OPERATION MANUAL

HE-1511-WB-Bo
HE-7300-WB-Bo
HE-775-Di

HONDEX
by HONDA ELECTRONICS

INTRODUCTION

Thank you very much for purchasing our product.

■ Please be sure to read this operating manual carefully and understand the contents before the actual operation in order to keep your safety.

■ Please store this manual safely at the convenient place so that you can read it when needed.

■ Please pass this manual to new owner when you resell or give this unit to someone else.

■ We are not responsible for any physical injuries and property damages under product liability (PL) law by wrong usage or any other operations not described in this manual.

DEFINITION OF SYMBOL MARK [CAUTION FOR SAFETY]

⚠ DANGER : Incur the accident resulting in the death or serious injuries unless you keep the descriptions.

⚠ WARNING : Be in danger of incurring the accident resulting in the death or serious wound unless you keep the descriptions.

⚠ CAUTION : Be in danger or incurring the slight wound to human or damage to other physical property unless you keep the descriptions.

・Do not reproduce a part or all of contents described in this manual.

・Please understand that the unit may differ from the contents described in this manual due to the specification changes etc.

・Please inform us if you see any errors and/or unclear descriptions in this manual.

TABLE OF CONTENTS

BASIC OPERATION

SOUNDER OPERATION

REFERENCE MATERIAL

CAUTION ON SAFETY (BE SURE TO READ THIS)

This section explains the important cautions in order to prevent the users and surrounding people from physical injuries and property damages.

1. HADLING OF MAIN UNIT

⚠ DANGER

● High voltage is used for the unit inside.
  No one besides authorized personnel should disassemble or modify the unit.
  If not followed, it may result in electronic shock.
  ※Please be sure to consult with the local dealer for any repairs.

⚠ WARNING

● Install the unit firmly.
  If not, it may cause the accidents such as human injuries.

● Do not use the information displayed on the screen for navigation.
  It causes the marine accidents and incidents.
  ※Be sure to use the official marine charts for navigation judgement.

● Do not operate the unit while piloting the vessel.
  It causes the marine accidents and incidents.
  ※Be sure to confirm the surrounding safety before the usage.

● Do not put the power on in the presence of flammable materials.
  It causes the fire.

● Do not use the power supply besides the specified one.
  It causes the firing and heating.

● Do not disassemble and modify the unit.
  It causes the firing, electronic shock, and injury.

● Do not operate the unit with wet hands.
  It causes the electronic shock and damage.

● Disconnect the power cable in the case of problem, smoke, and fire.
  It causes the firing and electronic shock.
  Be sure to contact the local shop or customer support.

⚠ CAUTION

● Do not install the unit where rain or spray dashes hit directly.
　It causes the firing and electronic shock.

● Do not install the unit at heated places.
　It causes the firing from the increase of internal temperature, injury, and electronic shock.

● Use the earthing.
　Noise influence can be prevented by firm earthing.

● Away from direct sun light.
　It causes the difficulty of future vision and heat problem.

2. HANDLING OF CABLE

⚠ WARNING

● Be sure to use the specified power supply cable.
　It causes firing and heating.

● Do not leave the power plug after its removal.
　It causes firing and heating if the plug gets wet.

● Be sure to wire the cables for safety pilot.
　The improper wiring causes the accident.
　※Do not put the heavy object on cables or bend cables excessively.

● Do not disassemble or modify the cables.
　It causes firing, heating, or electronic shock.

● Do not use damaged cables.
　It causes firing or electronic shock.

⚠ CAUTION

● Do not pull out the cable when disconnecting the plug.
　The cable damage causes firing and electronic shock.
　※Be sure to hold and pull the plug itself for the removal.

● Do not put any pressure on cables when installing the unit.
　It causes line cut and shortage.

3. HANDLING OF TRANSDUCER AND WATER TEMP SENSOR

> ⚠ **DANGER**
>
> ● Any works on the vessl are very unstable and risky.
>   Installation/maintenance of transducer and water temp sensor should be handled after landing the vessel on ground or fixing the vessel at shipyard etc.

> ⚠ **CAUTION**
>
> ● Be sure to ventilate well inside the vessel when installing the transducer at the bottom of vessel. Volatile gas from solvent etc causes the toxic symptoms.
>
> ● Water proof treatment is required for Thru-Hull installation.
>   If not, it causes the marine accident.
>   ※It is not allowed for aluminum vessels due to the risk of corrosion.
>
> ● Do not operate the electronic tools with wet hands.
>   It causes electronic shock.
>
> ● Do not remove the transducer plug when the power is ON.
>   It causes electronic shock.

4. TFT LCD PANEL

● TFT LCD panel is made with high precision technology. Therefore, the effective pixel is over 99%, and pixel loss and continuous lighting pixel exist 0.01% or more.
Please understand this specifications.

CAUTION OF OPERATION

1. Power OFF when Starting Engine

Battery voltage varies when the engine starts. It may cause some damage onto the unit.
Set the power OFF when starting the engine.

2. Power Supply 11~30V

Operate the unit within the range of DC 11~30V.

3. Organic Solution is Prohibited

Do not clean the unit with organic solution like thinner or alcohol etc because most parts are
made with plastic. For heavy dirt, soak the soft cloth in synthetic detergent and clean it
after wring.

4. Take Note of Important Data

The unit is not desgined for storing the data permanently. Important data should be
recorded on the notebook etc.

5. Lubricant and Anticorrosive are Prohibited
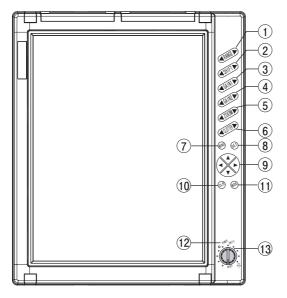
Do not use lubricant and anticorrosive. Chassis and gasket are damaged.

FEATURE
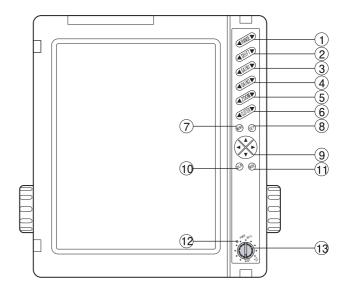
- Auto shift/gain functions allow easy operation even for beginner.

- Display style can be selected from portrait/landscape.

- Compact design allows easy installation.

- Optional modification for 2nd monitor connection (N/A for HE-775-Di) .

- Digital processing achieves the high sensitivity and effective noise reduction.

1. FRONT VIEW OF MAIN UNIT

< HE-1500-Di・HE-1511F-Di-Bo・HE-1511-WB-Bo>   < HE-7300-Di・HE-775-Di・HE-7300-WB-Bo >
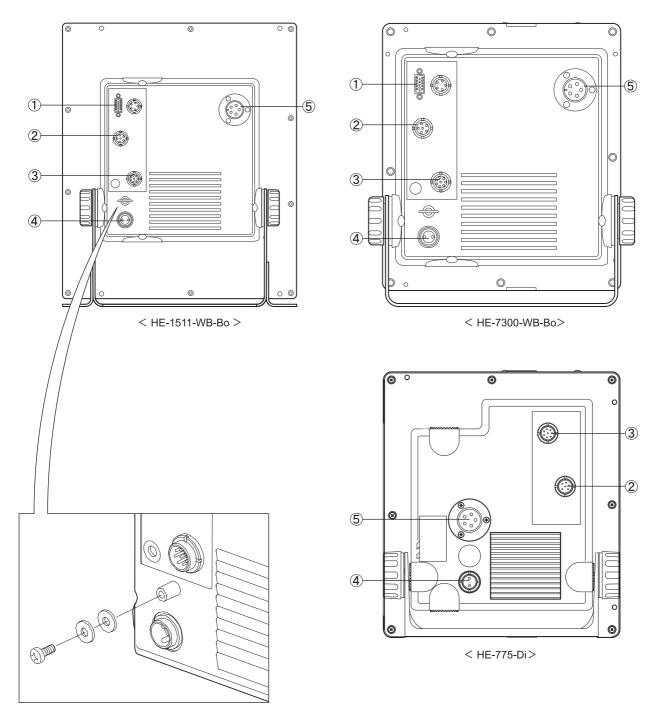
① RANGE(P10)
 Set the displayed depth range.

② SHIFT (p11)
 Move the displayed depth range.

③ GAIN 1 (p12)
 Adust the sensitivity of right side display
 when selecting dual freq display.

④ GAIN 2 (p13)
 Adjust the sensitivity of left side display.

⑤ ZOOM (p14)
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 surface or bottom (manual mode)

⑥ CLUTTER (p14)
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⑦ MENU (p7)
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⑧ SET (p7)
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⑨ DIRECTION (Up/Down/Left/Right) (p7)
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 item and change the set-up.
 When not opening the menu, Up/Down key
 moves the cursor on the screen.
 Left/Right key adjusts the contrast.

⑩ CLR (p7)
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⑪ MODE (p14)
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 Auto-Expansion, and Manual Expansion)

⑫ POWER (p8)
 Light ON when the power is ON.

⑬ POWER / BRIGHTNESS (p8)
 Power ON/OFF and adjustment of display
 brightness.

2. REAR VIEW OF MAIN UNIT / DESCRIPTION

< HE-1511-WB-Bo >

< HE-7300-WB-Bo >

< HE-775-Di >
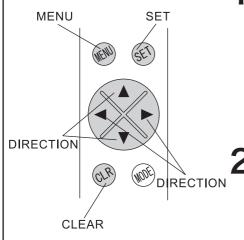
Earthing
Use M4x10 screw and 2pcs washers
as shown.

① RGB image output (option)
② External input/output(6P)
③ Water temp sensor(8P)
④ DC power supply(2P)
⑤ Transducer (5P)

Menu

Change the set-up with [MENU] / [DIRECTION] / [SET] / [CLR] keys.

MENU   SET

DIRECTION

CLEAR

DIRECTION

1 [MENU] key

・ Press MENU key to display Menu 1.

・ Press MENU key again to display Menu 2.

・ Press MENU key again to display Menu 3.

・ Press MENU key again to close the menu.

・ On water temp/depth alarm display, press MENU key to return to the previous display (Menu 2).

2 [DIRECTION] Up/Down key

・ Press Up key to move the selected item.

・ When the selected item is at the top, press Up key to move to the bottom.

・ Press Down key to move downward.

・ When the selected item is at the bottom, press Down key to move to the top.
The selected item in blue color can be changed.

3 [DIRECTION] Left/Right key

・ Press Left/Right key to change the set-up.
Set-up is effective right after selecting the change.

・ On water temp/depth alarm display, press right key to show alarm set-up display.

