

AIRBORNE PARTICLE COUNTER SOFTWARE

Operation Manual

Please keep this operation manual handy for future reference.

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08.09	

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1. Overview

1.1. Packing List

The following item is included in this package.

QTY1. AIRBORNE PARTICLE COUNTER SOFTWARE CD-ROM1

If the CD-ROM is missing or damaged, please contact your local distributor immediately.

1.2. System Overview

This software package includes four programs as follows;

- Remote Console Software
- Scheduler Software
- File Transfer Software
- · Measuring Software

Use the Remote Console Software to operate the Airborne Particle Counter remotely via computer.

Use the Scheduler Software to create a schedule file for use when performing a measurement.

Use the **File Transfer Software** to download stored measurement data from or upload a schedule file to the Airborne Particle Counter.

Use the **Measuring Software** to collect particle, air velocity, humidity and differential pressure data from the Airborne Particle Counter.

Applicable Computer Requirements:

Model:	IBM PC compatible
USB Port:	At least 2 available USB ports
Ethernet Connector:	1 available Ethernet port
OS	English or Japanese Windows 2000 SP4 or higher, Windows XP SP1 or higher,
	Windows Vista SP1 or higher

Network Requirements:

Your Firewall and/or Network Router settings may limit your Network connectivity while using this software. If you experience connectivity issues, please configure the following settings.

- When using the Remote Console Software or the Measuring Software, open TCP port "12344" and "12346.
- When using the Search Software, open UDP port "12345".
- When using the File Transfer Software, open FTP port "21".

Please refer to your Firewall or Router operation manual.

If you have any questions regarding the settings or network, please contact your network administrator.

2. Installation

2.1. Installation

When installing the software, be sure to log in with a user having administrative rights and follow the procedure below.

Insert the product CD-ROM into the CD-ROM drive. The installer will start automatically and the installation will begin. Follow the instructions displayed on the screen.

If the installer does not start automatically, follow the directions below to install the software.

- * This operation can be started from the Windows Explore menu.
 - (1) Execute the "Setup.exe" file stored on the product CD-ROM.
 - (2) Follow the instructions displayed on the screen.
 - (3) When the installation is completed successfully, a "KANOMAX" folder will be added to the "All Program" list of the "Start" menu.

2.2. Starting and Closing a Program

To Start the AIRBORNE PARTICLE COUNTER Remote Console Software:

From the start menu, click: [All Programs] -> [KANOMAX] -> [Remote Console Software]. The main window of the software will be displayed.

To Start the AIRBORNE PARTICLE COUNTER Scheduler Software:

From the start menu, click: [All Programs] -> [KANOMAX] -> [Scheduler Software]. The main window of the software will be displayed.

To Start the AIRBORNE PARTICLE COUNTER File Transfer Software:

From the start menu, click: [All Programs] -> [KANOMAX] -> [File Transfer software]. The main window of the software will be displayed.

To Start the AIRBORNE PARTICLE COUNTER Measuring Software:

From the start menu, click: [All Programs] -> [KANOMAX] -> [Measuring Software]. The main window of the software will be displayed.

To close the software:

- From the [File] menu, select [Exit], or
- Click the [x] button located at the right end of the title bar of the main window.

2.3. Uninstallation

- (1) Open [My Computer] -> [Control Panel] -> [Add or Remove Programs].
- (2) Select [AIRBORNE PARTICLE COUNTER Software] from the list, and click [Remove] button.

3. Remote Console Software

3.1. Main Screen

You need to connect LAN cable to the Ethernet connector when using this program.



3.2. Menu List

File Menu

For file related operations.

[Exit] To close the software.

Help Menu

[About] To view the software version information.

3.3. Destination Settings and Command Buttons

Host Name

Enter the Host Name for the instrument you wish to connect with. The instrument's Host Name is configured in the instrument's COMMUNICATION SETTING.

You can also set the Host Name using the Search command which will display all instruments currently connected to the LAN.

When you know the IP address of the instrument you wish to connect with, you can enter the IP address.

Connect

Click "Connect" to connect to the instrument configured in Host Name.

When the computer cannot connect to the instrument successfully, a message will be displayed saying "The connection was ended because of a network error. This application should be restarted."

Before attempting to connect to the instrument again, shut down the software, check the cable connections and the settings and restart the software.

When the computer is connected to the instrument successfully, the instrument's screen will be displayed on the computer. The [Connect] button will become [Disconnect] button.

Search

Starts a search for connected instruments.

EXIT

Closes the software.



3.4. How to Operate Remote Console Software

After the computer is successfully connected to the instrument, the same screen shown on the instrument will be displayed on the computer.

Click a button on the display to operate in the same manner as you operate the instrument.

