



Heroin ID Kit

User Manual



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Product presentation

Serstech AB has created a unique patent pending product for identification of heroin. The Heroin ID kit is an active solution that when used together with the Serstech 100 Indicator has proven to have excellent qualities when identifying heroin. The solution provides spot measurements over larger parts of the surface, that combined with high quality SERS surfaces with excellent amplification, provides very good heroin identification capabilities when used with the Serstech 100 Indicator.

Presentation of the Heroin ID kit and its accessories

Below, you will find listed all accessories included into the Heroin ID kit.

		Fully equipped rugged case.
	  	Heroin ID device powered by a Lithium battery. Bottom adaptor (attaches to the Serstech 100 Indicator probes). Active Sample holder.
		Sample preparation bottle containing 3mL of Methanol with attached swab stick on the main cap. <i>*Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle.</i>

			<p>Lithium battery 3.6 V, Lithium-thionyl Chloride (Li-SOCl₂).</p>
			<p>Hex key for battery replacement.</p>
			<p>Blotting paper.</p>
			<p>Washer with the SERS surface attached in the center. The washer is disposable.</p>

Demonstration

To use the Heroin ID kit please follow all steps in sequence, as described below:



Turn on the Serstech 100 Indicator and use your credentials to Log in. Please use the 90° angled adaptor as shown on the picture.



Mount the bottom adaptor of the Heroin ID device onto the Serstech 100 Indicator pointing up.





Use the blotting paper as base and place the washer containing the SERS surface on the top of it.



Remove the swab stick from the sample preparation bottle containing the solvent Methanol and dip it into the bag containing the sample powder.

**Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle. Some pictures might still show the old one.*



Collect sample particles using the swab stick. After this step, please very carefully remove the swab stick from the sample bag and place it back into the sample preparation bottle containing the solvent Methanol.

Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle. Some pictures might still show the old one.



Secure the sample preparation bottle lid and shake it in multiple directions until the powder is dissolved into the Methanol. Let the solution rest.

Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle. Some pictures might still show the old one.



Disclaimer: We would like to inform you that we have made a replacement on the plastic bottle. Some pictures might still show the old one.



Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle. Some pictures might still show the old one.

Now, from the sample preparation bottle containing the solution, break off the seal on top of the sample preparation bottle and place at least one drop in the centre of the washer.

Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle. Some pictures might still show the old one.

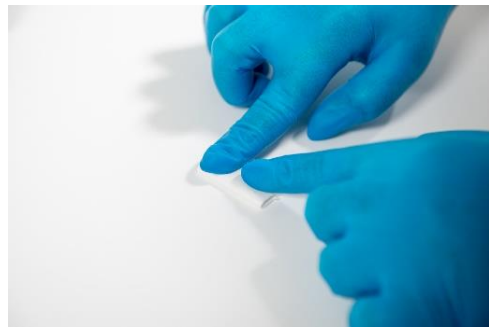
Note: Be careful to place the drop in the centre of the washer, where the SERS surface is. Ensure the drop is into the center of the SERS surface. If the SERS surface is not wet most likely the solution will not be analysed by the Serstech 100 Indicator.

Disclaimer: We would like to inform you that we have made a replacement on the sample preparation bottle. Some pictures might still show the old one.



Use the blotting paper to absorb any excess liquid from the washer.

Note: Use the blotting paper gentle and do not come in contact with the SERS-surface as there is risk of removing the solution from it.



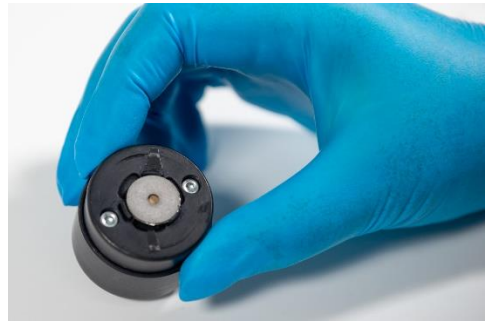
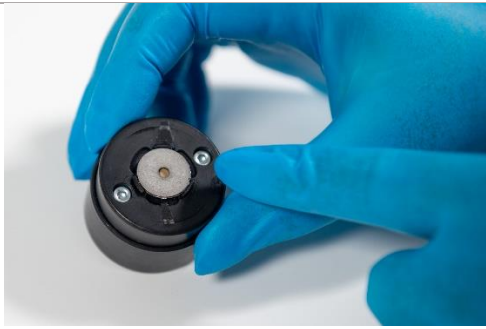
After cleaning the washer very gentle please confirm that there is remaining solution on the SERS surface by visual observation.

Let the sample rest. We recommend for at least 60 seconds and more.