4 [SET] key

・ SET key needs to be pressed to activate Display style (Portrait/Landscape) and initialization. After activating the change, normal display will appear automatically.

5 [CLR] key

・ Press CLR key to cancel from any menu display.

POWER ON / OFF

Power

Power Lamp
Power/Brightness potentiometer

Brighter
Darker
POWER
BRILL
OFF

OFF location

1 Turn the power/brightness potentiometer clockwise so that the power is set to ON.
The power lamp is lit, and display will activate.
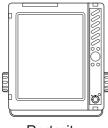
2 Turn the power/brightness potentiometer counter-clockwise so that the power is set to OFF.

Caution : Set the power OFF when starting the engine because the unstable variation of battery voltage level may cause the problems into unit.

DISPLAY STYLE (PORTRAIT / LANDSCAPE)

Portrait / Landscape

Display view can be selected for different installation environment.

Portrait   Landscape   Portrait Rev   Landscape Rev

※ only applied for HE-775-Di / HE-7300-WB-Bo
    HE-1511-WB-Bo : Portrait / Landscape

SCREEN BRIGHTNESS

Brightness Adjustment

Power Lamp
Power/Brightness potentiometer

Brighter
Darker
POWER
BRILL
OFF
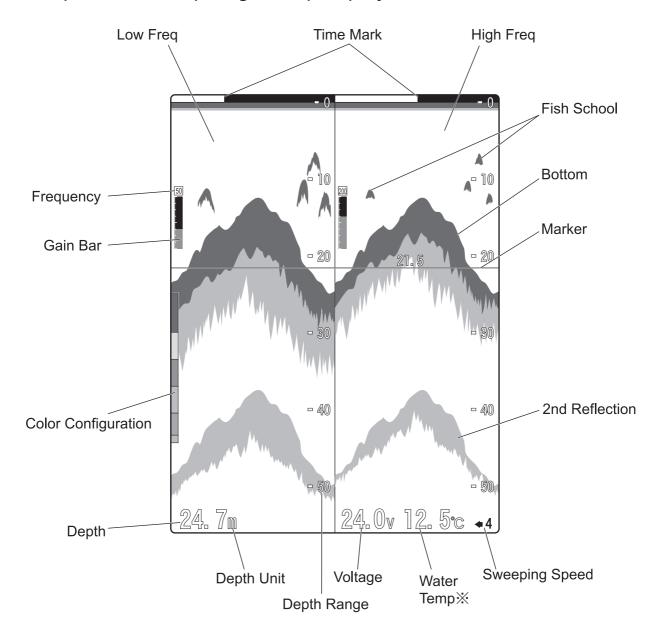
OFF location

● Adjust the brightness.
Turn right for brighter.
Turn left for darker.

Example : Low Freq - High Freq Display

Low Freq   Time Mark   High Freq

Fish School

Frequency

Bottom

Gain Bar

Marker

Color Configuration

2nd Reflection

Depth

24.7m   24.0v   12.5°c   4

Depth Unit   Voltage   Water   Sweeping Speed
Temp※

Depth Range

※ Water temperature
   Water temp appears when connecting to water temp sensor (option).
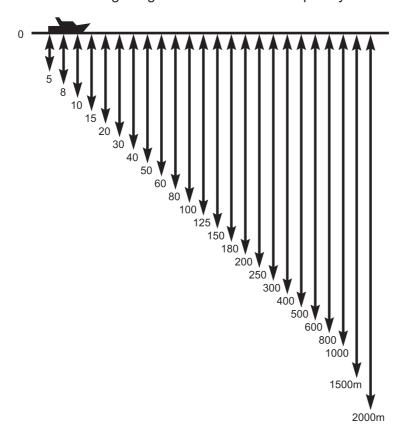
1. DEPTH SET-UP
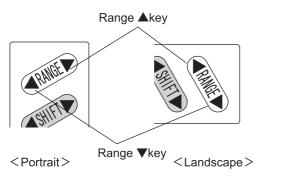
Depth (Display Range)
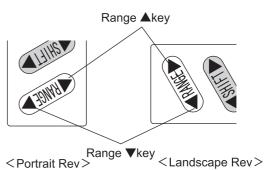
【RANGE】

Depth range is set. The set-up range varies depending on the model (frequency).
Please refer to the following image for each unit and frequency.

0

5
8
10
15
20
30
40
50
60
80
100
125
150
180
200
250
300
400
500
600
800
1000
1500m
2000m

1 [Shallow Range Direction]
Press ▲key for shallower range.

2 [Deep Range Direction]
Press ▼key for deeper range.

Range ▲key

Range ▼key

‹Portrait›　‹Landscape›

Range ▲key

Range ▼key

‹Portrait Rev›　‹Landscape Rev›
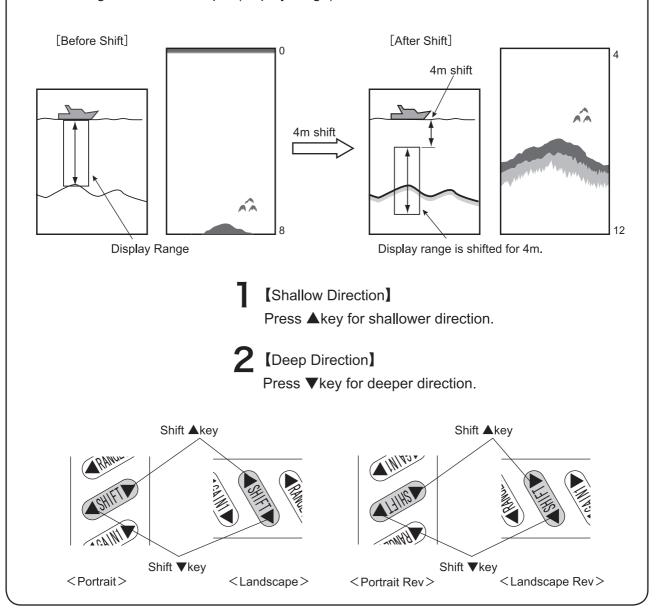
2. DISPLAY RANGE SHIFT

Shift (Display Range)

[Shift (Display Range)]

Possible to shift the starting position of depth (display range). For example, the depth is 4~12m when shifting 4m for 0~8m depth (display range).

[Before Shift]

[After Shift]

4m shift

4m shift

Display Range

Display range is shifted for 4m.

1 【Shallow Direction】

Press ▲key for shallower direction.

2 【Deep Direction】

Press ▼key for deeper direction.

Shift ▲key

Shift ▲key

Shift ▼key

Shift ▼key

＜Portrait＞   ＜Landscape＞   ＜Portrait Rev＞   ＜Landscape Rev＞

3. SENSITIVITY

Whole Display Gain Adjustment

Digital fishfinder is capable of changing the whole past image.
This function helps to find the optimized gain set-up for whole image (past recording data) with easy manual operation.

Single Frequency Display
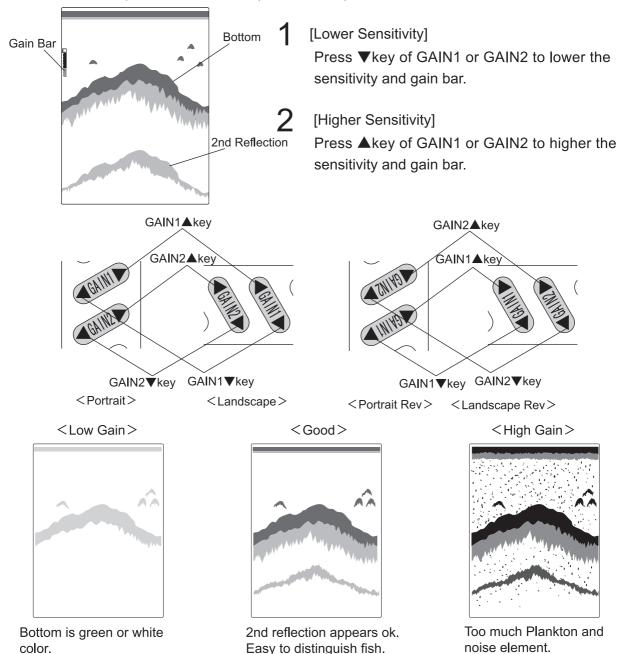
Operation for single frequency display.

※ Both keys, [GAIN1] and [GAIN2], changes the sensitivity.

※ Select single or dual frequency display from menu. (refer to page 26)

※ Dual frequency is selected for default set-up. (when the unit supports dual frequency)

[Gain]

Adjust the gain to distinguish the sea bottom and fish school. (1~41 (0~40) : 40 steps of sensitivity level) Optimum sensitivity is to have 2nd reflection of sea bottom and red color bottom.
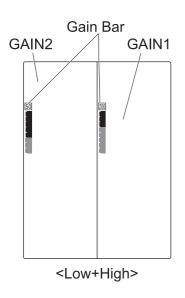
[2nd Reflection]

1st reflection is first reflected sound from sea bottom. 2nd reflection is the sound reflected from the sea surface and reflected again from the sea bottom. Usually, 2nd reflection is located twice deeper than sea bottom(1st reflection).

Gain Bar

Bottom

2nd Reflection

1 [Lower Sensitivity]

Press ▼key of GAIN1 or GAIN2 to lower the sensitivity and gain bar.

2 [Higher Sensitivity]

Press ▲key of GAIN1 or GAIN2 to higher the sensitivity and gain bar.

GAIN1▲key
GAIN2▲key
GAIN1▼
GAIN2▼
GAIN2▲
GAIN1▲
GAIN2▼key
GAIN1▼key
＜Portrait＞
＜Landscape＞

GAIN2▲key
GAIN1▲key
GAIN2▼
GAIN1▼
GAIN1▲
GAIN2▲
GAIN1▼key
GAIN2▼key
＜Portrait Rev＞
＜Landscape Rev＞

＜Low Gain＞

Bottom is green or white color.

＜Good＞

2nd reflection appears ok. Easy to distinguish fish.

＜High Gain＞

Too much Plankton and noise element.

Dual Frequency Display

For dual frequency display, GAIN1 is for right diplay, and GAIN2 is for left display.

Gain Bar

GAIN2   GAIN1

50   200

<Low+High>

1 Adjust the sensitiviy of left display with GAIN2 key.

[Lower Sensitivity]
Press GAIN2 ▼key to lower the sensitivity and gain bar.

