
AD-1687 Setting Tool Instruction Manual

By using the "AD-1687 Setting Tool" for the AD-1687,

- 1: Internal settings can be changed on your computer screen.
- 2: Internal settings can be reset to factory settings.
- 3: A function where upper and lower limits can be set and **HI** **LO** is displayable can be used.

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2. System Requirements

OS	Windows XP	SP3	or later
Display	XGA (1024 x 768)		or higher

3. Before Installing

Before using "AD-1687 Setting Tool", please be sure to back up any important data on your computer.

4. Installing the "AD-1687 Setting Tool"

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Unzip the AD-1687 Setting Tool.zip file in an appropriate folder.

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5. Uninstalling "AD-1687 Setting Tool"

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Delete the folder where AD-1687 Setting Tool.exe is installed.

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6. Starting and Using the Program

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1: Connect the AD-1687 to your PC using a USB cable

2: Select "CSV FILE" on the AD-1687 and hit the <ENTER> key.

USB
> CSV FILE

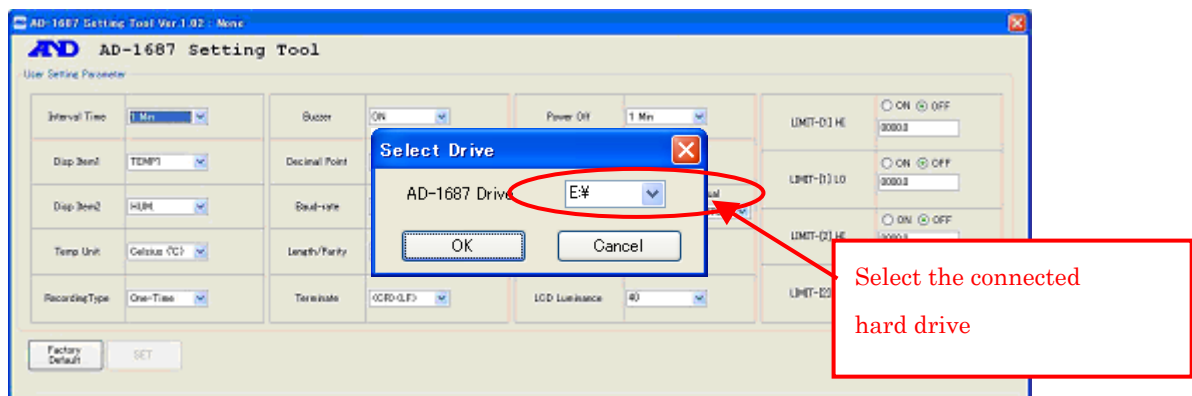
EXT. POWER

REAL TIME

3: Double click "AD-1687 Setting Tool.exe" in the unzipped folder.

4: Select the drive which the AD-1687 is connected to and hit **OK**

At this point, the internal settings saved in the AD-1687 will be read and displayed on-screen.



Note: Do not select a drive besides the one the AD-1687 is connected to.

5: Functions of the various areas

The screenshot shows the AD-1687 Setting Tool interface. It has several sections with color-coded boxes and arrows pointing to summary boxes below:

- Red box:** Interval Time (1 Min), Disp Item1 (TEMP1), Disp Item2 (HUM), Temp Unit (Celsius (°C)), RecordingType (One-Time), Buzzer (ON).
- Blue box:** Decimal Point (Dot[.]), Baud-rate (7bit/Even), Length/Parity (2400), Terminate (<CR><LF>).
- Green box:** Power Off (1 Min), Date Format (YY/MM/DD), Date Time (2012/07/24 ~ 16:00:44), ID (00000000), LCD Luminance (40).
- Orange box:** LIMIT-[1] HI (0000.0), LIMIT-[1] LO (0000.0), LIMIT-[2] HI (0000.0), LIMIT-[2] LO (0000.0).

