# Handheld CPC Software

# **OPERATION MANUAL**

Kanomax Japan Inc.

Please keep this manual handy or ready reference.

03001 19.01 Thank you for purchasing a product of Kanomax Japan Inc.

Please read this operation manual carefully and operate the instrument appropriately by following the instruction given in this manual.

- This manual is stored in the CD-ROM as a PDF file, which can be read by "Adobe Acrobat 4.x" and higher.
- Windows 9x/NT/2000/XP/Vista/7/8/8.1/10 is a resisted trademark of Microsoft Corporation.
- Any unauthorized duplication of the product, in whole or in part, without written consent from Japan Kanomax Inc is strictly prohibited.
- Contents of the Operation Manual are subject to change without notice.

# Important Safety Information

Types and definitions of warning signs used in this instruction manual are shown below.

## [Danger]

To prevent serious injury or death.

Items under this heading show measures to prevent serious injury or death, which may result if the instructions in this manual are not followed and the instrument is operated inappropriately.

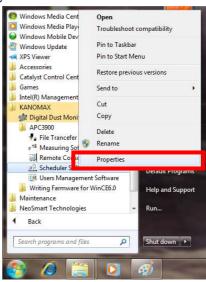
## **«Caution»**

To prevent damage to the product. Items under this heading show measures to prevent damage to the product and conditions that affect our product warranty.

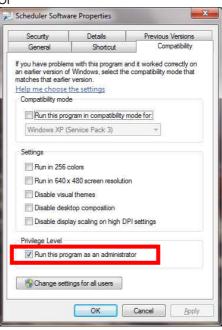
## Precautions When Using Kanomax Software Products in Windows 7 or 8/8.1 or 10

### 1. <u>Setting icon of the software :</u>

- 1. Click [Start] -> [ALL Programs] -> [KANOMAX] or right-click the desktop icon of the software.
- Right-click the icon of the software and click [Properties], or click [Properties] of the desktop icon.



- 3. Click the [Compatibility] tab in the Software Properties window.
- 4. Check "Run this program as an administrator" under Privilege Level.
- 5. Click [OK] to close the window.



Note: If you do not follow the above procedure, the software may abort with a runtime error when reading or printing data.

## 2. For Stored data:

Stored data may not appear in Windows Explorer if it was saved in the C:¥ folder or one of the folders in Program Files (Program Files(x86) for 64 bit).

Click "Compatibility files" in Windows Explorer to display the data.

If you cannot perform this operation, or "Compatibility files" does not appear, you need to save the data in a folder such as "My Documents" which users can read and write to.

🕒 🕞 🗢 📇 🕨 Computer 🕨	Local Disk (C:) 🕨	• 49	Search
Organize	Compatibility files	New folder	
🖌 🚖 Favorites	ame	Date modified	Тур
🔜 Desktop	dell	10/25/2010 12:34	File
📕 Downloads 🛛 🔋	drvrtmp	10/25/2010 12:36	File
🔄 Recent Places 🔰	Intel	10/25/2010 12:34	Filet
	PerfLogs	7/14/2009 11:37 A	M Filet

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# 1. Overview

## 1.1. Check Package Contents

The following items are included in the package.

	Quantity
1. Handheld CPC Software CD-ROM	1
2. Operation Manual	1

In case there is anything missing or damaged, please contact your local distributor immediately.

## 1.2. System Overview

This software allows the computer to sample data by controlling the CPC, displaying a graph, and storing the data as a file.

It also allows transferring the data stored in the CPC to the computer, and storing as a file.

Applicable Computer Requirements:

Model	IBM PC compatible
RS232C Communication Port	To be equipped with 1 or more ports.
USB Port	To be equipped with 1 or more ports.
OS	English Windows 7,8/8.1,10

## 2. Installation

## 2.1. Installation

When performing installation, make sure to login with the user having the administrative right to carry out the following steps.

(1) Install USB Driver:

Execute "PreInstaller.exe" from the [Driver] folder in the CD-ROM.

