

ADAM SCC

A New Standard of
Somatic Cell Counter



INSTRUCTION MANUAL

NESMU-ASC-001E (V.3.8)

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Product Contents

ADAM Somatic Cell Counter

The contents of the Adam somatic cell counter are listed below :

Item	Quantity
Main device	1
Instruction Manual	1
USB Cable	1
Installation CD	1
Key Pad	1
Power Cord	1
Fuse	2
External video monitor (Optional)	1
External Printer (Optional)	1

Soma Chip Kit

The contents of the ADAM Soma Chip Kit are listed below :

Item	Soma Chip2x Kit (Cat. No:CRS-K01)	Soma Chip4x Kit (Cat. No: CRS-K02)
Disposable Chip	50pcs (2 channel)	100pcs (4 channel)
Solution	100 x 100 μ L	400 x 100 μ L
Available test Q'ty	100 test/kit	400 test/kit

Upon Receiving the Instrument

- Examine the instrument carefully for any damage incurred during transit.
- Ensure that all parts of the instrument including accessories listed above are included with the product.
- Any damage claims must be filed with the carrier.
- The warranty does not cover in-transit damage.
- See the 13 page to install the instrument.
- Upon receipt, store somatic stain solution at room temperature.

Safety Information

Safety Precautions

1. Always ensure that the power supply input voltage match the voltage available in your location.
2. For operation environment, See page 12.
3. This machine is air-cooled so its surfaces become hot during operation. When installing it, leave a spaces of more than 10 cm (4 inches) around it.
4. Never insert metallic objects into the air vents of the instrument as this could result in electrical shock, personal injury and equipment damage.
5. Always set the main switch on the power supply unit to off before connecting the power cord to the wall outlet.
6. Always ensure that the grounding terminal of the instrument and that of the wall outlet are properly connected. The power cord should be connected to a grounded, 3-conductor power outlet.
7. To avoid potential shock hazard, make sure that the power cord is properly grounded.
8. Do not position the equipment so that it is difficult to operate the disconnecting device.
9. Be sure to set the main switch to off, unplug the power cord and lock the stage before moving.
10. If the instrument is broken or dropped, disconnect the cord and contact a authorized service person. Do not disassemble the instrument.
11. Use only authorized accessories.
12. Use this equipment only as specified in this manual and as specified in any documentation associated with its components. Any use of the equipment in an unspecified manner is strongly discouraged and may result in damage or injury as cautioned by signed warnings.

Safety Information

Safety Symbols

The symbols used on the Adam somatic cell counter and in the manual are Explained below :



The Caution symbol denotes a risk of safety hazard.



ON (Power)



Protective earth (Ground)



The CE mark symbolizes that the product conforms to all applicable European Community provisions for which this marking is required. Operation of the Adam automated cell counter is subject to the conditions described in this manual.

The protection provided by the device may be impaired if the instrument is used in a manner not specified by the manufacturer.



Caution, Biohazard

Protective measures must be used in dealing with biologically hazardous materials such as carcinogenic reagents.



Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2012/19/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or visit our web-site, www.nanoentek.com

Safety Information

Warnings

Battery inside device

- Risk of explosion if battery is replaced by an incorrect type.
- This battery is not replaceable by a user.
- Refer to a qualified personnel.

Cover

- Do not remove a cover or disassemble a case.
- There is no adjustable components inside the instrument.
- If malfunction is found, refer to a service personnel.

Manual

- Do not attempt to service the equipment unless this manual has been consulted and is understood.
- This manual is available in English only.
- Failure to heed this warning may result in injury to service provider, operator from electric shock, mechanical or other hazards.

Sample handling

- Wear gloves during sampling and testing. User's sample may have the infectious biohazardous substance.

Waste

- After using Soma Chip, appropriately dispose it as biohazardous waste.
- Do not reuse the Soma Chip.

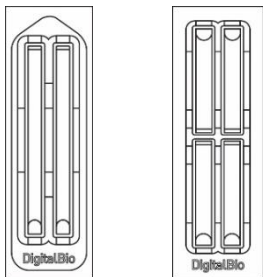
Product Specifications

ADAM SCC



Voltage	AC100~240 V, 50~60 Hz
Current	max. 1.8 A, max 100 W
Fuse	T250V 3.15AL
Objective lens	4 X
LED	4W Green LED
CCD camera	B/W CCD
Filter	Excitation filter Dichroic filter Emission filter
Weight	9Kg
Size (W×L×H):	220 × 375 × 250 mm
Degree of protection	IPX0

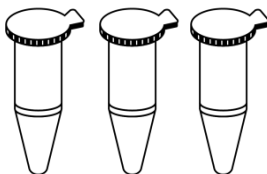
Soma Chip



SomaChip 2x SomaChip 4x

Measuring range	0.05 ~ 1.15 x 10 ⁶ cells/mL
Analysis time	2 ~ 2.5 min/test
Loading sample vol. per test	20 µL (for Soma Chip 2 ^x) 12 µL (for Soma Chip 4 ^x)
Measuring sample vol. per test	8.5 µL (for Soma Chip 2 ^x) 3 µL (for Soma Chip 4 ^x)

Stain Solution



PI (Propidium Iodide) staining of Somatic cells.

Accessories

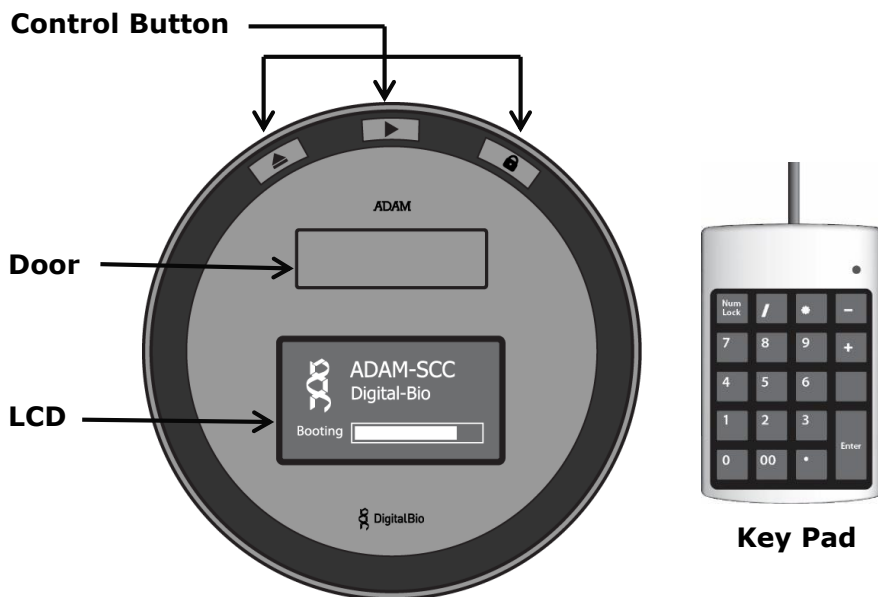


Power cord	1.5 m
Fuse	250 VAC, 3 A; T250V 3.15AL
Keypad	USB Type / 1.3 m

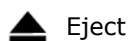
Description of ADAM Somatic Cell Counter

Front view of ADAM Somatic Cell Counter

The front view showing various parts of the ADAM Somatic cell counter is shown below :



• Control buttons:



Eject

Ejects the chip holder from the Adam.