Below the screenshot are three summary boxes:

- Interval Time Summary:**
 - > INTERVAL TIME
 - 1min
 - PRIMARY DATA
 - T1 / %RH
 - TEMP. UNIT
 - °C
 - RECORDING TYPE
 - ONE-TIME
 - BUZZER
 - ON
- Decimal Point Summary:**
 - DECIMAL POINT
 - DOT[.]
 - BAUD RATE
 - 2400bps
 - BITS PARITY
 - 7bits/EVEN
 - TERMINATOR
 - <CR><LF>
 - POWER SAVE
 - 1min
- Date Format Summary:**
 - DATE FORMAT
 - yyyy/mm/dd
 - DATE SETTING
 - 2012/03/19
 - TIME SETTING
 - 15: 05: 31
 - ID NUMBER
 - 00000000
 - CONTRAST
 - 40

AD-1687 Internal Settings Screen

Return all settings to factory defaults

For more info on the limit function,
Refer to **7. Limit Function**

Setting Item	Values and functionality
INTERVAL TIME	<u>Recording intervals for the AD-1687</u> 1, 2, 5, 10, 15, 20, 30 seconds 1*, 2, 5, 10, 15, 20, 30, 60 minutes
PRIMARY DATA 1	<u>Which items are displayed in the AD-1687 option screen?</u> • <u>Items using the limit function</u> Temp 1*, Humidity, Barometric pressure, Temp 2 (only when connected), Vibration, Balance
PRIMARY DATA 2	<u>Which items are displayed in the AD1687 option screen?</u> • <u>Items using the limit function</u> Temp. 1, Humidity*, Barometric Pressure, Temp. 2 (only when connected), Vibration, Balance

RECORDING TYPE	<u>When data is full, does the device overwrite and save?</u> One-time* . . . Does not overwrite when memory is full Endless . . . Does overwrite when memory is full
BUZZER	<u>Does the buzzer sound during weighing data input/ usage of the limit function</u> Sound* No sound
DECIMAL POINT	<u>Decimals displayed and saved to the AD1687</u> Dot (.)* Comma (,)
TERMINATOR	<u>Settings for connection to the balance</u> <CR><LF>* <CR>
BITS PARITY	<u>Settings for connection to the balance</u> 7bits/EVEN*, 7bits/ODD, 8bits/NONE
BAUD RATE	<u>Settings for connection to the balance</u> 600, 1200, 2400*, 4800, 9600, 19200bps
POWER SAVE	<u>Time elapsing without input before turning off power/display</u> No power-save, 30 seconds, 1*, 2, 5, 10 minutes
DATE FORMAT	<u>Order of year, month, and day</u> Year/month/day*, month/day/year, day/month/year
DATE/TIME SETTING	<u>Time setting</u> Auto . . . Records the time set on the PC Manual . . . Choose your own setting
ID NUMBER	<u>ID number settings</u> 8-digit value. Example: AND-1687
CONTRAST	<u>Screen contrast</u> 25 to 40* to 50
LIMIT UPPER/LOWER	<u>Limit function settings</u> * Refer to “7. Limit function”

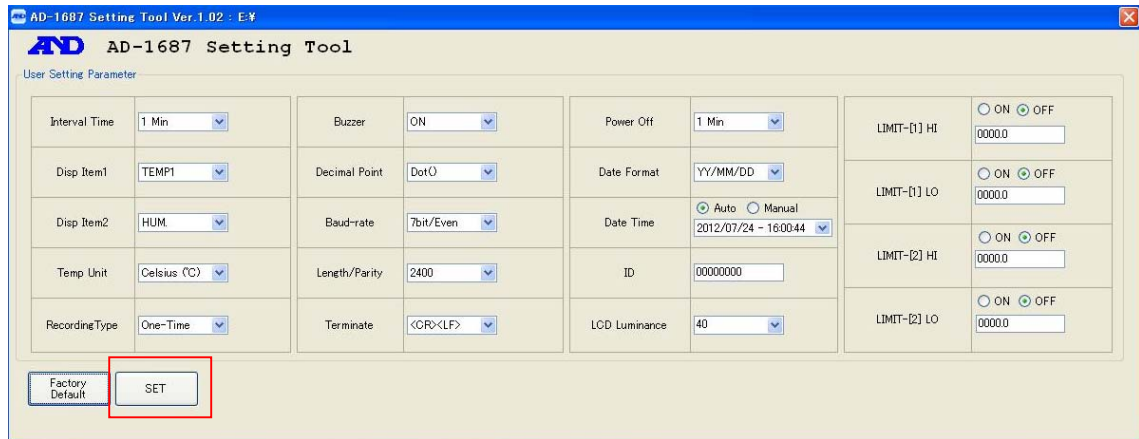
*: Factory settings

6: When returning settings to factory defaults

Press the Factory Default Settings button. All settings will be returned to factory defaults. When this happens, settings are not saved on the AD-1687 yet.

