

<< Overview / Precautions >>=====

DP-10 Data Logger Program ("the Program") is dedicated software for DIGITAL PROTRACTOR DP-10 series ("DP-10").

The Program captures the output by DP-10 and saves this data as text files on a computer. You can also enlarge the DP-10 display to fill up the entire computer screen.

The Program is able to capture up to 14,400 items of data.

You can use the buttons in the Program's windows to specify the timing for data capture. You can also select to have data automatically captured at specified intervals.

There is no need to set up the program on your computer.

Simply double-click DP-10-E.EXE on the CD-ROM to start running the program.

You can also store the program in a folder on your hard drive or a USB flash drive.

The only file you need to copy is DP-10-E.EXE.

If you want to copy the operation manual, copy the FIG folder and README.htm and save them in a folder.

The Program uses RS-232C signals from the DP-10.

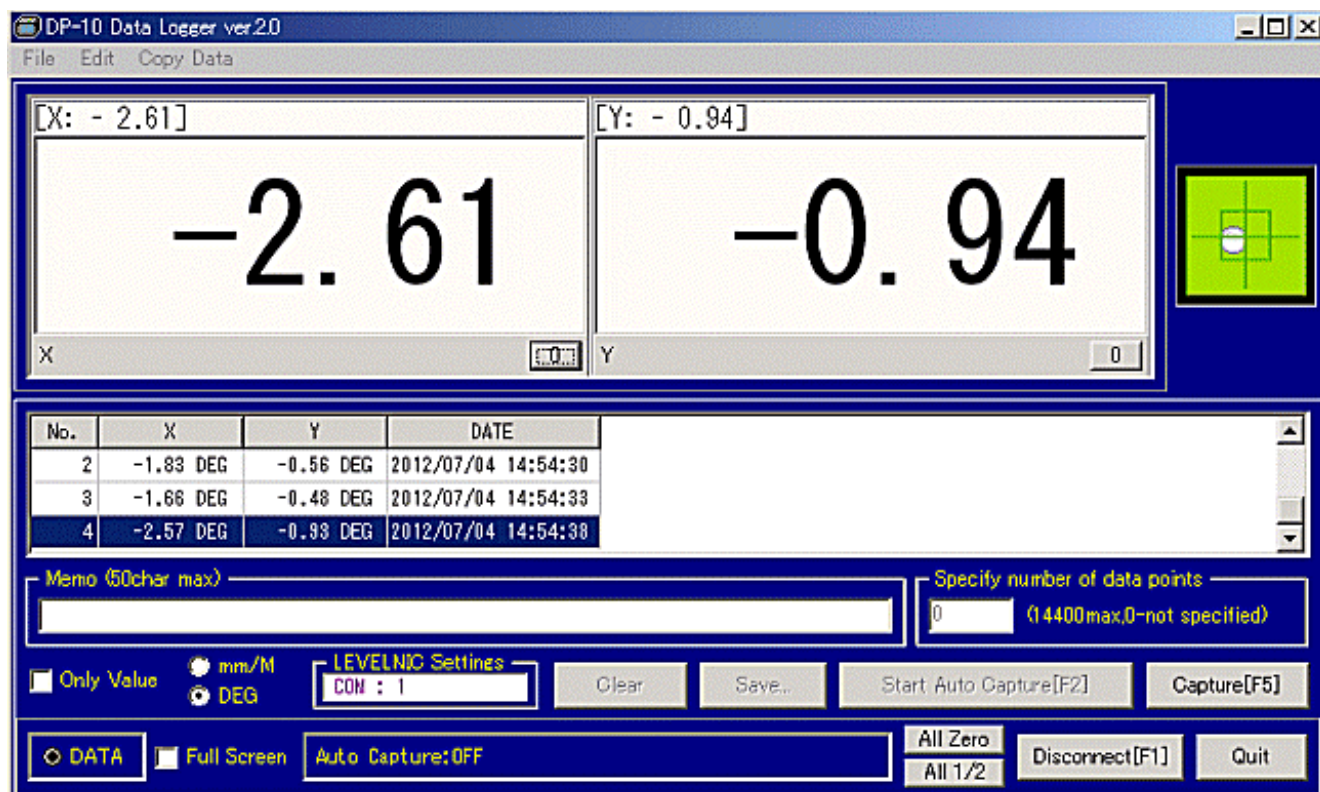
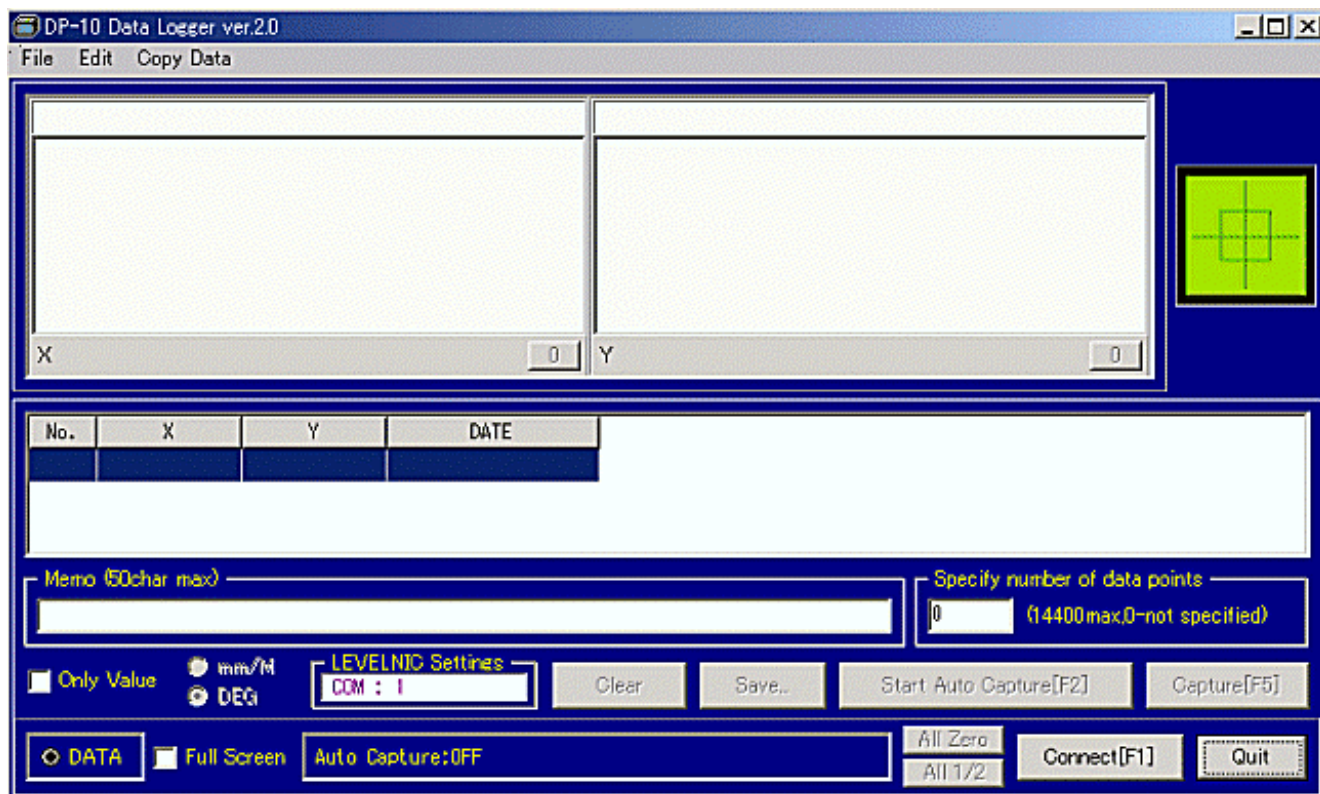
In order to receive these signals, you need a computer with a RS-232C port (serial port or COM port).

