



ClickCal

Calibration Software

For

Hamilton ARC Sensor Series

Operation Manual

Note

Your ARC Sensor ID must be identified. Normally it is set "1"

Communication speed must be set at default.



Programmed and Designed by T&C Technical, Japan

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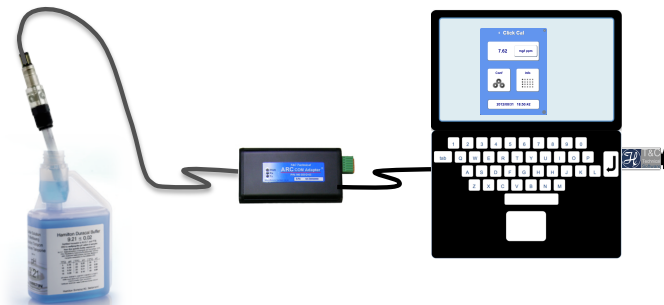
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Introduction

ClickCal is for using with Hamilton ARC Sensor Series to calibrate and configure the sensor function through your Windows computer.

The 2 calibration values; before and after are recorded as text format in a provided USB memory.



Package and Requirement

Hardware requirement

CPU	Pentium 1GHz or above
Memory	512MB or above
HDD capacity	2GB or more
Interface	2 x USB 2.0 or 3.0
OS	Windows XP SP3, Windows Vista SP1, Windows 7, Windows 8
Execution environment	.NET Framework 3.5 or above

ARC Com Adaptor Communication Kit

Software is provided with a communication kit

1) USB Memory Contents

Software: ClickLink, ClickCal

Communication driver: USB-Nano-485

Platform installer: Microsoft® .NET Framework 4.0

PDF: ClickLink Operation Manual,
ClickCal Operation Manual (This document)

2) ARC Com Adaptor: 1

3) USB Cable: 30cm

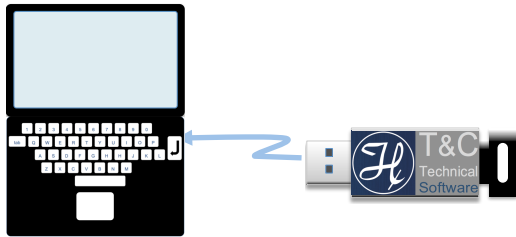
4) Sensor Cable with VP8 socket: 1m

Install the driver

ClickCal is able to use on 3 versions of Windows OS.

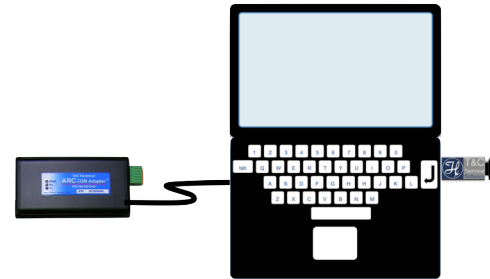
Windows XP, 7

1. Plug the USB memory stick into your PC.



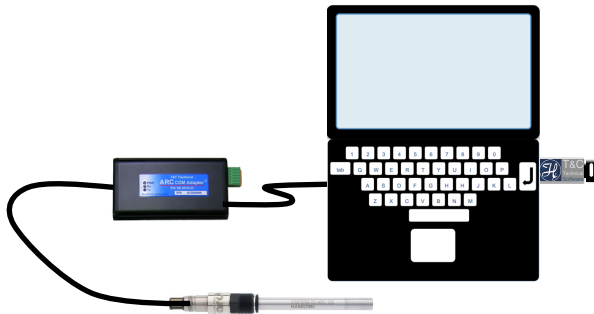
2. Install .NET Framework 4.0 in your computer
3. Copy USB-NANO-485 folder and paste on your desktop

4. Connect ARC Com Adapter



5. Install USB-NANO-485 driver (Ignore alert message and proceed)

6. After installing, connect your ARC sensor to ARC Com Adapter with sensor cable.



7. Double click  and in USB memory stick

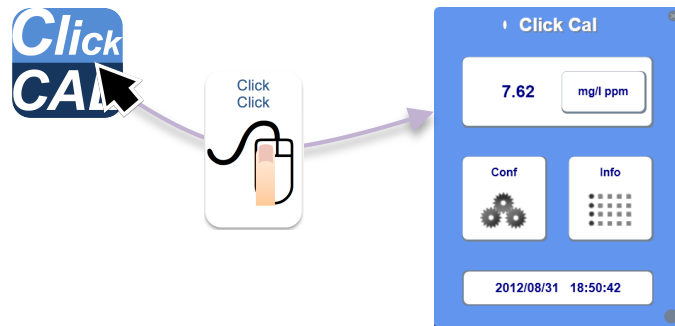
ClickCal is USB bootable software, and not necessary to be installed.

