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Software + USB cable

HH800W-RSW
HH800WE-RSW
Software + Wireless receiver + USB cable

INSTRUCTION SHEET

M4555/0208

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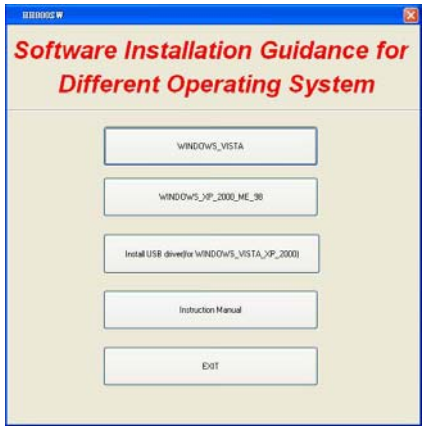
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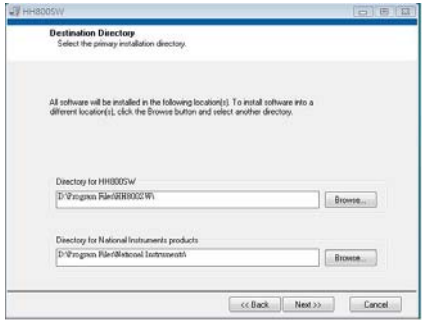
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WARNING: These products are not designed for use in, and should not be used for, human applications.

Install PC software & USB driver

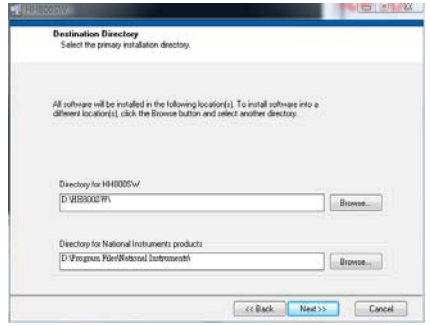
1. Put the disk in the disk drive. Following dialogue box will appear automatically. Please execute the “autorun.exe” if it does not appear.



2. Button explanations
   - WINDOWS_VISTA: install pc software for WINDOWS VISTA.
     Directory setting for VISTA.
     Following window comes up automatically, when click the bottom “WINDOWS_VISTA”.



Please change the directory to out side of the directory of “program file” as example shown following.



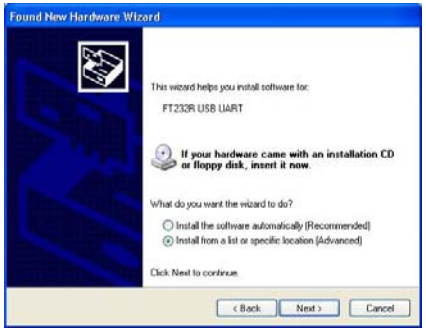
- WINDOWS_XP_2000_ME_98: Install pc software for WINDOWS XP 2000 ME 98.
- INSTALL USB driver (for WINDOWS_ VISTA _XP_2000): Please refer to the METER and WIRELESS USB DRIVER’S INSTALLATION for WINDOWS 98, ME.
- Instruction Manual: Operation instruction manual.
- EXIT: Exit install program.

For WINDOWS 98, ME METER and Doungle USB Driver's Installation

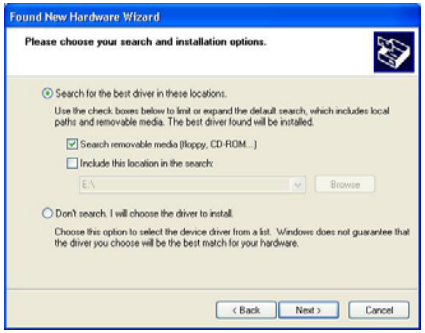
1. Connect meter to PC with USB cable. Following dialogue box will appear automatically. Please select "No, not this time" to put the disk in, and click "Next".