Due to LAN communication lag you may notice a delay in reaction to your commands.

If the computer becomes unresponsive for a minute or longer, the computer may be disconnected or a problem may be occurring with the LAN communication. If that is the case, close the software by clicking [Exit]. Check the LAN communications and start the software.

NOTE: If you select [MENU] -> [REMOTE] while using the "Remote Console Software", this will put the instrument in remote mode and the communication link between the instrument and PC will be terminated. The instrument should only be placed in remote mode for connectivity when using the "Measuring Software" program.

3.5.Search Software

Click [Search] to activate the Airborne Particle Counter Search Software.

🕱 Search Sensors 🛛 🔀					
Sensors					
No	Name	ID No.	Model	IP	
Status Search					
Select sensor to connect and					
Push Set button.			Se	t	
			Ex	it	

Click [Search] to search for instruments connected on the LAN.

When a connected instrument is found, it will be listed in the [Search Sensors] window shown above.

Select the instrument that you want to connect with and click [Set]. The name of the instrument selected will be displayed on the Remote Console Software or File Transfer Software.

Click [Exit] to close the software.

4. Scheduler Software

4.1. Main Screen

Scheduler Ver.1.0.0			
File Location Help			
Schedule:	(0, 0)	Zoom > Save	Map image will be displayed here.
		Delete Rename	Location Information
	- - - -	Edit Clear Up Dn	will be displayed here.
		Exit	

4.2. Menu List

File Menu

For file related operations.

[New]	To create a new SCHEDULE file.
[Open]	To load a saved SCHEDULE file.
[Save]	To save a created SCHEDULE file.
[Load Map]	To load MAP image file.
[Delete]	To delete a created SCHEDULE file.
[Rename]	To rename a created SCHEDULE file.
[Option]	To select a folder to save SCHEDULE file.
[Exit]	To close the software.

Location Menu

[Edit Location]	To edit the selected Location.
[Delete Location]	To delete the selected Location.
[Clear List]	To delete all Locations.
[Up]	Move the cursor up in the Location Information list.
[Down]	Move the cursor down in the Location Information list.

Help Menu

[About] To show the software version information.

4.3. Command Button

[File]

Zoom >

To magnify the displayed MAP.

Save To save the SCHEDULE that you are editing.

Open

To open the saved SCHEDULE file.

New

To create new SCHEDULE file.

LoadMAP

To load MAP file.

Map file should be created using an image editing application beforehand. The image must be in bitmap format.

Delete

To delete the saved SCHEDULE file.

You cannot delete a file while you are editing it.

Rename

To change the name of the saved SCHEDULE file.

You cannot change the name of the file while you are editing it.

[Edit Location]

Edit

To edit the selected Location.

Delete

To delete the selected Location.

Clear

To delete all the Locations.

Up

To move the cursor up in the Location Information list.

Dn

To move the cursor down in the Location Information list.

Exit

To close the software.

4.4. Schedule File Creation

4.4.1. Creating a new file

- Click [File] -> [New], or Click [New].
- (2) The "New Schedule" window will be displayed. Enter a Schedule name and specify a MAP File to load. To select a MAP File click [Ref] to display the "Select MAP File" window and click the file that you wish to use.

* Creating a MAP File:

Use a graphics painting program such as MS Paint to create a layout of the measurement area, and save it in BMP format. Without a MAP file, you cannot create a Schedule in this application.

<u>The maximum usable image size is 1600×1200 dot.</u> Click [OK] to return to the main screen and input test



١



Rename

Edit

Delete

Clear Up Dn

Exit

4

T

X

Y

ADDITIONAL INFO

155 connect.jpg

189 151 tube.jpg 114 266 connect.jpg

No. NAME

1 Location 1

2 Location 2 3 Location 3 (3) Click on a measurement point on the displayed MAP. Then "Edit Location" window will open.

Edit Location	
NAME Location 1	
Position X 153 Y 149	
ADDITIONAL INFO Ref	
Zoom OK Cancel	
	Edit Location NAME Location 1 Position X 153 Y 149 ADDITIONAL INFO Ref Zoom OK

NAME: Enter Location Name.

Position:

The coordinates that you clicked are displayed. You can edit these.

ADDITIONAL INFO:

Click on [Ref] button to select an image file for ADDITIONAL INFORMATION.

The image format should be *.jpg or *.bmp.

[Zoom] button:

To magnify the image that was loaded in ADDITIONAL INFO.

After you complete editing, click on [OK] or [Cancel]. Click [OK] to save the edited settings. Click [Cancel] to discard the edited settings.

Repeat this procedure to add a Location. You can set up to 100 Locations.

