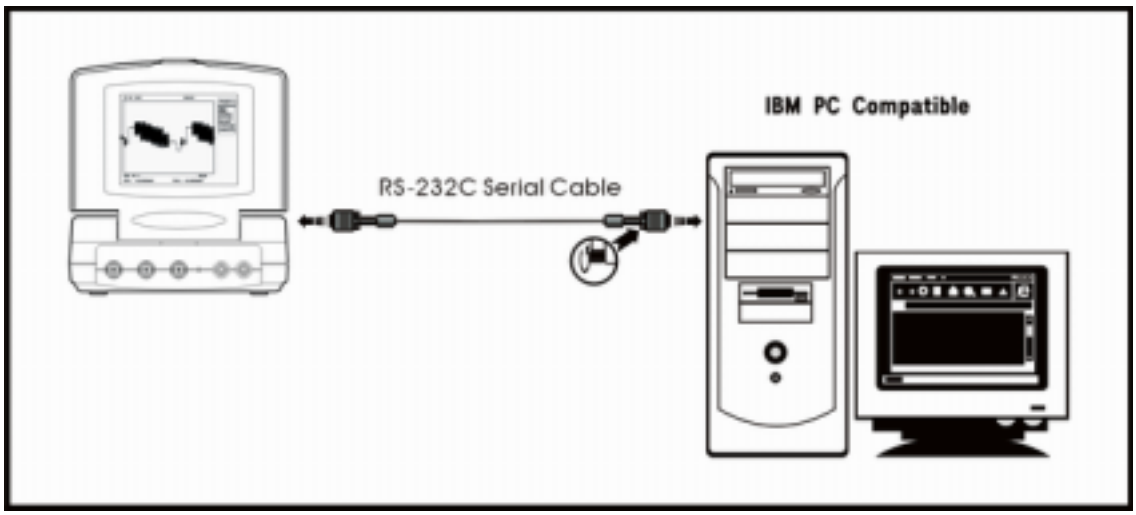
*** CONTENTS ***

1. The organization of link system



1. Minimum System Requirements

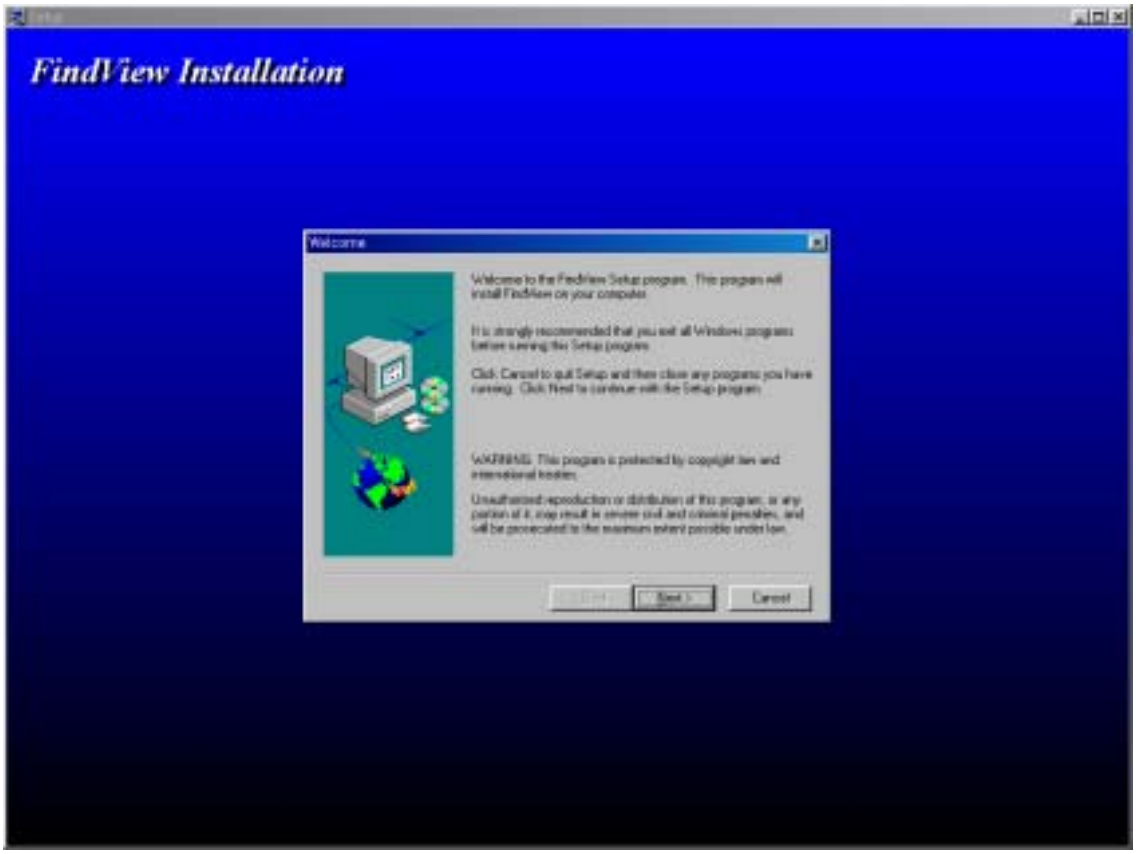
IBM PC : Minimum 486DX-2 66MHz.
OS : WIN95, WINDOWS NT 4.0 or later.
RAM : 16Mb free memory.
HDD : 40Mb hard disk space.
Video Adaptor : VGA Graphic card (256 colors at 640*480).
Mouse

