Back

FURUNO

OPERATOR'S MANUAL

LIVE PLAYER PRO

MODEL VR-5034

(Applicable to VR -5000 software version 3.00.00)

FURUNO ELECTRIC CO., LTD.
NISHINOMIYA, JAPAN

ECF
(Elemental Chlorine Free)
The paper used in this manual is elemental chlorine free.

© FURUNO ELECTRIC CO., LTD.

9-52 Ashihara-cho,
Nishinomiya 662-8580, JAPAN

Telephone : 0798-65-2111
Fax : 0798-65-4200

Your Local Agent/Dealer

All rights reserved. Printed in Japan

FIRST EDITION : JUL. 2005

Pub. No. OME-44182

(TATA) VR-5034

000156099 00

OME44182A00

IMPORTANT NOTICE

- No part of this manual may be copied or reproduced without written permission.
- If this manual is lost or worn, contact your dealer about replacement.
- The contents of this manual and equipment specifications are subject to change without notice.
- The example screens (or illustrations) shown in this manual may not match the screens you see on your display. The screen you see depends on your system configuration and equipment settings.
- This manual is intended for use by native speakers of English.
- FURUNO will assume no responsibility for the damage caused by improper use or modification of the equipment or claims of loss of profit by a third party.
- Please carefully read and follow the operation procedures set forth in this manual.
- Store this manual in a convenient place for further reference.

TABLE OF CONTENTS

FOREWORD iv

1. INSTALLATION 1
1.1 Requirements 1
1.2 Software Installation 1

2. PLAYER CONFIGURATION 3
2.1 How to Create a New Configuration Page 3
2.2 Making a User-specified Digital Form 9
2.3 Making a User-specified Graphical Form 21
2.3.1 Arranging graphical object 21
2.3.2 Configuration of graphical object 26
2.3.3 Compass object 26
2.3.4 Dial Meter object and Dual Dial Meter object 29
2.3.5 Doppler log object 31
2.3.6 Graph object 32
2.3.7 Vertical bar object 33
2.3.8 Horizontal bar object 34
2.3.9 Horizontal ruler object 35
2.3.10 Pitch and roll object 36
2.3.11 Rudder object 37
2.3.12 Numeric data display object 38
2.3.13 Default color definition 39
2.3.14 Formatter syntax 40
2.4 Saving the Configuration 41

3. REPLAY (PLAYBACK) 42
3.1 Reading the Data Recorded in DRU (Capsule) 42
3.1.1 Wiring 42
3.1.2 How to replay the data 43
3.2 Reading the Data Recorded in Removable Hard Disk 46
3.2.1 Wiring 46
3.2.2 How to replay the data 47
3.3 Reading the Data Retrieved from DRU or Removable Hard Disk 48

4. LIVE PLAY 51
4.1 Wiring 51
4.2 How to Operate 51

5. DATA DECODER 54
5.1 Opening Decoder Library 54
5.2 Decoder Library 54
5.3 Decoder Editor 57

6. OTHER SETTINGS 61
6.1 Alarm Panel 61
6.1.1 Opening the Alarm display dialog box 61
6.1.2 Default setting for alarm panel 62
6.2 Data Log 63
6.2.1 Creating directly columns of the data log 63
6.2.2 Creating indirectly columns of the data log 64
6.2.3 Organizing columns 65
6.2.4 Maximum number of columns 65
6.2.5 Saving log data to a file 66
6.2.6 Preferences 66
6.3 Audio Setting 67
6.4 Displaying Log 68

7. LIVE PLAYER BACKUP 69
7.1 Disc Organizer 70
7.1.1 Creating and formatting disc partitions 70
7.1.2 Disc properties 71
7.2 Duration of Backup 71
7.3 Starting the Backup Process 71
7.4 Settings After Restart of Program 72
7.5 Replaying the Backup Data 73
7.6 Extracting the Backup Data and Replaying 74

8. SERIAL OUTPUT FOR OTHER APPLICATIONS 76
8.1 Output Port Settings 76
8.2 Configuration of Serial Output 77
8.3 Data Output 77

APPENDIX AP-1

INDEX IN-1

FOREWORD

A Word to the Owner of the Live Player

FURUNO Electric Company thanks you for purchasing the Live Player Pro VR-5034. We are confident you will discover why the FURUNO name has become synonymous with quality and reliability.

For over 50 years FURUNO Electric Company has enjoyed an enviable reputation for quality and reliability throughout the world. This dedication to excellence is furthered by our extensive global network of agents and dealers.

Please carefully read and follow the operation procedures set forth in this manual.

Thank you for considering and purchasing FURUNO.

Features

This "Live Player Pro" software is installed to a PC and functions as follows:

- Replaying (Playback)
  - Data recorded in Capsule/Removable Hard Disk
  - Data retrieved from Capsule and Removable Hard Disk
- Live Playing
  - All the data being recorded can be observed in real times with user-customizable pages

1. INSTALLATION

1.1 Requirements

VR-5034 (Live Player Pro) components

- Program CD
- Firewire repeater
- AC adapter
- Firewire cable
- Document

Recommended specifications for Replay PC

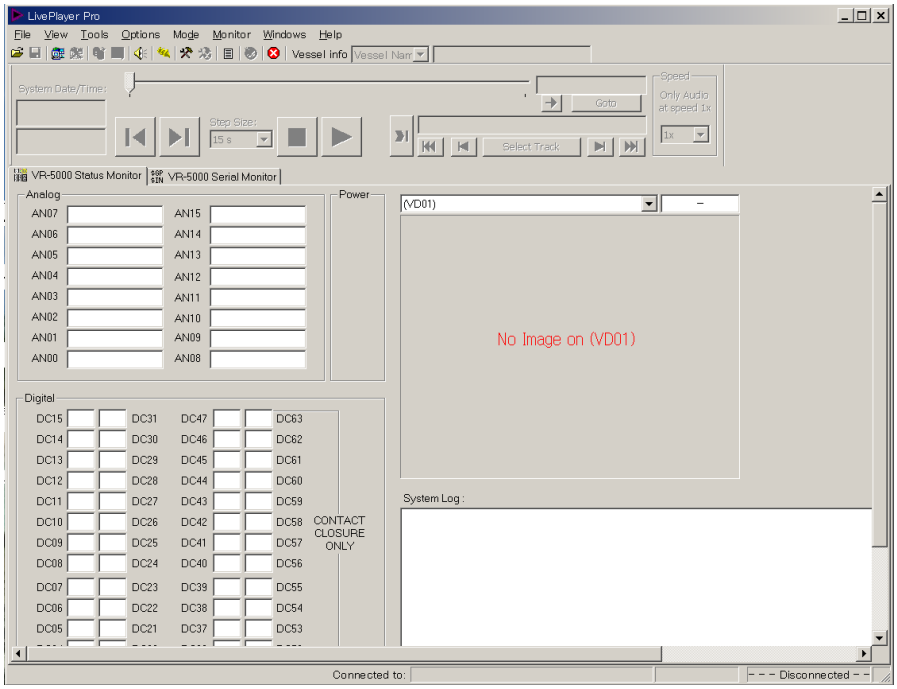
CPU: Pentium 4 (1.8 MHz) or higher
RAM: More than 256MB (More than 512MB recommended for Windows XP)
HDD: As much as possible (i.e., 20GB, 40GB)
(6 to 10 GB needed to store the 12-hour data recorded in the Capsule)
Screen Resolution: VGA or higher (More than SXGA (1280x1024) recommended)
Operating System: Windows 2000 Professional SP4, Windows XP Professional SP2
CD-ROM drive, LAN port: Mandatory
IEEE1394a 4 pin port: Required for play back of data in the DRU or Backup HDD. If PC's connector is 6 pins, 4Pin-6Pin FireWire cable is required.

1.2 Software Installation

1. Set the **Live Player Pro** software CD in the CD drive.
   The setup wizard appears. If the wizard does not appear, double-click MY COMPUTER and Live Player Pro (CD) in order.
2. Follow the indication of the wizard.
   If you checked "Create a desktop icon" during the installation, an icon (figure below) appears on the desktop of the PC. Double-click the **Live Player Pro** icon to open the initial window of the Live Player.



Desktop Icon



Initial window

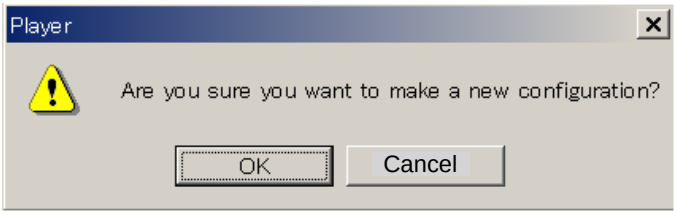
2. PLAYER CONFIGURATION

The user can configure the layout and data to display. The configuration can be saved and copied as a file, which can be loaded on another PC to share the same layout with other PCs. In addition, the configuration can be saved in the Capsule for use as the default layout for Replay and Live Play.

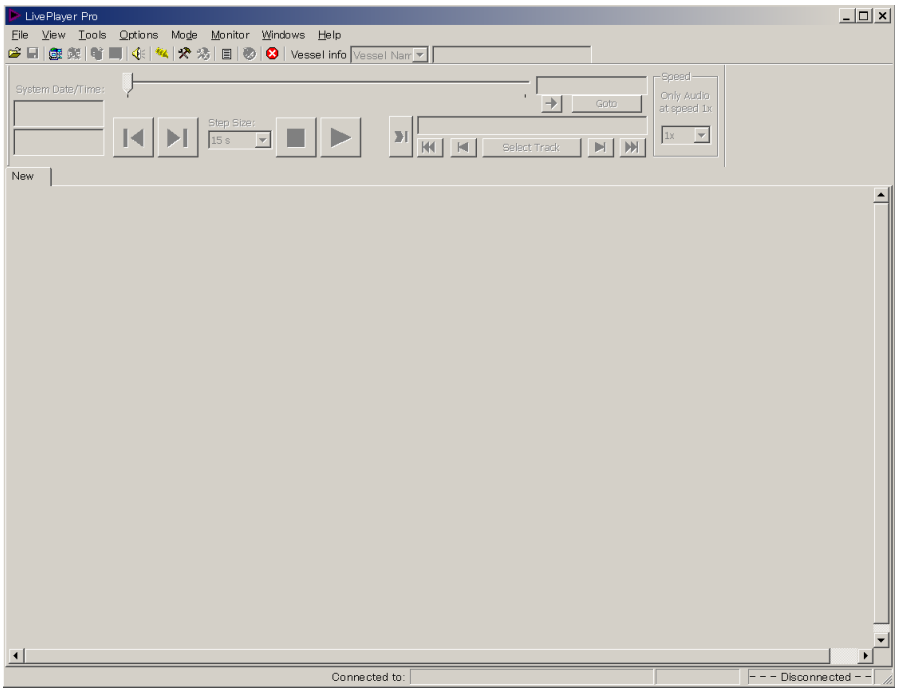
2.1 How to Create a New Configuration Page

To create a new player configuration page, follow the procedures below. The window title bar complies with the general standard for Microsoft GUI.

1. Double-click the **Live Player Pro** icon.
2. Click the **File** menu in the menu bar and then click **New**. The confirmation message appears.



3. Click the **OK** button. A new page is displayed.

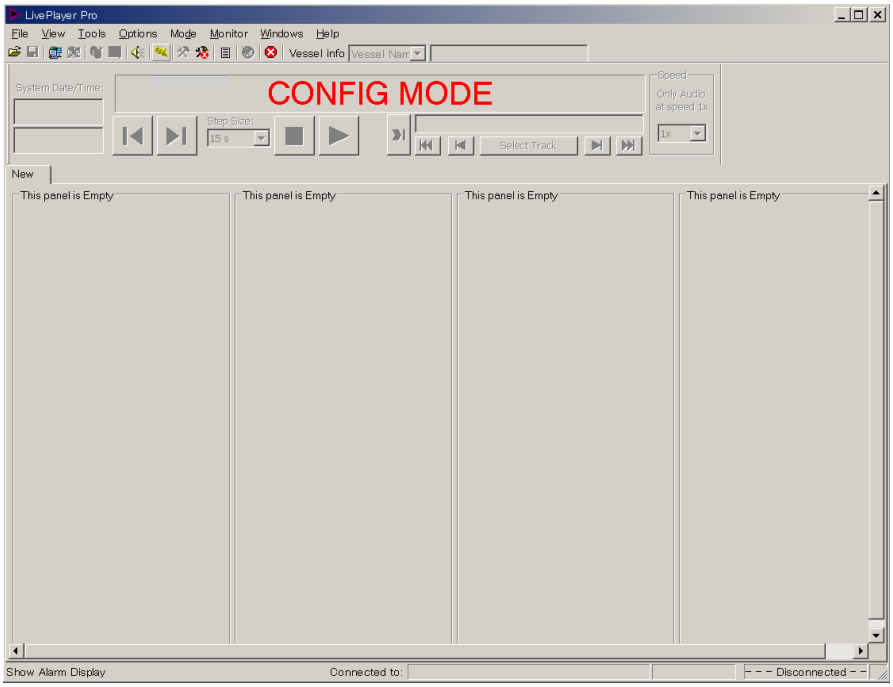


4. Click the **Turn Configuration Mode ON** button.

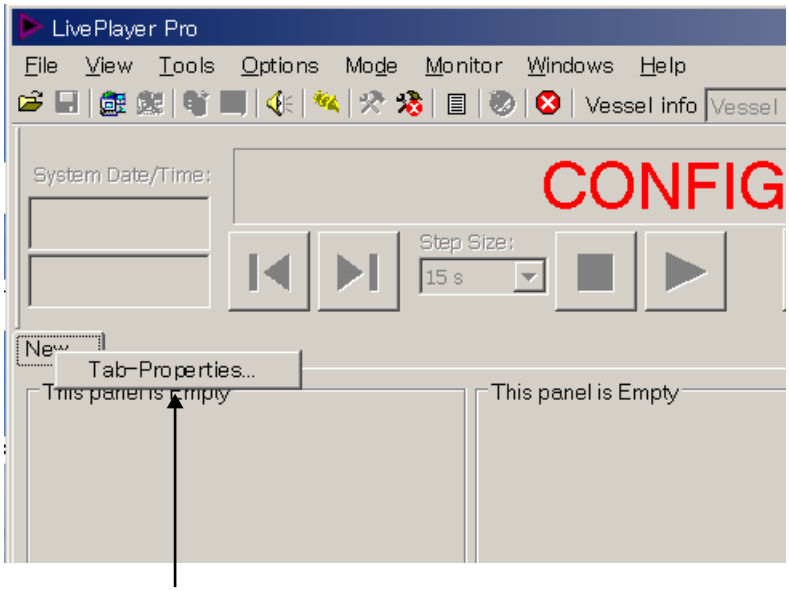


"Turn Configuration Mode ON" button

The data window changes as below.

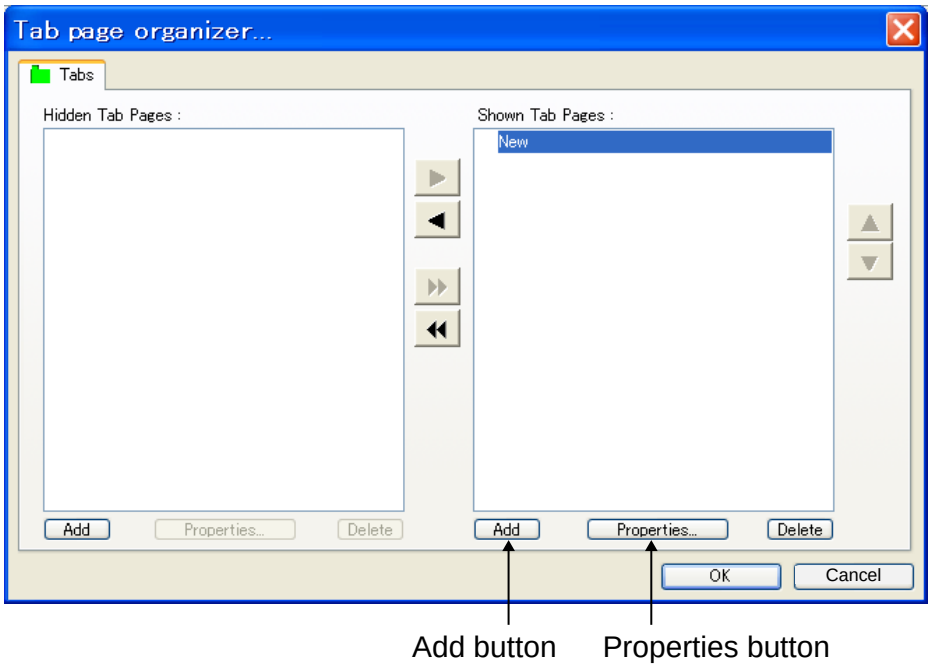


5. Right-click on the **New** tab. The Tab-Properties button appears.

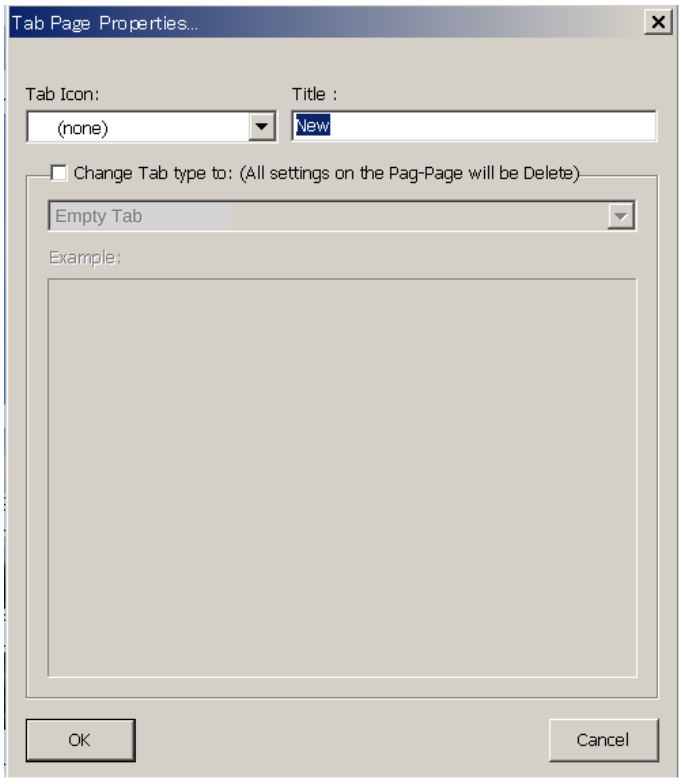


Tab-Properties button

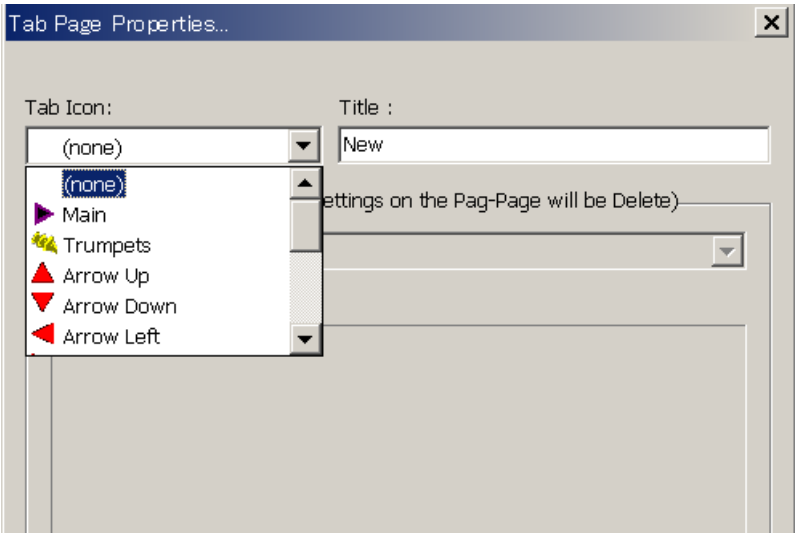
6. Click the **Tab-Properties** button. The Tab Page Organizer dialog box appears.



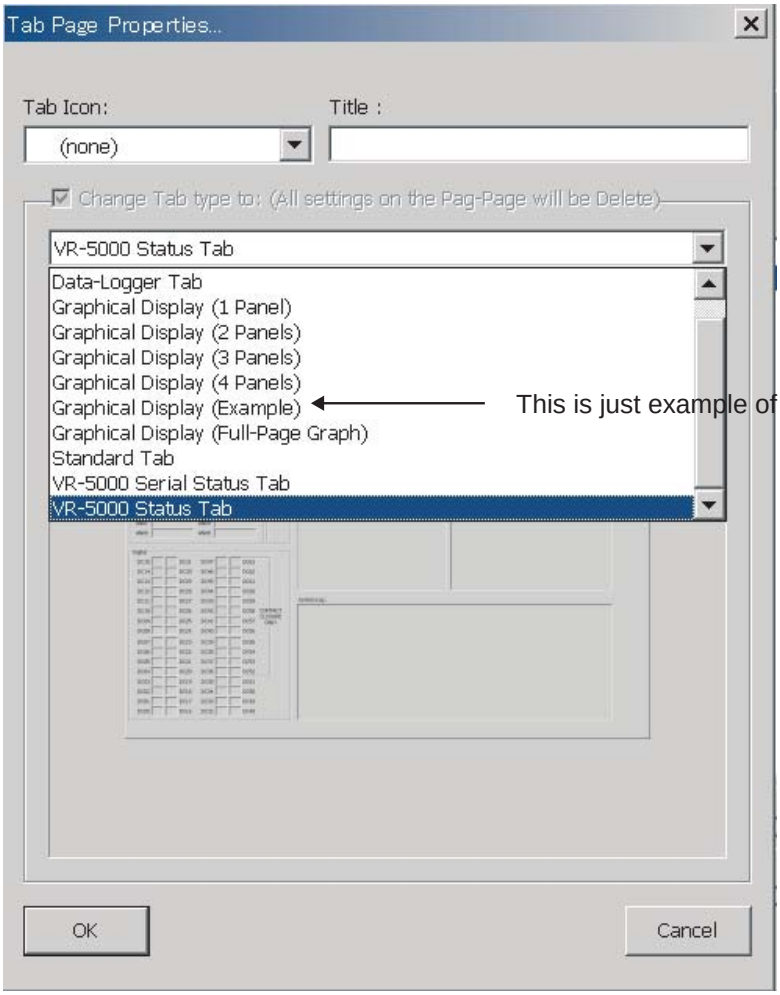
7. Click the **Properties** button. The Tab Page Properties dialog box appears. If you want to add a new page, click the **Add** button instead of the **Properties** button.



8. If necessary, choose the tab icon from the drop-down list in the Tab Icon box.

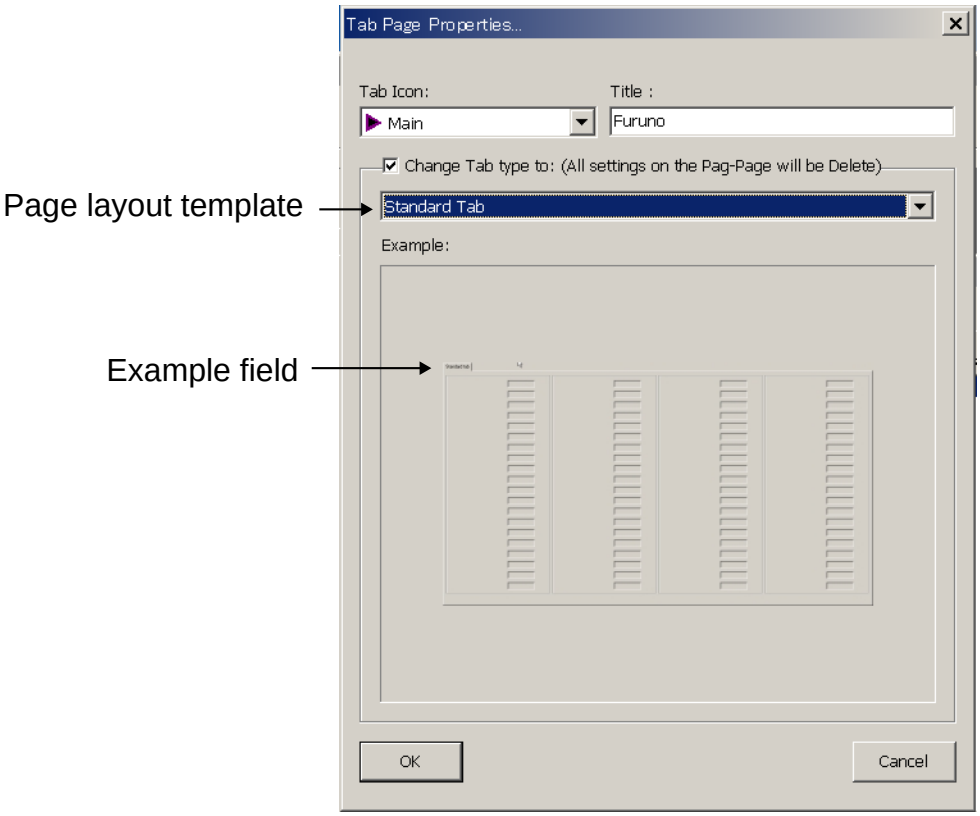


9. Enter tab name in the Title box.
10. Check the **Change Tab type to** check box.
11. Click arrow mark below the check box to show the drop-down list.

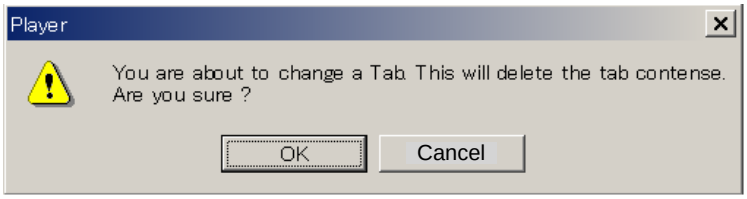


This is just example of graphical display

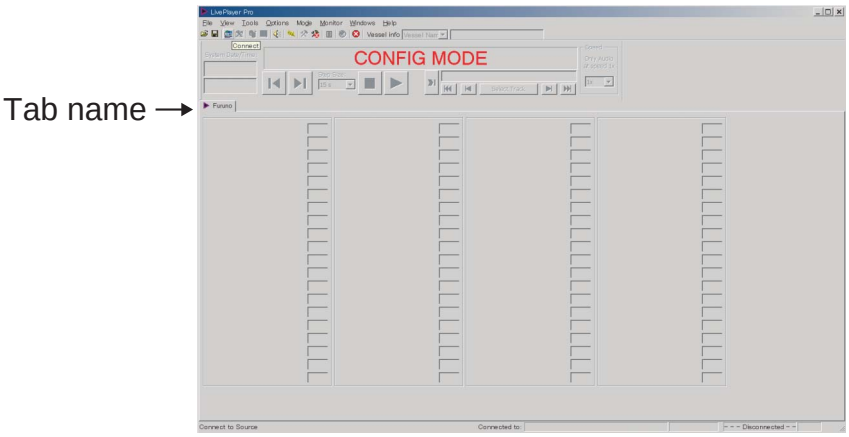
12. Choose page layout template from the drop-down list. The selected page layout template is shown in the example field. Select a suitable one, referring to the example field.



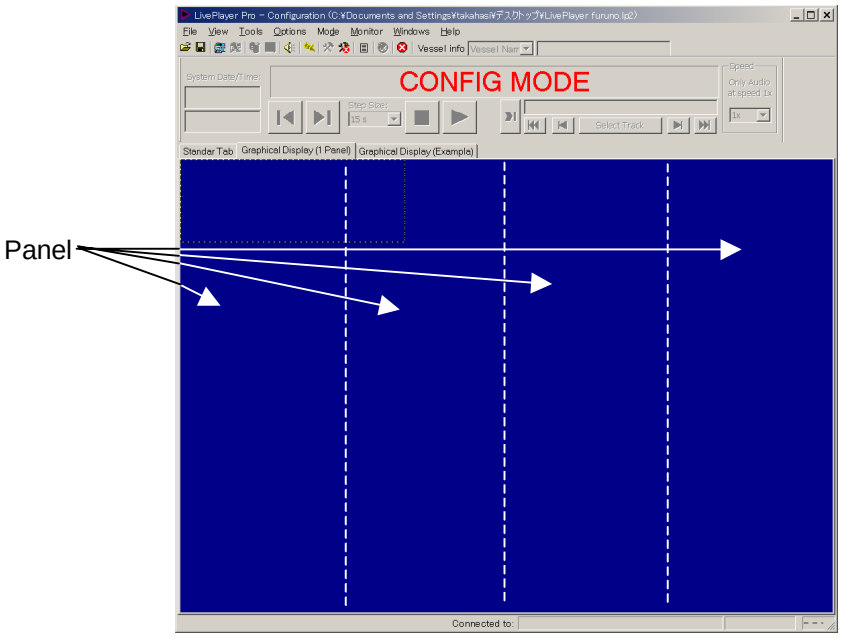
13. Click the **OK** button. The following confirmation message appears.



14. Click the **OK** button. The Tab Page Properties dialog box closes. The title name appears in the **Shown Tab Pages** field in the Tab Page Organizer dialog box.
15. Click the **OK** button. The new data window appears.



Example of "Standard Tab " (4 standard panels)



Example of “Graphical Display (4 panels)”



Example of “Graphical Display (Example)”

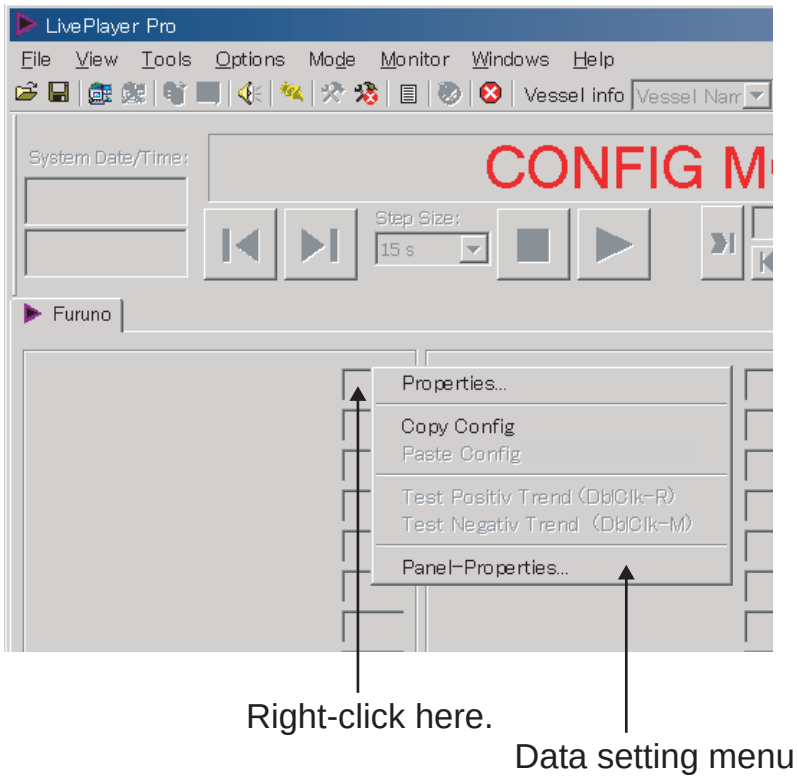
16. Go to next section to set each data box.

