

Upgrade to Remote Coarse Motion Control

It is Scienta Omicron's goal to make our products as practical and user friendly as possible. This package upgrades our legacy MATRIX V1 & V2 Hardware versions to incorporate the Remotely Controllable features of our modern MATRIX 4 Units.

The modern MATRIX 4 Units integrate the operation of the coarse positioning of the tip via the **MATRIX Graphical User Interface (GUI)**. The modern MATRIX GUI is remotely controllable from anywhere in the world via the internet, meaning that researchers can control and change the tip location on the surface of the sample without stepping foot in the laboratory.

This Upgrade to Remote Coarse Motion Control upgrades legacy MATRIX V1 & V2 hardware and supplies a stand-alone GUI which interfaces to the hardware.

Benefits of the upgrade:

- Operate the coarse positioning of the SPM tip from anywhere via online remote access to your **MATRIX V1 & V2 Hardware**
- Take control of auto approach and tip retract from **MATRIX PC**
- GUI controlled coarse motion from **MATRIX PC** for **MATRIX V1 & V2** with single step precision in all axes (number of coarse axes dependent on SPM type)

How the Upgrade works:

- A **Remote Coarse Signal Card (RCSC board)** is plugged into the **MATRIX frame** and interfaces to the **Coarse Positioning Facilities**.
- The **RCSC board** can be controlled from the **GUI** running in a browser window on the **MATRIX computer**.

Read more about the inclusions of the package in the technical specifications on the next page. If you have any questions about the package, please contact our [Services Team](#).

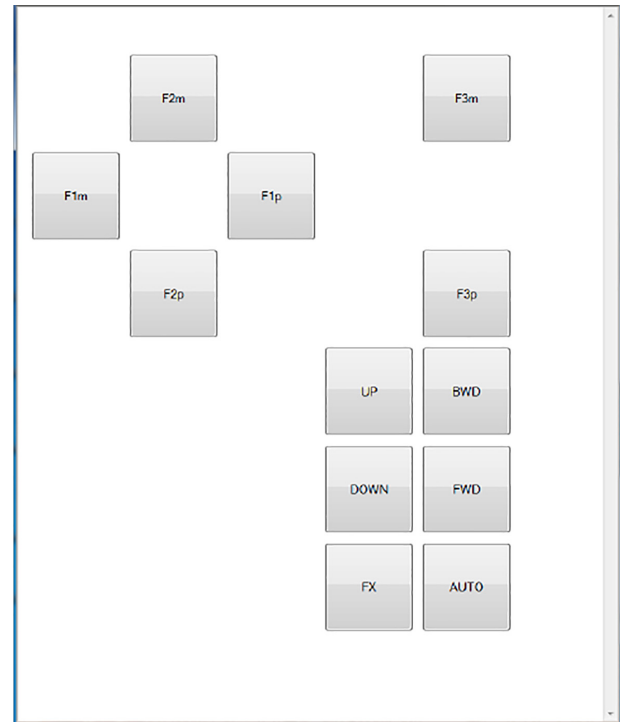


Figure 1: GUI for operating coarse positioning from Matrix PC

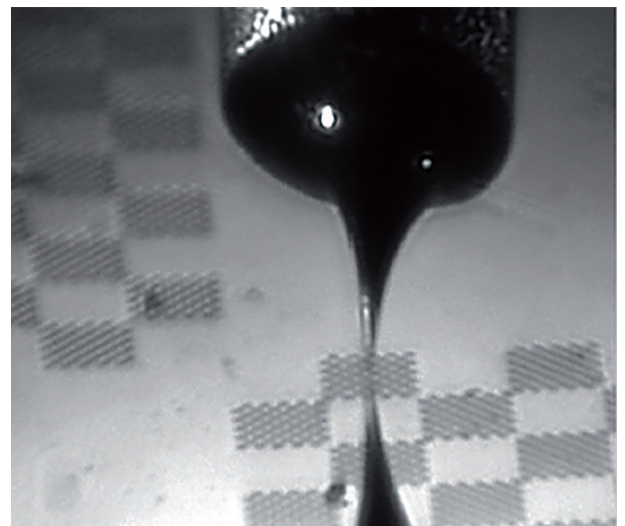


Figure 2: Coarse positioning of tip on a sample (example)



Summary

Part Number:

- CA13133-S RCSC Board

Requirements:

- MATRIX V1 or V2 Controller
- MATRIX Software V3.3 (or newer)

Limitations:

- Only compatible with MATRIX controller
- Continuous motion not supported, max. single step repetition rate ca. 2Hz

Installation:

- Can be installed by the user
- Does not require SO Engineer on site

How to contact us:

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