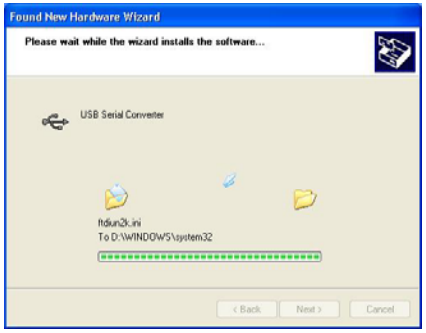
2. Select "Install from a list or specific location [Advanced]" and click "Next".



3. Select "Search removable media [floppy, CD-ROM..]" and click "Next".



4. Installation.



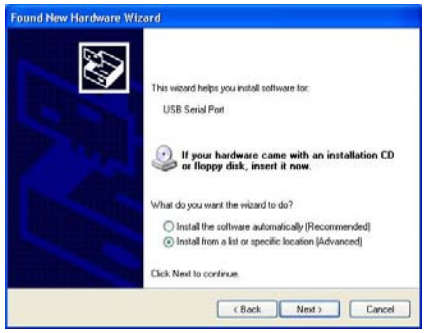
5. Complete installation, click "Finish" to complete.



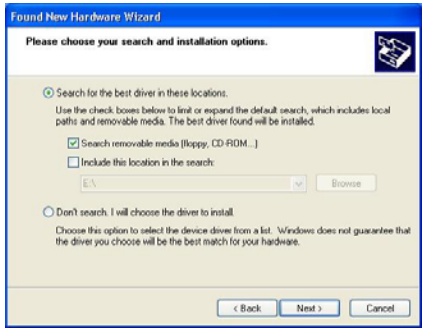
6. Appear found new hardware select "No, not this time" and click "Next".



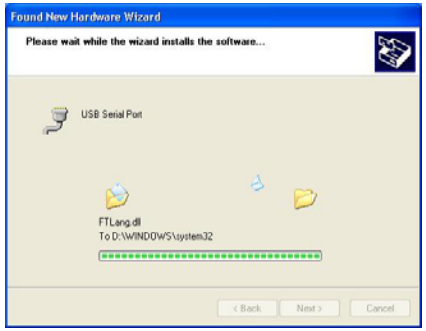
7. Select "Install from a list or specific location [Advanced]" and click "Next".



8. Select "Search removable media [floppy, CD-ROM..]" and click "Next".



9. Installation.

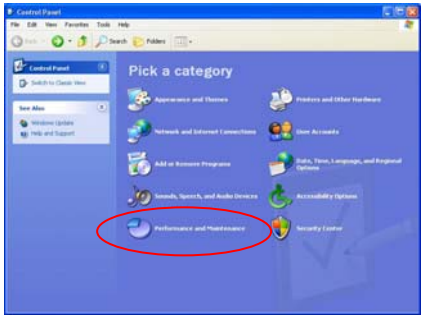


10. Complete installation, and click "Finish" to complete.

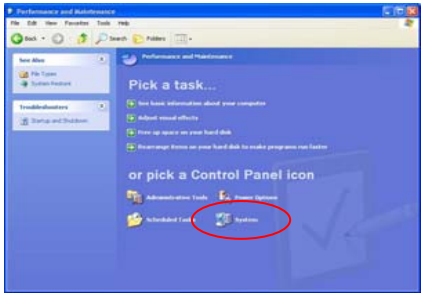


SET CONNECTION PORT

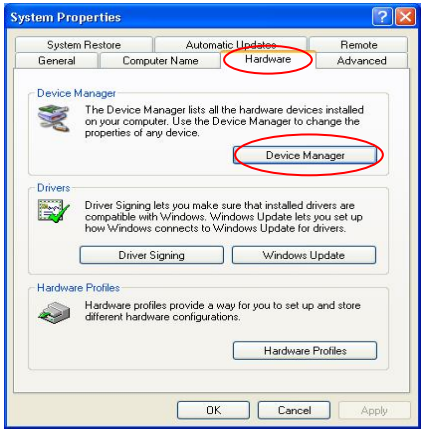
1. Start→Control Panel→Performance and Maintenance.



