# ADAM SCC

A New Standard of Somatic Cell Counter



# INSTRUCTION MANUAL

NESMU-ASC-001E(V.4.0)



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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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### **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
KeyPad	1
Power Cord	1
Fuse	2
Standard Beads solution	1
Barcode scanner	1
External video monitor (Optional)	1
External Printer (Optional)	1

#### SomaChip Kit

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

ltem	Soma Chip4x Kit (Cat. No: CRS-K02)
Disposable Chip	100pcs (4 channel)
Solution	25mL x 2ea
Available test Q'ty	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 14 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 13.
- 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.
- 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.
- 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.
- 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

- 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.
- 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 website, 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 dissemble 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.

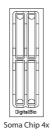
# **Product Specifications**

### 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 $\times$ L $\times$ H)	220 × 375 × 250 mm
Degree of protection	IPX0

### Soma Chip



Measuring range	0.05 ~1.15 x 10 <sup>6</sup> cells/mL
Analysis time	2 ~ 2.5 min/test
Loading sample vol. per test	12 μL (for Soma Chip 4X)
<b>Measuring</b> sample vol. per test	3 μL (for Soma Chip 4X)

PI (Propidium lodide) staining of Somatic cells

### **Stain Solution**



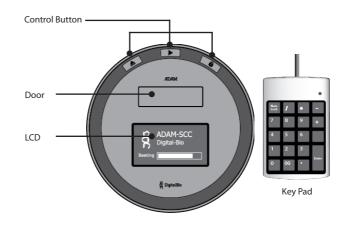
Accessories





Power cord	1.5 m
Fuse	250 VAC, 3 A;
	T250V 3.15AL
Barcode scanner	
Standard Beads solution	5mL, 1 bottle
Keypad	USB Type / 1.3 m

### **Description of ADAM Somatic Cell Counter**



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

#### **Control Buttons:**

Front view of ADAM Somatic Cell Counter



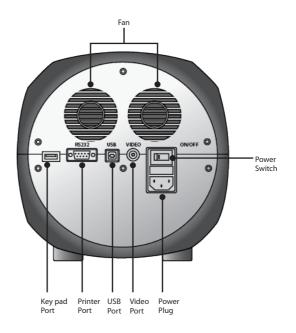
- Start : Performs all procedures of automatic counting.
- Lock : Protects the alignment of stage from external shock when the ADAM is moved to the other places.

#### "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 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.

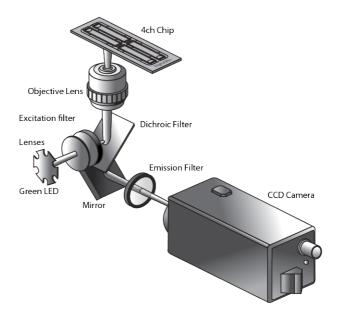


- Fan : Cooling fan
- Power switch : Main power on/off switch
- Power plug : ADAM power cord connection plug
- USB port : Connect to computer with USB Cable
- Printer port : Connect to Printer port
- Key pad port : Keypad connection port
- Video port : External video monitor port

### 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 a international standard for measurement of milk quality. For this reason, somatic cell counts are readily available to dairy farmer 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 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-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 ~ 1.15 x 10<sup>6</sup> cells/ mL.

Each bottles has 25 mL reagent of somatic stain solution. Simply add 100  $\mu$ L volume of the raw milk sample and 100  $\mu$ L stain solution in the 1.5 mL tube. Once the experiment is complete the results can be printed with the optional thermal print. Printed number indicates cell concentration ( x1000/ mL ) in each channel.

• Soma Chip 4X : Load 12 μL/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 4X>



<Soma Chip 4X Kit>

#### 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 ( $\leq$  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.

### 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 "  $\rm I$  " (ON) position.

### Start-Up Screen



1. System booting.

[ System init.]
Please wait!

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

	12:00
>> Input sam	nple ID?
T 1: _	N 1:
T 2:	N 2:

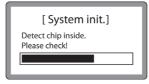
3. The home screens will be displayed as the image, no errors are detected.

# Error message during booting

#### [System State]

Error : 0x00000C00

- 1. It appears when booting not working properly.
- 2. Turn off main power and restart device.
- If this message still appears after restart, contact your local distributor or <u>sales@NanoEntek.com.</u>



- 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.
- If this message continues to display when no chip is inserted, contact your local distributor or sales@NanoEntek.com.

[Device unlocked] Please push the

locking button before turn off the ADAM device.