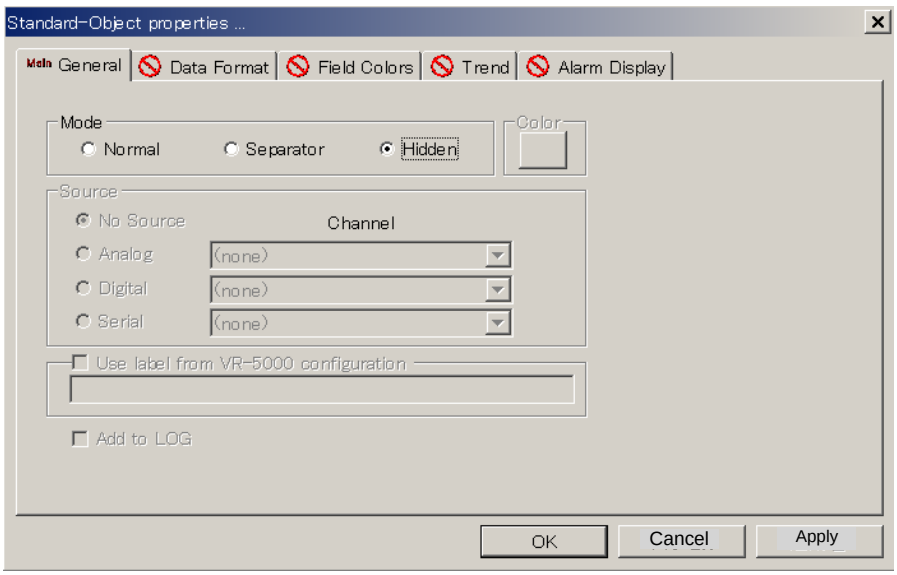
2.2 Making a User-specified Digital Form

To make a user-specified form, do the following.

For Serial data, do as follows:

1. Right-click a box you want to define to show the date setting menu and click the **Properties** button to show the Standard-Object Properties dialog box.



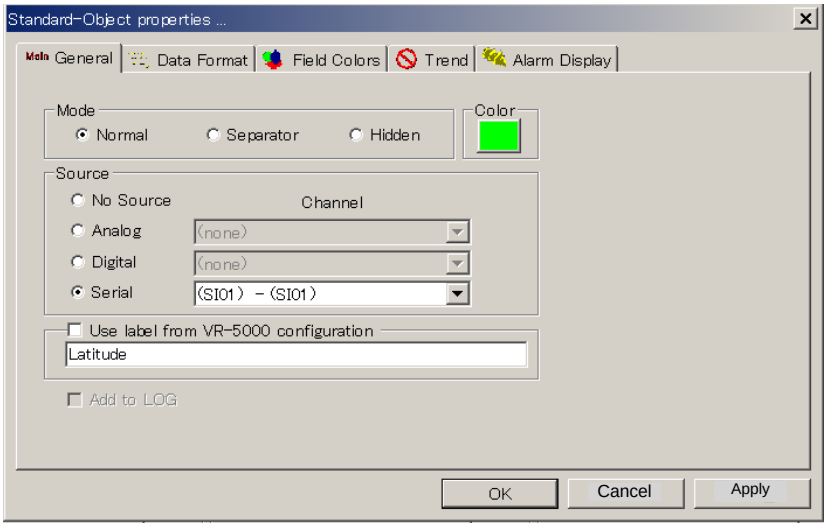


2. The General tab opens. You can change Mode Type, Source, Color or label in the dialog box.

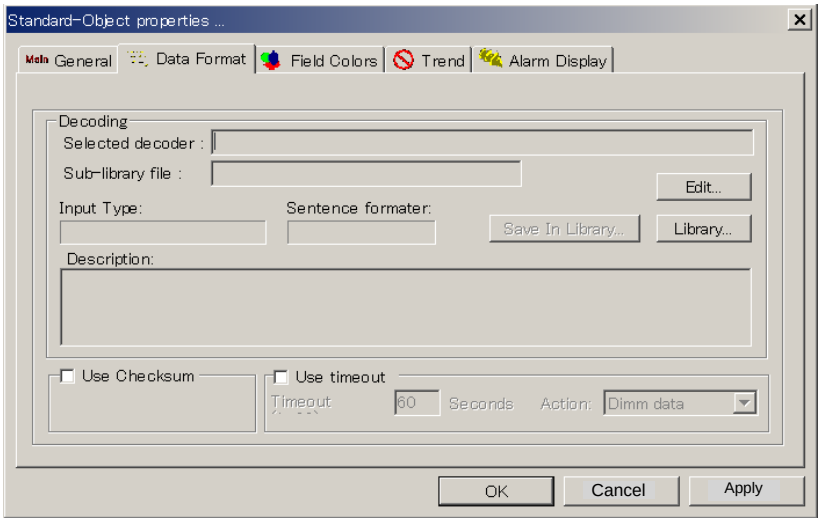
- **Mode field**
  Normal: Specified data is displayed.
  Separator: This is used to divide a panel.
  Hidden: Data is not displayed.

- **Color field**
  Choose color of data box.
- **Source field**
  No Source: Used primarily for template where the data source may be unknown.
  Analog: The data source is an analog input. Choose input port from the drop-down list in the Channel box.
  Digital: The data source is a digital input. Choose input port from the drop-down list in the Channel box.
  Serial: The data source is a serial NMEA input. Choose input port from the drop-down list in the Channel box.
- **Label**
  Enter a label name; alternatively if you want to use the label name which has been set at installation, check the “Use label from VR-5000 configuration” check box.

For example, when the input data is serial, input channel is SI01 and label is named “Latitude”, set as follows.



3. Click the **Data Format** tab.

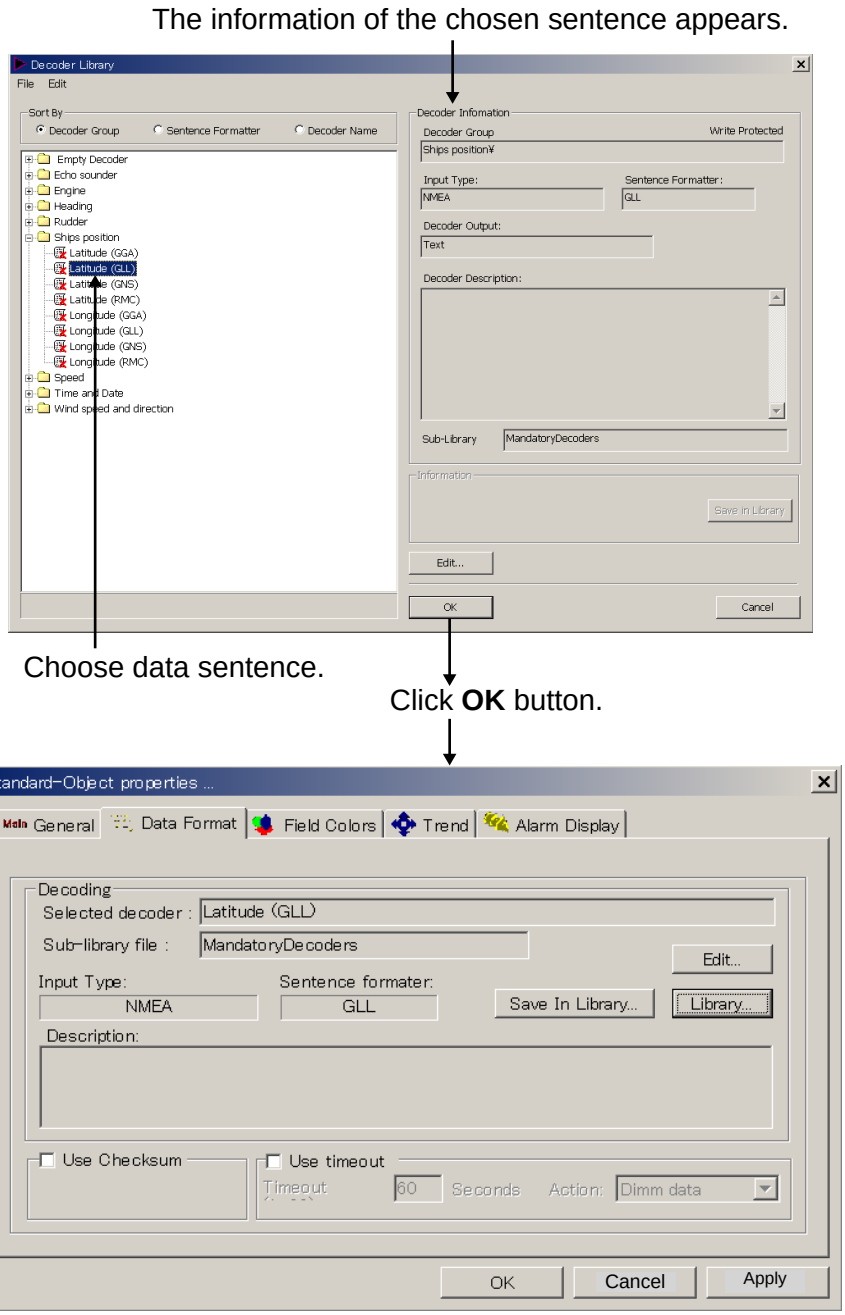


4. Set the data to be displayed as follows:

a. Click the **Library** button. The Decoder Library dialog box appears.

b. Click a data (NMEA sentence) desired in the decoder library (left-hand field of the Decoder Library dialog box). All the sentences specified in IEC 61996 are supported by this library. If a sentence which is not supported by this library is input to the VR-5000, you can create and edit a new decoder for the sentence. See chapter 5 for how to create a new decoder.

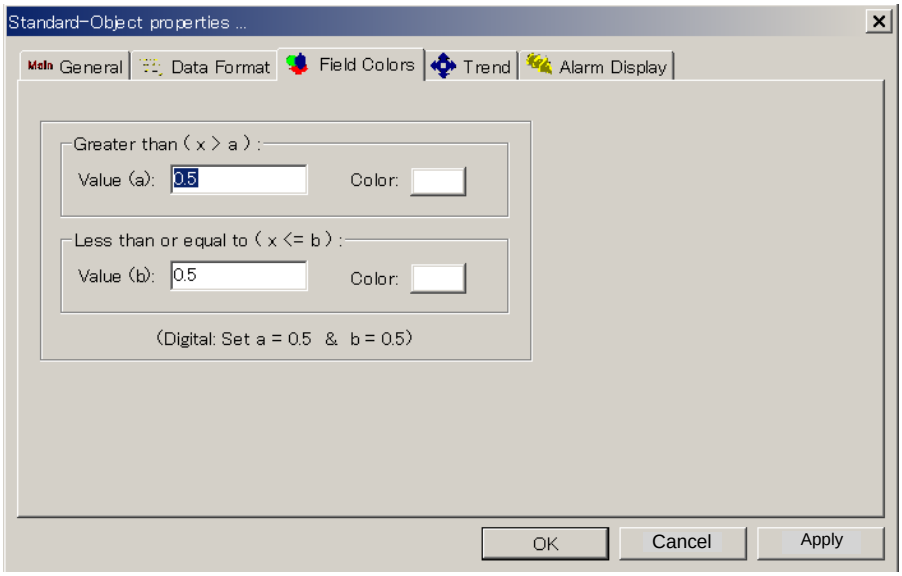
c. Click the **OK** button. The data sentence is displayed in the Standard-Object Properties dialog box.



Selected decoder: The name of the currently selected decoder.
Sentence formatter: The NMEA sentence formatter for the currently selected decoder.
Edit button: Opens the Decoder Editor (see section 5.3).
Save In Library: Saves the currently selected decoder in the library.

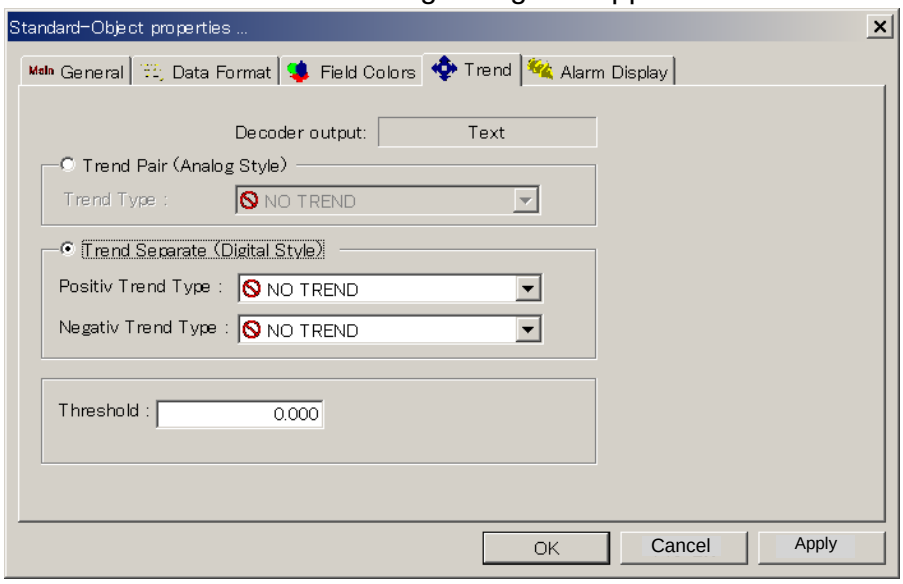
Use Checksum: If you use checksum, check this box.
Use Timeout: If you use timeout, check this box, enter timeout time (seconds) and set the action among Delete data, Dimm data and “TIME OUT”.

5. Click the **Field Colors** tab. The following dialog box is displayed.



For example, ship’s speed can be displayed in color when it becomes higher or lower from limitation set. Enter the upper limitation in the upper box and set the color. Enter the lower limitation in the lower box and set the color.

6. Click the **Trend** tab and the following dialog box appears.

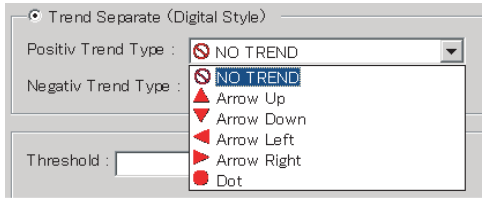


a. Choose the **Trend Pair** (Analog Style) or **Trend Separate** (Digital Style) radio button.

b. Choose an appropriate trend mark (arrow marks) in each drop-down list.
The trend which values are increasing or decreasing, are shown by trend mark (arrow, etc.) in the data window.



Select trend mark for analog

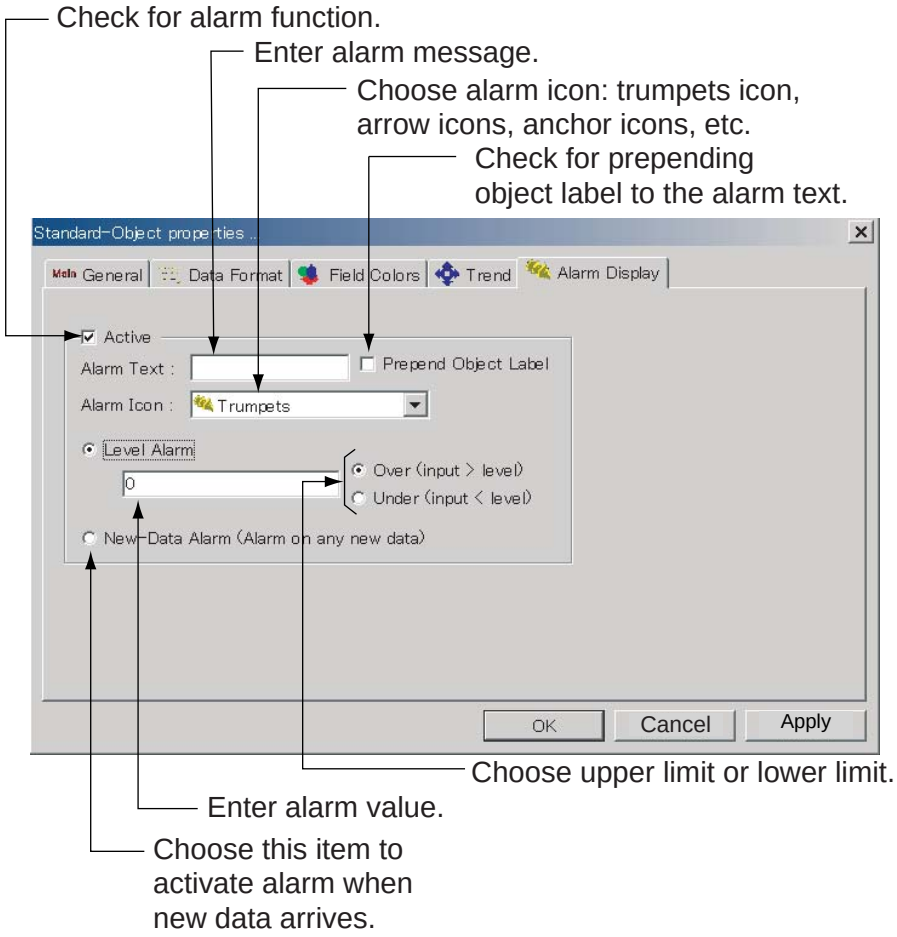


Select trend mark for digital

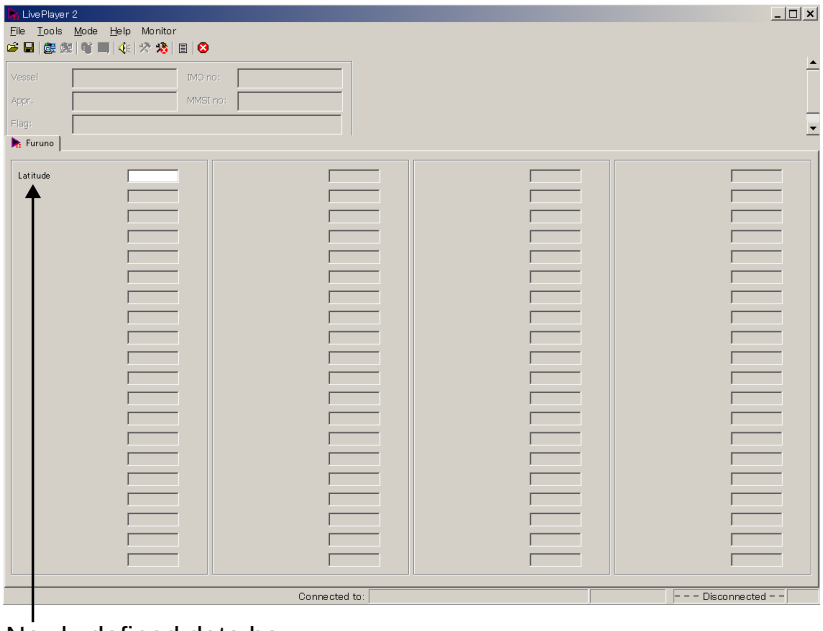
c. Set the sensitivity of the trend indicator in the Threshold box.

After setting, you can test the trend mark defined as follows.
a. Right-click the box defined to show the data setting menu (see page 9).
b. Click “Test Positive Trend” or “Test Negative Trend”. The trend mark appears in right side of the box.

7. Click the **Alarm Display** tab. The following dialog box is displayed.
For example, a message and an alarm icon can be displayed when the ship’s speed, etc. exceeds limitation set.



8. After setting, click the **OK** button. The Standard-Object Properties dialog box disappears and the data window is updated as follows.



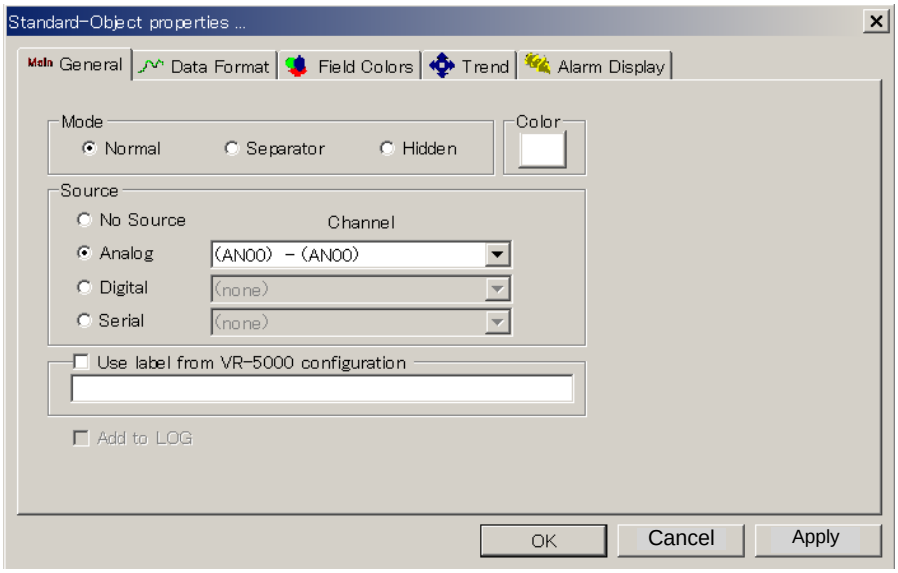
Newly defined data box

9. You can copy and paste this configuration to other data box.
   a) Right-click the box configured to show the data setting menu (See page 9).
   b) Click the **Copy Config**.
   c) Right-click a box you want to define and click the **Paste Config (Standard)**.

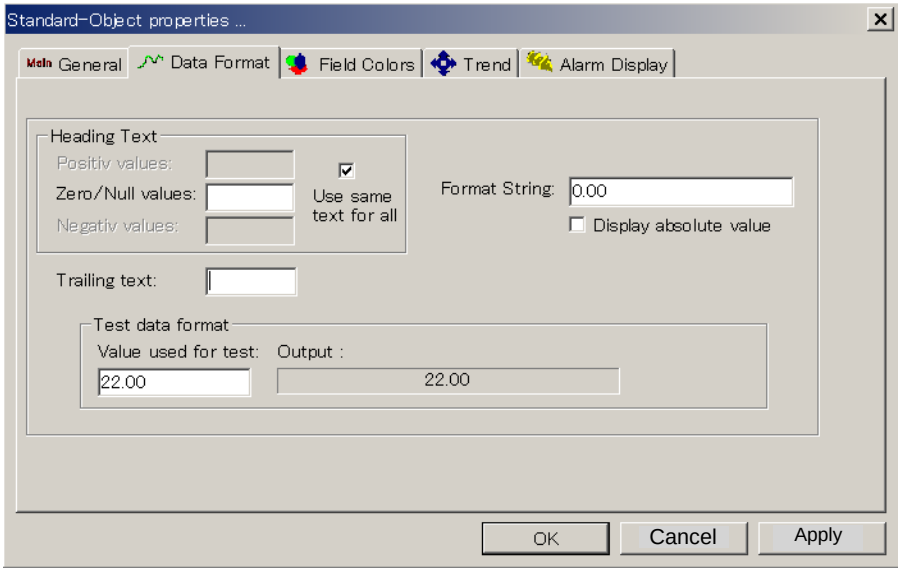
10. Set all other items as required.

For Analog data

1. In the data window (page 7), right-click the box you want to define and click **Properties** button to show Standard-Object Properties dialog box. The General tab opens. Click the **Normal** and **Analog** radio buttons and choose a data input channel (for example “(AN00)-(AN00)”) in the Channel drop-down list.

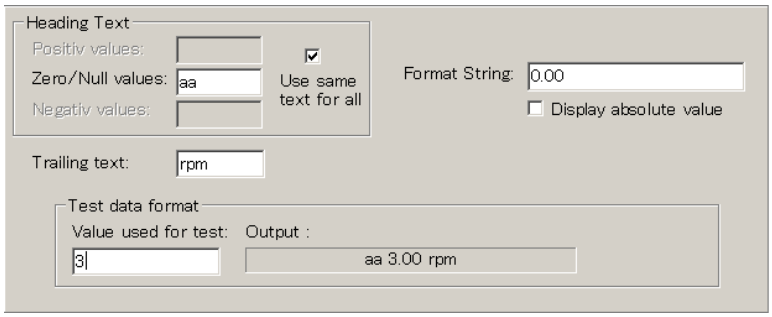


2. Click the **Data Format** tab. The following dialog box is displayed.



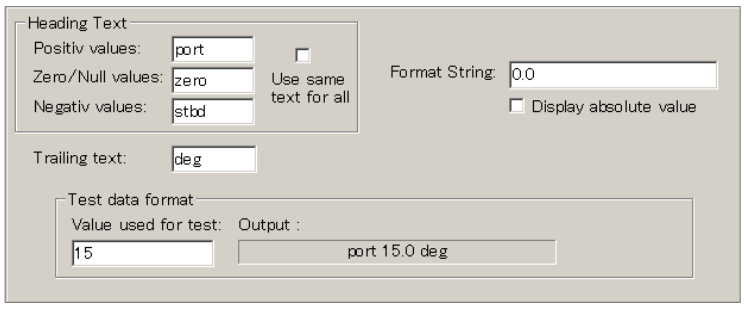
3. Heading and trailing text output format for the data may be configured. A real time “test facility” is located beneath the configuration fields.

Example 1



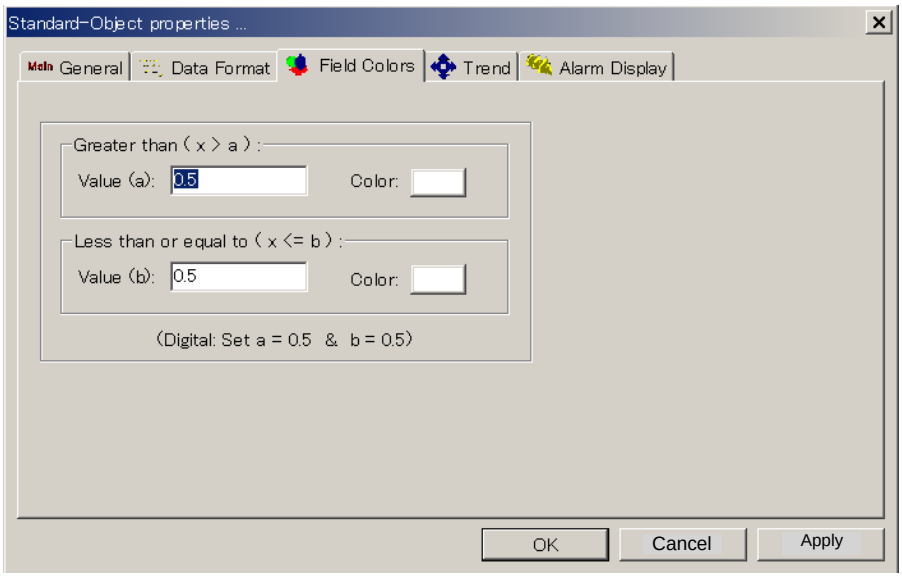
With check mark at “Use same text for all” check box, the header text “aa” and trailing text “rpm” are attached to value “3”. The format string is 0.00, then, the display shows “aa 3.00 rpm” at the Output box.

Example 2

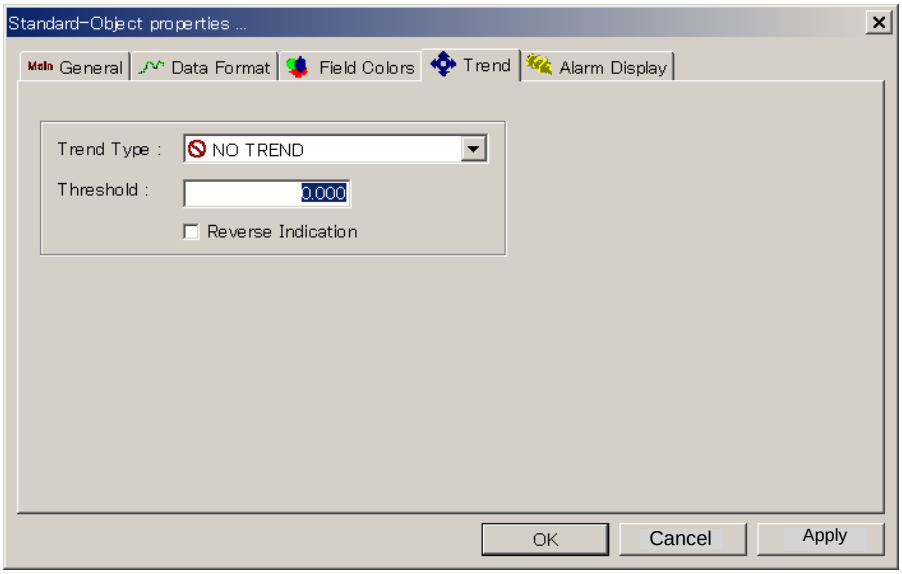


Without check mark at the check box, “port” is attached to positive value for header and “stbd” is attached to negative value. The trailing text is fixed to “deg”. The value used for test is 15 and format string is 0.0, then the output shows “port 15.0 deg”.

4. Click the **Field Colors** tab. The following dialog box is displayed. See page 12 for settings.



5. Click the **Trend** tab. The following dialog box is displayed.

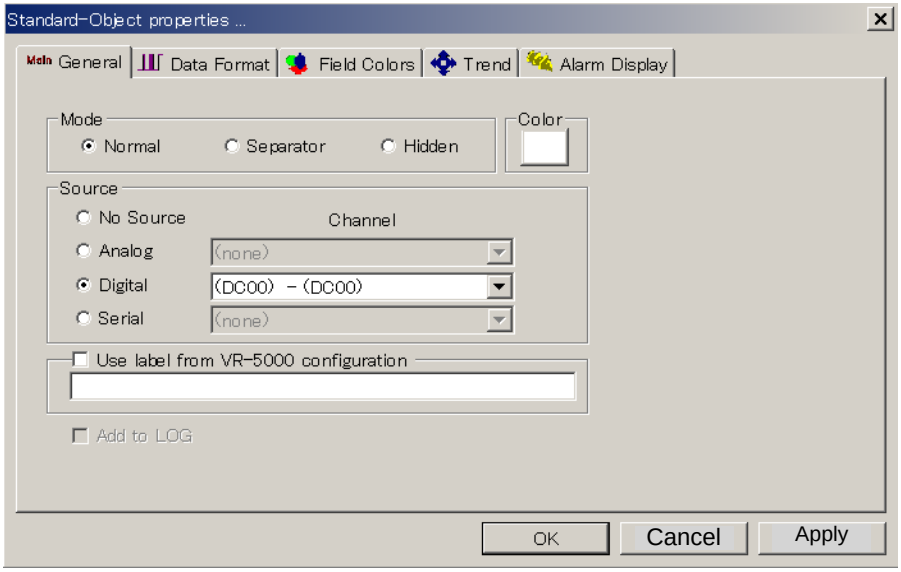


Trend Type: Chooses the type of graphical representation.
Threshold: Sets the sensitivity of the trend indicator.
Reverse Indication: The normal indication is that an increase corresponds to up or right, checking this box will reverse the behavior, i.e., an increase corresponds to down or left.

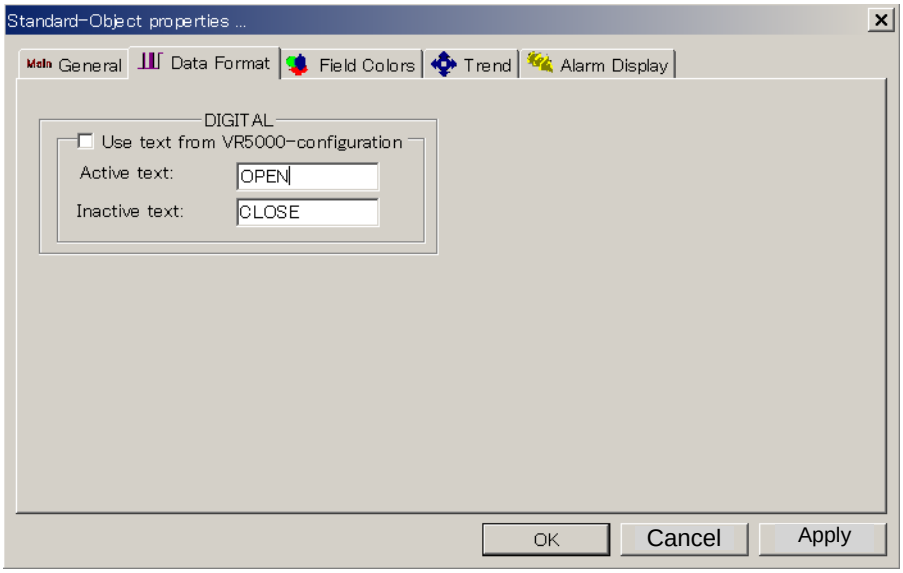
6. Click the **Alarm Display** tab. See step 7 on page 13 for settings.
7. After setting, click the **OK** button. The Standard-Object Properties dialog box disappears and the data window is updated (see page 14).
8. Set all other items as required.

