

FIELD RECORDING UNIT CONTROL PROGRAM

esNavi

User's Manual

Thank you for purchasing the Field Recording Unit es8.

Please read this manual before using the product.

Then, keep the manual handy.

Notes:

The company name or product name described on this manual is a trademark or a registered trademark.

Further, the contents of this manual may be changed without notice.

TEAC

TEAC Corporation




July, 2006, Revision 1.1.1






Manual Part Number D00860600X




Revision History

Revision	Date	Description
1.0.0	Dec. 2004	First edition
1.0.1	Dec. 2004	esNavi Version 1.00 covered
1.0.2	Jan. 2005	Option functions added
1.0.3	Jan. 2005	Program installation procedure added, Cautions for unguaranteed operation of USB HUB added, explanations for trigger recording function added
1.0.4	Mar. 2005	<System> added
1.1.0	July. 2005	X-Y display/FFT display added, GPS information added
1.1.1	July. 2006	Company name is changed to TEAC Corporation

For Safe Use

	This symbol designates the cautions (including warnings) to which you must pay attention.
	This symbol designates activity that is prohibited. This symbol indicates what is prohibited. (The left figure means "Disassemble is prohibited")
	This symbol designates a mandatory action or activity to be performed. This symbol illustrates the nature of the action. (The left figure means, "Unplug power cord from the power outlet.")

 WARNING	<p>A failure to observe the precautions indicated by this symbol may result in serious injury or death.</p>
	<p>■ If an abnormality occurs, continuing to work during the abnormal condition (e.g., smoke emission or a bad odor), could result in fire or electric shock. Turn the power supply off immediately and unplug the power cord from the power outlet. After you confirm that there is no (further) smoke emission, contact the TEAC customer service division for repair.</p>
	<p>■ Do not open the cover Do not remove the cover of this equipment. This could result in electrical shock. You may contact the TEAC customer service division for internal check or repair. Do not modify this equipment. This could result in fire or electrical shock.</p>
	<p>■ Do not damage the cable Do not place heavy objects on the cable. Any kind of damage or work to, or unnatural bending, twisting, stretching, or heating of, the cable should be avoided.</p> <p>■ Do not use at input voltage exceeding the supply voltage described on specifications This could result in fire or electric shock.</p>
	<p>■ Prevent dampness or moisture Do not let this equipment get wet. Operation while its interior is wet or damp could result in fire or electrical shock. If moisture gets inside, turn the power supply off immediately and unplug the power cord from the power outlet. Then, contact the TEAC customer service division.</p>

	A Failure to observe the precautions indicated by this symbol may result in injury or property damage.
CAUTIONS	
	<p>■ Unsuitable locations</p> <p>Do not place the equipment at the following sites. It may result in fire or electrical shock.</p> <ul style="list-style-type: none"> - in a place where the equipment may be exposed to oily smoke (e.g., smoke from cooking oil) or steam or where there is a moisture nearby. - in a humid or dusty places. - on an unstable surfaces, such as a tilted or unsteady table. - in a place where the equipment may be exposed to direct sun light
	<p>■ Do not touch with wet hand</p> <p>It may result in an electrical shock.</p>
	<p>■ When not in use for a long period</p> <p>When not using this equipment for a long period of time, unplug the power cord.</p>

Warranty

Software Warranty

- The software product warranty period is 90 days following the purchase of the product?
TEAC warrants that the SOFTWARE will be usable for the purpose indicated in TEAC's document if properly installed on a computer. If the SOFTWARE is not usable for the purpose indicated in TEAC's document during the warranty period, the customer may request modification of the product through a dealer. If TEAC considers it impossible to modify the SOFTWARE, the customer may return the product for a refund. TEAC does not warrant that the operation of the SOFTWARE will be uninterrupted or error free.
- No liability for consequential damages: In no event shall TEAC be liable for any consequential damages whatsoever (including damages for loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of, or inability to use, the SOFTWARE, even if TEAC has been advised of the possibility of such damages.
- The guarantee described above is available in Japan only.

SOFTWARE LICENSE AGREEMENT

- The right to use the software ("SOFTWARE", excepting one with an explicit license agreement for each case) provided with the product of TEAC Instruments Corporation ("TEAC") is granted only on the condition that you agree to the license agreement. If you do not agree to the license agreement, you may return the entire software package for a refund.
If you violate the condition of the SOFTWARE license Agreement as described below, resulting in copyright infringement against TEAC, you will be prohibited from using the SOFTWARE or you will be prosecuted to the maximum extent possible under the law.
- This agreement comes into effect when you begin to install the SOFTWARE. If you do not agree to the license agreement, do not install the software. If you have already finished installing it, close it in order to end the SOFTWARE operation and uninstall it immediately.
- TEAC grants to you the right to use the SOFTWARE on one computer only.
- Purchasing the SOFTWARE does not mean that any right, authority, or rights are owned by the customer. The SOFTWARE is a copyrighted work owned by TEAC and is protected by the Universal Copyrights Convention or the Berne Convention for the Protection of Literary and Artistic Work. All title and copyrights in and to the SOFTWARE are owned by TEAC.
- You may not reproduce the SOFTWARE, except for archival purpose. You may not reverse engineer, decompile, or disassemble the SOFTWARE. You may not distribute the SOFTWARE to third parties without prior written permission by TEAC.
- If you have any questions concerning this Agreement, please submit them to the address below:

TEAC CORPORATION
3-7-3 Naka-cho, Musashino-shi, Tokyo,
180-8550 Japan
E-mail: tic_cs@teac.co.jp
FAX: +81-422-52-1990

About this manual

This manual describes how to operate esNavi exclusive control program for es8 running on a Windows PC.

Please read the es8 User's Manual carefully before using this program.

Rules for expressions in this manual

Items or messages shown in the PC program are indicated by such descriptions as **<MENU>** or **<Are you sure?>**.

The control button or selection items in the PC program are expressed by such descriptions as **[REC]**.

Index

Section 1 Preface	1
1.1. Overview	1
1.2. Feature	1
1.3. Caution Item	1
Section 2 Program & Driver Installation	3
2.1. Recommended Operating Environment for esNavi	3
2.2. Installing esNavi	3
2.3. Installing the Device Driver for es8	5
2.4. Disconnecting es8 from PC	7
Section 3 Configuration using esNavi	9
3.1. Starting & Ending the Program	9
3.2. Configuring Record Settings	10
3.2.1. <File>: Setting the record destination	10
3.2.2. <System>: Setting of Sampling frequency and Clock	11
3.2.3. <Channel>: Setting of Channel	11
3.2.4. <Trigger>: Setting of Trigger record condition	12
3.2.5. <Comparator>: Setting of Comparator output	12
3.2.6. <Event>: Setting of Event	13
3.2.7. <View>: Setting of Waveform View	14
3.2.8. <XY>: Setting of the X-Y display	14
3.2.9. <FFT>: Setting of the FFT display	15
Section 4 Recording and Monitoring by esNavi	17
4.1. Operations for Recording and Monitoring	17
4.2. Operations for Display	17
4.2.1. Operations to show waveform in display	18
4.2.2. Display of Max./Min./Averaging value	18
4.2.3. Display of channel property	19
4.2.4. Overwriting	20
4.2.5. Choosing display mode	21
Section 5 Recorded File List	25
Section 6 Saving and Loading Setting Information	27
Section 7 Other Operations	29
Section 8 Functions of Option	31

Section 1 Preface

1.1. Overview

The esNavi is an exclusive navigation program for a handy type of field recorder, es8, which allows you to record signals of 8 channels on a CompactFlash® (CF) memory card. Thanks to the esNavi program, you can create settings for a variety of parameters, viewing on the PC display, and saving data on the PC hard drive by connecting Windows PC through a USB cable.

