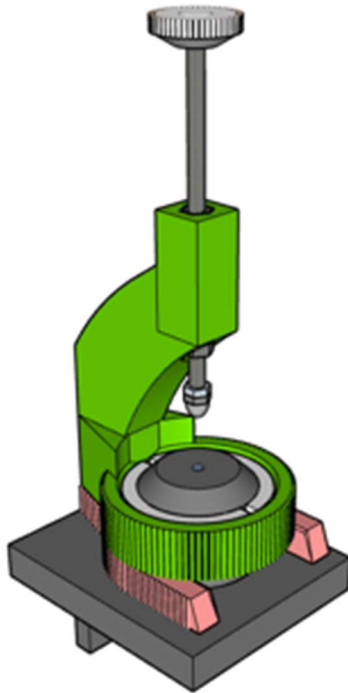


Installation GUIDE



ClampIR



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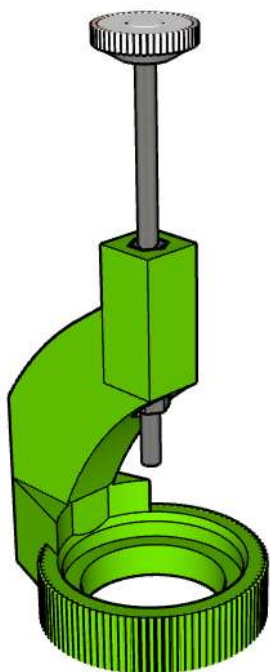
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Introduction

ClampIR is a tailor-made attachment designed for use with the 4300 handheld FTIR spectrometer's Diamond and Germanium ATR accessories. It serves as a conventional handheld presser, simplifying the process of conducting pressing-ATR tests. With its easy assembly and disassembly, along with switchable tips for various types of samples, ClampIR enhances the versatility and ease of your handheld spectroscopic analysis.

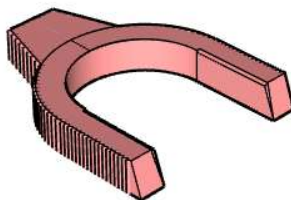
Components



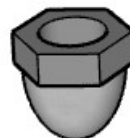
A. ATR Frame with Thumb Knob Presser



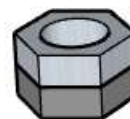
B. Groove Lock (2X)



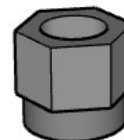
C. Spacer



D. Acorn Tip



E. Flat Tip (2X)



F. Dip Tip

Cautions

- Ensure that the Frame and Presser (*item A*) are NOT separated, as they should be precisely aligned for proper functionality.
- Never overturn the thumb knob; excessive pressure could damage the frame.
- Avoid using in temperatures >50°C, as excessive heat may cause softening.

WARNING: Do NOT over press the sample. The ClampIR does not include a pressure-limiting mechanism. Always monitor the live spectrum feature of the FTIR software and stop tightening once the signal intensity is sufficient.

Suggestions

- Utilize the live view spectrum in the instrument software to adjust pressure and sample positioning.
- The Acorn tip offers the highest pressure, well-suited for general sample types.
- For powder and thin cord, the Flat tip is the most suitable choice.
- When working with resin, pellets, and bead-type samples, opt for the Dip tip.
- The Acorn and Dip Tip consist of one part each; simply screw them into position.
- For the Flat tip, it consists of two nuts. First, align the bottom nut with the press tip, then secure it in place with the top nut.

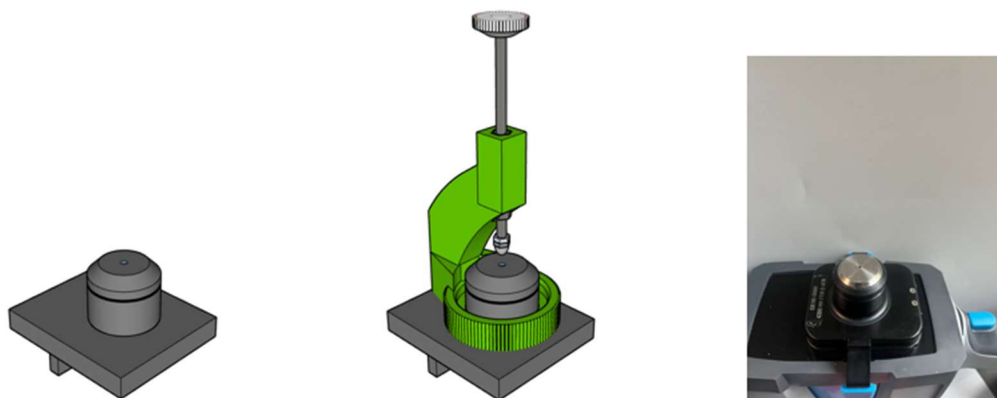
Note: The Spacer (*item C*) fits between the ATR base and ClampIR Frame (*item A*) to ensure mechanical stability.

- Due to variation across ATR accessories, the support may not always fit tightly.
- **Suggested improvement:**
 - Apply a thin layer of Scotch tape or sticker to the bottom of the spacer to increase its thickness slightly.
 - This ensures a snug, secure fit and prevents wobbling during operation

Assembly

Please follow the workflow outlined below to assemble the ClampIR onto the 4300 ATR (Diamond or Germanium). Begin by securely screwing up the presser to create sufficient space for assembly. Ensure that the groove locks are positioned correctly.