If ClickCal is removed from USB memory stick and put on a desktop or any place in a computer, it doesn't work.

Windows 8

- 1) Configure your PC before connecting ARC Com Adapter.
- 2) Display "Charms" and click "Settings"
- 3) Click "Change PC Settings"
- 4) Click "General"
- 5) Click "Restart now" in "Advance Startup"
- 6) Click "Trouble Shoot"
- 7) Click "Advanced Option"
- 8) Click "Startup Settings"
- 9) Click "Restart" button
- 10) Push 7 to select "Disabled driver signature enforcement", and
Enter key to restart Windows 8
- 11) Plug USB memory stick in a PC.

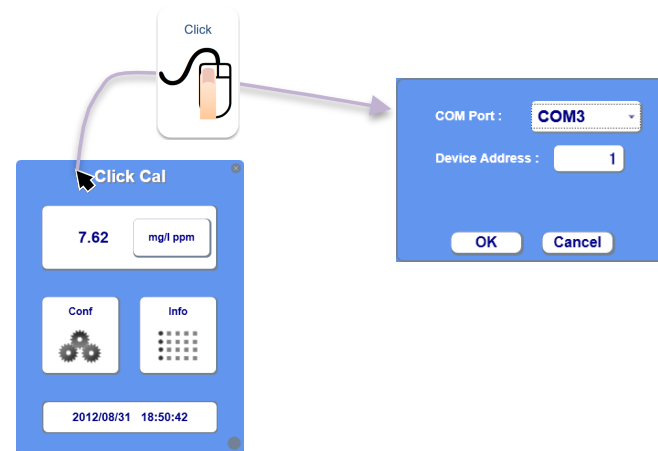
Run ClickCal



Select COM port

Click white circle or red circle (COM error) at the top of screen.

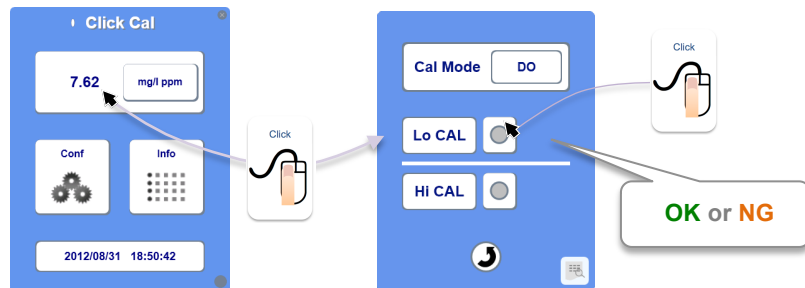
The COM port and ID selection screen is displayed.



Set the proper COM port number and ID, and click OK button.

The red circle becomes white when the COM port is properly selected.

Calibration

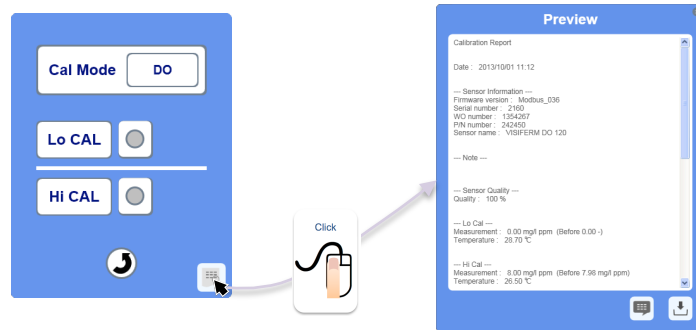


Stabilize the measurement value in a buffer, Oxygen free air and so on to receive OK.

When NG is displayed, please leave the sensor for a little more time in a solution, and retry.

If NG is still appeared, check the sensor quality.

Calibration Report



Display Calibration report and its contents

Calibration Date

Sensor Information

Note

After calibration data

Before calibration data

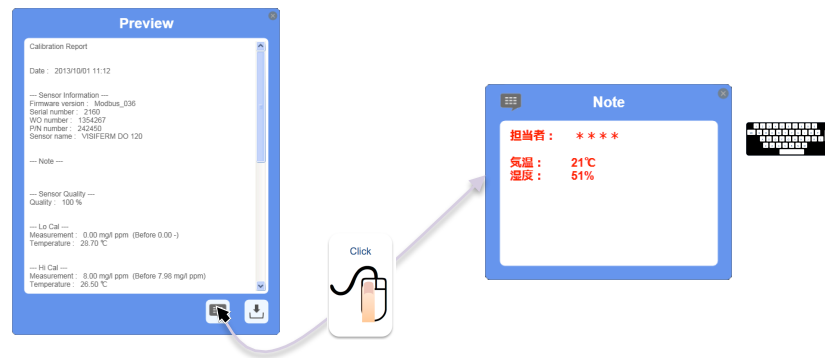
(when calibration is not done, it becomes 0)