- (4) To edit the configured Location, select the Location that you want to edit from the Location Information list, and click [Edit]. "Edit Location" window will be displayed and you can edit the Location.
- (5) To delete the selected Location, select the Location that you want to delete from the Location Information list, and click [Delete].
- (6) To delete all Locations, click [Clear].
- (7) When you finish editing Schedule, click [Save].The edited Schedule will be saved in the folder configured by [File] -> [Option].

4.4.2. When editing an existing file

- Click [File] -> [Open], or Click [Open] button.
- (2) "Open Schedule" window will open. Select a Schedule file that you want to edit and click [OK].
- (3) Edit the file referring to (3), (4), (5), (6) and (7) in **4.4.1Creating a new file**.

4.5. Setting a Folder for Saving File

To set a folder, go to [File] -> [Option].

"Browse for Folder" window will open. The currently selected folder is indicated in blue. To change the folder for saving data, select the folder and set it.

Brow	rse for Folder	? 🗙
Sele	ct a New Schedule Data Folder	
	🖃 🧰 Program Files	~
	😟 🛅 Common Files	
	ComPlus Applications	
	🔃 🚞 Internet Explorer	
	😑 🧰 KANOMAX	
	Ē~ 🛅 LPC3900	
	🔂 ScheduleData	
	🧰 Messenger	
	🗈 🛅 microsoft frontpage	
	🗈 🛅 Movie Maker	
	🕀 🧰 MSBuild	
	🛅 MSN	
- I	📃 👘 🗁 MSN Gaming Zone	
	ОК Са	incel

[NOTE]:

Do not perform this operation while creating Schedule data as the data you are working on may be discarded. When creating shedule data, save the data first before setting a folder for saving the file.

5. File Transfer Software

5.1. Main Screen

You need to connect LAN cable to the Ethernet connector when using this program.

🛃 File Transfer			×	
File Help				Configure
Host Name Ipo	stest	Connect	Search	connection setting
Name	Size	Time.		
				File will be displayed here.
File Name Measure Mode ⓒ Downlos	All v d O Upload Upload Do	wrload	Exit	

5.2. Menu List

File Menu

For file related operations.

[Exit] To close the software.

Help Menu

[About] To show the software version information.

5.3. Destination Setting and Command Button

Host Name

Enter the Host Name of the instrument you wish to connect with. The instrument's Host Name is configured in the instrument's COMMUNICATION SETTING.

You can also set the HOST NAME using the Search command which will display all instruments currently connected to the LAN.

When you know the IP address of the instrument you wish to connect with, you can enter the IP address.

Connect

To connect to the instrument configured in Host Name.

When the computer is connected with the instrument successfully, the Download or Upload button will be activated.

After the computer is connected with the instrument, "Connect" button will become "Disconnect" button.

Search

Starts a search for connected instruments.

Measure Mode

Select the file type that is displayed when downloading.

The files that you can select are;

Single:	Single Measurement Data
Sequential:	Sequential Measurement Data
Inter:	Interval Measurement Data
Statistic:	Stat Measurement Data
ISO:	ISO Mode Measurement Data
FS 209E:	FS 209E Mode Measurement Data
BS 5295:	BS 5295 Mode Measurement Data
EC GMP:	EC GMP Mode Measurement Data
GB/T:	GB/T Mode Measurement Data
ALL:	All Measurement Data

Download/Upload (Radio Button)

Select Download or Upload.

Select Download and connect the computer to the instrument. Then measurement data stored on the instrument will be displayed.

Click [Upload] to display the SCHEDULE file saved in 4. Scheduler Software

Download

To download the selected data file.

Upload

To upload the selected Schedule file to the instrument.

EXIT

To close the software.

5.4. Downloading Measurement Data

- (1) Enter "Host Name" and click [Connect] to connect the computer with the instrument.
- (2) Choose the radio button [Download].
- (3) Select the file that you want to download. The selected file name will be displayed in the "File Name".
- (4) Click [Download].

(5)	"Save As" dialogue box will be
	displayed. Enter the file name and
	click [Save].

(6) After the file is downloaded from the instrument, it will be saved.

