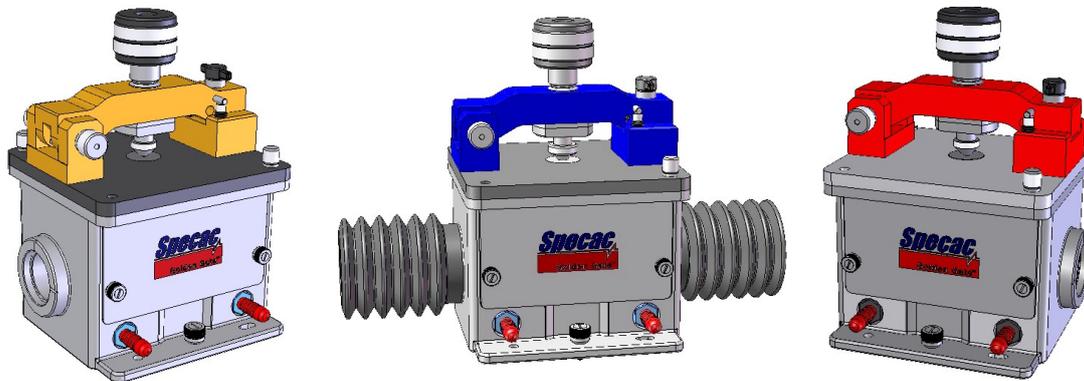




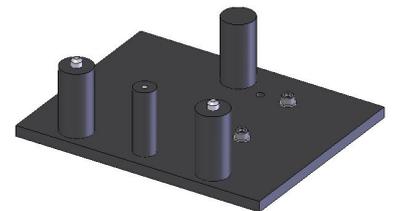
Quick Start Guide For Golden Gate™ ATR Accessory P/N GS10500 Series



This Quick Start Guide is intended to help you through the steps required for the correct first time installation and alignment of the **Golden Gate™ ATR Accessory** into your IR spectrometer system. This guide is a supplement to the Instruction Manual provided for the accessory itself where more detailed information can be found.

Step 1 – Install the Benchmark™ Baseplate into your spectrometer

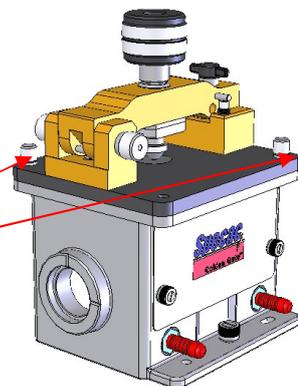
The Benchmark™ baseplate supplied allows the Golden Gate™ ATR Accessory to be positioned correctly in the sample compartment of your specific spectrometer. Please consult the relevant page of the Benchmark™ Baseplate Installation Guide instruction manual (21-549-000-7) if you need more information.



Step 2 – Fit the Golden Gate™ ATR Top Plate to the Optical Unit

For any Golden Gate™ ATR Accessory that is supplied, the ATR crystal Top Plate assembly of choice (with diamond or germanium crystal option) will normally already be fitted to the Optical Unit. If these parts are separate, install the Top Plate onto the Optical unit using the two fixing thumb screws. (The Top Plate will only fit to the Optical Unit one way evenly and flat with the stud and pin fix fixings on the Optical Unit passing correctly through the slot and circular holes on the Top Plate.)

