includes wrist strap
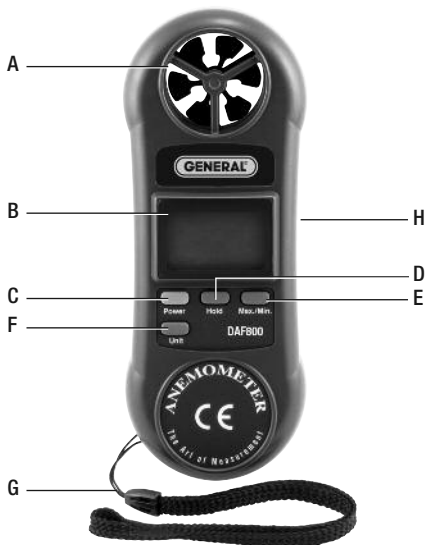- CE and RoHS approved
- 1 year limited warranty

WHAT'S IN THE BOX

The meter comes in a white box along with this user's manual. A "9V" battery to power the unit is *not* included.

PRODUCT OVERVIEW

The figure below shows all controls and components on the front of the meter as well as the location of the battery compartment, which is accessible from the back of the unit.

A. Vane sensor
B. LCD
C. **Power** button
D. **Hold** button
E. **Max./Min.** button
F. **Unit** button
G. Wrist strap
H. Battery compartment
   (on back)

SETUP INSTRUCTIONS
INSTALL BATTERY

To open the battery compartment, turn the meter over and use a small Phillips-head screwdriver to loosen and remove the single screw securing the battery compartment cover. Plug a "9V" battery into the wired socket inside the compartment. The terminals of the battery and the socket mate in only one way, with the smaller male terminal plugging into the larger female terminal.

Secure the battery compartment by replacing its cover and reinstalling and tightening the Phillips-head screw.

Complete setup by carefully removing the plastic film protecting the LCD.

OPERATING INSTRUCTIONS
MEASURING REAL-TIME AIR SPEEDS

To begin, press the front-panel **Power** button. The meter will respond by sounding a single beep. Then press the **Unit** button below it one or more times to choose from among five widely used air speed units. The options are (in the button-press sequence):

- **Km/h** (kilometers per hour)—the factory default unit
- **M/S** (meters per second)
- **fpm** (feet per minute)
- **mph** (miles per hour)
- **Knot** (knots)

The meter will "remember" your last selection when it is powered off and will resume using that unit upon restart. So if you always use the same unit, you will never have to press the **Unit** button again.

To extend battery life, when operating in real-time mode the DAF800 will automatically power itself off following any 10-minute period in which no front-panel button is pressed. The meter will sound two beeps twice when this Auto

4

Power Off (APO) function is activated. The APO function is disabled when operating in Min/Max recording mode (see next section).

To make a measurement, position the vane at the top of the meter perpendicular to the source of air or wind. Allow time for the reading to stabilize. It makes no difference whether the front of back of the vane faces the wind or air flow.

To hold any reading ("freeze" the display), press the **Hold** button. To release the hold and resume displaying real-time values, press the **Hold** button again. This function is very useful for making measurements in low light or when the source of air or wind is above your head, below your knees or around a corner. You can make a measurement, hold it, and then read the display up to 10 minutes later after positioning the LCD at eye level.

RECORDING AND DISPLAYING MAXIMUM AND MINIMUM SPEEDS

The DAF800 can record the maximum and minimum (fastest and slowest) air speed values measured over a user-selectable period of time. The Min/Max recording function is handy for noting fluctuations in the output of a fan over time.

During these recording sessions, the meter's Auto Power Off function is disabled to enable recording for longer than 10 minutes. The only limit on recording duration is remaining battery life.

To begin recording Max and Min readings, first position the vane in the flow of air or wind and then press the **Max./Min.** button on the right side of the front panel. If you begin recording before positioning the vane, your Min. reading will always be recorded as **0.0** (zero).