For digital data

1. In the data window (page 7), right-click the box you want to define and click the **Properties** button to show Standard-Object Properties dialog box. The General tab opens. Click the **Normal** and **Digital** radio buttons and choose a data input channel(example for “(DC00)-(DC00)”) in the Channel list box.



2. Click the **Data Format** tab. The following dialog box is displayed.



3. The text may be configured. The default setting uses text from the VR-5000 configuration.

   Example

   For alarm signal of Normal Close:

   Active text to “Normal”

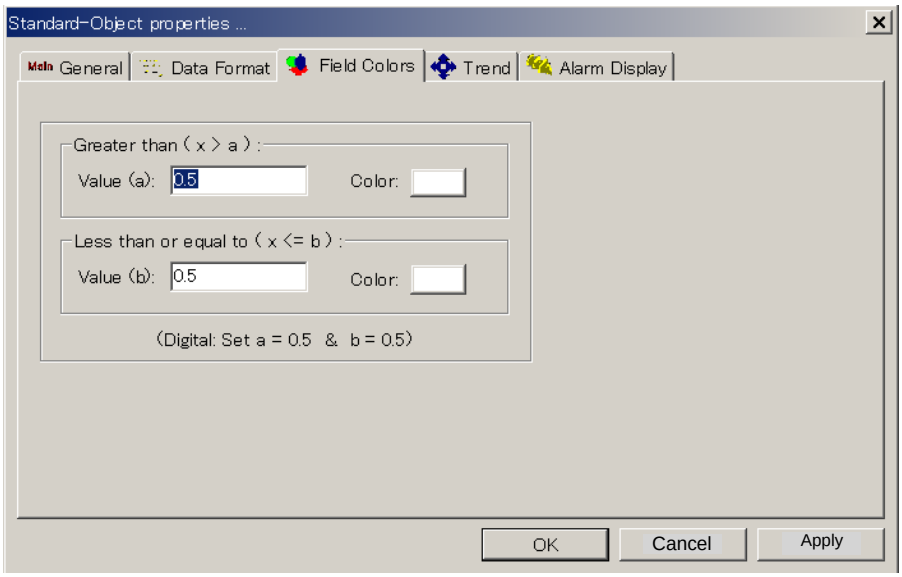
   Inactive text to “General Alarm” or “Fire Alarm”

   For steering gear run indicator signal of Normal Open:

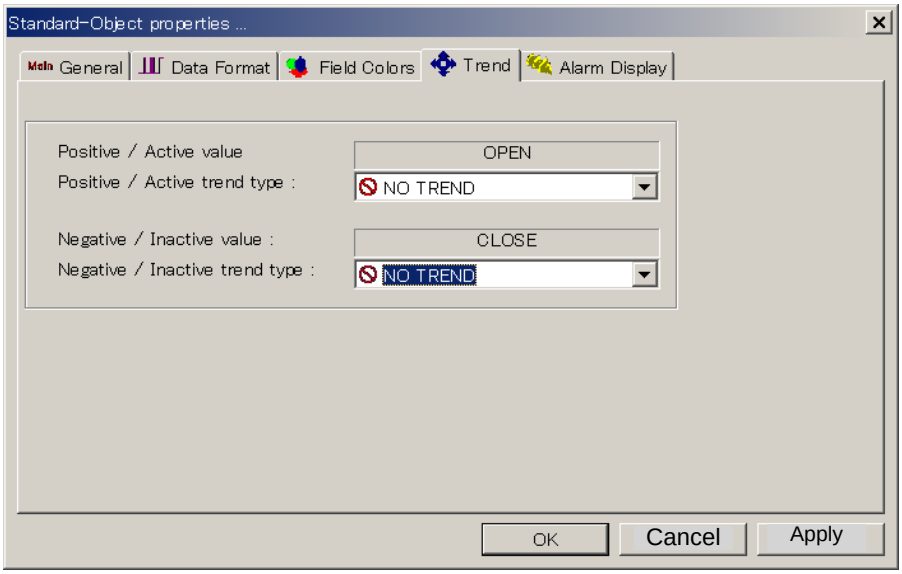
   Active text box to “Run”

   Inactive test box to “Stop”

4. Click the **Field Colors** tab. The following dialog box is displayed. See page 12 for settings.



5. Click the **Trend** tab. The following dialog box is displayed.



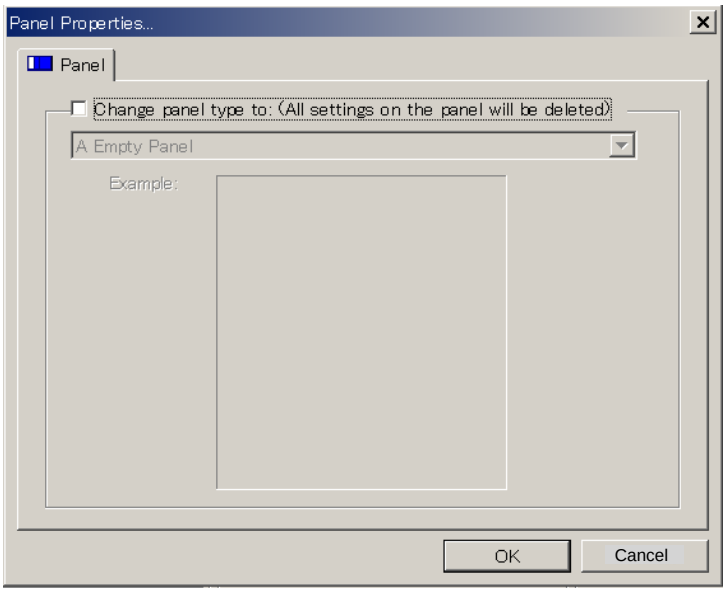
Positive/ Active trend type: The symbol displayed when data is shifting from “0” to “1”.

Negative/ Inactive trend type: The symbol displayed when data is shifting from “1” to “0”.

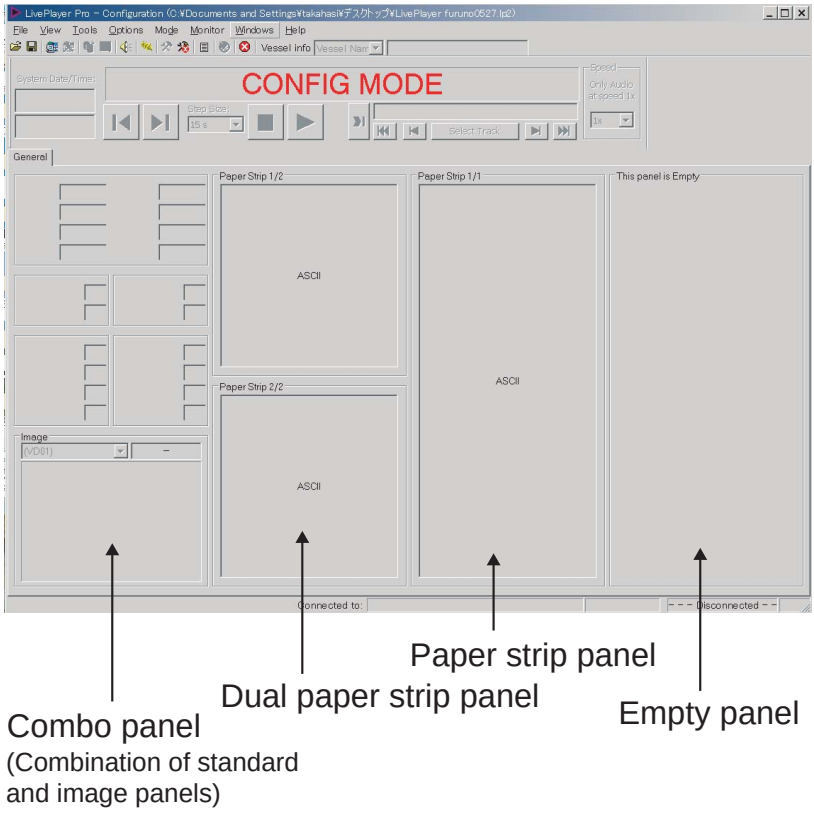
6. Click the **Alarm Display** tab. See step 7 on page 13 for settings.
7. After setting, click the **OK** button. The Standard-Object Properties dialog box disappears and the data window is updated (see page 14).
8. Set all other items as required.

Changing panel properties

1. Right-click a data box in the data window to show the data setting menu (page 9).
2. Click the Panel-Properties.



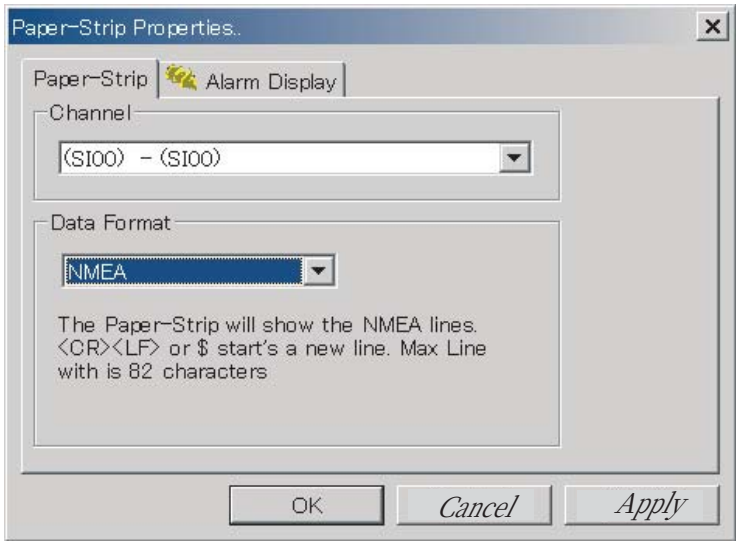
3. Enter check mark and choose a panel as appropriate from the drop down list. There are five kinds of panel: Empty panel, Combo panel, Dual paper strip panel, Paper strip panel and Standard panel (See page 7.)



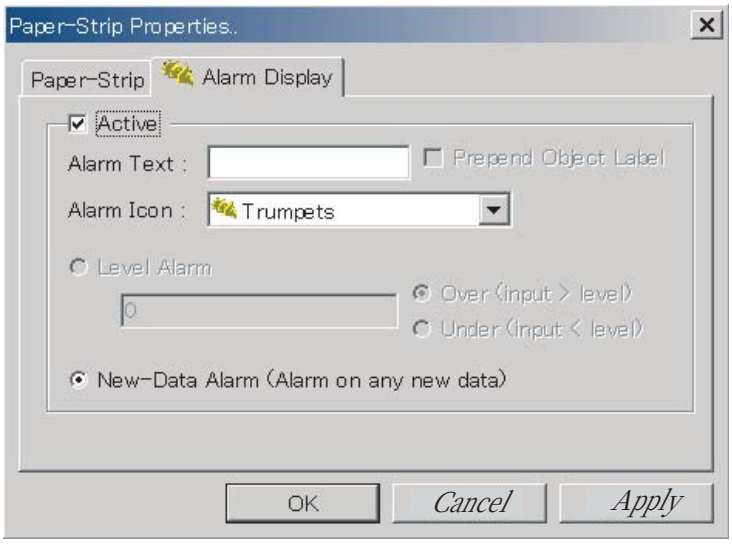
Example of panel of the data window

Setting for Paper Strip panel

1. Right-click a paper strip panel and left-click the Properties to show the Paper-Strip Properties dialog box.



2. Choose a channel of the serial data from the drop-down list in the Channel field.
3. Choose an output format among ASCII, NMEA and BIN in the Data Format field.
4. To set alarm items, click Alarm Display tab. For details about setting, see page 13.

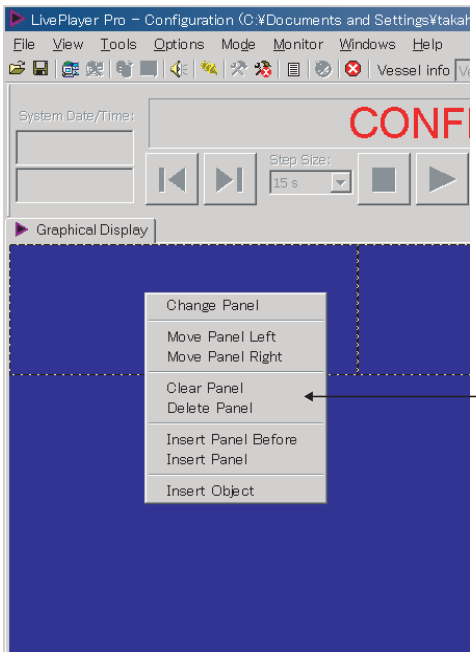


5. After setting, click OK to close the Paper-Strip Properties.

2.3 Making a User-specified Graphical Form

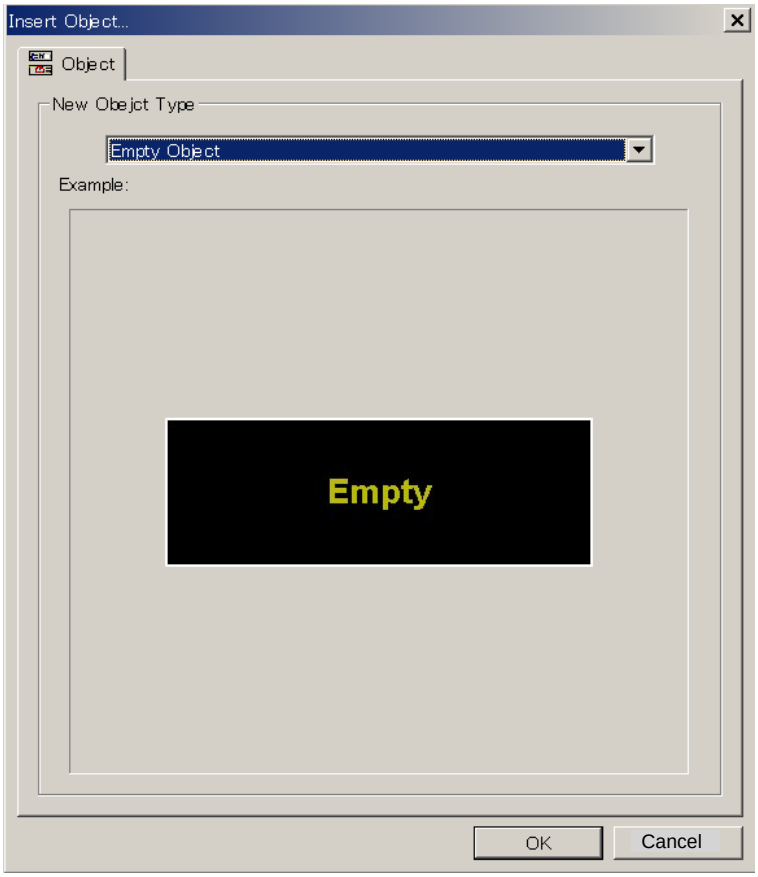
2.3.1 Arranging graphical object

There are four templates and one example for graphical display, as shown in the previous section.
To create a graphical form, do the follows:
1. Right-click on an empty panel to show the panel menu.

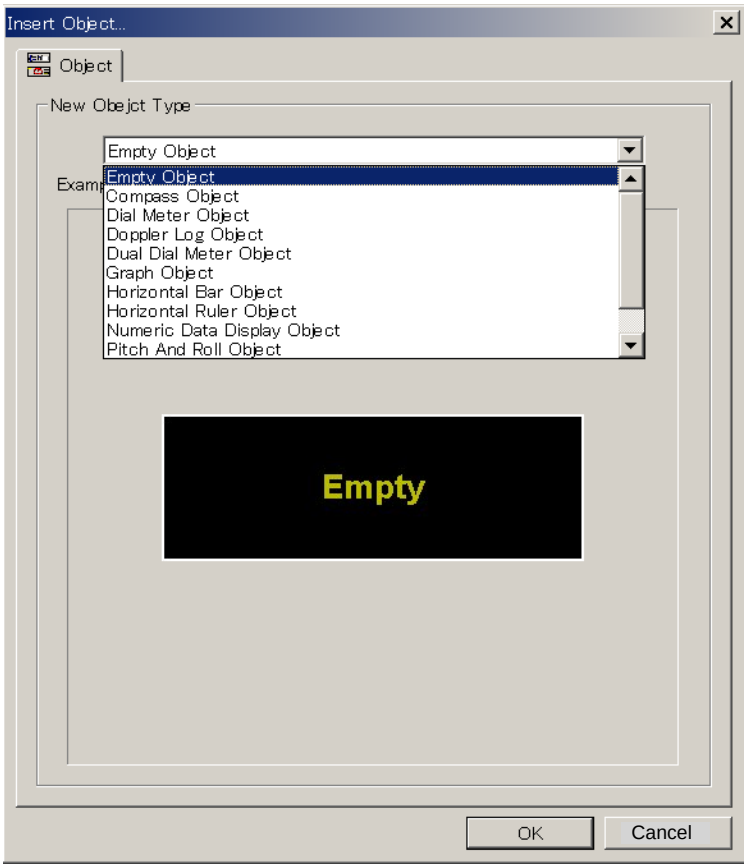


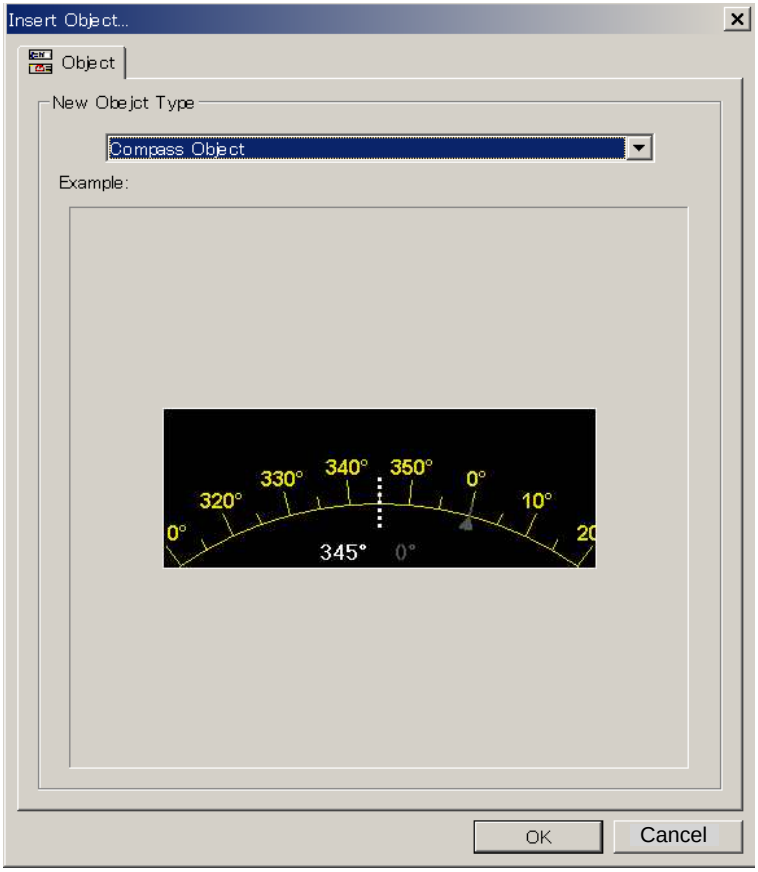
Panel menu
(See page 22.)

2. Click the **Insert Object** to show the Insert Object dialog box.

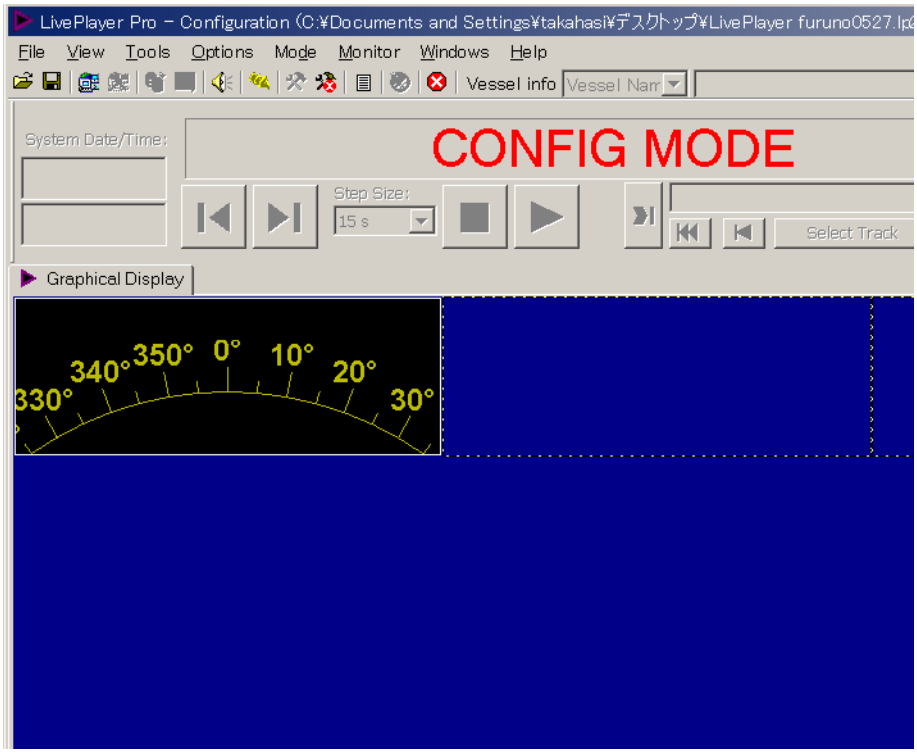


3. Click the arrow mark on the drop-down list and choose (click) an object desired you wish to display. In the 2nd example below, the compass object is chosen.



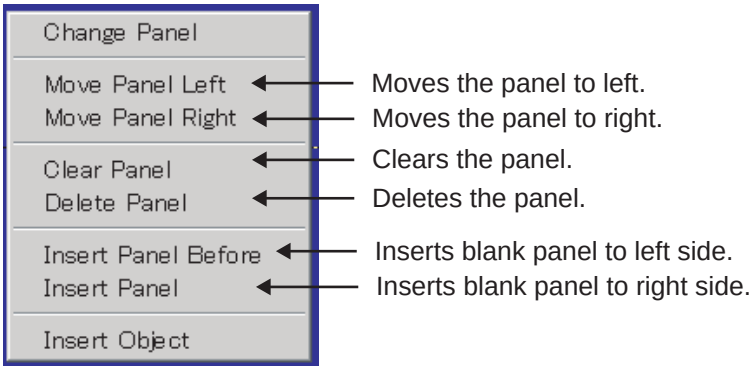


4. Click the **OK** button. In the example shown below, the compass object is displayed in the data window.



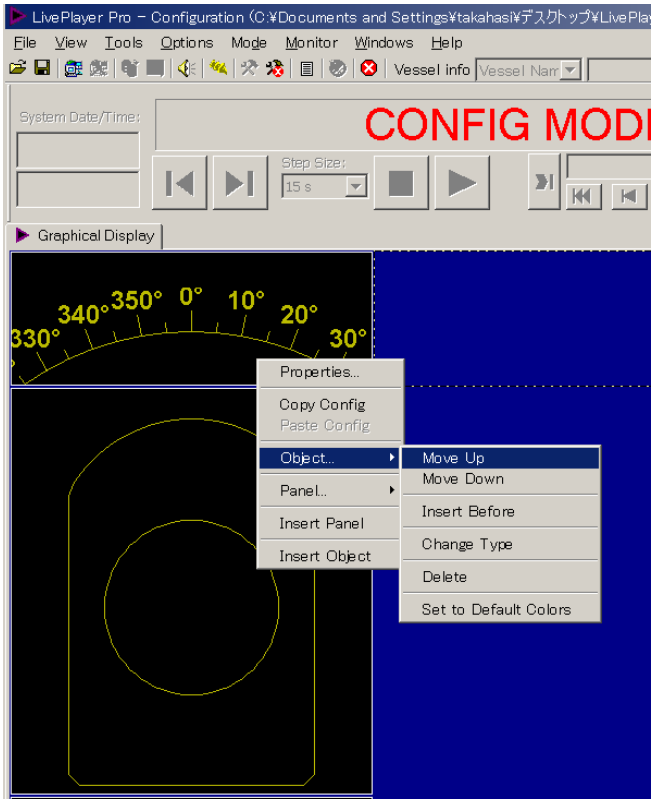
5. Right-click on an empty panel again to show the panel menu and repeat the step 2 to 4 several times to choose other objects. There are 11 objects: Compass dial, Dial meter, Doppler log indicator, Dual dial meter, Graph, Horizontal bars (up to two bars), Horizontal ruler, Numeric data display, Roll and Pitch indicator, Dual Rudder indicator and Vertical bars (up to fore bars).

About panel menu



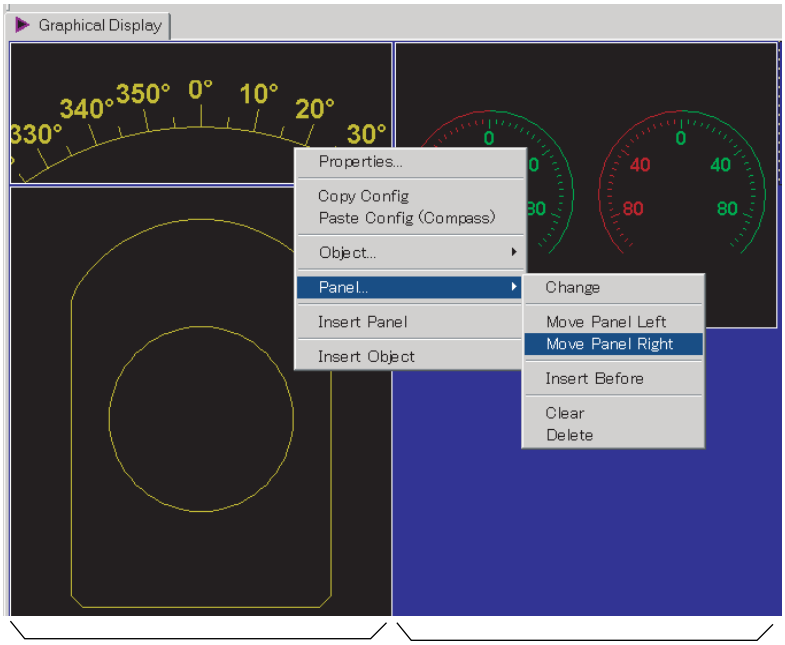
■The position of an object within a panel may be changed, i.e., the object may be moved up and down as follows:

1. Right-click on a graphical object to show the sub-menu.
2. Click **Object** and then **Move Up** or **Move Down**.

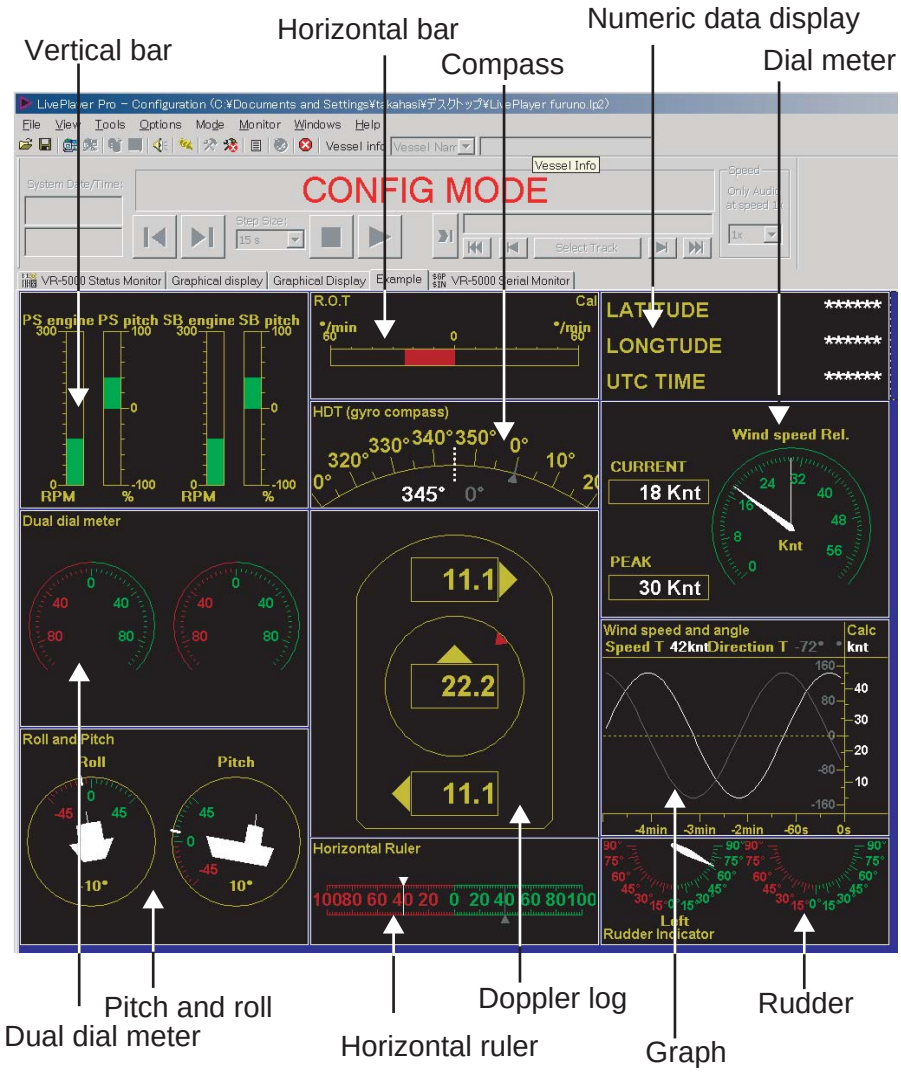


■A graphical object cannot be moved to another panel, i.e., to the left or to the right. However a panel (or column) can be moved to left or right.

1. Right-click on a graphical object to show the sub-menu.
2. Click **Panel** and then **Move Panel Left** or **Move Panel Right**.