7: Confirm settings

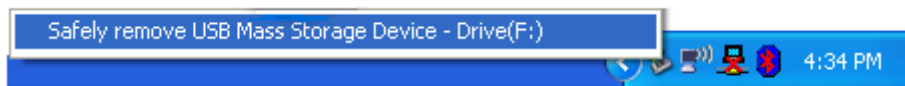
After changing the necessary settings, press the **Set** button.



8: To make the changes take effect, you must turn off the power for the AD-1687 and restart it.



1: Left-click “Safely remove hardware” on the taskbar and sever the connection.



2: If you see the “Hardware removed” message, pull the USB cable from the AD-1687.

3: Press and hold the AD-1687's [ON/OFF] key, and turn it off.

9: Quit the Setting Tool

Pressing the quit button in the upper right will close the program.

7. About the Limit Function

- There is a “limit function” that will display **HI**, **LO** on the AD-1687 and sound a buzzer when environmental values pass set limits
- It's possible to quickly be informed of irregularities through a buzzer and/or display when certain limits are exceeded, such as in climate controlled room.

1: Please go to Step 5: "Functions of the various areas" of “6. Starting and Using the Program”

2: Select the item that will use the limit function.

Limits will be applied to the settings in “Primary data 1, 2”.

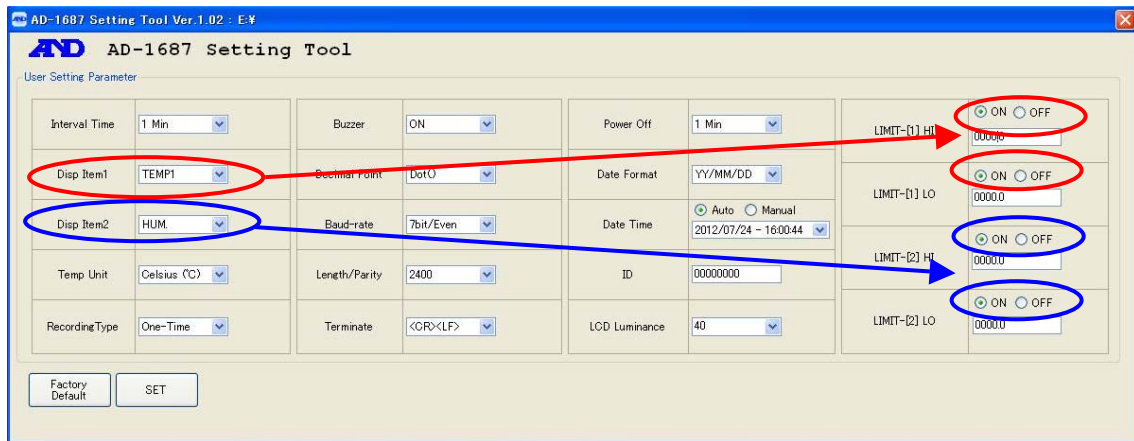


Note: The limit function cannot be used on “vibrations” or “balance”.

When using the limit function, please do not select these.

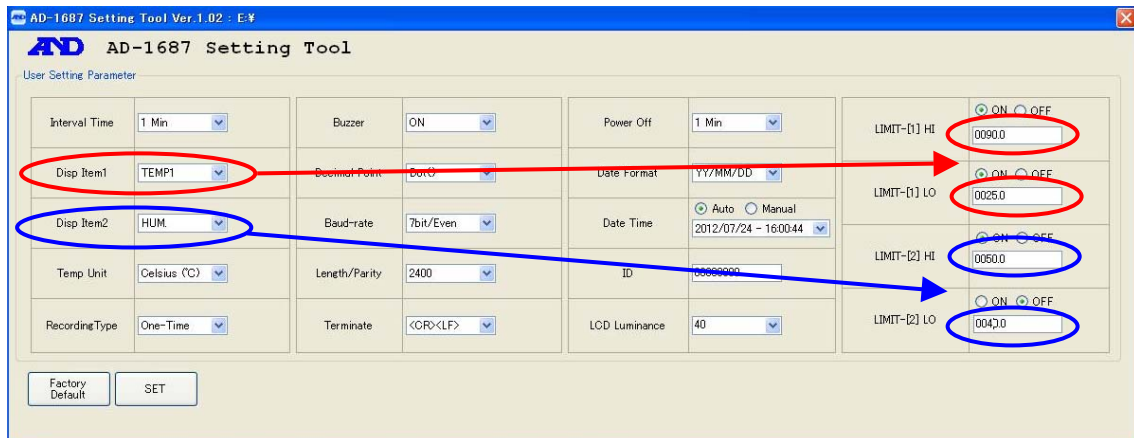
3: Select whether to enable the limit function

To use the limit function on the settings displayed in “Primary data 1, 2”, click ON



4: Set the upper and lower limits for the limit function

Input the upper and lower limits.