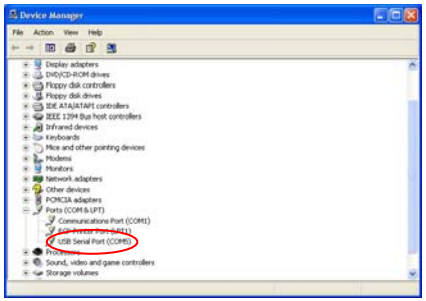
2. Select "System".



3. Select “Hardware” →Device Manager.

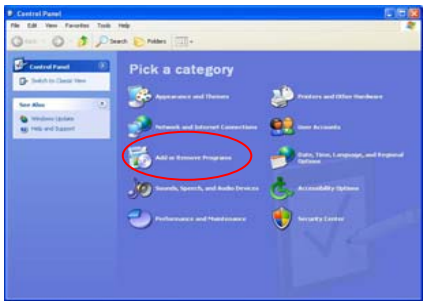


4. In this window, you see the number of the port selected by system auto manically. You can change it. Please write down the port number, it will be needed for manual connection.

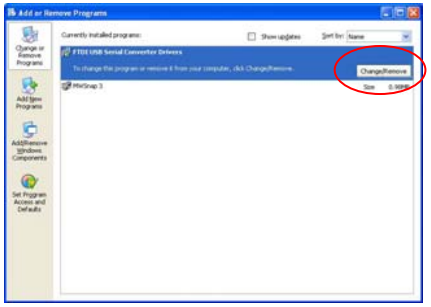


Uninstallation of USB Driver

1. Start→Setting→Control Panel→Add or Remove Programs→Change/Remove.



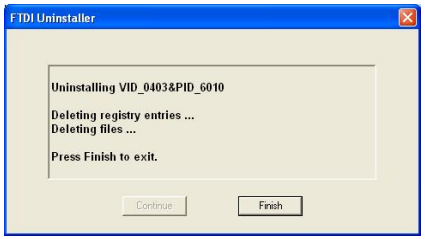
2. Select “FTDI USB Serial Converter Drivers”→Change/Remove.



3. Click “Continue”.



4. Click “Finish”.



SOFTWARE OPERATION

For wireless mode

1. Please plug the Doungle into USB port.
2. Turn on the meter and select wireless function. (Wireless function will be turn off automatically, if connection can not complete within two minutes.)
3. Turn on “PC software” (Start→ All programs →HH800SW→HH800SW).

For USB cable mode

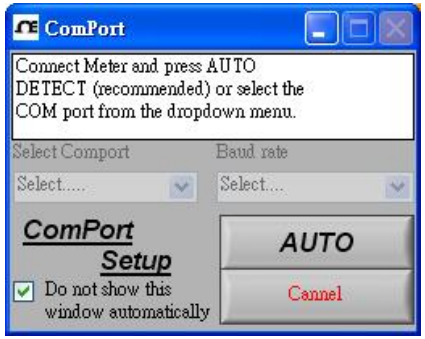
1. Connect meter to PC with USB cable.
2. Turn on “PC software” (Start→ All programs →HH800SW→HH800SW).

Description of “PC software”

1. Following window comes up automatically after PC software turn on.

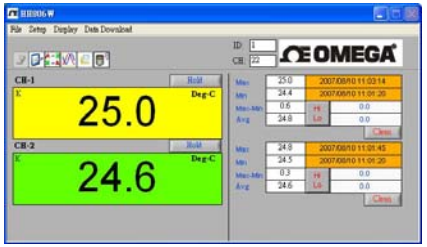


2. For first time use following communication port setup dialog box. Comes up automatically.



3. For communication port setup please refer to 6.1.

4. After finishing communication port setup following Main display window comes up.



Model number shown at up-left corner varies according to meter.

5. Explanations of comments



5.1 File

About	Display manufacturer information.
Exit	Exit program.

5.2 Setup

Options	Environment selection settings (please refer to 6.2) Communication port Check Search/Settings/Connection /Showing the current Communication port used.

5.3 Display

Graphic	1. View real time reading and curves. 2. Window setup refer to 6.4.
Relative	Set and display the difference between two channels.



Received Signal strength indication. Only available for meters with wireless function.