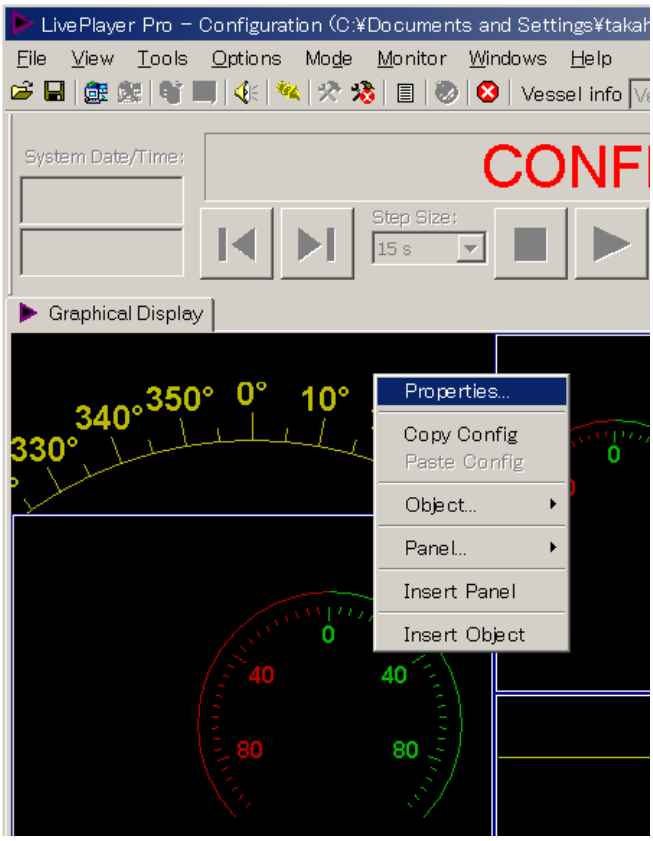


■ Example of panel layout



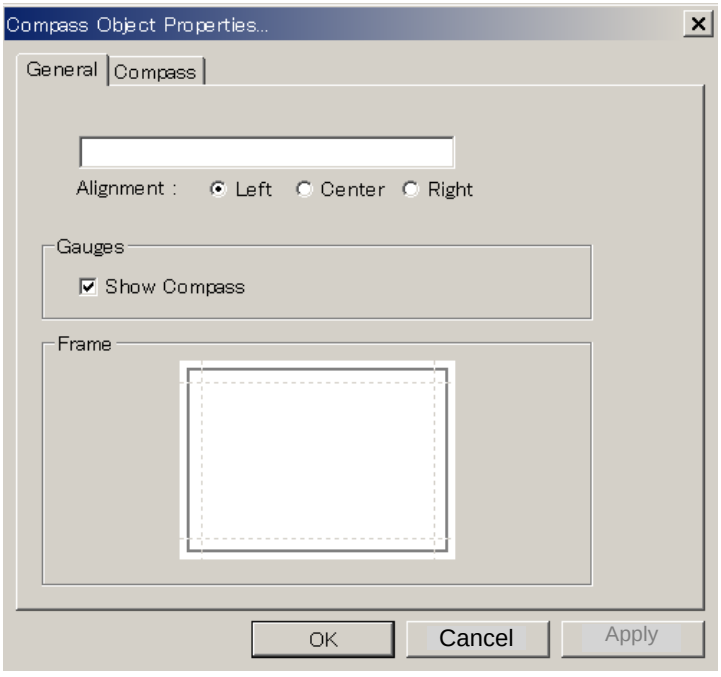
2.3.2 Configuration of graphical object

There are 11 objects. Configure each graphical object as described in the next several paragraphs. To display each Properties dialog box, right-click each object and choose Properties.



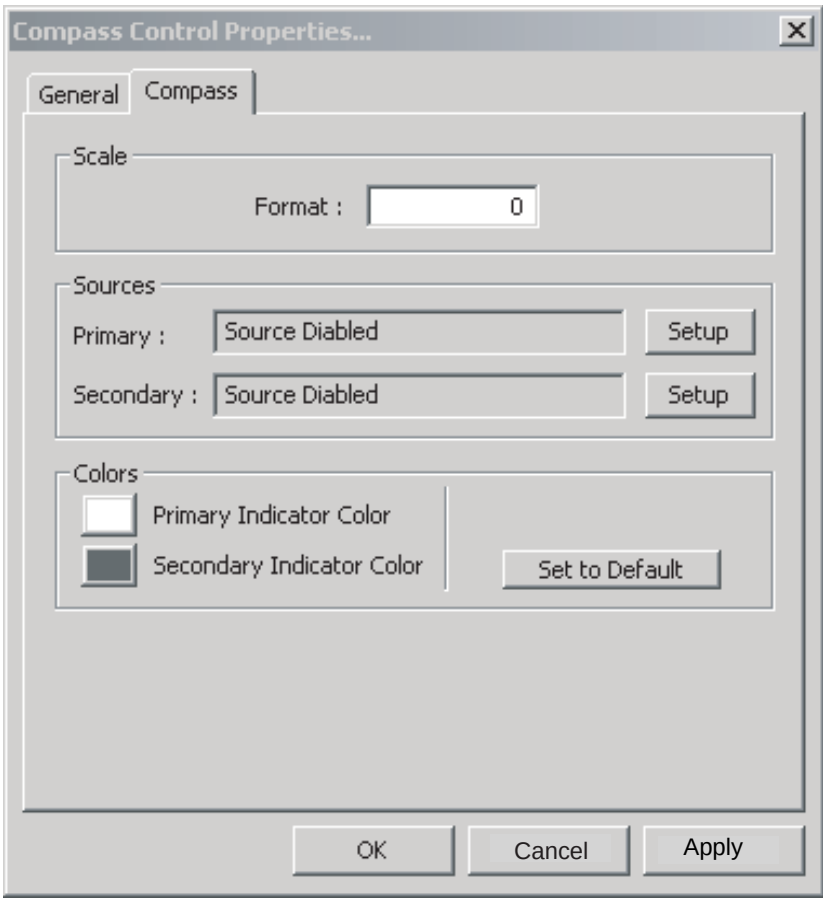
2.3.3 Compass object

General tab



The first tab page, called “General”, contains the most common parameters for a graphical object.
Title: Enter text that is displayed in the graphical object.
Gauges: Check the checkbox for enabling the display of gauges defined for that graphical object.
Frame: The boundary of a graphical object is indicated (default) with four thin lines. A number of graphical objects may be grouped by removing the adjacent lines. This is purely a visual effect. A line may be disabled / enabled by double clicking its position on the squared symbol located in this field.

Compass tab



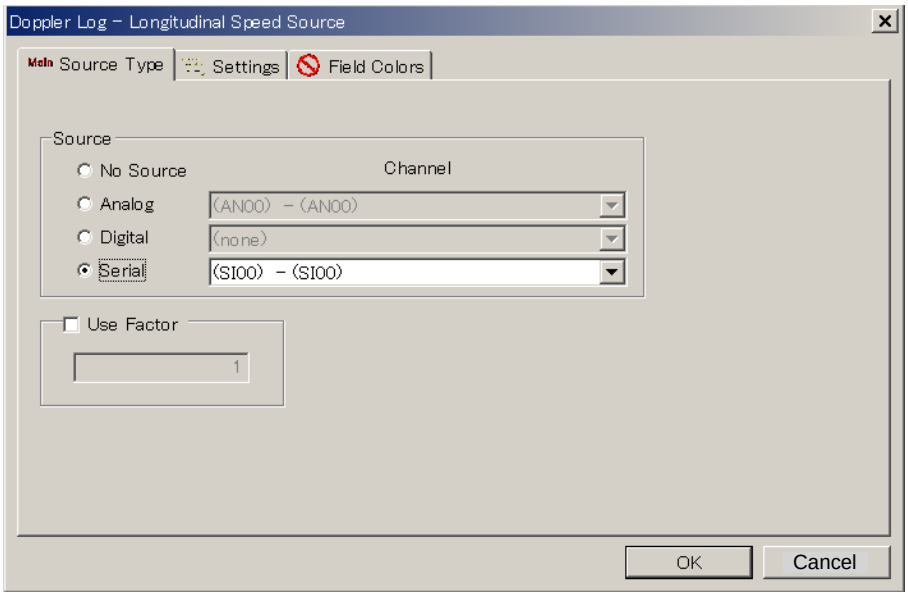
Scale

Format: is used to define the format of the figures on the compass dial, see paragraph 2.3.14.

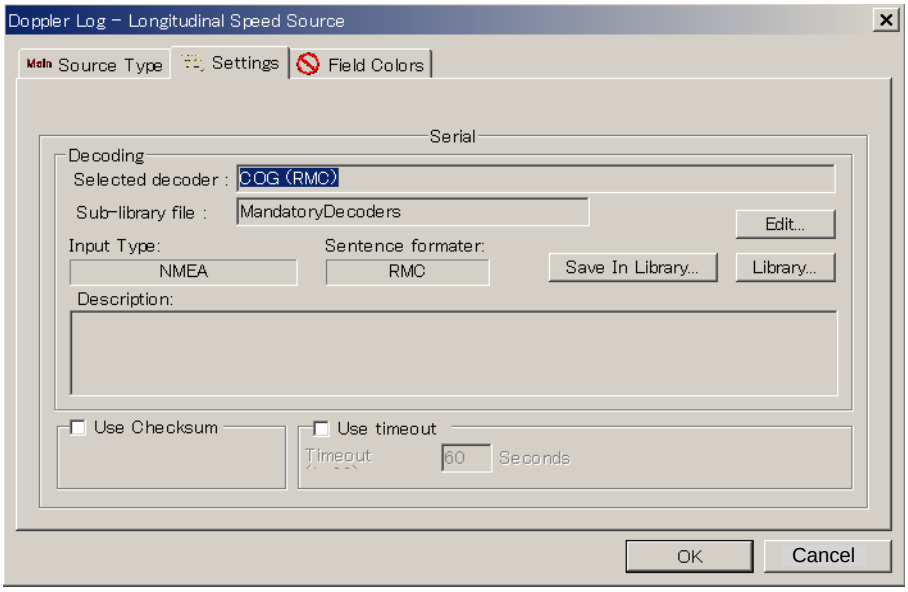
Sources

Primary: Set the primary data source to control the rotation of the compass dial.
Secondary: Set the secondary (optionally) data source to control a small triangle circling the compass dial.

Click the **Setup** button to display the source setting dialog box.



Source: The source field is used to select the proper source for the gauge.
Use Factor: The operator may apply a factor (multiplier) to the original data, e.g., knots may be converted to m/s.



See section 2.2 for setting.

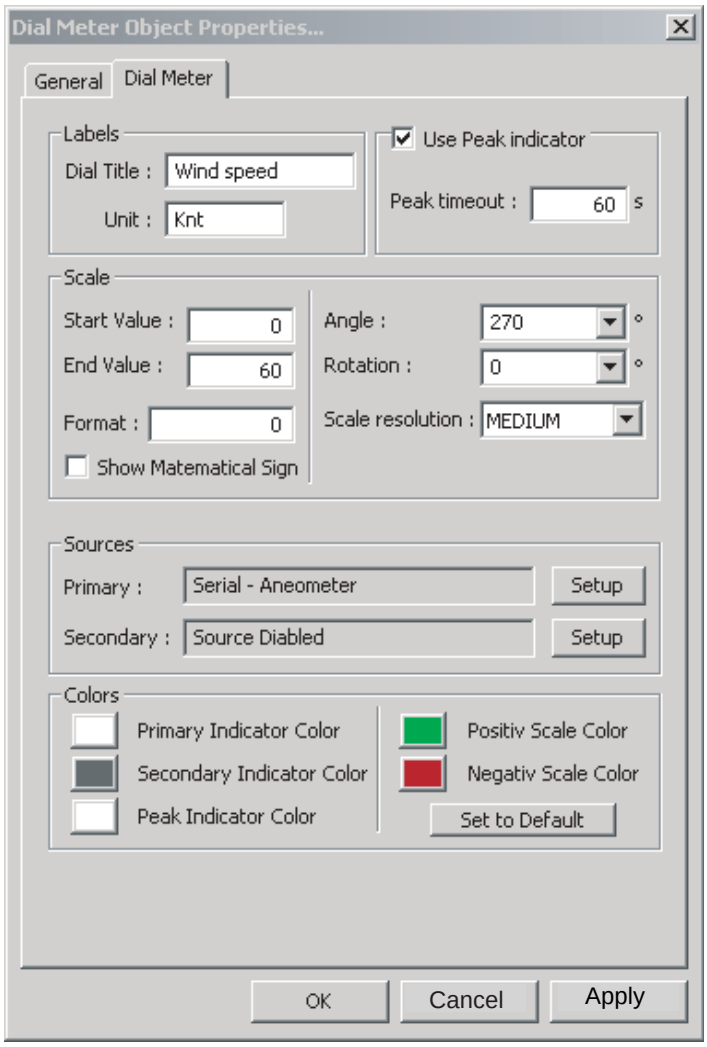
Colors

The parameters in this field control the appearance of the compass dial. The **Set to Default** button may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.4 Dial Meter object and Dual Dial Meter object

The setting of **General** tab is almost the same as in paragraph 2.3.3.

Dial Meter tab



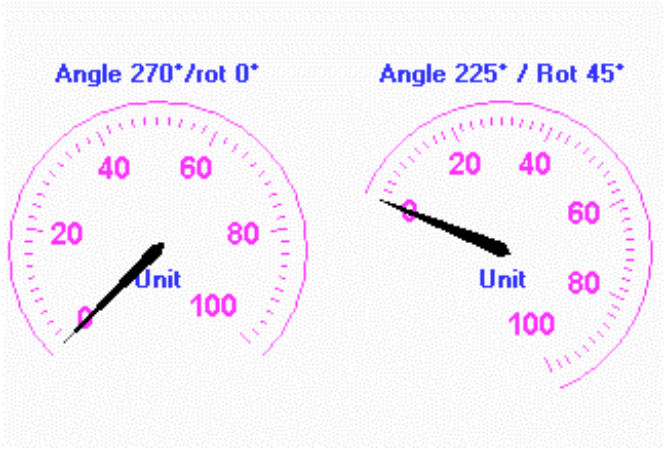
Labels

Dial Title: Text located immediately over the dial meter.
Unit: Text located inside the dial.
Use peak indicator: The peak indicator will show the maximum reading for a specified time (peak timeout). This is useful when measuring wind speed, for example.

Scale

This field contains the parameters for controlling the geometry and resolution of the dial.
Start value: The start value corresponds to the most anticlockwise point on the dial.
End value: The end value corresponds to the most clockwise point on the dial.
Format: Format is used to define the format of the figures on the dial, see paragraph 2.3.14.

Show mathematical sign: The parameter controls whether figures on the dial are displayed signed or unsigned.
Angle: Defines the extent of the dial
Rotation: The dial will per default be oriented like a typical speedometer in a car, i.e., the axis of symmetry is vertical. The operator may change the orientation by entering a value other than 0 in this field.
Scale Resolution: This parameters control the graduation of the dial.



Example of settings for dual dial meter

Sources

Primary: Input to the pointer for the dial meter.
Secondary: Input to the secondary indicator for the dial meter. The secondary indicator is shown as a small triangle. The secondary indicator is typically used for displaying the “commanded value” while the main indicator shows the actual value.

The **Setup** button will open a dial box where the source data may be defined. See the previous paragraph.

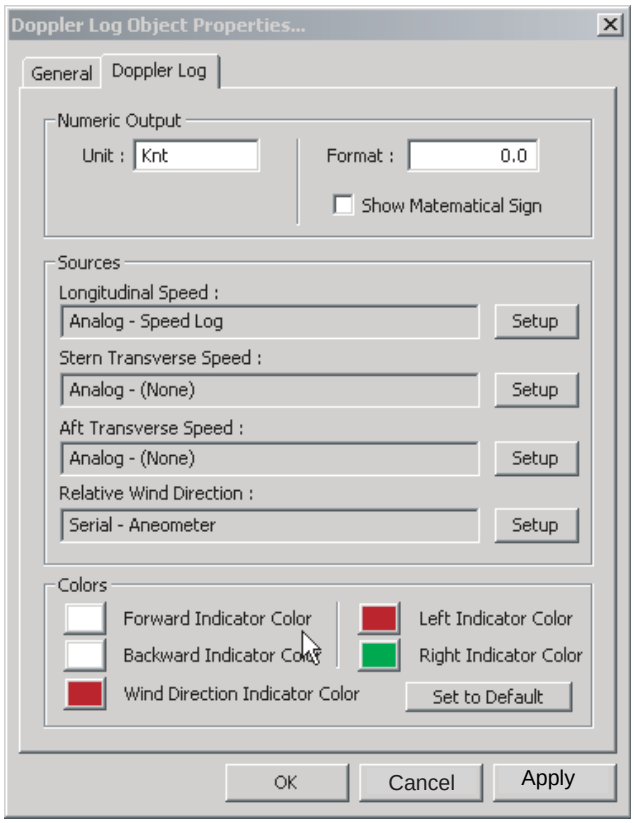
Colors

Parameters in this field control the appearance of the dial meter. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.5 Doppler log object

The setting of General tab is almost the same as in paragraph 2.3.3.

Doppler Log tab



Numeric Output

Unit: Text displayed after all numeric outputs, e.g., KNT.
Format: Format is used to define the format of the numeric outputs. See paragraph 2.3.14.
Show mathematical sign: The parameter controls whether the numeric outputs are displayed signed or unsigned.

Sources

Four inputs may be applied to the Doppler log object.

Longitudinal speed: is shown as numeric data in the center of the object.
Stem transverse speed: is shown as numeric data at top of the object.
Aft transverse speed: is shown as numeric data at bottom of the object.
Relative wind direction: is shown as a triangle circling the center of the object.

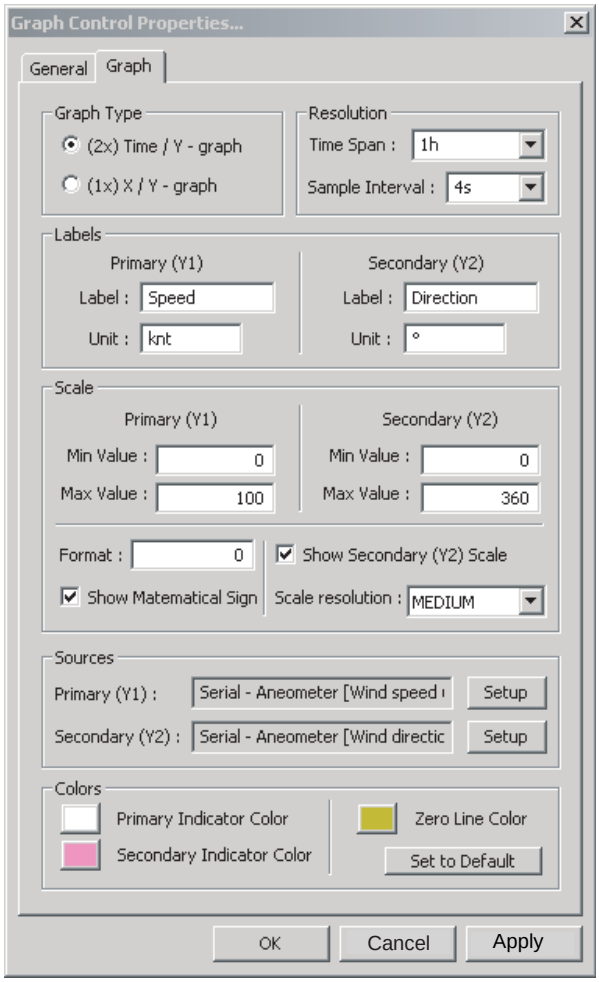
Colors

Parameters in this field control the appearance of the object. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.6 Graph object

The setting of **General** tab is almost the same as in paragraph 2.3.3.

Graph tab



Graph type

The field is used for defining the input to the X-coordinate for the graph object.
Time/Y graphs: The primary and secondary will be used as Y-coordinate for two independent graphs. The time will be used as X-coordinate for both graphs.
X/Y graph: The primary input will be used for the X-coordinate and the secondary for the Y-coordinate.

Resolution

The field is used for defining the resolution of the graph(s). Small values for “Time Span” and “Sample Interval” provide a graph with high resolution while high values provide a graph that covers a large time span.

Labels

Label: Labels for numeric output
Unit: Text displayed after numeric output and Y-axis, and X-axis if X/Y graph is selected.

Scale

The field is used for defining resolution for the Y-axis and the X-axis in case of X/Y graph and Y-axis in case of Time/Y graph.

Sources

Primary: Set the primary data source for Y1 axis or Y axis.
Secondary: Set the secondary data source forY2 axis or X axis.

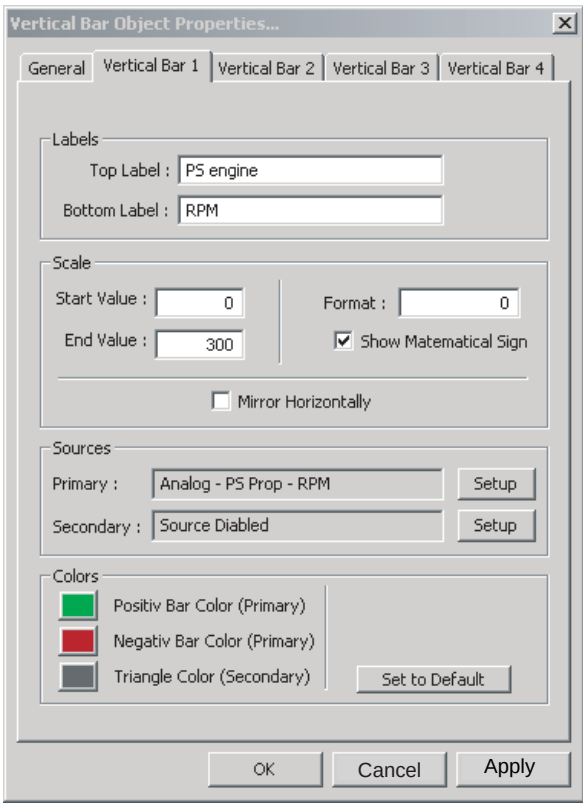
Colors

Parameters in this field control the colors of the graph. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.7 Vertical bar object

The setting of **General** tab is almost same as in paragraph 2.3.3.

Vertical Bar tab



Labels

A vertical bar has two labels, one at each end. One of them is typically used as description while the other indicates units.

Scale

Start value: The start value corresponds to the bottom of the bar.
End value: The end value corresponds to the top of the bar.

Mirror horizontally: Two adjacent bars are per default two symmetrical instances of the bar object. i.e. bar 1,2 and 3,4 form two pairs. The operator may change this by e.g. “horizontally mirror” bar object 1 and 3.
Format: Format is used to define the format of the figures for the bar object. See paragraph 2.3.14.
Show mathematical sign: The parameter controls whether figures related to the bar object are displayed signed or unsigned.

Sources

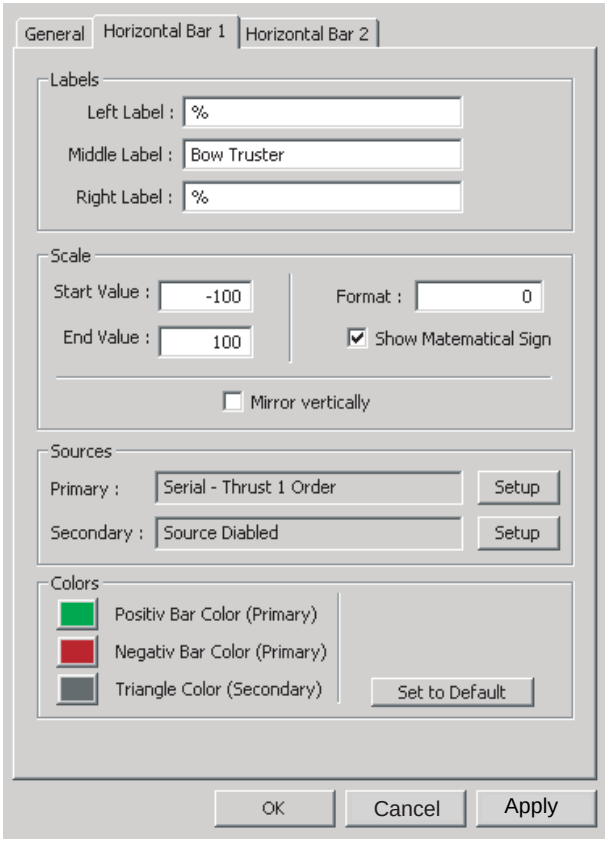
Primary: Input to the main indicator for the bar object.
Secondary: Input to the secondary indicator for the bar object. The secondary indicator is shown as a small triangle. The secondary indicator is typically used for displaying the “commanded value” while the bar shows the actual value.

Colors

Parameters in this field control the appearance of the bar object. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.8 Horizontal bar object

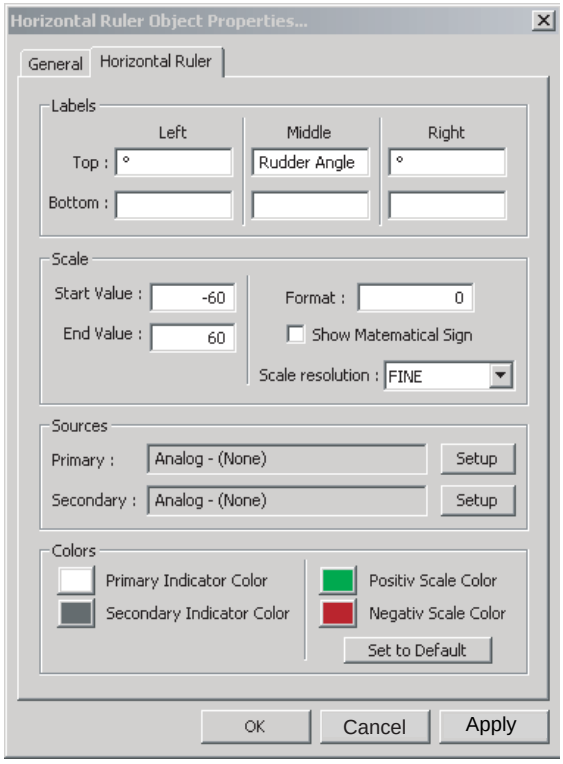
The setting of **General** tab is almost the same as in paragraph 2.3.3. To display two horizontal bars, check two check boxes in the Gauges field in the General tab.
The parameters for the horizontal bar correspond to the parameters for vertical bar. An extra label (middle) has been added.



2.3.9 Horizontal ruler object

The setting of **General** tab is almost the same as in paragraph 2.3.3.

Horizontal ruler



Labels

A horizontal bar has 6 labels.

Scale

Start value: The start value corresponds to the far-left point of the ruler.
End value: The end value corresponds to the far-right point of the ruler.
Format: Format is used to define the format of the figures on the ruler object. See paragraph 2.3.14.
Show mathematical sign: The parameter controls whether figures related to the ruler object are displayed signed or unsigned.
Scale resolution: Close the scale resolution among Course, Medium and Fine.

Sources

Primary: Input to the main indicator for the bar object. The main indicator is shown as a triangle above the ruler.
Secondary: Input to the secondary indicator for the bar object. The secondary indicator is shown as a triangle below the ruler. The secondary indicator is typically used for displaying the “commanded value” while the primary indicator shows the actual value.

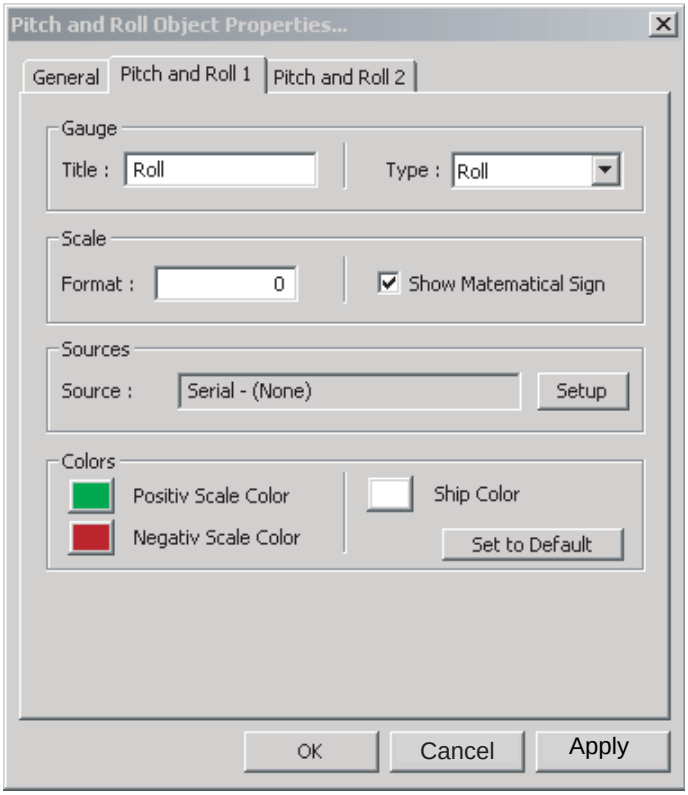
Colors

Parameters in this field control the appearance of the ruler object. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.10 Pitch and roll object

The setting of **General** tab is almost same as in paragraph 2.3.3.

Roll and pitch indicator



Gauge

Title: Text shown above the gauge.
Type: Used to select gauge type (roll or pitch). Roll is default for gauge 1 and pitch is default for gauge 2.

Scale

Format: Format is used to define the format of the numeric outputs. See paragraph 2.3.14.
Show Mathematical Sign: The parameter controls whether figures on the dial are displayed signed or unsigned.

Sources

Source: The data source controls the pointer; the typical input is data from the rudder angle sensor.

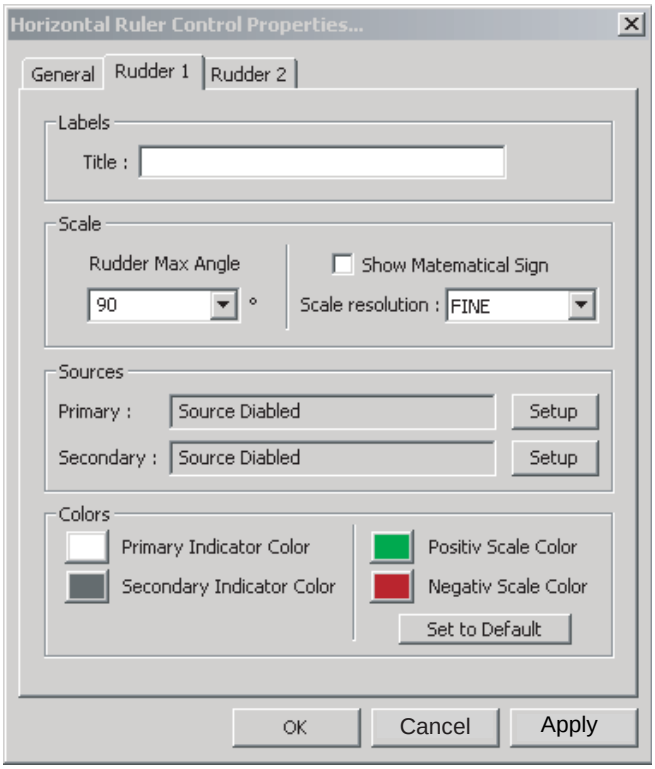
Colors

Parameters in this field control the appearance of the object. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.11 Rudder object

The setting of **General** tab is almost the same as in paragraph 2.3.3.

Rudder Indicator tab



Labels

Title: Text shown beneath the rudder indicator.

Scale

Rudder Max Angle: This parameter controls the extent of the dial for the object. It is recommended that a value equal to the maximum rudder angle for vessel is used.
Show Mathematical Sign: The parameter controls whether figures on the dial are displayed signed or unsigned.