2. RS-232C Serial Cable

Type : The side of IBM PC → 9 PIN D-SUB, Female.
The side of Oscilloscope → 9 PIN D-SUB, Male.
Port : Com1,.. Com4.

2. FindView Installation

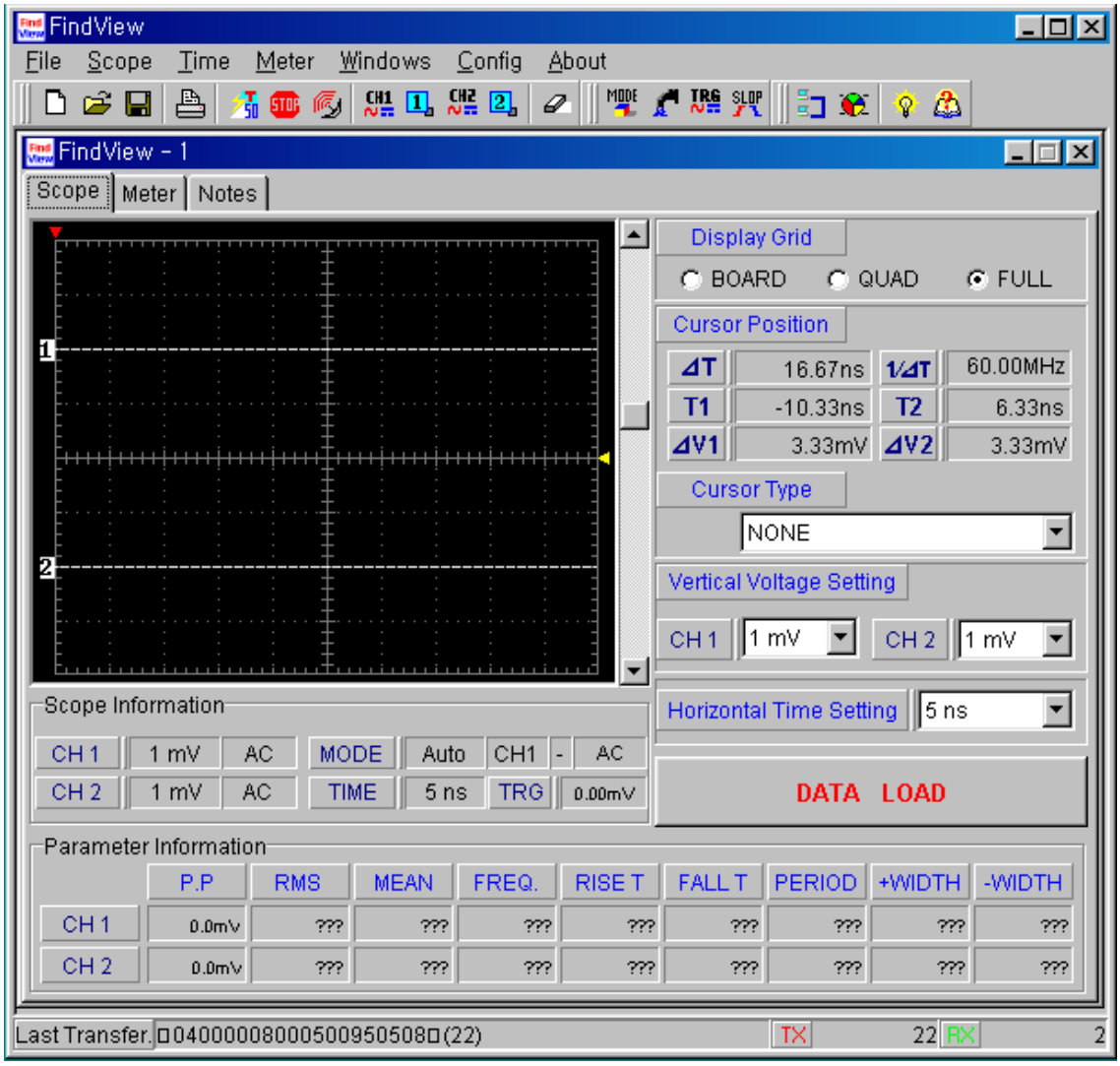
1. Insert the FindView Installation Disk.
2. Run the Setup program.
3. Follow the direction of installation program.



