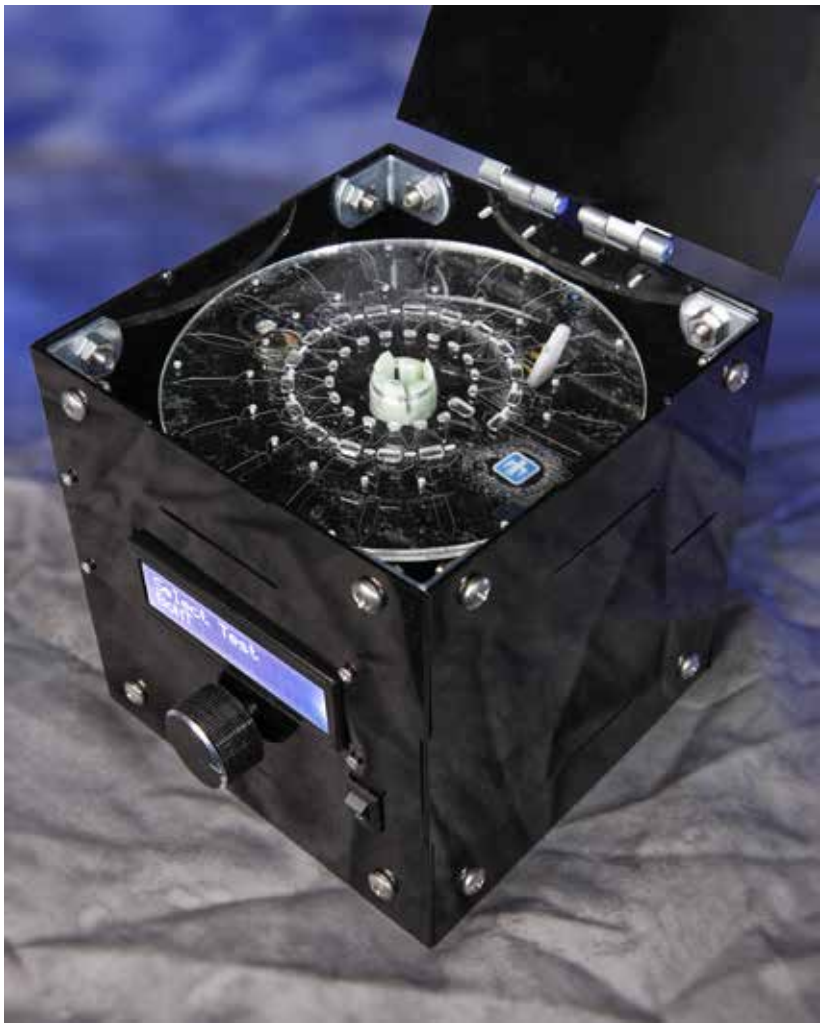
SAND2013-2420P

SpinDx Demonstration Prototype User Manual



U.S. DEPARTMENT OF ENERGY

National Nuclear Security Administration

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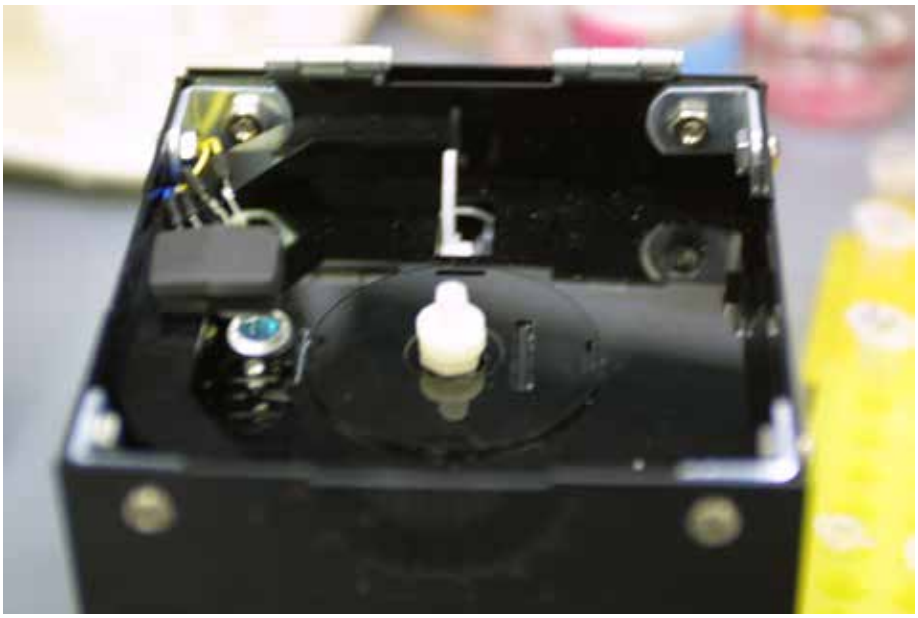