The recorded file can be shown as a type of waveform by using the PL-D2860 ExtrTAFf program, which can be downloaded from the TEAC web site without charge, or the PL-S1001LX View program available in the marketplace.

1.2. Feature

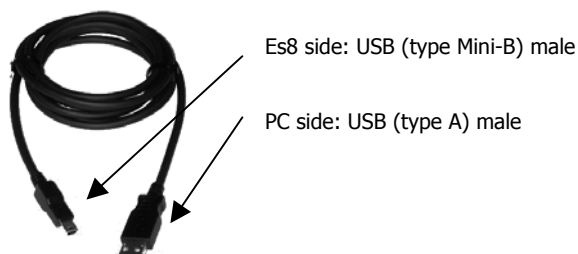
- Can easily configure es8 recording condition by graphical user interface .
- Able to do es8 recording control in remote site.
- Bar meter and digital panel display are available, in addition to a waveform display of a maximum of 8 channels as a data monitor on the PC.
- A data file of TAFfmat or CSV format can be created on the PC hard drive, as recording data on CompactFlash®(CF) inserted in es8.
- Connecting or disconnecting the PC is possible, even while the es8 main unit is recording (in the case of CF memory card recording mode only). (You must boot the esNavi program after connecting and close it before disconnecting.)

1.3. Caution Item



CAUTIONS

- A general USB cable is required to connect the PC to the control es8. Please buy the following USB cable in the marketplace:



- The esNavi program doesn't have a function to show the wave form of the recorded data file. A PL-D2860 ExtrTAFf program, which can be downloaded from the TEAC web site without charge, or the PL-S1001LX View program is available in the marketplace for this function.
- Operations via USB HUB are not guaranteed. Please, connect the USB cable directly to the USB port of the PC main unit.

Note:

Section 2 Program & Driver Installation

This section explains the PC requirements for connection with es8, installation of the driver for es8 and the esNavi program.

2.1. Recommended Operating Environment for esNavi

CPU: Pentium 850 MHz or more

OS: Windows 2000/XP

Memory: 256MB or more recommended.

Free space on HDD: Requires free space exceeding the amounts of data files to be submitted

USB interface: USB1.1 or 2.0 interface compatible with OHC1 or UHCI

12Mbps Full Speed only available for the es8 side

CD-ROM drive: For reading the attached utility disk

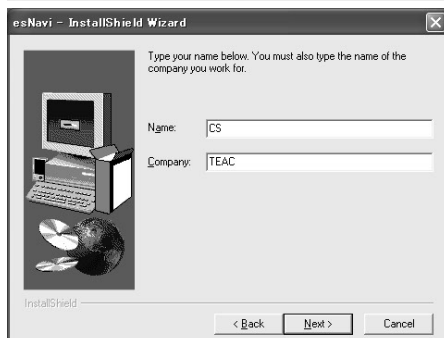
2.2. Installing esNavi

Before connecting the PC to es8, insert the attached CD(Application Software CD-ROM T001107-00□) into the PC's CD-ROM drive.



1. The install wizard (see the left figure) will appear automatically as the auto-run action starts

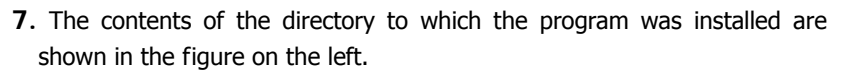
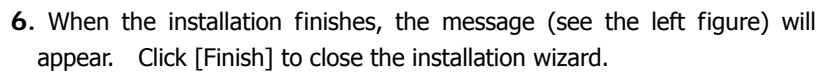
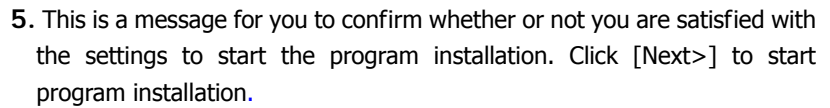
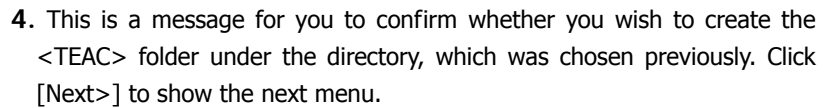
In case it doesn't automatically, double click the CD-ROM icon to run the install wizard. Click [Next>] to show the next menu.



2. Input <Name:> and <Company:> and click [Next>] to show the next menu.



3. The destination directory, to which the program is installed, will appear. Click [Browse...] to change the directory. Click [Next>] to show the next menu.



2.3. Installing the Device Driver for es8

In this section, the procedure to connect es8 with the PC initially is explained using Windows XP as the example.
The device driver for es8 is included in the CD-ROM.

1. Turn the es8 power supply on.



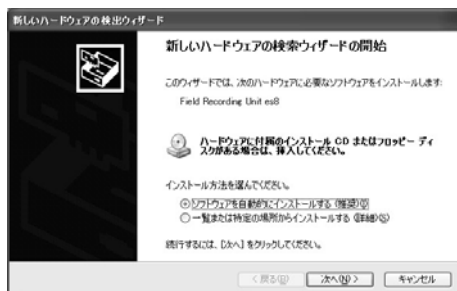
CAUTIONS

The es8 requires an AC adaptor to be attached and an external battery or internal cell battery as a power supply. The PC cannot be accessed by USB cable for use as a power resource.

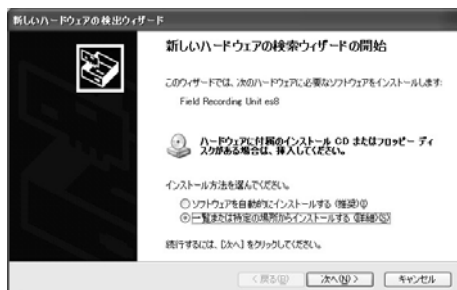
A USB cable is not attached to es8 as a standard accessory. Please, purchase a general USB cable in the marketplace.

2. Insert the attached CD-ROM into the PC. Alternatively, copy the driver folder from the attached CD-ROM to the local PC hard drive.

3. Connect es8 to the PC's USB interface by a USB cable.



4. Shortly after the connection has been established, < Welcome to the Found New Hardware Wizard > will appear.



5. Check the <install from the list or specific location [Advanced]> check box and click on the [Next(N)] button.



6. Check the <Search for the best driver in these locations> box and click on the [Refer(R)] button to specify the directory of the CD-ROM or the PC where the es8 driver is.



7. Click on the <Next(N)> button to start the USB driver installation for es8.



8. After the driver file has finished copying, the setup finished dialog box will appear. Click on the [Finish] button to end the driver installation.



9. To confirm whether or not the driver was properly installed, right click on My Computer on Desktop and choose [Property] to show the <System Property> dialogue.

Click on [Device Manager(D)] of <Hardware> tab sheet to show <Device Manager> dialogue.

Please check to ensure that <TEAC Device> - <TEAC Field Recording Unit es8> is shown in the <Device Manager> dialogue.

If it doesn't appear properly, please check the cable connection between es8 and the PC, and install the driver again.