3. The FindView Software Main Screen

The following figure is the FindView Software Main Screen of the first activation. The following operation will be done whenever you run FindView program

1. Initialization of the communication port.
2. The previous waveform loaded from oscilloscope is displayed.



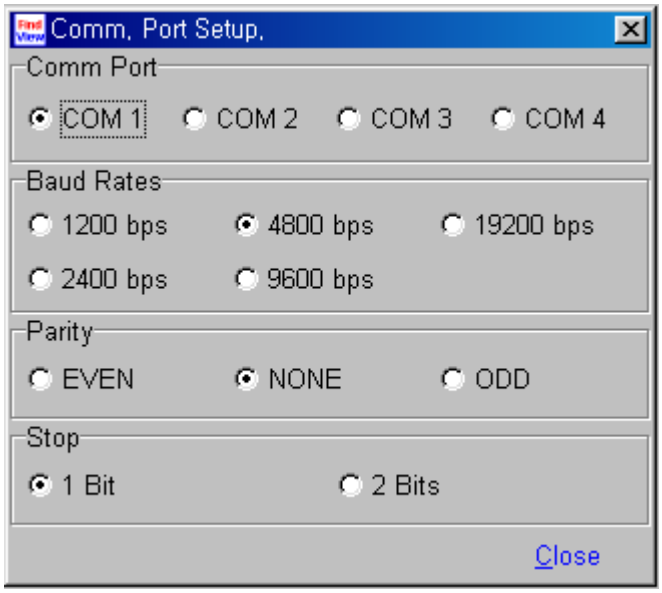
Notice) You must set the window system font to the small word type. If you have set the window system font to the large word type, the window could have been broken.

4. Communication Port Setup

If you want to reset the RS-232C port, use this Dialog Box.
If the application is activated at the first stage, the default mode is set.
This setting must be equal to the communication setting state of this unit

Default Setting

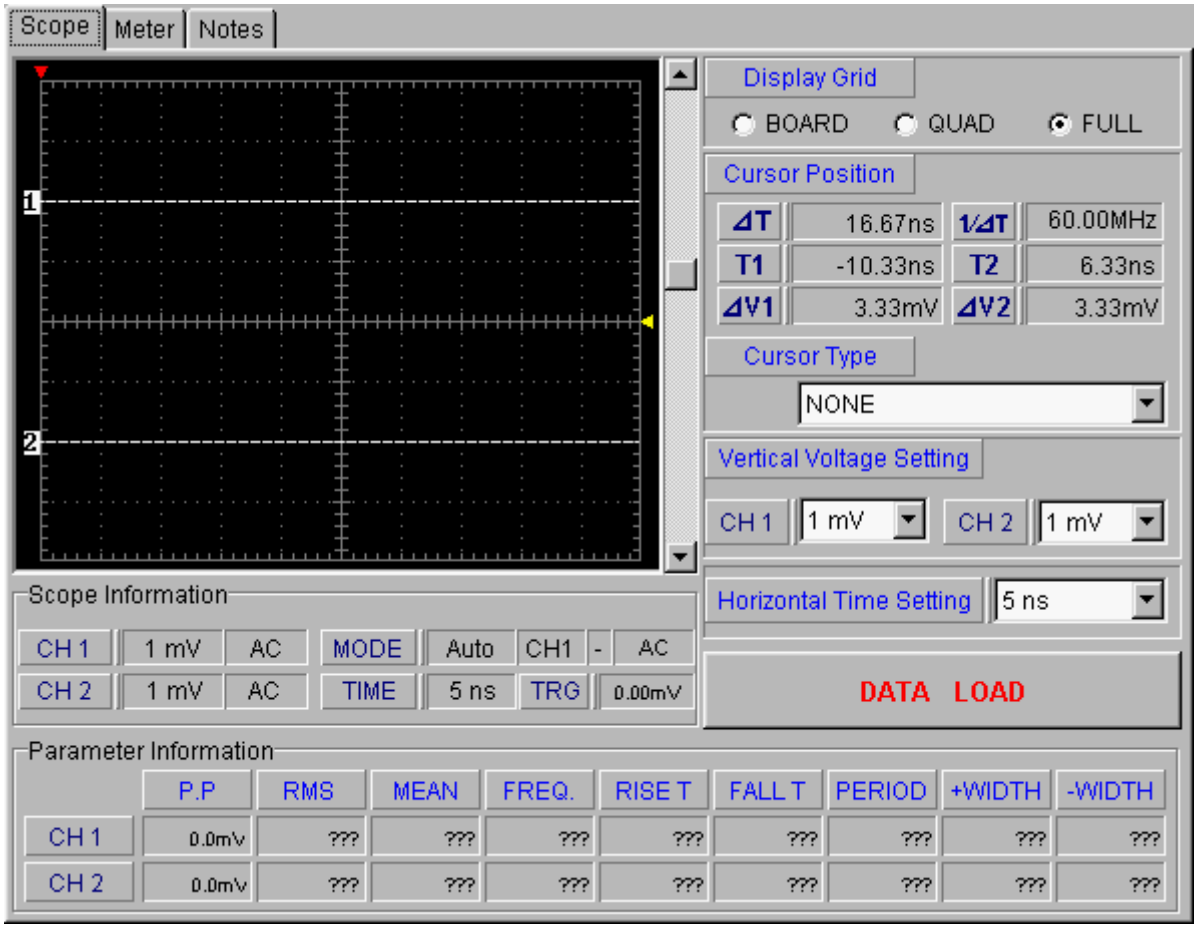
Comm Port : COM1
Baud Rates : 19200bps
Parity : NONE
Stop Bit : 1 BIT



