



SideDrive™

by smartdrive™

Smart automation and capture technology for microscope users

SideDrive™ is a revolutionary digital technology which automates existing microscope stages allowing users to perform a host of motion based research without the need for expensive stage upgrades. SideDrive™ creates the platform for X,Y & Z stage automation delivered via a user friendly palm interface or PC software options; offering huge in-focus digital images of entire slides, depth montaging and sophisticated image analysis.

Revolutionary SideDrive™ technology makes digital automation an affordable reality...



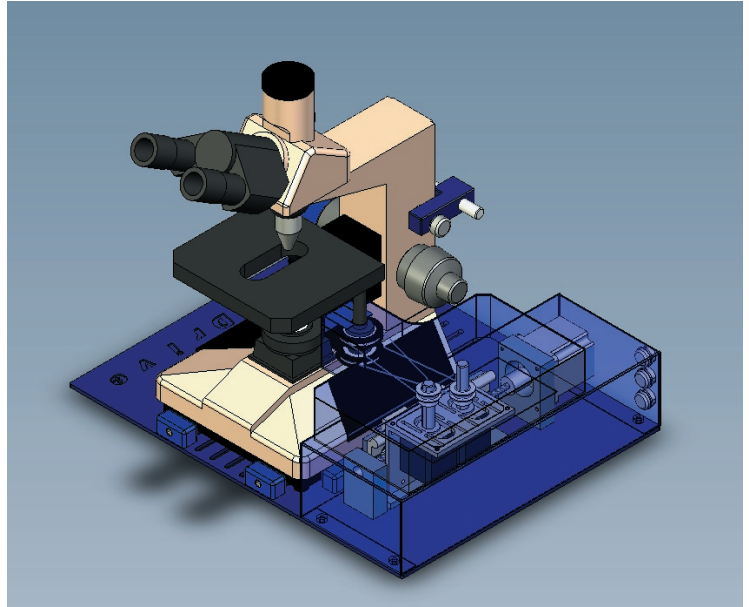
smartdrive
DRIVING MOTION FURTHER

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Concept

Most microscopes are sold with a conventional manual stage that allows the user to adjust the sample X,Y position via two rotary thumbwheels mounted vertically below the stage. Users are comfortable with this simple method of control, which is especially useful for quick analysis of samples. However, when large batches of samples are to be processed or a number of time and repetitive strain issues in mind a motorised stage may be preferred. Motorised stages exist; however, they are replacements for the existing microscope stage and can be used manually, typically relying on a PC being powered up and working before any sample manipulation can be performed. SideDrive™ is an innovative low cost solution to motorise the existing X, Y stage, with the option of automatic focus. SideDrive™ offers the user complete integrated solutions incorporating hardware, software control suite, microscope and cameras in fact everything you need for an automated workstation at sensible pricing!



Design

The SideDrive™ base hardware provides a platform on to which the microscope is mounted using universal thumbwheels providing accurate X & Y motorised motion on the existing stage.



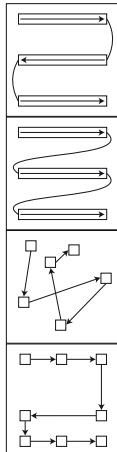
SideDrive control module

```
Fields X: 2
Fields Y: 3
Up/down change value
Enter OK back abort
```

Versatile

With precise sample manipulation in mind the versatile hand pendant offers the effect of the thumbwheel control familiar to all microscope users. Easy to use scan patterns and motion timings. All these functions are available at the tip of the wand, without the need for a PC to be connected.

Scan Modes

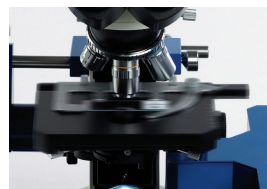


Snake – the stage alternates between scanning right to left and left to right forming a continuous chain.

Raster – the sample is moved right to left stopping at the end of a row it moves back to the right and commences the next row in the same manner.

Random – the sample is moved to a series of random positions.

Stored – the sample is moved to user programmed positions.

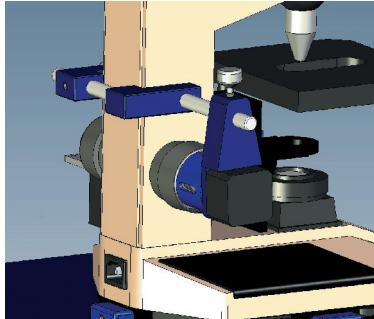


The versatile hand pendant

SideDrive™ Upgrade Options

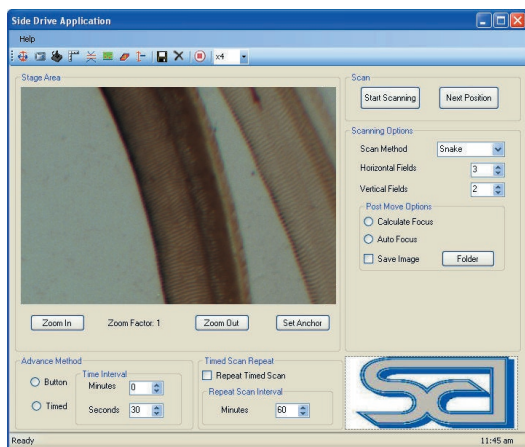
1) Motorised Focus

The universal Motorised Focus microscope in under 5 minutes, allowing the focus to be controlled from the hand pendant, or to enable the autofocus and montage functions when combined with the optional PC control software and camera.



2) SideDrive™ PC

a Windows PC.



Additional Features:

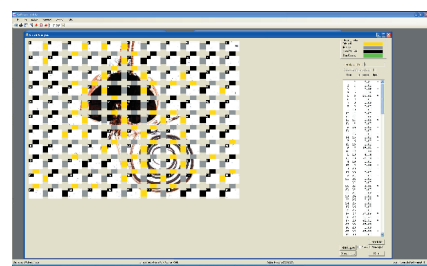
- Live image display
- Live focus meter
- Fast slide preview Scan mode
- Point and click to go anywhere on stage

Features when combined with Motorised Focus attachment:

- Manual Focus mode
- Autofocus mode
- Sample graduation compensation

3) SatScan™

SatScan™ PC software creates huge totally in focus seamless images, algorithm which is able to work on blank areas and regions with little or



stitched to create high resolution images

Provides all the functions of SideDrive™ PC - plus:

- Automatic illumination and shading correction
- In Focus Montage of 3D samples
- In image scale bar
- Stitch analysis with manual editor
- On screen line measurement tools
- Illumination Aid