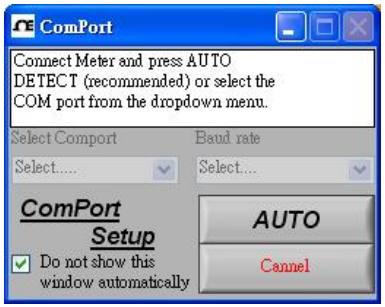
5.4 Data Download

Download the saved data from the meter. (Only for save/data log function mode)

6. Explanations of Toolbar



6.1 Communication port setup dialog box.



- **Auto connection**

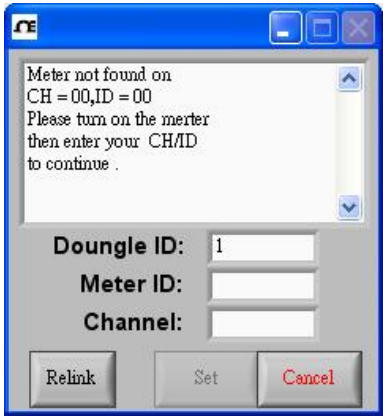
  AUTO : Click the bottom let system select communication port automatically.

- **Manual connection**



Select communication port and baud rate manually. (Wireless mode, please select 38400 bps, USB mode, please refer to operation manual).
After click on "Do not show this window automatically" it will not bring up the dialog box automatically. It will only function when you call from the Setup.
For first use, after communication port setting following dialogue box comes up.

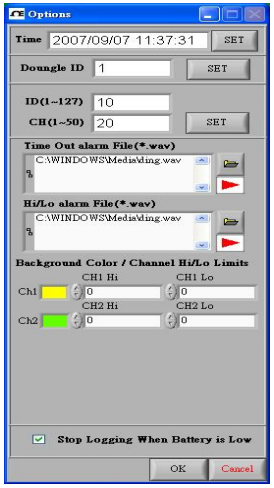
- **Set meter ID and CH (Only for wireless models)**



1. When message "Meter is found on CH=00, ID=00" is shown in dialogue box.
   Please change ID and CH numbers to other numbers preferred (ID from 1 to 127, and CH from 1 to 50).
   (Model HH8XXE: CH from 1 to 4).
   Click "Set" to connect.
2. When message "Meter not found on CH=00, D=00" is shown in dialogue box, please reset ID and CH as following:
   I. Turn off the meter.
   II. Press and hold wireless starting key (>2S) and press power on/off key ( )for longer than five seconds. Display will shown "00".
   III. Turn on wireless function by pressing wireless starting key (>2S).
   IV. Click "Relink".
   V. Repeat 1.

Note
If there are more than one wireless transceivers operate at same location.
1. Different doungle ID's should be given.
2. Distance between 2 doungles must be more than 30 cm. (12 inches)

6.2 Environment selection settings dialog box.



- **Time setting**



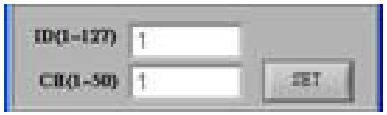
Only available for meters with time setting function.
Click "SET" synchronize the clock in meter with the time of PC.

- **Doungle ID setting**



Only available for meters with wireless function.

- **Meter ID and CH setting**



CH setting only available for meters with wireless function.

- **Sound of Hi/Lo limit setting**



Click data folder icon on the right , and select sound effect. (Only use WAVE format).

- **Hi/Lo limit setting**



1. Setting the Limits.
   Audio alarm will be actuated, when measurements are out of limits.
2. Background color of each channel can be selected.

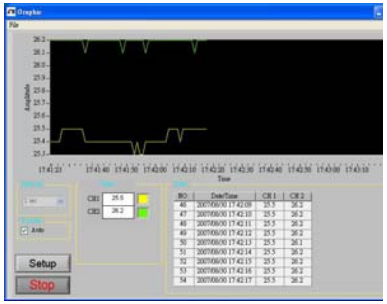


Enable or disable the function which stop data logging when battery is low.

6.3 Relative dialog box.



6.4 Graphic dialog box.



- **Interval setting**



- **Y scale setting**



Select auto mode to accept Y scale auto matically set by PC.
Turn off the auto mode to freeze Y scale at that moment.