Start

Performs all procedures of automatic counting.



Lock

Protects the alignment of stage from external shock when the ADAM is moved to the other places.

"It is strongly recommended to lock ADAM before turning it off."

• Door

Chip holder comes out here.

• LCD

Displays the test process and the result.

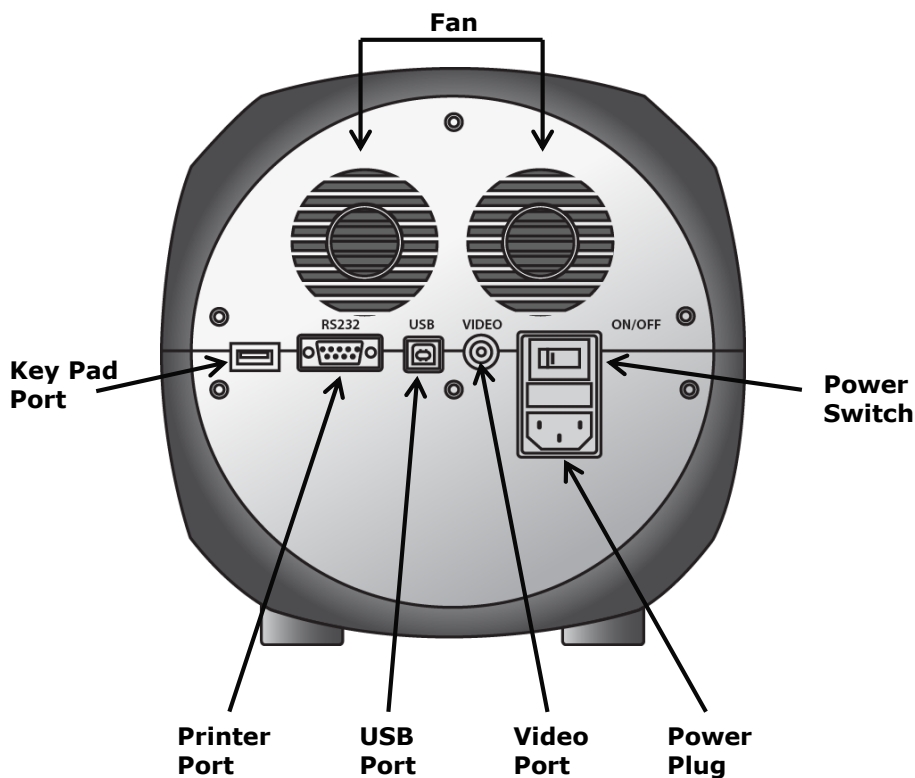
• keypad

Inputs the sample number less than 3 characters.
Refer to page 16 ~ 17.

Description of ADAM Somatic Cell Counter

Rear view of ADAM Somatic Cell Counter

The rear view showing various parts of the ADAM Somatic cell counter.

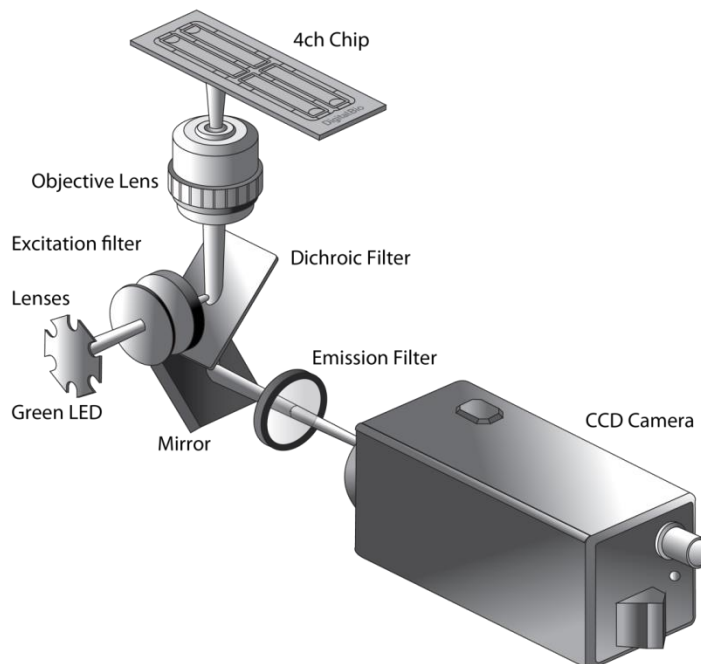


Fan	Cooling fan
Power switch	Main power on/off switch
Power plug	ADAM power cord connection plug
USB port	Connect to computer with USB Cable
Printer port	Connect to Printer port
Key pad port	Keypad connection port
Video Port	External video monitor port

Introduction

Overview : ADAM-SCC

High levels of somatic cells cause disagreeable taste and reduce storage life in dairy products. These somatic cell counts (SCC) are accepted as an international standard for measurement of milk quality. For this reason, somatic cell counts are readily available to dairy farmers in most of the countries. Current reference method for enumeration of somatic cells in raw milk is the direct microscopic somatic cell count (DMSCC). However, it needs the training and skill of analysts for accuracy, precision, and reproducibility of this method. The ADAM-SCC system is fully compatible to the DMSCC. It is composed of the disposable plastic microchips and staining solutions, a fluorescence microscopic optics equipped with a CCD (Charge Coupled Device), and an image analysis system. It utilizes the capillary flow of micro-fluidic chamber by the surface modification of hydrophilicity. Micro-fluidic technology of disposable microchips provides the low reagent consumption and combining with the ready-to-use reagent makes daily work easy. The ADAM-SCC system is not only easy to use but offers the same repeatability and accuracy as the conventional expensive device. Therefore, the ADAM-SCC system can be used as an ideal equipment for dairies, smaller labs and veterinary establishments working with somatic cell analysis because most of procedures are carried out automation. It will be helpful to the implementation of milk quality control, which favors farmers who want to supply milk with the desired properties and improved quality.



Introduction

Overview : SCC Kit

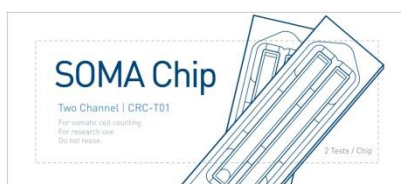
SCC Kit (CRS-K01 / CRS-K02) is composed of Propidium Iodide (PI) for counting somatic cells. SCC Kit can be used without diluting raw milk.

Measuring range of cell density is $0.05 \sim 1.15 \times 10^6$ cells/mL.

Each tube has 100 μ l reagent of somatic stain solution. Simply add the same volume of the raw milk sample in the tube then every preparing for experiment end. Once the experiment is complete the results can be printed through the optional thermal print. Printed number indicates cell concentration ($\times 1000/\text{mL}$) in each channel.

- Soma Chip 2X : Load 20 μ l/Channel, 2 test/Chip
- Soma Chip 4X : Load 12 μ l/Channel, 4 test/Chip

Store kit box upright and at room temperature. Expiration date of stain solution is written on the bottom of the kit box (yy-mm-dd). Be sure to check the expiration date before using. Follow the exact steps detailed in the Instructions for Use section.