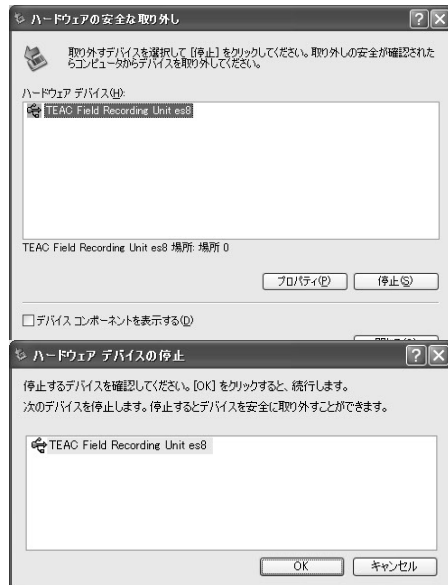
2.4. Disconnecting es8 from PC

To disconnect es8 when it is connected to a PC by USB cable, use the following procedure.



CAUTIONS

Disconnect es8 only when the esNavi program is being closed.



1. Right click on the <Safely Remove Hardware> icon, located on the lower right side of the screen, and then click [Safely Remove Hardware (S)].
2. The <Safely Remove Hardware> window will appear.
3. Choose [TEAC Field Recording Unit es8] from <Hardware Device (H) :> and click on [STOP(S)].
4. After a while, the <Stop a Hardware device> window will appear. Click [OK].
5. Confirm that the [TEAC Field Recording Unit es8] item is disappearing from <Safely Remove Hardware> before disconnecting the USB cable and es8 from the PC.


Note:

Section 3 Configuration using esNavi

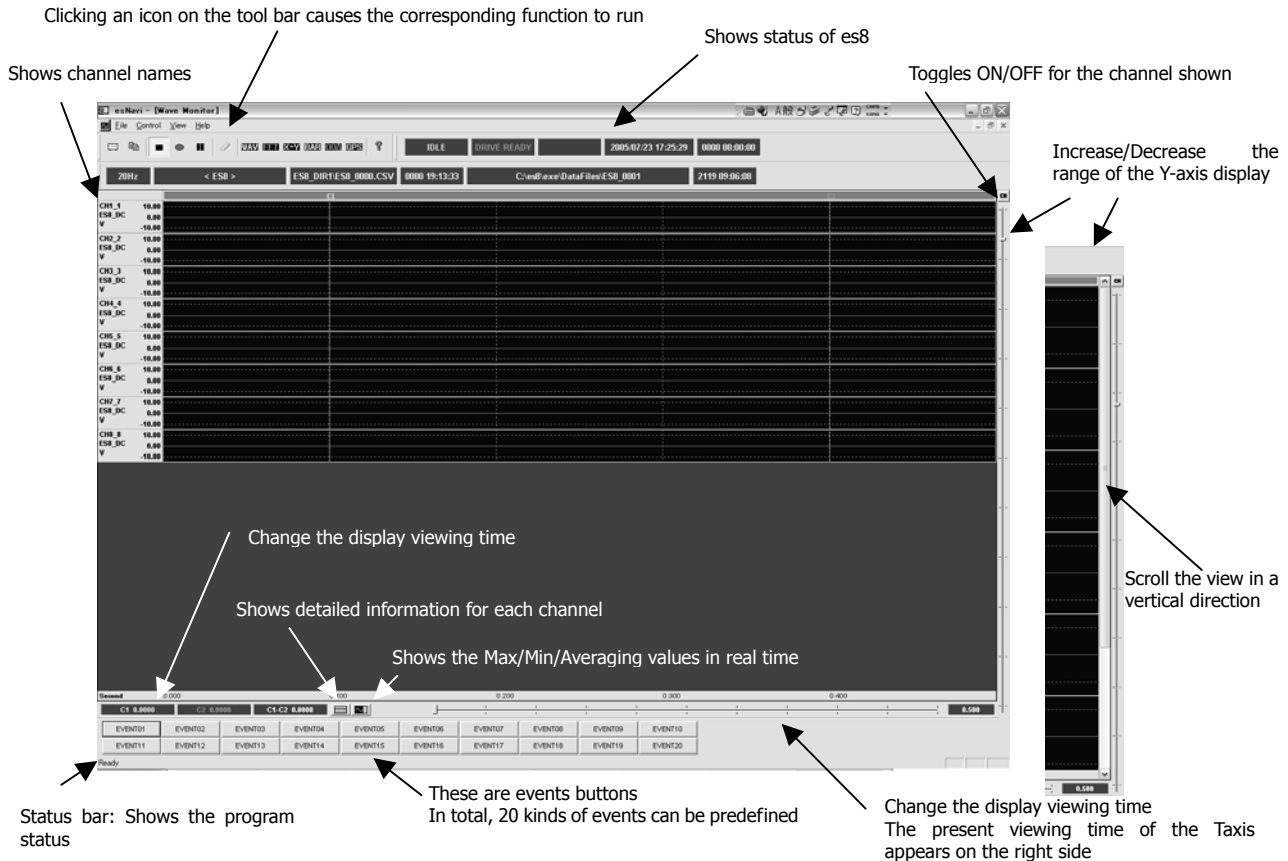
In this section, esNavi's main display and procedure for establishing the optimum es8 settings for recording are explained.

3.1. Starting & Ending the Program

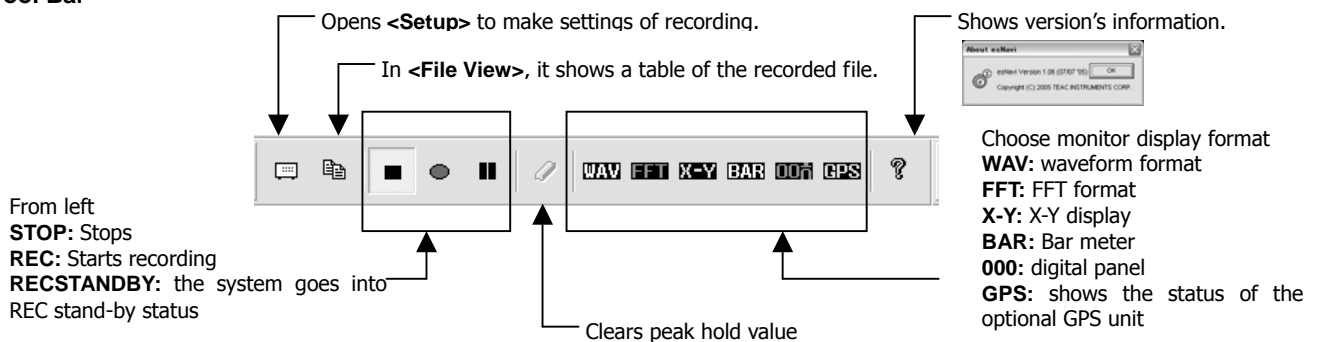
Connect es8 to the PC.


Double click the  esNavi.exe icon to run the esNavi program and the main display will appear.

In the main display, the following operations are available.




Tool Bar



To end the program, click  on upper right corner of the main window, or click [Exit] from [File] of the menu bar.

3.2. Configuring Record Settings

Click  on the tool bar to show <Setup>.

If you click a tab sheet shown in <Setup>, the corresponding setting menu will appear.

3.2.1. <File>: Setting the record destination

Please, choose the inserted CF memory card, the PC, or the simultaneous recording on the CF memory card plus the PC. In addition, you can create settings, such as destination directory name, recording file name, and recording type for each media.



CAUTIONS

Please make sure to insert the CF memory card formatted by FAT16 before deciding to record data on the CF memory card.

The available destination device, media, or folder for recording will be shown.

If you click + symbol, a folder in the next lower directory or the saved name of the recorded file will appear.

Check the box if recording on the CF card

Specify the directory name in which to save the recording file

Specify the recording file name.

