



USB DIGITAL SOUND LEVEL DATA LOGGER

USER'S MANUAL



DSM20

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

TABLE OF CONTENTS

Introduction	2 – 3
Key Features	3
Safety Instruction	4
What's in the Package	4
Product Overview	4
Setup Instructions	4 – 5
Install the Battery	4 – 5
Software, Drivers, Configuration	5
Operating Instructions	5 – 6
Deploy the Unit	5
Button Functions	5 – 6
Specifications	6
Maintenance Tips	7
Warranty Information	7 – 8
Return for Repair Policy	8

INTRODUCTION

Thank you for purchasing General Tools & Instruments' DSM20 USB Digital Sound Level Data Logger. Please read this user's manual carefully and thoroughly before using the instrument.

The DSM20 is a low-cost, compact, battery-powered sound level meter capable of unattended logging (recording) of the decibel level of an environment for days, weeks or months. Data logging can be started or stopped by pushing a button on the unit, eliminating the need to bring a laptop to the job site.

Windows® 7 and Windows® XP are registered trademarks of Microsoft Corporation.

After a data log has been captured and stored, it can be uploaded as a .txt file to any PC running the Windows®7 or Windows® XP operating system after plugging the DSM20 into one of the computer's USB ports. The DSM20's internal flash memory is large enough to store up to 32000 data points.

Included with the product—which is slightly larger than a thumb drive—is a mini-disc with the drivers needed to interface the unit to the computer, as well as software that can display a data log file as a table or graph and/or export it to Microsoft Excel. Exporting to Excel is recommended for sophisticated trending and analysis of sound level data and easy detection of unexpected excursions.

KEY FEATURES

- One button starts/stops data logging without a PC
 - Plug-and-play USB 2.0 interface; no need for cables, cradles or docks
 - Large storage capacity offers the ability to track, store, and download 32,000 data points into Excel-Format.
 - LCD displays real time sound level
 - A/C frequency weighting
 - FAST/SLOW time weighting
 - MAX/MIN/AVG displays
 - High and low alarm limit, selectable sampling time
 - Ability to analyze data in graph view using included software and also print or save the results.
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SAFETY INSTRUCTION

Do not use the DSM20 in the presence of flammable or explosive gases.

WHAT'S IN THE PACKAGE

The DSM20 comes in a blister pack containing:

- The instrument (with included “1/2 AA” battery)
- A disc with software drivers for Windows® 7 or Windows® XP computers, a program for capturing data logs and displaying them as curves, a software installation and operation manual, a PDF of this user’s manual
- A stand to mount the instrument
- A USB extension cord
- A hard copy of this user’s manual (inside the fold-over card)

PRODUCT OVERVIEW

Fig. 1 shows the main components, controls, display and connectors of the DSM20. Familiarize yourself with their names and functions before moving on to the Setup Instructions.

- A. Microphone
- B. Function button
- C. LCD
- D. Protective cap
- E. Full-size USB plug



SETUP INSTRUCTIONS

INSTALL THE BATTERY

The DSM20 uses a 3.6VDC “1/2 AA” Lithium-ion battery (included). **To open the battery compartment**, use a screwdriver with a fine point to push in the silver flange

showing through the small square hole in the rear of the unit. Push back the cover, insert a fresh battery in the correct orientation, and replace the cover, pushing it forward until you feel and hear a click.

Note: If the battery is removed from a unit before it has been set up from software or while it is recording, the unit must be reconfigured before it can be reactivated. If it is not reconfigured, the unit will remain in standby mode.

Replacement “1/2 AA” batteries are available from General. To order, visit www.generaltools.com, click through the right image to the Instruments home page, and enter “BA10” in the SEARCH box.

SOFTWARE, DRIVERS, CONFIGURATION

Please refer to the software manual on the CD for installation, configuration and operating instructions.

OPERATING INSTRUCTIONS

DEPLOY THE UNIT

The DSM20 is particularly easy to deploy on a job site because the unit does not need to be plugged into a computer to be activated (ready to start logging data). The DSM20—with its protective cap on—can be deployed either by laying it on a horizontal surface or by mounting it onto the stand provided.

BUTTON FUNCTIONS

To turn on the device, press and hold the unlabeled yellow Function button (Fig. 1, Callout B) for 3 seconds. If the device has not yet been activated, this operation will activate the device and the LCD will display **Log**. If the device is already activated, this operation will deactivate the logger and the LCD will display **Con**. If the memory is full, the LCD will

display **FUL** during recording. The data logger has 5 display modes which are **Normal**, **Max**, **Min**, **Avg** and **Status**. Press the button briefly to switch between these modes.

Normal: displays current sound level

Max: displays the maximum reading recorded since activation of this mode

Min: displays the minimum reading recorded since activation of this mode

Avg: displays the average value of readings recorded since activation of this mode

Status: displays status of the device

Log: currently logging data

Con: inactive; connect to computer to configure for next data logging session

Ful: memory is full

--- configured and ready to start logging

SPECIFICATIONS

Range: 30~130dB Resolution: 0.1dB Accuracy: ± 1.5 dB

Max capacity: 32000 data points Link Protocol: USB 1.0/2.0

Power supply: DC3.6V Li Battery Capacity: 1200mAh

Working current: <1mA

Operating temperature: 32° to 122°F (0° to 50°C)

Operating humidity: 10-90%RH non-condensing

Storage temperature: 14° to 122°F (-10° to 50°C),
5% to 95%RH w/o battery

Dimensions: 7.09 x 1.10 x 1.06 in. (180 x 28 x 27 mm)

Weight: 2.01 oz. (57g) w/o battery

MAINTENANCE TIPS

- Avoid dropping the unit. Do not subject it to violent shock or vibration or expose it to strong electromagnetic fields (for example, near arc welders or induction heaters).
- Keep the unit out of direct sunlight.
- Do not use chemicals or abrasive cloth to clean the display window or housing.
- Before storing the DSM20 for an extended period of time (several months or more), remove the battery to avoid having it leak and damage the unit.

WARRANTY INFORMATION

General Tools & Instruments' (General's) DSM20 USB Digital Sound Level Data Logger 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 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—including dropping the unit. 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 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:

General Tools & Instruments
80 White Street New York, NY 10013 212-431-6100

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



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Specifications subject to change without notice

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