

ICE 35, ICE 45, ICE 55 Installation and Operations Manual

531611-1_A



ICE Flasher Series™

THANK YOU!

Thank you for choosing Humminbird®, America's #1 name in fishfinders. Humminbird® has built its reputation by designing and manufacturing top-quality, thoroughly reliable marine equipment.

Your Humminbird® is designed for trouble-free use in even the harshest marine environment. In the unlikely event that your Humminbird® does require repairs, we offer an exclusive Service Policy - free of charge during the first two years after purchase, and available at a reasonable rate after the two-year period. For complete details, see the Warranty section included in this manual.

We encourage you to read this installation and operations manual carefully in order to get full benefit from all the features and applications of your Humminbird® product.

Contact our Customer Resource Center at either **1-800-633-1468** or visit our website at **www.humminbird.com**.

WARNING! Do not touch an active transducer during operation, as this may cause physical discomfort and may result in personal injury in the form of tissue damage. Handle the transducer only when the power to the fishfinder is off.

WARNING! This device should not be used as a navigational aid to prevent collision, grounding, boat damage, or personal injury. When the boat is moving, water depth may change too quickly to allow time for you to react. Always operate the boat at very slow speeds if you suspect shallow water or submerged objects.

WARNING! Disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty. Handling and/or opening this unit may result in exposure to lead, in the form of solder.

WARNING! This product contains lead, a chemical known to the state of California to cause cancer, birth defects and other reproductive harm.



The WEEE Directive aims to minimize the impact of end-of-life electrical and electronic equipment on human health and the environment. Therefore, any product bearing the WEEE symbol must not be included with unsorted municipal waste. Instead, it must be separately collected, treated and recycled.

For proper disposal of this equipment, please contact the Johnson Outdoors distributor or see **www.humminbird.com**.

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NOTE: Some features discussed in this manual require a separate purchase, and some features are only available on certain models. Please read the manual carefully in order to understand the full capabilities of your model. You can visit our website at www.humminbird.com to order accessories online or contact our Customer Resource Center at 1-800-633-1468.

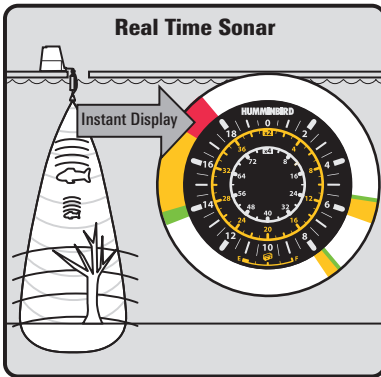
HOW SONAR WORKS

Sonar technology is based on sound waves. The ICE Flasher Series™ Fishfinder uses sonar to locate structure, bottom composition, as well as depth directly below the transducer. Your ICE Flasher Series™ Fishfinder consists of two components: the control head and the transducer. The control head contains the transmitter and receiver, as well as the user controls and display. The transducer is suspended beneath the water, underneath the ice, and converts electrical energy from the transmitter into mechanical pulses or sound waves. The transducer also receives the reflected sound waves and converts them back into electrical signals for display on the Flasher Dial.

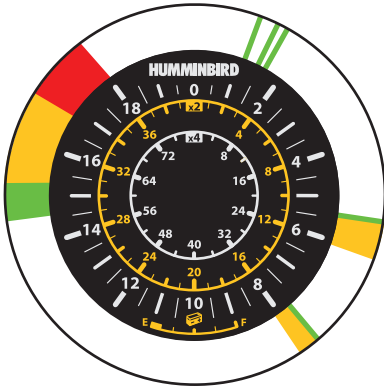
NOTE: *The transducer must be submerged in water for reliable transducer detection. The bottom of the transducer should be even with the bottom of the ice or hang slightly below the bottom of the ice.*

Your ICE Flasher Series™ Fishfinder sends a sound wave signal and determines distance by measuring the time between the transmission of the sound wave and when the sound wave is reflected off of an object; it then uses the reflected signal to interpret depth, size, and composition of an object.

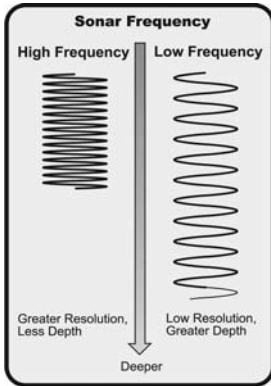
Sonar is very fast. A sound wave can travel from the surface to a depth of 240 ft (70 m) and back again in less than 1/4 of a second.



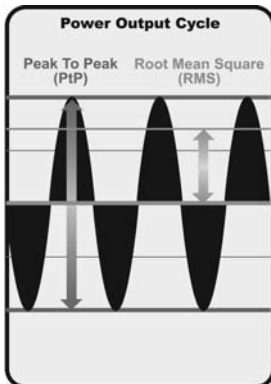
SONAR is an acronym for **S**ound and **N**avigation **R**anging. Sonar utilizes precision sound pulses or "pings" which are emitted into the water in a teardrop-shaped beam. The sound pulses "echo" back from objects in the water such as the bottom, fish and other submerged objects. The returned echoes, or signals, are displayed as colored lines on the Flasher Dial.



When all the echoes are viewed within the beam, an easy to interpret multicolor palette of sonar return signals appears on the Flasher Dial. The ICE Flasher Series™ Fishfinder plots the depth and intensity of sonar returns from the bottom, fish and structure.



The sound pulses are transmitted at various frequencies depending on the application. Your ICE Flasher Series™ Fishfinder gives you the power to choose the frequency and coverage of your sonar. 455 kHz provides narrow coverage with the greatest definition. 240 kHz provides wider coverage and a good balance between depth performance and resolution.