[Higher Sensitivity]
Press GAIN2 ▲key to higher the sensitivity and gain bar.
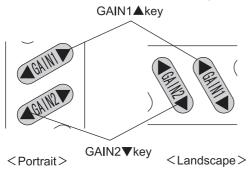
2 Adjust the sensitiviy of right display with GAIN1 key.
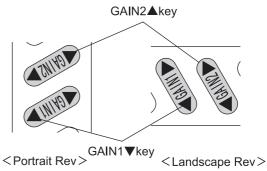
[Lower Sensitivity]
Press GAIN1 ▼key to lower the sensitivity and gain bar.

[Higher Sensitivity]
Press GAIN1 ▲key to higher the sensitivity and gain bar.

GAIN1▲key

GAIN1 ▼ GAIN2 ▼ GAIN1 ▼

GAIN2▲key

GAIN2 ▼ GAIN1 ▼ GAIN2 ▼

GAIN2▼key

＜Portrait＞   ＜Landscape＞   ＜Portrait Rev＞   ＜Landscape Rev＞

GAIN1▼key
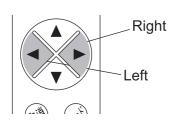
4. CONTRAST

Contrast

Display may flicker when scrolling the sounder display (from right to left). Possible to lower the flickering level with left/right direction button by adjusting the contrast value.

Right

Left

1 When menu is not selected, press right direction button to increase the contrast value.

2 When menu is not selected, press left direction button to lower the contrast value.

3 Adjust the contrast with left/right button for optimized conditoin. Adjustable range is ±4.

5. CLUTTER
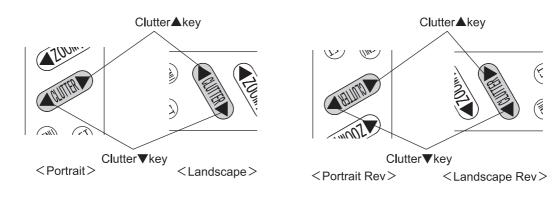
Clutter

Fish school and bottom are displayed with the set-up of reflected echo strength and color tone. "Clutter" easily distinguishes the fish school by erasing the color from weakest reflection such as plankton or dirts under the water.

● Clutter set-up

Each time pressing CLUTTER▲ key, erase the color of weakest reflection.
Each time pressing CLUTTER▼ key, re-activate the color of strong reflection.

Clutter▲key

Clutter▲key

Clutter▼key
＜Portrait＞   ＜Landscape＞

Clutter▼key
＜Portrait Rev＞   ＜Landscape Rev＞

6. EXPANSION MODE

Expansion Mode

[Expanded Display]

Expanded display appears on the left side.
When selecting dual frequency mode, the right-side frequency is applied for exanded display.

Zoom key

Mode button

● Press Mode button to switch each mode.

Normal ： Normal display appears.
Bottom Lock : Straight bottom contour and expanded area from the bottom.
Auto Expansion : Set the bottom at center position and expand upper/lower area.
Manual Expansion : Set the selected location at center and expand upper/lower area.
Use Zoom key to move the expansion area.

※ Display range varies depending on the expansion ratio. (p.17)

7. EXPANSION AREA

Expansion Area
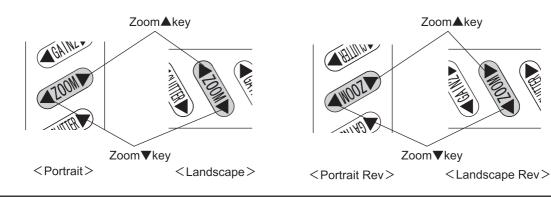
Possible to move the expansion area to either sea surface / bottom sides.

※ [ZOOM] key can be only used during manual expansion mode.
※ Expansion ratio can be selected from x2, x4, x8. (p.17)
※ x4 is factory set-up.

1 Press MODE button to set to manual expansion.

2 Use ZOOM key to move the expansion area (green expansion mark area) up/down.
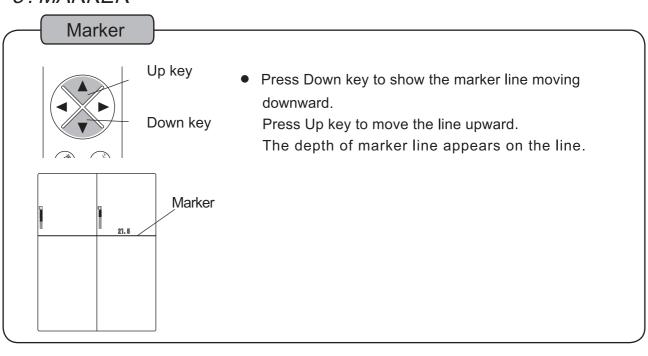
Press ▲key to move to shallow area.
Press ▼key to move to deeper area.

※Press MODE button to cancel the expansion display.

Zoom▲key

Zoom▲key

Zoom▼key

Zoom▼key

＜Portrait＞   ＜Landscape＞   ＜Portrait Rev＞   ＜Landscape Rev＞

8. MARKER

Marker

Up key

Down key

Marker

21.5

● Press Down key to show the marker line moving downward.
Press Up key to move the line upward.
The depth of marker line appears on the line.

SWEEPING SPEED

Sweeping Speed

[Sweeping Speed]

Sounder display consists of the consecutive latest image (image beneath the vessel) at the right edge and keep shifting the past image to the left side. Sweeping speed is the speed to shift the image. Whole display appears differently with this set-up value.

[Relation between Sweeding Speed and Sounding Rate]

Sweeping speed can be selected from 6 (5) different types. The following is the reference of sounding rate for each set-up.

Menu Set-up	Sweep Speed / Sounding Rate
×3	3／1
×2	2／1
4	1／1
3	1／2
2	1／4
1	1／8
Freeze	Freeze

Fast ↑

Slow ↓

- Set-up the sweeping speed of Menu1.

2. A MODE

A Mode

A mode appears between sounder image and depth indication. The width changes depending on the strength of reflected echo signal.

ON　: A Mode ON
OFF　: A Mode OFF

3. AUTO RANGE / SHIFT

Auto Range / Shift

- Set-up Auto Range / Shift of Menu1.

  Range ： Range is automatically adjusted for optimized bottom location (lower half area).

  Shift ： Automatic shift (display range movement) is applied for bottom location (lower half area).

  OFF ： Cancel Auto Range and Auto Shift.

4. AUTO RANGE MAX. DEPTH

Auto Range Max. Depth

Set-up the max. depth when using auto range.

- Set-up max. depth for auto range of Menu1.

  30m,50m,100m,300m,500m,1,000m

5. EXPANSION RATE

Expansion Rate

[Expansion Rate]

Expansion rate can be selected from 2x / 4x / 8x.

- Set-up the expansion rate of Menu1. (2x / 4x / 8x)

6. AUTO GAIN

Auto Gain

Set the optimized gain automatically for better image presentation.

- Set-up the auto gain of Menu1.
  - LOW : Lower sensitivity set-up.
    Suitable for 2nd/3rd reflection or
    bottom hardness judgement.
  - HIGH : Higher sensitivity set-up.
    Suitable for detecting bait fish or
    higher sensitivity.
  - OFF : Cancel the auto gain set-up.

7. CLEAN ECHO

Clean Echo

Reduce the desynchronized noise such as other fishfinder, electronic noise, air bubble, and mechanical noise.

- Set-up the clean echo of Menu1.
  （OFF・L・M・H）

Caution : Clean echo may erase small fish reflection as well as small noise.

8. TRANSMIT POWER

Output Power

Select from 2 levels of output power. (Low / High)

- Set-up the output power of Menu1.
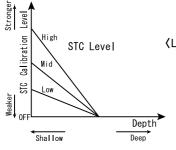 （OFF・LOW・HIGH）

※ *Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.*

9. STC SETTING

STC SETTING(HE-1511-WB-Bo,HE-7300-WB-Bo)

Reduce the sensitivity of shallow water area by eliminating the noise signals such as plankton and air bubbles.
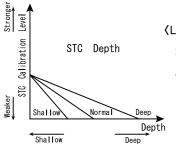
1 Set-up STC SETTING of MENU 1

〈Low-Freq STC Level〉〈High-Freq STC Level〉
Set-up STC level for either low-freq or high-freq.
Low sensitivity at shallow area with stronger STC.
4 different STC level: OFF, Low, Mid, High
OFF: Weakest, H: Strongest

〈Low-Freq STC Depth〉〈High-Freq STC Depth〉
Set-up the target depth for STC adjustment (low-freq or high-freq)
Deeper the depth is selected, selected STC level is affected to deeper water.
3 different STC target depth: Shallow, Normal, Deep.
Shallow: 0~50m, Normal: 0~150m, Deep: 0~300m

STC SETTING(Only forHE-775-Di)

Reduce the sensitivity of shallow water area less than approx.100m and present the clear image by eliminating the noise signal such as plankton and air bubbles.

● Set-up STC SETTING of Menu1.
(L・M・H)

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

10 . SENSITIVITY MODE

Sensitivity Mode

Set-up the sensitivity level of sounder.

- Set-up sensitivity mode of Menu3(Menu1).
  STD : Normal mode
  HIGH : High sensitivity mode

※Please refer to "3.SENSITIVITY" (page 11) for normal gain adjustment.

11 . BACKGROUND COLOR

Background Color

Visual image of display looks differently by surrounding brightness. It is easier to see the image by selecting the background color from 4 different colors.

- Set-up background color of Menu2. (black, cyan, blue, white)

12 . COLOR TONE

Color Tone

Set-up the color tone of display.
Day mode is for brighter screen.
Night mode is for darker screen.

- Set-up color tone of Menu2. (day / night mode)

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

13 . COLOR CONFIGURATION

Color Configuration

Reflected signal of sound wave is converted into 17 ranks of digital signal according to the strength of response. Color configuration is the color set-up for 16 ranks except background color.
Fishfinder image is shown by the the color configuratoin. The displayed color shows the strength of reaction. Also, specific reaction can be emphasized by changing the color configuration.

1 Go to color set-up of Menu2.

2 Select the color config. (5 patterns: 0~4)

Intense Level

This set-up shows more color of strong reflection (signal).

1 Go to color set-up of Menu2.

2 Select the level.

Standard
High   Stronger coloration
Max

Clutter

Remove unnecessary weak noise and distinguish the fish school clearly.

1 Go to COLOR SETTING of Menu2.

2 Set-up the clutter level.

Standard
1   Less weak noise.
2
3

※Please refer to "HOW TO OPERATE MENU"(p.7)for menu operation.

14 . WATER TEMP. GRAPH

Water Temp. Graph

Water temp graph appears. It's easy to see the fishing points by knowing the variation of water temperature and tide change.

- Set-up TEMP GRAPH of Menu2.