If there is no RS-232C port on your computer, use a USB-RS232C converter cable.

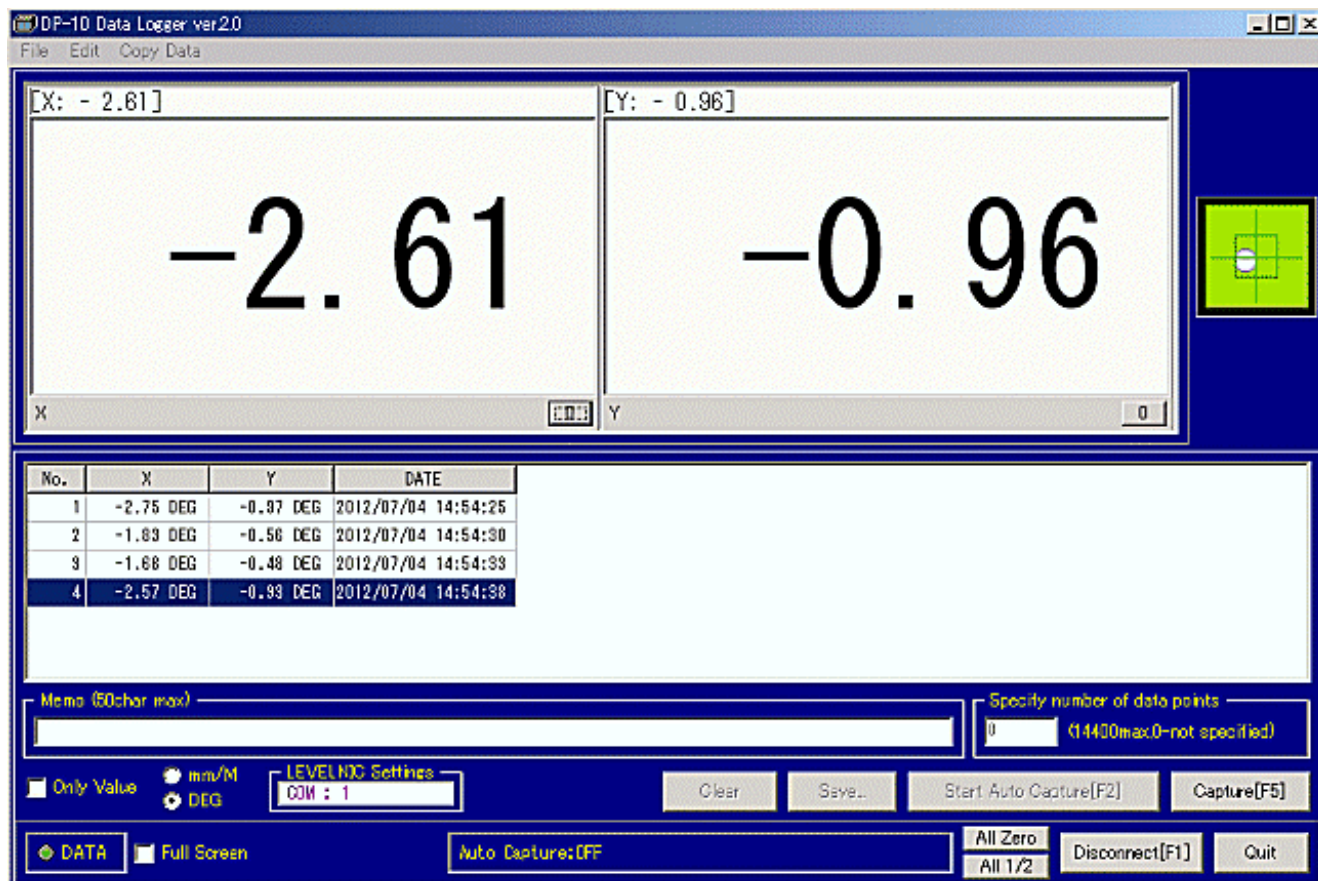
Follow the instructions in the cable manual to set up the device driver for the converter cable.

