iGaging 35-407

iGaging Digital Protractor User Manual

Model: 35-407

1. Introduction

Thank you for choosing the iGaging Digital Protractor. This precision instrument is designed for accurate angle measurements in various applications. Featuring two stainless steel rules (7-inch and 4-inch blades) with photo-etched graduations in both inches and metric units, it provides continuous display readings as the arms are adjusted. The large, clear LCD display, hold function, and reversible reading capability enhance usability. This manual provides essential information for the proper setup, operation, and maintenance of your digital protractor.

2. Safety Information

Please read and understand all safety instructions before using the digital protractor. Failure to follow these instructions may result in injury or damage to the device.

- Keep the device away from water and excessive humidity to prevent damage to electronic components.
- Avoid dropping the protractor or subjecting it to strong impacts, as this can affect its accuracy and functionality.
- Handle the stainless steel blades with care to prevent cuts or injuries.
- Do not attempt to disassemble or modify the device. Repairs should only be performed by qualified personnel.
- Store the protractor in a clean, dry place when not in use.

3. Package Contents

Verify that all items are present in the package:

- iGaging Digital Protractor (Model 35-407)
- 7-inch Stainless Steel Blade
- 4-inch Stainless Steel Blade
- CR2032 Battery (pre-installed)
- Extra CR2032 Battery

4. Setup

The iGaging Digital Protractor comes ready for use with a pre-installed battery. Follow these steps for initial setup:

1. **Unpacking:** Carefully remove the digital protractor and its accessories from the packaging.
2. **Blade Attachment:** The protractor includes two interchangeable stainless steel blades (7-inch and 4-inch). Select the appropriate blade for your task and ensure it is securely attached to the main body. The blades are designed to slide into a slot and be held by the blade lock mechanism.
3. **Power On:** Press the **ON/OFF** button to turn on the device. The LCD display should illuminate.
4. **Zeroing:** Before taking measurements, it is recommended to zero the protractor. Close the blades completely or set them to your desired reference angle, then press the **ZERO** button. The display will show 0.00°, indicating the new reference point.

5. Operating Instructions

The digital protractor is designed for intuitive operation. Here are the key functions:

5.1 Taking Measurements

1. **Positioning:** Place the protractor on the surface or object you wish to measure. Adjust the movable blade until it aligns with the angle you need to determine.
2. **Reading the Display:** The angle will be continuously displayed on the large LCD screen as you adjust the blades. The resolution is 0.05 degrees.
3. **Inside and Outside Angles:** The protractor can measure both inside and outside angles. Simply position the blades accordingly.

Figure 1: Digital Protractor displaying an angle measurement.

5.2 Hold Function

- Press the **HOLD/Rev.** button once to freeze the current reading on the display. This is useful for recording measurements in difficult-to-view positions.
- Press the **HOLD/Rev.** button again to release the hold and resume continuous measurement.

5.3 Reversible Reading

- The **HOLD/Rev.** button also controls the display orientation. If the protractor is inverted, pressing and holding the **HOLD/Rev.** button will flip the display reading to be right-side up, improving readability.

5.4 Power Off

- Press the **ON/OFF** button to manually turn off the device.
- The protractor features an automatic power-off function after 5 minutes of non-use to conserve battery life.

Figure 2: Close-up of the digital display and control buttons (ON/OFF, ZERO, HOLD/Rev.).

6. Maintenance

Proper maintenance ensures the longevity and accuracy of your digital protractor.

6.1 Cleaning

- Wipe the protractor clean with a soft, dry cloth after each use.
- For stubborn dirt, a slightly damp cloth can be used, but ensure no moisture enters the electronic components.
- Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the display or finish.

6.2 Battery Replacement

The protractor uses one 3V CR2032 lithium coin cell battery. The battery life is approximately 1 year under normal use. Replace the battery when the display becomes dim or does not turn on.

1. Locate the battery compartment cover on the back of the digital module.
2. Use a small screwdriver or coin to gently open the battery compartment.
3. Remove the old CR2032 battery.

4. Insert a new 3V CR2032 battery with the positive (+) side facing up.
5. Close the battery compartment cover securely.
6. Turn on the protractor and verify that the display is clear.