<Soma Chip 2X>



<Soma Chip 4X>



<Soma Chip2x Kit>

Getting Started

Environmental Requirements

To obtain the best results,
install the ADAM-SCC in a location following conditions:

1. Room temperature between 20 and 35 °C.
 - Not recommended for cold room use (≤ 4 °C).
 - At low temperature (≤ 10 °C), warm up the ADAM for 10 min.
2. Not exposed to direct sun light.
3. Not subject to direct or continuous vibration.
4. Not subject to intense magnetic or electromagnetic fields.
5. Relative humidity between 0–95 %.
6. Area free from corrosive gases or other corrosive substances.
7. Area with very little dust or other airborne particles.
8. Allow a 10 cm minimum space around the instrument for proper air flow.
9. Not allow to put heavy material on top of ADAM-SCC.

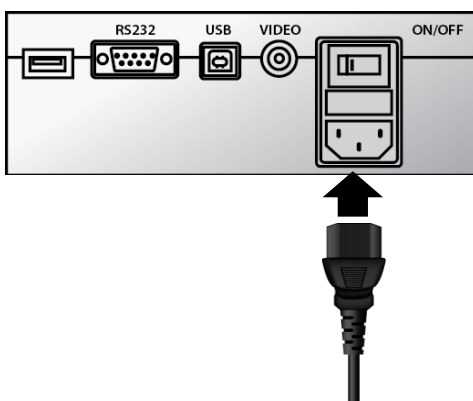
Getting Started

Installation



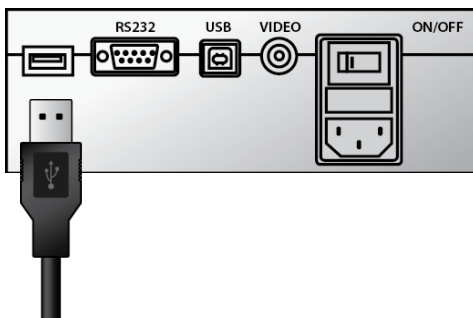
1. Remove all components of ADAM-SCC from their box.

2. Place the instrument in a flat, level, dry surface.

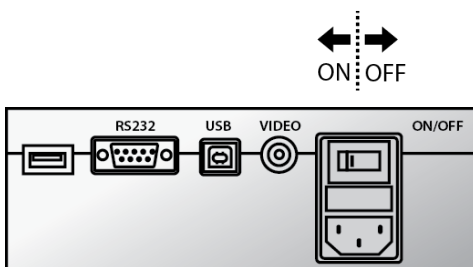


3. Plug to power cord into the electrical outlet.

- Be sure to use only the power cord supplied with your instrument.
- Powering the instrument with an unapproved power cord may damaged the instrument.



4. Plug to Keypad

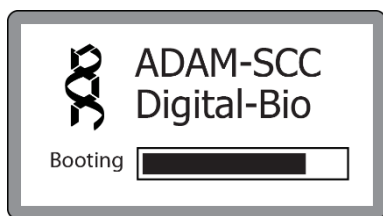


5. turn on the power switch.

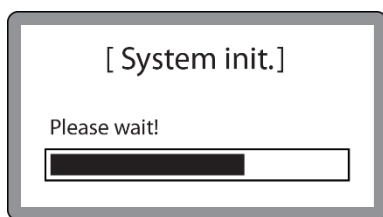
- Make sure that the main power switch is In the "I" (ON) position.

Getting Started

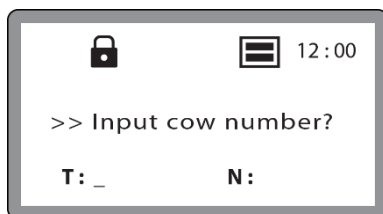
Start-Up Screen



1. System booting.



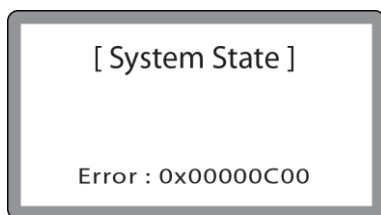
2. System will go through self diagnostic tests.
 - If you get an error message, please contact your local distributor or sales@nanoentek.com.



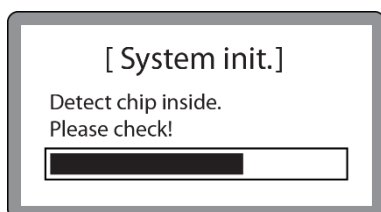
3. The home screens will be displayed as the image, no errors are detected.

Getting Started

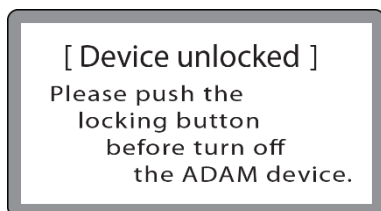
Error message during booting



1. It appears when booting not working properly.
2. Turn off main power and restart device.
3. If this message still appears after restart, contact your local distributor or **sales@nanoentek.com**.



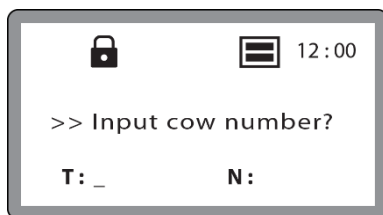
1. It appears when a chip is inserted during Start up.
2. Remove the chip from a device, and Do not turn on the device with a chip.
3. If this message continues to display when no chip is inserted, contact your local distributor or **sales@nanoentek.com**.



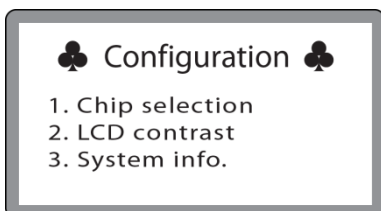
1. It appears when turning off without locking device.
2. Push the lock button before turn off the device. If this message still appears after restart, contact your local distributor or **sales@nanoentek.com**.

Getting Started

Menu Setting

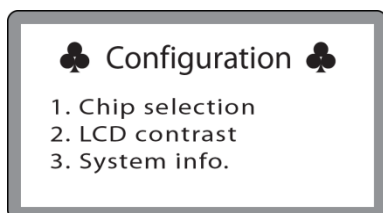


1. You can set the menu as you press the '*' button on the keypad from the screen for inputting cow numbers.

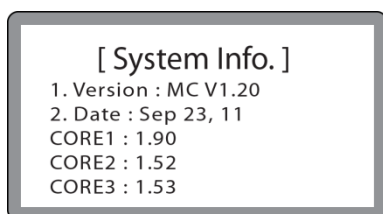


2. You can select the number from the Menu.

System Information



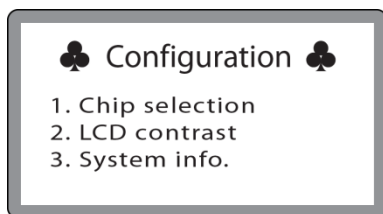
1. Check the device versions and date which have been installed in the device.



2. Select number 3 key from the MENU, and Press the 'Enter' key.
3. The screen will return to the Menu screen automatically.

Getting Started

Chip Selection



1. Press '1' for chip selection.

You can select the number from the Menu.



2. User can select the 2 kinds of chip type.

- '1' : Two channel chip (Soma Chip^{2X})
- '2' : Four channel chip (Soma Chip^{4X}).