<< Windows Description >>=====

[[Capture Window]]



The Program communicates with DP-10, capturing data and displaying the measurement values.



By changing the size of display window, display size can be increased.

By moving the boundaries between windows, the number of data points can also be increased.

[Display]

Display on the top of display window are X numerical display, Y numerical display and green bubble display.

The X,Y measurement value is displayed once communication with DP-10 starts.

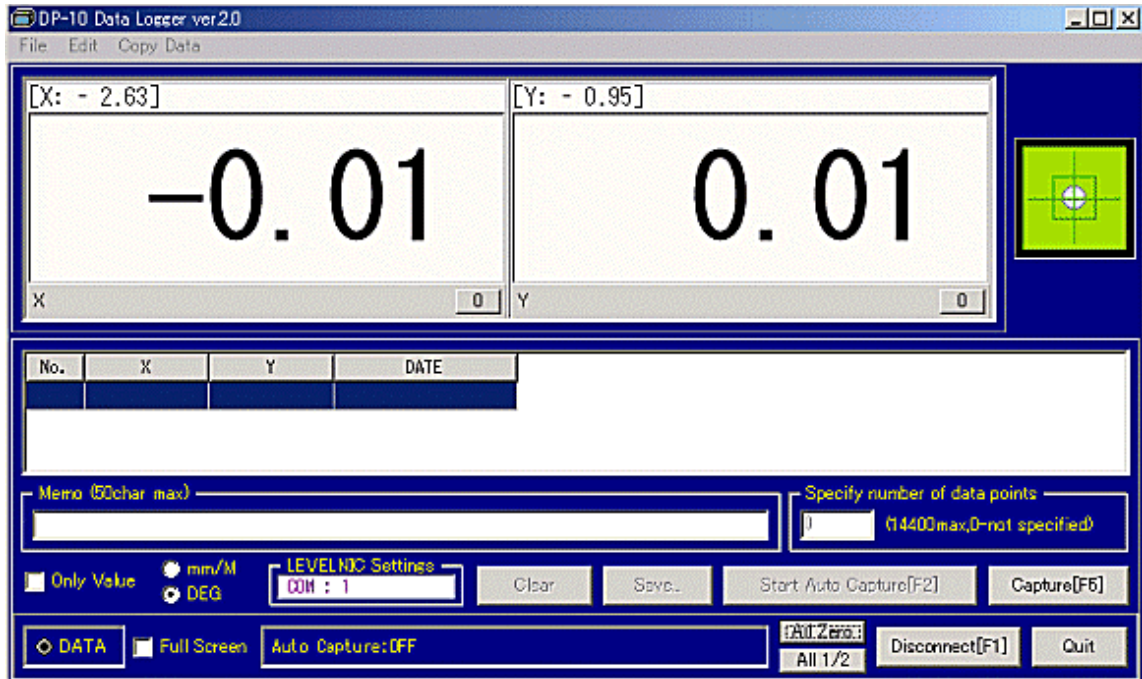
In addition to the horizontal display, the X,Y values can be configured to display in vertical format.

To modify the settings, use the File / Settings tab in the menu bar.

Inside the brackets "[]" at the top line, the data string received from the DP-10 is displayed.

The X and Y display windows each also contain a 0-cal button.

The green display frame is a facsimile of a bubble level showing the inclination direction and magnitude in the X and Y directions.



* Displayed value and the raw value in the brackets "[]" will differ after pressing 0-call or 1/2-call or if the display units in the program are selected as mm/M.

[Records Field]

The center portion of windows shows the No. / captured data X,Y / and the time of capture. Displays the captured data.

The captured data, the data item number, and the data values (X,Y) are displayed in chronological order (date and time).

To save the content of the field as a text file, click the "Save..." button after ending communication.

[Memo]

You can add strings of text to describe items of saved data.