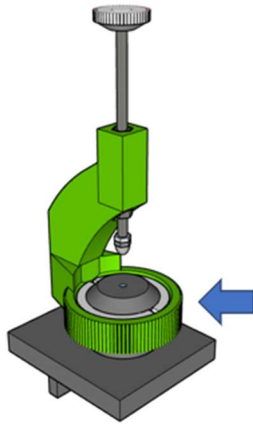
Step 1: Insert and push the Frame (*item A*) to the bottom



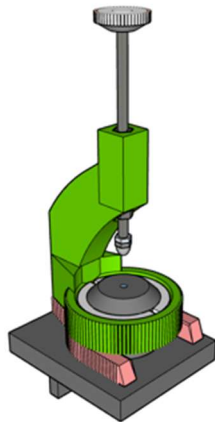
Step 2: Insert the Groove lock (*item B*)



Step 3: Pull up the Frame (*item A*)



Step 4: Insert the Spacer (*item C*)



Step 5: Thread the Tip as suited for the sample types (*items D, E, or F*)

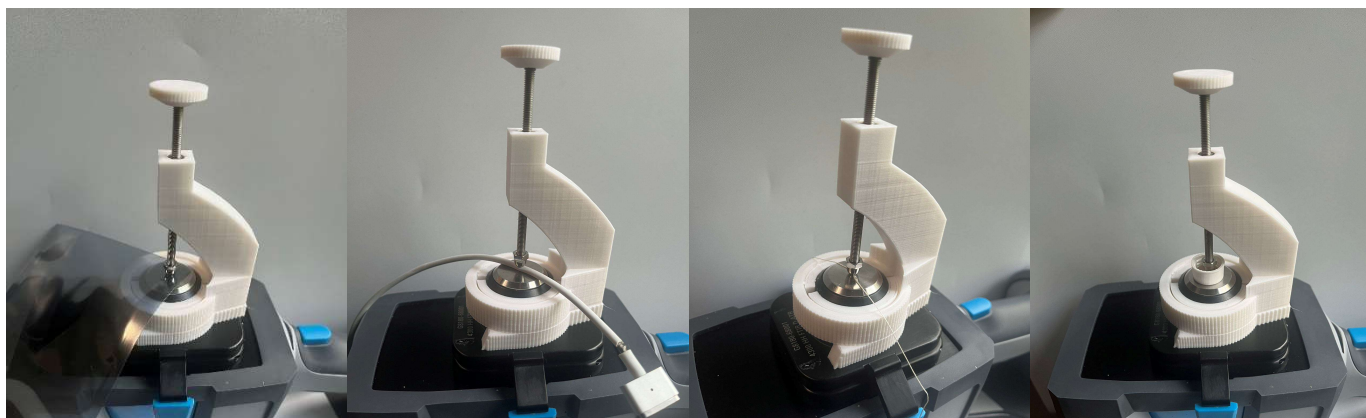
Disassembly

Disassemble the attachment in the reverse workflow (*Steps 5 through 1*). Screw upward the thumb presser to allow enough space for disassembling.

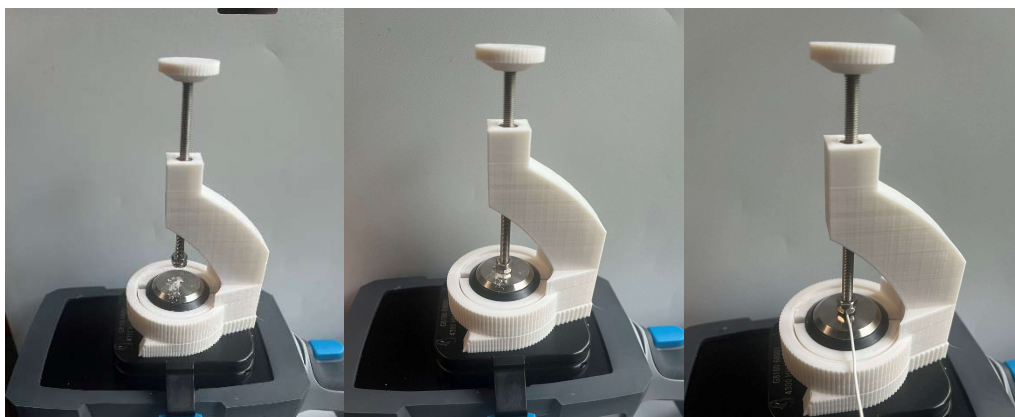
Support

If you require further assistance, please contact our support team via info@jlabolutions.com.

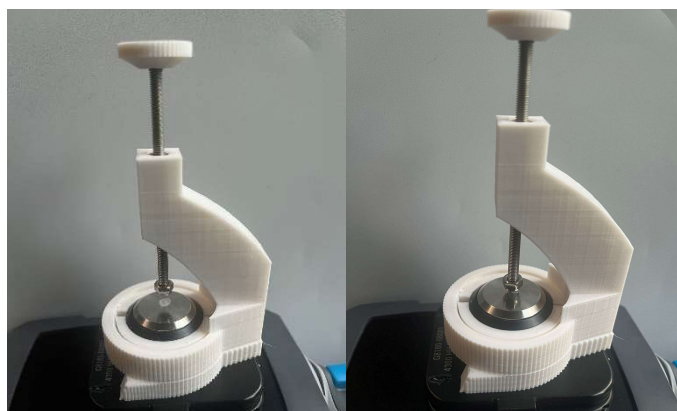
Examples



Acorn Tip: Film, Cord, Fiber, Plastic Cap (the most adaptive tip with greatest pressure)



Flat Tip: Powder, Thin Wire



Dip Tip: Resin