3. Press '1' or '2', and Enter key.



4. After pressing the 'Enter' key, the screen will return to the Menu screen automatically.

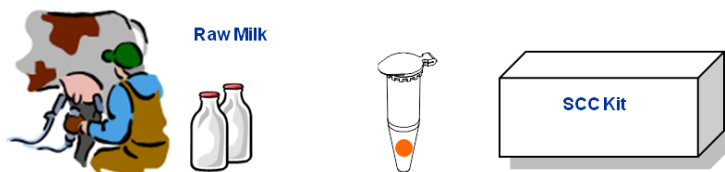
General Operation

Introduction

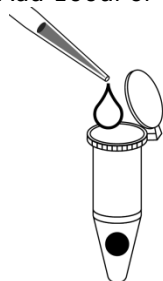
Instruction are provided in this section for preparing the cell sample with SCC stain solution for use with disposable Soma Chip for automated somatic cell count using the Adam.

Preparing cell

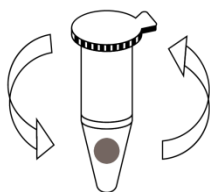
- 1) Prepare some raw milk sample, SCC kit, tube, Pipette and tips.



- 2) Add 100ul of the raw milk sample in tube.

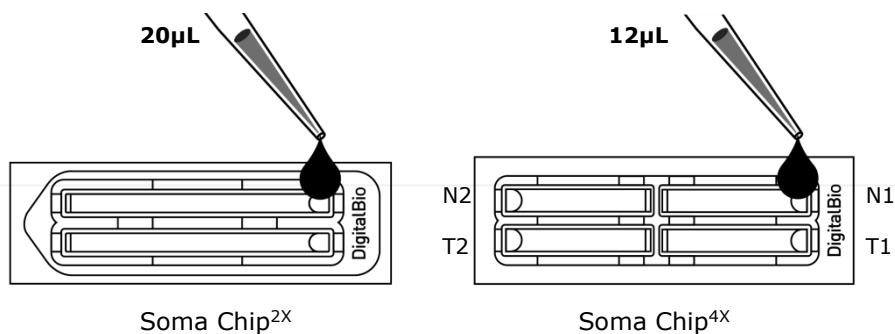


- 3) Mix the sample by turning the tube upside down 3-5 times.



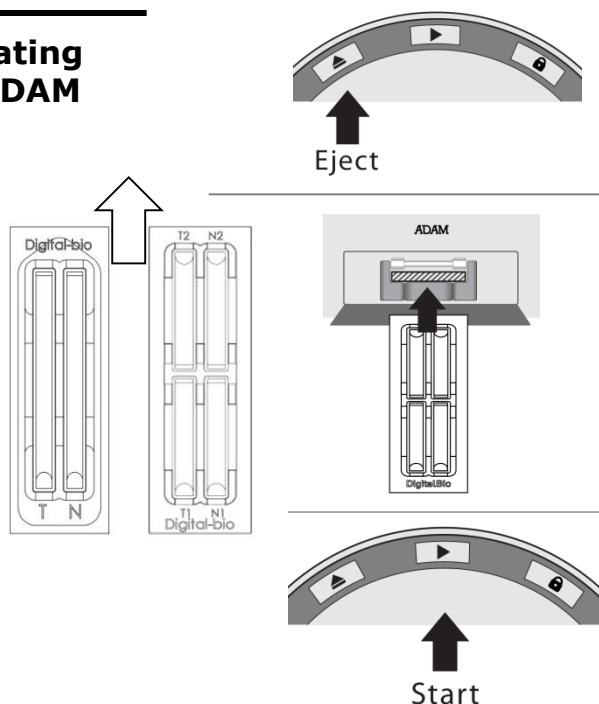
- 4) Load the cell sample onto the chip.

“ Ensure that no bubbles enter each channel. ”



General Operation

Operating the ADAM

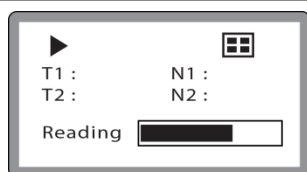


1. Press "**Eject(▲)**" button on the main device to eject the chip holder.

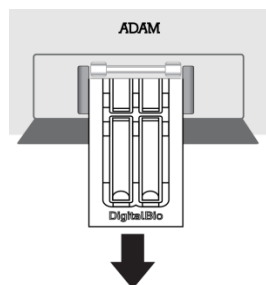
2. Insert the Chip loaded with the sample onto the chip holder.

3. Press the "**Start(▶)**" button on the main device.

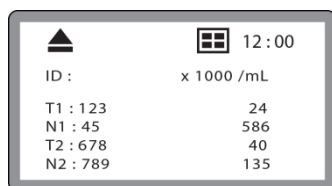
Note Automatic Focus will be carried out at the first time the device is booted. Once ADAM have done the Auto Focus process and on the following time, focusing process will be skipped.



4. The instrument takes approximately 2 min. to count sample.



5. After calculating the cell number, the chip will be ejected automatically. Then chip can be removed.

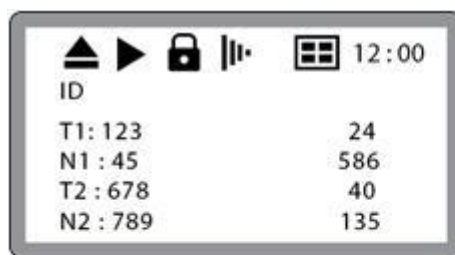


6. The calculated cell number per 1ml will be displayed on the screen automatically.

7. For another experiment, repeat the process from steps 1 ~ 5.

General Operation

Icon Function



1. Display a status of the performance such as Start, Eject, Lock or Insert.

Eject		Shows the Chip Holder is ejected . (After you press the eject button)
Start		Shows when cell counting is running. (After you press the run button)
Lock		Shows the Chip Holder is parked . (After you press the park button)
Insert		Shows the Chip Holder is inserted.

2. Display menu setting



Shows that ADAM reads 4 Channel chip.



Shows that ADAM reads 2 Channel chip.

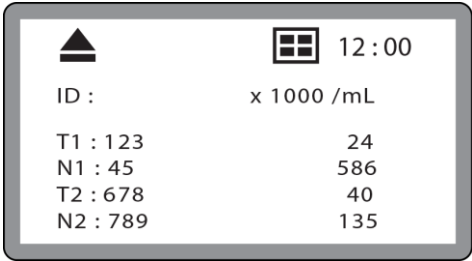
12 :00

Shows that the system time.

General Operation

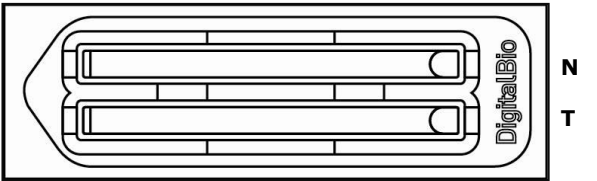
Result Analysis

Press the '▶' key. Once inputted, the screen will return to the counting mode automatically.