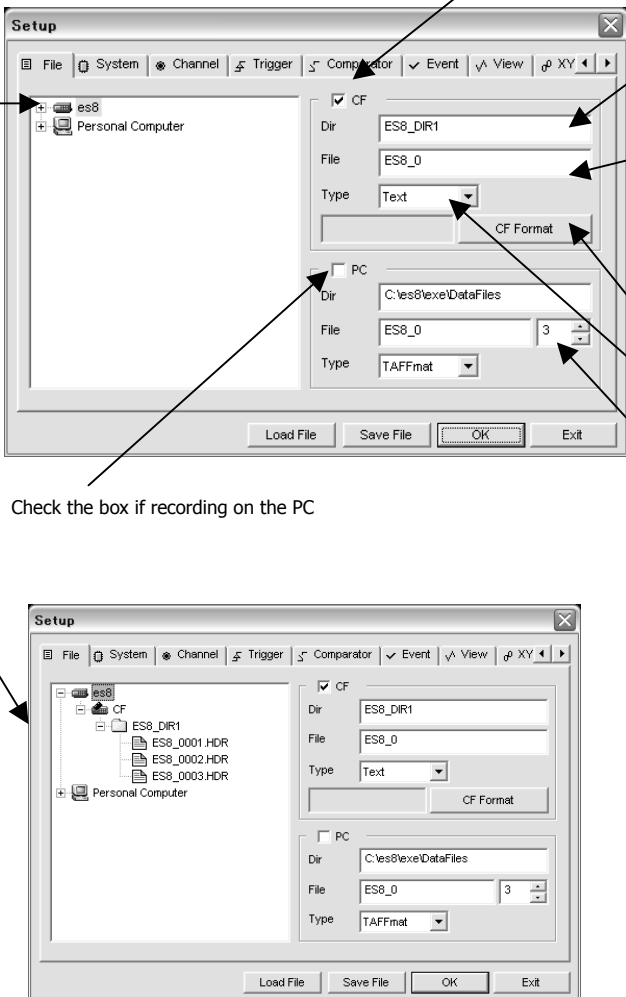
When recording on the CF card, the recording file name consists of the specified name and a 3-digits sequential number, which increases by one on each recording

Format CF memory card

Select the recording file type

When recording on the PC, you can set the digits of the sequential number that increases for each recording

Check the box if recording on the PC



3.2.2. <System>: Setting of Sampling frequency and Clock

Please, choose the inserted CF memory card, the PC, or the simultaneous recording on the CF Memory card plus PC. In addition, you can create setting, such as destination directory name, recording file name, and recording type for each media.

Set the sampling frequency.

If you choose [ON], panel operation of es8 will be disabled.

Set the clock.

If you click [Set], setting the time shown on the left side of the button will be set on es8.

If you click [Set PC Clock], setting the PC time shown on the left side of the button will be set on es8.

Comments (text) that will be recorded on the header file can be input.

Actions to take when the external power supply battery is low
[Close File] Stop recording and start file closing. If the external supply recovers, it will restart to save as a new file automatically.
[Continuous] Keeps on recording by internal battery. If the external supply recovers, it switches to the external one and continues to save. If the external one does not recover, the system stops saving and begins file closing when the internal battery reaches a low state.

Set the offset value between world standard time and local time when using the optional GPS unit. Input a value of 9 00, as shown here, to set to Japan standard time.

In the case of using optional GPS unit, choose whether or not to record the following information. (Set [ON] to record)

Lat./Lon.: Latitude/Longitude

Alt.: Altitude of antenna location

Speed: Speed

Course: Course

If the storage destination is PC, this information will not be recorded.

3.2.3. <Channel>: Setting of Channel

You can set record ON/OFF, input range, slope value, and offset value for each channel.

name	range	unit	slope	offset
<input checked="" type="checkbox"/> CH1_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH2_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH3_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH4_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH5_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH6_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH7_ES8_DC	2 V	V	1.000000	0.000000
<input checked="" type="checkbox"/> CH8_ES8_DC	2 V	V	1.000000	0.000000

Click channel, which you might want to set, in order to highlight it.

A Setting is available for the highlighted channel.

Use: To set the recording channel, choose [ON].

Name: Input channel name.

Range: Choose input range.

Unit: Input physical quantity unit.

Slope: Input slope value.

Offset: Input offset value.

3.2.4. <Trigger>: Setting of Trigger record condition

You can choose trigger recording mode and set the condition. Please click the channel to create settings of the highlighted channel.

External: Check the box if you are using the external trigger.

Interval: Check the box if you are doing interval recording.

To record by trigger, es8 must always be in recording standby (REC STANDBY) status after trigger setting. In the case of external trigger without pre-trigger setting, it is not necessary to be in recording stand-by status.

name	state	level_h	level_l
CH1_ES8_DC	Edge Down	30 %	30 %
CH2_ES8_DC	Ignore	0 %	0 %
CH3_ES8_DC	Ignore	0 %	0 %
CH4_ES8_DC	Ignore	0 %	0 %
CH5_ES8_DC	Ignore	0 %	0 %
CH6_ES8_DC	Ignore	0 %	0 %
CH7_ES8_DC	Ignore	0 %	0 %
CH8_ES8_DC	Ignore	0 %	0 %

Set logic of level trigger.

OFF: don't use level trigger.

AND: Level trigger will occur when all conditions, set for each channel, are satisfied.

OR: Level trigger will occur when either of the conditions, set for each channel, is satisfied.

Level trigger will occur when the condition has been satisfied the number of times set in Level Count.

Set monitor conditions for each channel. Click the channel to choose, and select the condition to be set for the channel from the list box below.

State: Choose pass condition of trigger level, such as [Ignore], [Edge Up], [Edge Down], [Window In], and [Window Out].

Level High/Level Low: Set threshold level. In the case of Window, set the upper and lower limits.

Pre Scan: Set the pre-trigger area in the scan number

Post Scan: Set the post-trigger area in the scan number

Rec Time: Set the recording time after trigger occurs (unit:sec)

Rec Count: Set the repetition counts of recording

Start Time: Set the starting time of recording

Interval Time: Set the time from the end of recording until the next recording starts in case of interval recording (unit:sec)

3.2.5. <Comparator>: Setting of Comparator output

Set the comparator output conditions. Click the channel to create the setting for the highlighted channel.

Set logic of comparator output conditions.

OFF: don't use comparator output

AND: Level trigger will occur when all conditions, set for each channel, are satisfied.