- 1. It appears when turning off without locking device.
- 2. Remove the chip from a device, and Do not turn on the device with a chip.
- Push the lock button before turn off the device. If this message still appears after restart, contact your local distributor or sales@NanoEntek.com.

### **Menu Setting**



	12:00
>> Input c	ow number?
T 1: _	N 1:
T 2:	N 2:
Conf	iguration 🐥
1. LCD cont	rast
	rast

- You can set the menu as you press the <sup>\*\*'</sup> button on the keypad from the screen for inputting cow numbers.
- 2. You can select the number from the Menu.

### System Information

55	1	٠	
7	8	•	٠
4	5	6	
1	2	3	
0	00	1	Deter
-			

Configuration
 LCD contrast
 System info.

[ System Info. ]
1. Version : MC V1.21
2. Date : Aug 28, 17
CORE1 : 1.95
CORE2 : 1.53
CORE3 : 1.53

- 1. Check the device versions and date which have been installed in the device.
- 2. Select number 2 key from the MENU, and Press the 'Enter' key.
- 3. The screen will return to the Menu screen automatically.

### 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.



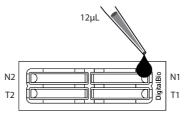
2. Add 100 µL of the raw milk sample and Kit solution in tube. (1:1 ratio)



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



Load the cell sample onto the chip.
 "Ensure that no bubbles enter each channel."

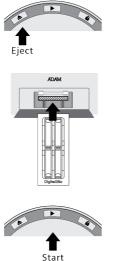








[Outside]



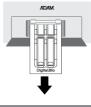
- Press " Eject( ▲ )" button on the main device to eject the chip holder.
- 2. Insert the Chip loaded with the sample onto the chip holder.

- 3. Press " **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.

►	
T1 : T2 :	N1 : N2 :
Reading	

sample.

4. The instrument takes approximately 2 min. to count

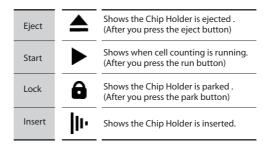


- 5. After calculating the cell number, the chip will be ejected automatically. Then chip can be removed.
- L2:00 1D: x1000 /mL T1:123 24 N1:45 586 T2:078 40 N2:789 135
- 6. The calculated cell number per 1mL will be displayed on the screen automatically.
- 7. For another experiment, repeat the process from steps  $1 \sim 5$ .

### **Icon Function**

	<b>I</b> • <b>1</b> 2:00
ID :	x 1000 /mL
T1 : 123 N1 : 45 T2 : 678 N2 : 789	24 586 40 135

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



#### 2. Display menu setting.



Shows that ADAM reads 4 Channel chip.

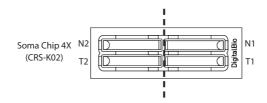
12:00 Shows that the system time.

### **Result Analysis**

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

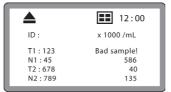
	12:00
ID :	x 1000 /mL
T1:123	24
N1:45	586
T2 : 678	40
N2 : 789	135

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



#### **Error message**

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



< In case of "Sample error!" >

- 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.

Date	Time	CowID	Barcode	Total	Chip	Channel	^
2017-05-18	14:45:57	233	0	1082	4	N2	
2017-05-18	14:45:57	232	0	1045	4	T2	
2017-05-18	14:45:57	231	0	772	4	N1	
2017-05-18	14:45:57	230	0	Sample error	4	T1	
2017-05-18	14:43:15	229	0	1087	4	N2	
2017-05-18	14:43:15	228	0	1171	4	T2	
2017 05 10	14-42-15	222	0	600		NH1	1

▲	12:00
ID :	x 1000 /mL
T1 : 123 N1 : 45 T2 : 678 N2 : 789	24 586 Range over! 135

< In case of "Range over!" >

- 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.

Date	Time	CowID	Barcode	Total	Chip	Channel	^
2017-07-14	15:32:01	108	123325	1069	4	N1	
2017-07-14	15:32:01	107	123325	947	4	T1	
2017-07-14	15:28:12	106	88012063	Range over	4	N2	
2017-07-14	15:28:12	105	88012063	1045	4	T2	
2017-07-14	15:28:12	104	88012063	1070	4	N1	
2017-07-14	15:28:12	103	88012063	993	4	T1	

#### **Error message**

x 1000 /mL
Result error!
Result error! Result error!
Result error!

< 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.