5. Scope Window

The window of FindView Software consist of Scope Window, Meter Window and Notes Window.

The waveform transmitted from the oscilloscope and the measurement value is displayed on scope window.



Composition of the Scope Window

Main menu

The remote control of the system and the important function of FindView Software. When you control remotely some function of oscilloscope's menu, the remote controlled menu's function is not applied at the oscilloscope window menu.

If you want to confirm the applied setting, do the following process.

1. Press the ESC/ CLEAR button.

2. Move the upper menu.
3. Select the pertinent menu.

Fundamentally, the Main Menu item send the control signal to oscilloscope. That's all. That is to say, it does not change FindView display window. But the Math-Arith item of the Main Menu sends the control signal to both of them. You can execute the Scope and Time item of the Main Menu, when the scope window has been opened. As the same, Meter Menu is executed at the only Meter window.

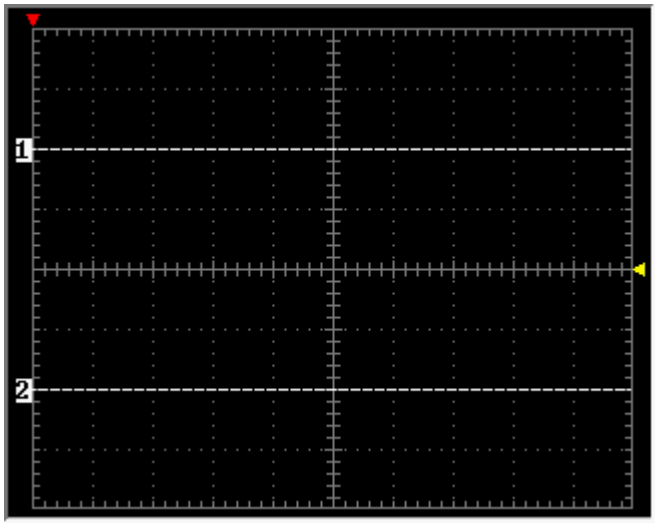
Toolbar

Short-key for the main function of menu and the remote control of this oscilloscope system.

In the main window, you can situate the tool-bar wherever you want to.

Waveform Display Window

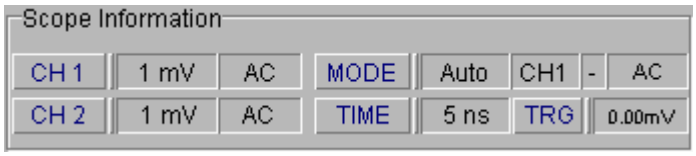
This window displays waveform transmitted from oscilloscope.



At the scope window mode, you can not control remotely oscilloscope on using the control bar in scope window. (Except for channel position, trigger level, pre trigger position, scroll bar)

Scope Information

It shows Trigger Mode and CH1, 2 Mode of the oscilloscope system, when Data Load is carried out successfully.



CH1

- 1mV : Ch1 Volt Division
- AC : Ch1 Coupling

CH2

- 1mV : Ch2 Volt Division
- AC : Ch2 Coupling

MODE

- AUTO : Trigger Mode
- CH1 : Trigger Source
- ㅡ : Trigger Slope
- AC : Trigger Coupling

TIME

-5ns : Time base

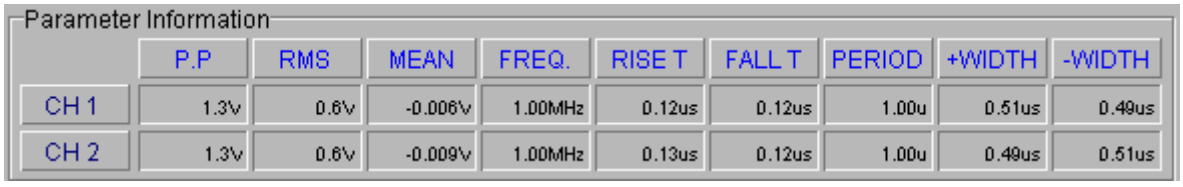
TRG

-0.00mV : Trigger Lavel

There is a possibility that TRG item unit differ from this unit

Parameter Information

It shows each measurement parameter of the transmitted waveform.



