

# ESR Analyzer

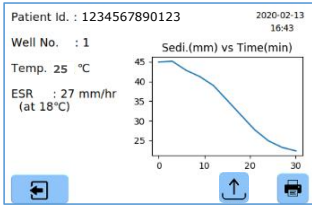
For In-vitro diagnostic use by trained lab technicians.

## Quick Reference Guide

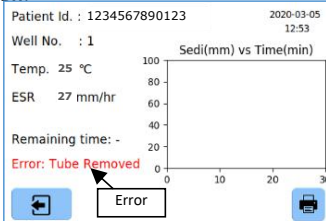
For detailed user manual, please contact :-



- After the test is completed, touch the well circle to open an updated entry screen.

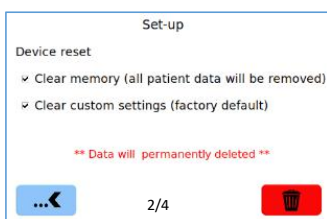


- Touch the printer icon in the above screen to print the result.
- Touch the upload icon in the above screen to send data to the server.
- The test tube to be discarded properly after the test.
- In case of errors, the error message is shown as below.



- Option to display the Result at 18° C, based on Manley's Nomogram.
- Option to set the test duration to either 30 or 60 minutes.
- Option to transfer data automatically to Host after test is completed (Requires Wi-Fi connection & Host details).

- ⚠ Any change is affected only on new tests, not on the current tests.
- Set-up page 2/4 is for clearing patient memory or custom settings (set-to factory default).



- ⚠ Data deleted cannot be retrieved.

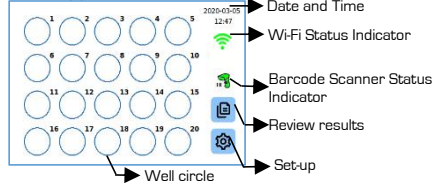
## Wi-Fi & Host Connection

- Set-up page 3/4 is for Wi-Fi & Host Connection.

## Getting Started: -



- Connect the power adapter to the socket on the rear and press the Power switch to turn on the unit.
- Connect Printer and Barcode Scanner (BCS) if available, to the USB ports.
- It takes around 100 seconds for the Home screen to appear.



## Start the test: -

There are many ways to start the test.

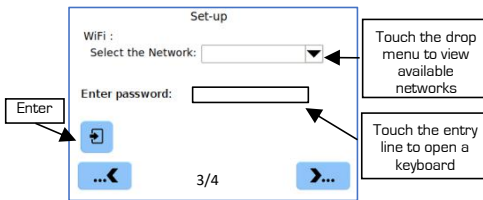
1. Just place the test tube on any well. It may take few seconds for the test to start. Touch the well circle anytime during the test to enter Patient Id (manually or using BCS) in the entry screen.

- Possible error messages:

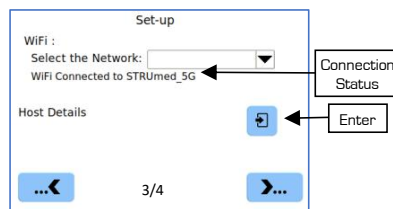
- i. When the test tube is removed before test completion, **"Error: Tube removed"**
- ii. When the blood level in test tube is below the lower marker, **"Error: Level low"**
- iii. When the blood level in test tube is above the higher marker, **"Error: Level High"**
- iv. When test duration exceeds the selected duration, **"Error: Time exceeded"**

## Review Results: -

- Touch the review results icon in the Home screen to access the stored test results.
- Results can be searched either by Date or Patient Id or both. Enter these and touch the filter icon on the screen to get the filtered test results.

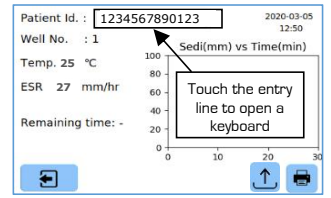


- Select a network from the drop menu. Enter password & touch the Enter button, when connected an indicator appears as shown below.



- Touch the Enter button for entering Host details and enter the IP Address and Port Number in the entry lines.