OR: Level trigger will occur when either of the conditions, set for each channel, is satisfied.

name	state	level_h	level_l
CH1_ES8_DC	Level Up	40 %	40 %
CH2_ES8_DC	Ignore	0 %	0 %
CH3_ES8_DC	Ignore	0 %	0 %
CH4_ES8_DC	Ignore	0 %	0 %
CH5_ES8_DC	Ignore	0 %	0 %
CH6_ES8_DC	Ignore	0 %	0 %
CH7_ES8_DC	Ignore	0 %	0 %
CH8_ES8_DC	Ignore	0 %	0 %

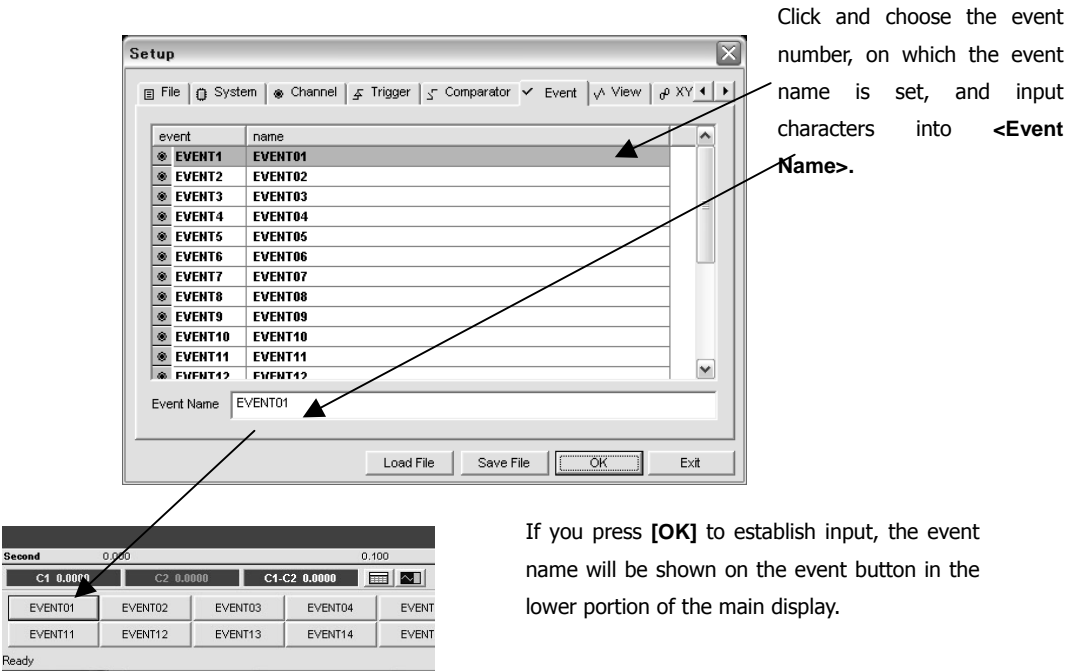
Set monitor conditions for each channel. Click the channel to choose, and select the condition to be set for the channel from the list box below.

State: Choose pass condition of trigger level, such as [Ignore], [Level Up], [Level Down], [Window In], and [Window Out].

Level High/Level Low: Set threshold level. In the case of Windows, set upper and lower limits.

3.2.6. <Event>:Setting of Event

You can configure a maximum of 20 kinds of events and record the data of the recording file. Each event's information is recorded on the header file.

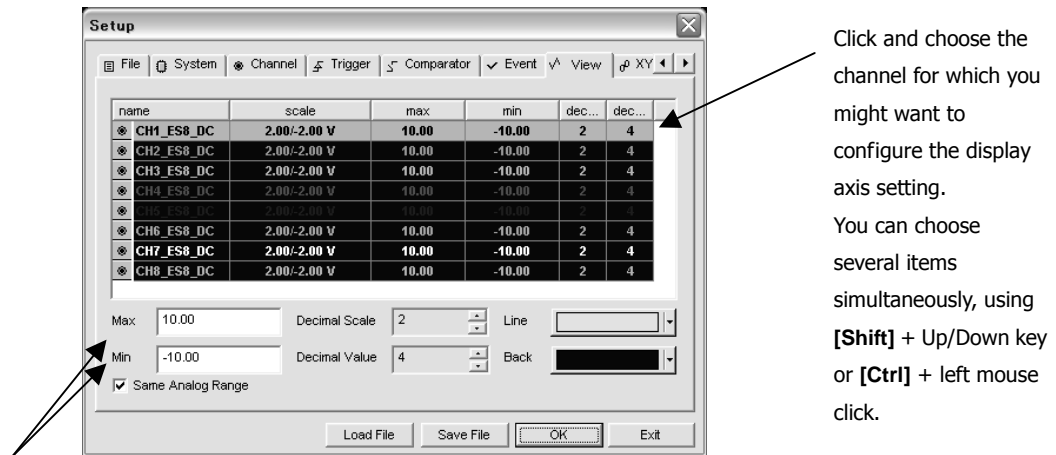


Example of header files of PC recording when the event button is clicked

```
DATASET ES8_0001
VERSION 1
SERIES CH1_ES8_DC,CH2_ES8_DC,CH3_ES8_DC,CH4_ES8_DC,CH5_ES8_DC,CH6_ES8_DC,CH7_ES8_DC,CH8_ES8_DC
DATE 07-23-2005
TIME 18:54:00.00
RATE 20.000000
VERT_UNITS V,V,V,V,V,V,V,V
HORZ_UNITS Sec
COMMENT < ES8 >
NUM_SERIES 8
STORAGE_MODE INTERLACED
FILE_TYPE INTEGER
SLOPE 0.000080,0.000080,0.000080,0.000080,0.000080,0.000080,0.000080,0.000080
X_OFFSET 0.000000
Y_OFFSET 0.000000,0.000000,0.000000,0.000000,0.000000,0.000000,0.000000,0.000000
NUM_SAMPS 420
DATA
DEVICE PC(es8)
MARK 212,272,340
EVENT1 EVENT01,212
EVENT4 EVENT04,272
EVENT6 EVENT06,340
```

3.2.7. <View>: Setting of Waveform View

Set Y-axis scale, graph line, and background color of waveform view. Click the channel to create the setting of the highlighted channel.



Create settings of graph axis or value display for the chosen channel.

Max: Input the maximum value to be shown.

Min: Input the minimum value to be shown.

Decimal Scale: Specify the number of digits under the decimal point of the range information shown in the display.

Decimal Value: Specify the number of digits under the decimal point of the data display, such as digital display.

Line: Choose the color of the graph line.

Back: Choose the background color of the graph

Same Analog Range: Shows the rating of the input range as Max/Min values when the box is checked.

(If offset and coefficient have been set, the value would be arranged according to the value.)

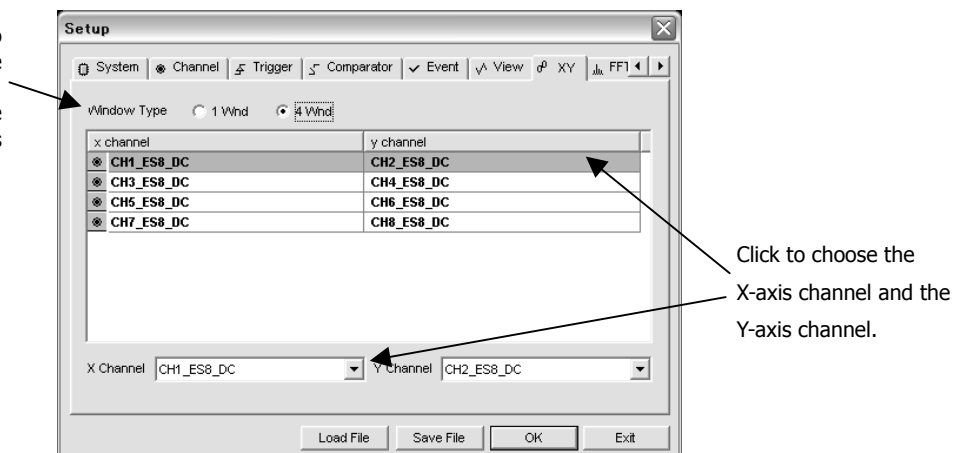
3.2.8. <XY>: Setting of the X-Y display

Set the display mode and display channel of the X-Y display. Click the highlighted item to choose the channel for the X-axis and Y-axis.

Choose display mode.

<1Wnd>: Overwrite to display the data in one window

<4Wnd>: Display the data in 4 windows independently



3.2.9. <FFT>: Setting of the FFT display

Set the FFT display for 4 channels that you might want to see. You can configure the display mode, each parameter of FFT display, and the display scale of highlighted item.