  ON ： Enable

  OFF ： Disable

※ *Optional water temp sensor is required to show temp graph.*

15 . FISH ALARM

Fish Alarm

Alarm is ON when the fish is detected.

- Set-up Fish Alarm of Menu2.

  S ： High sensitivity mode to detect small /big fish schools.

  L ： Low sensitivity mode to detect only big fish schools.

  OFF ： Fish alarm is OFF.

Caution : Fish alarm may react to the objects other than fish.

16 . WATER TEMP. ALARM

Water Temp. Alarm

Alarm is ON within or exceeding the range of 2 different water temp.

※ Optional water temp sensor is required for water temp alarm.

e.g) Water temp1 : 5℃
Water temp2 : 10℃

10℃

Out of Range

Within Range

5℃

Out of Range

0℃

1 Go to water temp alarm of Menu2.

2 Press right key to display the set-up of water temp alarm. Set-up the alarm condition.

Within Range：Alarm is ON within the range of 2 selected temp. Temp display blinks.

Out of Range：Alarm is ON outside the range of 2 selected temp. Temp display blinks.

OFF ：Temp alarm is OFF.

3 Set-up the water temp1 and temp2.

17 . DEPTH ALARM

Depth Alarm

Alarm is ON within or exceeding the range of 2 different depth (Depth Set1, Depth Set2).
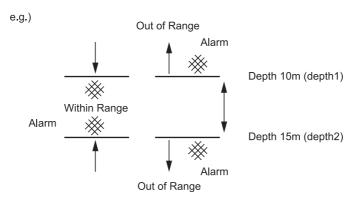
- Go to depth alarm of Menu2.

    Press right key to display the set-up of depth alarm.
    Set-up the alarm condition.

    Within Range：Alarm is ON within the range of 2 selected depth.

    Out of Range：Alarm is ON outside the range of 2 selected depth.

    OFF　：Depth alarm is OFF.

    Set-up the depth1 and depth2.

e.g.)

Out of Range
Alarm
※
Depth 10m (depth1)

Within Range
Alarm
※

Depth 15m (depth2)
※
Alarm
Out of Range

18 . DEPTH UNIT

Depth Unit

Select from "Meter", "Feet", "Fathom",or "Brazas".

- Set-up depth unit of Menu2.

19 . PULSE LENGTH

Pulse Length

Basic set-up is normal for pulse length, but it is possible to select the pulse length.
Selecting "L" means 2 times longer pulse than normal.

- Set-up pulse length of Menu2.

    SHRT・NORM・LONG

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

20 . BOTTOM HARDNESS

Bottom Hardness Set-up

Bottom Hardness Level   : 0 ~ 20
Hard Bottom   : Higher value
Soft Bottom   : Lower value
The value appears on the upper left of screen.
Also, bottom hardness graph appears at the bottom.

Bottom
Hardness
Level

1 Set - up BTM HARDNESS of Menu2
ON : Enable
OFF : Disable

Note) Applicable for shallow water.
        The value varies depending on the
        conditions of transducer installation etc.

Bottom

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

21 . SUPER RANGE

Super Range

Whole past image changes automatically according to the current depth (displayed depth range on screen) if changed any.

- Set-up super range of Menu3.
  - ON ： USE
  - OFF ： NO USE

22 . FREQUENCY DISPLAY

Display Screen

Possible to select dual frequency display as follows.

※ This function is not for single frequency transducer.

- Set-up display of Menu3.

  L : Low frequency display on whole screen

  H : High frequency display on whole screen

  L+H :

  　Low freq for left and High freq for right half display

  H+L :

  　High freq for left and Low freq for right half display

  L+L : Low freq appears for left/right screen.

  H+H : High freq appears for left/right screen.

  Capable of adjusting different gain set-up even for single frequency. Auto gain only works for right side screen.

< "L+H" >

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

23 . CORRECTION

Water Temp. Correction

Correct the water temp.

●   Set-up the water temp of Menu3.

Voltage Correction

Correct the voltage.

●   Set-up the voltage of Menu3.

24 . DEPTH DISPLAY SIZE

Depth Display

Select the display size of depth digit.

●   Set-up the depth digit of Menu3.
       (OFF, S, M, L)

25 . SCALE LINE

Scale Line

Horizontal line (scale line) appears on the screen.

● Set-up scale line of Menu3.

ON ：USE

OFF ：NO USE

26 . SEARCH AREA

Search Range

1 Set-up the search area of Menu3.

```
1 SEARCH AREA SETTING [OFF, ON]
2 BEAM ANGLE SELECT [BY TD, OPTIONAL]   ＊1
3 TD [––, –––]                          ＊2
4 OPTIONAL SET(L FREQ) [----° ]         ＊3
5 OPTIONAL SET(H FREQ) [---° ]          ＊4
```

When selecting "Transducer Set"(*1), the selected transducer appears(*2).

When selecting "Other TD"(*1), each set-up of *3+*4 becomes effective.

※ 4, 5 : Only for HE-7300-WB-Bo / HE-1511-WB-Bo.

Caution: Search area may differ from the actual area due to the installation method of transducer and sensitivity set-up etc.

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

27 . INITIALIZATION

Initialization
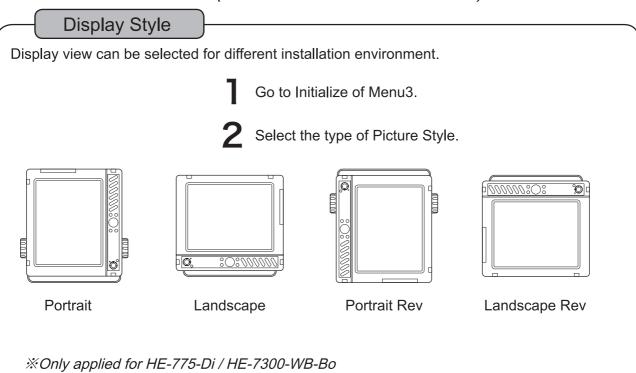
Initialize all the set-up except display style.

1 Go to Initialize of Menu3.

2 Select Initial All.

3 Press Set key to execute initialization.

28 . DISPLAY STYLE (PORTRAIT / LANDSCAPE)

Display Style

Display view can be selected for different installation environment.

1 Go to Initialize of Menu3.

2 Select the type of Picture Style.

Portrait   Landscape   Portrait Rev   Landscape Rev

※Only applied for HE-775-Di / HE-7300-WB-Bo
    HE-1511-WB-Bo : Portrait / Landscape

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

29 . SIMULATION

Simulation

Simulation mode set-up.

Operational practice is possible without connecting to transducer.

1 Go to Initialize of Menu3.

2 Select Simulation of Initial Setting.

Caution : Information appears on the simulation mode is not actual image. This is only used for operational practice or demonstration purpose.

Caution : An optional simulation card is required for HE-7300-WB-Bo , HE-1511-WB-Bo.

※*Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.*

30 .TRANSDUCER SET-UP *(only for HE-7300-WB-Bo, HE-1511-WB-Bo)*

TD Set-up

1 The following display appears for factory set-up and initialiazed condition. Press SET key or right direction key for set-up display. Output power is set to "Low" during this set-up. It will automatically set back to "High" after completing the set-up.

Transducer is not selected.
Set Frequency.
While setting, transmitting power is reduced to "LOW".
<CAUTION>
Incorrect setting may damage transducer and unit.

[SET] OR [▶] TO SELECT TD   ▶

The following TD list appears. Use direction key (up/down/left/right) to select TD.
Press Menu key after the selection.

TD List

Not selected		
40-75 TD51	28 TD88	OTHER TD (50)
40-75 TD73/83/93	200 TD33	WB L1kw H1kw TD340
50-100 TD87/97	50&200 TD47/48	WB L2kw H1kw TD360/TD361
28-55 TD87	50&200 TD66/67/68	WB L3kw H1kw TD380
	28-100 TD87	WB L5kw TD390
	50&200 TD86	

[◀✦▶] : SELECT
[MENU] : TO PREVIOUS MENU

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

TD Set-up

3 The following display appears. Press Menu key to end the set-up. Or, press right key to return to set-up display.

```
Transducer is not selected.
Set Frequency.
While setting, transmitting power is
reduced to "LOW".
          <CAUTION>
Incorrect setting may damage
transducer and unit.
[SET] OR [▶] TO SELECT TD      ▶
[MENU] : COMPLETE SET-UP
```

Caution : Wrong set-up may cause the damage onto main unit and transducer.

31 .TRANSDUCER RE-SET-UP   *(only for HE-7300-WB-Bo, HE-1511-WB-Bo)*

TD Re-Set-up

1 Go to Initialize of Menu3.

2 Press right key or Set key to display Initial Setting.
Select Transducer Set.

3 Press right key or Set key to display TD list.
Select Transducer Set.

TD List

Not selected		
40-75 TD73/83/93	200 TD33	OTHER TD ( )
50 TD30	200 TD89	WB L1kw H1kw TD340
50 TD113	50&200 TD47/48	WB L2kw H1kw TD360/TD361
28 TD88/98	50&200 TD66/67/68	WB L3kw H1kw TD380
28-55 TD87/97	32-40 TD70/80	WB L5kw TD390
28-100 TD87/97	36-65 TD81/95	
55-100 TD87/97		

```
[ ◄▲▼► ] : SELECT
[MENU] : TO PREVIOUS MENU
```

※*Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.*

32 . TRANSDUCER THRU-HULL / IN-HULL SET-UP

TD Location

The optimized condition is set for each installation method of transducer.

1 Go to Initialize of Menu3.

2 Select TD location

THRU-HULL : Select this when using thru-hull installation.

IN-HULL : Select this when using In-hull or Inside-Case installation.

33 . FREQUENCY SET-UP

Frequency Set-up

Frequency can be selected in 5kHz steps for Low-Freq and 10kHz steps for High-Freq by connecting to a wideband transducer(TD340/TD360/TD361/TD380/TD390).

※Only available when "WB L1kW H1kW TD340","WB L2kW H1kW TD360/361",
  "WB L3kW H1kW TD380","WB L5kW TD390" are selected in "TD Set-up"(P.30)

1 Go to Initialize of Menu3.

2 Select FREQUENCY SETTING

Low-Freq
38kHz, 40kHz, 45kHz, 50kHz, 55kHz, 60kHz, 65kHz, 70kHz

High-Freq
130kHz, 140kHz, 150kHz, 160kHz, 170kHz, 180kHz, 190kHz, 200kHz, 210kHz, 220kHz

※Please refer to "HOW TO OPERATE MENU" (p.7) for menu operation.