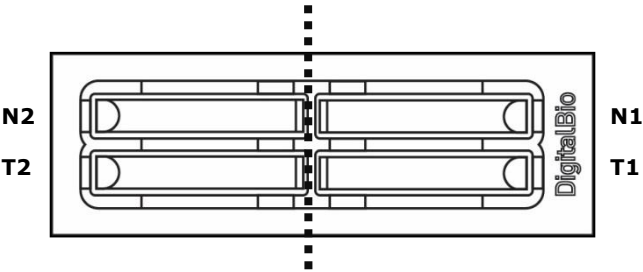


Sample name		Number of Somatic cells
T1	123	(24x1000/mL)
N1	45	(586x1000/mL)
T2	678	(40x1000/mL)
N2	789	(135x1000/mL)

Soma Chip 2x
(CRS-K01)



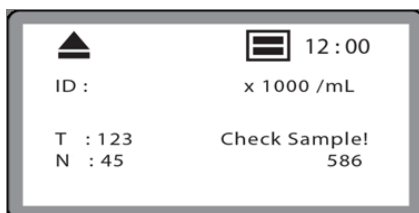
Soma Chip 4x
(CRS-K02)



General Operation

Error message

If the density of sample is over-range, you may see "Check sample!" .
"Over Range!" or "Result error! " message at display monitor.

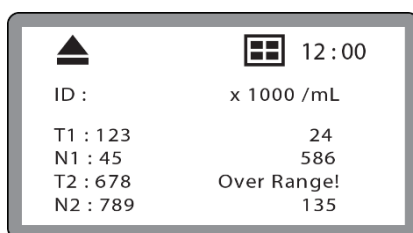


< In case of "Check sample!" >

- 1) Check sample contamination, or Chip with dust or other materials.
- 2) Check mixture of sample and reagent. It has to be mixed well.
- 3) Check test tip whether stained with something.

If you have problems that mentioned above, you will get a result sheet like below.

Number	Date	Time	Cow	Count (SCC*1000/mL)	Chip	Channel
0012	2010/03/23	21:50:31	12	87	4 CH	N2
0011	2010/03/23	21:50:31	11	25	4 CH	T2
0010	2010/03/23	21:50:31	10	S - E	4 CH	N1
0009	2010/03/23	21:50:31	9	65	4 CH	T1
0008	2010/03/24	03:51:56	8	0	4 CH	N2
0007	2010/03/24	03:51:56	7	5	4 CH	T2
0006	2010/03/24	03:51:56	6	13	4 CH	N1
0005	2010/03/24	03:51:56	5	0	4 CH	T1
0004	2010/03/24	03:39:17	4	54	4 CH	N2



< In case of "Over Range!" >

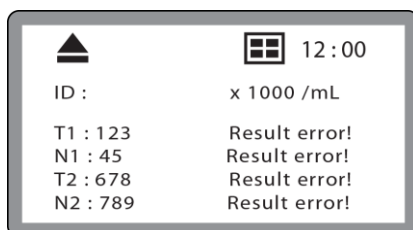
- 1) In case of the result of cell-counting is over 4000[X1000mL]
- 2) Check mixture of sample and agent. It has to be mixed well.

If you have problems that mentioned above, you will get a result sheet like below.

Number	Date	Time	Cow	Count (SCC*1000/mL)	Chip	Channel
0012	2010/03/23	21:50:31	12	87	4 CH	N2
0011	2010/03/23	21:50:31	11	25	4 CH	T2
0010	2010/03/23	21:50:31	10	R - O	4 CH	N1
0009	2010/03/23	21:50:31	9	65	4 CH	T1
0008	2010/03/24	03:51:56	8	0	4 CH	N2
0007	2010/03/24	03:51:56	7	5	4 CH	T2
0006	2010/03/24	03:51:56	6	13	4 CH	N1
0005	2010/03/24	03:51:56	5	0	4 CH	T1
0004	2010/03/24	03:39:17	4	54	4 CH	N2
0003	2010/03/24	03:39:17	3	57	4 CH	T2

General Operation

Error message



< In case of "Result error!" >

- 1) Check a chip is inside of device when turning on the device.
- 2) Removing the chip first, then rebooting the device.

If you have problems that mentioned above, you will get a result sheet like below.

Number	Date	Time	Cow	Count (SCC*1000/mL)	Chip	Channel
0012	2010/03/23	21:50:31	12	87	4 CH	N2
0011	2010/03/23	21:50:31	11	25	4 CH	T2
0010	2010/03/23	21:50:31	10	Error	4 CH	N1
0009	2010/03/23	21:50:31	9	65	4 CH	T1
0008	2010/03/24	03:51:56	8	0	4 CH	N2
0007	2010/03/24	03:51:56	7	5	4 CH	T2
0006	2010/03/24	03:51:56	6	13	4 CH	N1
0005	2010/03/24	03:51:56	5	0	4 CH	T1
0004	2010/03/24	03:39:17	4	54	4 CH	N2

Maintenance and Cleaning

1. ADAM-SCC does not need regular maintenance.
2. ADAM-SCC has no replacement of consumable materials
3. Clean the exposed outer surface of ADAM using a soft cloth and alcohol or deionizers water.



CAUTION:

Dispose of wipes in an appropriately labeled solvent contaminated waste container.

Software Installation

ADAM-SCC Report Program: Introduction

ADAM-SCC Report Program is designed to manage and report all results from ADAM-SCC.

- All measurement results are saved on the memory of ADAM-SCC, automatically.
- User can download the data from the memory of ADAM-SCC and export it to **Excel (*.xls) format**.
- User can delete data from memory of ADAM-SCC or can save captured images into Desktop or Laptop hard drive.
- The data list window consists of the sample number, type of chip (2 channel or 4 channel), date, time.

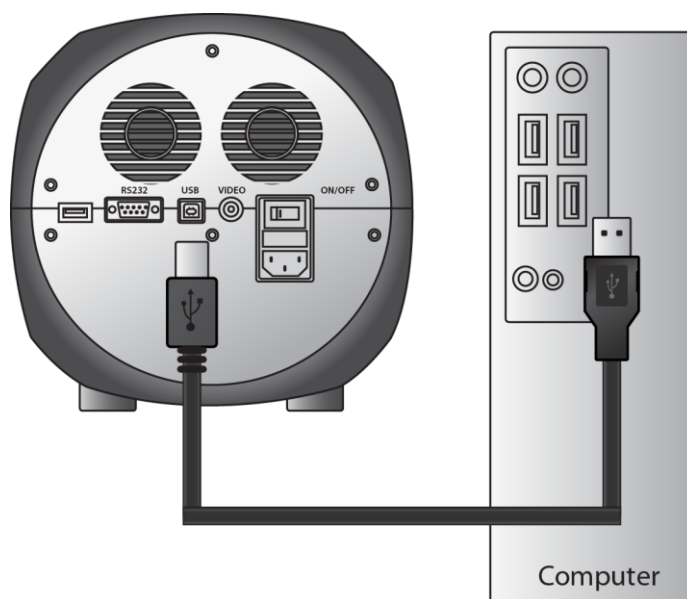


CAUTION:

Before running the program, check the connection of USB cable between the ADAM-SCC and the laptop or desktop computer.

ADAM-SCC Report Program: Getting started

The following steps are guide for connecting USB cable:



1. Connect the USB cable to ADAM-SCC.
2. Connect the USB cable to Desktop or Laptop computer.
3. Turn on ADAM-SCC and Desktop computer.