- (2) Follow the instructions displayed on the screen.
- (3) Install Software: Execute "Setup.exe" from the CD-ROM.
- (4) Follow the instructions displayed on the screen.
- (5) When installation is completed successfully, "KANOMAX" will be registered in the [Program] of the [Start] menu.

## 2.2. Startup and Shutdown

### To startup the Handheld CPC Software:

From the start menu, click [Program]  $\rightarrow$  [KANOMAX]  $\rightarrow$  [Handheld CPC Software]. Main screen of the Handheld CPC Software will be displayed.

### To shutdown the Handheld CPC Software.

Select [File]  $\rightarrow$  [Exit] from the menu. Click the [x] button at the right end of the title bar of the main screen.

## 2.3. Uninstall

(1) Open [My computer]  $\rightarrow$  [Control Panel]  $\rightarrow$  [Add or Remove Programs].

(2) Select [Handheld CPC Software] from the list, and click the [Remove] button.

# 3. Display

## 3.1. Main Screen

	dheld CPC							
Deneral Date		n <mark>g M</mark> easurement	<u>O</u> PC <u>H</u> elp					
	<b>ð</b> <u>?</u>				Menu Bar			
Concentration [Pt/cc]			LUoncentra	tion/Pressure]		1,000 900 800 700 600 500 400 800	Concentration	
	20 10 0		08:57:50		08:57:5	200 100 5	9	Zoom On
	Time	Concentration [Pt/cc]	Pressure[hPa]	Status	Ave:	ation Pt/cc Pt/cc	Pressure Max: Ave:	hPa hPa
1 2 3 4					Min:	Pt/cc	Min:	hPa
5 6					•	Me	asure Start D	ata transfer

## 3.2. Menu List

### File Menu

Used for file related operations.

[Open]	Reads in a stored CSV format file.
[Save]	Stores measurement data in a CSV file.
[Print]	Prints displayed data.
[Exit]	Terminates a program.

## **Computer Setting Menu**

Used for setting various parameters.

[RS232C]	RS232C setting
[Option]	Folder setting of stored data.

### **CPC Setting Menu**

Used for setting various data for the CPC.

[Instrument Setting] Program, clock, and alarm settings.

#### Measurement Menu

Used for setting various parameters for performing a measurement.

[Measure Start]	Starts a measurement. Data is collected in accordance with the
	conditions set by [Measure Setting].
[Measure End]	Terminates a measurement.
[Measure Setting]	Parameter setting for performing a measurement.

#### Help Menu

[About Handheld CPC Software] Displays version information.

### 3.3. Command Button

#### Measure Start

Stats sampling in accordance with the conditions set by the [Measure Setting].

When starting for the second or subsequent time, a message "Data is not saved. Do you save?" will be displayed if the former data has not been stored.

- When "YES" is clicked, a window for data storage will be displayed. Store data. To perform sampling, press [Measure Start] again.
- When "NO" is clicked, the previous data will be deleted, and new sampling will start.

### Data Transfer

Transfers data stored in the CPC to a computer. When the button is clicked, the data in the CPC will be displayed. Select data to be transferred.

### Zoom On /Off

Enables enlargement of a graph.

When zooming-in the graph is enabled, the [Zoom Off] button will be displayed.

When [Zoom Off] is selected, the enlarged graph will return to its initial size.

Note that this enlargement function button cannot be used while performing a measurement.

### 3.4. Graph

### **Enlargement of Graph**

Left click the mouse at the upper left of the area you want to enlarge, and drag to the bottom right of the area you want to enlarge.

When the button is released, the enlarged graph of the desired area will be displayed.

In order to restore the size of the graph, left click the mouse on any area of the graph, drag toward the left direction, and release. Or press the [Zoom Off] button.

Note that this enlargement function button cannot be used when performing a measurement.

# 4. Computer Settings

The following screen will be displayed on selecting the [RS232C] from the setting menu.