MENU LIST AND FACTORY SET-UP

HE-1511-WB-Bo
MENU1

Menu Item		Set-up Value	Factory Set-up
1. SWEEP SPEED		STOP, 1, 2, 3, 4, X2, X3	4
2. A-MODE		OFF, ON	OFF
3. AUTO RNG/SFT		OFF, RNG, SFT	OFF
4. AUTO RNG MAX DEP.		30m, 50m, 100m, 300m, 500m, 1000m	500m
5. EXP. RATE		x2, x4, x8	×4
6. AUTO GAIN		OFF, L, H	OFF
7. C-ECHO		OFF, L, M, H	L
8. OUTPUT POWER		OFF, LOW, HIGH	HIGH
9. STC SETTING	1. LOW STC	OFF, L, STD, H	STD
	2. HIGH STC	OFF, L, STD, H	STD
	3. STC_LOW_F	1, 2, 3	2
	4. STC_HIGH_F	1, 2, 3	1

HE-1511-WB-Bo
Menu2

Menu Item			Set-up Value	Factory Set-up
1. BACK GROUND			Black, Cyan, Blue White	Cyan
2. COLOR TONE			DAY, NIGHT	Day
3. COLOR SETTING	1. COLOR CONFIG		0, 1, 2, 3, 4	4
	2. INTENSE COL		STD, H, MAX	STD
	3. CLUTTER		STD, 1, 2, 3	STD
	4. IMAGE		0, 1, 2, 3, 4	2
	5. GAIN SETTING		1, 2	2
4. TEMP GRAPH			OFF, ON	OFF
5. ALARM	1. FISH ALARM		OFF, S, L	OFF
	2. TEMP ALARM	1. ALARM SET	OFF, IN RNG, OUT RNG	OFF
		2. TEMP SET1	0.0℃~50.0℃	20.0℃
		3. TEMP SET2	0.0℃~50.0℃	20.0℃
	3. DEPTH ALARM	1. ALARM SET	OFF, IN RNG, OUT RNG	OFF
		2. DEPTH SET1	1m~1500m ※Different for each spec.	10m
		3. DEPTH SET2	1m~1500m ※Different for each spec.	500m(1000m)
6. UNIT SETTING	1. DEPTH UNIT		m, ft, fa, br	m
	2. TEMP UNIT		℃, ℉	℃
7. PULSE LENGTH			S, STD, L, MAX	STD
8. BTM HARDNESS			OFF, ON	OFF
9. SUPER DEEP ※1			OFF, ON	OFF

※1　Effective at 1,000m depth or deeper. Available with 28kHz or wideband transducer (low-freq only).

Menu Item			Set - up Value	Factory Set - up
1. SUPER RANGE			OFF,ON	OFF
2. DISPLAY			(Dual freq spec) L,H, H-L, L-H, L-L, H-H	L-H
			(Single freq spec) S, S-S	S
3. ADJUST	1. TEMP. CORRECT		-3.0℃～+3.0℃	0.0℃
	2. VOLT. CORRECT		-3.0V～+3.0V	0.0V
4. DEPTH DIGIT			OFF, S, M, L	M
5. SCALE LINE			OFF, ON	OFF
6. SCALE DOT			WIDE,NARROW	WIDE
7.SEARCH AREA SETTING	1. SEARCH AREA SETTING		OFF, ON	OFF
	2. BEAM ANGLE SELECT		BY TD, OPTIONAL	BY TD
	3. TD		※Different for each spec	※Different for each spec
	4. OPTIONAL SET (L FREQ.)		1°～60°	20°
	5. OPTIONAL SET (H FREQ.)		1°～60°	20°
8. INITIALIZE	1. INITIAL ALL			
	2. PICTURE STYLE		PORT,LAND,P,L	PORT
	3. SIMULATION		OFF, ON	OFF
	4. TRANSDUCER SET			
	5. TD LOCATION		THRU-HULL, IN-HULL	THRU-HULL
	6. BANDWIDTH		WIDE,STD,NAR-1,NAR-2	STD
	7. EXT SYNC		OFF, ON	OFF
	8.BTM HARDNESS SETTING	1. BTM HARDNESS OFFSET	-6～+4	± 0
		2. BTM HARDNESS AVE	1, 2, 3	1
		3. BTM HARDNESS SENS	H, ·, ·, ·, ·, L	
	9.OTHER SPECIAL SETTING	1.FINDER DETIL SETTING 1	1. L FRQ. MIN DEPTH LV	-20dB～+12dB	± 0dB
			2. H FRQ. MIN DEPTH LV	-20dB～+12dB	± 0dB
			3. L FRQ. MIN DEPTH	24cm～600cm	36cm
			4. H FRQ. MIN DEPTH	24cm～600cm	36cm
			5.L FRQ. AUTO GAIN CORRECT	-5～+5	±0
			6. H FRQ. AUTO GAIN CORRECT	-5～+5	±0
			7.TARGET DEPTH RANGE	x1, x2, AUTO	AUTO
			8. BL LEVEL	0～200	120
			9. SENSITIVITY	STD,HIGH	STD
		2.FINDER DERAIL SETTING 2	1. DEPTH MEAS.	AUTO, RIGHT-DISP	AUTO
	0. FREQUENCY SETTING ※ 1	1. L FREQ		38kHz, 40kHz, 45kHz, 50kHz, 55kHz, 60kHz, 65kHz, 70kHz	50kHz
		2. H FREQ		130kHz, 140kHz, 150kHz, 160kHz, 170kHz, 180kHz, 190kHz, 200kHz, 210kHz, 220kHz	200kHz
	0.FISH SYMBOL ※ 2	1. FISH SYMBOL		OFF, ON, ON(SIZE)	OFF
		2. RIGHT-DISP SYMBOL(50/200)		OFF, ON	ON
		3. SYMBOL LEVEL CALIB		-12～+12	± 0
		4. SYMBOL LEVEL 0-9		ON,OFF	OFF

※ 1 Available with Wideband Transducer

※ 2 Available with 50 & 200 Transducer

HE-7300-WB-Bo
MENU1

Menu Item		Set-up Value	Factory Set-up
1. SWEEP SPEED		STOP, 1, 2, 3, 4, X2, X3	4
2. A-MODE		OFF, ON	OFF
3. AUTO RNG/SFT		OFF, RNG, SFT	OFF
4. AUTO RNG MAX DEP.		30m, 50m, 100m, 300m, 500m, 1000m	500m
5. EXP. RATE		x2, x4, x8	×4
6. AUTO GAIN		OFF, L, H	OFF
7. C-ECHO		OFF, L, M, H	L
8. OUTPUT POWER		OFF, LOW, HIGH	HIGH
9. STC SETTING	1. LOW STC	OFF, L, STD, H	STD
	2. HIGH STC	OFF, L, STD, H	STD
	3. STC_LOW_F	1, 2, 3	2
	4. STC_HIGH_F	1, 2, 3	1

HE-7300-WB-Bo
Menu2

Menu Item			Set-up Value	Factory Set-up
1. BACK GROUND			Black, Cyan, Blue White	Cyan
2. COLOR TONE			DAY, NIGHT	Day
3. COLOR SETTING	1. COLOR CONFIG		0, 1, 2, 3, 4	4
	2. INTENSE COL		STD, H, MAX	STD
	3. CLUTTER		STD, 1, 2, 3	STD
4. TEMP GRAPH			OFF, ON	OFF
5. ALARM	1. FISH ALARM		OFF, S, L	OFF
	2. TEMP ALARM	1. ALARM SET	OFF, IN RNG, OUT RNG	OFF
		2. TEMP SET1	0.0℃~50.0℃	20.0℃
		3. TEMP SET2	0.0℃~50.0℃	20.0℃
	3. DEPTH ALARM	1. ALARM SET	OFF, IN RNG, OUT RNG	OFF
		2. DEPTH SET1	1m~1500m ※Different for each spec.	10m
		3. DEPTH SET2	1m~1500m ※Different for each spec.	500m(1000m)
6. UNIT SETTING	1. DEPTH UNIT		m, ft, fa, br	m
	2. TEMP UNIT		℃,℉	℃
7. PULSE LENGTH			S, STD, L	STD
8. BTM HARDNESS			OFF, ON	OFF
9. SUPER DEEP ※1			OFF, ON	OFF

※1 Effective at 1,000m depth or deeper. Available with 28kHz or wideband transducer (low-freq only).

Menu Item			Set - up Value	Factory Set - up
1. SUPER RANGE			OFF,ON	OFF
2. DISPLAY			(Dual freq spec) L,H, H-L, L-H, L-L, H-H	L-H
			(Single freq spec) S, S-S	S
3. ADJUST	1. TEMP. CORRECT		-3.0℃～+3.0℃	0.0℃
	2. VOLT. CORRECT		-3.0V～+3.0V	0.0V
4. DEPTH DIGIT			OFF, S, M, L	M
5. SCALE LINE			OFF, ON	OFF
6. SCALE DOT			WIDE NARROW	WIDE
7.SEARCH AREA SETTING	1. SEARCH AREA SETTING		OFF, ON	OFF
	2. BEAM ANGLE SELECT		BY TD, OPTIONAL	BY TD
	3. TD		※Different for each spec	※Different for each spec
	4. OPTIONAL SET (L FREQ.)		1°～60°	20°
	5. OPTIONAL SET (H FREQ.)		1°～60°	20°
8. INITIALIZE	1. INITIAL ALL			
	2. PICTURE STYLE		PORT, LAND, P-REV, L-REV	PORT
	3. SIMULATION		OFF, ON	OFF
	4. TRANSDUCER SET			
	5. TD LOCATION		THRU-HULL, IN-HULL	THRU-HULL
	6. BANDWIDTH		WIDE,STD,NAR-1,NAR-2	STD
	7. EXT SYNC		OFF, ON	OFF
	8.BTM HARDNESS SETTING	1. BTM HARDNESS OFFSET	-6～+4	± 0
		2. BTM HARDNESS AVE	1, 2, 3	1
		3. BTM HARDNESS SENS	H, ·, ·, ·, ·, L	
	9.OTHER SPECIAL SETTING	1.FINDER DETIL SETTING 1	1. L FRQ. MIN DEPTH LV	-20dB～+12dB	± 0dB
			2. H FRQ. MIN DEPTH LV	-20dB～+12dB	± 0dB
			3. L FRQ. MIN DEPTH	24cm～600cm	36cm
			4. H FRQ. MIN DEPTH	24cm～600cm	36cm
			5. L FRQ. AUTO GAIN CORRECT	-5～+5	±0
			6. H FRQ. AUTO GAIN CORRECT	-5～+5	±0
			7.TARGET DEPTH RANGE	x1, x2, AUTO	AUTO
			8. BL LEVEL	0～200	120
			9. SENSITIVITY	STD, HIGH	STD
		2.FINDER DERAIL SETTING 2	1. DEPTH MEAS.	AUTO,RIGHT-DISP	AUTO
	0. FREQUENCY SETTING ※ 1	1. L FREQ	38kHz, 40kHz, 45kHz, 50kHz, 55kHz, 60kHz, 65kHz, 70kHz	50kHz
		2. H FREQ	130kHz, 140kHz, 150kHz, 160kHz, 170kHz, 180kHz, 190kHz, 200kHz, 210kHz, 220kHz	200kHz
	0.FISH SYMBOL ※ 2	1. FISH SYMBOL	OFF, ON, ON(SIZE)	OFF
		2. RIGHT-DISP SYMBOL(50/200)	OFF, ON	ON
		3. SYMBOL LEVEL CALIB	-12～+12	± 0
		4. SYMBOL LEVEL 0-9	ON, OFF	OFF