Sensor quality (%)

4-20mA output scale

Operation information

Note Pad

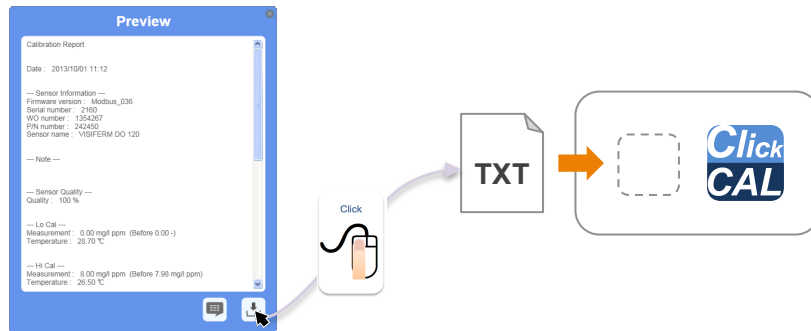


Note Pad is to use for the recording the personal data, memo and so on,
and record in a calibration report file (txt format).

There is no limitation of the volume.

For example, to record the tag number, location, name and may record
the reason of calibration.

Export calibration report



The calibration report with note is stored in a USB memory stick.

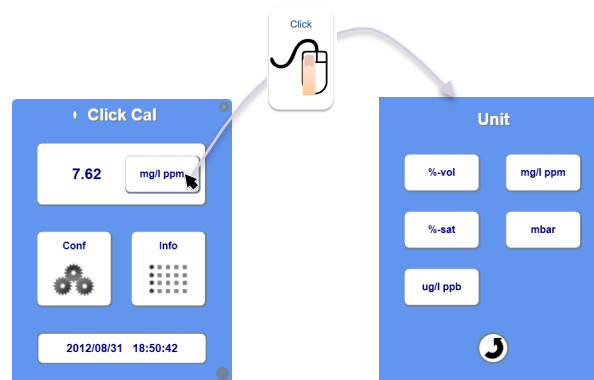
The file name is generated and consisted with following information.

Sensor name, sensor serial number, date

If make several reports with a same sensor in one day, the file would be generated for each time.

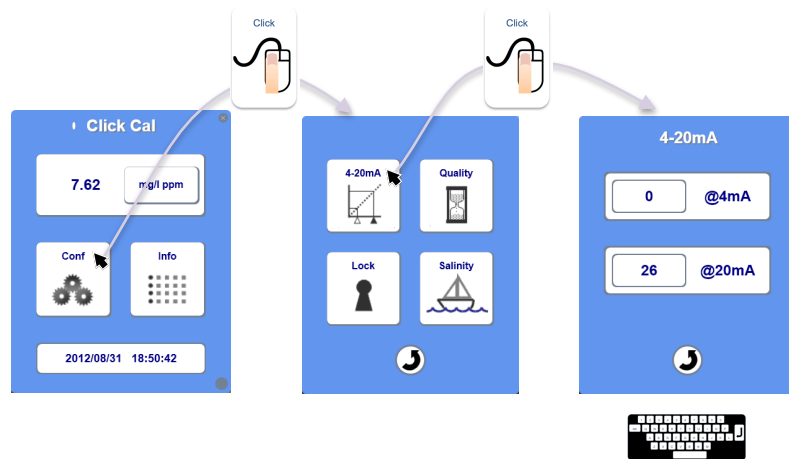
The name will be added -n at the end (n is number).

Change measurement unit



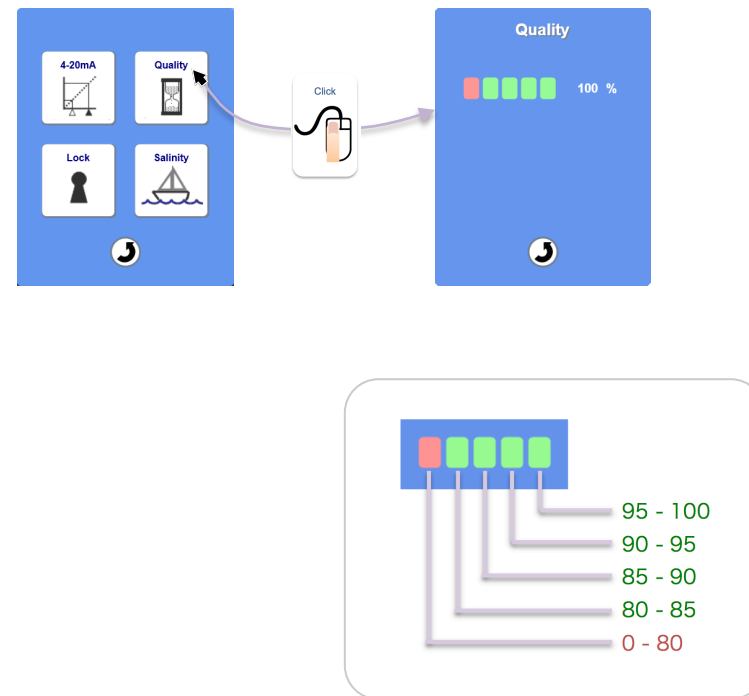
When change the unit, check analog output range, too.