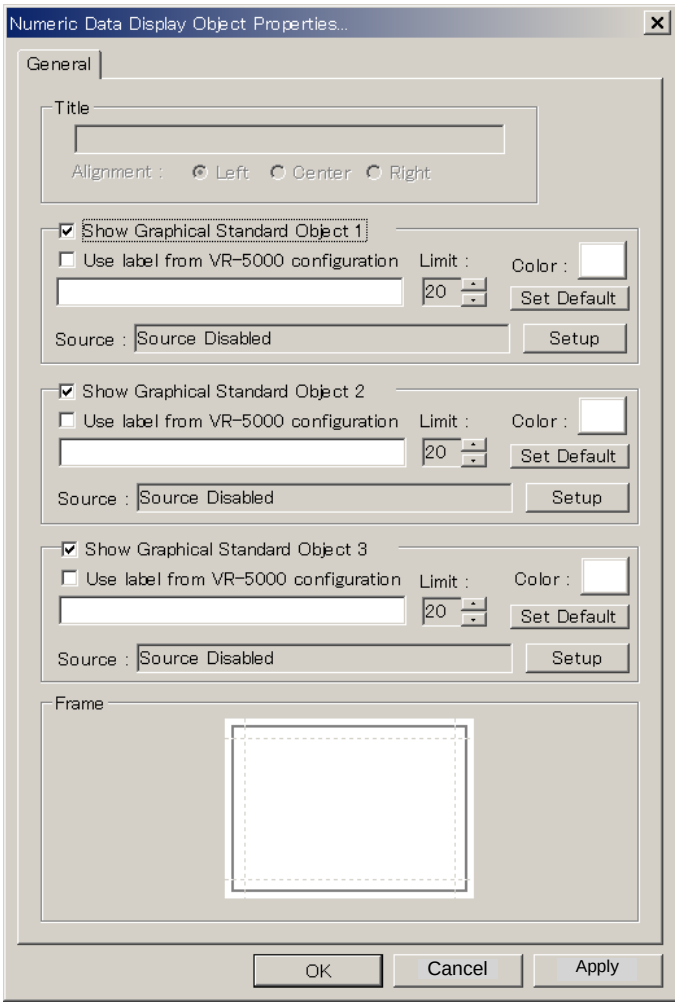
Sources

Primary: The primary data source controls the pointer; the typical input is data from the rudder angle sensor.
Secondary: The secondary (optionally) data source controls a small triangle circling the dial. The typical secondary input is “Commanded rudder angle”

Colors

Parameters in this field control the appearance of the object. The **Set to Default** may be used to reset all the colors to the default definition. See paragraph 2.3.13.

2.3.12 Numeric data display object



The Numeric Data Display does not display any gauges. Three smaller “objects” for displaying numeric data or text are displayed instead. These smaller objects, called “Graphical standard objects”, are almost identical to the non-graphical standard objects defined for showing data in tabular form.

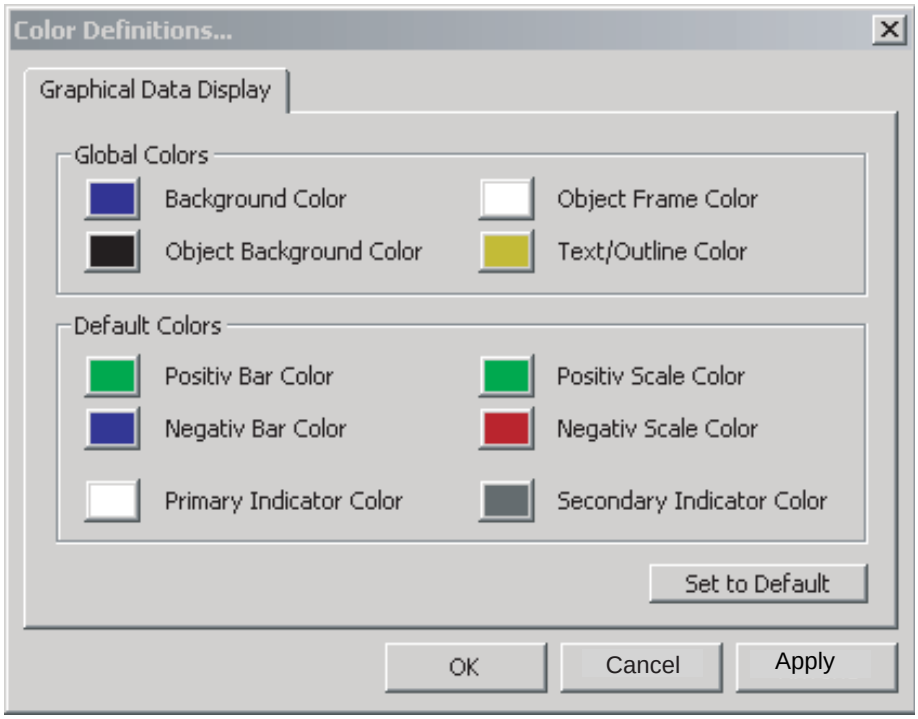
Note that the overall title for the graphical object may interfere with the “Graphical Standard Object” #1.

The color of the label text for a “Graphical Standard Object” is determined by the default color definition (Text/Outline Color) see paragraph 2.3.13. The “Primary indicator color” is used as default for the displayed data but may be set by the operator.

A number of Numeric Data Displays may be linked by removing adjacent lines.

2.3.13 Default color definition

To open the Color Definitions dialog box, click **Options** on the menu bar and then click **Color Definitions**.



The **global colors** define the overall color scheme used for the graphical data display(s).

- The **Background Color** is the color of the window used for a graphical data display. The background color will be visible because there is a small space between objects (unless they are merged).
- The **Object Frame Color** indicates the border of an object.
- The **Object Background Color** is background color used for objects.
- The **Text / Outline Color** is color for static text (e.g. labels) and for outline of most gauges.

Changes to Global color take affect immediately after the **OK** or **Apply** button is clicked, even when the Player is not in the configuration mode.

The **default colors** are the colors of dynamic elements in a graphical data display, e.g., the indicator for a dial meter. Changes to default colors will only take affect for new objects. The colors for an existing object may be set to new default colors by right-clicking on the object (in configurations mode) and selecting **Object** -> **Set to Default Colors**.

2.3.14 Formatter syntax

Figures displayed by the graphical objects may be formatted, i.e., the number of digits after the decimal point and leading zeroes may be defined.

The formatter syntax is identical to the syntax defined for formatting output from an NMEA decoder.

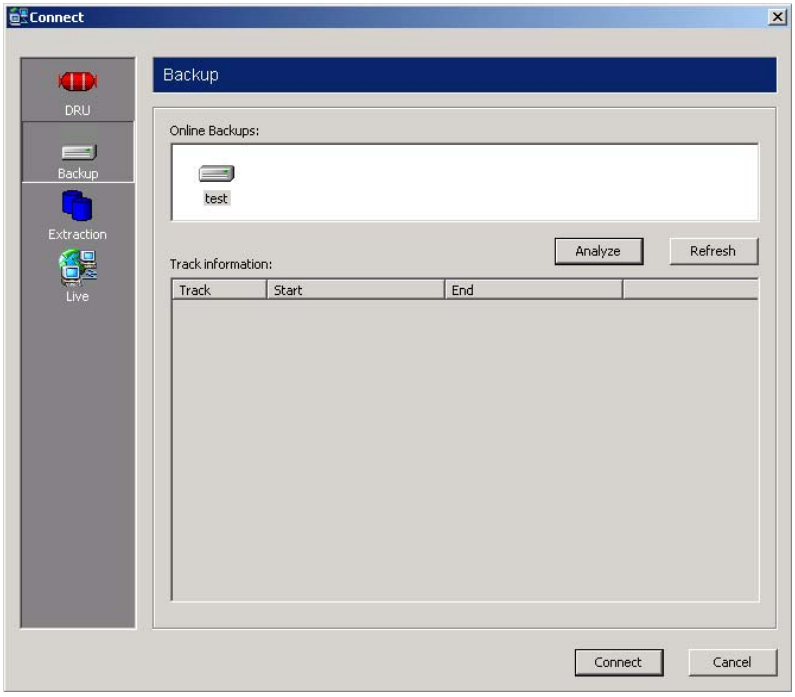
Example: The figures 7.5 and 10 will be displayed like this depending on the formatter.

Formatter	7.5	10
0	7	10
0.0	7.5	10.0
000	007	010

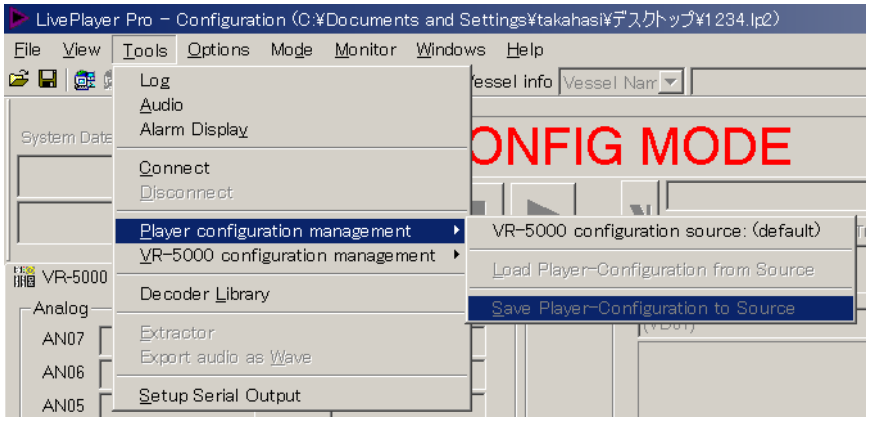
2.4 Saving the Configuration

To save the configuration created to the PC:
1. Click **File** -> **Save as** in the menu bar.
2. Choose a directory where to save.
3. Enter file name and click the **Save** button.

To save the configuration to the DRU (Capsule) and/or the removable hard disk:
1. Connect the PC as shown in the figure in paragraph 3.1.1, 3.2.1 or 4.1.
2. Open the Player configuration created.
3. Click the **Connect** button in the tool bar.



4. Click the **DRU**, **Backup** or **Live** icon depending to the hardware connection.
5. Click **Connection** button in the dialog box displayed.
6. Click **Tools** in the menu bar.
7. Click the **Player configuration management** -> **Save Player-Configuration to Source** in the menu displayed. Then, the configuration created is saved to the DRU and/or the removable hard disk.



If you are using another PC, you can load the configuration from the DRU.

3. REPLAY (PLAYBACK)

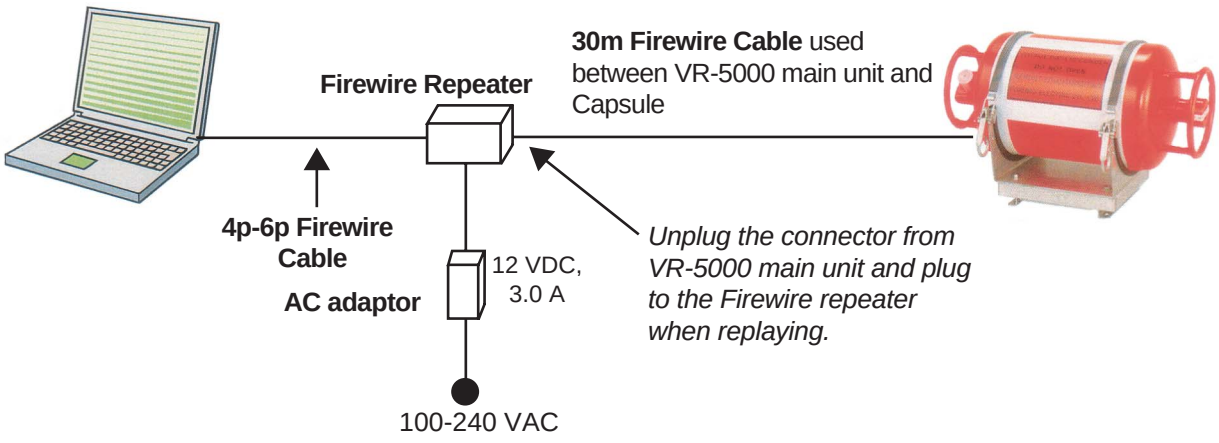
The replay function is specially designed for data analysis after an incident. Since accessing the data recorded in the DRU is NOT allowed while the VDR is in operation, in accordance with IEC regulations, replay is only possible by direct connection with the DRU or Removable Hard Disk, after turning OFF the VDR main unit.

There are three ways to replay the data recorded:
1) Reading the data recorded in the DRU (Capsule) by accessing the data stored in DRU directly without retrieving.
2) Reading the data recorded in a Removable Hard Disk by accessing the data stored in a Removable HDD directly without retrieving.
3) Reading the data retrieved from the DRU or Removable Hard Disk.

3.1 Reading the Data Recorded in DRU (Capsule)

In this paragraph, we explain how to access the data recorded in the DRU (Capsule) directly without retrieving it.
Normally, it takes more than one hour to retrieve the recorded data from the DRU to the Replay PC. Using this Live Player Pro software, however, the data recorded in the DRU can be read to replay it without copying the data into the Hard Disk of the Replay PC. This feature is very useful for testing equipment function when installing the VR-5000, to check if all the data input to the VR-5000 is recorded properly in the DRU.

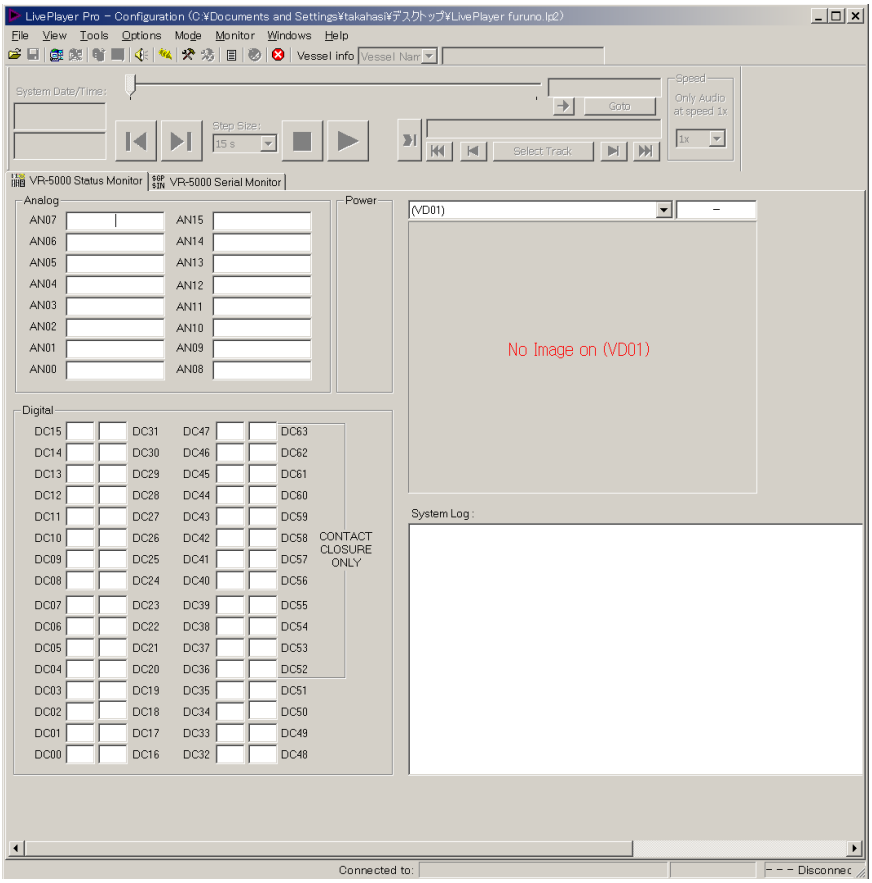
3.1.1 Wiring



3.1.2 How to replay data

To replay data recorded in the Capsule, simply select source of data and push the start button.

1. Start the Live Player Pro software. The data window appears.



Example of data window

2. Click the **Connect** button in the tool bar.



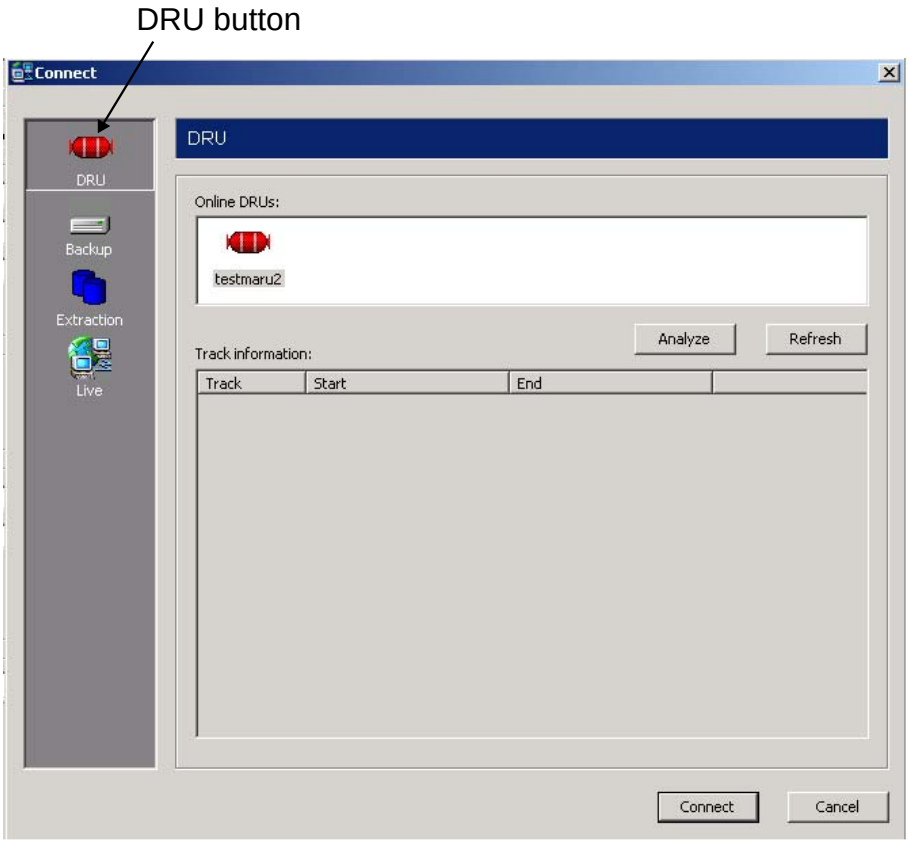
DISCONNECT button

CONNECT button

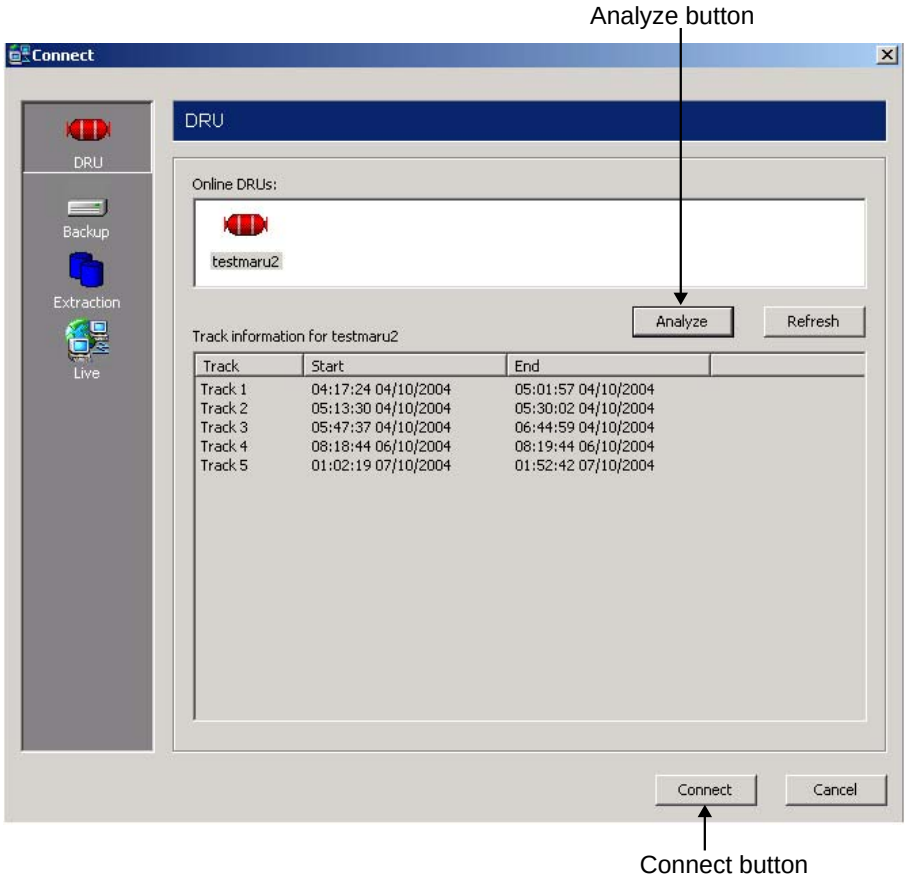
Connect button

The Connect dialog box appears as shown in the figure on next page.

3. If the **DRU** button is not selected, click it.



4. To see memory track information in the DRU, click the **Analyze** button.
The track information appears in the connect dialog box.

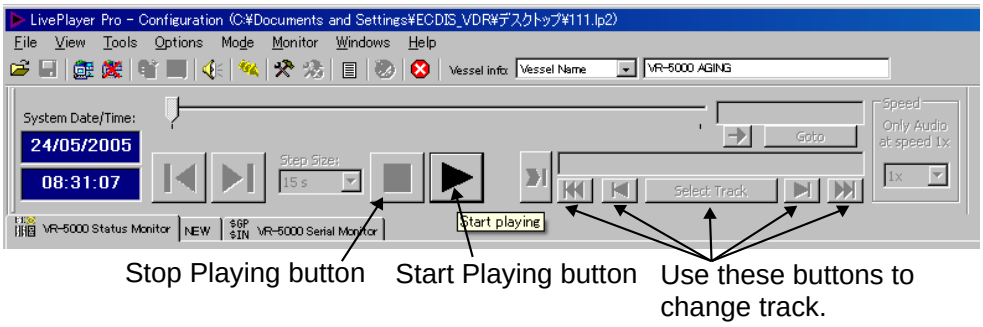


5. Click the **Connect** button in the Connect dialog box.

   After completion of connection with the DRU, the Connect dialog box disappears.

   If you want to load the player configuration data from the DRU, click **Tools** -> **Player configuration management** -> **Load Player-Configuration from Source**.

6. Click the **Start Playing** button to display the data recorded in the DRU.

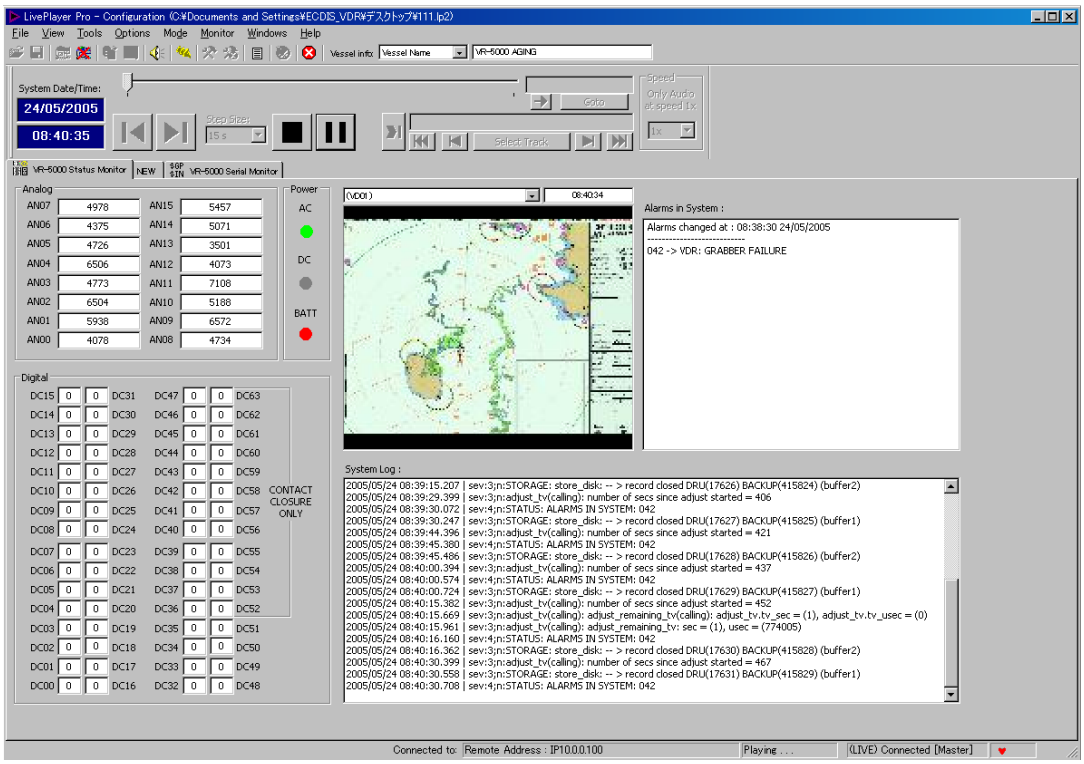


   For example, various data is displayed as shown in the data window. Click a tab to change the data display window to see various data.

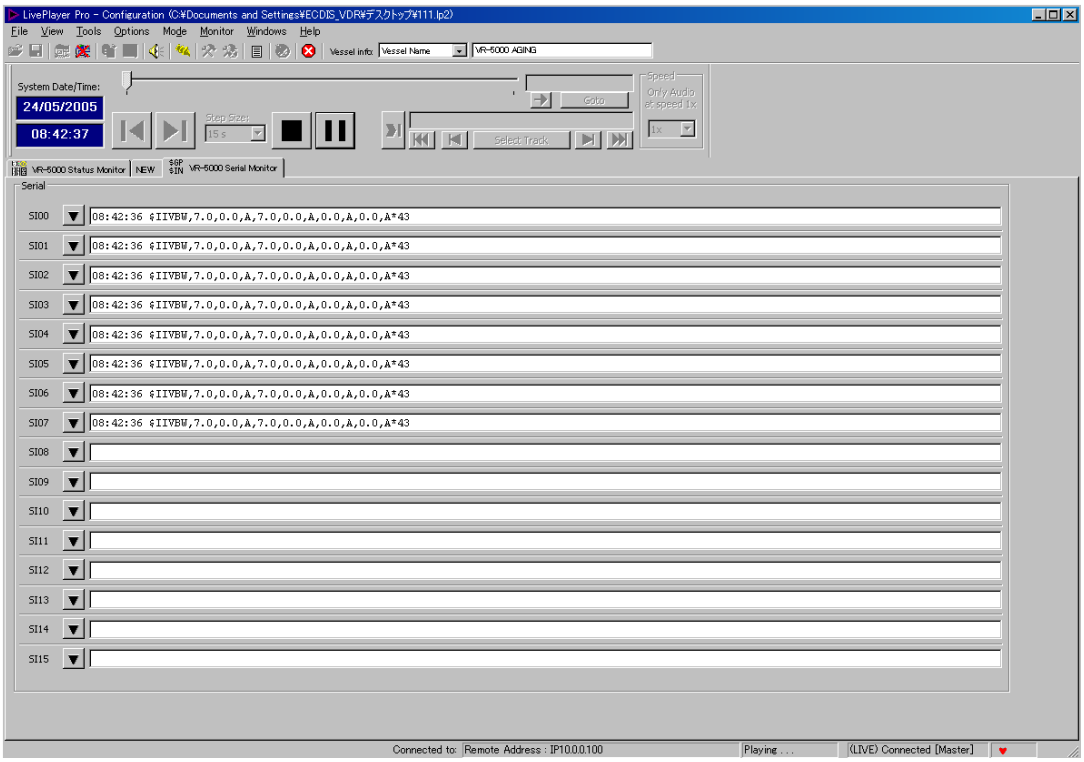
7. To stop displaying data, click the **Stop Playing** button.

8. To disconnect the line, click the **Disconnect** button in the tool bar (see the figure which follows step 2). The confirmation message appears. Click the **OK** button to disconnect.

The figure below shows an example of the data window.



Example of data window

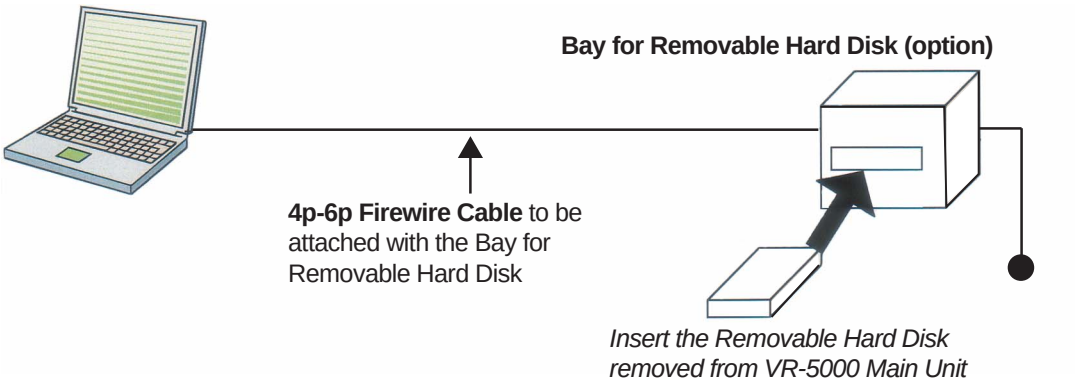


Example of serial data monitor

3.2 Reading the Data Recorded in Removable Hard Disk

In this paragraph, we explain how to access and read the data recorded in the removable hard disk without retrieving the data from the hard disk.
Normally, it takes more than one hour to retrieve the recorded data from the removable hard disk to the Replay PC. Using this Live Player Pro software, however, the data recorded in the removable hard disk can be read for replay without copying the data into the hard disk of the Replay PC. This feature is very useful for testing equipment function when installing the VR-5000, to check if all the data input to the VR-5000 is recorded properly in the removable hard disk.

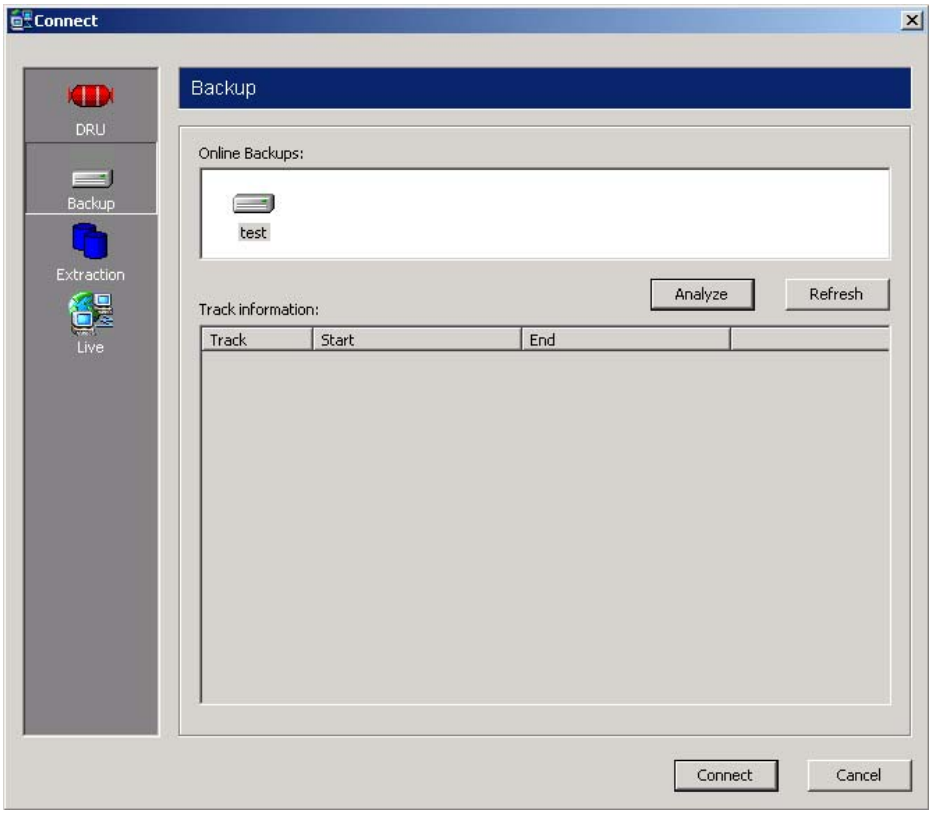
3.2.1 Wiring



3.2.2 How to replay the data

To replay the data recorded in the removable hard disk, simply select source of data and push the start button.