These memos are for reference sake only.

You can also conduct displays and data capture without adding memos.

[Specify number of data points]

If you specify the number of data items to be captured, communication ends when the specified number is captured. After communication ends the "Save..." button is enabled.

If you specify 0, communication continues until the maximum number of data items is reached (14,400).

When you have captured the desired number of data items, click "Disconnect" to enable the "Save..." button.

[Only Value]

Selecting the "Only Value" option will save data without comment or text characters.

This option is useful when saved data is to be imported into spreadsheet software.

[Unit]

When using the DP-10, units of measurement cannot be changed from the main body.
However, they can be changed from the Program.

[LEVELNIC Settings]

Displays the Program settings (RS-232C Port Settings) for communicating with DL-ADP.
Check this field to see whether there any problems with the conditions.
To modify the settings, use the File / Settings tab in the menu bar.

[DATA Indicator]

Indicates the communication status with DP-10.

Flashing : Communicating with DP-10.

Receiving data at regular intervals.

Off : Cannot communicate with DP-10, so START button is no active.

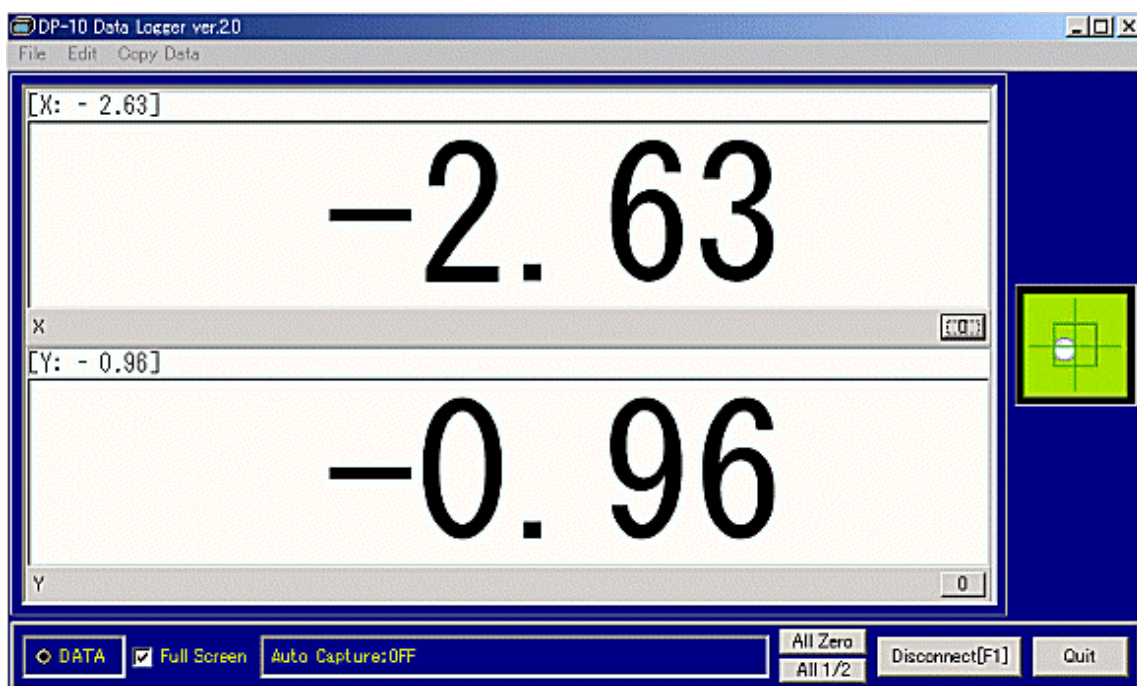
Please confirm power and connection status, and check if there is configuration problem with LEVELNIC or software.

Green : Normal.

Red : The indicator turns red if it receives error data beyond the measurement range.

[Full Screen]

Selecting "Full Screen" enlarges the Display region to fill the entire window.



Example of vertical display configuration.