7. Troubleshooting

If you encounter issues with your digital protractor, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Display is blank or dim.	Low or dead battery.	Replace the CR2032 battery (refer to Section 6.2).
Inaccurate readings.	Protractor not zeroed; debris on blades; damaged sensor.	Press the ZERO button to re-zero. Clean blades thoroughly. If problem persists, contact support.
Buttons are unresponsive.	Battery issue; internal malfunction.	Replace battery. If still unresponsive, contact support.
Protractor does not turn off automatically.	Internal sensor issue.	Manually turn off using the ON/OFF button. Contact support if auto-off is critical.

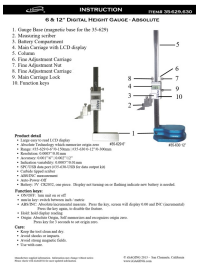
8. Specifications

- **Measurement Range:** 0-360 Degrees
- **Resolution:** 0.05 degrees (5/100th of a degree)
- **Repeatability:** 0.1 degree
- **Blades:** 7-inch and 4-inch Stainless Steel
- **Display:** Large, clear LCD
- **Power Source:** 1 x 3V CR2032 Lithium Coin Cell Battery (included, with extra battery)
- **Battery Life:** Approximately 1 year
- **Auto Power-Off:** After 5 minutes of non-use
- **Model Number:** 35-407
- **Package Dimensions:** 8.19 x 2.83 x 1.46 inches
- **Item Weight:** 5.29 ounces

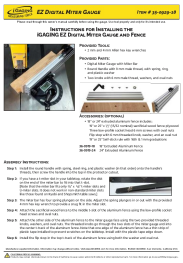
9. Warranty and Support

iGaging stands behind the quality of its products. For warranty information, technical support, or service inquiries, please visit the official iGaging website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty claims.
iGaging Official Website: Visit the iGaging Store on Amazon

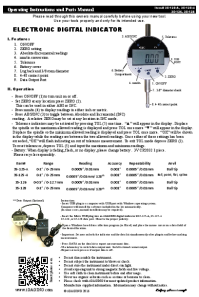
Related Documents - 35-407



[iGAGING 6 & 12" Digital Height Gauge - Absolute Instruction Manual]
Instruction manual for the iGAGING 6 & 12" Digital Height Gauge - Absolute, covering product details, specifications, function keys, and care instructions. Includes model numbers 35-629 and 35-630.

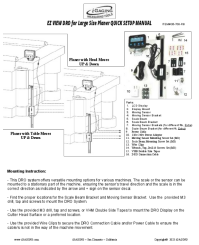


[iGAGING EZ Digital Miter Gauge: Installation, Calibration, and User Guide]
Comprehensive guide for installing, calibrating, and using the iGAGING EZ Digital Miter Gauge (Item #35-0929-18). Includes parts, tools, assembly steps, usage instructions, specifications, and safety information for woodworking.

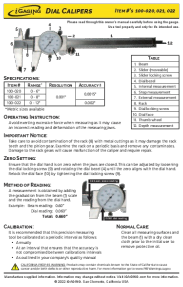


[iGAGING Electronic Digital Indicator Operating Manual]
Operating Instructions and Parts Manual for iGAGING Electronic Digital Indicators (Models 35-125-A, 35-125-4, 35-126, 35-128). Learn about features, operation, data output, and care instructions.

[iGAGING IP54 OriginCal Absolute Digital Caliper Operating Instructions and Parts Manual]
Operating instructions and parts manual for the iGAGING IP54 OriginCal Absolute Digital Caliper, detailing its parts, specifications, operations, battery replacement, and precautions.



[EZ View DRO for Large Size Planer Quick Setup Manual]
This manual provides quick setup and operating instructions for the iGAGING EZ View DRO system designed for large size planers. It covers mounting, parts identification, and operational features like unit selection, preset values, and calibration.



[iGAGING Dial Calipers: Owner's Manual and Specifications]
Comprehensive guide to iGAGING Dial Calipers (models 100-020, 100-021, 100-022), covering specifications, operating instructions, zero setting, reading methods, calibration, and care.