1. Start the Live Player Pro software.
2. Click the **Connect** button in the tool bar.
   The Connect dialog box appears.
3. Click the **Backup** button and choose a backup media.



Connect dialog box

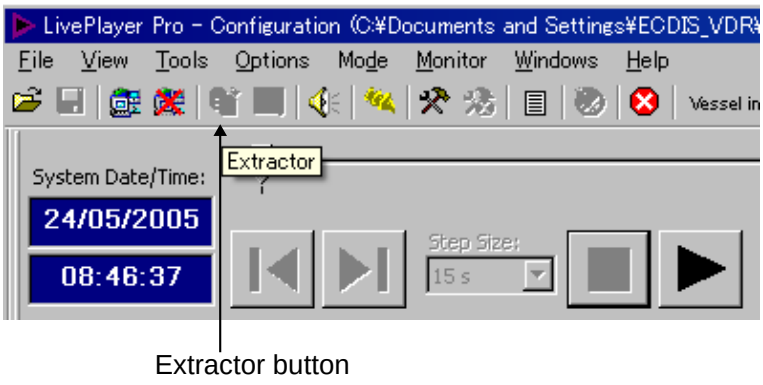
4. To see memory track information in the removable hard disk, click the **Analyze** button.
   The track information appears in the Connect dialog box.
5. Click the **Connect** button in the Connect dialog box.
   After completion of connection with the removable hard disk, the Connect dialog box disappears.
6. Click the **Start Playing** button to display the data recorded in the removable hard disk. The data appears in the data window.
7. To stop displaying the data, click the **Stop Playing** button.
8. To disconnect the line, click the **Disconnect** button in the tool bar. The confirmation message appears. Click the **OK** button to disconnect.

3.3 Reading the Data Retrieved from DRU or Removable Hard Disk

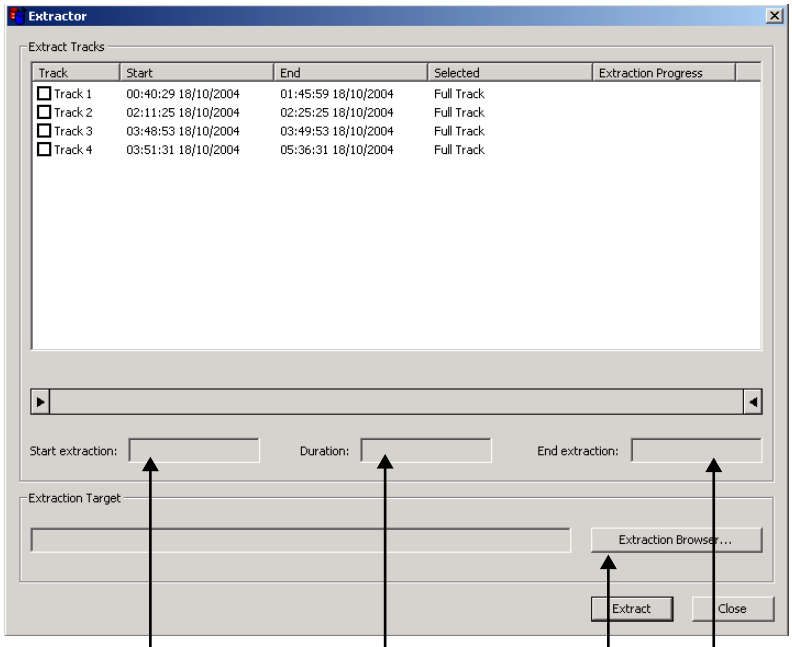
The data recorded in the DRU and the removable hard disk can be copied to the hard disk of the Replay PC and replayed by using the Live Player Pro software. The data copied can be replayed by another Replay PC. The wiring necessary to retrieve the data is the same as shown in paragraph 3.1.1 and 3.2.1.

To retrieve the data from the DRU (or the removable hard disk):

1. Click the **Connect** button in the tool bar. The Connect dialog box appears.
2. Click the DRU button or Backup button, depending on from where to retrieve data.
3. Click the **Connect** button in the Connect dialog box.
4. Click the **Extractor** button in the tool bar.



Extractor button



Start Extraction time

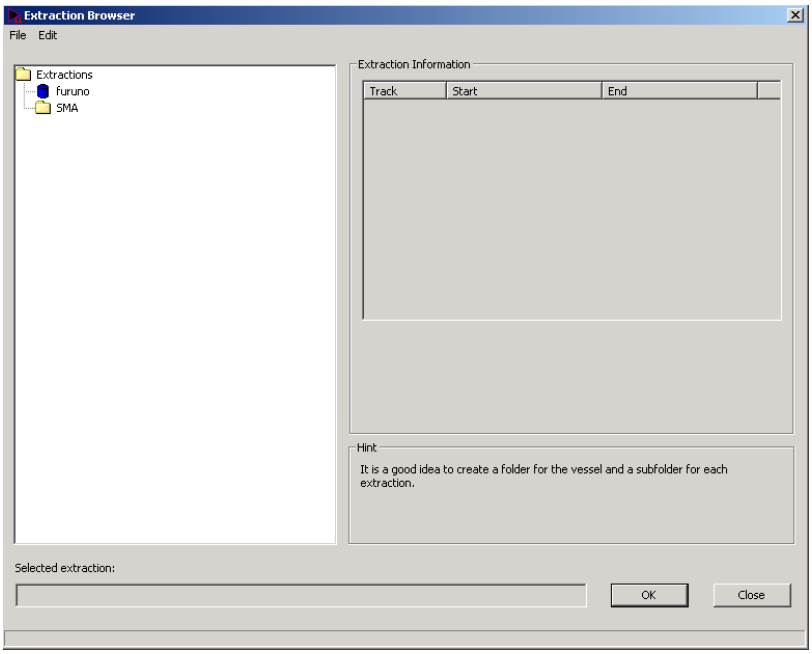
Duration

End Extraction time

Extraction Browser button

5. Choose the tracks you want to retrieve, referring to the Start Extraction time, Duration, and End Extraction time. Also, the Start Extraction time, Duration, and End Extraction time can be changed.

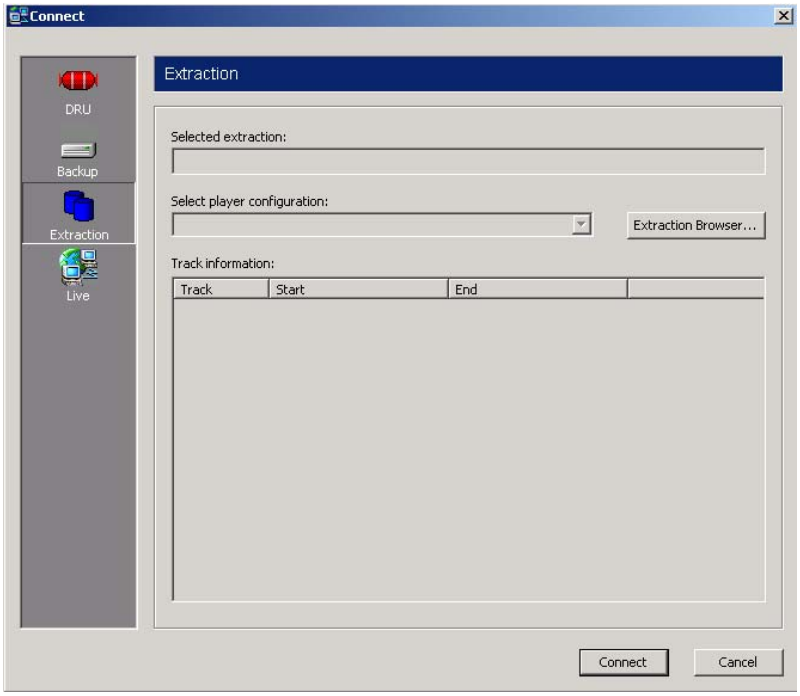
6. Click the **Extraction Browser** button. The Extraction Browser dialog box appears.



7. Choose **Edit** and **New Extraction** from the menu bar on the Extraction Browser dialog box and enter a file name.
8. Click the **OK** button. The Extraction Browser dialog box disappears.
9. Click the **Extract** button in the Extractor dialog box. The bar graph which indicates retrieving status appears. When the extraction is completed, the message “Extraction Completed Successful” appears.
10. Click the **OK** button and then click the **Close** button.

To replay the data retrieved and copied into the HDD of the PC:

1. Click the **Connect** button in the tool bar. The Connect dialog box appears.
2. Click the **Extraction** button.



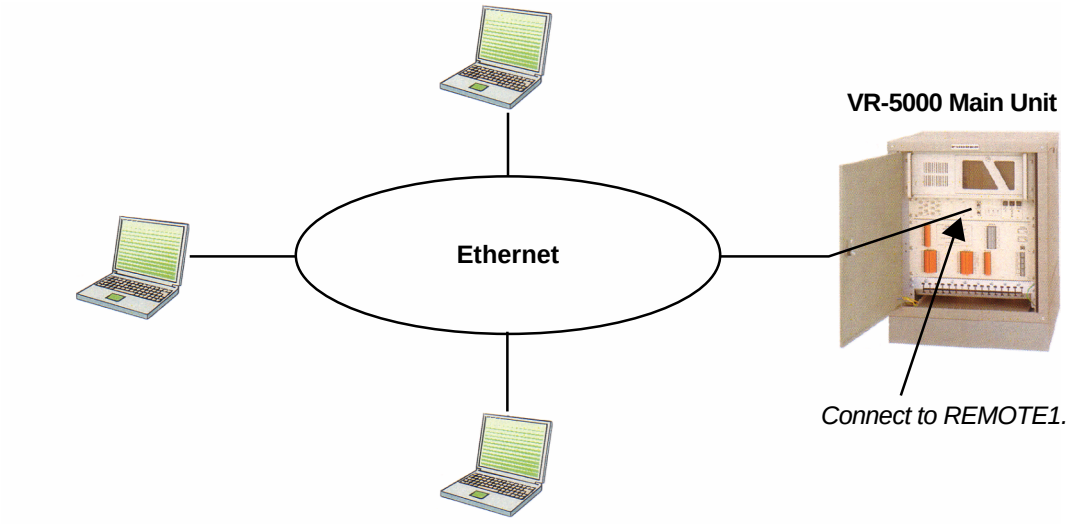
3. Click the **Extraction Browser** button on the Connect dialog box. The Extraction Browser appears.
4. Choose a file to replay and then click the **OK** button.
5. Click the **Connect** button on the Connect dialog box.
6. Click the **Start Playing** button. The data is displayed in the data window.

4. LIVE PLAY

In addition to its replay functions, this software has a "Live Play" capability when the Replay PC is connected to the VR-5000 main unit via an Ethernet cable. The Live Player allows monitoring all the data input to the VR-5000 in real time at a remote location. This is useful for checking the current status of all devices connected to the VR-5000.

4.1 Wiring

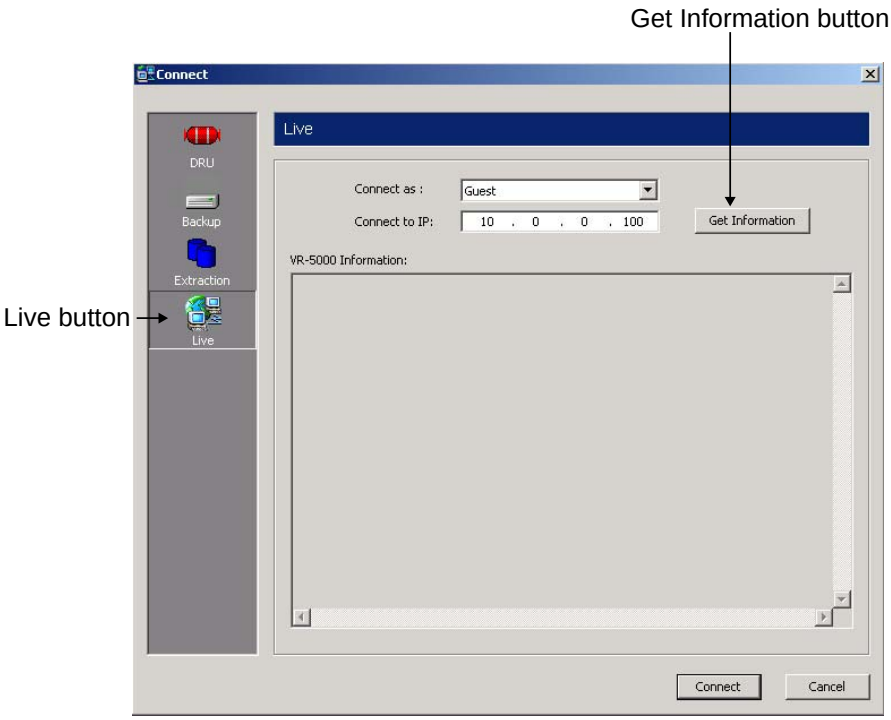
Any PC in the network installing this software can access the VR-5000. Also, a number of PC can communicate with the VR-5000 since the VR-5000 (version 3.00) can distribute the Live Play data in multi-cast. However, the multi-cast via router can not be guaranteed.



4.2 How to Operate

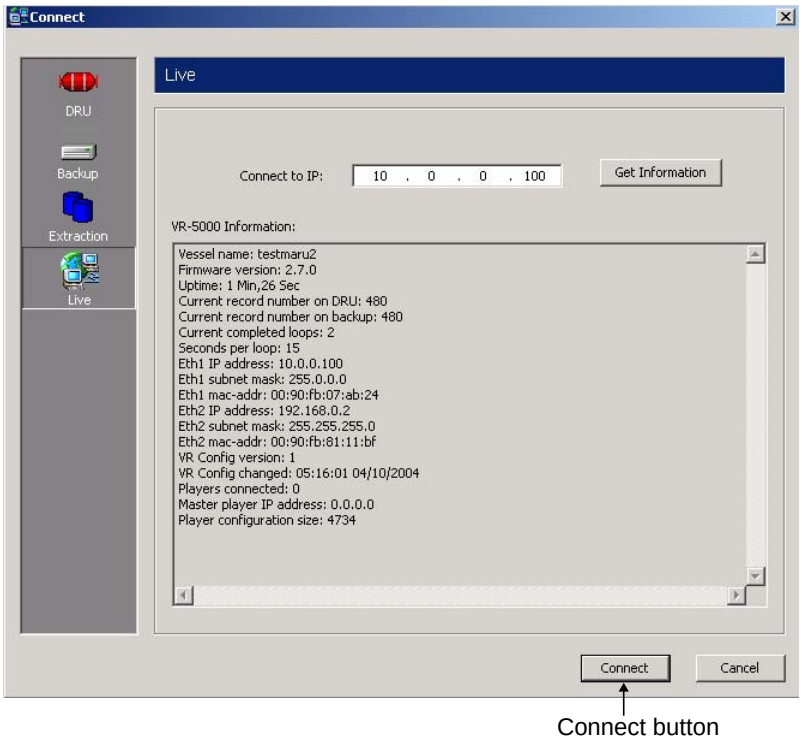
To execute Live Player, simply select source of data and push the start button.

1. Start the Live Player Pro software.
2. Click the **Connect** button on the tool bar.
3. Click the **Live** button in the Connect dialog box.



4. Choose Guest or Master in the “Connect as” field.
5. If necessary, click the **Get Information** button.

   Shortly thereafter, the VR-5000 information appears in the Connect dialog box as follows.

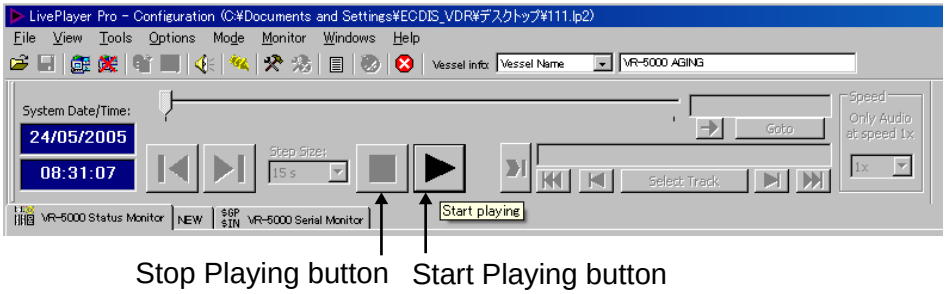


6. Click the **Connect** button.

   If the password has been set in the VR-5000 configuration at installation, the password entry box appears.
7. Enter master password or guest password and click OK.

   After completion of connection with the VR-5000, the Connect dialog box disappears.

8. Click the **Start Playing** button to display real time data.



Stop Playing button Start Playing button

The data appears in the data window.

9. To stop displaying the data, click the **Stop Playing** button.
10. To disconnect the line, click the **Disconnect** button in the tool bar. The confirmation message appears. Click the **OK** button to disconnect.

5. DATA DECODER

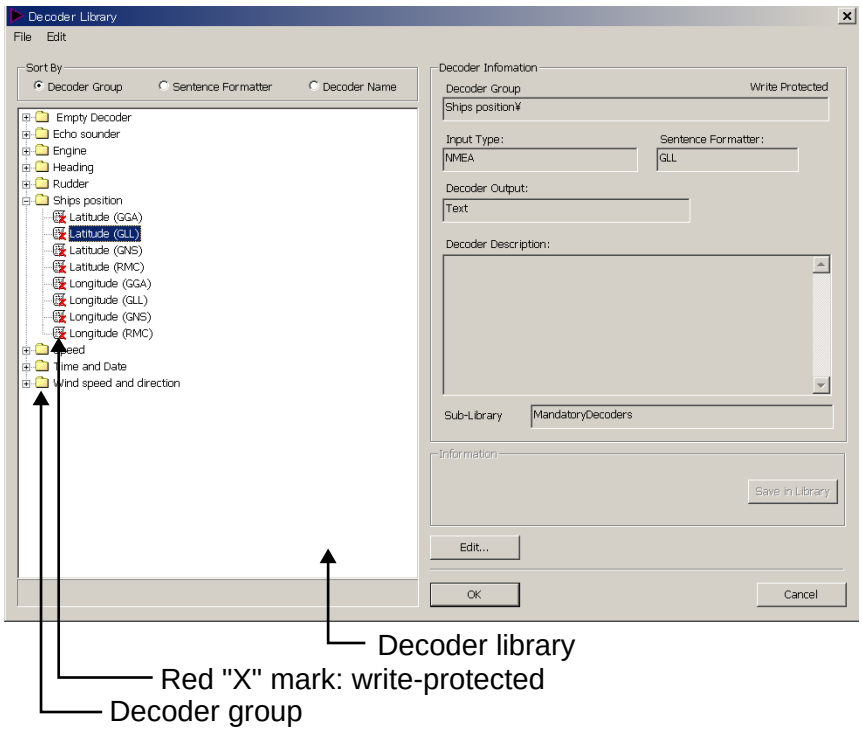
The decoder library is used to organize the decoders. A decoder is a small script which describes how information is decoded and retrieved from a specific NMEA sentence. This means any sentence can be decoded and displayed in a user-specified form with this software if the sentence fully meets the NMEA standard (proprietary sentence is also accepted).

5.1 Opening Decoder Library

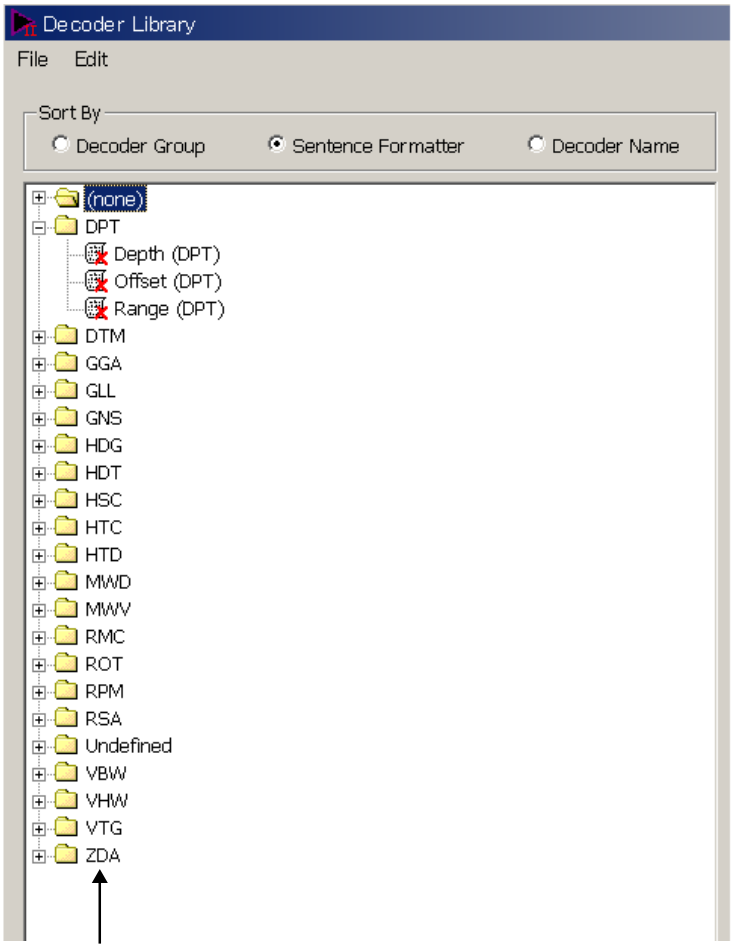
1. Click the **Tools** menu in the menu bar and choose **Decoder Library**.
   The Decoder Library dialog box is displayed. See paragraph 5.2.
2. Choose a sentence from the left box and the information of the chosen sentence appears at the right side. All the sentences specified in IEC 61996 are supported by this library.
3. Click the **Edit** button.
   The confirmation message appears. Click the **OK** button in the message. The NMEA Decoder Editor is displayed. See paragraph 5.3.

If a sentence which is not supported by this library is input to the VR-5000, you can edit and create a decoder for the sentence. In addition, you can program the decoder so that a specified data field can be picked up and displayed on the Replay and Live Play window.

5.2 Decoder Library

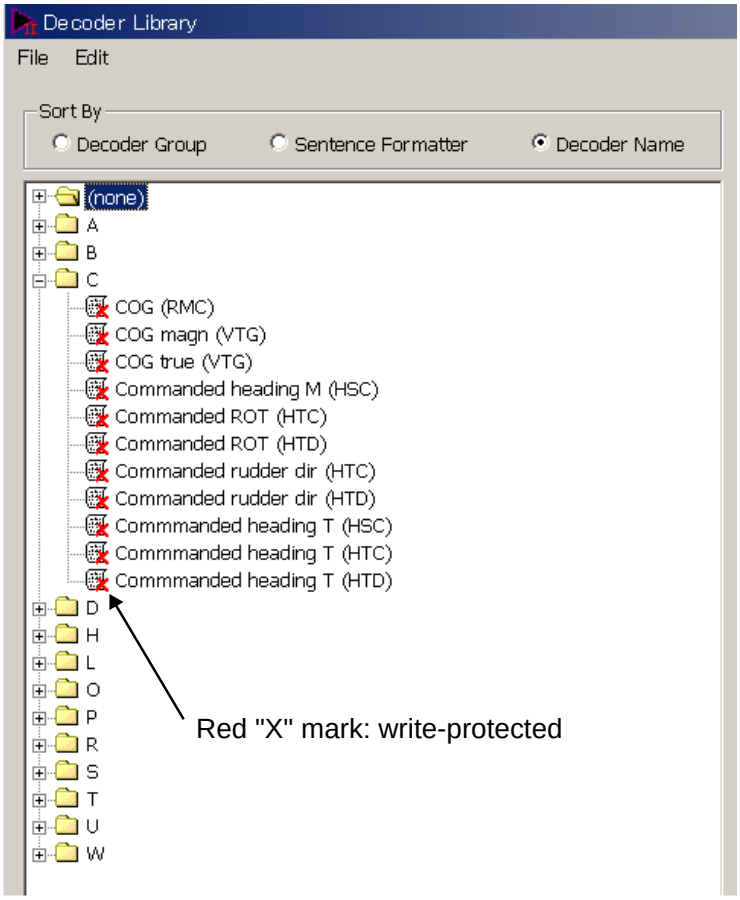


Decoder Group: A decoder belongs to a group, and all decoders in the same group are stored in the same folder. Groups have been defined corresponding to the data items to be recorded. User may establish new groups.
Sentence formatter: A decoder is only able to retrieve information from one specific NMEA sentence. A typical decoder is only able to retrieve information from one field in an NMEA sentence. Most NMEA sentences contain many fields, hence a number of decoders may be needed for retrieving all the information from one sentence.



Sentence formatter

Decoder name: A decoder must be assigned a name, and the name must be unique within the decoder group.



Write-protected decoders: A number of standard decoders (protected decoders) have been defined. These decoders are write-protected and cannot be changed or deleted by the user. These are indicated with a red “X” mark as shown above. However, the operator may use one of these decoders as a template for a new decoder.
Sub-library: The Player will at startup “compile” the library from a number of library files each containing a number of decoders. The standard decoders are stored in one file and another file is used to store the user-defined decoders. The user is not able to add or delete the sub-library files.
Decoder output: The output from a decoder may behave like analog data, digital data or a text string. This information may be indicated for a decoder. However, this information is only informative and will not be used by the Player.
Input type: The input type of the standard decoders defined are all NMEA. A unique input type can be defined for a decoder.

Drop down menus

File->import: Imports decoders from an external file. The imported decoders will be added to the user defined sub-library file.
File->export: Exports decoders to an external file.
File->Save in library: Saves decoder in library.
File->Close: Closes the window. Corresponds to cancel.
Edit->New decoder: Adds a new decoder to the library.
Edit->New folder: Adds a new folder to the library.

Edit->Copy: Makes a copy of the selected decoder.
Edit->Edit: Opens the decoder edit window.
Edit->Rename: Renames the selected decoder or folder.
Edit->Delete: Deletes the selected decoder or folder.

Decoder library

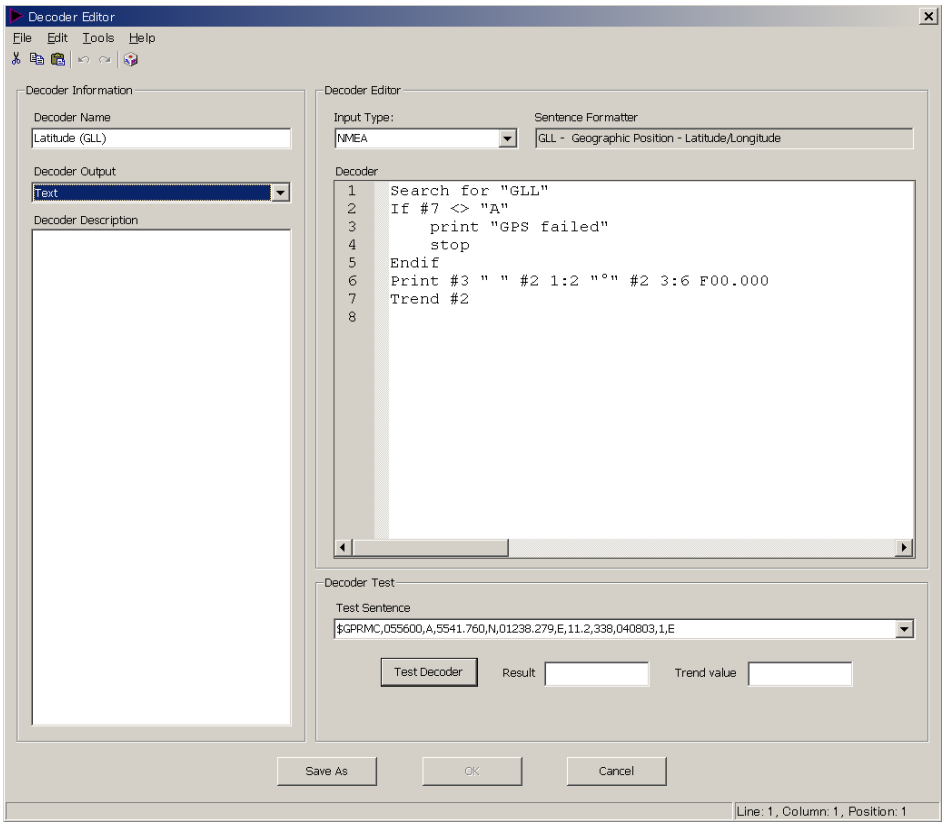
The decoder library is shown to the left. The “radio buttons” at the top define how the library is organized.
Pop-up menu will appear if the user right-clicks on a folder or a decoder. This menu will enable the user to add, rename, copy and delete folders and decoders.
It is possible to create a new “root folder” by right-clicking on the empty space beneath the “library tree”.

Decoder description

The remaining decoder properties, for the selected decoder, are shown in decoder description located to the right of the decoder library window.

5.3 Decoder Editor

You can edit a decoder which has been defined, in the Decoder Editor screen. The Decoder Editor may be opened from either the decoder library (see next page) or from the object configurator (Edit button on the “Standard-Object propertied” dialog box on page 11). Select a decoder in the Decoder Library dialog box or Data Format tab in the Standard-Object Properties dialog box and click the **Edit** button.



Drop-down menus

A number of drop-down menus are located at the top of the window.
File->Save as: Closes the editor window and opens the decoder library window where a new name and folder (group) may be defined.
Tools->Insert symbol: Enables the user to insert a symbol normally not found on a keyboard.

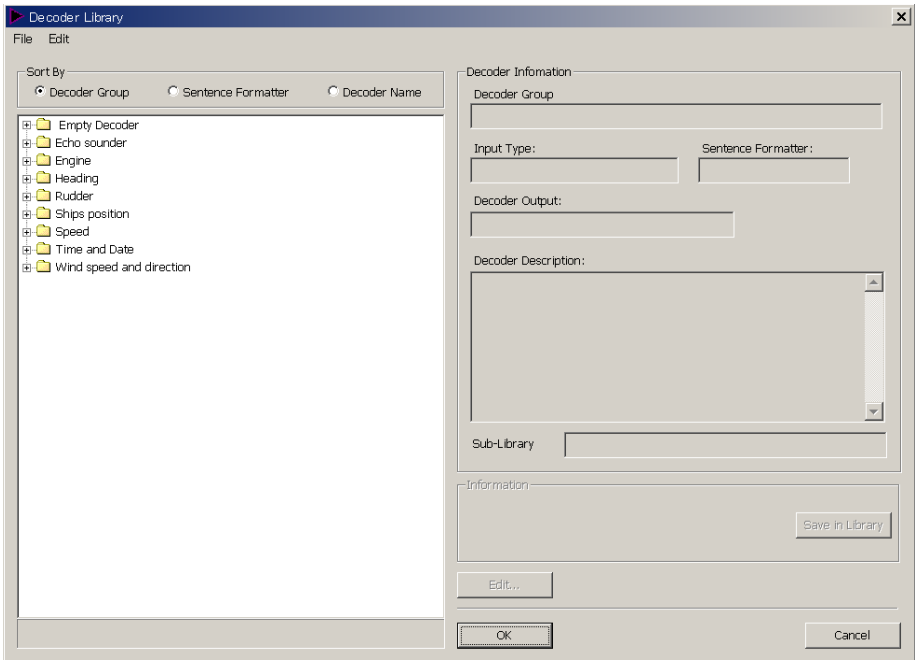
Tool bar

A tool bar is located below the drop-down menus. The tool bar contains short cuts (icons) to the most commonly used items from the drop-down menus.