Name IN20080325215428. IN20080325215653. SQ20080712131748 IS20080717131120.0	csv csv	Size 934	Time.	
Name IN20080325215428. IN20080325215653. SQ20080712131748 IS20080717131120.0	csv csv	Size 934	Time.	^
IN20080325215428. IN20080325215653. SQ20080712131748 IS20080717131120.0	csv csv	934		
IN20080325215653. SQ20080712131748 IS20080717131120.0	CSV		2008/03/26 06:5	
SQ20080712131748 IS20080717131120.0		1067	2008/03/26 06:5	
IS20080717131120.0	.csv	396	2008/07/12 22:1	
1	CSV	1871	2008/07/17 22:1	
IN20080325220328.	.csv	1131	2008/03/26 07:0	
IN20080326085630.	.csv	1135	2008/03/26 17:5	
IN20080331183144.	.csv	858	2008/04/01 03:3	
IN20080331195412.	.csv	992	2008/04/01 05:0	
IN20080331202553.	.csv	879	2008/04/01 05:2	
IN20080402173448.	.csv	846	2008/04/03 02:3	
IN20080402174129.	.csv	1218	2008/04/03 02:4	
IN20080403193423.	.csv	1195	2008/04/04 04:3	
IN20080507182023.	.csv	885	2008/05/08 03:2	
IN20080513094637.	.csv	1422	2008/05/13 18:4	~
111100000610100461		0/2	2000/06/4/2 22:0	
_	Upload	Downl	load Exit	
				?
🚱 Desktop		-	+ 🛍 💣 🎟	-
umente				
<u>umentes</u>				
<u>iputer</u>				
work Places				
	IN20080331202553. IN20080402173448. IN20080402173448. IN20080402173448. IN20080507182023. IN20080513094637. File Name Mode A @ Download @ Desktop uments nputer work Places	IN20080331202553.csv IN20080402173448.csv IN20080402174129.csv IN20080403193423.csv IN20080507182023.csv IN20080513094637.csv IN20080513094637.csv IN20080513094647 File Name Measure Mode All © Download Uploar	IN20080331202553.csv 879 IN20080402173448.csv 846 IN20080402174129.csv 1218 IN20080403193423.csv 1195 IN20080513094637.csv 1422 IN20080513094637.csv 1422 IN20080513094637.csv 1422 IN2008051309464 Weasure Mode All • Download • Upload Upload Download Upload • Upload	IN20080331202553.csv 879 20080401 05:2 IN20080402173448.csv 846 2008/04/03 02:3 IN20080402174129.csv 1218 2008/04/03 02:4 IN20080403193423.csv 1195 2008/05/08 03:2 IN20080507182023.csv 885 2008/05/08 03:2 IN20080507182023.csv 1422 2008/05/08 03:2 IN20080513094637.csv 1422 2008/05/13 18:4 With the same Measure Mode All @ Download C Upload @ Download C Upload @ Desktop

5.5. Uploading Schedule File

- (1) Enter "Host Name" and click [Connect] to connect the computer with the instrument.
- (2) Choose the radio button [Upload].
- (3) Select the Schedule file that you want to upload. The selected file name will be displayed in the "File Name".
- (4) Click [Upload].
- (5) After the data is uploaded to the instrument, the data will be saved and the main screen will be displayed.

If the same Schedule name already exists, a message window will be displayed asking if you want to overwrite the file or not. Click [Yes] to overwrite the file and upload it.

If you click [No], a message window will be displayed asking you if you want to delete the same name of the Schedule file which is already saved.

Click [Yes] to delete the Schedule file saved on the instrument.

Click [No] to go back to the main screen.