P.P : Peak To Peak Value

RMS : Root Mean Square

Mean : Mean
Freq. : Wave frequency
RISE T : Rise Time
FALL T : Fall Time
PERIOD : Wave Period
+WIDTH : Positive Pulse Width
-WIDTH : Negative Pulse Width

There is a possibility that measurement unit differ from this system unit.

Display Grid

It changes the grid style of the Waveform Display Window.

BOARD : Displays Board grid
QUAD : Displays Quad grid
FULL : Displays Full grid

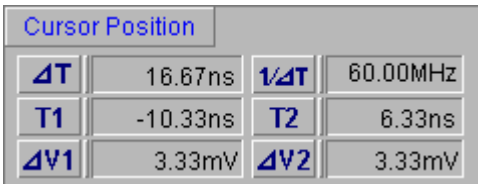
The setting items can not control remotely this unit, but the only waveform display window. And when Data Load is executed, the Grid setting state applied at this unit is displayed in the waveform display window.

Contrast Setting Scrollbar

It is the Scrollbar at the right side of Scope Screen
It controls the Scope Screen Brightness. The upper of the scrollbar is Contrast Level 0%, the lower is Contrast Level 100%.

Cursor Position

The Cursor Position in the Waveform Display Window is showed to the relative and absolute numeric value.



ΔT : The absolute value between T1 and T2.
1/ΔT : The reciprocal of ΔT, The unit is Hz.
T1 : Time expression of horizontal scale from center to cursor 1.
T2 : Time expression of horizontal scale from center to cursor 2.
ΔV1 : The voltage measurement gap of channel 1.
ΔV2 : The voltage measurement gap of channel 2.

If you want to move the cursor sprites, drag the mouse.
It is not permitted remote control the cursor in this unit's window but in the only waveform display window.

Cursor Type

It selects the cursor type.

Vertical : Vertical Cursor Type Display.
Horizontal : Horizontal Cursor Type Display.
Pair : Vertical and Horizontal Cursor Type Display.

Vertical Voltage Setting

It sets Voltage Division of the CH1 and the CH2 waveform in the current Waveform Display Window.

It is not permitted Remote Control at this Vertical Voltage Setting.
When the Data Load is executed, the setting value is loaded to the scope window. You can enlarge and reduce between 1mV and 5V.

Horizontal Time Setting

It sets Time Base of the CH1 and the CH2 waveform in the current Waveform Display Window.

It is not permitted Remote Control at this Horizontal Time Setting.
When the Data Load is executed, the default value becomes maximum range.
You can enlarge to 1ns.

Data Load

If you want to read the Waveform from the oscilloscope and every parameter, use this button.

6. Meter Window

The following display is the figure of the Meter Window Sheet.

The Mode of this unit is automatically changed if Scope Window Sheet is changed to Meter Window Sheet.

Composition, Function of the Meter Window Sheet

Data Display Part

It displays measurement data with the current setting state (DC, AC, OHM, DIODE) information from this unit Meter Mode every one second.

Max Reset, Min Reset

It shows the maximum and minimum value at the current mode.

Whenever the measurement mode is changed, it is initialized. And it shows the measurement value.

Current Mode

It shows measurement mode of the current this system Meter Mode.

Auto Range Button

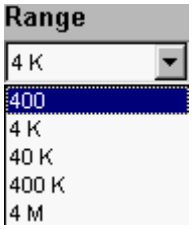
It applies the best proper Range mode to the current measurement mode automatically.

Measurement Mode Setting

It changes Measurement Mode.

Range List Box

It sets Range at the current measurement mode.



It means bad communication state that you cannot set the range. Because the

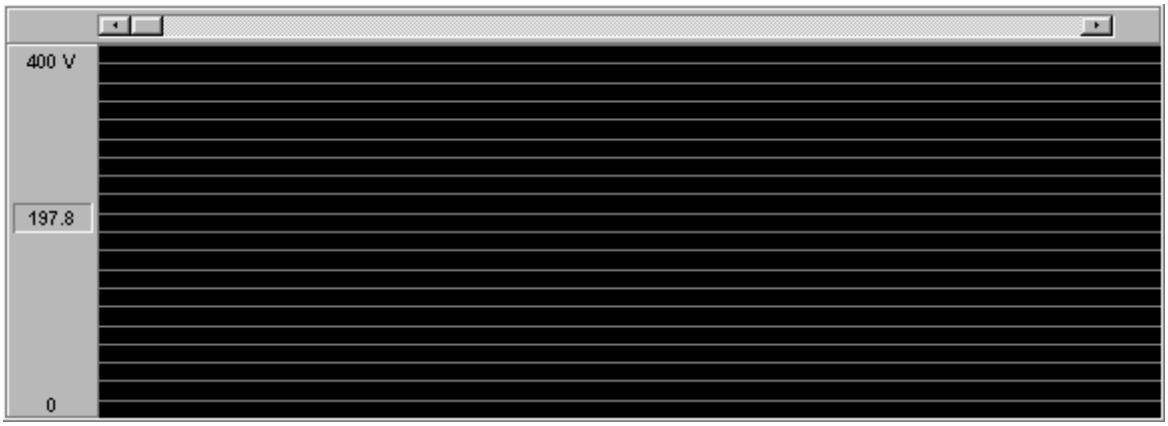
measurement data is loaded, as the range information is loaded. That is to say, if that data value is false, the setting is failed. Then, retry the setting.