Date	Time	CowID	Barcode	Total	Chip	Channel	^
2017-07-14	16:25:21	125	88012063	984	4	T2	
2017-07-14	16:25:21	124	88012063	816	4	N1	
2017-07-14	16:25:21	123	88012063	431	4	T1	
2017-07-14	16:22:14	122	88012063	Result error	4	N2	
2017-07-14	16:22:14	121	88012063	1017	4	T2	
2017-07-14	16:22:14	120	88012063	886	4	N1	
2017-07-14	16:22:14	119	88012063	459	4	T1	
2017 07 14	16.10.00	110	00012062	1005		810	

#### 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 deionized water.

#### ∕ CAUTION:

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

#### 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, date, time.

#### ∕ CAUTION:

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

The following steps are guide for connecting USB cable:

#### ADAM-SCC Report Program: Getting started



- 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.

#### ADAM-SCC Report Program: Installation

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



- 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 7 or higher version, and recommended in net.framework 3.0 or higher version.
- 2. The start-up dialogue of the software, as shown like left image, will appear.
- 3. Click "Next" to start installation.
- If you want to change installation folder, click "Browse" and choose the location that you want.

ADAM-SCC-Setup		- 0	×
Select Installation F	older		5
The installer will install ADAM-SCO	Setup to the following folder.		
To install in this folder, click "New	". To install to a different folder, enter it belo	w or click "B	rowse".
Eolder:			
C:WProgram Files (x85)	NanoEnTekWADAM-SCC-Setup	Biowo	e
		Disk Co	at
Install ADAM-SCC-Setup for you	uself, or for anyone who uses this computer.		
○ Everyone			
● Just me			

WARNING: This computer program is protected by copyright law and international treaters Unsufforcized duplication or distribution of this program, or any portion of it, may result in ne or principal meridian, and the program that the this program, or any portion of it, may result in ne

Cancel (Back Next)

rowse:	📄 Program Files (x86)	~ 🖻 🕯		
Acronis		Cisco		
Adobe		🚞 clipsoft		
🗎 Adobe N	fedia Player	Common Files		
🗋 AhnLab		Crosscert 🚞		
Apple Software Update		CyberLink		
Applicati	ion Verifier	🗀 Dell		
Bonjour		🚞 Dell Digital Delivery		
CE Rem	ote Tools	DreamSecurity		
<				
older:	C:₩Program Files (x86)₩			

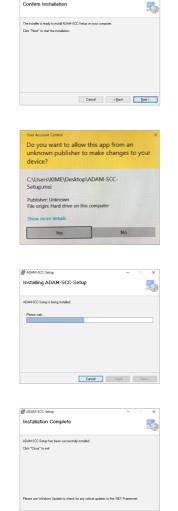
ADAM-SCC

Installation

**Report Program:** 

🛃 ADAM-SCC-Setup

Confirm Installation



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

- 6. Click "Yes" to grant administrator privileges.
  - Note: Initial installation folder is "C:\Program Files(x86)\NanoEntek\ ADAM-SCC-Setup\"
- 7. Report Program will be installed automatically.

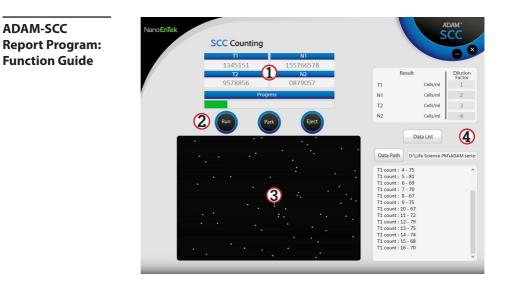
8. Click "Close" to finish the installation.

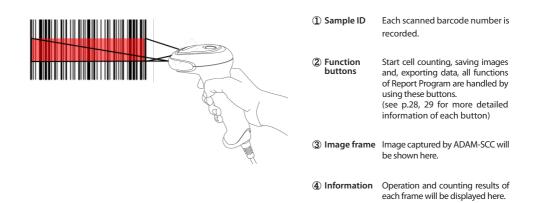


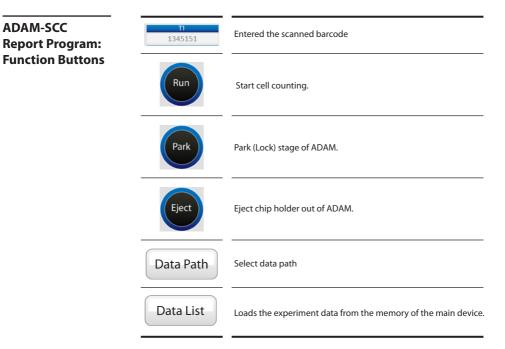
Cancel (Back Doce

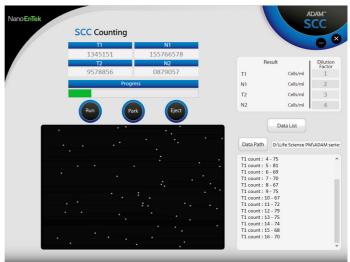
9. If the installation was successful, the report program can be found at Start>All Program>ADAM\_SCC.