- **Data area**

NO.	Date/Time	CH 1	CH 2
28	2007/10/09 18:50:42	25.2	25.7
29	2007/10/09 18:50:43	25.2	25.7
30	2007/10/09 18:50:44	25.2	25.6
31	2007/10/09 18:50:45	25.2	25.7
32	2007/10/09 18:50:46	25.2	25.6
33	2007/10/09 18:50:47	25.2	25.6
34	2007/10/09 18:50:48	25.2	25.6
35	2007/10/09 18:50:49	25.2	25.7
36	2007/10/09 18:50:50	25.1	25.6
37	2007/10/09 18:50:51	25.1	25.6

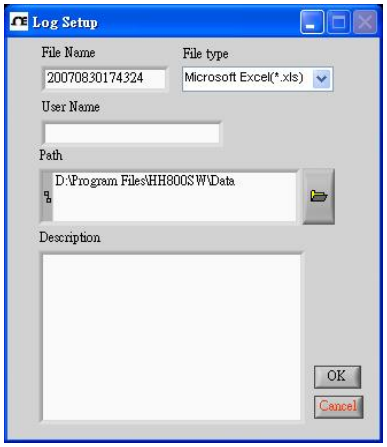
Display last ten measurements.

- **CH1/CH2 Setting**

Setup : Click this bottom to turn on or off CH1 and CH2 and select the back-ground colors.

- **Start data logger**

Record : Click this bottom to bring up “Log Setup” window.



- File name: To define the name of the file in which you want to store the logged data. The default file name is current time. (YYYYMMDDHHMMSS).
- File type: It can be saved as (*.csv or *.xls).
- User name: The user’s name.
- Path: Saved path.
- Description: information added by user.
- User name and Description will be saved in the data file.
- Click “OK” to start recording.

- **Stop data logger**

Stop : Click to stop data logging and save the data.

- **Return to the main window after data logging ended.**

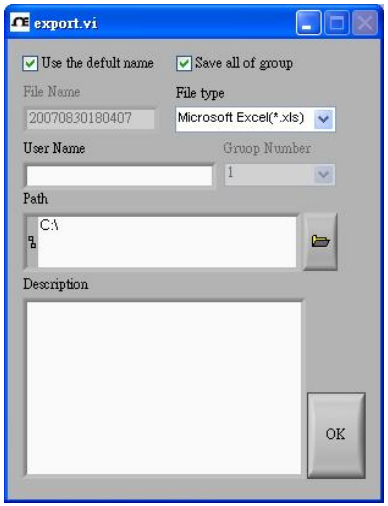
File → Exit

6.5 To export data stored in meter to PC. Only available for meters with save/data log function.

Click this icon to bring up “Data download dialog box”.

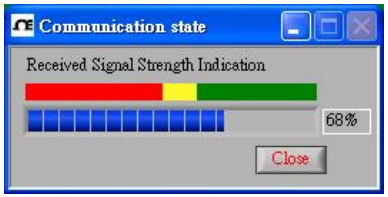


File menu
File
Exports Data exports



Exit Exit program.
Reload re-load data.

6.6 Received signal strength indication. Only available for meters with wireless function.

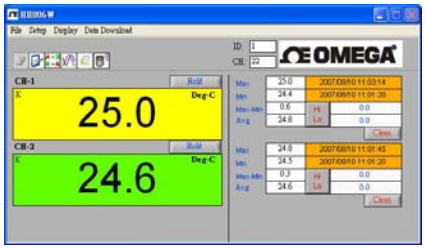


I. The barograph and number are Received Signal Strength Indicator (RSSI).
- RSSI >= 60 signal is better (in green range).
- 60 <= RSSI <=50 signal is good (in yellow range).
- RSSI <= 50 signal is weak. (in red range)

II. Suggestions for weak signal:
- Change the location & orientation of doungle (vertical to the ground is best.)
- Change location of orientation of meter.