※ 1   Available with Wideband Transducer
※ 2   Available with 50 & 200 Transducer

HE-775-Di
MENU1

Menu Item	Set-up Value	Factory Set-up
1. SWEEP SPEED	STOP, 1, 2, 3, 4, X2, X3	4
2. A-MODE	OFF, ON	OFF
3. AUTO RNG/SFT	OFF, RNG, SFT	OFF
4. AUTO RNG MAX DEP.	30m, 50m, 100m, 300m, 500m, 1000m	500m
5. EXP. RATE	x2, x4, x8	×4
6. AUTO GAIN	OFF, L, H	OFF
7. C-ECHO	OFF, L, M, H	L
8. OUTPUT POWER	OFF, LOW, HIGH	HIGH
9. STC SETTING	L, M, H	M
0. SENSITIVITY	STD, HIGH	STD

Menu Item			Set-up Value	Factory Set-up
1. BACK GROUND			Black, Cyan, Blue White	Cyan
2. COLOR TONE			DAY, NIGHT	Day
3. COLOR SETTING	1. COLOR CONFIG		0, 1, 2, 3, 4	4
	2. INTENSE COL		L, STD, H, MAX	STD
	3. CLUTTER		STD, 1, 2, 3	STD
4. TEMP GRAPH			OFF, ON	OFF
5. ALARM	1. FISH ALARM		OFF, S, L	OFF
	2. TEMP ALARM	1. ALARM SET	OFF, IN RNG, OUT RNG	OFF
		2. TEMP SET1	0.0℃~50.0℃	20.0℃
		3. TEMP SET2	0.0℃~50.0℃	20.0℃
	3. DEPTH ALARM	1. ALARM SET	OFF, IN RNG, OUT RNG	OFF
		2. DEPTH SET1	1m～1500m ※Different for each spec.	10m
		3. DEPTH SET2	1m～1500m ※Different for each spec.	500m(1000m)
6. UNIT SETTING	1. DEPTH UNIT		m, ft, fa, br	m
	2. TEMP UNIT		℃, ℉	℃
7. PULSE LENGTH			S, STD, L	STD
8. BTM HARDNESS			OFF, ON	OFF
9. FISH SYMBOL	1. FISH SYMBOL		OFF,ON,ON(MARK+SIZE),ON(SIZE ONLY)	OFF
	2. FISH SIZE UNIT		cm , inch	cm
	3. SYMBOL LEVEL CALIB		-12 ~ +12	±0
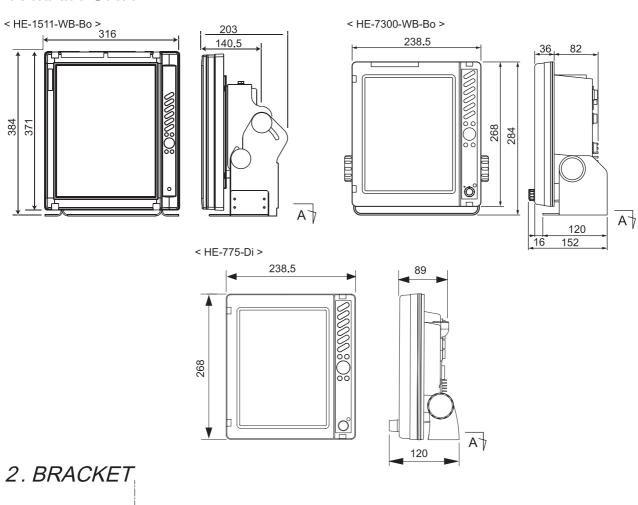
Menu Item				Set - up Value	Factory Set - up
1. SUPER RANGE				OFF,ON	OFF
2. DISPLAY				50,200,200-50,50-200,50-50,200-200	50-200
3. ADJUST	1. TEMP. CORRECT			-3.0℃～+3.0℃	0.0℃
	2. VOLT. CORRECT			-3.0V～+3.0V	0.0V
4. DEPTH DIGIT				OFF, S, M, L	M
5. SCALE LINE				OFF, ON	OFF
6. SCALE DOT				WIDE, NARROW	WIDE
7.SEARCH AREA SETTING	1. SEARCH AREA SETTING			OFF, ON	OFF
	2. BEAM ANGLE SELECT			BY TD, OPTIONAL	BY TD
	3. TD			※Different for each spec	※Different for each spec
	4. OPTIONAL SET (L FREQ.)			1°～60°	20°
	5. OPTIONAL SET (H FREQ.)			1°～60°	20°
8. INITIALIZE	1. INITIAL ALL				
	2. PICTURE STYLE			PORT, LAND, P-REV, L-REV	PORT
	3. SIMULATION			OFF, ON	OFF
	4. TD LOCATION			THRU-HULL, IN-HULL	THRU-HULL
	5. BANDWIDTH			WIDE, STD, NAR-1, NAR-2	STD
	6.BTM HARDNESS SETTING	1. BTM HARDNESS OFFSET		-6～+4	±0
		2. BTM HARDNESS AVE		1, 2, 3	1
		3. BTM HARDNESS SENS		H, ·, ·, ·, ·, L	
	7.OTHER SPECIAL SETTING	1.FINDER DETAIL SETTING 1	1. 50kHz MIN DEPTH LV	-20dB～+12dB	±0dB
			2. 200kHz MIN DEPTH LV	-20dB～+12dB	±0dB
			3. 50kHz MIN DEPTH	24cm～600cm	36cm
			4. 200kHz MIN DEPTH	24cm～600cm	36cm
			5. 50kHz AUTO GAIN CORRECT.	-5～+5	±0
			6. 200kHz AUTO GAIN CORRECT.	-5～+5	±0
			7.TARGET DEPTH RANGE	x1, x2, x2.5, x3, AUTO	AUTO
			8. KEEL OFFSET	-10.0～30.0	0.0
		2.FINDER DETAIL SETTING 2	1. DEPTH MEAS.	AUTO, RIGHT - DISP	AUTO
			2. STC	AUTO, 1, 2, 3, 4	AUTO
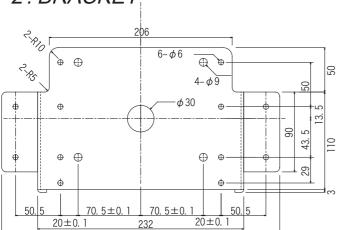
MEMO
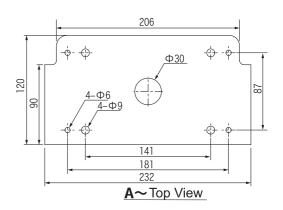
DIMENSIONAL DRAWING

Unit : mm

1. MAIN UNIT
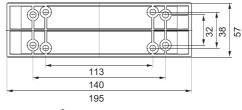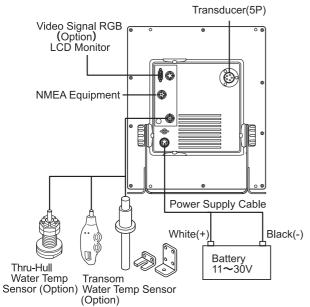
< HE-1511-WB-Bo >

316
203
140.5
384
371

A

< HE-7300-WB-Bo >

238.5
36
82
268
284
120
16
152

A

< HE-775-Di >

238.5
89
268
120

A

2. BRACKET

2-R10
2-R5
206
6-φ6
4-φ9
φ30
50
50
13.5
90
43.5
29
110
3
50.5
70.5±0.1
70.5±0.1
50.5
20±0.1
232
20±0.1
313

A〜 Top View
< HE-1511-WB-Bo >
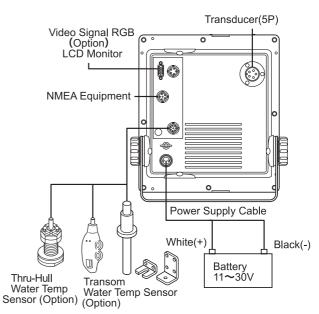
206
120
90
Φ30
4-Φ6
4-Φ9
87
141
181
232

A〜 Top View
< HE-7300-WB-Bo >

113
140
195
32
38
57

A〜 Top View
< HE-775-Di >

< HE-1511-WB-Bo >

< HE-7300-WB-Bo >

< HE-775-Di >
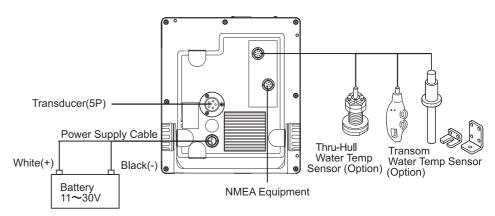
1. Connector for Power Supply
1. Power Supply(+)11～30V
2. Power Supply(-)

Connector 5P for Transducer
1. TD Low   4. TD High
2. TD High   5. TD Low
3. Shield

(Example) TD Line Info

5P Spec		
1	- (Black)	Low
2	- (Green)	High
3	Shield	
4	+ (Red)	High
5	+ (White)	Low

3. Connector for Water Temp Sensor
1. N/A
2. N/A
3. N/A
4. N/A
5. N/A
6. Water Temp Sensor(+)
7. Water Temp Sensor(-)
8. N/A

4. Connector for External Input/Output
1. GND
2. Data Input(-)
3. Data Input(+)
4. N/A
5. Data Output
6. DC 12V(200mA) Output

This is connector image when looking at the main unit.

MAIN UNIT INSTALLATION

⚠ WARNING

● Install the unit firmly.

If not, it may cause the human injuries.

※ Install the unit correctly according to the following instruction.

1. *Procedure of Installation* (HE-7300-WB-Bo , HE-775-Di)

＜Installation of Unit＞

Fix the unit with enclosed screws by using bracket holes (4 locations).