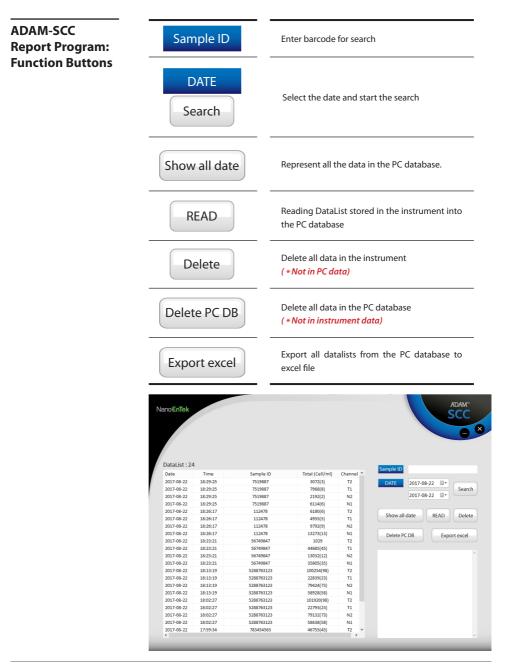
ADAM-SCC



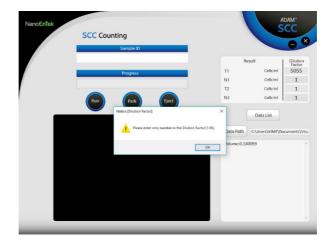








ADAM-SCC Report Program: Dilution Factor



If you enter more than 2 digits or enter letters such as an alphabet and press'Start' button, an alert window will appear.

\* Please enter only numbers in the Dilution Factor(1-99)

### ADAM-SCC Report Program: Information

T1 count : 9 - 74	^
T1 count : 10 - 79	
T1 count : 11 - 74	
T1 count : 12 - 77	
T1 count : 13 - 84	
T1 count : 14 - 82	
T1 count : 15 - 79	
T1 count : 16 - 81	
T1 count : 17 - 71	
T1 count : 18 - 63	
T1 count : 19 - 73	
T1 count : 20 - 63	
T1 count : 21 - 57	
T1 count : 22 - 65	

This section shows information regarding operation of ADAM. If cell counting starts through Report Program, the counting results of each will be shown here.

#### ADAM-SCC Report Program: Data List

DataList : 24	1			
Date	Time	Sample ID	Total (Cell/ml)	Channel
2017-08-22	18:29:25	7519887	3072(3)	T2
2017-08-22	18:29:25	7519887	7968(8)	T1
2017-08-22	18:29:25	7519887	2192(2)	N2
2017-08-22	18:29:25	7519887	6114(6)	N1
2017-08-22	18:26:17	112478	6180(6)	T2
2017-08-22	18:26:17	112478	4955(5)	T1
2017-08-22	18:26:17	112478	9792(9)	N2
2017-08-22	18:26:17	112478	13273(13)	N1
2017-08-22	18:23:21	56749847	1029	T2
2017-08-22	18:23:21	56749847	44685(45)	T1
2017-08-22	18:23:21	56749847	13032(12)	N2
2017-08-22	18:23:21	56749847	35805(35)	N1

DataList shows data stored in the ADAM memory.

Total amount of stored results is shown on the right of the title, DataList. Up to 1000 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.

\* You can sort the data by clicking "Date" or "Time".

Sa	mple	ID					
	DATE		201	7-08	-28	•	Search
•		August 2017				•	Search
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
30	31	1	2	3	4	5	
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	Delete
20	21	22	23	24	25	26	
27	28	29	30	31	1	2	
3	4	5	6	7	8	9	
Today: 8/28/2017						ort excel	

You can also find the data by specifying a date range and clicking 'Search' to find the data or entering barcode and clicking 'Search'.

You can also combine barcodes and dates to find data.

If you want to go back to the most current day, check the below box.