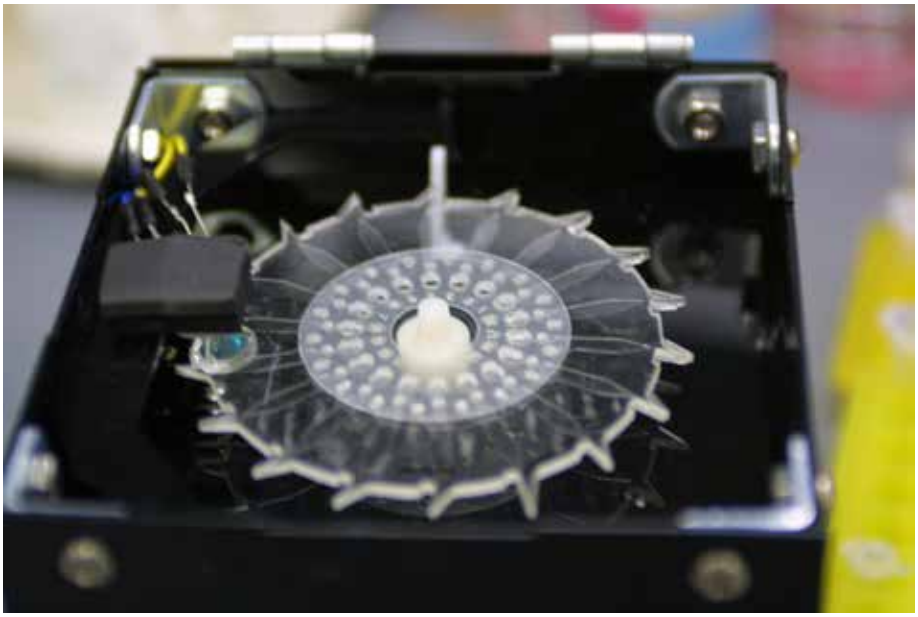
Front face of the demonstration prototype. The LCD screen displace instrument status. The power switch turns the instrument on/off. Rotate the encoder knob to switch between menu options. Depress the knob to select the displayed option.