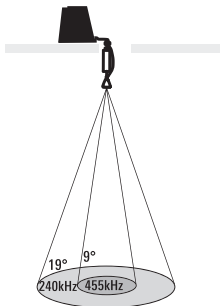


The power output is the amount of energy generated by the sonar transmitter. It is commonly measured using two methods:

- Root Mean Square (RMS) measures power output over the entire transmit cycle.
- Peak to Peak measures power output at the highest points. The benefits of increased power output are the ability to detect smaller targets at greater distances, ability to overcome noise, and enhanced depth capability.

DUAL BEAM

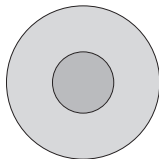
Ice transducer



Your ICE Flasher Series™ Fishfinder uses selectable dual-frequency sonar with a wide area of coverage. Selectable dual-frequency gives you the option of two beams, and both beams will cover the bottom and provide high definition. The 9 degree center beam provides the highest definition, while the 19 degree beam provides wider coverage. Depth capability is affected by such factors as bottom hardness, water conditions, and transducer installation. Whether fishing in shallow to very deep water, in both fresh and salt water, selectable dual-frequency is ideal for a variety of conditions.

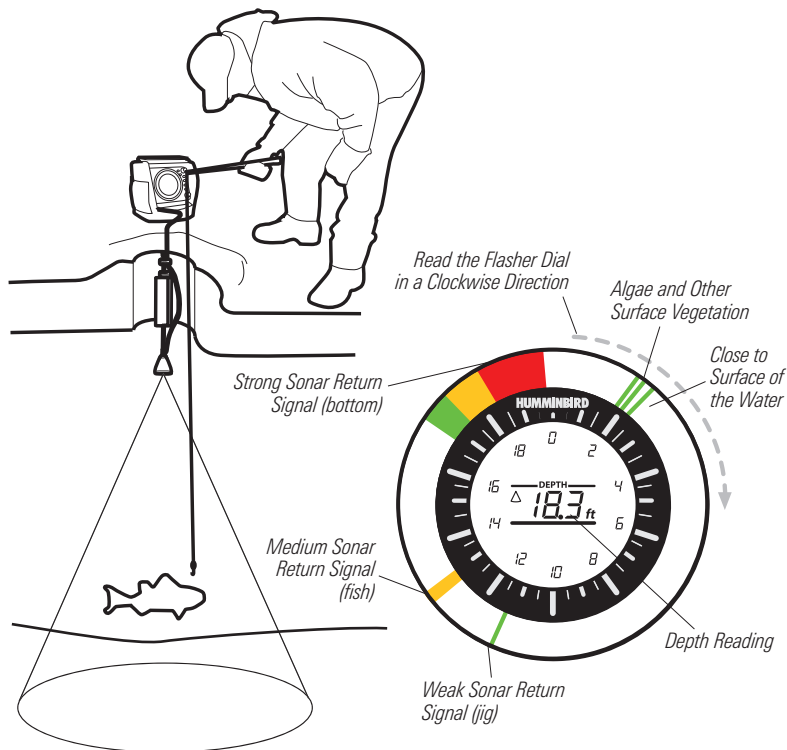
❖ 19 Degree Total Coverage

❖ Bottom Coverage = 1 x Depth



HOW ICE FLASHERS WORK

Although the sonar part of an ICE Flasher Series™ Fishfinder works in the same way as any other Humminbird® control head, the return signal is displayed differently. The ICE Flasher Series™ LCD is modeled on the original analog displays and represents what is happening below the transducer the moment it happens. The Flasher Dial displays a multicolor palette indicating low to high sonar intensity returns, where red indicates high intensity and green indicates low intensity. See *Color Palettes* for more information.



When fish swim into the area below the transducer, the new sonar return signal is immediately displayed on the Flasher Dial. Depending on the size of the fish and its closeness to the transducer, the sonar return will be displayed as a weak, medium, or strong sonar signal.

In the above example, the sonar return signal from the jig is displayed as a weak signal (green), the fish is displayed as a medium signal (yellow), and the bottom composition is displayed as a strong signal (red). When the fish swims towards your jig, you can see the activity instantly on your Flasher Dial. Also, the Active Display shows that the ICE 45/55 Flasher is reading the depth of 18.3 feet to the bottom.

INSTALLATION OVERVIEW

Before you start installation, we encourage you to read these instructions carefully in order to get the full benefit from your ICE Flasher Series™ Fishfinder. You will assemble your control head first, then assemble and install your transducer. When you are done with both of these installation tasks, you should perform a final installation test before operating your ICE Flasher Series™ Fishfinder.

Please make sure that the following parts are included for your ICE Flasher Series™ control head:

- ICE Flasher Series™ control head
- Portable base and handle
- Power cable, battery, battery charger, and connecting hardware
- Flasher Bag (ICE 55 only)

Also, please make sure the following parts are included for your transducer:

- Ice Fishing transducer with 8' of signal cable
- Float, 40" of support cable, and support clip
- Cable clamps.

In addition to the hardware supplied, you will need a Phillips-head and a flat-head screwdriver for installation and operation.