6.7 Low battery warning,, please change batteries as soon as possible.

7. INTRODUCTION OF MAIN DISPLAY



Left hand side shows reading of each channel with unit at right-upper corner.
When measure with thermocouple, the type of thermocouple is shown at left-upper corner.
Right hand side shows maximum (MAX), minimum (MIN), range (MAX-MIN) and average (AVG) value of readings, and times of maximum and minimum value occur.

- Hold

  Click the button to holds the current reading.
- Clean

  Click the button to reset the reading and time of MAX, MIN & AVG..
- Hi
  Lo

  Click the bottom to activate out of limit alarm. Hi/Lo limit values are set in 6.

Wireless Features:

Frequency range:
910~920MHz. (Model HH8XX)
868.1~868.5MHz. (Model HH8XXE)
Low current consumption less than 1mA.
The transmitting distance can reach 25M without magnetic interference.

FEDERAL COMMUNICATIONS COMMISSION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

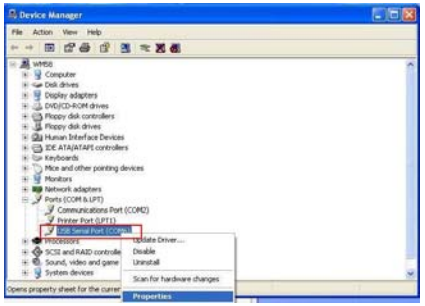
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

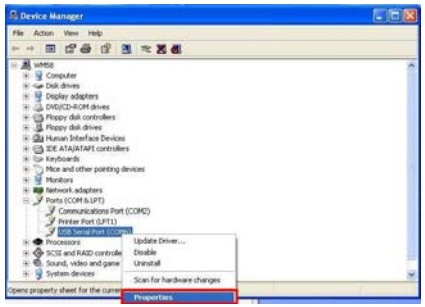
Comport Confirmation Procedure

1. Confirm to see if the port (COM&LPT1) of PC is assigned to the meter like the following illustration, but it could be other Comport not COM6.

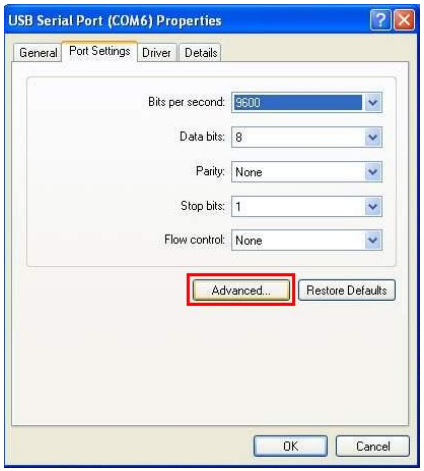


2. If it is normal, then the change of the port (COM&LPT1) of PC must follow the following step to make Comport changes.

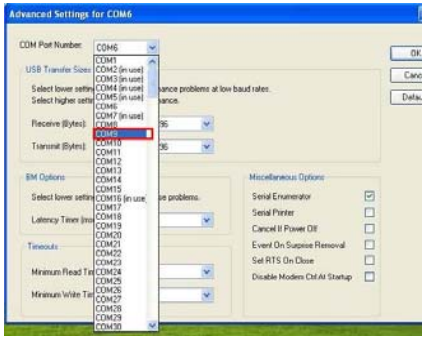
Setup1. Click on the Properties of the red frame.



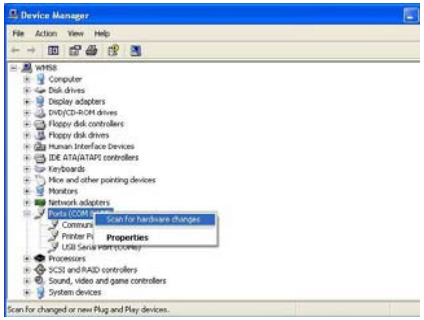
Step2. Choose the Advanced of the red frame as the illustration blow



Step3. Choose Comport other than COM10, COM3 and the COM without "IN USE" like the illustration below.



Step4. Complete the above steps and re-scan the device. And start opening the software to do Auto-Connection.



WARRANTY / DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY / DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests / inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.
The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.
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