[Auto Capture]

Indicates whether data acquisition in a regular interval is on or off.

If data acquisition is on, the interval is also displayed.

To modify the settings, use the File / Settings tab in the menu bar.

[Buttons]

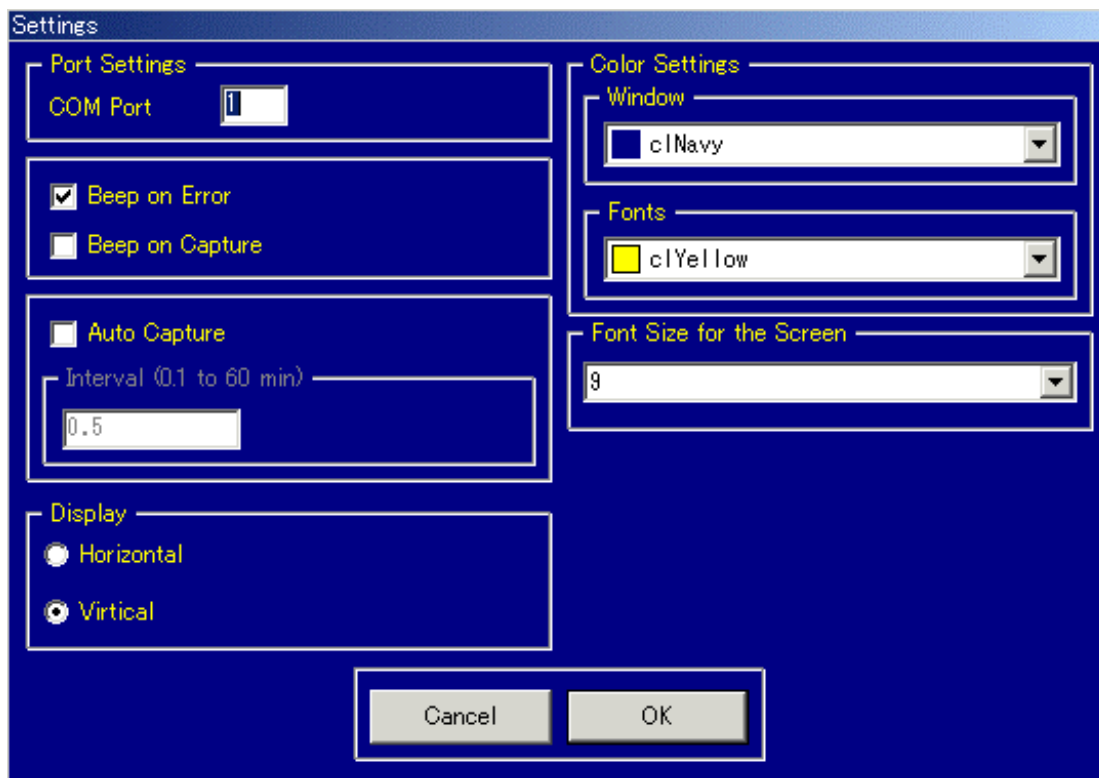
0	: 0 call button. Switches the display to zero (0).
Clear	: Clears the records.
Save...	: Saves the records as a text file.
Start Auto Capture	: Enables the auto capture function. If auto capture is on, this button is enabled when communication with DL-ADP starts.
Capture	: Captures the data in the Records Field. This button is enabled when communication with DP-10 starts. If auto capture is on, the button is enabled when you start auto capture. If you click this button while auto capture is in progress, the item of data for that time is captured and displayed in the Records Field.
All Zero	: 0-call for all displayed inputs. For all inputs the displayed value is set to zero (0).
All 1/2	: 1/2-call for all displayed inputs. For all inputs displayed value is halved.
Connect	: Starts communication with DP-10. Pressing the "Connect" button causes it to change to the "Disconnect" button.
Disconnect	: Ends communication with DP-10. If any records exist, the "Save..." button and "Clear" button are enabled.
Quit	: Quits the Program.