General buttons

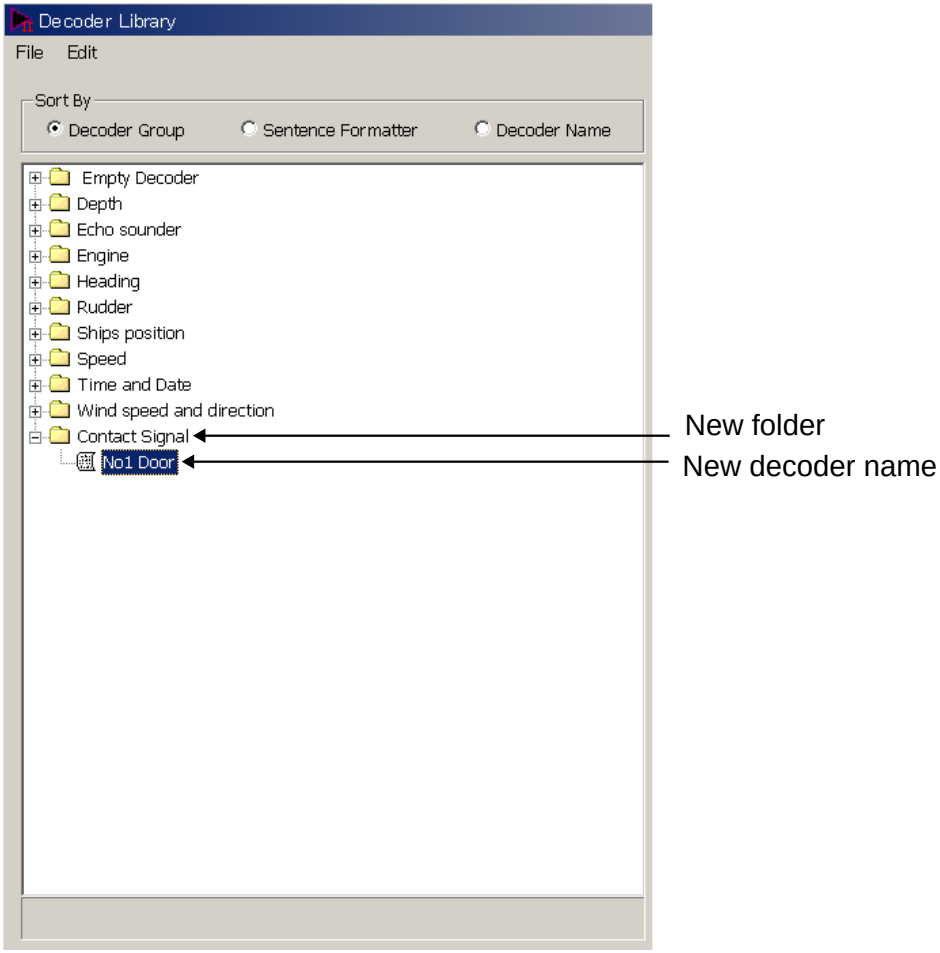
"OK" button: Changes made will be stored after the editor window is closed. The previous version of the decoder is overwritten.
"Cancel" button: Closes the editor window; any changes made will be ignored and lost.
"Save As" button: Closes editor window. Changes made may be saved if the "Save As" button in the decoder library is activated. This will give the operator an opportunity to save the changes using a new name/folder while maintaining the previous version of the decoder. The Save As button is only enabled if the editor is opened from the library (i.e., disabled when opened from the GUI configurator).

To make a new decoder, do as follows:
1. Click the **Tools** menu in the menu bar and choose **Decoder Library** to show the Decoder Library dialog box.
2. Choose the **Decoder Group** radio button in the Sort By field.

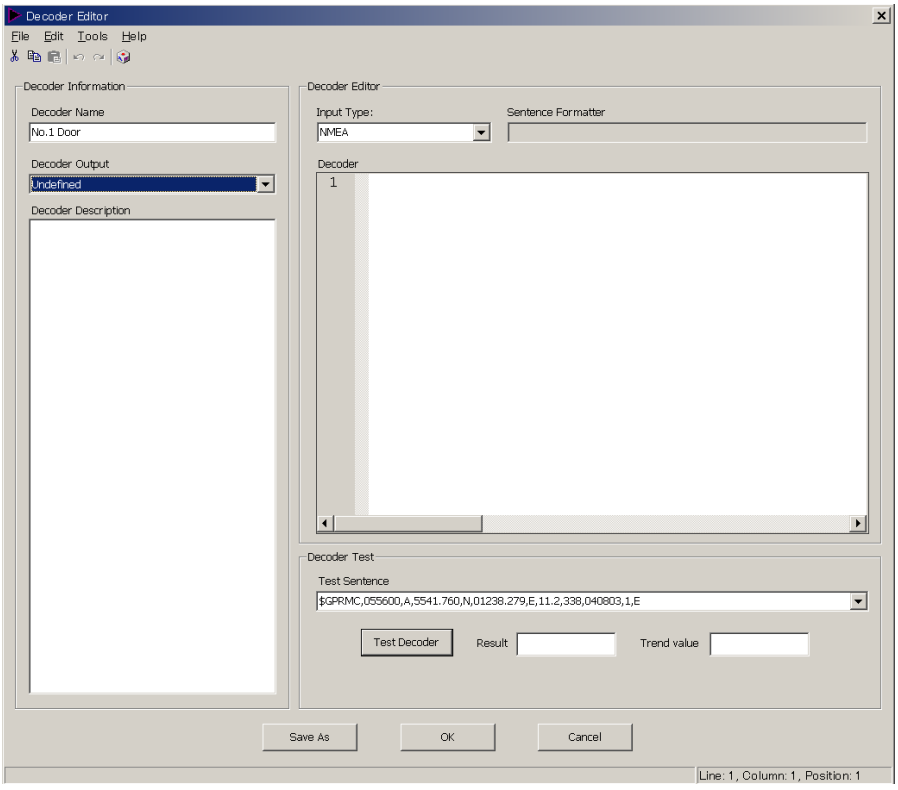


3. Right-click on the empty space beneath the library tree in the Decoder Library. The **New Folder** button is displayed.
4. Click the **New Folder** button and enter a name for the folder (For example: Contact Signal).

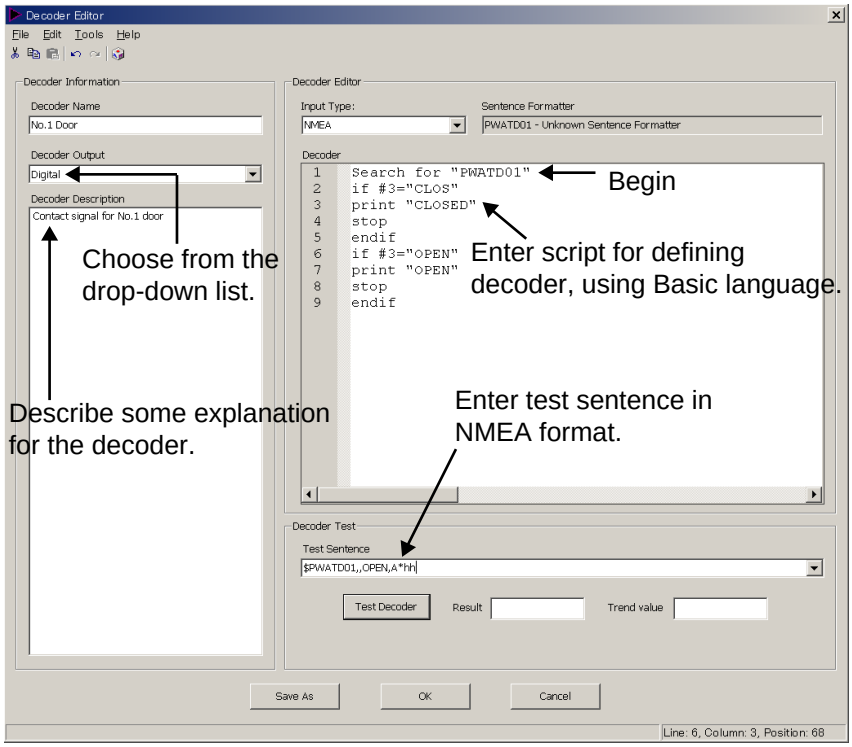
5. Right-click the new folder (named Contact Signal) and click **New Decoder** in the menu displayed.
6. Enter a name for the new decoder (for example: No.1 Door).



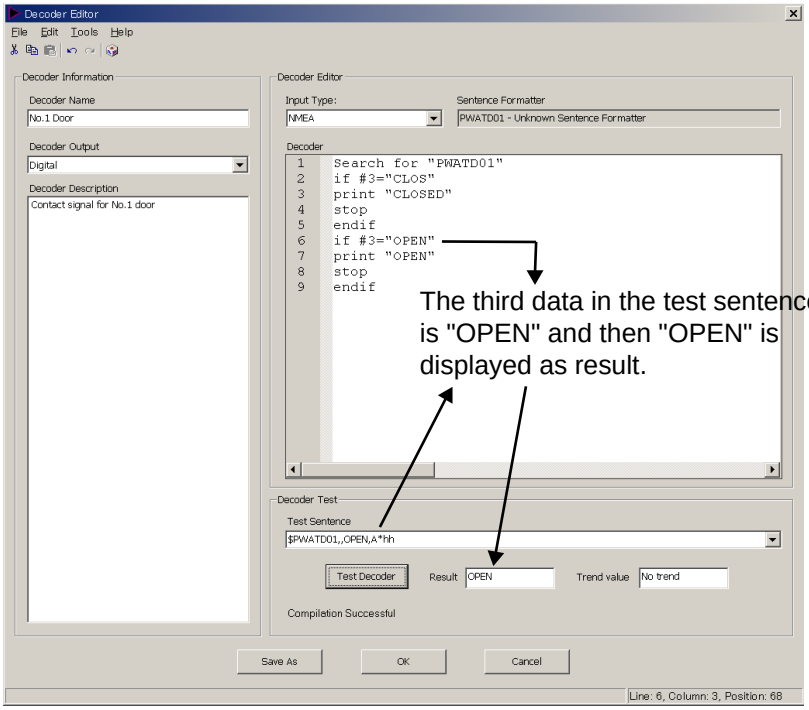
7. Double-click the new icon. The Decoder Editor dialog box is displayed.



8. Choose and enter items as follows.



9. Click the **Test Decoder** button. The decoder may be tested against an NMEA sentence. The test results are displayed in the Result box and the Trend Value box and the message “Compilation Successful” is displayed. This is only meaningful if the NMEA sentence formatter in the test sentence matches the NMEA sentence formatter in the decoders search for statement.



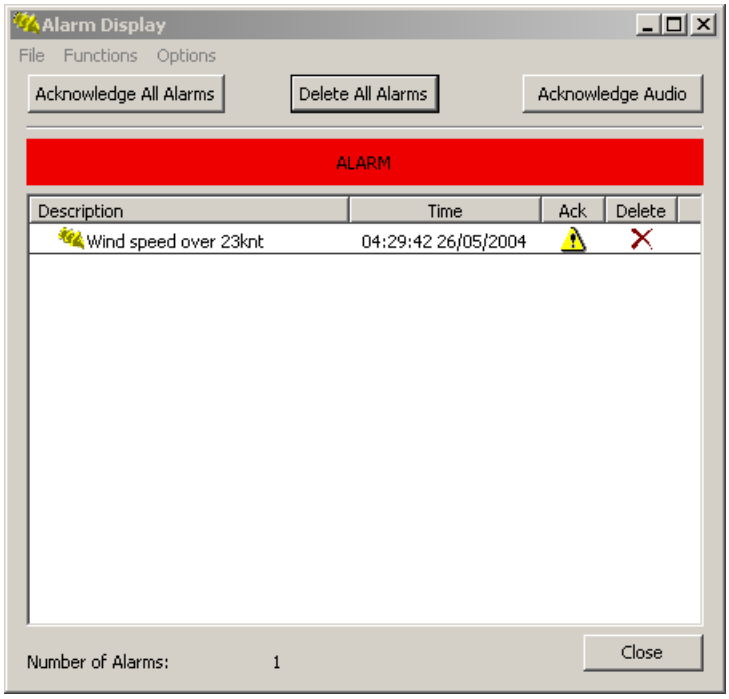
10. Click the **Save As** button. The Decoder Editor dialog box disappears.
11. Click the **Save As** button in the Decoder Library dialog box. The confirmation message appears.
12. Click the **OK** button twice.

6. OTHER SETTINGS

6.1 Alarm Panel

6.1.1 Opening the Alarm display dialog box

Click **Tools** and **Alarm Panel** on the menu bar or click on the icon on the Player window tool bar to activate the alarm display window.



Acknowledge All Alarms:
This function will acknowledge all alarms on the list. An alarm may be acknowledged individually by clicking on the icon for that alarm.

Delete All Alarms:
This function will delete all alarm from the list. An alarm may be acknowledged individually by clicking on the icon for that alarm.

Acknowledge Audio:
This function will mute the audio until a new alarm is generated.

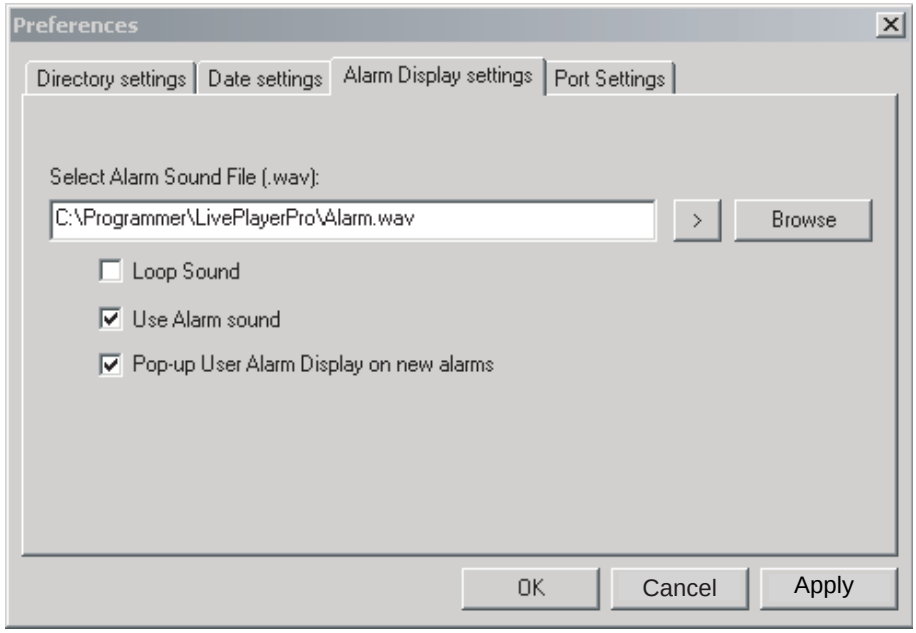
Drop-down menu
Options -> Disable Sound:
This option will mute the audio related to the alarms panel completely.
Options -> Disable Popup:
This option will prevent the alarm window from popping up when a new alarm is generated.

Easy localization of alarms source

Double clicking on the text for an alarm will bring the tab page from where the alarm is generated in front. The object that has generated the alarm will flash in red for a few seconds.

6.1.2 Default setting for alarm panel

The default settings for the alarm panel may be set from the Player's main window by selecting **Options** -> **Preferences**.



Configuration of objects for alarms

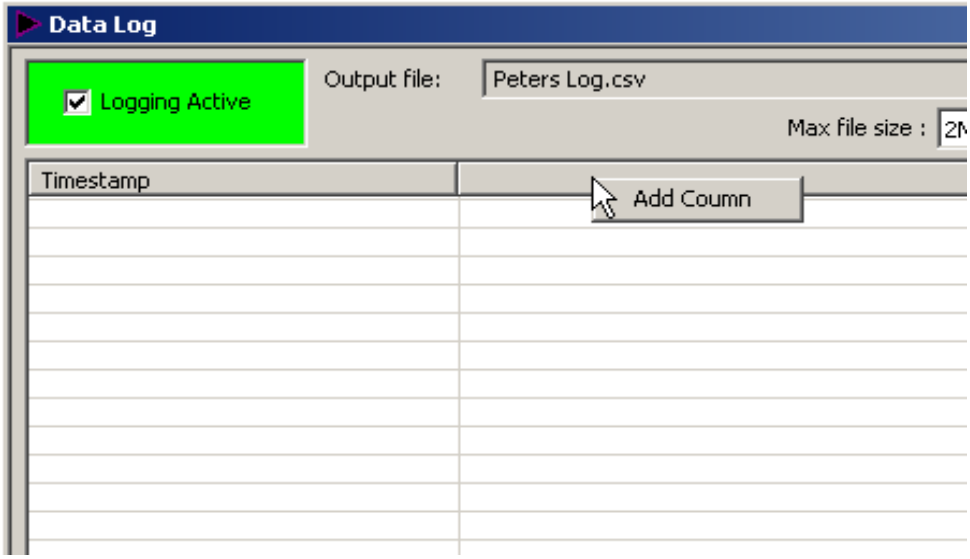
See page 13 for configuring objects for alarms.
An extra page has been added to the properties for these objects.

6.2 Data Log

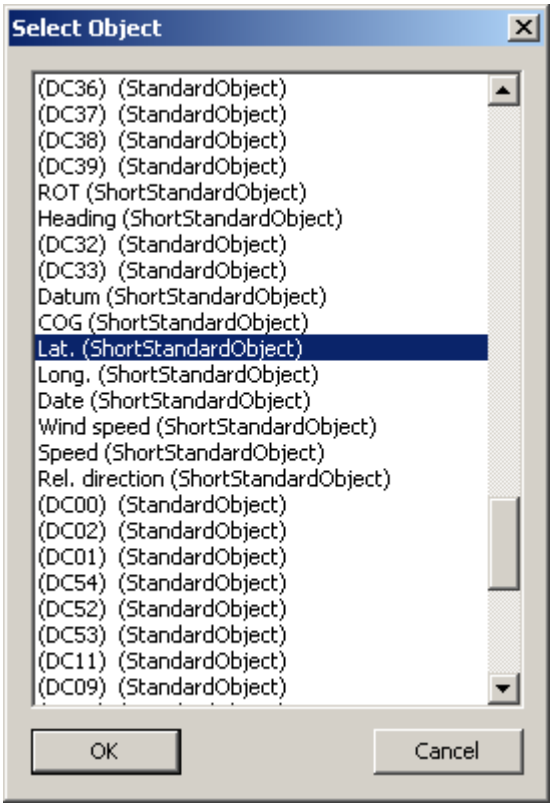
The data log function is able to log data from selected objects in to a CSV file.

6.2.1 Creating directly columns of the data log

1. Click the **Turn Configuration ON** button in the tool bar.
2. Right-click on a tab for a tab page and then select **Tab Properties** to show the "Tab page organizer" dialog box.
3. Click on **Add** and select "Data Logger Tab" from the drop-down list.
4. Enter title and click the **OK** button twice.
5. Right click on the title bar for the columns next to "Timestamp".



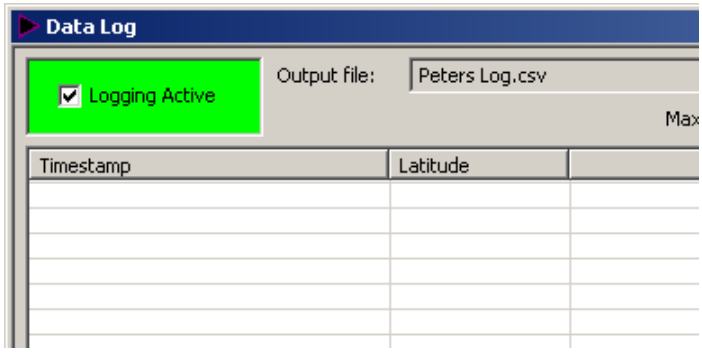
5. Click on **Add Column** and a list of relevant objects appears.



6. Select an object and click the **OK** button.

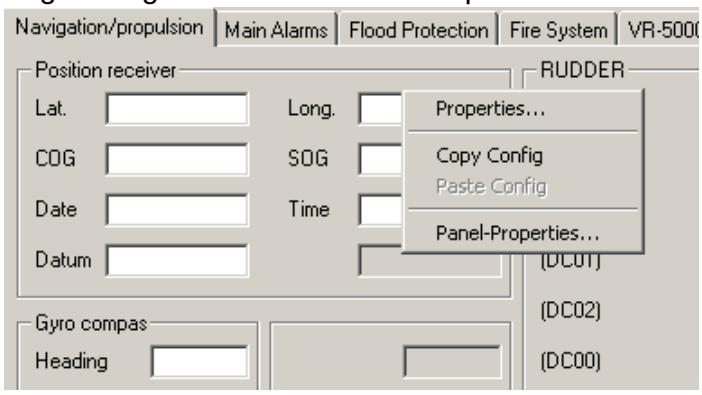


7. Enter the title and click the **OK** button. A new column is created.

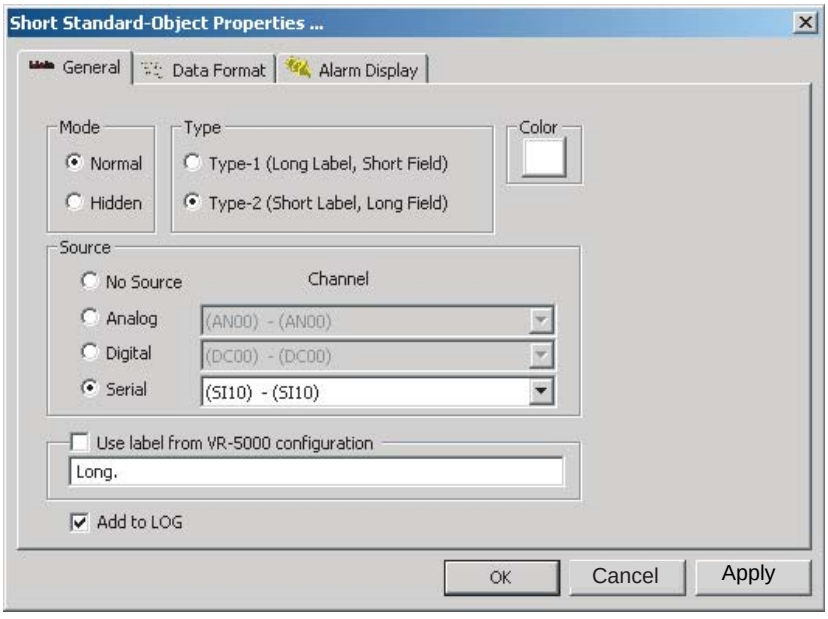


6.2.2 Creating indirectly columns of the data log

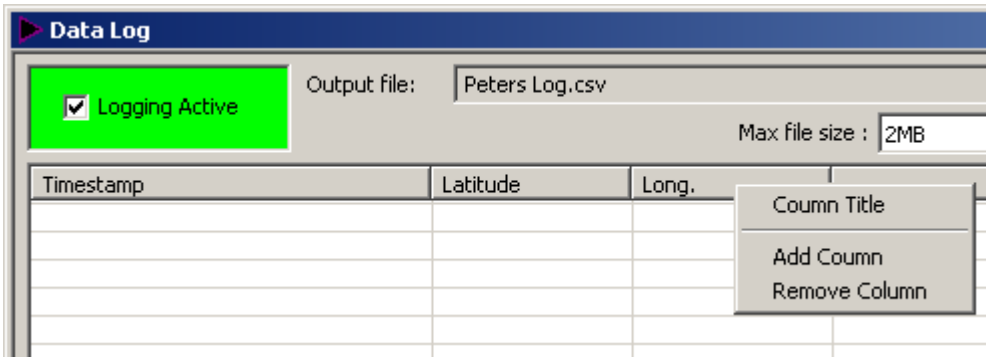
1. Create the data log tag as described in paragraph 6.2.1.
2. Open a data tag and right-click a data box to open the sub menu.



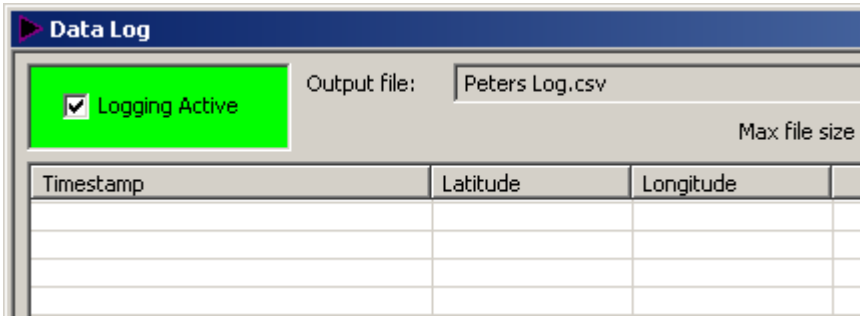
3. Click **Properties**.



4. Check **Add to LOG.** A new column is created in the data logger page.



5. Change the title if needed. Right-click on the title, select **Column Title** and enter a new title.



6.2.3 Organizing columns

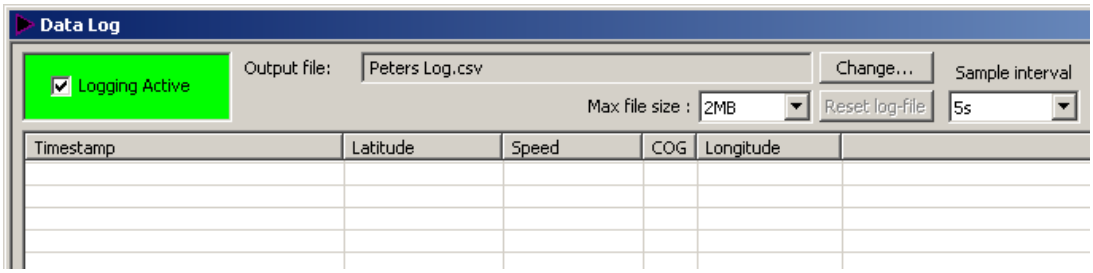
In configuration ON mode, right-clicking on the title for a column will open a menu with miscellaneous commands.
Generally, the width and order of the column can be changed in the same manner as for many other Windows programs, e.g., using ”click drag and drop” on the column title may shift columns around.

6.2.4 Maximum number of columns

The maximum number of columns that can be handled depends on the PC. A PC that meets the general requirements for Live Player Pro will be able to handle 25 columns without any noticeable performance degradation.

6.2.5 Saving log data to a file

The program will store the data to a user-defined output file.



The library path for the log files is defined by the preferences for the Player. See paragraph 6.2.6.

Max file size

Maximum file size is user defined. Data logging will stop when the file is full. The file may then be reset (or renamed/moved using Windows Explorer).

Sample interval

The sample interval is user defined. Fast sampling (small intervals) requires lots of disc space.

6.2.6 Preferences

Directory path for log files

The library path for the log files is defined by the preferences for the Player (Player main window, **Options** -> **Preferences** -> **Directory settings**).

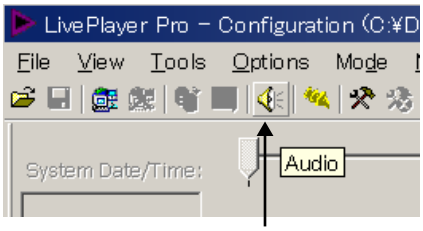
Disable data logging at connect

Data logging without explicit acknowledge from the operator can be inhibited (Player main window, **Options** -> **Preferences** -> **Data Logger**).
On: The operator must start data logging manually.
Off: Data logging will start automatically if configuration with “data logger enable” is loaded.
Prompt: (Default) The operator will be prompted before data logging will start.

6.3 Audio Setting

The audio can be set from the menu bar.

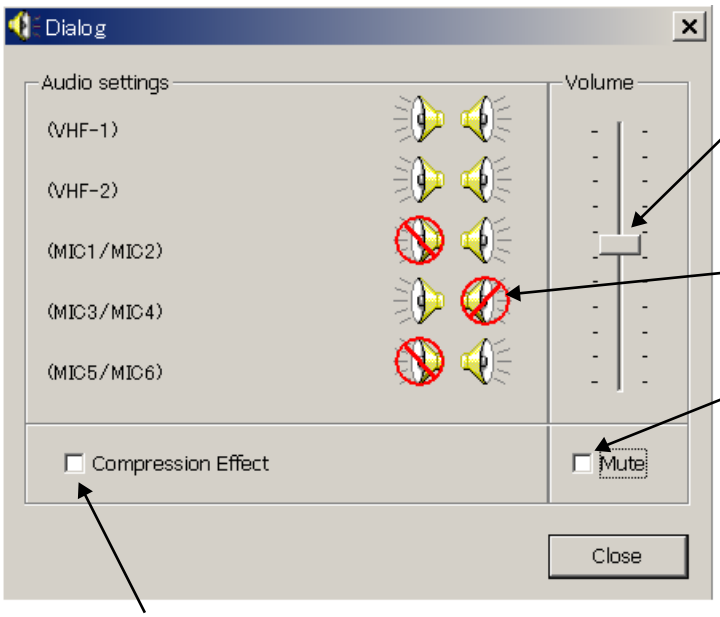
- Click the **Tools** menu in the menu bar and then click **Audio,** or click the Audio icon.



Audio icon

If a password has been defined at installation, enter the password.

The following audio setting dialog box is displayed. Set each item as shown in the figure below.



Adjust volume of audio.

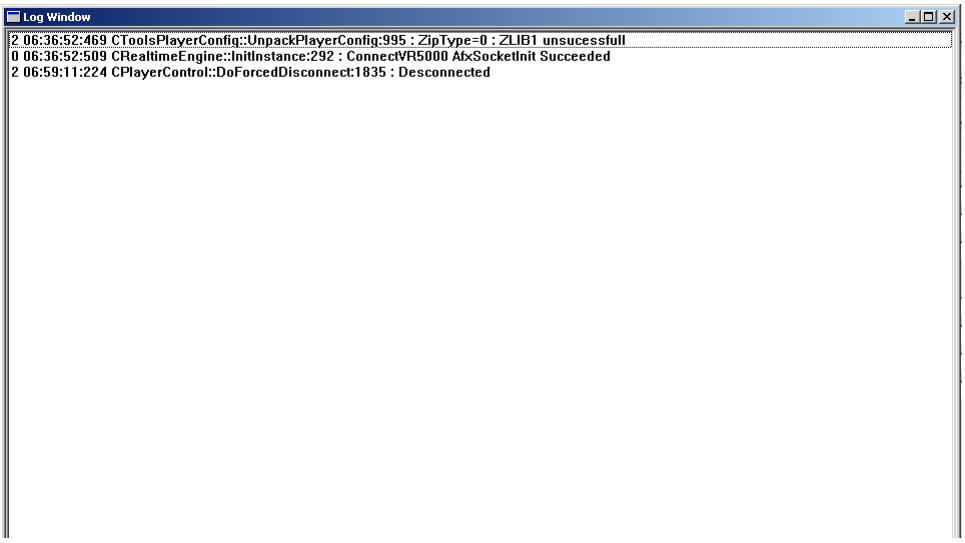
Click each loudspeaker icon to turn on or off.

Check to mute audio.

Check to compress audio data.

