

Tanner 6900 H&E Slide Stainer



1. Important Illustrations

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- When the instrument is on, please pay particular attention to safety procedures if you are using flammable reagents.
 - If instrument is not in use for extended periods, pull out the plug and cover the unit.
 - Do not add reagents when the instrument is working, in addition, make sure there is no reagent spillage into the instrument when adding reagents at any time.
 - Place the instrument on a steady work surface with an inclination not exceeding 5°.
 - Do not use any solid object to touch the display screen.
 - ⚠ Only the power line provided with the instrument should be used. Please ensure that the power socket is 3 prong grounding type.
 - ⚠ Use a dedicated socket for supplying power to avoid power fluctuations.
 - ⚠ Before replacing a fuse, turn off the main power switch and pull out the plug. Then replace the fuse with the same model and specifications; Refer to the technical parameters for this information.
 - ⚠ We strongly advise using the mounting dehydration basket provided by our company.
 - ⚠ When cleaning the instrument, turn off the main power switch and pull out the plug.
 - ⚠ The instrument should not be placed near any flammable or explosive objects.
 - ⚠ Acetone and xylene organic solvents should not be used to clean the surface of the instrument.
 - ⚠ Take care not to overflow the containers during processing; the liquid reagent should just immerse the specimen.
 - ⚠ The instrument should only be serviced by factory trained technicians.
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- Processing time of each station: 0 seconds to 59 minutes
- The frequency of agitating during container stay can be programmed in a range of 0-6/Minutes.
- The duration of dripping after moving out from the container can be programmed in a range of 0-60 Seconds.
- There can be a total of 10 users, including 1 public user without password (user#: 0) and 9 individual users who require a password (user#: 1-9).
- Total stations: 15 - The first station is the dryer station, the second station is the rinsing station, the rest of the stations are reagent stations.
- Approximate Volume: 350 ml
- Specimen capacity: 24pcs
- Voltage: AC110V
- Frequency: 60Hz
- Power: \leq 400VA
- Dimensions: 930mm × 245mm × 260mm (36.5" × 9.6" × 10.2")
- Weight: 20kg (44 lb)
- Fuse: F3A/110VAC

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- Please ensure that the outer packaging is not seriously damaged. If it is damaged, please contact the transportation agency and do not open.
 - Unpack the wooden carton, remove all components, including the instruction manual.
 - Carefully lift out the instrument. If the instrument needs to be transported again, we suggest using the original packing materials.
 - Take out the unit. Put the instrument on the stable platform in the lab.

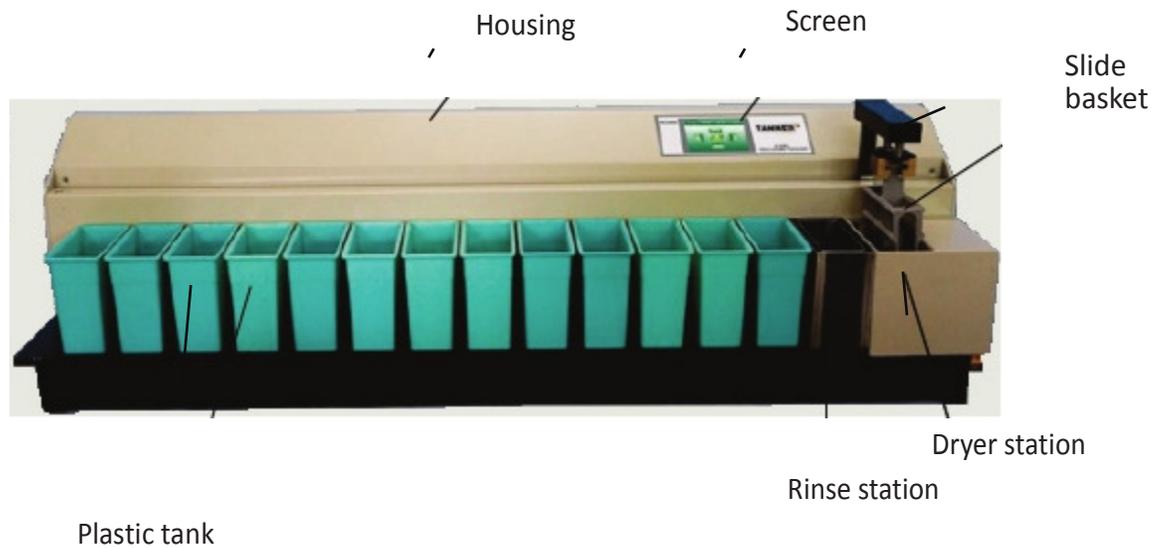


Do not put the instrument in an explosive or flammable area.