Software Installation

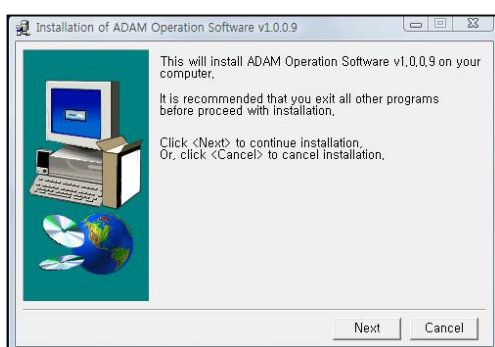
ADAM-SCC Report Program: Installation

To install the ADAM-SCC Report software, follow the directions as below :

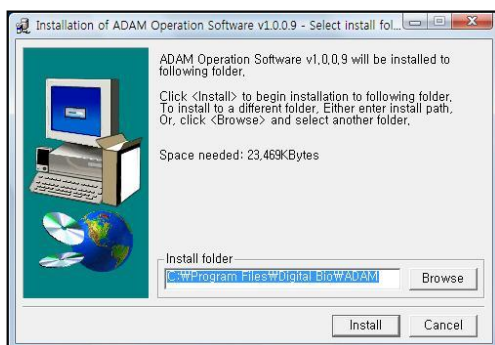


1. Insert the installation CD-ROM into the computer.
Then open the file
"Setup_ADAM_v1.x.x.x.exe".

※Report program can be installed in Windows 2000, XP or higher version.



2. The start-up dialogue of the software, as shown like left image, will appear.
3. Click "Next" to start installation.

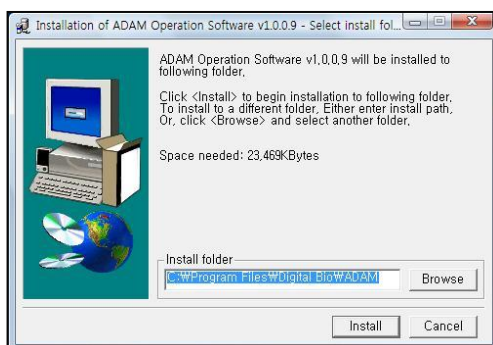


4. If you want to change installation folder, click "Browse" and choose the location that you want.

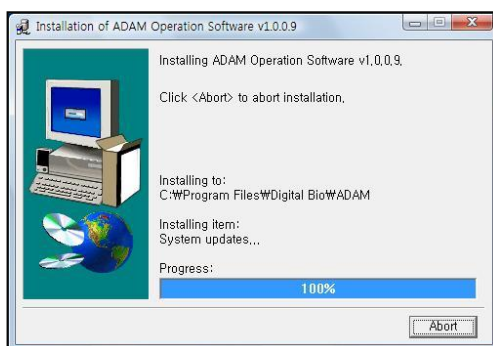


Software Installation

ADAM-SCC Report Program: Installation

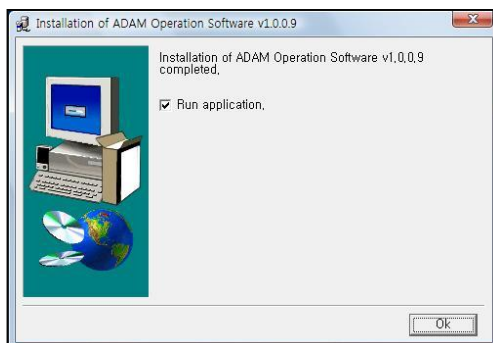


5. After choosing installation folder, click "Install" to proceed with the installation.



6. The computer activates the "Installation of the Software".
Initial installation folder is "C:\Program Files\Digital Bio\ADAM".

7. Report Program will be installed automatically.



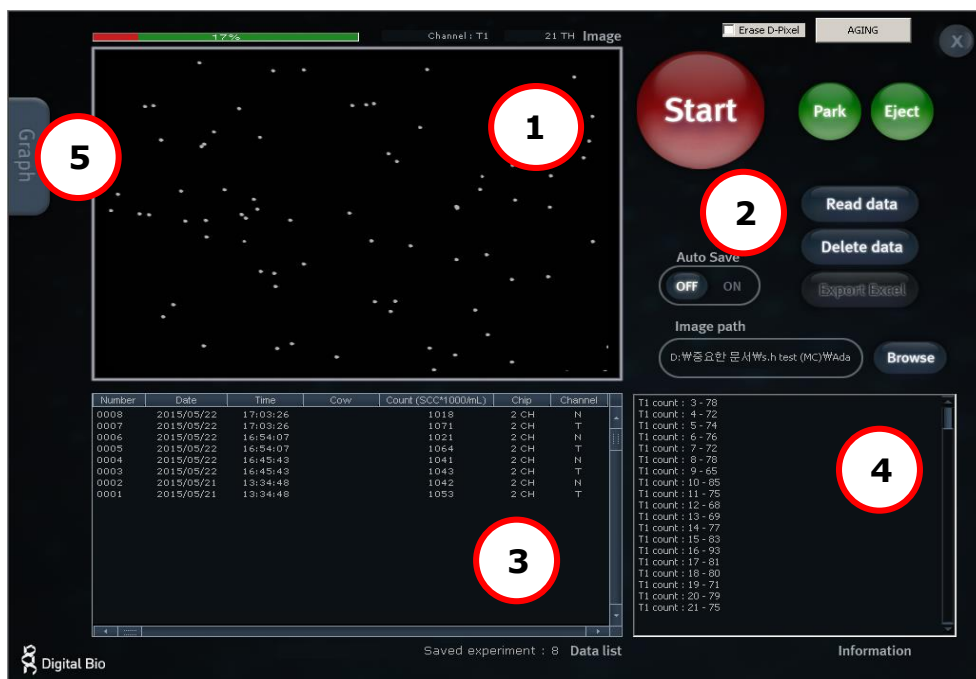
8. Click "Ok" to finish the installation.



9. If the installation was successful, the report program can be found at Start>All Program>ADAM.

Software Installation

ADAM-SCC Report Program: Function Guide



① Image frame

Image captured by ADAM-SCC will be shown here.

② Function Buttons

Start cell counting, saving images, exporting data, and all function of Report Program are handled by using these buttons.
(see p.28 for more detailed information of each button)

③ Data List

All saved data in ADAM-SCC will be loaded and shown in data list section.

④ Information

Operation and counting results of each frame will be displayed here.

⑤ Graph

Analysis of results including cell size and frame by frame counting will be shown in graph section.

Software Installation

ADAM SCC REPORT Program: Function Buttons



Start cell counting.



Park (Lock) stage of ADAM.



Eject chip holder out of ADAM.

Read data

Loads the experiment data from the memory of the main device.

Delete data

Deletes all of the loaded data and memory of the main device.

Export Excel

Transfers the data list to Excel format and saves it.

Auto Save



Turn on or off automatic image save option

Default image save folder is "C:\Program Files\Digital Bio\ADAM\Images". Images will be saved until your hard drive has no more capacity to save.

Be sure to set Auto Save off, unless you need to save images.

Example of saved image file: 081221(yymmdd)-203452(hhmmss)-N1(channel name)-002.bmp

Browse

Choose folder to save images automatically.