e Help						
Host Name	lpctest			Disconr	lect	Sean
Schedule Nar	ne	[
Cleanroom1						
Cleanroom2 Cleanroom3						
File Name						
Measure Mo	ode All	Y				
C Dow	nload @	Upload				
201		(S Proad		4		
	Upload		Dowr	load		Exit
File Transfer					×	
Help				1		
lost Name lpo	rtest	I	Disconnect	Sean	ch	
Schedule Name			-		_	
					-	
	d Schodule					
Uploa	<mark>d Schedule</mark> utput file already evic	its, Clirk VF	5 to over	rite.		
Uploa The c	d Schedule butput file already exis	sts. Click YE	5 to overv	rite.		
Uploa The c	d Schedule output file already exis Yes	sts. Click YE No	5 to overw	rite.		
Uploa The c	d Schedule hutput file already exis	sts. Click YE No	5 to overv	rite.		
Uploa The c File Name	d Schedule utput file already existence Yes Cleannoom1	sts. Click VE No	5 to overv	rite.		
Uploa The c File Name Measure Mode	d Schedule Uutput file already exis Yes Cleanrooml	its. Click YE	5 to overv	wite.		
Uploa The o File Name Measure Mode	d Schedule Utput file already exis Yes Cleanroom1	sts. Click YE	5 to overw	rite.		
Upton The o File Name Messure Mode C Downlos	d Schedule utput file aiready exis ves Cleanrooml All <u>v</u> d o Upload	its. Click YE	5 to overv	wite.		
Uploa The c File Name Messue Mode C Downlos	d Schedule Dutput file already exis Ves Cleannoom1 All ¥ d • Upload	sts. Click YE No Bownio	5 to overw	rike. Exit		
Uploa The c File Name Messure Mode C Downloe	d Schedule vutput file already exis Ves Cleanroom1 All v d (o Upload	sts. Click VE No Downlo	to overw	rite. Exit		
Upton The c File Name Measure Mode C Download	d Schedule utput file already exis Yes Cleanrooml All Y d Oupload Upload	No Downlo	nd	wite. Exit		
Upton The o File Name Messure Mode C Downlos File Transfer Help	d Schedule Utput file already exis Ves Cleannooml All Upload Upload	its. Click VE No Downlo	to overw	Exit		
Upton The of File Name Measure Mode C Downlose File Transfer Help	d Schedule Dutput file already exis Yes Cleannoomi All Y al © Upload Upload	its. Click YE No Downlo	5 to overv	Eat Sear		
Upton The o File Name Measure Mode C Downlos File Transfer Help Host Name	d Schedule Dutput file already exis Ves Cleancoom1 All V d © Uploed Uploed	its. Click VE No Bownalo	5 to overw	Enit		
Uploa The c The c File Name Measure Mode C Downlos File Transfer Hep Host Name	d Schedule Dutput file already exis Ves Cleannooml All d (o Upload Upload	its. Click VE No Downlo	nd	Exit		
Upton The c The c File Name Messure Mode C Downloe File Transfer Help Host Name	d Schedule vutput file already exis (Cleancoml All d Upload Upload	ts. Click VE	5 to overw	Exit		
Upton The c The c File Name Measure Mode C Downlos File Transfer Help Host Name Ip Schedule Name	d Schedule vutput file already exis (Cleanroom1 All v d © Upload Upload	kts. Click VE No Downlo	ad Disconnect	Exit		
Upton The c The c File Name Measure Mode C Downlos File Transfer Help Host Name P Host Name Schedule Name	d Schedule Utput file already exis Ves Cleannoomi AI Opload Upload Cleat cleat	kts. Click VE No Downlo	nd	Exit		
Upton The c The c File Name Measure Mode C Downlos File Transfer Help Host Name Schedule Name Uptor Do y	d Schedule Utput file already exis Ves Cleanroom1 All Y Cleanroom1 All Y clupload Upload Upload	schedule fil	nd	Exit	× ch	
Upton The c The c File Name Measure Mode C Download File Transfer Help Hot Name Upton Schedule Name Upton Do y	d Schedule Utput file already exis Ves Cleanroom1 All GUpload Upload Upload Cleat test	schedule file	ad	Exit		
Upton The c File Name Measure Mode C Download File Transfer Hoot Name P Hoot Name Upton Upton Do y	d Schedule Utpload CleanroomI A Upload Upload ttest	its. Click VE No Downlo	nd Disconnect	Exit		
Upton The of File Name Measure Mode C Downlose File Transfer Help Host Name Los Name Upton Do y	d Schedule Dutput file already exis Ves Cleannooml All v d (o Upload Upload tupload ctest d Schedule ou want to delete the Yes	its. Click VE No Downloo	ad Disconnect	Exit		
Upton The o File Name Measure Mode C Downlos File Transfer Help Schedule Name Upton Do y File Name	d Schedule putput file already exis (Cleannooml All (Dpload) Upload Upload Upload ctest d Schedule ou want to delete the Yes (Cleannooml	its. Click VE	nd	Exit		
Upton The c The c File Name Measure Mode C Downlos C Dow	d Schedule vutput file already exis Cleanrooml All v d o Upload Upload Upload ctest d Schedule ou want to delete the Ves Cleanrooml All v Ves	ts. Click VE No Downlo schedule fil	nd	Exit Exit		
Uploa The c The c File Name Measure Mode C Downlos File Transfer Help Schedule Name Do y File Name Measure Mode C Downlos	d Schedule vutput file already exis (Cleanroom1 All v Upload Upload Upload Upload Upload cutest d Schedule ou want to delete the Ves (Cleanroom1 All v test d Cupload d Cupload	schedule fik	Disconnect	Exit		

5.6 Search Software

Refer to 3.5 Search Software.

6. Measuring Software

6.1. Operation Procedure

- * NOTE: The instrument must be placed in "REMOTE MODE" for connectivity when running this program.
 - (1) Start the program.

(4) Start Measuring

(2) Initial Screen The last file used before closing the program will be displayed.

- (3) LAN Setting
 Go to: [Setting] -> [R LAN Setting...]
 to configure the LAN Port and HOST
 Name.
- Start-up Operation (Executable File: AirborneParticleCounter.EXE) 8448 8512 7402 8413 7403 7404 8525 Л LAN Setting Port : ΟK 000 Cancel HOST: apc3900 ŢĹ **Remote Measurement** Click [Measurement] from the menu bar or click M to start a measurement. the icon
- (5) As shown on the right, go to [File] -> [Save] to save data.
- (6) To end the program, go to [File] -> [Exit].