## 4.1. Communication Setting (RS232C)

	200000000000000000000000000000000000000	
Port	COM3	<u> </u>
Baud rate	38400	
Data Bit	8	¥
Parity	None	¥
Stop Bit	1	Ŷ
Flow	None	¥

Port Number: Setting of connection port number.

Click the down arrow to select from a list of port number(s) which are currently equipped.

### <Attention>

Recognizable port numbers of this software is COM1 to COM15. If the setting exceeds COM15 on connecting the CPC, the COM number must be changed.

Baud Rate:	Fixed value of "38400".
Data Bit:	Fixed value of "8".
Parity:	Fixed value of "None".
Stop Bit:	Fixed value of "1".
Flow:	Fixed value of "None".

## 4.2.Changing COM Number

1) Open the Control Panel.

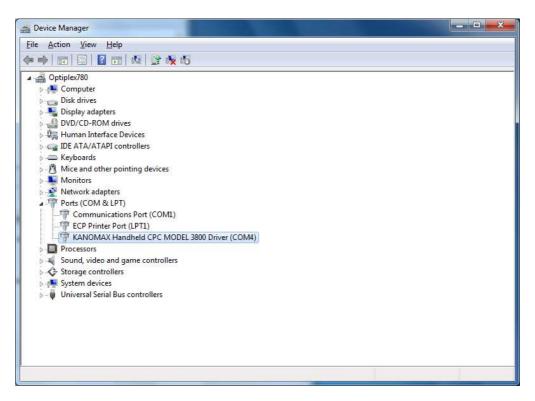
For Windows 7: [Start] – [Control Panel]



2) For Windows 7: Click category [System and Security].



- 3) Click [Device Manager].
- 4) When [Device Manger] is open, double click the [Ports (COM&LPT)].



5) Double click the [KANOMAX Handheld CPC MODEL 3800 (COMxx)].

6) Click the [Port Settings] tab, and click the [Advanced Settings for COMxx] button.

eneral Port Settings	Driver	Details	Power Management
	<u>B</u> its pe	er second	9600
		<u>D</u> ata bits	8
		<u>P</u> arity	None
		<u>S</u> top bits	1
	Elo	w control	None
		<u>A</u> a	vanced <u>R</u> estore Defa
			ОК Са

7) Select a COM from the [COM Port Number] combo box. An empty port among COM 1 to 15 must be selected.

Vise FIFO buffers (requ	ires 16550 (	compatible UAR	1.1			C	ОК
Select lower settings to			ns.				Cance
Select higher settings f	or taster per	tomance.				6	<u>D</u> efault
Receive Buffer: Low (1)	1	3	ă.	Ų	High (14)	(14)	
<u>T</u> ransmit Buffer: Low (1)	1	(k)		—Q	High (16)	(16)	

8) Setting is complete. If the Software is active, exit and reboot.

## 4.3.Option

🖥 Option			
Option			
Data storage folder	C:¥		
		<u> </u>	Cancel

### Data Storage Folder:

Sets folder for storing the sampled data or the data transferred from the CPC. Input folder name directly (input full path) or select a folder by clicking the reference [...] button.

# 5. CPC Settings

## 5.1.CPC Settings

Program Setting	Instrument Clock	Alarm
Program Number PRG1 PRG2 PRG3 PRG4 PRG5		per of Sampling Times 99 sec 0 sec 0000/00/00
()	Start Time: 16 ऱ : End Time: 19 ऱ : Send A	00 ▼ : 00 ▼ 45 ▼ : 00 ▼

## 5.2. Menu List

### File Menu

Used for file related operations.

- [Open] Reads in a stored INI format program file.
- [Save] Stores the program setting in an INI format file.
- [Exit] Closes the setting window.

### 5.3. Settings

(1) Settings of Programmed Measurement

### Program Number:

Select the program number of the program to be set. The contents of the selected program will be displayed.