Software Installation

ADAM SCC REPORT Program: Data List

Number	Date	Time	Cow	Count (SCC*1000/mL)	Chip	Channel
0010	2015/05/26	13:29:08		1050	2 CH	N
0009	2015/05/26	13:29:08		1084	2 CH	T
0008	2015/05/22	17:03:26		1018	2 CH	N
0007	2015/05/22	17:03:26		1071	2 CH	T
0006	2015/05/22	16:54:07		1021	2 CH	N
0005	2015/05/22	16:54:07		1064	2 CH	T
0004	2015/05/22	16:45:43		1041	2 CH	N
0003	2015/05/22	16:45:43		1043	2 CH	T
0002	2015/05/21	13:34:48		1042	2 CH	N
0001	2015/05/21	13:34:48		1053	2 CH	T

Saved experiment : 10 Data list

Data list shows data stored in ADAM memory.
Total amount of stored results are indicated at bottom of list as "Saved experiment".
Up to 200 counting results are automatically saved to ADAM memory.

When memory of ADAM is full, new counting result will replace old data.

These data can be exported as Excel Sheet (*.xls) and stored in personal computer or can be erased from ADAM memory.

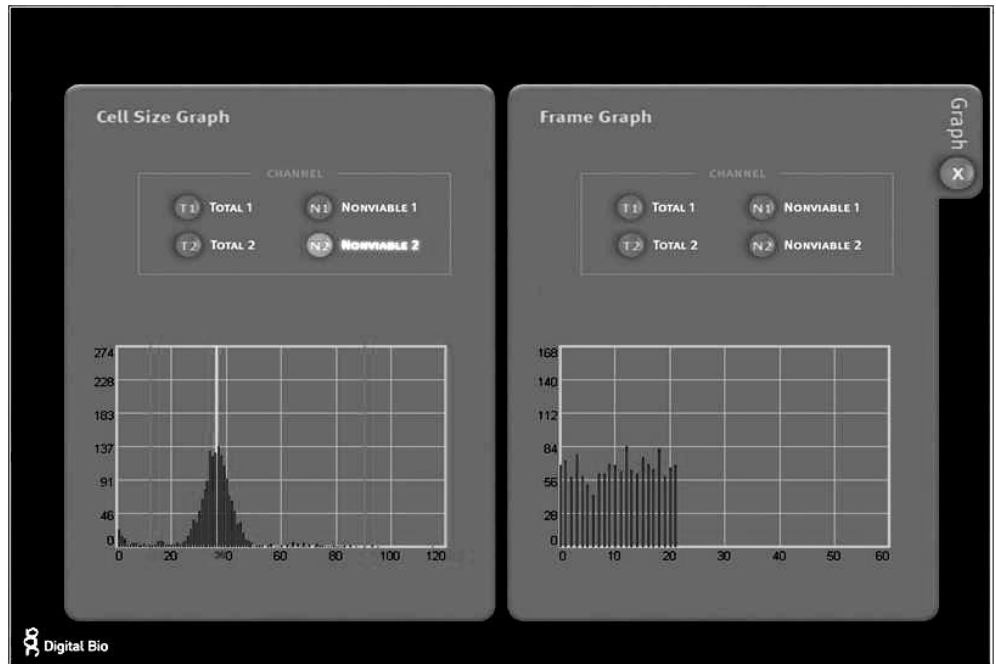
ADAM SCC REPORT Program: Information

```
T1 count : 12 - 68
T1 count : 13 - 71
T1 count : 14 - 69
T1 count : 15 - 79
T1 count : 16 - 83
T1 count : 17 - 83
T1 count : 18 - 75
T1 count : 19 - 76
T1 count : 20 - 78
T1 count : 21 - 71
T1 count : 22 - 72
T1 Auto Count : 1030504
T1 error frame : 0
T1 Total : 1604
N1 count : 1 - 95
N1 count : 2 - 64
N1 count : 3 - 64
N1 count : 4 - 92
N1 count : 5 - 69
N1 count : 6 - 91
```

This section shows information regarding operation of ADAM. If cell counting is started through Report Program, the counting results of each frame that ADAM captures will be shown here.

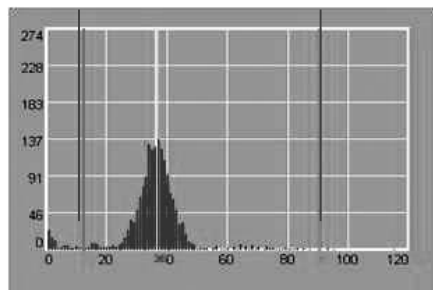
Software Installation

ADAM SCC REPORT Program: Graph



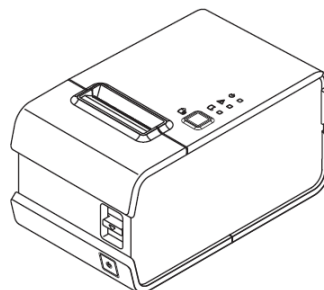
This section shows information of cell size distribution and counting results of each frame that ADAM captured. Through cell size graph, you can figure out whether there are cell clumps or aggregates. In case of counting evenly distributed cells without any aggregation, there should be a single peak on distribution of cell size.

- The size of cell in graph is not real size of cell. It is the size of pixels in fluorescence image captured by ADAM. And the size information is only to judge if there is a lot of aggregated cells.



Printer Installation

Printer



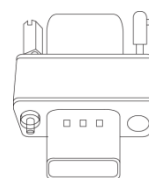
Serial Cable
(ELLIX10U)



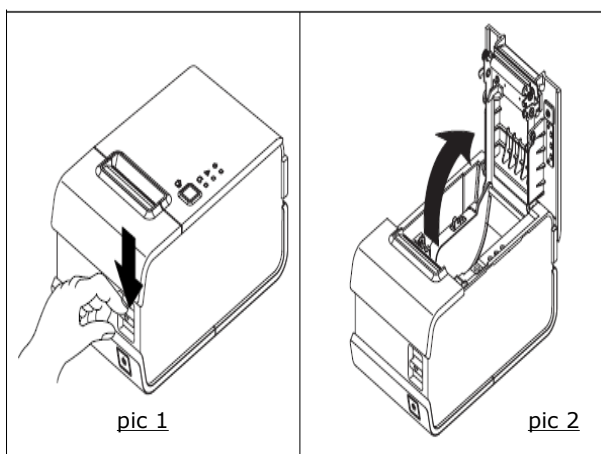
Roll paper



Power-cord



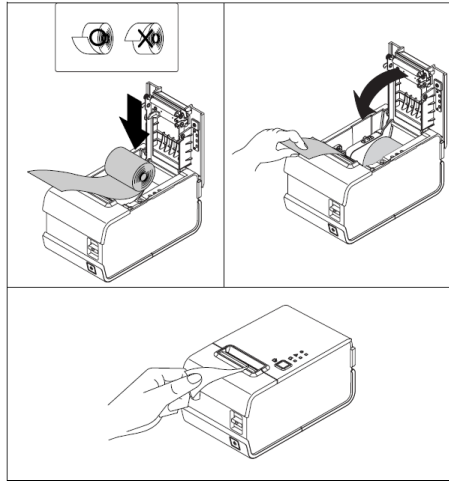
Serial
gender



1. To open the case,
press button as <pic1>

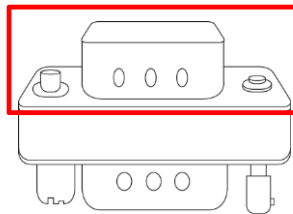
Printer Installation

Printer

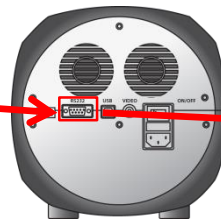


2. Insert paper as picture.
3. Close the case.

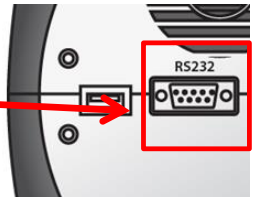
Connect serial cable & gender to ADAM-SCC