- The instrument should be installed using only a 3-prong grounding type socket.
- The instrument should be placed under a vented fume hood.
- Ensure that there is a water connection and drain near the unit. A faucet type connector is provided. If using a direct connection, just remove end and use secure clamp.

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- The instrument must always use the power supply line supplied with the instrument, using a grounding type socket.
 - The instrument should use the water tube provided. This can be connected directly to the main water pipe or to the sink faucet. If connecting directly to water supply a flow regulator is provided.
 - Before connecting to the main power source, please make sure that the power switch is in the “O” (off) position.
 - **When connecting the power, please insert one end into the instruments power plug first, then insert the other end into the wall power plug.**
 - Before turning on the instrument, please ensure that the water pipe has a good connection.

1. Front overview



2. Operation:

1) Connect the instrument to the power outlet, and connect the water pipes to the instrument. Turn on the instrument. The slide basket will move to the dryer station and stop above the dryer station. The screen should then show company information. Next, enter into the menu interface shown below automatically. Remove all lids from the plastic stations and make sure the containers are straight and firmly placed into the slots.

(Note: Please hold the plastic station when removing the lids to avoid the station tipping.)

Interface after self-testing



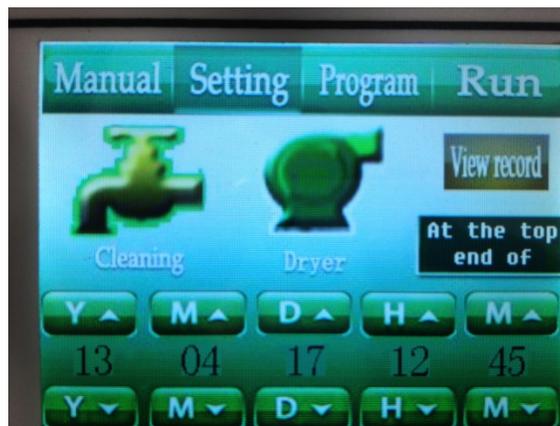
2) Select desired function. Then, press the middle key to enter into the password setting interface. Enter a figure from 1 to 9 in the first line according to user's operation number, and then enter a 6-digit password into the second line. Re-enter the same digits from the first line into the second line to confirm operator code and password.



- 3) If the user does not require a password, please press the Manual key to return back to the main menu. Press '<' or '>' to move the basket to left or right. Press '↑' or '↓' to move rise or drop the basket.

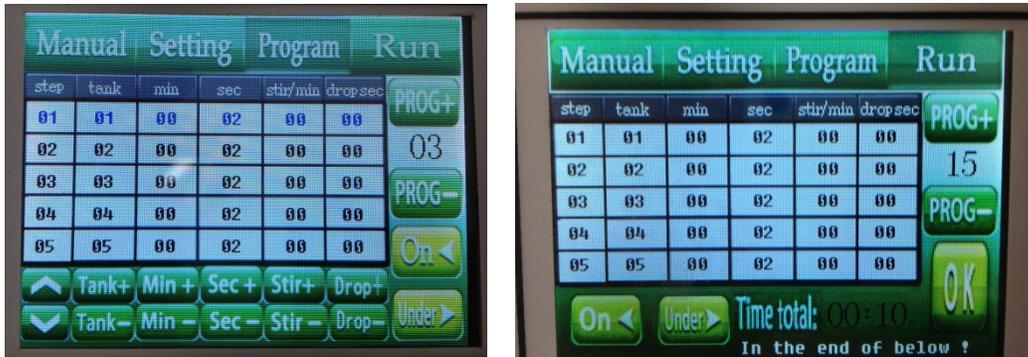


- 4) Press the 'Setting' key to enter the setting interface as below. Press Dryer symbol to test the dryer System; Press Faucet symbol to test the rinse station; Press 'Y', 'M', 'D' to adjust Year, Month and Date; Press H and M to adjust Hour and Minute; and Press 'View record' to check the usage record.



- 5) Press to switch between the options of 'end submerged (in the end of below)' and 'end above station 2 (at the top end of)' to decide where the slide basket stays after staining is over according to user's need.

6) Press Program key to enter editing interface as below. Press '0' or '9' to choose Step number. Press Tank + or Tank - to choose station number. Press Min + or Min - to set the time of container stay. Press Sec + or Sec - to set seconds for container stay. Press Stir + or Stir - to set agitating time. Press Drop + or Drop - to set drip time. Press Prog + or Prog - to choose program number. Press 'On' key to page up and press 'Under' key to page down.



7) Press 'Run' key and press 'OK' key after checking. Screen should then appear as shown below.



8) When the instrument finishes one program, the slide basket will stop either in the tank used in the last step or above the station 2 based on the selection in the step 5) and the machine will sound a buzzing alarm every 5 seconds to indicate that the program is finished. Please remove slide basket and touch the blue window (as shown above) to continue staining or turn off the instrument if finished. Or, press 'run' key to process another program.