### Sampling Time:

Sets the sampling period. Setting range: 1 to 999 or (Interval / Number of sampling times)

### Number of Sampling Times:

Sets the sampling frequency of the provided sampling time. Setting range: 1 to 999 or (10,000 / Number of cycles) or (Interval / Sampling time)

#### Interval:

Sets the duration of one measurement cycle (called "interval"). When this is changed, total measurement time and measurement end time will be automatically calculated and displayed.

Setting range: 1 to 9999 or (Number of sampling times × Sampling time)

#### Number of Cycles:

Sets the number of cycles (intervals). One cycle is considered as one measurement. When this is changed, total measurement time and measurement end time will be automatically calculated and displayed.

Setting range: 1 to 999 or (10,000 / Number of sampling times)

### Start Date:

Sets the measurement start date. Input in accordance with the date format which can be set from the [Regional and Language Options] of the [Control Panel].

In the above screen, date input is in the format of "yyyy/mm/dd".

(e.g. For English OS, input format will be <code>"m/d/yyyy"</code>)

For setting daily measurement, input "0000/00/00".

(e.g. For English OS, input "0/0/0000")

### Start Time:

Select hour, minute, and second from the combo box. The time is based on a 24 hours clock.

If there is any overlap between programs in the [Start Date], [Start Time] and the calculated [End Time], or if the set [Start Date] and [Start Time] are of an already passed date/time, the following window will be displayed. (In this example, PRG1 and PRG2 are overlapped.)

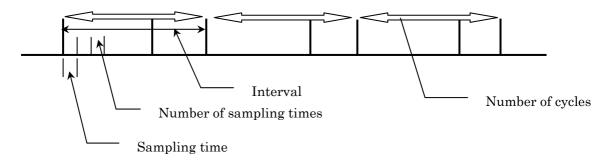
	Start Date	Start Time	End Time
PRG1	0000/00/00	16:00:00	18:46:30
PRG2	0000/00/00	16:00:00	16:07:50
PRG3	0000/00/00	17:41:00	17:46:00
PRG4	0000/00/00	17:49:00	17:51:30
PRG5	0000/00/00	18:00:00	18:16:40

Correct any overlapping [Start/End Time] (or passed dates) of the program(s).

- When [OK] is clicked, inputted values will be rechecked. If there is an error, the window will be displayed again.
- When [Cancel] is clicked, the window will close without the inputted values being checked.

Correction can be made from the Instrument Setting screen.

[Description of Measurement Setting Terms]



**Command Button** 

Send All:Every set program will be written in the CPC.Send PRGx:Only the program that is currently displayed will be written in the CPC.Close:Closes the setting window.

### (2) Time Setting

Program Setting	Instrument Clock	Alarm
System Date 2005/12/13	Instrument Dat	e
System Time	>> 2005/12/13 Instrument Tim	e
09:17:25	>> 09:17:25	
		Send

Current time and date of the computer and CPC will be displayed.

Command button

- Send: Sets the time and date of the CPC to the computer time and date that are displayed.
- Close: Closes the setting window.

## (3) Alarm Setting

📲 Instrument Set	ting		
<u>F</u> ile			
Program Setting	Ins	trument Clock	Alarm
Alarm	1000	Particle/cc	
			Send
-			Close

Alarm setting: Sets an alarm value of the CPC. Setting range: 1 to 19999

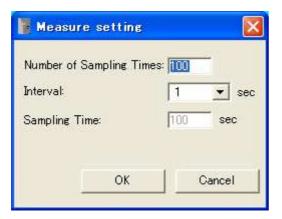
Command button:

Send: Sets an alarm value of the CPC to the inputted value.

Close: Closes the setting window.

# 6. Measurement

## 6.1. Measurement Setting



Number of Sampling Times:

Sets the number of sampling times. When set, the total measurement time will be automatically calculated and displayed. Setting range: 1 to 65500

Sampling Time:

To be selected from 1sec, 2sec, 5sec, 10sec, 30sec, and 60sec. Data for the selected period will be collected.