📲 Airborne	e Particle Co	inter	Measur	ing Softw	/are -	test.KRM
File Setting	Measurement	View	Option	Windows	Help	
New				Ctrl-	+N	1
Open				Ctrl-	+0	
Save				Ctrl-	⊦S	_
Print				Ctrl-	+P	
1 C:\Progra	am Files\KANOM/	4X\LPC	3900\tes	KRM		
Exit						

Save As					? 🛛
Save in:	C LPC3900		-	+ 🗈 💣 💷-	
My Recent Documents Desktop My Documents	≧ ScheduleData				
My Network	File name: Save as type:	test Text files(*.CSV)		•	Save Cancel
Places				_	

 $\widehat{}$

6.2. Screen Structure

Menu bar and tool bar are displayed on the parent window. The menu bar and tool bar change depending on the active child window.



1) Toolbar

The menu items most commonly used are shown as icons on the toolbar. Click on the corresponding button to execute the item easily.

2) Status Bar

The program status, data status and measurement parameters are displayed on the status bar.

6.3. Data File

6.3.1. File Menu

el /	\irborne	Particle Co	inter	Measur	ing Softw	/are -	test.KRM
File	Setting	Measurement	View	Option	Windows	Help	_
N	lew				Ctrl-	ΗN	1
C	pen				Ctrl-	ŀО	-
S	ave				Ctrl-	⊦S	
Р	rint				Ctrl-	ŀΡ	
1	C:\Progra	am Files\KANOMA	AX\LPC	3900\test	KRM		
E	×it						L
	000						

1) New Document

Click [New] to execute the following:

- (1) If there is unsaved data in the memory, a dialogue box appears asking if you want to save the data. Choose whether to save the data or not.
- (2) A new file will be displayed with the file name of "NEWFILE.KRM". The previous data will be cleared but the configured parameters are kept.

2) Open

Click [Open] to execute the following:

- (1) If there is unsaved data in the memory, a dialog box appears asking if you want to save the data. Choose whether to save the data or not.
- (2) "Open" dialog box shows up to open an existing file.

3) Save

Click [Save] to display "Save as ..." dialog box and you can save the data with a specified file name.

4) Print

Click [Print] to print out the graph or data list on the active child window.

5) Recently used documents

Open the files recently used.

6) Exit

Click [Exit] to perform the following:

- (1) If there is unsaved data in the memory, a dialog box appears asking if you want to save the data. Choose whether to save the data or not.
- (2) Exit the program.

6.3.2. Data File List

Measurement Data File	•	File Name	: ###.KRM
	•	Format	: Binary
	•	Contents	: File information, measurement parameter, remote measurement data
Data File	•	File Name	: ###.CSV or ###.TXT
Excel Compatible	•	Format	: Microsoft Excel comma-delimited file
CSV format or text	•	Contents	: Remote Measurement: measurement parameter, measurement data
			Dump : dump data
tormat			1 1

6.4. Setting

6.4.1. LAN Port Setting

Click [Setting] -> [R LAN Setting...] to display "LAN Setting" dialog box.

Specify port (ID configured in the REMOTE MODE setting on the main instrument to be connected) and HOST name (Host Name configured in Communication setting on the main instrument to be connected) in the combo box.

6.4.2. Measurement Parameter Setting

Click [Setting] -> [Measurement Parameter Setting...] to display "Measurement Parameter Setting" dialog box.

Configure the remote measurement parameter settings in the "Measurement Parameter Setting" dialog box shown on the right. Refer to the setting table below.

Setting Item	Setting Contents
Sampling Time	Set sampling time in seconds.
	Key input: Integer 6~3600
	Select: 6, 8, 10, 30, 60, 300, 600, 1200
Interval Time	Set interval time in minutes.
	Key input: Integer 1~1440
	Select: 1, 5, 10, 20, 30, 60, 120, 180
No. of Samples	Key input: Integer 1~30000
	Select: 1, 10, 60, 120, 300, 600, 1200, 3000



🛃 Airborne Particle Counter Measuring Software

Measurement Parameter Setting

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Port :

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File Setting Measurement View Option Windows Help

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Measurement Paramet	er Set	t 🔼
Sampling Time (6-3600sec) :	10	•
Interval Time (1-1440min) :	2	•
The Number of Sample (1-3000)):5	•
OK	Cance	1
OK	Cance	1

<Measurement Parameter Explanatory Drawing>



6.5. Remote Measurement

To perform remote measurement, select REMOTE MODE on the Airborne Particle Counter by selecting: [MENU] -> [REMOTE].

You need to connect LAN cable to the Ethernet connector when using this program.