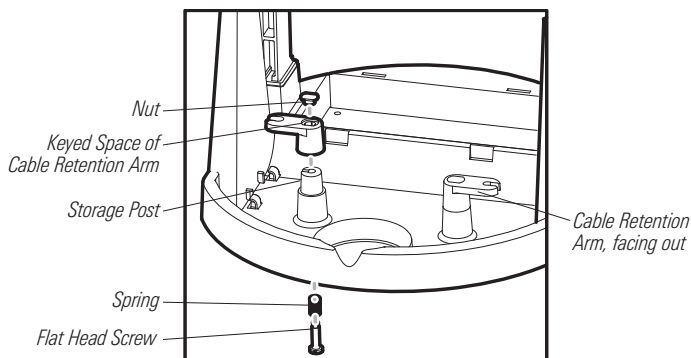
ICE FLASHER SERIES™ BASE ASSEMBLY

Perform the following high-level steps by following the instructions in each numbered section to assemble the ICE Flasher Series™ base assembly:

1. Assembling the transducer storage posts
2. Assembling the base and handle
3. Assembling the control head to the base and handle

1. Assembling the Transducer Storage Posts

In this procedure you will install the posts to hold the transducer cable.



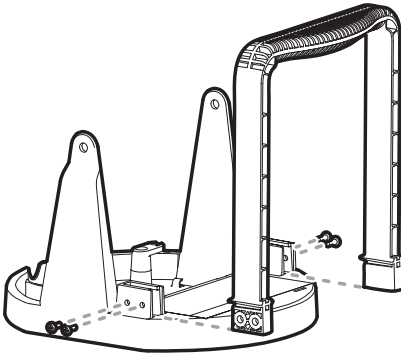
1. Slide one spring over each flat-head screw and set aside.
2. Insert a nut into the keyed space of each cable retention arm. Push down on the nut until it is flush with the surface of the cable retention arm.
3. Slide one cable retention arm over one storage post so that the arm faces out.
4. Hold the cable retention arm in place, and turn the base upside down.
5. Drop the assembled screw and spring straight into the back of the storage post. Using a flat-head screwdriver, push down on the screw, and tighten.
6. Repeat steps 2-5 for the second cable retention arm.

2. Assembling the Base and Handle

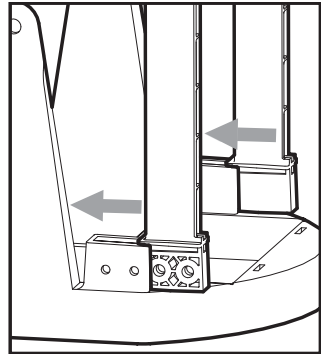
In this procedure, you will install the handle onto the base, and attach the tie-down straps that will be used to secure the battery to the base in a later procedure.

1. Install the handle onto the base, so that the curved part of the handle faces towards the back of the base, towards the battery well. Use the four included #8-32 x 7/16" screws, two on each side, to attach the handle to the base (see the illustrations *Installing the Handle Onto the Base* and *Sliding in the Handle*). **Hand tighten only!**

Installing the Handle Onto the Base



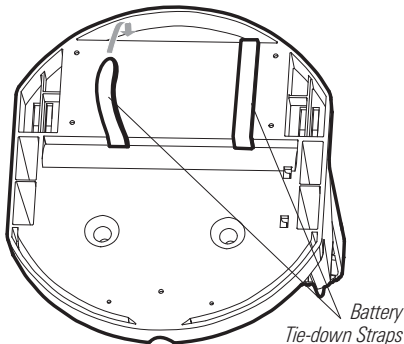
Sliding in the Handle



NOTE: The handle is keyed so that it only fits onto the base in one direction.

2. Turn the base upside down, then thread the two included battery tie-down straps from the bottom of the base up through each side of the battery well, using the strap holes (see the illustration *Attaching the Battery Tie-Down Straps*).

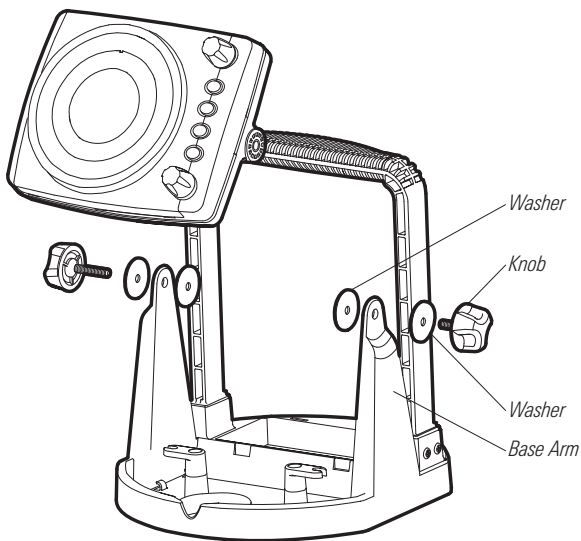
Attaching the Battery Tie-Down Straps



3. Assembling the Control Head to the Base and Handle

In this procedure you will install the ICE Flasher Series™ control head to the base/handle assembly.

1. Place the control head into the gimbal bracket located on the base.
2. Place the 1" diameter black washers as shown in the figure; then, thread the gimbal knob through the bracket and washers, into the housing. Tighten the gimbal knob to secure the ICE Flasher Series™ control head to the mount.
3. Repeat step 2 for the other side.



ICE FLASHER SERIES™ ASSEMBLY

In this procedure you will connect the power cable to the control head and install the base/handle assembly into the portable bag.

1. Connecting the Power Cable

1. Insert the power cable into the back of the control head. The slots for the plugs are keyed to prevent reverse installation.