[Menu bar]

File	: About...	: Displays the name and version of the Program.
	Settings...	: Opens the Settings window. This window allows you to specify the conditions for communicating with DP-10. You can also specify the color and size of the font used in the Program.
	Quit	: Quits the Program.

- Edit : Cut : Allows you to cut portions of data that can be input.
- Copy : Allows you to copy portions of data that can be input.
- Paste : Allows you to paste portions of data that can be input.
- Copy Data : Separated by Commas : Copies all the records displayed.
The records are separated by commas.
This function is useful when pasting data into other items of software.
- Separated by TAB : Copies all the records displayed.
The records are separated by tab.
This function is useful when pasting data into other items of software (particularly spreadsheet applications).

[[Settings Window]]



This window allows you to specify the COM port number.
It also allows you to specify the window color, font size, and sounds issued.

[Port Settings]

COM Port : Specifies the COM port number of the RS-232C port used for communication with DL-ADP.

If you do not know the COM number, use the Windows Device Manager to check the communication port number.

A COM port number (such as COM1) is attached to the name of each available RS-232C port.

[Beep on Error]

If the sound on the computer has been enabled, you can specify whether to issue a beep when the DATA indicator turns red or when the Program issues an operational warning.

[Beep on Capture]

If the sound on the computer has been enabled, you can specify whether to issue a beep when data is captured.

[Auto Capture]

Specify whether to capture data at regular intervals (ON) or manually (OFF).

When using auto capture, specify an interval of between 0.1 to 60.0 minutes.

[Display]

Allows you to choose the display setting for the X,Y display as horizontal, or vertical.

[Color Settings]

Allows you to specify the background color of the window and the color of characters.

[Font Size for the Screen]

Allows you to change the font size of the characters displayed in the window.

<< Using the program >>=====

[[Restoring the default settings]]

This program stores the status of configurable items in the DP-10.ini configuration file.

To restore the default settings, remove the DP-10.ini file.

After you restore the default settings, a new DP-10.ini file is created the next time you start the program.

[[Getting Started]]

Make sure that communication is ready for using the Program.

- Does your computer have an RS-232C port?

Do you know the COM port number?

- * If your computer does not have an RS-232C port, use a USB-RS232C converter cable in place of the RS-232C port.

Follow the instructions in the cable manual to set up the device driver of the USB-RS232C converter cable.

- * If you do not know the COM port number, use the Windows Device Manager to check the communication port number.

A COM port number (such as COM1) is attached to the name of each available RS-232C port.

Getting the program ready.

There is no need to set up the program on your computer.

Simply double-click DP-10-E.EXE on the CD-ROM to start running the program.

You cannot save measurement files or configurations on this CD-ROM.

You can store the program in a folder on your hard drive or a USB flash drive.

We recommend using a copy saved on your hard drive or a USB flash drive.

Doing so allows you to save measurement data.

The only file you need to copy is DP-10-E.EXE.

If you want to copy the operation manual, copy the FIG folder and README.htm and save them in a folder.

[[Steps]]

[Recording data]

- 1) Using cable, connect to computer to the DP-10.
- 2) Start the Program.
 - Check the LEVELNIC settings and whether Auto Capture has been enabled.
Modify the settings as needed.
 - If needed, enter a comment or specify the maximum number of data items to be captured.
- 3) Turn on DP-10.
- 4) Start communication.
 - Capture data.
- 5) End communication.
- 6) Save the data as needed.

[Displaying measurement values]

- 1) Using cable, connect to computer to the DP-10.
- 2) Start the Program.
 - Check the LEVELNIC settings.
Modify the settings as needed.
- 3) Turn on DP-10.
- 4) Start communication.
 - You can enlarge the display area by selecting "Full Screen".
You can also change the window size by dragging it.
- 5) Stop communication.

* Trouble shooting :

When you have no communication to DP-10.

- check the Levenic setting.
- check whether the battery is low.

When the battery is low, the DP-10 will not generate an output signal.