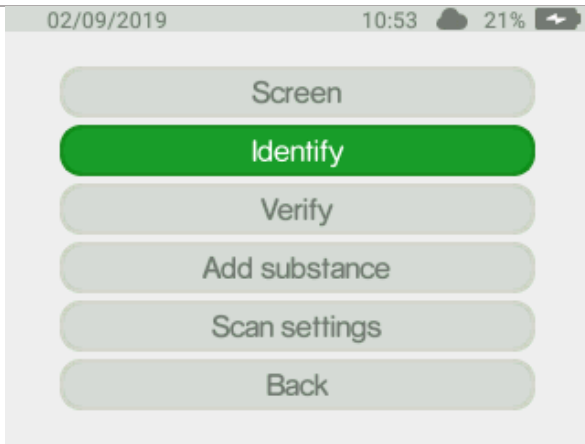


Now, place the washer on the center of the Active sample holder.

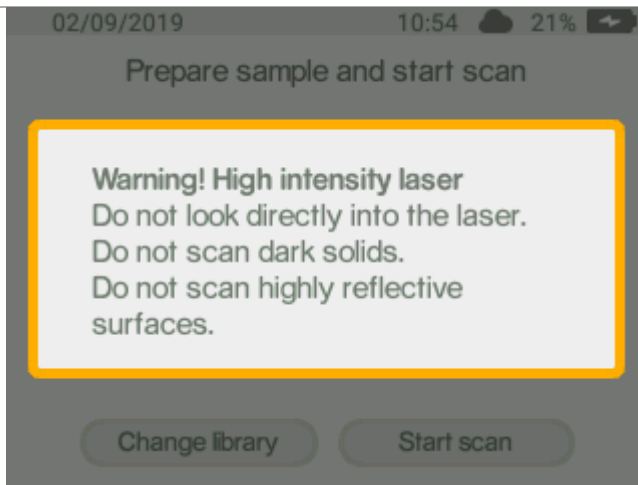
Note: Make sure that the washer is stable and placed exactly on the center of the Active sample holder as shown on the pictures. When the washer is placed correctly you will notice a 'click' sound. If the washer is misplaced, there is a high chance of not analyzing the right substance.



Place the top of the Active sample holder onto the mounted bottom part that is attached to the Serstech 100 Indicator hand-held Raman spectrometer.




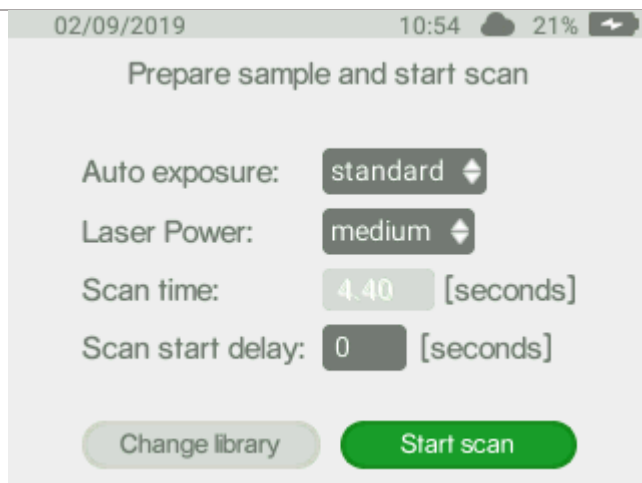
Select Scan and then Identify. Select the Narcotics Library.



Select Proceed.



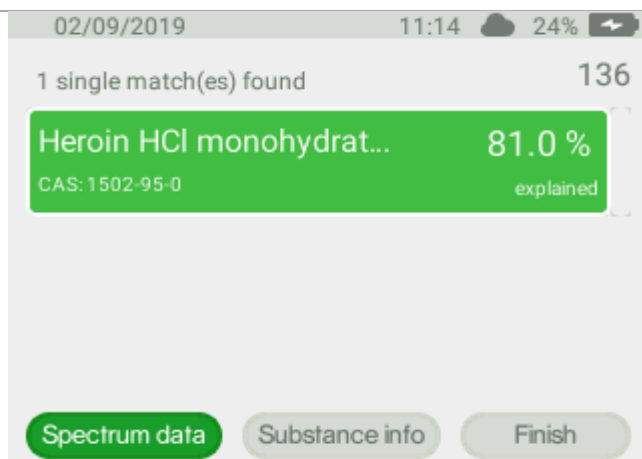
Click the power  button on the top of the Heroin ID device. Be sure that the Heroin ID device rotates.



Start the analysis on the Serstech 100 Indicator.



Let it run till the analysis ends. Then click the power button to turn the top of the Heroin ID device.



The Serstech 100 Indicator will display the results.

If you get Inconclusive as a result, please go back to the washer, and add more than 1 drop of the prepared sample into the surface. For optimal results we suggest up to 5 drops. Please add one drop at a time and let it evaporate before adding the second drop etc. Run the analysis again as mentioned above.

For further analysis you can use the ChemDash One software.



SERSTECH

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This manual is issued by:

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