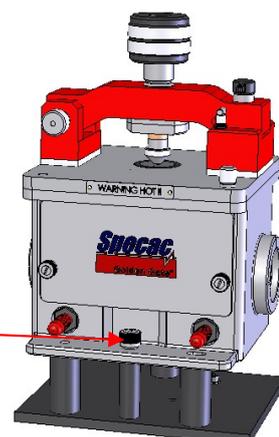
Top Plate Fixing
Thumb Screws



Step 3 – Fit the Golden Gate ATR Accessory (Optical Unit) to the Baseplate

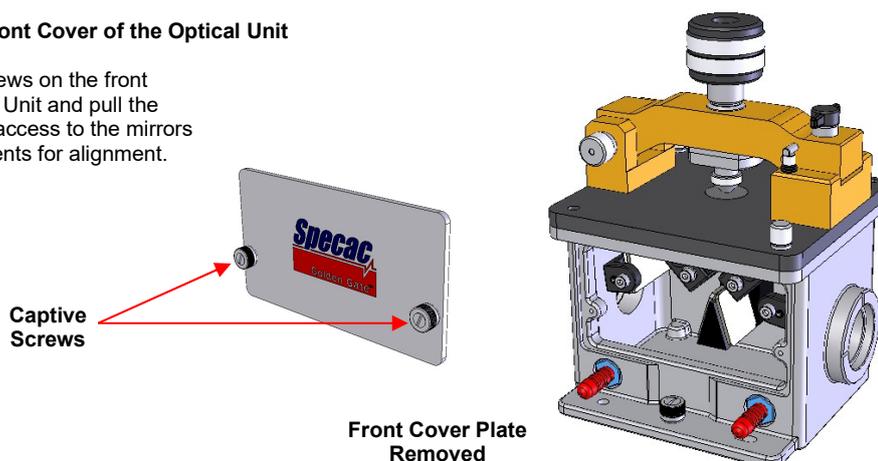
The Golden Gate™ ATR Accessory can now be fitted onto the Benchmark™ baseplate. The Optical Unit is placed over the baseplate support pillars and the fixing thumb screw is tightened into the central front pillar.

Fixing Thumb Screw of
Optical Unit to
Benchmark™ Baseplate



Step 4 – Remove the Front Cover of the Optical Unit

Undo the two captive screws on the front cover plate of the Optical Unit and pull the cover plate clear to gain access to the mirrors and lens optical components for alignment.



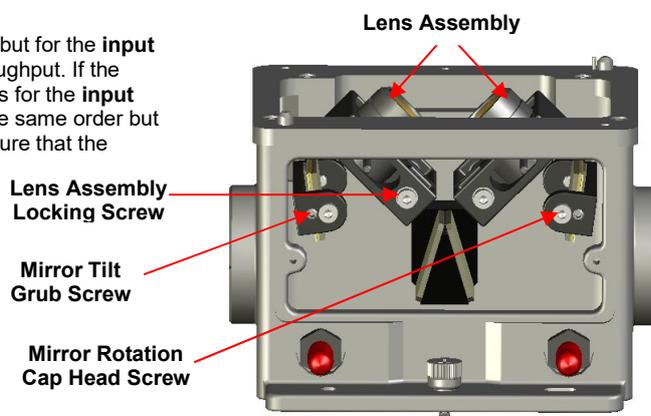
Step 5 – Alignment Procedure

With the spectrometer in its energy monitoring mode, use the 3.0mm ball driver (for rotation) and 2.0mm Allen key (for tilt) tools supplied to adjust the alignment screws of the mirrors and lens assemblies in the Optical Unit. It is important to know the source to detector beam direction of the spectrometer being used - left to right or right to left – as it passes through the sample compartment. This determines the **input** mirror and lens to the sample area and **output** mirror and lens from the sample area to adjust.

For alignment start with the **output** adjustable mirror for its rotate and then tilt position by turning of the respective adjustment screws. Obtain a maximum energy reading with a rotational adjustment of the mirror before moving to the tilt adjustment and then obtain a maximum reading from the tilt adjustment. Then adjust the focus position of the **output** lens. The lens barrel locking screw is loosened by the 3.0mm ball driver and the lens assembly is slid in its mount for focus holding the little tiller bar. When a maximum throughput is obtained from the **output** lens focal point lock the screw again.

Repeat the rotate, tilt and focal point adjustment settings but for the **input** mirror and lens components to try and maximise the throughput. If the energy has increased significantly after these adjustments for the **input** mirror and lens components then repeat them again in the same order but for the **output** components once again only. This will ensure that the accessory is at its optimum alignment settings.

Remember, this alignment process only has to be done once when first setting up the accessory in the spectrometer – so it is worth spending a small amount of time now in order to get the best performance from it in the future.



Step 6 – Replace the Front Cover

Once aligned, the front cover can be replaced to maintain a stable environment inside the accessory. To fit the purge bellows or a dry air supply to purge the accessory, refer to page 23 of the Golden Gate™ ATR Accessory instruction manual provided.

Step 7 – It's Ready to Use!

For safety information and detailed instructions on getting the best from your Golden Gate™ ATR accessory please refer to the Golden Gate™ ATR Accessory instruction manual 2I-10500-17 supplied.

Specac Ltd
Unit 12, Science & Innovation Centre
Halo Business Park
Orpington
Kent BR5 3FQ
Tel: +44 (0) 1689 873134
www.specac.com