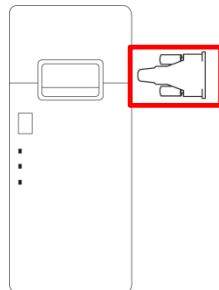
Pic 1



Pic 2



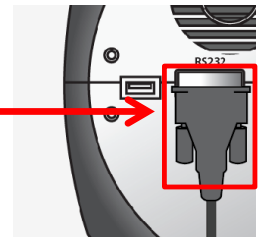
Pic 3



Pic 4



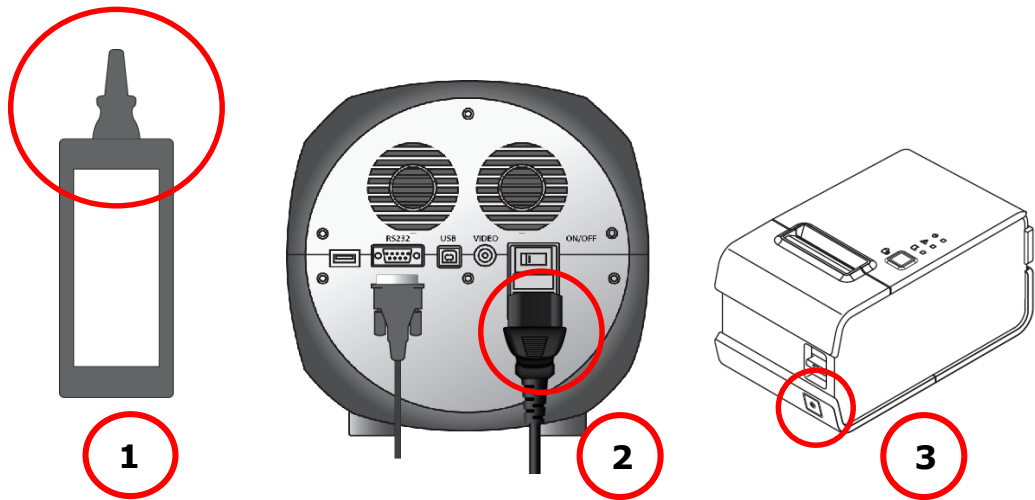
Pic 5



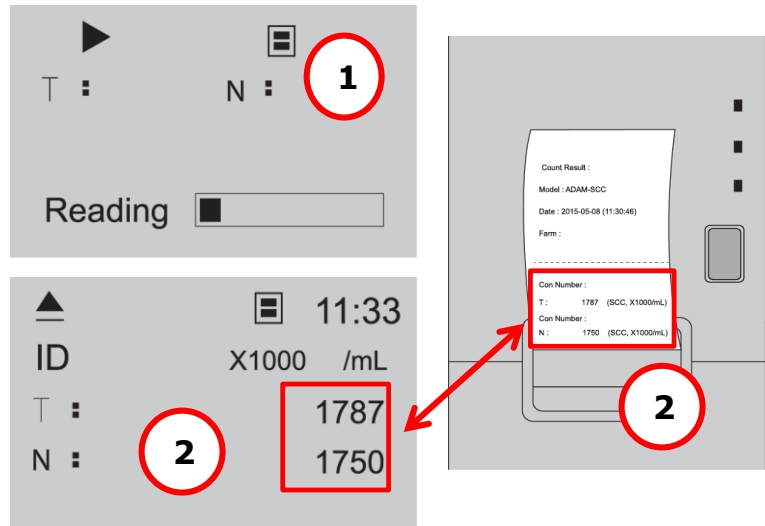
Pic 6

Printer Installation

Printer



1. Connect power cable to Adapter.
2. Connect power cable to ADAM-SCC.
3. Power on both ADAM-SCC and printer



1. Reading sample
2. Result shown on LCD is printed automatically

Trouble shooting

Trouble shooting

Problem	Cause	Solution
ADAM does not power up	• Power switch in off position.	1. Check power switch on back of unit.
	• No power from outlet.	2. Check power source.
	• Bad power cord.	3. Replace.
Inaccurate result	• Cell number may be out of range.	1. Adjust the number of cells between 0.05 ~ 1.15×10^6 cells/mL.
	• Stain Solution has expired.	2. Check the expired date.
	• Too high clumped cells.	3. Try again after vortexing the cells.
Software does not work	• PC setup incorrect/wrong instruct mode.	1. Check program setup.
	• Cable's not fully connected/ wrong adaptor.	2. Check all connections.
When error message is shown	• When there are too many frames with errors (Error message: E)	1. Check the suspension of cells if all cells are fully dissociated into single cells.
		2. If contaminants except cells are found, prepare sample again.
	• When too many cells are loaded (Error message: O)	1. Check if concentration of cell is too high.
		2. Dilute the sample and count again.
	• Low concentration of cells (Error message: L)	1. Check if concentration of cell is high or not.
		2. Dilute sample and count Again.
	• Too few cells are loaded (Error message: U)	1. Check if concentration of cell is too low.
		2. Use concentrated sample and count again.

Warranty

Warranty

NanoEnTek warrants that the ADAM-SCC will be free from defects in material and workmanship for a period of one (1) year from date of purchase.

If any defects occur in the ADAM-SCC during this warranty period, NanoEnTek will repair or replace the defective parts at its discretion without charge.

The following defects, however, are specifically excluded:

- Defects caused by improper operation.
- Repair or modification done by anyone other than NanoEnTek or an authorized agent.
- Damage caused by substituting alternative parts.
- Use of fittings or spare parts supplied by anyone other than Digital Bio.
- Damage caused by accident or misuse.
- Damage caused by disaster.
- Corrosion caused by improper solvent or sample.

For your protection, items being returned must be insured against possible damage or loss.

NanoEnTek cannot be responsible for damage incurred during shipment of a Repair instrument; It is recommend that you save the original packing material in which the instrument was shipped.

This warranty should be limited to the replacement of defective products.

For any inquiry or request for repair service, contact sales@nanoentek.com or your local distributor.

Product List

Additional Product List

Cat. No.	Product	Contents	Quantity
ADM-001	External video monitor (optional)	7" LCD Monitor	1
CRS-K01	Soma Chip ^{2X} Kit	2 channel Soma Chip	50
		0.1 mL Stain solution	100 test
CRS-K02	Soma Chip ^{4X} Kit	4 channel Soma chip	100
		0.1 mL Stain solution	400 test
ADP-001	External Printer (Optional)	Thermal Printer	1

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ADAM-SCC, Instruction Manual

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The information in this manual is described as correctly as possible and is applicable to the latest firmware and software versions, but it may be changed without prior consent or notification.

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