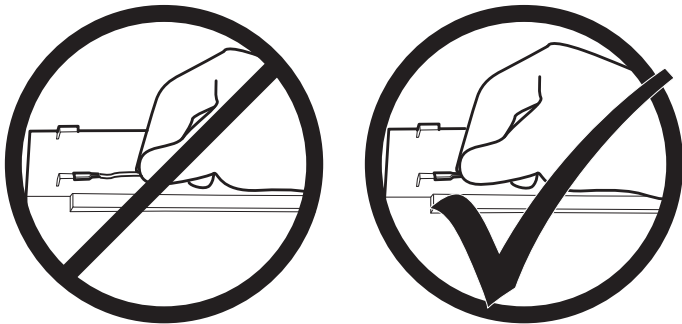
2. Charging and Installing the Battery

1. Charge the battery, using the included battery charger, until it is fully charged. Charging usually requires 8 continuous hours but may vary depending on your configuration. The LED on the charger will turn green when the battery is fully charged.

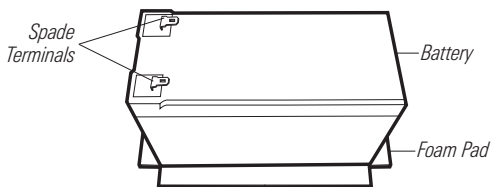
NOTE: Some international models may not include a battery or battery charger.

NOTE: The battery charger uses a yellow LED to indicate it is charging. On some models, this light might appear closer to orange than yellow. When this happens, the battery is still charging properly and should be left to charge until the LED becomes green.

CAUTION: Do not pull on the battery or charger cables when you are trying to connect them to or disconnect them from the battery terminals. Push or pull gently on the spade terminals instead. If the connector feels tight, use a slight wiggling motion to slide the spade connector into place on the terminal.



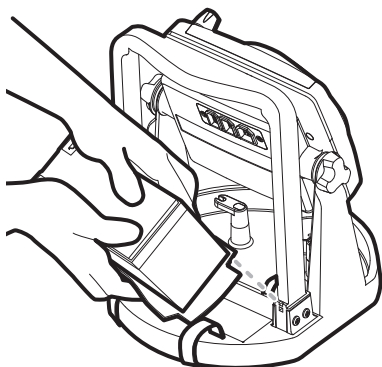
2. Center the battery on top of the foam pad.



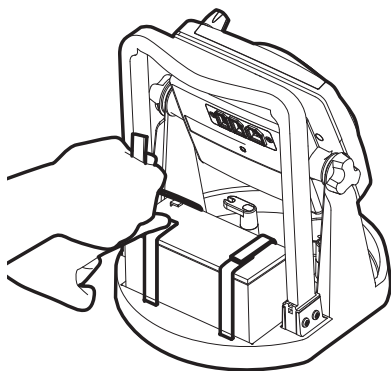
NOTE: Do NOT connect the power cable to the battery at this time. You should wait until just before fishing to connect the power cable to the battery.

3. Move the tie-down straps out of the way so that the battery well is fully accessible.
4. Hold the foam pad and the battery together, and slide them into the battery well. Make sure that the spade terminals are on the left side of the battery well and the foam pad fits evenly around the battery well edges.

Installing the Battery



Tying Down the Battery



5. Pull the two battery tie-down straps over the top of the battery and connect both ends of each strap over the top. Make sure that the straps are pulled tight around the battery and that the battery is seated securely in the battery well.
6. Slide the Battery Terminal Adapter over each spade terminal.

NOTE: The Battery Terminal Adapter allows you to power your control head and charge it at the same time.

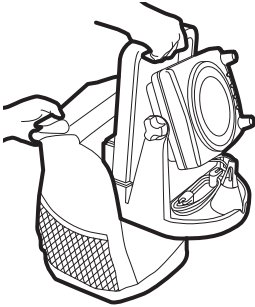


3. Assembling the Portable Bag (ICE 55 Only)

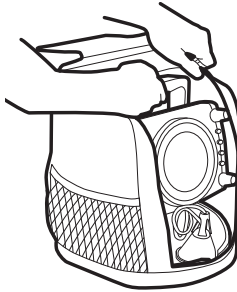
In this procedure, you will install the ICE 55 Flasher into the portable bag. The portable bag is not included with ICE 35/45 Flashers.

1. Unzip the largest opening on the front of the portable bag.
2. Insert the base/handle assembly into the portable bag, so that the Flasher Dial is facing out of the bag. For best results, pull the bag over one shoulder of the handle at a time.
3. Adjust the bag so that you can easily grab the handle, through the fabric handhold inset, from the outside top of the portable bag.

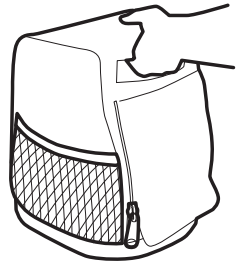
**Installing the Base
into the Bag**



**Pulling the Bag
over the Handle**



**Holding the
Portable Bag**



TRANSDUCER INSTALLATION

Perform the following high-level steps by following the instructions in each numbered section to install the transducer.

1. Testing the transducer
2. Assembling the transducer and float
3. Connecting the cable

1. Testing the Transducer Prior to Installation

Prior to installation, test the transducer to make sure that no damage occurred during shipping.

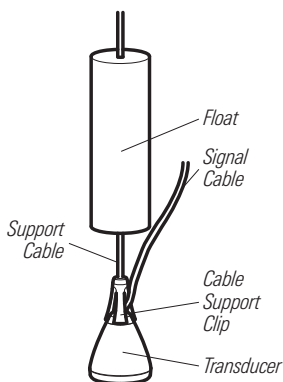
1. Connect the transducer to the control head. The slots are keyed to prevent reverse installation, so be careful not to force the connector into the holder.
2. Drop the transducer into the ice hole. If the transducer is working properly, you will see the bottom displayed on the Flasher Dial as a red line.

WARNING: Before walking onto the ice, make sure that conditions are safe.

2. Assembling the Transducer and Float

In this procedure you will assemble the transducer and float.