6.5.1. Start/End Measurement

1) Start Measurement

Click [Measurement] -> [Measurement] or **M** button to display "Measurement Parameter Setting" dialog box. Configure the settings and click [Measure] to start a measurement.

📲 Airborne	Particle Co	inter	Measur	ing	Softw	are
File Setting	Measurement	View	Option	Wir	ndows	Help
🗅 🚅 🗐 🛛	Measuremer	nt	F5		123	
	Measuremer	nt Stop	Ctrl+F5			
- M Particle	Graph				·	

When LAN is not connected properly or HOST cannot be found for one minute, the error message shown on the right will be displayed.

When a LAN connection error occurs, confirm the setting on the Airborne Particle Counter and the software setting as shown on the right. Also, check if the network environment is established.





2) End Measurement

Click [Measurement] -> [Measurement Stop] or button. A dialog box appears asking "Are you sure you want to stop measurement?" Click [Yes] to stop measurement. Data collected until the measurement was stopped will be stored. The number of data will be the actual number of the data collected.

🛃 Airborne Particle Counter Measuring Software								
File Settin	g	Measurement	View	Option	Wir	ndows	Help	
	1.6	Measuremer	nt	F5		123		
		Measuremer	nt Stop	Ctrl+F5				
-\c Partic	cle	Graph	_					

6.5.2. Measurement

1) Measurement Control

During a measurement, this program performs measurement timing control, turns ON/OFF the pump of the Airborne Particle Counter, and downloads data.

2) Data Display

During a measurement, you can display the time series graph and data table in real time. For details, refer to <u>6.2 Screen Structure</u>.

6.5.3. Measurement Data Storage

Specify the destination to save data manually after measuring.

Save As		?×
Save jn:	➢ APC3900	
My Recent Documents Desktop My Documents	ScheduleData 0805.CSV 0821.CSV	
	File name:	iave
My Network Places	Save as type: Text files(".CSV)	ancel

Before starting a measurement, specify the file name and the destination to save. Data is saved as ".CSV (Microsoft Excel comma-delimited character file)".

For example, if you enter "Test" as a data file name and choose to save it as ".TXT", the data is saved as "Test.KRM" and Test.CSV".

<When the PC in use for measurement is forcibly terminated>

Even if the PC is shut down unintentionally, the data can be recovered.

Data for uncompleted measurements are saved as "temp.KRM" file in the folder where the software is stored (Normally "C:Program Files¥KANOMAX¥APC3900").

Open this file in the "Airborne Particle Counter Measuring Software" and save it as an arbitrary name.

6.6. Remote Measurement Data Display

	Unit	Display Format	Example
Particle	CNT	<10000 : XXXX	2568
		≧10000 : X. XXXE + X	1.256E + 5
Temperature	deg C	XXX. X	26.5
Humidity	%	XXX. X	75.3
Air Velocity	m/s	X. XXX	0.652

6.6.1. Data Display Format

6.6.2. Particle Graph

1) Particle Graph Window

Graphs are available with two types of vertical axis; linear and logarithmic



In the above windows, you can scroll the graph, move the cursor, and display the data the cursor is on. During a measurement, the graph cursor disappears and the scroll bar is disabled.

To display the particle graph, go to [View] -> [Time Series Graph] -> [Particle] or click 📺 on the tool bar.

2) Particle Graph Parameter Setting

Click [View] -> [Graph Parameter Edit] -> [Particle] to display the "Particle Graph Parameter Edit" dialog box shown on the right. Then configure the Particle Graph Parameter Settings.

You can also click is on the tool bar to display the "Particle Graph Parameter Edit" dialog box.



Settings:

Setting Item	Settings			
Horizontal axis (time axis) range	Select a range from below:			
setting	10min, 20min, 30min, 40min, 50min, 60min			
	1~24 hours – on an hourly basis			
	1~30 days – on daily basis			
Displayed items on Vertical axis	6 different particle size $(0.3, 0.5, 1, 3, 5, 10 \mu\text{m})$ data are displayed in the			
	same pane.			
Types of vertical axis	Select Linear or Logarithm			
Vertical axis display range	Select a range from below;			
	Linear:			
	10, 20, 50, 100, 200, 500, 1000, 2000, 5000,			
	1.00E+04, 1.00E+05, 1.00E+06, 1.00E+07, 1.00E+08, 1.00E+09			
	Logarithm:			
	10, 100, 1000,			
	1.00E+04, 1.00E+05, 1.00E+06, 1.00E+07, 1.00E+08, 1.00E+09			

6.6.3. Temperature, Humidity, Air Velocity and Differential Pressure Graph

1) THVP Graph Window

Only linear type is available for the horizontal axis for THVP graph.