Change 4 to 20mA range

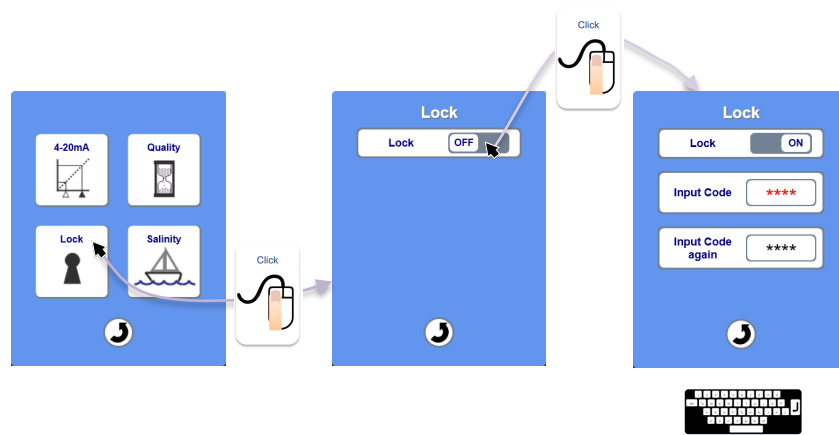


Sensor Quality

Change sensor or sensor cap when it becomes 80% (red mark), and calibrate the sensor.



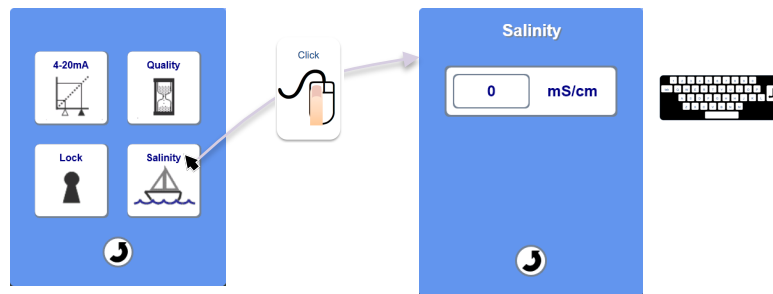
Password



Password is requested when ClickCal icon is double clicked.

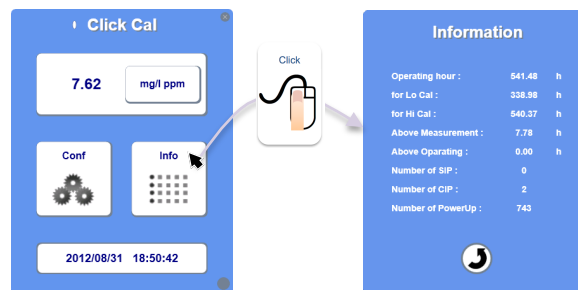
Use alphabet and number to define the password.

Compensation for DO



Salinity compensation button is appeared when ARC DO or Visiferm DO are connected.

Sensor operation data



Operating hour

Elapsed time since last Lo Cal

Elapsed time since last Hi Cal

Over Measurement range time

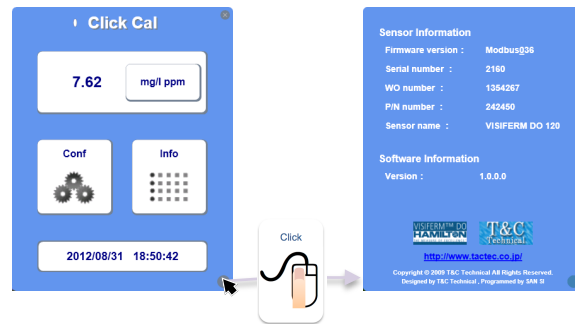
Over Operation condition time

Number of SIP

Number of CIP

Number of powering up

Sensor Information



Sensor firmware version

Serial number

Working order number

Product number

Sensor name

Software information: Version