Note: Cover the cups with the lids once finished with work in order to avoid liquid vaporization.

- After receiving the machine, please examine the outer appearance of crate. If there is no visible damage, open box and check the components. Read the instructions carefully before starting and operating the machine.
- In order to ensure the security of people and the equipment, a three-prong power source is required. Make sure that the grounding is secure. Non-grounding power is prohibited with this machine.
- Remove the plug from the power outlet if not using the machine for a long period of time.
- The equipment must not be placed near flammable chemicals or in high heat areas.
- Do not allow any hard materials to touch the LCD screen, doing so may cause screen to crack and/or malfunction.
- Once the machine is working no liquid should be allowed near the working surfaces.
- The plastic water drain pipe must be lower than the water outlet in order to avoid water flowing back into the instrument.
- Please turn off the main switch and pull out the power socket before you change any fuse. The model and specifications of the fuse must remain the same as fuse that is being replaced.
- Xylene, acetone, and other organic solvents should not be used to clean the surface of the equipment.
- When you clean the equipment, you must turn off the main power first and pull out the power socket.
- The equipment should be thoroughly cleaned every day.
- If you don't use the equipment for extended periods of time, you should pull out the power socket, and then install a dust proof cover.

9.1 Fault recognize

Problem Troubleshooting	Possible Cause	Solution
No power indication	Fuse is burnt or power line not connected well	Exchange fuse or power line
Electric shock by touching the machine surface with the hand	No grounding connection or loose grounding connection	Fasten grounding wire
Little water inflow	The water tube is blocked	Clean the filter, check line
Mechanical arm moves toward right direction without moving vertically up	Vertical sensor is damaged	Check the sensor, if the sensor voltage is $> 0.1V$, please exchange. If the sensor voltage $< 0.1V$, it's good
Mechanical arm moves up but does not move toward right direction	The sensor for the first station is damaged	Exchange the sensor
Mechanical arm does not stop when the machine runs or when pressing left/right arrow	Alignment sensor is damaged	Exchange the sensor
Motion mechanism has loud noise and little power	Electrical motor has problem	Check the electrical motor and circuit board
Mechanical arm moves up and down in a jerky motion	The gear for mechanical arm has become damaged	Check and exchange
Mechanical arm cannot move side but the electrical motor is good	The stainless steel wire for side to side movement is broken	Exchange the stainless steel wire
The dryer station cannot heat	The heating pipe or controlled silicon on the temperature controller board is damaged	Check and exchange
Words on screen appear blurred	The circuit board behind screen is damaged	Adjust 103 electric resistance on the circuit board
No words on screen	The circuit board behind screen or LCD screen has problem	Check the voltage of the circuit
LCD screen cannot work or is not sensitive	LCD screen is damaged	Exchange LCD screen

9.2 Cleaning

- Keep instrument clean. Reagents on surface or inside unit can cause damage.
 - Use only common detergent and a soft household cloth to keep unit clean.
 - Avoid any liquid flowing into the unit.
 - Before replacing the fuse, turn off main switch and pull out the plug. Then replace the fuse with the same model and specifications. Refer to the technical parameters for specific model and specifications.
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- This machine should be stored in clean and dry indoor places with the relative humidity under 80% and should be kept far away from any caustic gas.
 - Handle with care, avoid wetting, and always place upward.
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Tanner reserves the right to change the technical parameters of any model for improving the function of the instruments.

Quality guarantee

We will ensure that every instrument sold is strictly examined to ensure that every instrument is qualified and matches technical standards. The Warranty terms to the customers are created with the distributing agencies in mind. Warranty terms are only provided for those who operate the instrument according to the instructions. We will not be responsible for the damage and other problems caused by abuse and improper use of the instrument.

Disposal of unwanted instruments

Discarding the instrument and its parts should be done according to current laws or regulations.

Service information for customers:

If you need any service or parts for the instrument in the warranty period or beyond, please consult the agencies of our company or the distributors. Please provide them the model, the item number and the time the unit was purchased.

Additional Notes:

If you are returning the instrument or any of its parts back to Tanner Scientific, please make sure:

1. If the instrument or its parts has been exposed to virus and bacteria or touched with radioactive sources, please disinfect them or eliminate the radioactivity before sending back. Our technicians will examine and verify.
2. If you are certain that the instrument or parts you want to send back are safe from infection of virus, bacterium, or radiation, please tell our technician the method used to disinfect or eliminate the radioactivity. Any possible dangerous infection from bacterium, virus, or radiation will lead to Tanner Scientific sending back the instrument or its parts without any maintenance or service by collect freight.

For technical service, please provide:

Model No. of the instrument, address and contact person, and causes for the service.