Choose display mode.

<1Wnd>: Overwrite to display the data in one window

<4Wnd>: Display the data in 4 windows

name	max	min	zero	dec...	dec...
CH1_ES8_DC	100	0	100.000000	0	3
CH2_ES8_DC	100	0	100.000000	0	3
CH3_ES8_DC	100	0	100.000000	0	3
CH4_ES8_DC	100	0	100.000000	0	3

Click to choose

Channel: Choose display channel

Zero: Input value of 0db

Max: Input maximum value shown on the Y-axis

Min: Input minimum value shown on the Y-axis

Decimal Scale: Specify the number of digits under the decimal point of the range information shown in the display

Decimal Value: Specify the number of digits under the decimal point of the "data display".

Choose the channel of the channel-axis and the channel of the Y-axis

Spectrum Type: Choose the FFT type

Spectrum Line: Choose the FFT display resolution

Spectrum Window: Choose the FFT window function

X Axis: Choose the X-axis display scale

Y Axis: Choose the Y-axis display scale

DC Cut: If the box is checked, data from which the DC element is cut off will be shown

Same Analog Range: If the box is checked, the rating of the input range will be shown as Max/Min values

Note:

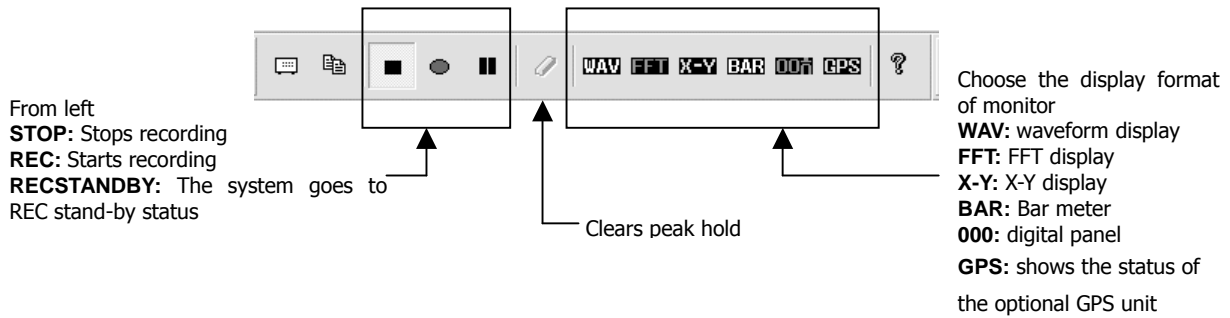
Section 4 Recording and Monitoring by esNavi

You can record while monitoring data after finishing the required setting.


4.1. Operations for Recording and Monitoring

To start or stop recording and choose the monitor mode, click the corresponding icon on the Tool Bar.

Tool Bar

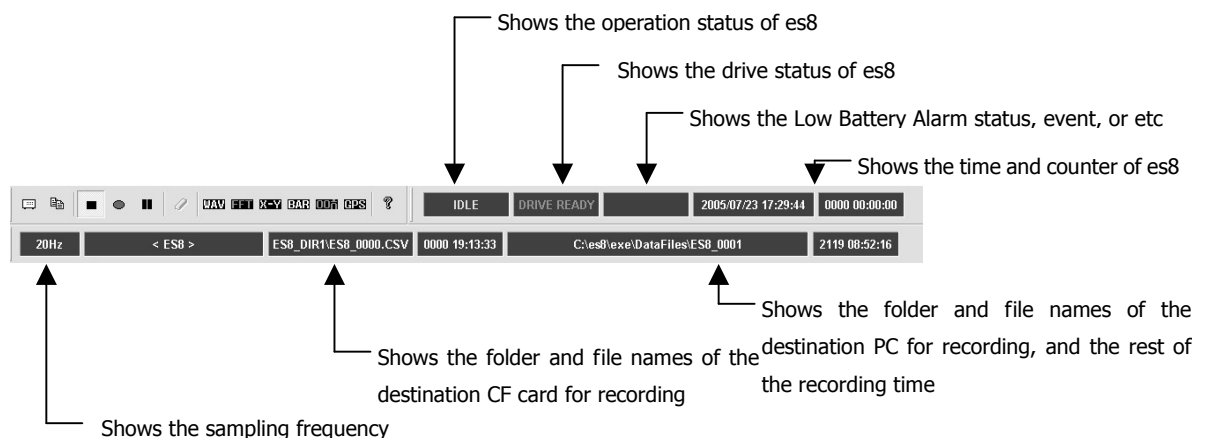


注意

To do trigger recording on a preset condition, click  on the tool bar to make the system go to REC stand-by status, as well as the operations in the main unit.

4.2. Operations for Display


The data is being shown as a waveform while REC is on stand-by or recording.



4.2.1. Operations to show waveform in display

Change of display contents can be done while monitoring is being displayed.

However, Data reading using the cursor is available only for recording idle status (IDLE status).





Click **CH** to display the channel selector.

ON/OFF of display channel, changing the order of display, and fitting to display are available.

Extend the display in the Y-axis

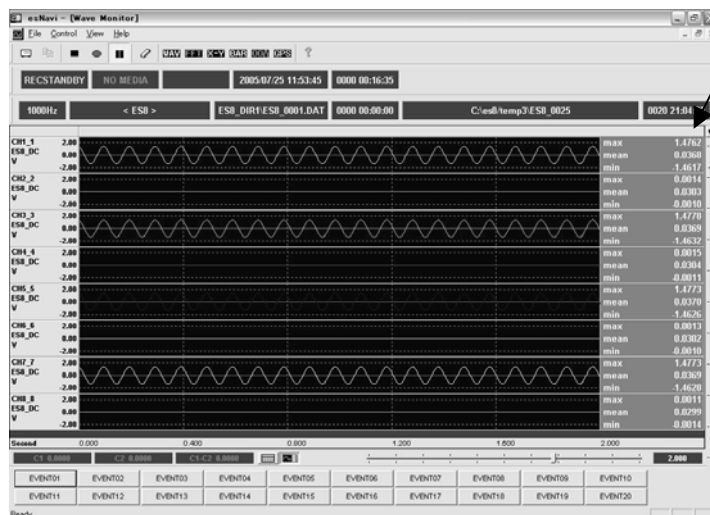
Shows the cursor location time and difference of C1/C2.

Click  to show Max/Min/Averaging values of each channel.

Click  to show the channel property.

Changes the display time per screen.

4.2.2. Display of Max./Min./Averaging value



4.2.3. Display of channel property



By grasping the left end of the channel property and doing a drag & drop, you can place it where you might want to display it.



In the channel property, the data of the C1/C2 cursor location can be examined in detail.

The C1/C2 cursor location can be controlled by dragging it with the mouse.