Line Frequency Selection Button

This button selects the line frequency that is used for removing the line noise at VAC mode.

Logging Data Display

If Data Log button is ON(RED), it displays the data to the histogram every one second.



Y-Axis : Detected value X-Axis : Time interval

Data Log Button

Data Log ON/OFF button.

If Data Log function is operated, it is impossible for all function except for Max Reset and Min Reset to be operated. But you can change the mode.
If you want to release the Data Log function, click the Data Log Button.
If the button color is changed blue, the release is successful.
The measured data is saved the appointed file

Measure Time Limits

It assigns the measurement time before the data log function.

H : Hour
M : Minute
S : Sec

Log Window Time Range

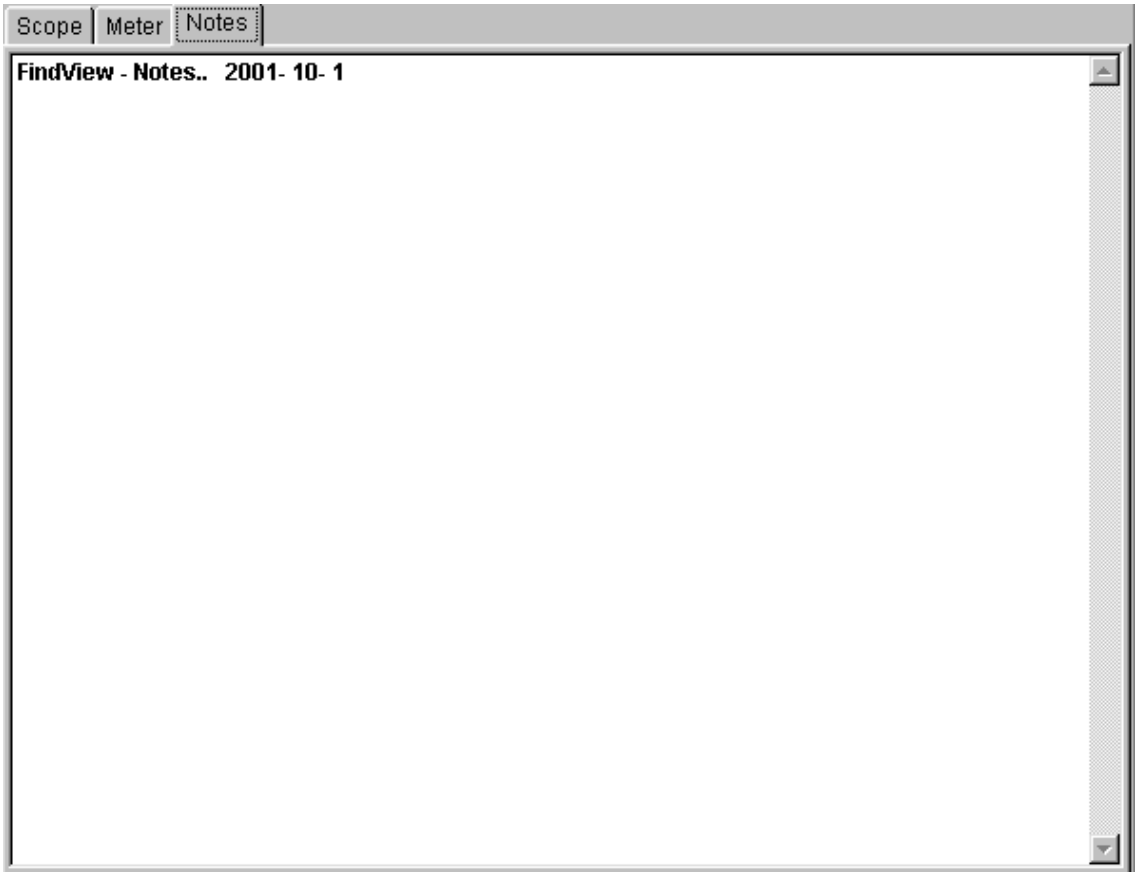
This Control Box sets up the time interval of the current Logging Data Display Window.

That is to say, It displays the graph of one hour interval at the current screen if it is assigned for one hour interval.