Pressing the **Max./Min.** button will cause the term **REC** to appear at the top left of the LCD. The meter will continue to record Max and Min values—but display real-time values—until you press the **Max./Min.** button again.

To display the maximum air speed measured during the current recording session, briefly press the **Max./Min.** button. (**Do not** press and hold the button; this will stop recording). The LCD will display the maximum value below the term **Max** on the top line.

To display the minimum air speed measured during the current recording session, briefly press the **Max./Min.** button again. (Again, do not press and hold the button.) The LCD will now display the minimum value below the term **Min** on the top line.

Once you have pressed the **Max./Min.** button with **REC** on the top line, you cannot resume displaying real-time readings without ending the recording session.

To end the recording session, press and hold the **Max./Min.** button. This will cause the **REC** term to disappear. The meter will then resume displaying real-time air speed measurements.

SPECIFICATIONS

Measurement Ranges	1.4 to 108 km/hr, 0.4 to 30m/sec, 80 to 5910 fpm, 0.9 to 67 mph, 0.8 to 58.3 knots
Measurement Accuracy	±3% of full-scale value below 20m/sec; ±4% of full-scale value above 20m/sec
Measurement Resolutions	0.1 km/hr, 0.1m/sec, 1 fpm, 0.1 mph, 0.1 knots
Display Size	1.3 in. (33mm) diagonal
Digit Height	3/8 in. (10mm)
Auto Power Off Trigger	10 minutes of front-panel inactivity (disabled in Min/Max recording mode)
Current Consumption	17mADC
Dimensions	6.15 x 2.36 x 1.29 in. (156 x 60 x 33mm)
Weight (including battery)	5.6 oz. (159g)
Power Source	1 "9V" battery (not included)

MAINTENANCE TIPS

When the ✉ icon appears in the upper left corner of the LCD, it's time to change the meter's "9V" battery (although measurements will remain valid for several hours after the icon first appears). To change the battery, follow the Setup Instructions on p. 4.

Remove the battery if you do not expect to use the meter for an extended period of time (months or years).

Do not drop or disassemble the meter or immerse it in water.

To clean the housing or LCD, use a dry or damp cloth. Avoid using chemical cleaners.

WARRANTY INFORMATION

General Tools & Instruments' (General's) DAF800 Mini Digital Airflow Meter is warranted to the original purchaser to be free from defects in material and workmanship for a period of one year. Subject to certain restrictions, General will repair or replace this instrument if, after examination, the company determines it to be defective in material or workmanship. The warranty period begins on the date of purchase. You are encouraged to register your product online. General will extend your warranty an additional 60 days if you register at www.generaltools.com/ProductRegistry.

This limited warranty does not apply to damages that General determines to be from an attempted repair by non-authorized personnel or misuse, alterations, normal wear and tear, or accidental damage. The defective unit must be returned to General Tools & Instruments or to a General-authorized service center, freight prepaid and insured.

Acceptance of the exclusive repair and replacement remedies described herein is a condition of the contract for purchase of this product. In no event shall General be liable for any incidental, special, consequential or punitive damages, or for any cost, attorneys' fees, expenses, or losses alleged to be a consequence of any damage due to failure of, or defect in any product including, but not limited to, any claims for loss of profits.

Register now at www.generaltools.com/ProductRegistry to receive a 60-day extension to your warranty.
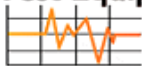
RETURN FOR REPAIR POLICY

Every effort has been made to provide you with a reliable product of superior quality. However, in the event your instrument requires repair, please contact our Customer Service to obtain an RGA (Return Goods Authorization) number before forwarding the unit via prepaid freight to the attention of our Service Center at this address:

Remember to include a copy of your proof of purchase, your return address, and your phone number and/or e-mail address.

GENERAL®

Specialty Tools & Instruments

Test Equipment Depot
1-800-517-8431

99 Washington Street
Melrose, MA 02176
Phone 781-665-1400
Toll Free 1-800-517-8431

▶ Visit us at www.TestEquipmentDepot.com