Attaching the Float to the Support Cable



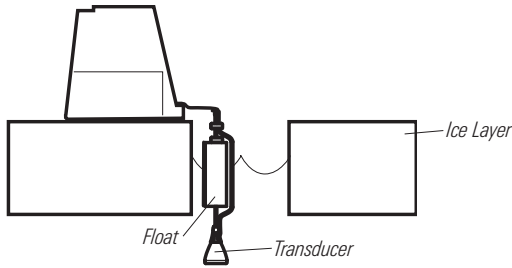
1. Thread the support cable through the support clip and then clip onto the transducer.
2. Attach your transducer float to the support cable by sliding the support cable through the slit in the float.

NOTE: Attaching the float is optional. You can also use the storage posts to hold the support cable in position.

Threading Support Cable through Support Clip

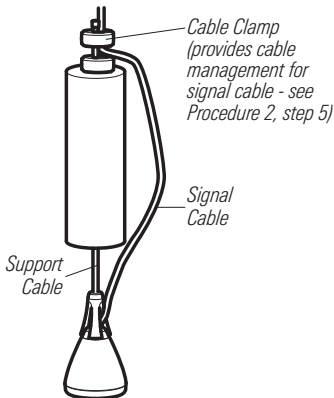
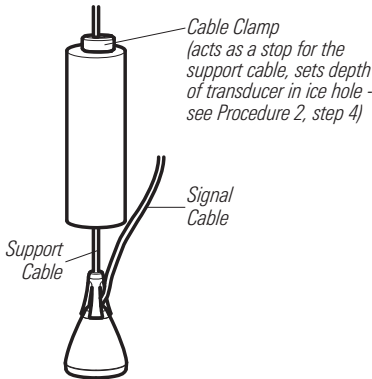


- Position the float so that the transducer will be submerged in the water, just below the ice.

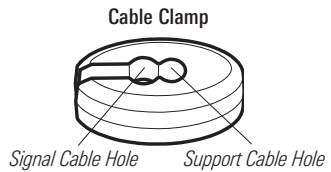


NOTE: The transducer must be submerged in water for reliable transducer detection. The bottom of the transducer should be even with the bottom of the ice or hang slightly below the bottom of the ice.

Attaching the Cable Clamps



- Once you know where you want to position your float, place one of the cable clamps onto the support cable, above the float. Use the inside, smaller cable hole for the support cable so that the float will not move, and so that the transducer will maintain its position under the ice. Make sure that the support cable is taut, so that the transducer hangs straight down (see illustration).



- If you would like to keep the support and signal cables together above the float stop, attach a cable management clamp (included) to the support cable (using the inner, smaller hole) and the signal cable (using the outer, larger hole). Make sure that the signal cable has some slack so that it is not bearing the weight of the transducer.

3. Connecting the Transducer Cable

This section covers how to connect your transducer cable to your control head.

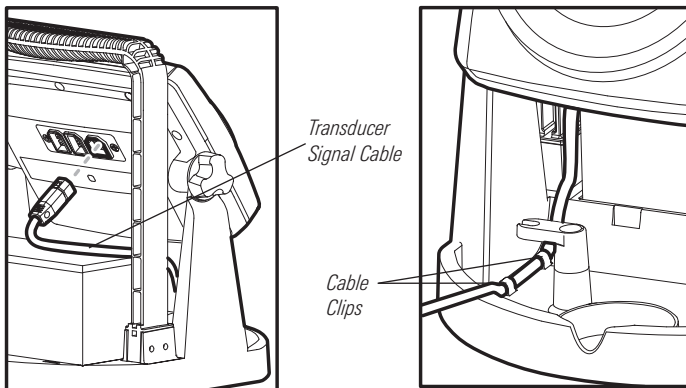
NOTE: If you have an ICE 55 Flasher, remove the control head and base from the portable bag first.

1. Insert the transducer cable into the appropriate terminal slot on the rear of the control head.

NOTE: The slots are keyed to prevent reversed installation, so be careful not to force the connector onto the holder.

2. Route the transducer signal cable beneath the control head and secure to cable clips on the base.

Connecting to the ICE Flasher Series™ Fishfinder



3. Reinstall assembled control head, base, and transducer into portable bag (ICE 55 only).

4. Storing the Transducer

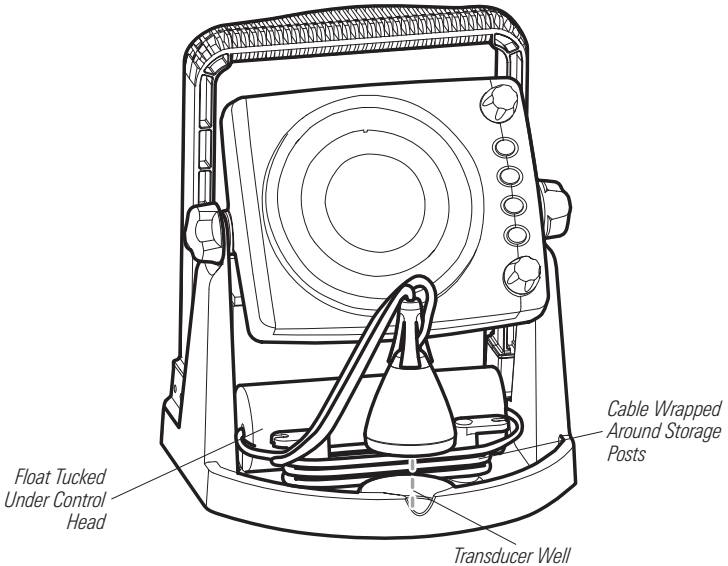
When you are done fishing, store the transducer using the following guidelines:

1. Wipe the cable dry.
2. Tuck the float under the control head, and wrap the cable around the storage posts. Store the transducer in the transducer well.