H : Hour
M : Minute
S : Sec

7. Notes Window

This Notes Window Sheet is the window that is composed by user and is automatically typed in the sheet as the following sheet.



8. Menus and Toolbar

Toolbar : Remote controls and commands

 : New Waveform

 : File Load : Waveform, Parameter, Notes

 : File Save : Waveform, Parameter, Notes

 : Print the Waveform, statement, Parameter, Notes
(notice: You can't print the Meter data.)

 : Trigger Setup 50%

 : HOLD/RUN Selection

 : AUTO Setup

 : CH1 Couple Setup

 : CH1 Display ON/OFF

 : CH2 Couple Setup

 : CH2 Display ON/OFF

 : Oscilloscope Waveform Clear

 : Trigger Mode Setup

 : Trigger Source Setup

 : Trigger Couple Setup

 : Trigger Slope Setup

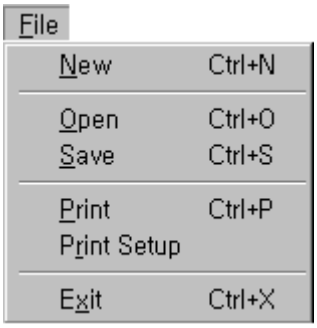
 : Com Port Setup

 : Color Setup

 : About FindView

 : Online Help

MENU : Remote controls and commands



File

New : Creates a new control window.

Open : Opens an existing Waveform, Parameter and Notes.

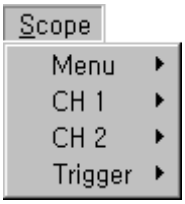
Save : Saves an opened Waveform Parameter and Notes.

Print : Print the Waveform, Statement, Parameter, Notes.

Notice : You can not print Meter data.

Print Setup : Selects a printer and printer connection

Exit : Exits FindView



Scope : Remote control menu

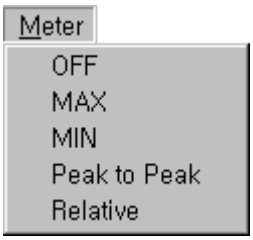
Menu : Controls main menu of the oscilloscope (remote controls)

CH1 : Controls the oscilloscope CH1 mode(remote controls)

CH2 : Controls the oscilloscope CH2 mode(remote controls)

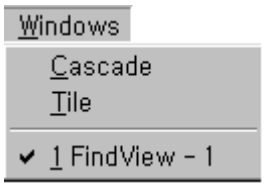
Trigger : Controls Trigger mode of the oscilloscope (remote controls)

Time : Controls time base of the oscilloscope (remote controls)



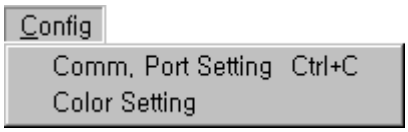
Meter : Meter Remote control menu

OFF : Measurement parameters OFF at the Meter Mode
MAX : MAX Measurement parameters ON at the Meter Mode
MIN : MIN Measurement parameters ON at the Meter Mode
Peak to Peak : Peak to Peak Measurement parameters ON at the Meter Mode
Relative : Relative value Display at the Meter Mode



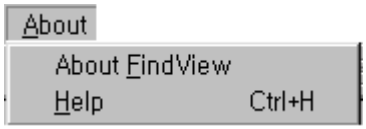
Windows

Cascade : Arranges windows in overlapped fashion
Tile : Arranges windows in non-overlapped fashion
<Document List>: List of currently open files



Config

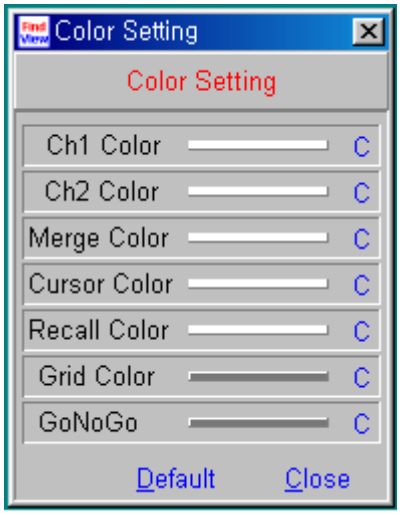
Comm Port Setting : Activates the COMM. setup dialogbox
Color Setting : Activates the color setup dialogbox



About : FindView Online Help

9. Waveform and Cursor Color Setting

If you want to reset the color about all Objects at Scope Window Sheet, use this Dialog Box.



Buttons

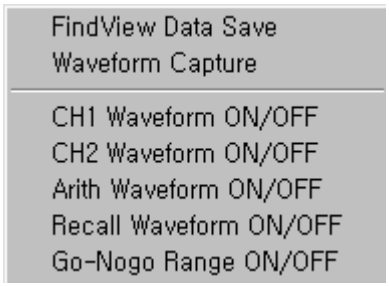
C button : Open Color Dialogbox

Default Button : Default color Setting

Close : Color Dialogbox close

10. Waveform Display and Save Menu Box

Move the mouse cursor to waveform display window and click the right mouse button. This menu appears.