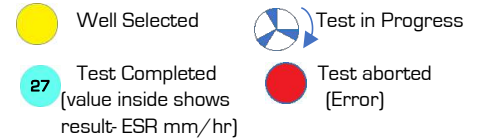
- ⚠ The IP address and Port Number of the Host should be static and known prior connection.



2. Touch any well circle to open the entry screen. Enter Patient Id, exit and place the tube in the corresponding well.
3. Scan the barcode on the tube using BCS. A message appears on the BCS indicator. Touch a well circle to open entry screen. Verify the Patient Id and exit. Place the tube in the corresponding well.

- ⚠ Patient Id cannot be edited after the test is completed.

## Well circle status indicators: -



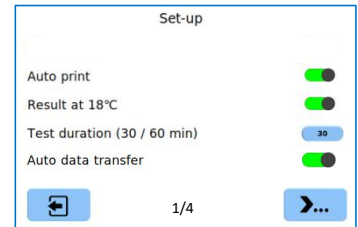
- Test completed /aborted status stay till the tube is removed.

S.No.	Patient Id.	Date	ESR
123	NA	2020-02-26	0
122	NA	2020-02-26	0
121	12345	2020-02-19	0
120	12345	2020-02-19	1
119	NA	2020-02-13	14
118	NA	2020-02-13	25

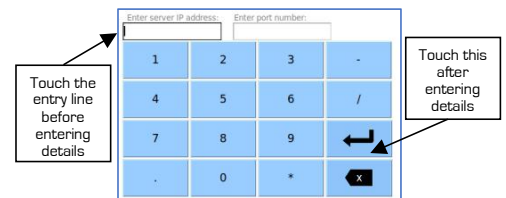
- Touch any row to view and print the test results.

## Set-up Menu: -

- Touch the Set-up menu icon in the Home screen to enter the set-up options.



- Print graph option for printing the sedimentation graph.
- Auto-print option to print the test results automatically, after the test.



- The Host details remains saved until any changes are made.
- Set-up page 4/4 is for factory use.
- Factory settings can be accessed only by authorized company personnel.

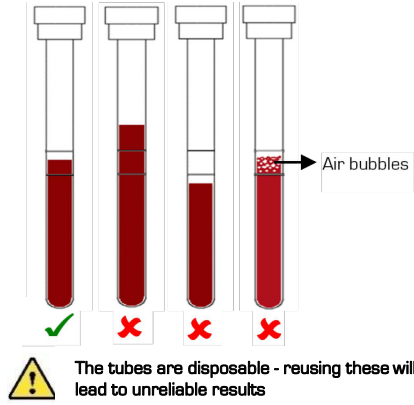
## Power off: -

- Press the Power Switch to turn off the unit.

## List of factory default settings:-

- Auto print : OFF
- Result at 18° C : OFF
- Test duration (30/60 min) : 30 min

Ensure blood level is within the upper and lower markers on the test tube: -



**Technical Specifications: -**

- ESR measuring range: 0 - 140 mm/hr
- Throughput: 40 samples/hour
- Loading pattern: Random
- Loading capacity: 20 samples simultaneously
- Optical sensor reading resolution: +/- 0.04 mm
- Patient data storage: 1024 records

**Operating Conditions: -**

- Ambient temperature: 15° C - 35° C
- Relative humidity: 5 % - 85 %
- Altitude: 2,000 metres
- Input power: 12V DC/ 2A
- AC - DC adapter: 150 - 240 V AC, 50 - 60 HZ











Unit Sl. No.:

**Packing list: -**

- |                            |                          |
|----------------------------|--------------------------|
| 1. ESR Analyzer            | <input type="checkbox"/> |
| 2. Power adaptor           | <input type="checkbox"/> |
| 3. Quick reference guide   | <input type="checkbox"/> |
| 4. Allen Key               | <input type="checkbox"/> |
| 5. Instructions Before-Use | <input type="checkbox"/> |

Verified by:

**Symbols/ Marks used on product & manual**

-  Caution/ Warning
-  Power switch
-  AC power
-  DC power
-  DC inlet
-  USB port
-  In Vitro diagnostic device
-  Manufacturing address
-  Manufacturing date
-  Unit serial number

02-184-0011-1 Rev 0 - 05-03-2022