Refer to the picture below.

Caution : When selecting Portrait style, install the unit after jointing the bracket at the bottom.

・ Display Style

Select the display style and put rubber ring on the unit jointing the bracket
(2 hole locations).

・ Positioning

Fix the unit with mounting bracket and fixation spot. Put the mark.

※ Leave some room in the backside of unit for cable connections.

・ Installation of Bracket

Fix it with enclosed screws by using 4 holes on the bracket.

※ The cutting slits for both edges of bracket face to rear side.

・ Installation of Unit

Refer to the picture below and fix the unit.

< Bracket Installation >

< HE-7300-WB-Bo >

< HE-775-Di >

Main Unit

Put disc plates on holes not used for bracket.

Rubber Ring
Attach rubber rings for 2 holes.

Screw
6×20 (4pcs)

Bracket

Clamping Knob

Rubber Washer

Screw
5×20 (4pcs)

Rubber Ring

2. *Procedure of Installation* （HE-1511-WB-Bo）

Positioning

Fix the unit with mounting bracket and fixation spot. Put the mark.

※ Leave some room in the backside of unit for cable connections.
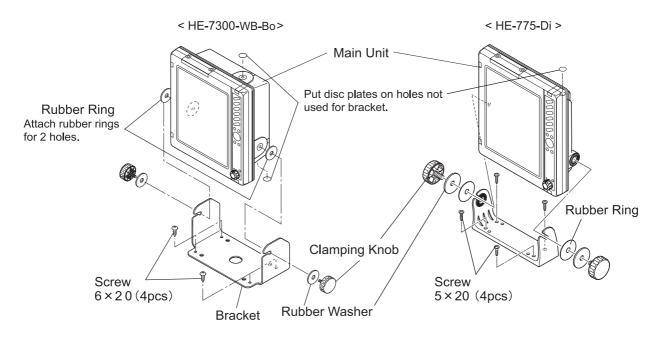
Installation of Bracket
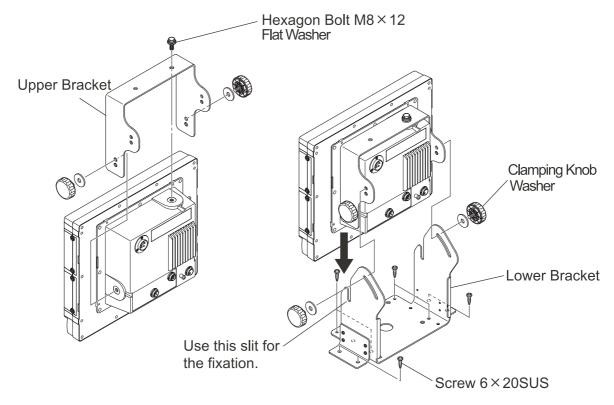
Fix the unit with enclosed screws and 8 holes on the bracket.

Installation of Unit

Refer to the picture below and fix the unit.

Caution：When selecting Portrait style, install the unit after jointing the bracket at the bottom.

1. Fix the unit with upper bracket and M8x12 (and flat washer).

   Insert the clamping knob(and washer) temporarily from sideway.

2. Slide the unit to lower bracket which is located between main unit and clamping knob.

3. Fix the unit with remaining clamping knobs (and washers).

4. Adjust the angle of main unit and tighten 4pcs clamping knobs.

Hexagon Bolt M8×12
Flat Washer

Upper Bracket

Clamping Knob
Washer

Lower Bracket

Use this slit for
the fixation.

Screw 6×20SUS
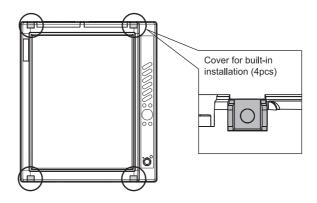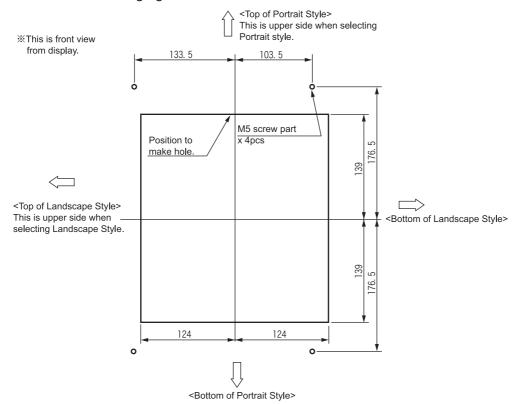
> ⚠ **WARNING**
>
> ● Install the unit firmly.
>
>   If not, it may cause the human injuries.
>
>   ※ Be sure to follow the instruction below and official installation method.

< HE-1511-WB-Bo >
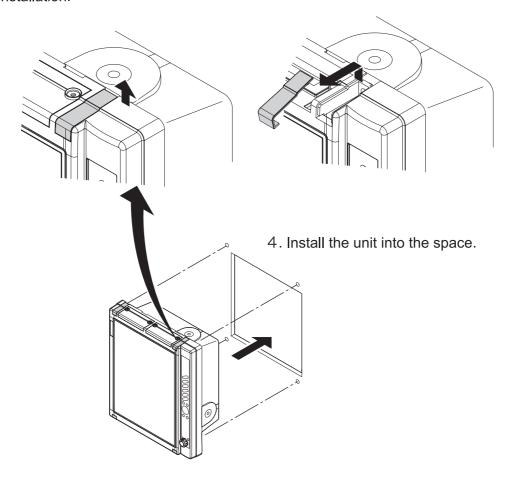
Fix the unit by using 4 holes on the front panel.
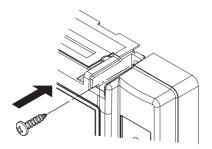
Cover for built-in installation (4pcs)

1. Refer to the following figure for fixation holes.

<Top of Portrait Style>
This is upper side when selecting Portrait style.

※This is front view from display.

133. 5   103. 5

Position to make hole.

M5 screw part x 4pcs

176. 5
139

<Top of Landscape Style>
This is upper side when selecting Landscape Style.

<Bottom of Landscape Style>

139
176. 5

124   124

<Bottom of Portrait Style>

2. Remove the cover for built-in installation.

3. Pull the cover for removal.

4. Install the unit into the space.
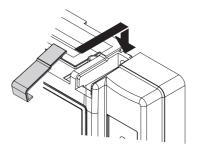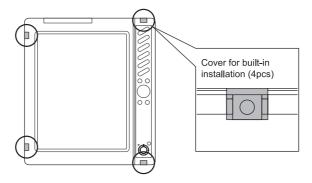
5. Use 5×30 screw for fixation.

6. Put the covers back. (4pcs)
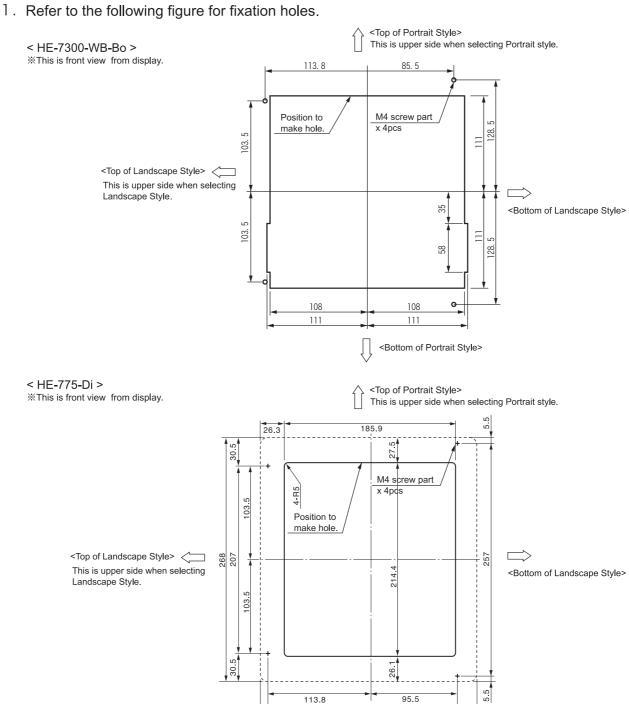
< HE-7300-WB-Bo, HE-775-Di >

Fix the unit by using 4 holes on the front panel.

Cover for built-in installation (4pcs)

1. Refer to the following figure for fixation holes.

< HE-7300-WB-Bo >
※This is front view from display.

<Top of Portrait Style>
This is upper side when selecting Portrait style.

113. 8   85. 5

Position to make hole.

M4 screw part x 4pcs

103. 5

<Top of Landscape Style>
This is upper side when selecting Landscape Style.

128. 5
111

35

103. 5

58
111
128. 5

<Bottom of Landscape Style>

108   108
111   111

<Bottom of Portrait Style>

< HE-775-Di >
※This is front view from display.

<Top of Portrait Style>
This is upper side when selecting Portrait style.

5.5

26.3   185.9

30.5

27.5

4-R5

M4 screw part x 4pcs

103.5

Position to make hole.

<Top of Landscape Style>
This is upper side when selecting Landscape Style.

268   207

214.4

257

<Bottom of Landscape Style>

103.5

30.5

26.1

5.5

113.8   95.5

5.5   209.2   23.8

238.5

<Bottom of Portrait Style>

2. Remove the cover for built-in installation.

3. Pull the cover for removal.

4. Install the unit into the space.

5. Use 4×30 screw for fixation.

6. Put the covers back. (4pcs)

WATER TEMP. SENSOR INSTALLATION

⚠ DANGER

● Any works on the vessel are very unstable and risky.
  Installation/maintenance of water temp sensor should be handled after landing the vessel on ground or fixing the vessel at shipyard etc. If not, it may cause serious injuries.
● Do not operate the electronic tools with wet hands.
  It causes electronic shock.
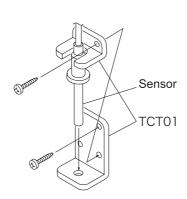
[Installation of Thru-Hull Water Temp Sensor (15m)]
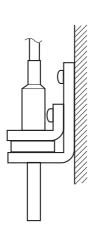
※ The use of this sensor is prohibited for aluminum vessels due to the risk of corrosion.