5: After changing settings for the limit function

Refer to the steps following “7. Confirm settings” from “6. Starting and Using the Program” and enable the setting changes made to the limit function.

6: The AD-1687's display

When the upper/lower limit values set using the Setting Tool are passed, **HI/LO** will be displayed, or the unit area will reverse from black to white and a buzzer will be sounded.

T1	HI	25.8 °C
RH	LO	36.8 %
BAR		995.3 hPa
VIB		2 mG

T1	HI	
		25.8 °C
RH	LO	
		36.8 %

7: Stopping the limit function

To stop the limit function, use the Setting Tool again, and click OFF

Refer to the steps following “7. Confirm settings” from “6. Starting and Using the Program” and enable the setting changes made to the limit function.

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AD-1687 Setting Tool

User Setting Parameter

Interval Time	1 Min	Buzzer	ON	Power Off	1 Min	LIMIT-1] HI	ON OFF
Disp Item1	TEMP1	Decimal Point	Dot()	Date Format	YY/MM/DD	LIMIT-1] LO	ON OFF
Disp Item2	HUM	Baud-rate	7bit/Even	Date Time	2012/07/24 - 16:00:44	LIMIT-2] HI	ON OFF
Temp Unit	Celsius (°C)	Length/Parity	2400	ID	00000000	LIMIT-2] LO	ON OFF
Recording Type	One-Time	Terminate	<CR><LF>	LCD Luminance	40		

Factory Default SET

8. Usage Example for the Limit Function

An actual example showing how to use the limit function is below.