## 7. Data Transfer

## 7.1. Data Transfer

Re	ad Data			1)	
Т	otal numbers of ID	10			2)
		Date/Time	Number of		
	1	2005/12/13 9:20:15 -	705		
	2	2005/12/13 9:20:20	533		
	3	2005/12/13 9:20:25	579	1	
	4	2005/12/13 9:20:31	289		
	5	2005/12/13 9:20:36	301		
	6	2005/12/13 9:20:41	774		
		Send	Close	3	4)

On clicking [Data Transfer] button on the main screen, the above window will be displayed. If the measurement data is not stored, a message "Data is not saved. Do you save?" will be displayed.

- When "YES" is clicked, the data storage window will open. Store data. To transfer the data, click [Data Transfer] button again.
- When clicking "NO", the data transfer window will open. The measured data will not be erased unless data is transferred. If you want to store the measured data, do not perform data transfer, and store the data from the main screen.
- 1) Total ID numbers stored in the CPC.
- 2) Details of the data stored in the CPC.
- 3) Starts data transfer on clicking.
- 4) Closes the window. When clicked during data transfer, data transfer will be canceled, and the window will close.

How to select data you want to transfer:

Read Data		
Total numbers of ID	10	
	Date/Time	Number of 🔺 data
1	2005/12/13 9:20:45	45
2	2005/12/13 9:20:50	414
3	2005/12/13 9:20:55	862
4	2005/12/13 9:21:01	790
5	2005/12/13 9:21:06	373
6	2005/12/13 9:21:11	961 👻
	Send	Close

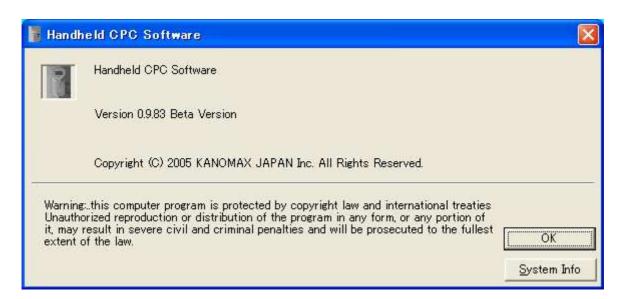
1) Click the row of the data you wish to transfer, at the part indicating data details. For selecting multiple rows, see the instruction below.

As shown in the above screen, for selecting the first and third rows, click on the rows while pressing the "Ctrl" key.

For selecting every row, click the first row, then move to the last row and click the last low while pressing the "Shift" key.

- 2) Click the [Send] button.
- 3) Data will be read in from the CPC. Data that is read in will be automatically stored with the file name provided according to the measurement date and time.
  When data is read in, for example with the above screen, two files "20051213 092045.csv" and "20051213 092055.csv" will be stored.
  Destination folder will be the folder assigned by the [Option] setting.

# 8. Help



 $[Help] \rightarrow [Version Information]$ : Displays the window as shown above.

## 9. Descriptions of Files

Sampled data and transferred data can be stored with a random file name.

### 9.1. Sampled Data Storage File

File name: "random file name".csv

Contents

Format: CSV file format text file Program Ver., CPC\_Ver.0950 Date,2005/06/20 Data,4 Particle Data Max,0 Particle Data Ave,0.0 Particle Data Ave,0.0 Pressure Data Max,1011 Pressure Data Max,1011 Pressure Data Ave,1010.0 Pressure Data Min,1008 Time,Concentration,Atmos Pressure,Status

TT:TT:TT,AAAAAA,PPPPPP | TT:TT:TT,AAAAAA,PPPPPP

TT:TT: time data AAAAAA: particle data BBBBBB: pressure data

### 9.2. Transferred Data Storage File

File name: yyyymmdd hhmmss.csv

Contents

Format: CSV File format Text file Program Ver.,CPC\_Ver.0950 Date,2005/06/20 Data,4 Particle Data Max,0 Particle Data Ave,0.0 Particle Data Ave,0.0 Pressure Data Max,1011 Pressure Data Ave,1010.0 Pressure Data Min,1008 Time, Concentration, Atmos Pressure, Status