NOTE: You do not have to detach the transducer cable from the control head to store the transducer.

CAUTION: Although the transducer signal cable is designed to be flexible in cold temperatures, you must store your cable correctly to avoid stressing it. Make sure it is coiled smoothly, with no kinks, and that it is clear of the zippers on the portable bag.

Storing the Transducer



TEST AND FINISH THE INSTALLATION

Once you have assembled both the ICE Flasher Series™ control head and the Ice Fishing transducer, and have routed all the cables, you should perform a final test. Testing should be performed with the transducer in the water.

1. After connecting the transducer to the control head, and confirming that the power cable is connected to the battery, drop the transducer into the ice hole to confirm proper operation.

WARNING: *Before walking onto the ice, make sure that conditions are safe.*

2. Turn the Power/Range dial to A (Auto) or x1 to power-on the control head.

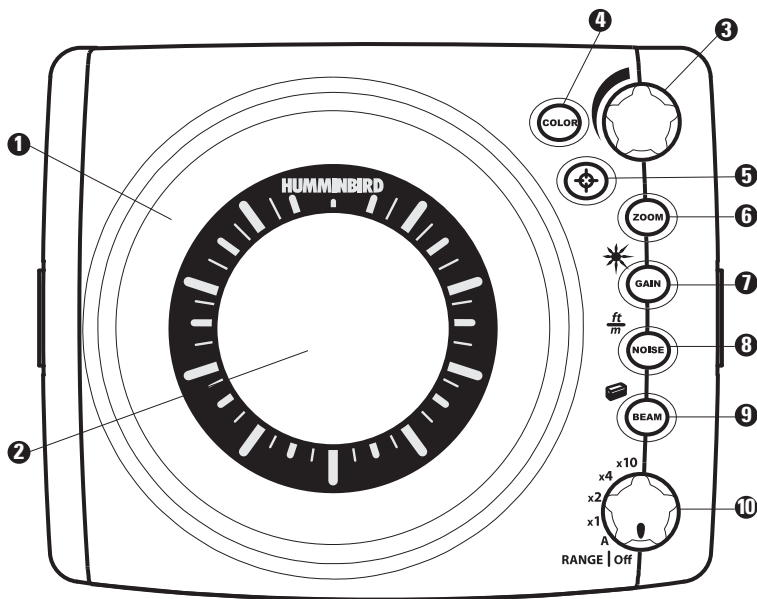
NOTE: *If the unit does not power up, make sure that the connector is fully seated in the back of the control head, the power cable is connected to the battery, and the battery is charged.*

3. If all connections are correct and power is available, the Humminbird® control head will enter Normal operation, and you should see the bottom on the control head display.
4. If the bottom is visible on-screen with a digital depth readout, the unit is working properly (ICE 35 will only display the bottom on the Flasher Dial).

NOTE: *The transducer must be submerged in water for reliable transducer detection. The bottom of the transducer should be even with the bottom of the ice or hang slightly below the bottom of the ice.*

GETTING STARTED - USING YOUR ICE FLASHER SERIES™ FISHFINDER

Your ICE Flasher Series™ interface is easy to use. A combination of keys and special features allows you to control what you see on the Flasher Dial and Active Display. Refer to the following illustration, and see *Key Functions* for more information.



- 1 Flasher Dial
- 2 Range Scale (ICE 35)
Active Display (ICE 45/55)
- 3 Selection Dial
- 4 Color Key (ICE 55)
- 5 Target Key (ICE 55)

- 6 Zoom Key
- 7 Gain/Backlight Key (ICE 45/55)
- 8 Noise/Units Key (ICE 45/55)
- 9 Beam/Battery Key
- 10 Power/Range Dial

POWERING UP THE CONTROL HEAD

Power-on your ICE 35/45/55 Flasher by turning the Range/Off dial to any range setting. The ICE Flasher Series™ Fishfinder will immediately enter Normal operation, and the sonar return signals from the bottom will be displayed on the Flasher Dial.

SIMULATOR

Use the Simulator to learn how to use your ICE Flasher Series™ Fishfinder before taking it out on the ice. The Simulator is a very powerful tool that simulates on-the-water operation, providing a randomly-updated display. We recommend going through this manual while using the Simulator, since all of the menu function the way they actually do when in Normal operation.

To begin Simulator mode, hold down the Selection dial while powering on the control head.

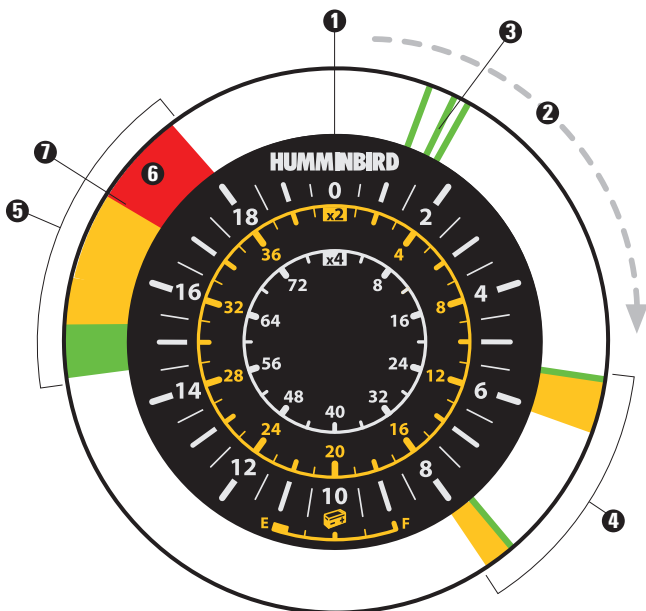
Exit the Simulator by powering your ICE 35/45/55 off.