FindView Data Save

It saves the current waveform and state, parameter information, Notes data.

Waveform Capture

It saves the current waveform and position information to the bit-map file.

CH1 Waveform ON/OFF

It turns on and off the CH1 Waveform.

CH2 Waveform ON/OFF

It turns on and off the CH2 Waveform.

ARITH Waveform ON/OFF

It turns on and off the ARITH Waveform.

RECALL Waveform ON/OFF

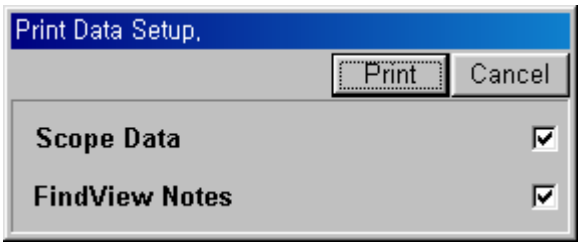
It turns on and off the RECALL Waveform.

Go NoGo Range ON/OFF

It turns on and off the Range setting of the Go- NoGo.

11. Print Data Setup

When you print the data that you want to, click this dialog box.



12. The File Format of the FindView

Waveform Screen Capture

Extension: BMP

Content : You can save the current waveform Screen to the file with BMP extension.

Method : Click the right mouse button at the Wave Display Window Select [Waveform Capture].

Waveform Screen and Setting State, Waveform Parameter

Extension : FND

Content : You can save the Waveform Screen, the Setting State and the parameter in relation to the Waveform to the file with FND extension.

Method : Click the right mouse button at the Wave Display Window. Select [FindView Data Save] or [File Save] Icon of the Toolbar.

Document File

Extension : TXT

Content : You can save the content of the Notes screen.

Method : When the file with FND extension is saved, the same filename with TXT extension is automatically saved.

Data Log File

Extension : TXT

Content : You can save the measured data value to the previous appointed file when the Data Log function is executed.

Method : Execute the Data Log function.

13. Communication Protocol

1. FindView Transmission Protocol

[0x02][ID][Data Byte Number][Data Frame][Check Sum][0x03]

[0x02]	: STX
[ID]	: Command (ID Table Reference)
[Data Byte Number]	: The Byte Number of the Data Frame
[Data Frame]	: Data
[Check Sum]	: The WORD Check Sum Between [ID] and [Data Frame]
[0x03]	: ETX

2. FindView Reception Protocol

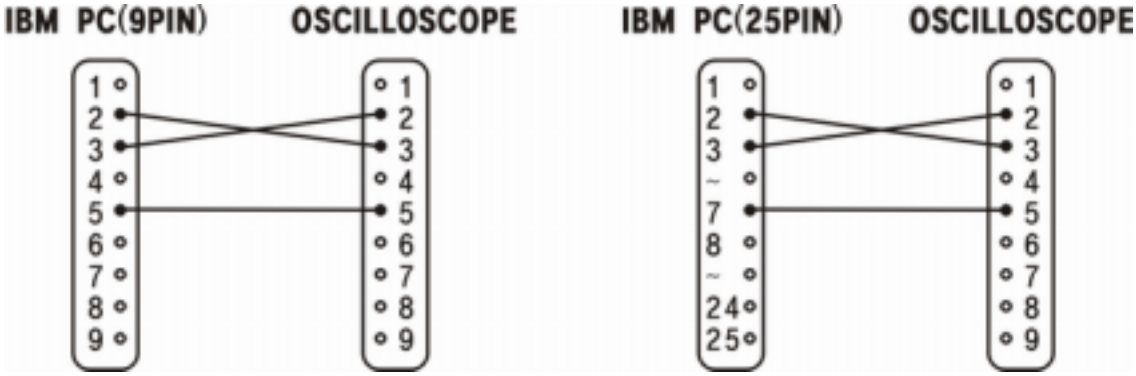
[0x02][ID][Data Byte Number][Data Frame][Check Sum][0x03]

[0x02]	: STX
[ID]	: Command (ID Table Reference)
[Data Byte Number]	: The Byte Number of the Data Frame
[Data Frame]	: Data
[Check Sum]	: The WORD Check Sum Between [ID] and [Data Frame]
[0x03]	: ETX

14. Notice at the System setting

1. You must execute FindView Software after you turned on this unit
2. According to the following rules, use the serial communication cable.

The PIN Connection of the Communication Cable



15. Check this point when you can’t communicate.

1. Check the connection state of the communication cable.
2. Check the communication port setting.
3. Compare FindView S/W version with system software version.
   At this time, you must use system software version 1.02 or later.
   Otherwise, exchange the program through the local agency or service center.
4. Check the use of the proper communication cable