TT:TT:AAAAAA,PPPPPP | TT:TT:TT,AAAAAA,PPPPPP TT:TT:TT: Time data AAAAAA: Particle data BBBBBB: Pressure data

## 9.3. Program Storage File

File name: "random file name".ini

Contents Format: ini File format Test file [Program Ver.] Program Ver.=CPC\_Ver.0950 [Program Setting1] Measure Number= 5 Measure Interval= 5 Measure Time= 1 Measure Repeat= 5 Measure StartDate=2005/09/08 Measure StartTime=09:35:00 Measure EndTime=09:35:50 Measure TotalTime= 50 [Program Setting2] Measure Number= 5 Measure Interval= 1 Measure Time= 1 Measure Repeat= 10 Measure StartDate=2005/09/08 Measure StartTime=09:40:00 Measure EndTime=09:41:00 Measure TotalTime= 60 [Program Setting3] Measure Number= 5 Measure Interval= 5 Measure Time= 1 Measure Repeat= 10 Measure StartDate=2005/09/08 Measure StartTime=09:45:00 Measure EndTime=09:46:40 Measure TotalTime= 100 [Program Setting4] Measure Number= 100 Measure Interval= 60 Measure Time= 1

```
Measure Repeat= 10
Measure StartDate=2005/08/26
Measure StartTime=06:00:00
Measure EndTime=06:26:40
Measure TotalTime= 1600
[Program Setting5]
Measure Number= 100
Measure Interval= 60
Measure Time= 1
Measure Repeat= 10
Measure StartDate=2005/08/26
Measure StartTime=08:00:00
Measure EndTime=08:26:40
Measure TotalTime= 1600
```

## 9.4. CPC.INI File

Stores data such as parameters necessary for starting up the software. Caution! If this file is deleted, the software will be initialized.

# 10. Common Questions

### 10.1. Startup of RS232C setting screen is slow.

The screen is displayed after searching for the RS232C port equipped to the PC. Since the required time is dependent on factors such as the PC's processing speed, please wait for the screen to be displayed.

## 10.2. Can this software run under Windows XP systems or Windows Vista?

The operation of this software is guaranteed only for running under Windows 7/8/8.1/10.

## **11.Warranty and After Service**

All of our products have gone through thorough inspection based on our quality assurance system prior to shipment. However, in case a defect in materials/workmanship, or damage due to a transportation accident is found, please contact your local distributor, or call us at KJI's service desk.

Products are equipped with a registration card for service registration. Please make sure to send this card to us after all required information is filled in.

### << Caution >>

Please be advised that if the registration card is not returned to us, we may not be able offer satisfactory service.

This product is warranted against defects in materials and workmanship for a period of one year from the date of original purchase. The limited warranty covers all defects encountered in normal use of the product, and does not apply in cases such as; loss or damage to the product due to abuse, mishandling, or alternation by the owner, or natural disaster.

# 12. Contact Information



## <u>U.S.A.</u>

KANOMAX USA, INC. PO Box 372, 219 Route 206, Andover, NJ 07821 U.S.A. Tel: (800)-247-8887 / (973)-786-6386 FAX: (973)-786-7586 URL: <u>http://www.kanomax-usa.com/index.htm</u> E-Mail: <u>info@kanomax-usa.com</u>

### JAPAN

KANOMAX JAPAN, INC. 2-1 Shimizu Suita City, Osaka 565-0805, Japan Tel: 81-6-6877-0183 FAX: 81-6-6879-2080 URL: <u>http://www.kanomax.co.jp/</u> E-Mail: <u>sales@kanomax.co.jp</u>

### <u>CHINA</u>

Shenyang Kano Scientific Instrument Co., Ltd

No. 12, 4 Jia Wencui Road Heping District Shenyang City PRC **Tel**: 86-24-23845309 **Fax**: 86-24-23898417 URL: <u>http://www.kanomax.com.cn/</u> E-mail: sales@kanomax.com.cn