

Spectra-Tech Foundation Thunderdome

Since its introduction in 1997 as a stand-alone product, the Thunderdome™ has become the largest selling, single-reflection ATR accessory on the market today. In 2000, the Thunderdome was incorporated into the Spectra-Tech Foundation Series of modular accessories. The Spectra-Tech Foundation Thunderdome provides rugged performance allowing analysis of highly absorbing samples requiring extremely shallow penetration. The Ge crystal has excellent chemical resistance, attacked only by Aqua Regia and hot sulfuric acid. Finally, the Spectra-Tech Foundation Thunderdome features a domed sampling surface and a choice of two, fail-safe pressure devices to obtain a good spectrum on the first try.

Applications

- Single polymer beads
- Carbon filled materials
- Paint chips
- Liquids, including aqueous solutions, corrosives and caustics
- Formed, rigid polymers
- Single filaments
- Contaminants in paper

Features

- Dome shaped crystal condenses beam so smaller samples may be analyzed
- Standard pressure device tip is 2 mm in diameter, which defines the effective spot size
- Rugged Ge crystal has a spectral range of 4,000–675 cm^{-1}
- Ge's high refractive index yields shallow depth of penetration—ideal for highly absorbing samples and thin surface analyses
- Liquid holder allows small volumes of liquid to be sampled

Pressure Device Features

- Two pressure devices available—Tilt-Back Pressure Tower (standard) and Lightning Viewer (optional)
- Both pressure devices have tilt-back feature for easy crystal cleaning
- Both devices feature slip-clutch mechanism for repeatable pressure and to prevent crystal damage
- Audible click indicates when pressure has been optimized
- Two tips with Tilt-Back Pressure Tower—one with a flat end, one with a concave end for holding pellets, crowns and powders
- Lightning Viewer allows viewing for proper sample positioning



Product Configuration

Product Configuration	Part Number
Spectra-Tech Foundation Base plus Thunderdome Swap-Top with Tilt-Back Pressure Tower	0074-1XX
Spectra-Tech Foundation Base plus Thunderdome Swap-Top with Lightning Viewer	0074-2XX
Spectra-Tech Foundation Thunderdome Swap-Top only with Tilt-Back Pressure Tower (shown above)	0074-100
Spectra-Tech Foundation Thunderdome Swap-Top only with Lightning Viewer	0074-200
Spectra-Tech Foundation Base only	0070-1XX

Options/Replacements

Liquid holder	0009-050
Replacement o-rings (Qty, 5)	0004-099
Tilt-Back Pressure Tower	0074-150
Lightning Viewer	0074-250