Channel: number of channel

DispRange(max): maximum value in the Y-axis display range

DispRange(min): minimum value in the Y-axis display range

Cursor(C1): Y-axis value of the C1 cursor location

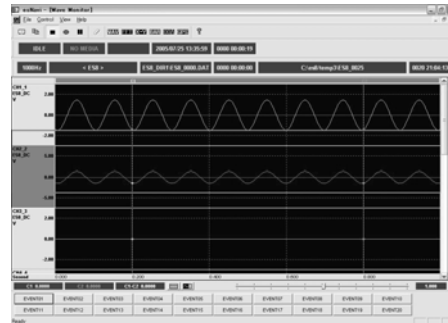
Cursor(C2): Y-axis value of the C2 cursor location

Abs(C1-C2): difference of the C1-C2 cursor location in the Y-axis value

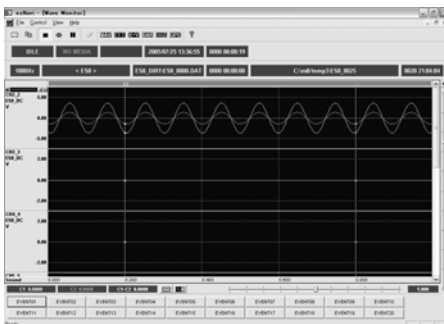
4.2.4. Overwriting

Example: By dragging & dropping Channel 2 on Channel 1 to overwrite.

1. Place cursor on a portion of the displayed channel name, and drag it to channel 1. (A rectangular frame will be shown.)




2. By dropping it on channel 1, the screen will change to overwriting display.



CH2_2
ES8_DC
V

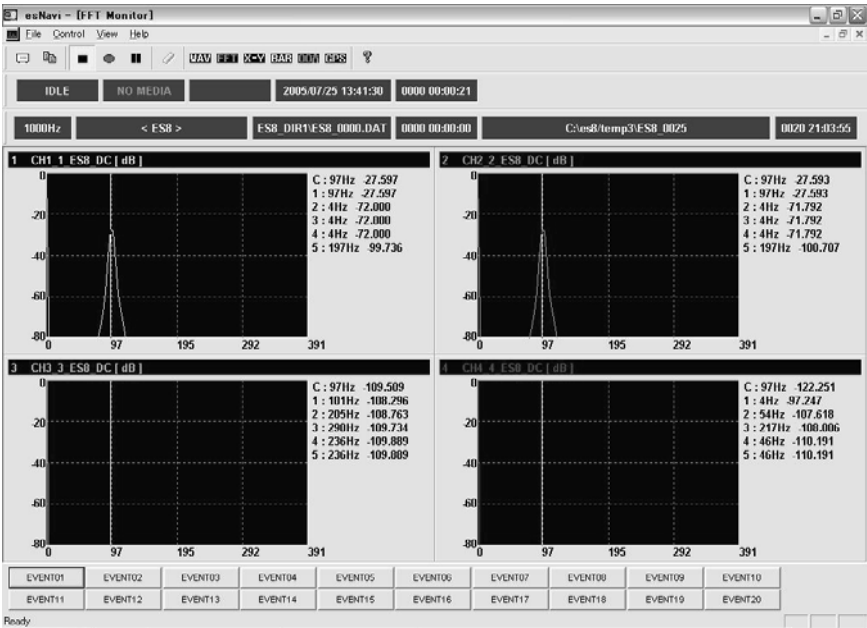
3. Click  to disable overwriting.

Click  to change the display order of overwriting.

4.2.5. Choosing display mode



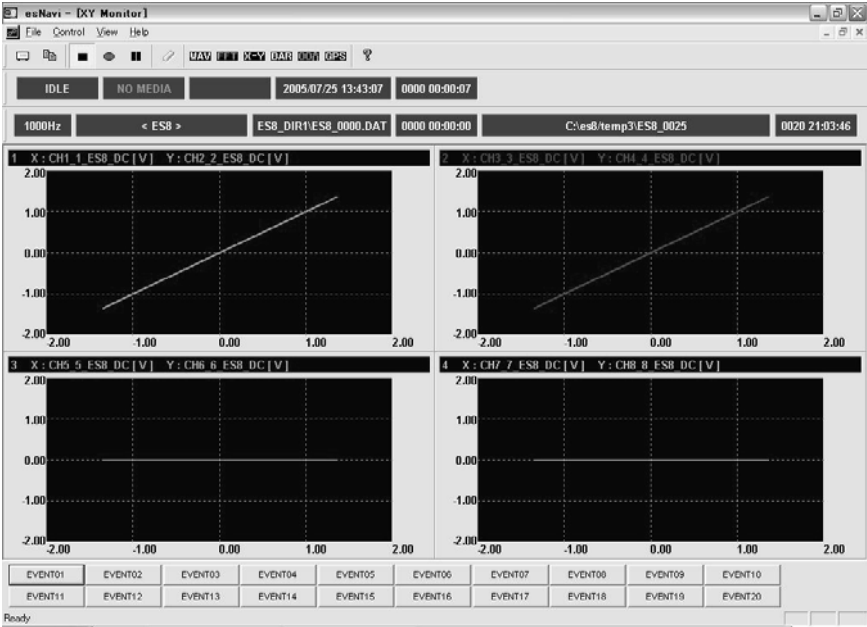
Click to show FFT.



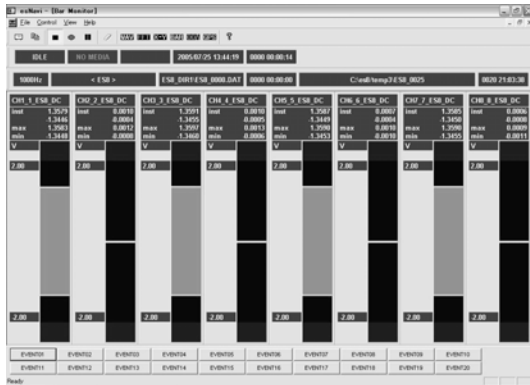
Show 5 data of the cursor location value and peak value.



Click to show the X-Y graph.



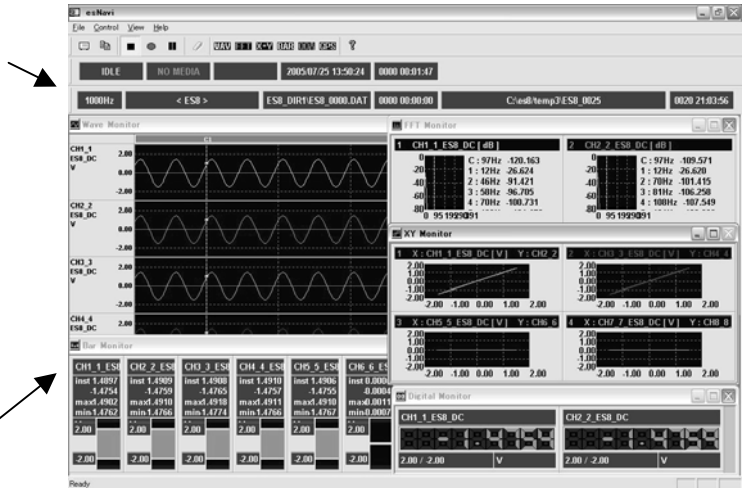
Click **BAR** to show the Bar meter.



Click **000** to show the digital panel.



You can change the size and location of the waveform display, bar meter, and digital panel display, and arrange and combine them to show.