In the above window, you can scroll the graph, move the cursor, and display the data the cursor is on. To display the particle graph, go to [View] -> [Time Series Graph] -> [Particle] or click \mathbb{H} on the tool bar.

2) THVP Graph Parameter Setting

Click [View] -> [Graph Parameter Edit] -> [THVP...] to display the right dialog box. Then configure the THVP graph parameter settings.

You can also click with on the tool bar to display the "Particle Graph Parameter Edit" dialog box.

• 10-60 :	minutes	40		-
0 1-241	iows	1		-
C 1-30 d	lays	1		~
T(deg C) H(%) V(m/s)	Max. 5	•	Min. 0 0 0 0.0	•

Settings:

Setting Item			Settings
Horizontal axis (time axis) range setting			Select a range from below:
			10min, 20min, 30min, 40min, 50min, 60min
			1~24 hours – on an hourly basis
			1~30 days – on daily basis
Vertical axis	Temperature	Max	Select: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50
display range	(deg C)	Min	Select: 0, 5, 10, 15, 20, 25, 30, 35, 40, 45
	Humidity (%)	Max	Select: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
		Min	Select: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90
	Air Velocity	Max	Select: 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0
	(m/s)	Min	Select: 0.0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9
	Differential	Max	Select: 200, 150, 100, 50, 0, -50, -100, -150, -200
	Pressure (Pa)	Min	Select: 200, 150, 100, 50, 0, -50, -100, -150, -200

6.6.4. Data Table

Data values are listed in chronological order in data table window. The window size is resizable.

Date & Time	LPC Status	0.3um (CNT)	0.5um(CNT)	lum(CNT)	3um (CNT)	Sum (CNT)	10um (CNT)	T(deg C)	H(%)	V(m/s)	I -
2008/07/17 17:20:14	OK	63148	9061	3501	272	90	64	27.8	51.3	0.000	
2008/07/17 17:21:14	OK	48466	6448	2039	73	23	14	27.7	52.5	0.000	
2008/07/17 17:22:14	OK	59952	8512	3122	125	29	14	27.7	51.3	0.000	
2008/07/17 17:23:14	OK	51749	7803	3196	400	155	105	27.7	52.4	0.000	
2008/07/17 17:24:14	0K	60148	8415	2996	125	37	22	27.7	52.3	0.000	
2008/07/17 17:25:14	OK	59015	7583	2591	98	20	15	27.6	53.2	0.000	
2008/07/17 17:26:14	OK	60042	7812	2656	101	25	18	27.5	53.8	0.000	
2008/07/17 17:27:14	0K	60536	7966	2771	146	54	41	27.6	52.4	0.000	
2008/07/17 17:28:14	OK	49601	6025	1860	102	30	18	27.7	52.4	0.000	
2008/07/17 17:29:14	OK	56172	6359	1965	88	31	17	27.7	52.9	0.000	

To display the measuring data table, go to [View] -> [Data Table Display] or click 🛄 on the tool bar.

6.7. Other Functions

6.7.1. Switching Languages

You can switch the language between English and Japanese by clicking [Option] on the menu bar.

🛃 Airborne Particle Counter I	Measuri	ng Software
<u>File S</u> etting <u>M</u> easurement <u>V</u> iew	Option	<u>W</u> indows <u>H</u> elp
D 😅 🖬 🚳 🖄 M 🛛 🛃	<u>J</u> apar	nese
	V LINE IIS	***

6.7.2. Windows Arrange

Click [Windows] -> [Windows Arrange] to display the graph windows and data table window.

<u>F</u> ile <u>S</u> etting <u>M</u> easurement <u>V</u> iew <u>O</u> ption	<u>W</u> indows	<u>H</u> elp	
) 🚅 🗖 🚑 🖼 M 🛛 💻 🐺 🚜	✓ <u>S</u> tandar	d Arrange	
	Windows <u>A</u> rrange		
🖓 Particle Graph	✓ <u>1</u> Measu	uring Data Table	
	<u>2</u> THVP	Graph	
0.3um 1.0E+5	<u>3</u> Partic	le Graph	
0.5um			

If [Standard Arrange] is checked, when you change the parent window size, the child window will be arranged automatically.

6.7.3. Software Version

Click [Help] -> [About] to check the software version information as shown below.



6.7.4. Printing Function

This program outputs graphs and data list to a printer.

- Printing a Graph
 Display the graph to be printed in the Graph Window.

 When the Graph Window is active, click [File] -> [Print] to output the graph to the printer.
- Printing a Time Series Data List After activating the data table, click [File] -> [Print] to output the data to the printer.

7. Troubleshooting

Operation failure under Windows 9x or Windows NT

The operation of this software is guaranteed only for running under Windows 2000/XP/Vista. Please prepare an English or Japanese Windows 2000/XP/Vista computer for proper use.



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