Loading a disc into the instrument

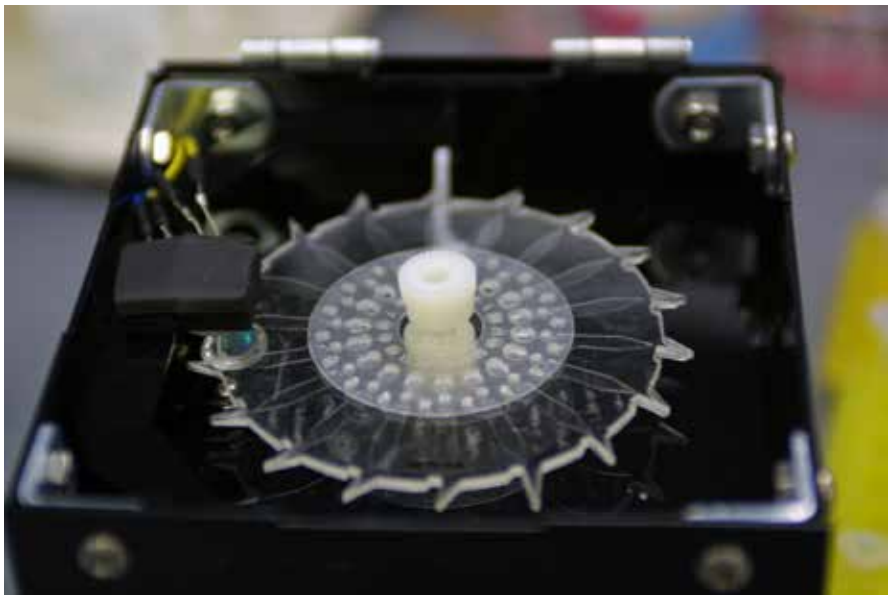
1. Open the lid



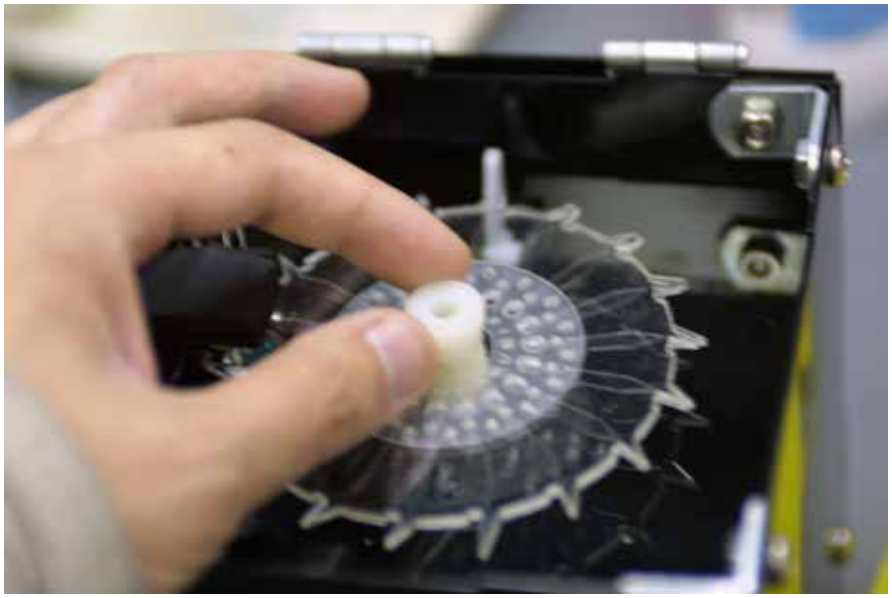
2. Place the disc onto the hub. Ensure that the channel numbers are readable (if they are backward the disc is upside down).



3. Place the teflon wingnut on the hub

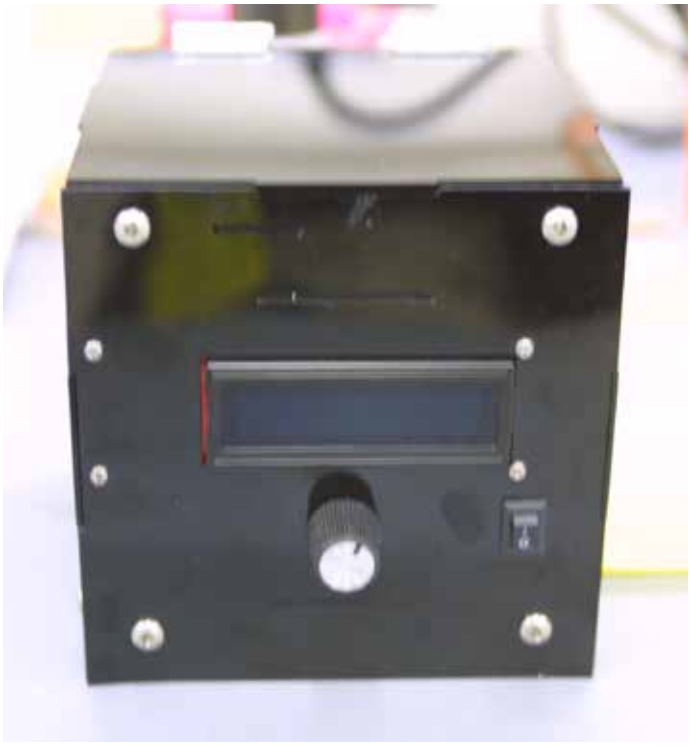


4. Screw down until it is fingertight.



Instrument operating instructions

1. Turn the power switch on. The LCD will illuminate and the microprocessor will initialize.



2. The first option is integration time. This controls the amount of time the instrument analyzes each channel. For demonstration purposes, 0.5 seconds is appropriate to minimize waiting time.

3. Depress the encoder knob to select integration time. The analysis program will automatically begin.

4. Mixing and spinning protocols will begin, as indicated by the LCD.

5. The LEDs will warm up and zero the instrument prior to analysis of the channels. The instrument will then step through each channel and read the fluorescence. The results are displayed on the LCD screen; scroll through the results by rotating the encoder knob.