

GC×GC Thermal Modulator Upgrade Kit A

Alignment-Free Hardware Upgrade for Zoex Loop Modulators

Upgrade your existing loop modulator without replacing the complete system

Why Upgrade?

Conventional loop-delay thermal modulators require precise positioning of the modulation loop relative to the hot and cold jets. Manual alignment can be time-consuming, and the loop may shift during operation as a result of repeated hot-jet pulses.

InfoMass Upgrade Kit A replaces the conventional head clamp and loop holder with an alignment-free design in which loop positioning is established by the hardware geometry. The result is easier setup, improved mechanical stability, and repeatable loop positioning.

What the Kit Upgrades

- Replaces the existing head clamp
- Replaces the existing loop holder (column holder)
- Retains the other existing modulator components
- Requires no change to normal modulator operation

A targeted hardware upgrade - not a complete modulator replacement.

Upgrade at a Glance

Upgrade type:

Mechanical hardware

Components replaced:

Head clamp and loop holder

Alignment:

Alignment-free loop positioning

Existing modulator:

Other components retained

Operation:

No change to normal operation

Key Benefits

Alignment-Free Loop Positioning

Hardware geometry establishes the modulation-loop position without user adjustment.

Improved Mechanical Stability

Finger-tight fastening securely holds the loop holder in position during operation.

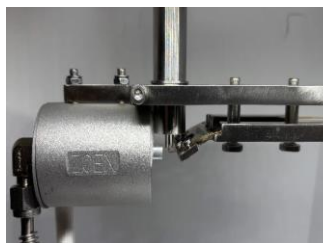
Simplified Jet Alignment

A dedicated **installation tool** provides accurate and repeatable positioning of the hot and cold jets.

Easy Loop Installation

The loop-holder design simplifies loop winding and replacement.

Upgrade Hardware



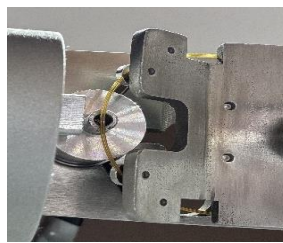
Installed Upgrade

Redesigned head clamp and loop holder



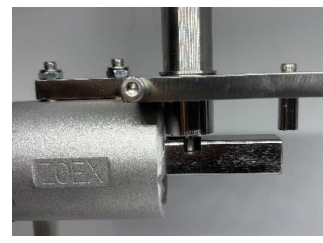
Finger-Tight Loop Holder

Secure and stable positioning



Alignment-Free Geometry

Loop position defined by the hardware



Jet Alignment Tool

Accurate and repeatable jet positioning

Upgrade your existing Zoex loop modulator with InfoMass Upgrade Kit A.

For more information: info@infomassllc.com