WHAT'S ON THE FLASHER DIAL

The ICE Flasher Series™ Fishfinder uses a backlit circular display, together with a multi-button keypad, to control all user functions. In addition, multiple color palettes are available, depending on your model.

Sonar return signals are displayed as colored lines on the Flasher Dial. The color and thickness of the lines reflect the strength of the sonar return or the size and density of the object. In addition, multiple color palettes are available, depending on your model. All Humminbird® ICE Flasher Series™ Fishfinders provide a multicolor palette, where red = strong, yellow = medium, and green = weak sonar return signals. If you have a high-end ICE 55 Flasher, you will also have the choice of 2 additional color palettes. The color palette you have selected will determine the appearance and significance of the individual color lines that appear on the Flasher Dial.

NOTE: *The location of an object in relation to the transducer can influence how it appears on the Flasher Dial. For example, a large object might display as a weak sonar return signal if it is located on the outer edges of the transducer beam, where as a small object located at the top of the transducer beam might display as a strong sonar return signal.*



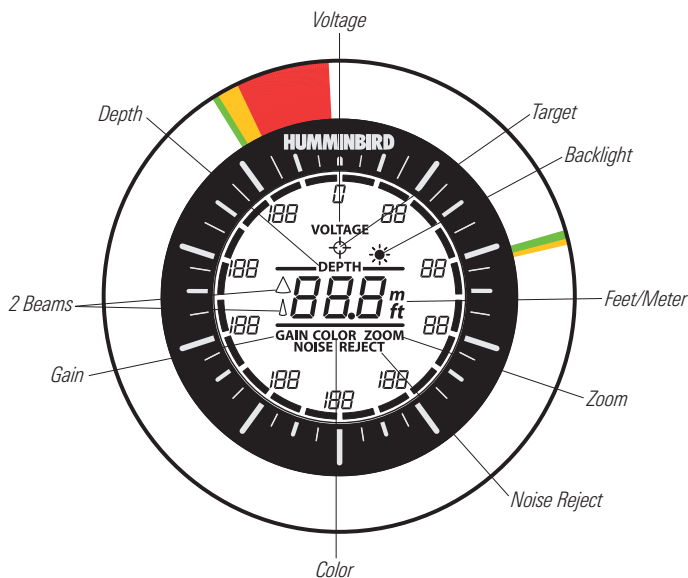
- ❶ **Zero:** Indicates the start of the dial and represents the surface of the water, or the top of the water column.
- ❷ **Reading Direction:** Read the dial in a clockwise direction. The top of the Flasher Dial represents the top of the water column, and as you read further around the dial, you are reading deeper into the water column.
- ❸ **Sonar Return Signals Close to Zero:** These lines indicate minor activity close to the surface of the water such as air bubbles, algae, seaweed, or turbulence.
- ❹ **Sonar Return Signals Displayed between Zero and Bottom:** These sonar return signals can indicate your jig, bait fish, and other fish swimming into the water column. The color of the lines, indicating the strength of the sonar return signal, will vary depending on the size and density of the objects.
- ❺ **Sonar Return Signals Close to Bottom:** The sonar return signal lines that are displayed near the bottom can indicate softer return signals such as from vegetation, mud, or sand at the bottom of the water column.
- ❻ **Bottom Line:** Bottom is usually indicated by a thick red line. Because the bottom is often a dense, hard object, it will create a strong sonar return signal.
- ❼ **Depth:** Shown in this example as 17 feet, the depth is continuously updated and can be read from the first line of the bottom sonar return signal.

WHAT'S ON THE ACTIVE DISPLAY (ICE 45/55 ONLY)

Your ICE Flasher Series™ control head sends a sound wave signal and determines distance by measuring the time between the transmission of the sound wave and when the sound wave is reflected off of an object.

As your Ice Fishing transducer receives sonar signals, it converts them to a digital depth that is shown on the ICE Flasher Series™ Active Display. The depth reading is continuously updated. At initial power-up, the unit will begin normal operation and display the digital depth and the units of measure. The liquid crystal display (LCD), or Active Display, offers sharp viewing, even in bright, direct sunlight, and is continuously lit for nighttime operation. The figure below shows the many features that are available on the Active Display and where each feature will be displayed when you activate it.

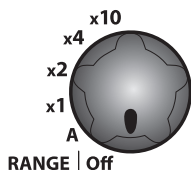
NOTE: Actual depth capability depends on such factors as bottom hardness, water conditions, and transducer installation. Units will typically read to deeper depths in fresh water than in salt water.



NOTE: The Active Display is available on ICE 45/55 Flashers only, and certain features are only available on the ICE 55. Read this manual completely to understand the full capabilities of your model.

KEY FUNCTIONS

Your ICE Flasher Series™ Fishfinder uses a number of keys to control the Range, Zoom, Gain, Noise, Beam, and Color Palette functions. While in normal operating mode, press a function key, such as Gain, turn the Selection dial to choose a setting for that function, then press the Selection Dial to complete your selection.



POWER/RANGE DIAL

Use the Power/Range dial to power-on the ICE Flasher Series™ control head and to also set the depth range.

1. **To Power-On the Control Head:** Turn the Power/Range dial from Off to any of the Depth Range settings.
2. **To Set the Depth Range:** Turn the Power/Range dial to A, x1, x2, x4, or x10. (A, x1, x2, x4, x10)

Auto Range: Selecting A (Auto) will tell the unit to automatically choose the best range based on the actual depth of the bottom. A (Auto) setting is not available on the ICE 35.

