

# **INSTRUCTION MANUAL**

# Model 381277 DMM Temperature Adapter

#### 1. INTRODUCTION

Congratulations on your purchase of Extech's DMM Temperature Adapter. This professional meter, with proper care, will provide years of safe reliable service.

## 2. SPECIFICATIONS

Temperature Range	0 to 2000°F (-20 to 1370°C)
Output Resolution	Adapter output: 1mV per degree C or F
Accuracy	<u>+</u> 3% to 233°F (112°C) ( <u>+</u> 5% above 233°F)
Power Supply	DC 9V battery (Heavy duty type).
Weight	5 oz. (142 g )
Dimensions	3 x 2 x 1" (76 x 51 x 25 mm)
Accessories Supplied	9V battery and K-type thermocouple

# 3. ADAPTER DESCRIPTION

- 1. Standard DMM displaying temperature
- Temperature Adapter shown connected to DMM
- Power status LED
- 4. Units select switch for degrees C/F
- Thermocouple sensor shown attached to Adapter

NOTE: Battery compartment is on rear of adapter secured by three screws.



# 4. OPERATION

# 4.1 Adapter to DMM Connection

Connect the Adapter to the DMM input terminals via the Adapter's output plugs observing polarity (the output plug polarity is labeled on the adapter). The positive (+) Adapter plug connects to the DMM "V" volts input terminal and the Adapter's negative plug connects to the DMM "COM" (-) input terminal. Power the DMM and set its function switch to the mV DC range. (Use the VDC setting if mV setting is not available). If you are using an Auto Range DMM, disable the Auto Range function and use Manual Range mode.

#### 4.2 Power the Adapter and Select Temperature Units

Move the "OFF/C/F" Switch to either the degrees F or C position as desired. The Adapter is now powered (observe the red LED power light) and the units of measure are selected. To remove power to the meter, move this switch to the OFF position and observe that the red LED indicator extinguishes. If the red status LED does not light when the meter is switched on, replace battery.

#### 4.3 Measurement Considerations

The supplied Type K Thermocouple can measure temperatures up to 650°F. The Adapter can accept other thermocouples which can measure higher temperatures (up to 2000°F). Contact Extech or you local distributor for other thermocouple probe types.

### 5. MAINTENANCE

#### 5.1 Battery Replacement

Remove the three (3) Phillips head screws on the rear of the Adapter and open the housing. Replace the battery and secure the adapter housing.

#### 5.2 Cleaning

Caution: Use only a dry cloth to clean the plastic case.

# 6. CALIBRATION / REPAIR SERVICES

Extech offers complete repair and calibration services for all of the products we sell. For periodic calibration, NIST certification or repair of any Extech product, call customer service for details on services available. Extech recommends that calibration be performed on an annual basis to insure calibration integrity.

# 7. WARRANTY

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for one year from date of shipment (a six month limited warranty applies on sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product.

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