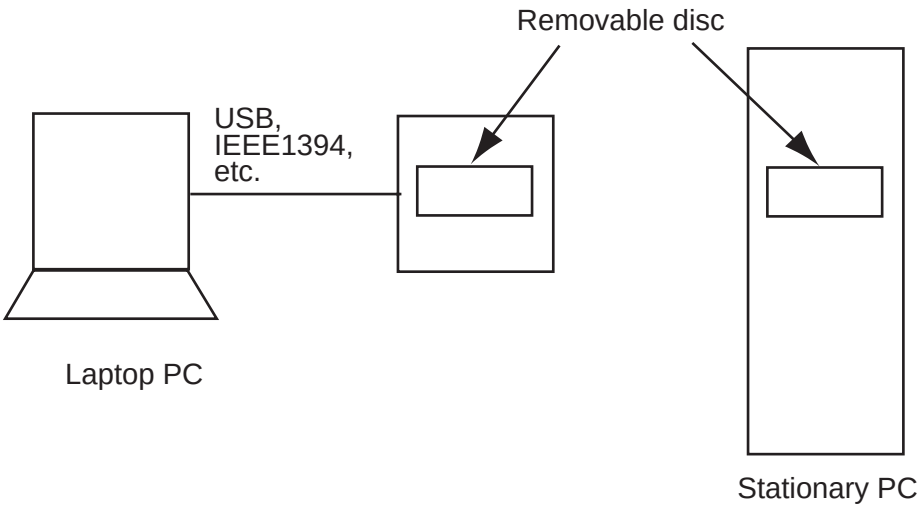
6.4 Displaying Log

The log for the player program may be displayed. This may be used for troubleshooting.
Click the **Tools** menu in the menu bar and then click **Log**. The following log window is displayed.



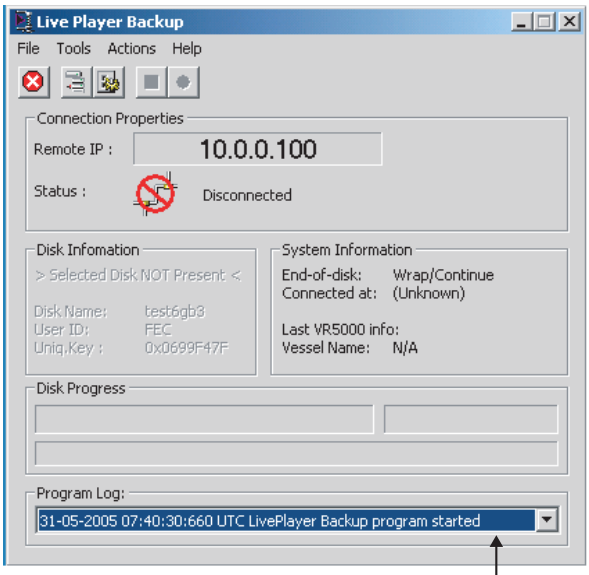
7. LIVE PLAYER BACKUP

The Live Player Backup program is an independent program. The program is able to use an internal disc in a PC, however it is strongly recommended that a disc bay with a removable disc is used for this purpose. The disc will be formatted in a special way and will not be available for the Windows operating system. The capacity of an available hard disk is 6 GB to 250 GB.



It is started from the desktop by double-clicking on its associated icon or from the Windows start menu (Live Player Backup).

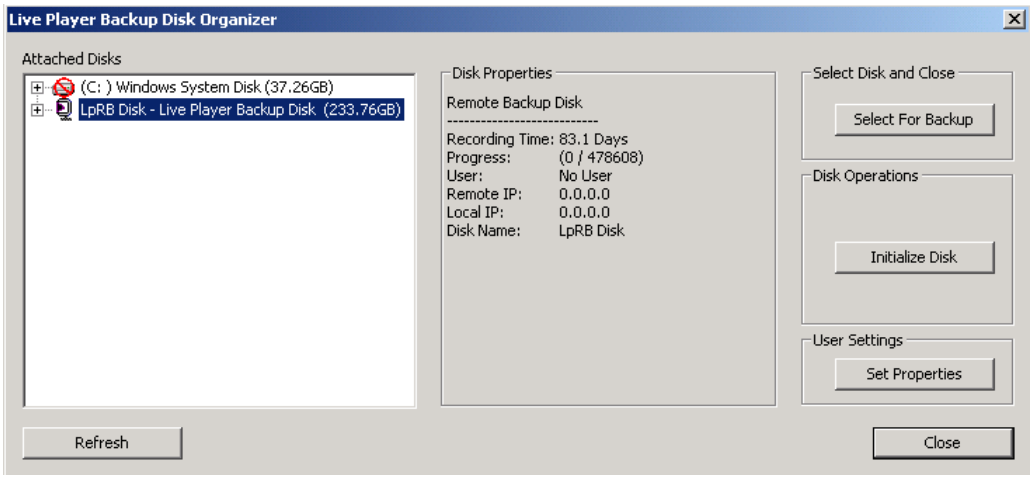
Note: Do not start the backup program and live-player program simultaneously. If these programs are started simultaneously, the processor will be overloaded, and then the backup or live-play may function abnormally.



Program log is displayed each 15 seconds during backup.

7.1 Disc Organizer

A disc must be selected before the backup can start. The Disc Organizer is opened by selecting **Tools** -> **Disc Organizer**.



7.1.1 Creating and formatting disc partitions

The disc must be in initialized (i.e., partitioned and formatted correctly) before the backup program can use it. All data on the disc will be lost during this process.

The left window in the disc organizer shows all discs that program is able to access.

Discs are divided into 3 groups:
Possible system disc:
This indicates a disc that is formatted differently from the format used by the backup program. System discs must normally not be formatted (note 1). However, a disc that has been used for another purpose (and is going to be used as a backup disc) will often be marked as “Possible system disc”. Great care must be taken before the disc is formatted.

1. Write down the characteristics (e.g., disc size and number of partitions) of all discs in the system before the new disc is added.
2. Add the new disc and click on refresh (note 2).
3. Make a positive identification of the new disc.
4. Initialize the new disc.

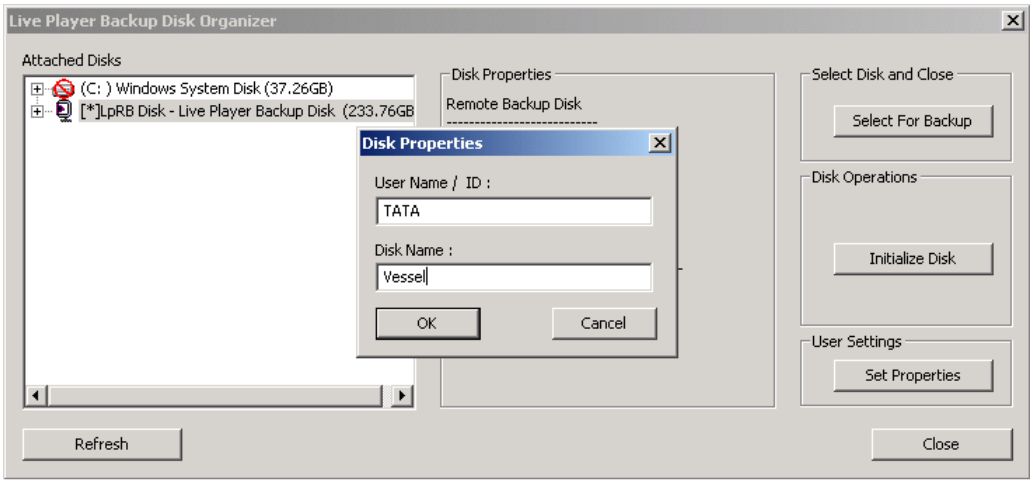
Note 1 The program is prohibited from formatting the first disc in the system, which is properly the Windows OS system disc.
Note 2 The PC will need a shutdown and restart if a permanent disc is added.

Disc ready for partitioning:
This indicates a disc that is completely new. A new disc can be securely initialized.

Live Player backup disc:
This indicates a disc that is ready to be used unless is it full.

7.1.2 Disc properties

The properties for a disc must be set after it has been formatted. Click the **Set Properties** button.



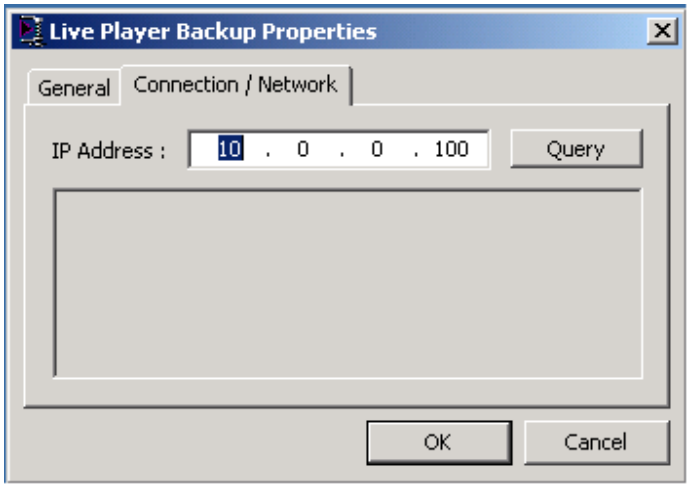
User name / ID: May be used to indicate the initials of the person who formatted the disc.
Disc name: Typically used to indicate the name of the vessel.

7.2 Duration of Backup

A typical VDR system will generate 3G bytes of data each day, i.e., a 120G byte disc will be able to store data for about 40 days.

7.3 Starting the Backup Process

1. A disc must be selected for back up before the backup process can start. Open the Disc organizer, click on an appropriate disc marked with an asterisk and then click the **Select For Backup** button. After processing, click the **close** button.
2. The IP address of the VR-5000 must be set correctly. Click T**ools** -> C**onnection Setup** -> **Connection/Network** to open the Live Player Backup Properties dialog box for this purpose.



3. Enter the IP address for the VDR, click the **Query** button to test the connection and click the **OK** button.
4. Click **Actions** -> **Start Backup** from the main menu to start the backup process.
5. Enter password if the operator will be prompted for master password when attempting to start the backup process if the VR-5000 is password protected (master password).
6. The backup begins. You can see the program log in the lowest line in the Live Player Backup dialog box.

To stop backup operation, click the **Actions** -> **Stop Backup**.

Stop/Wrap Around at end of disc

When the end of the disc is reached, “stop” or “wrap around” can be set.

Click **Tools** -> **Connection Setup** -> **Connection/Network** to open the Live Player Backup Properties dialog box.



Check **Stop Recording** to stop when the disc is full.
Check **Wrap around and continue** to continue even if the disc is full - the oldest data will be overwritten.

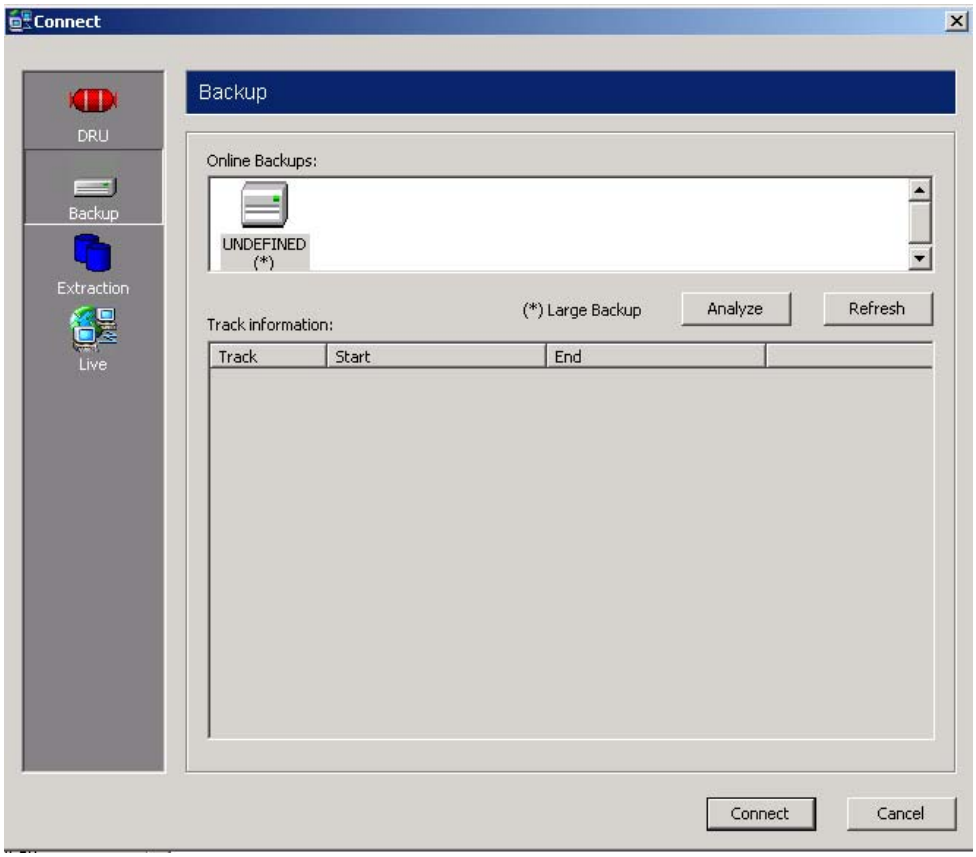
7.4 Settings After Restart of Program

The Live Player Backup program will store its settings upon exit. The program is therefore ready to resume the backup process (Note1) under the condition that disc that was used for backup last time the program was running is still available.

Note1: The operator just needs to start the backup process (**Actions**->**Start Backup**).
Note2: This backup program will continue to store data automatically after recovery of lines or restart of the VDR.

7.5 Replaying the Backup Data

1. Start the Live Player Pro software.
2. Click the **Connect** button in the tool bar. The Connect dialog box appears.
3. Click the **Backup** button in the left side. The backup media icon with * mark appears.



Connect dialog box

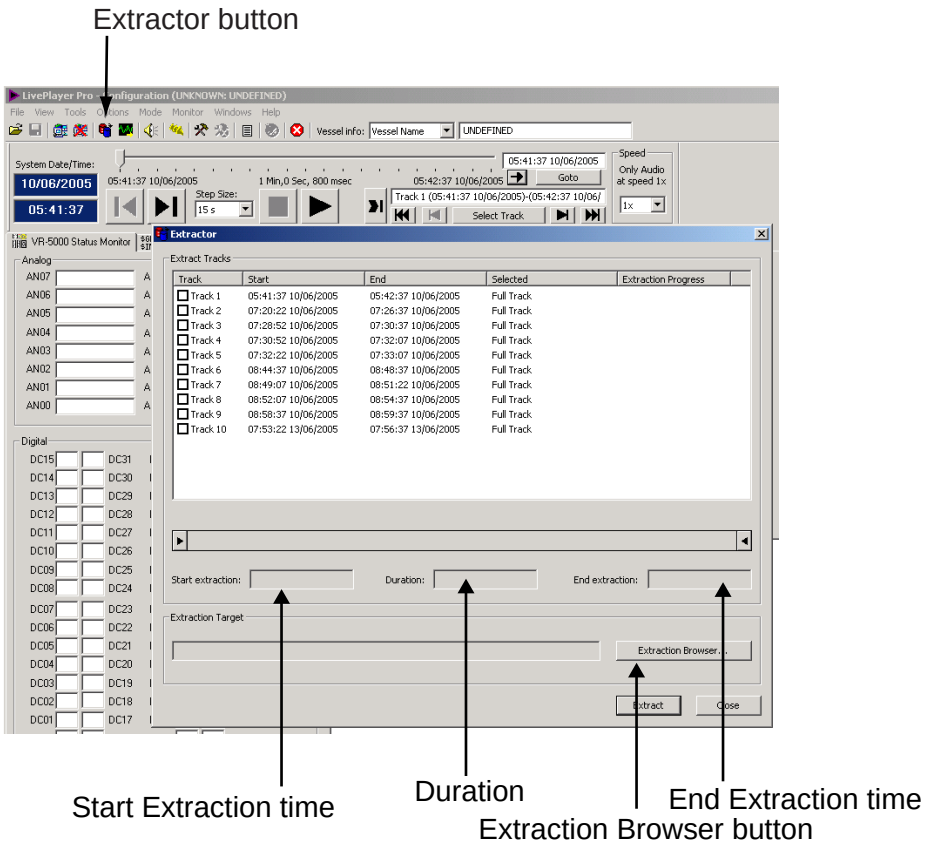
4. To see memory track information in the backup hard disk, click the **Analyze** button. The track information appears in the Connect dialog box.
5. Click the **Connect** button in the dialog box. The Connect dialog box disappears.
6. Select a track as appropriate to replay by track selection buttons.
7. Click the **Start Playing** button to replay the backup data. The replaying will start.
8. To stop replaying, click the **Stop Playing** button.
9. To disconnect the line, click the **Disconnect** button in the tool bar. The confirmation message appears. Click the **OK** button to disconnect.

7.6 Extracting the Backup Data and Replaying

The data recorded in the backup hard disk can be copied to the hard disk of the Replay PC and replayed by using the Live Player Pro software.

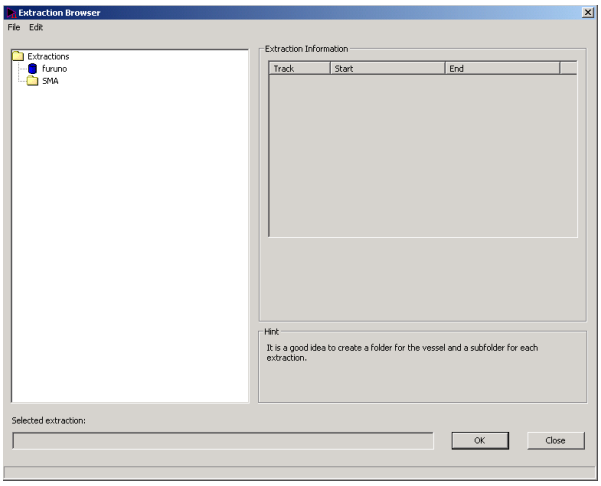
To extract the data from the backup hard disk:

1. Click the **Connect** button in the tool bar. The Connect dialog box appears.
2. Click the **Backup** button.
3. Click the **Connect** button in the Connect dialog box.
4. Click the **Extractor** button in the tool bar.



5. Choose the tracks you want to retrieve, referring to the Start Extraction time, Duration, and End Extraction time.

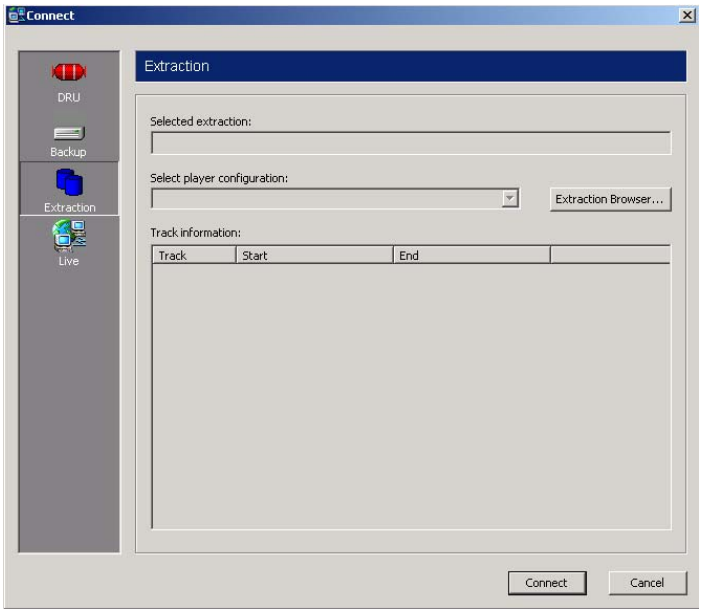
6. Click the **Extraction Browser** button. The Extraction Browser dialog box appears.



7. Choose **Edit** and **New Extraction** from the menu bar on the Extraction Browser dialog box and enter a file name.
8. Click the **OK** button. The Extraction Browser dialog box disappears.
9. Click the **Extract** button in the Extractor dialog box. The bar graph which indicates retrieving status appears. When the extraction is completed, the message “Extraction Completed Successful” appears.
10. Click the **OK** button and then click the **Close** button.

To replay the data retrieved and copied into the HDD of the PC:

1. Click the **Connect** button in the tool bar. The Connect dialog box appears.
2. Click the **Extraction** button.



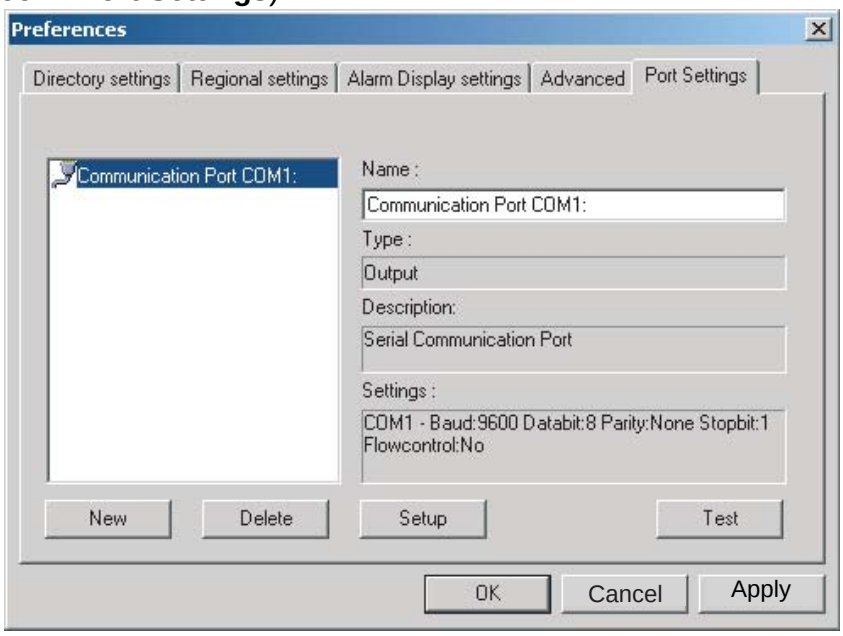
3. Click the **Extraction Browser** button on the Connect dialog box. The Extraction Browser appears.
4. Choose a file to replay and then click the **OK** button.
5. Click the **Connect** button on the Connect dialog box.
6. Click the **Start Playing** button. The data is displayed in the data window.

8. SERIAL OUTPUT FOR OTHER APPLICATIONS

The Player is able to relay serial data for other applications.

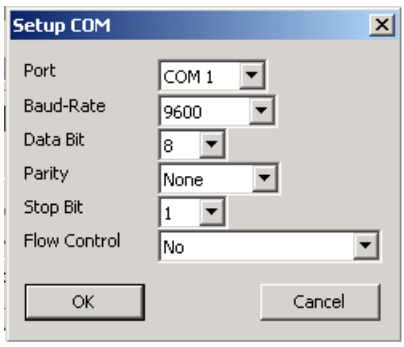
8.1 Output Port Settings

An output port on the PC for the serial data is needed and must be configured. These parameters are included in the Players preferences **(Options** -> **Preference** -> **Port Settings**).



To set output port:

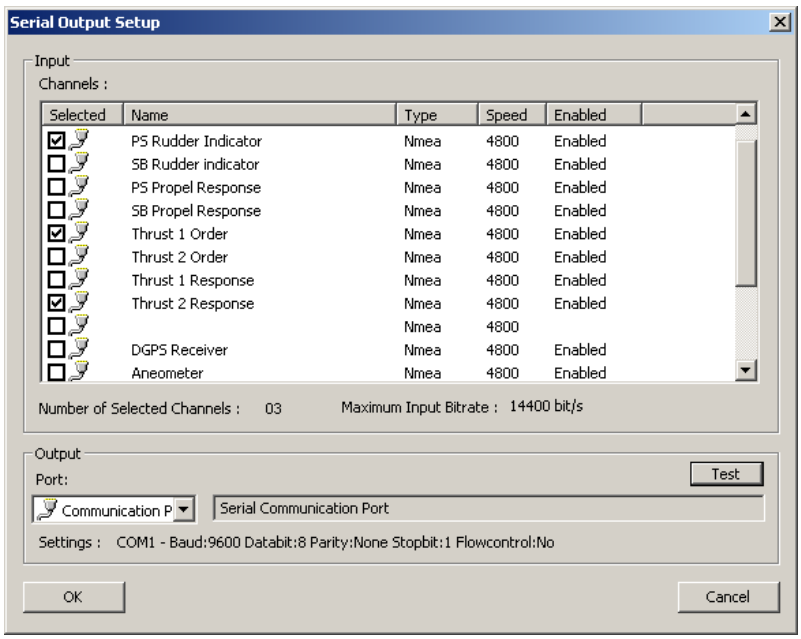
1. Click **New** and enter name at Name field.
2. Click **Setup** to show the Setup COM dialog box.



3. Enter each box as appropriate and click **OK**.

8.2 Configuration of Serial Output

The Player must be in the configuration mode to configure the serial output. A click on **Tools** -> **Setup Serial Output** will open the tool for configuring the sources for the serial output.



Enter check mark to items to be output at the “Selected” column in the Input filed. Choose output port at “Port” drop down list in the Output field. The operator may select a number of data sources and one output port.

Merging of data

The program is designed to handle NMEA sentences, i.e., two sentences will not be interleaved but sent one at a time. The program may fail to relay ASCII or binary data depending on the properties of the data.

8.3 Data Output

Enable/Disable output

The Enabled/Disable Serial Output icon on the Players tool bar is used to output data. This can be done while the Player is playing/replaying data.

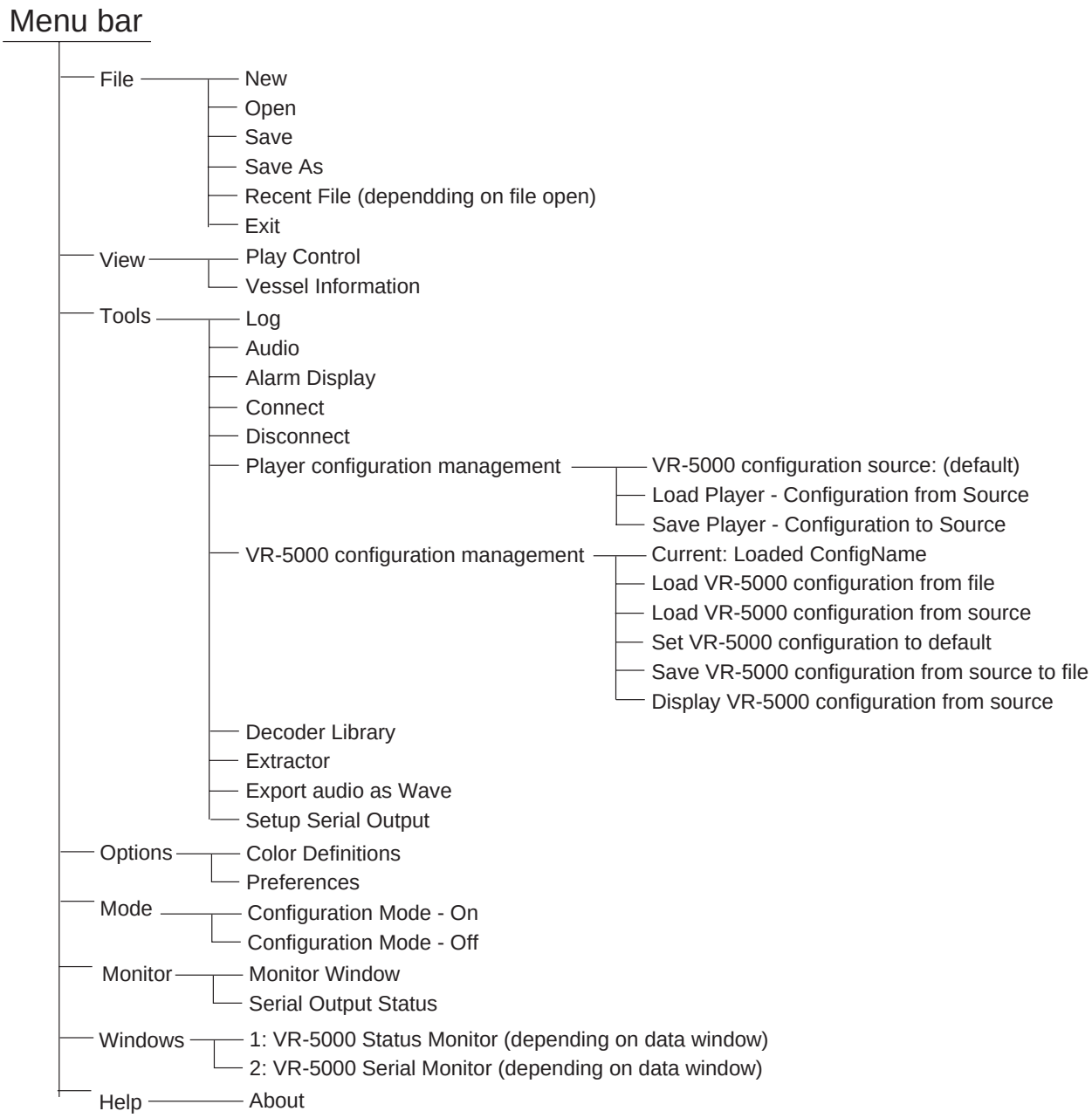
Overflow on serial port

The serial output port may overflow if the combined inputs exceed the capacity of the output port. The operator will be warned if this happens. The operator may suppress the message. This will be in force until output is disabled and then enabled.

Serial output and step

The Player is able to generate serial output while stepping. However the output port may be congested and steps may take very long time to process.

APPENDIX


Menu bar
File
New
Open
Save
Save As
Recent File (dependding on file open)
Exit
View
Play Control
Vessel Information
Tools
Log
Audio
Alarm Display
Connect
Disconnect
Player configuration management
VR-5000 configuration source: (default)
Load Player - Configuration from Source
Save Player - Configuration to Source
VR-5000 configuration management
Current: Loaded ConfigName
Load VR-5000 configuration from file
Load VR-5000 configuration from source
Set VR-5000 configuration to default
Save VR-5000 configuration from source to file
Display VR-5000 configuration from source
Decoder Library
Extractor
Export audio as Wave
Setup Serial Output
Options
Color Definitions
Preferences
Mode
Configuration Mode - On
Configuration Mode - Off
Monitor
Monitor Window
Serial Output Status
Windows
1: VR-5000 Status Monitor (depending on data window)
2: VR-5000 Serial Monitor (depending on data window)
Help
About

INDEX

A

Active text 17
Alarm Display 13
Alarm Panel 61
Analog 10
Analog data 14
Analyze button 44

B

Backup 41

C

Change Tab type to 6
CONFIG MODE 4
Colors 28
Color field 10
Color Definitions 39
Copy Config 14
Compass object 26
Creating columuns 64

D

DATA DECODER 54
Data Format 15
Data Format tab. 17
Data Log 63
Decoder Editor 57
Decoder Library 54
Decoder Group 55
Decoder name 56
Default color definition 39
Dial Meter object 29
Digital 10
digital data 17
Display Log 68
Disc Organizer 70
Disc properties 71
Doppler log object 31
DRU 41
DRU button 44
Dual Dial Meter object 29

E

Edit button 11
Extraction Browser 49
Extracting the Backup Data 74

F

Field Colors 12, 18
Frame 27
Formatter syntax 40

G

Gauges 27
Graphical Display 8
Graph object 32
graphical object 21

H

Horizontal ruler object 35

I

Inactive text 17
Insert Object 21

L

Label 10
Library 11
Live 41
LIVE PLAY 51
LIVE PLAYER BACKUP 69

M

Mode Up 24
Move Panel Left 24

N

New Configuration 3
Numeric data display object 38

O

Object 24
Organizing columns 65
Out Port Setting 76

P

panel properties 19
panel menu 23
Paste Config 14
Paper Strip panel 20
Properties 5
Primary 28
Pitch and roll object 36

R

Replanting the Backup Data 73
Removable Hard 46
Rubber object 37

S

Save In Library 11
Saving log data 66
Saving the Configuration 41
Scale 27
Secondary 28
Selected decoder 11
Sentence formatter 11, 55
Shown Tab Pages 7
Sources 28
Source field 10
Start Playing button 45
Stop Playing button 45

T

Tab-Properties 5
Turn Configuration Mode ON 4
Trend 12, 18
Tend Separate 12
Trend Pair 12

U

Use Checksum 12
Use Timeout 12

V

Vertical bar object 33