Sensor
Cork
Nut
Washer
Rubber Gasket

Sensor
TC02CS

Kingston for
Water Temp Sensor
TCK01

Put the seal for waterproof
at joint point.
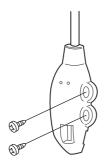
[Installation of Transom Water Temp Sensor]

TC02ES

Sensor

TCT01
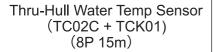
TC03-05, TC03-10
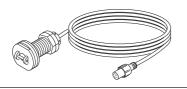
STANDARD CONFIGURATION

Main Unit

Bracket 1pc
Bracket Clamp 1pc
Clamping Knob 4pcs
Washer 4pcs
Hexagon Bolt M8x12 1pc
Flat Washer M8 1pc

< HE-1511-WB-Bo >

Bracket 1pc
Clamping Knob 2pcs
Rubber Washer 2pcs
Bracket Washer 2pcs

< HE-7300-WB-Bo・HE-775-Di>

Screws for Main Unit and Bracket	Screw for Buit-in Installation
6×20 SUS×8pcs< HE-1511-WB-Bo > 6×20 SUS×4pcs< HE-7300-WB-Bo > 5×20 SUS×4pcs< HE-775-Di >	5×30 SUS×4pcs< HE-1511-WB-Bo > 4×30 SUS×4pcs< HE-7300-WB-Bo・HE-775-Di >

Power Supply Cable

(DC07)2P　2m < HE-1511-WB-Bo ・HE-7300-WB-Bo >

(DC06)2P　2m < HE-775-Di >

Disk Plate
（only for 10.4"）.

×2

Operating Manual

OPTIONS

Thru-Hull Water Temp Sensor （TC02C + TCK01） （8P 15m）	Transom Water Temp Sensor （TC02E + TCT01） （8P 15m）	Transom Water Temp Sensor TC03-05 （8P 5m） TC03-10 （8P 10m）
	x4	

Extension Cable for Water Temp Sensor (EK11) （8P-8P 3m）	Extension Cable for Transducer EK05 （5P-5P 12m）

1. Theory of Fish Finder

● Theory of fishfinder is same as echo among hills.

Ultrasonic wave transmitted from the transducer directly beneath the vessel is reflected at the sea bottom and received by transducer.
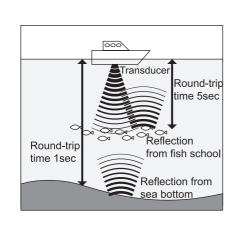Fishfinder indicates the depth by calculating the round-trip time to distance.
Also, the unit shows the color image of fish school size/dentisy or sea floor condition according to the strength of reflected wave.
Ultrasonic wave runs at 1500m/sec inside the water. Therefore, the depth to fish school and sea bottom can be captured by calculating the round-trip time.

e.g.) 1sec is round-trip time from sea bottom.
    Round-trip distance = 1500m/sec x 1sec
                = 1500m
    The depth is half the size, so
            Depth = 1500m ÷ 2
                = 750m

0.5sec is round-trip time from fish school
Round-trip distance = 1500m/sec x 0.5sec
                = 750m

The depth is half the size, so
            Depth = 750m ÷ 2
                = 375m
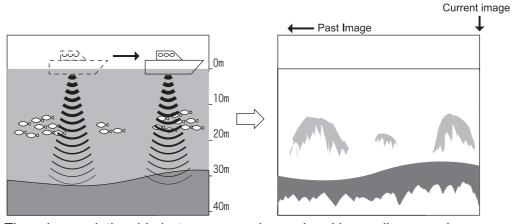
● Display Method

Current image is shown at 1st line of right edge after processing the reflected wave of transmitted ultrasonic. The line image previously located at the right edge moves to one line to the left.
Keep executing this operation to create the cross section view.
Therefore, the latest image beneath the vessel is located at the right edge. More left side the image moves, more past image the screen shows.
You can assume that fishfinder screen shows the image from the side view. The sea floor shape can be only captured when sailing the vessel. No matter how the bottom is shaped, the image shows the flat bottom if the vessel is stopped.

Caution : There is no relationship between vessel speed and image line speed.

2. Distinguish of Fish School

●Important tip is comparison between fish school image and actual fish

Possible to judge the fish type to some extent from the image of fish school. The shape of fish school changes even for same fish group by time (day/night, season, current change).
The important tip is to distinguish the fish type image and actual catch and look for the point.
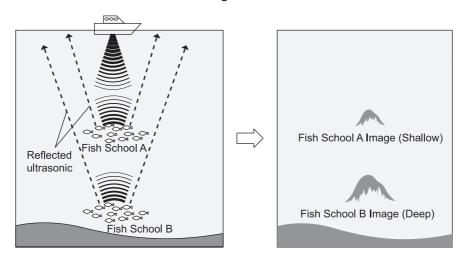
3. Distinguish of Fish Quantity

●Distinguish fish quantity from density/size of fish school.

Higher density of fish school has stronger reflected wave. Therefore, the fish density can be seen from the color strength of image.
It is wrong that fish quantity is large for large image on the screen. Fish school located deeper area tends to appear bigger compared to the one at shallow water. This is because the width of transmitted wave becomes wider as it go deeper. The reflected ultrasonic wave becomes bigger as the distance (depth) gets further. The important tip to distinguish the fish quantity is to know fish school located at deeper water appears bigger.
Judge from size of fish school and color strength.
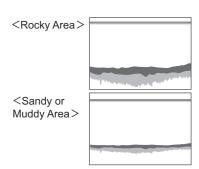
4. Distinguish of Sea Floor Condition

●There are many types of sea floor conditions such as rocky, sandy, or muddy.

The condition can be judged by the upper/lower width of sea floor image and 2nd echo. The reflection is stronger for hard bottom such as rocky area. The image width is thicker, and 2nd echo tends to appear.
On the other hand, the relfection is weaker for soft bottom such as sandy and muddy area. The image width is thinner, and it's harder to have 2nd echo.

<Rocky Area>

<Sandy or Muddy Area>

TROUBLE SHOOTING

● When the unit has any problems, please check the following points before returning the unit for repair.

Symptom	Cause	Remedy
Power cannot be turned ON.	Voltage of battery is lower than standard value (11V).	Recharge the battery.
	Contact of power connector is poor.	Retighten it. Remove and clean the rust/dust. Replace it in the case of corrosion. ・ Replace the power cable. ・ Replace the connector on the unit.
	Wrong connection of power. Opposite polarity + - .	Check the polarity and connect it properly.
	Cut the wire insdie power cable.	Exchange to new power cable.
	Blown fuse.	Send it for repair.
No display on screen	Brightness is set to minimum level.	Adjust the brightness. (Refer to [SCREEN BRIGHTNESS] p8.)
Bottom or fish cannot be displayed at all.	Contact problem with transducer connector.	Retighten the connection. Remove/clean the rust/dust. Replace it in the case of corrosion. ・Exchange transducer. ・ Send it for repair.
	<Problem with Transducer> Check followings and replace it in the case of actual problems. 　1. It's normal if you hear the sound like "Bo Bo" from the surface of transducer. 　2. It's normal if rain like dots appears on the transducer surface after setting the sensitivity and depth to the max and rubbing the transducer surface.	
	Transducer is not immersed enough into the water.	Adjust the transducer installation so that it is always beneath water surface.
	Internal liquid is not enough inside the case.	Add enough liquid to immerse the transducer.
Image does not appear sometimes.	Transducer is not immersed enough into the water.	Adjust the transducer installation so that it is always beneath water surface.
	Problem with the transducer installation causes the image problem due to air bubbles at speeding the vessel.	Check the installation of transducer.
	Influence from other vessel causing air bubbles.	Move to other location or wait until air bubble disappears.

Symptom	Cause	Remedy
Bottom or fish school is not displayed well.	Too low sensitivity.	Increase the sensitivity. Or, set to auto gain (auto sensitivity control).
	Rubbish and weed attached on the transducer surface. Dirty bottom or liquid.	Remove the excrescence. Remove the dirt from bottom and exchange the liquid.
	Water and environmental conditions may cause the problem with image which is not problem at all. Too much sludge　　Lots of weeds　　Muddy and dirty locations　　Rapid current	
	Too high clutter.	Activate low reflection color. Refer to [CLUTTER] p14.
Too much noise	Too high sensitivity	Lower the sensitivity. Set to auto gain (auto gain control)
	Interference with other vessel's fishfinder.	Noise disappears after other vessel moves far away.
	Noise from engine.	Change the routing of cables such as transducer and power cables. (keep distance from the engine as far as possible.)

SPECIFICATIONS

	HE-1511-WB-Bo	HE-7300-WB-Bo	HE-775-Di
Display	15" TFT Color LCD	10.4" TFT Color LCD	
Display Style	Portrait / Landscape	Portrait / Landscape / Portrait Rev / Landscqpe Rev	
Number of Pixel	1024 × 768	640 × 480	
Operating Voltage	DC11 ～ 30V	DC11 ～ 30V	
Frequency (kHz) Output Power (W) — 1kW	50&200(TD47/48)　　38~70 / 130~210(TD340)		50&200(TD47/48)
1.5kW	40 / 75 (TD51) 200(TD33) 50&200(TD66)		50&200(TD66)
1.8kW	50&200(TD67)		50&200(TD67)
2kW	50&200(TD68)　　38~70 / 130~210(TD361)		50&200(TD68)
2.5kW	40 / 75 (TD73)		
3.0kW	28 (TD88) 40 / 75 (TD83) 50&200(TD86) 28 / 55 /100(TD87)　　38~70 / 130~210(TD380)		50&200(TD86)
5.0kW	40 / 75 (TD93)　　38~70(TD390)		
Depth Range	0~2000m (varies for each transducer) Refer to Range (Display Range) p10.		
Auto Range	OFF / Range / Shift		
Auto Gain	OFF / Low / High		
A-Mode	OFF / ON		
Fish Alarm	OFF / ON		
Water Temp Alarm	OFF / In Range / Out of Range		
Depth Alarm	OFF / In Range / Out of Range		
Expansion Mode	OFF / Bottom Lock / Automatic Expansion / Manual Expansion		
Expansion Rate	x 2 / x 4 / x 8		
Sweep Speed	6 speed + Stop		
Background Color	4 Colors (Black, Cyan, Blue, White)		
Color Configuration	5 Patterns		
Depth Unit	Meter / Feet / Fathom / Brazas		
Scale Line	OFF/ON		
Super Range	OFF/ON		
Depth Digit	OFF / Small / Medium / Large		
Scale Dot	Wide / Narrow		
Picture Style	Landscape / Portrait / Landscape Reverse / Portrait Reverse		
NMEA0183 Output	Depth (DBT sentence), Water Temp (MTW sentence)		
Dimension of Main Unit (H×W×D mm)	342 x 371 x 203	254.5 x 268 x 152	239.2 x 268 x 120
	384 x 316 x 203	284 x 268 x 152	268 x 239.5 x 120
Weight of Main Unit	Approx. 7kg	Approx. 4kg	Approx. 2.3kg

HONDEX

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