

RMR Scanner

Rapid Multi Region Scanner

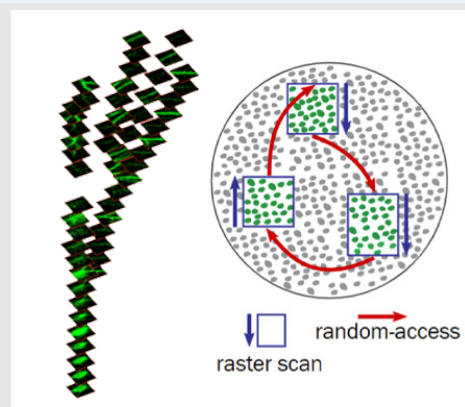
Powered by ScanImage®



The RMR (Rapid Multi Region) Scanner increases the imaging rate of your microscope by subdividing the field of view into multiple regions of interest. It combines the flexibility of galvo mirrors with the speed of resonant scanners. Its novel design integrates one resonant and two galvo mirrors in a single compact device. The RMR scanner is fully compatible with ScanImage resonant raster scanning and arbitrary line scanning modes. Equipped with flexible mounting options, the RMR Scanner can be installed on Thorlabs BScope, Sutter MOM, and custom-built microscopes.

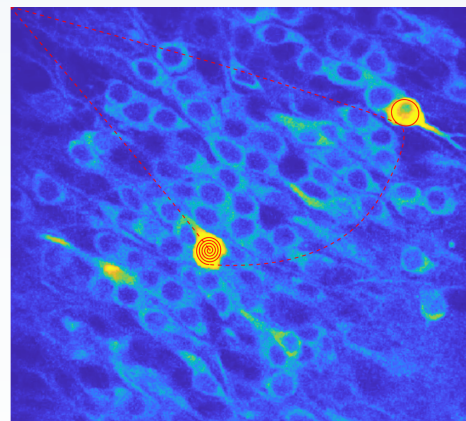
Rapid Multiple Region Scanning

Get the speed of resonant raster scanning in combination with the flexibility of galvo scanning. By selecting regions of interest for imaging, no time is wasted on empty areas in the field of view. The intuitive ScanImage mROI (multi region of interest imaging) feature makes it easy to define regions in 2D or 3D.



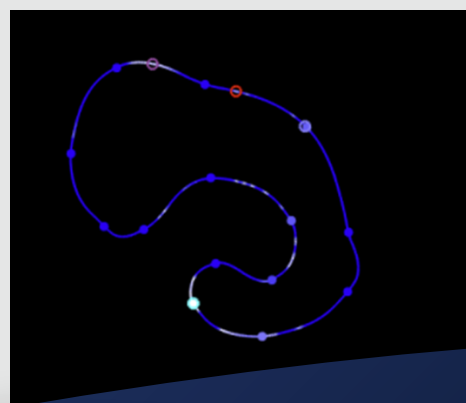
Photostimulation

Apply photostimulation during resonant raster scanning by selectively increasing the power in selected regions using the ScanImage Power Box. Alternatively, you can rapidly stimulate neurons in sequence or at will using the Photostimulation feature in ScanImage Premium.



Arbitrary Line Scanning

Use the galvo pair to sample individual neurons along a predefined scan path. The powerful ScanImage Premium Arbitrary Line Scanning feature enables you to quickly define 3D paths with user defined timing. The corresponding driving waveforms can be optimized with the ScanImage Premium waveform feature in order to achieve at least 200 Hz cycle rate.



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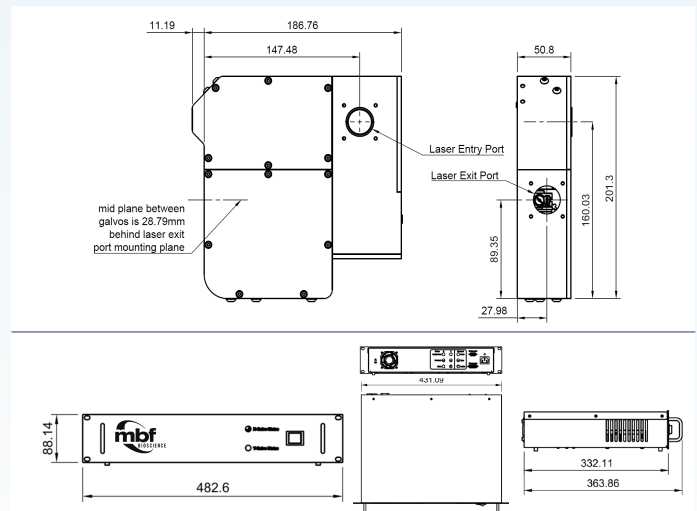
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Technical Specifications

- Two high-performance galvo mirrors
- One 8 kHz or 12 kHz resonant mirror
- Wavelengths: 800–1100 nm
- Group delay dispersion <1000 fs²
- Total scanning range in X and Y: 20° optical
- Maximum input beam diameter: 4 mm
- Compatible with 30 mm cage mounts
- M4X0.7 mounting holes
- Rack-mountable (2 U) control electronics included
- Compatible with Sutter, Thorlabs and custom-built microscopes



Learn more at: mbfbioscience.com/products/rmr-scanner



About MBF Bioscience

A rich history of creating the future of neuroscience.

MBF Bioscience develops advanced tools for collecting and analyzing accurate, reproducible data from histological specimens, 2D and 3D microscope images, and freely moving *C. elegans* so that scientists can better understand brain diseases and processes at a cellular level.

Our products have helped researchers publish over 17,000 peer reviewed papers.

What our customers say

“ ScanImage is extremely stable, allowing us to image for hours without bugs or crashes, and the user interface is intuitive but still provides detailed control over acquisition parameters.

Dan Wilson
Harvard Medical School

“ MBF Bioscience is extremely responsive to the needs of scientists and is genuinely interested in helping all of us in science do the best job we can.

Sigrid Veasey, M.D.
University of Pennsylvania