Note:


Note:

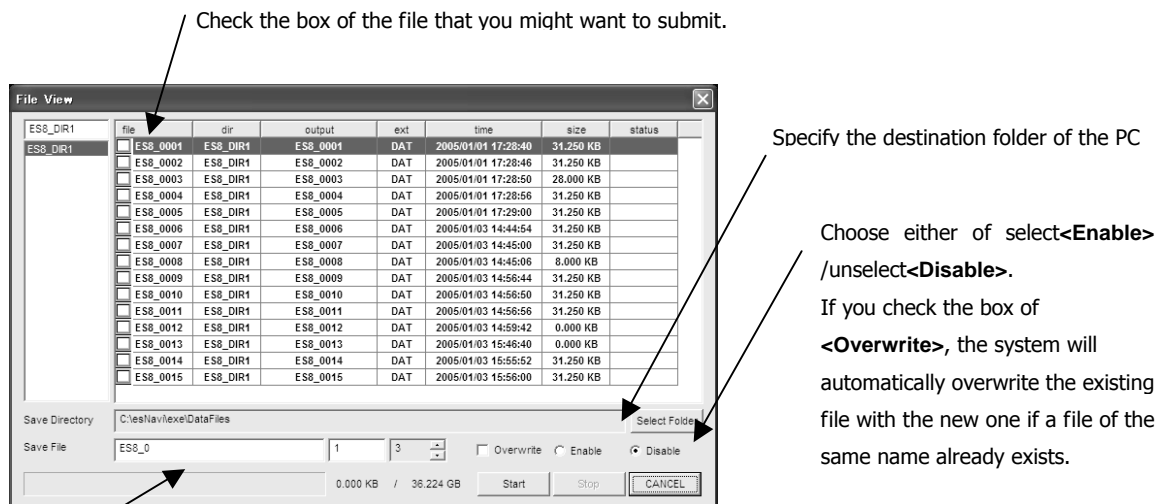
Section 5 Recorded File List

In esNavi, a table of files that were recorded on the CF memory card can be shown.

You can choose the files that you might want to submit from the list and name them to save on the PC.

These recorded files can be shown in a type of waveform using PL-D2860 ExtrTAF, which can be downloaded from the TEAC web site without charge, or the PL-S1001LX View program available in the marketplace.

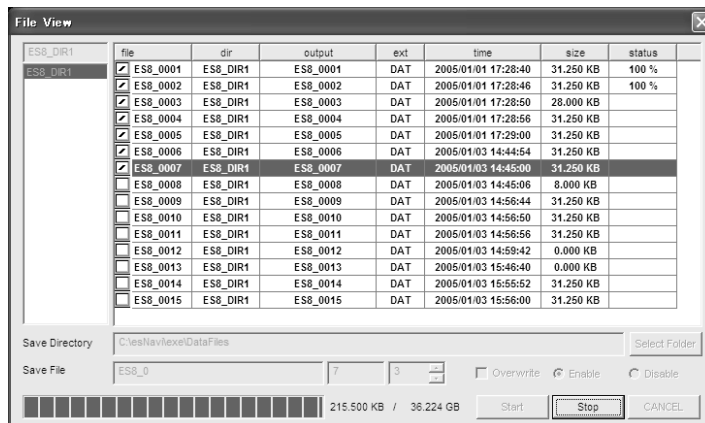
Click  on Tool Bar to show <File View>.



Set the characters and values, such as file name(ES8_0 in this example) of destination for recording, the default value(1) of the sequential number to be incremented, and the digits(3) of the sequential number. This setting value will be reflected in <output> display.

By finishing the selection and clicking [Start], the file submitting will begin.


<Status> of the file submitted will appear <100%>.



Note:

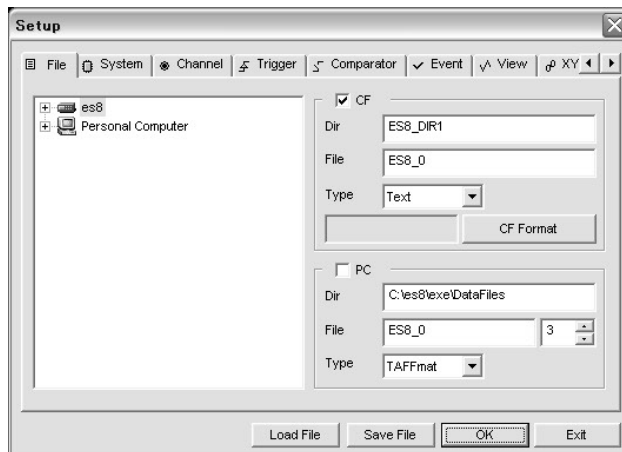
Section 6 Saving and Loading Setting Information

In esNavi, you can save the setting information on the PC and load it when required.

To save and load the setting information, click  to show <Setup>.

If you click [Save File], the present setting information will be saved as a parameter file(.prm).

If you click [Load File], the saved parameter file will be loaded.



Note:

Section 7 Other Operations

In esNavi, the operations of es8 can be performed as follows.

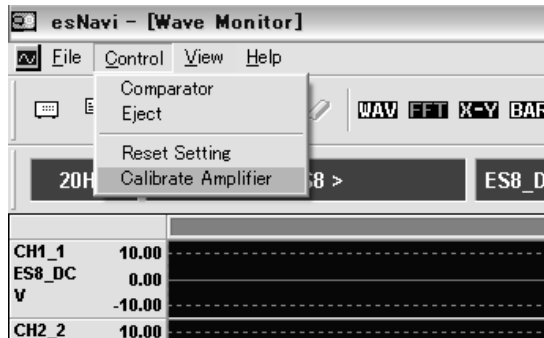
Click [Control] on the menu bar.

If you click [Comparator], the contact signal will be outputted from es8

[Eject] must be clicked before pulling out the CompactFlash[®] memory card inserted in the main unit.

If you click [Reset Setting], the present setting of es8 will be initialized.

If you click [Calibrate Amplifier], the es8 amplifier will be calibrated.

**CAUTIONS**

These operations, except [Comparator], can be done when es8 is in stop status.

Note:

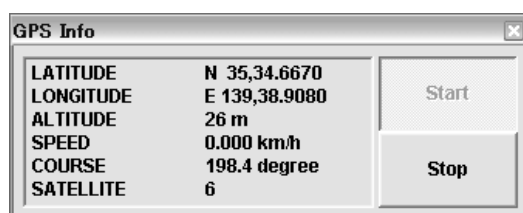
Section 8 Functions of Option

An Optional GPS unit is available for es8.

GPS ユニット	Exclusive option for calibrating time, or recording location data (latitude, longitude, altitude, speed, course) by GPS.
es8 GPS UNIT (19192950-00)	Power for GPS unit can be supplied via the main unit of es8, as well as the attached AC adaptor. However, if it is supplied via the main unit operated by a cell battery, the operating time will be shortened remarkably. Receiver unit: Position co., Ltd made, GSU-36AM Antenna: Cirocomm Technology Corp. made, GA-31 AC adaptor for GPS attached

Connect es8 to the GPS unit. The following information will be shown in the esNavi program.

Click  on the Tool Bar and click [START] to start the GPS unit data display.



To stop display, click [STOP].

The time of es8 that is shown in esNavi is the time calibrated by the data accepted by the GPS unit.

Note:

Note:

Recommendation of User Registration

Once you have completed the User Registration, we will send you information concerning product support and new products. In addition, we will create a specific updated version on this product, if we believe it to be necessary.

Choose one of the three following methods of registration:

■ On line registration

Please login to the following web site to register.

URL:<http://www.tic.teac.co.jp>

■ Registration by FAX

Please complete the required items in the following <User Registration Form>, and send it by

fax to:

(FAX: +81-422-52-1990)

■ Registration by Mail

Please complete the required items in the following <User Registration Form>, and copy and send it to the following address.

Address:

Overseas Sales Group, Business Solutions Company

TEAC CORPORATION

3-7-3 Naka-cho, Musashino-shi, Tokyo

180-8550 Japan

User Registration Form

Product Name	es8
Serial Number	No.
Purchase Date	
Company Name	
Division Name	
Person in charge	
Address	
TEL	
FAX	
E-mail	
Information via E-mail	<input type="checkbox"/> Do not send.
Notes	