Today: 8/28/2017

### ADAM-SCC Report Program: Data retrieval

#### ADAM-SCC Report Program: Data export

A1 $\cdot$ : $\times$ $\checkmark$ $f_X$ Date							
	А	В	С	D	E		
1	Date	Time	Sample ID	Total (Cell/ml)	Channel		
2	2017-08-22	18:29:25	7519887	3072(3)	T2		
3	2017-08-22	18:29:25	7519887	7968(8)	T1		
4	2017-08-22	18:29:25	7519887	2192(2)	N2		
5	2017-08-22	18:29:25	7519887	6114(6)	N1		
6	2017-08-22	18:26:17	112478	6180(6)	T2		
7	2017-08-22	18:26:17	112478	4955(5)	T1		
8	2017-08-22	18:26:17	112478	9792(9)	N2		
9	2017-08-22	18:26:17	112478	13273(13)	N1		
10	2017-08-22	18:23:21	56749847	1029	T2		
11	2017-08-22	18:23:21	56749847	44685(45)	T1		
12	2017-08-22	18:23:21	56749847	13032(12)	N2		
13	2017-08-22	18:23:21	56749847	35805(35)	N1		
14	2017-08-22	18:13:19	5288763123	100254(98)	T2		
45	2017 00 22	10.12.10	5000760100	22020(22)	T1		

This section shows information of result such as Date, Time, Barcode, and counting results of each frame.

Choose a folder to save the excel file.

\* The results are displayed with the dilution factor applied.



\* Notice: When exporting data to an Excel, please wait until data loading is completed. Otherwise, the data load stops prematurely.



To change the data path, you can click on "Data path" to save it to a different path or create a new folder.

The resulting data is saved in a newly created folder for each project in the image folder.

\* Default data path: The image is saved in the path where the program was first installed.

### ADAM-SCC **Report Program:** Turn off the software

ADAM-SCC

Data path



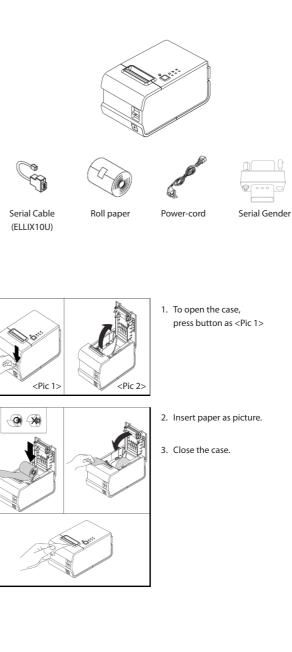
When you turning off the software, this alert message is shown.

Before turning off the software, please remove the SOMA chip from the instrument and press the 'park' button of the instrument or software.

\* If you turn off the unit without turning it on and turn it on again, a message such as 'Please push the locking button before turn off the ADAM device' will appear on the LCD window.

### **Printer Installation**

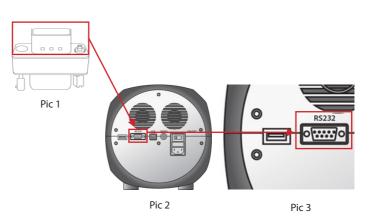
### Printer

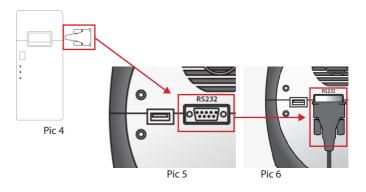


### **Printer Installation**

### Printer

Connect serial cable & gender to ADAM-SCC



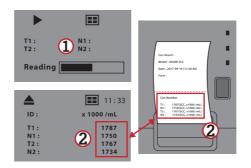


### **Printer Installation**

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**

Problem	Cause	Solution
ADAM-MC does not	· Power switch in off position.	1. Check power switch on back of unit.
power up	· 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
	<ul> <li>AccuStain Solution has expired.</li> </ul>	0.05 ~ 1.15 x 10 <sup>6</sup> cells/mL.
	<ul> <li>Too high clumped cells.</li> </ul>	<ol><li>Check the expired date.</li></ol>
		<b>3.</b> Try again after vortexing the cells.
Software	· PC setup incorrect/wrong instruct	1. Check program setup.
does not work	mode.	2. Check all connections.
	· Cable's not fully connected/	
	wrong adaptor.	

### 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-K02	Soma Chip4X Kit	4 channel Soma chip	100
Ch3-h02	Joina Chip4x Kit	25 mL Stain solution 2ea	400 test
ADB-500	Calibration Bead	5 mL Beads solution	1
ADP-001	External Printer (optional)	Thermal Printer	1

### ADAM SCC

A New Standard of Somatic Cell Counter

NESMU-ASC-001E(V.4.0)



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