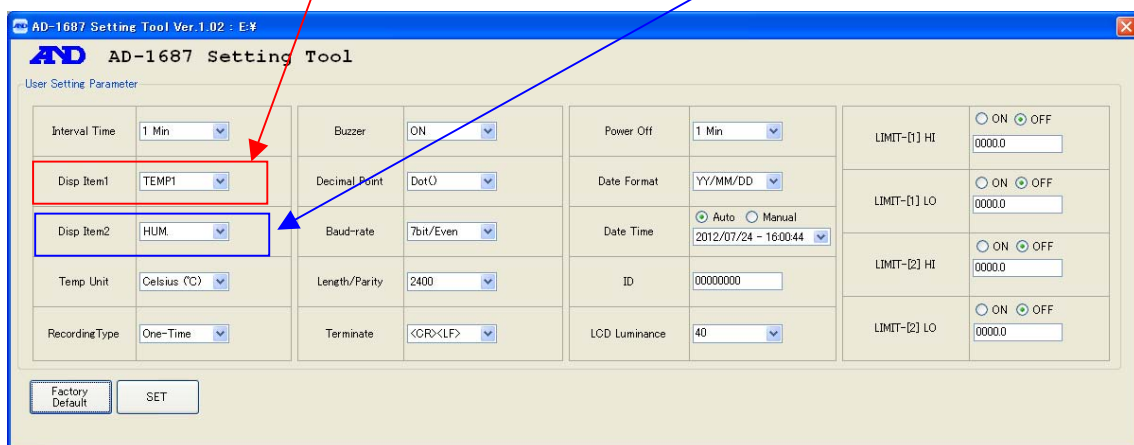
Conditions

Temp	Upper limit: 25.0°C
	Lower limit: 23.0°C

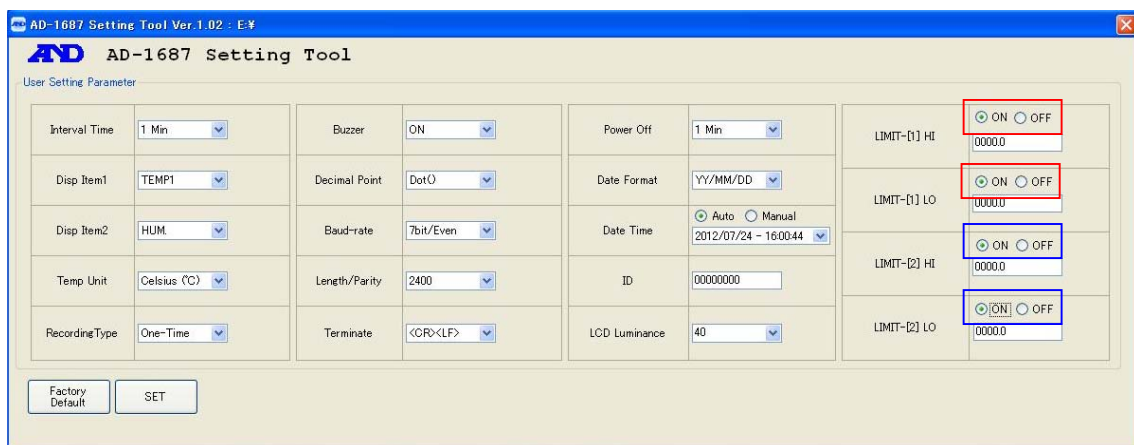
Humidity	Upper limit: 50.0%
	Lower limit: 40.0%

1: Follow the steps all the way up to “5. Functions of the various areas” from
“6. Starting and Using the Program”

2: In Primary Data 1 set “Temperature 1”, and in Primary Data 2 set “Humidity”



3: To enable the limit function, click “ON”



4: Input upper/lower limits

Temp	Upper limit: 25.0°C	Humidity	Upper limit: 50.0%
	Lower limit: 23.0°C		Lower limit: 40.0%

The screenshot shows the 'AD-1687 Setting Tool' window. The 'User Setting Parameter' section contains various settings. On the right, the 'LIMIT' section is expanded, showing four rows: 'LIMIT-[1] HI' (0025.0), 'LIMIT-[1] LO' (0023.0), 'LIMIT-[2] HI' (0050.0), and 'LIMIT-[2] LO' (0040.0). Red and blue arrows from the table above point to the '0025.0' and '0040.0' fields respectively. The 'ON' radio button is selected for all limit rows.

Parameter	Value
Interval Time	1 Min
Buzzer	ON
Power Off	1 Min
Disp Item1	TEMP1
Decimal Point	Dot(.)
Date Format	YY/MM/DD
Disp Item2	HUM
Baud-rate	7bit/Even
Date Time	2012/07/24 - 16:00:44
Temp Unit	Celsius (°C)
Length/Parity	2400
ID	00000000
Recording Type	One-Time
Terminate	<CR><LF>
LCD Luminance	40
LIMIT-[1] HI	0025.0
LIMIT-[1] LO	0023.0
LIMIT-[2] HI	0050.0
LIMIT-[2] LO	0040.0

5: Click the **Set** button

The screenshot shows the same 'AD-1687 Setting Tool' window. A pink box highlights the 'SET' button at the bottom left, and a pink arrow points to it from the text 'Click the Set button'.

6: Apply the setting changes

Refer to the steps following “7: Confirm settings” from “**6. Starting and Using the Program**” and enable the limit function changes to the AD-1687.

7: Confirm the AD-1687 display.

Temp	Upper limit: 25.0°C
	Lower limit: 23.0°C

Humidity	Upper limit: 50.0%
	Lower limit: 40.0%

When the set limits are exceeded, **HI**, **LO** will be displayed, and the buzzer will go off.

T1	HI	25.8 °C
RH	LO	36.8 %
BAR		995.3 hPa
VIB		2 mG

T1	HI	
		25.8 °C
RH	LO	
		36.9 %

8: To stop the limit function, click OFF

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AD-1687 Setting Tool

User Setting Parameter

Interval Time	1 Min	Buzzer	ON	Power Off	1 Min	LIMIT-[1] HI	☐ ON ☒ OFF
Disp Item1	TEMP1	Decimal Point	Dot()	Date Format	YY/MM/DD	LIMIT-[1] LO	☐ ON ☒ OFF
Disp Item2	HUM	Baud-rate	7bit/Even	Date Time	2012/07/24 - 16:00:44	LIMIT-[2] HI	☐ ON ☒ OFF
Temp Unit	Celsius (°C)	Length/Parity	2400	ID	00000000	LIMIT-[2] LO	☐ ON ☒ OFF
Recording Type	One-Time	Terminate	<CR><LF>	LCD Luminance	40		

Factory Default SET