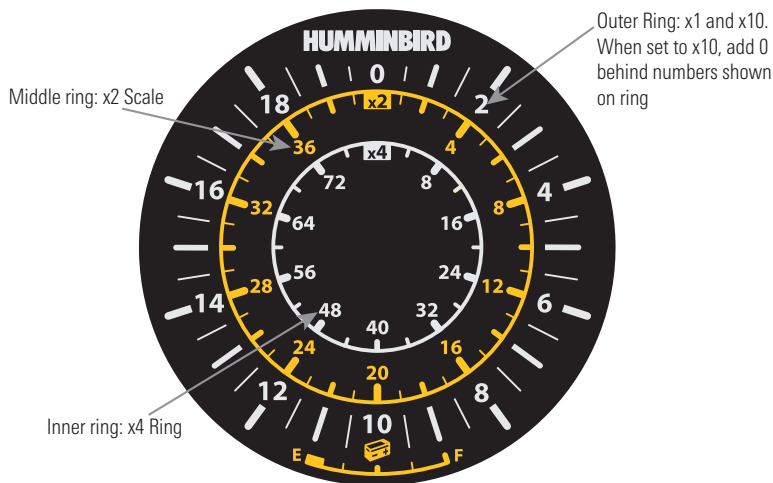
Auto Ranges available (ICE 45 and 55 only)	
0 - 20 ft	10m
0 - 40 ft	20m
0 - 60 ft	30m
0 - 80 ft	40m
0 - 100 ft	60m
0 - 120 ft	80m
0 - 200 ft	100m

Manual Ranges: Selecting a manual range allows you to choose a specific range. For example, if you only want to read sonar returns up to 80 feet or 40 meters in depth, set the manual range to x4.

Manual Ranges		
x1	0 - 20 ft	10m
x2	0 - 40 ft	20m
x4	0 - 80 ft	40m
x10	0 - 200 ft	100m

NOTE: The maximum range setting should not exceed the actual depth to the bottom.

Range scales for the ICE 35 are shown below:



SELECTION DIAL

The Selection dial allows you to set levels for the many functions on your ICE Flasher Series™ control head. To use the Selection dial: Press a function key, such as Gain. Then, turn the Selection dial to choose a setting for that function. Press the Selection dial to complete your selection.

NOTE: If you turn the Selection dial without pressing a function key first, it will default to the Gain function.



ZOOM

When you use the zoom feature, your ICE Flasher Series™ Fishfinder will display a 2x magnified view of the area you choose. The zoomed view will display on the right side of the Flasher Dial between two blue lines. The normal view will display on the left side of the Flasher Dial. (2x, Default = Off)

1. Press the Zoom key. Two blue zoom lines will display on the Flasher Dial, which indicate that your Flasher Dial is in zoom mode.
2. Turn the Selection dial to move the zoom lines to the area you want to magnify. The zoomed view will be shown on the right side of the Flasher Dial between the two blue zoom lines. On the ICE 45/55 Flasher, the tick marks shown on the Active Display show the zoom area.

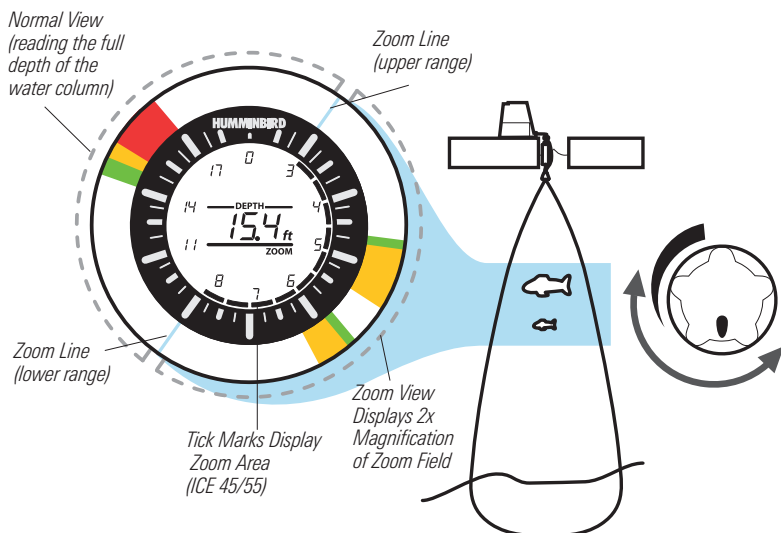
NOTE: If you do not press the Selection dial within 5 seconds of pressing the Zoom key or turning the Selection dial, the zoom select function will time out.

NOTE: Exit zoom by pressing the Zoom key.

NOTE: Zoom can be dynamically updated after making your initial selection by turning the Selection dial to a new location.

NOTE: When you are in zoom mode, in a 10m scale, 1/2 meters are represented by a dash (for example: 2— = 2 1/2)

Flasher Dial in Zoom Mode



GAIN

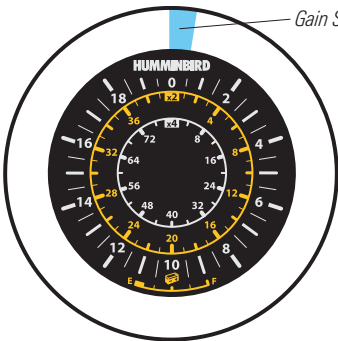
GAIN

Gain controls how much the return sonar signal is amplified; the preferred setting depends on the conditions in the water under your transducer. Increase the gain to see more of what is below the transducer, and decrease the gain to reduce clutter on the screen. High gain levels should only be necessary in deeper water or to see smaller objects.

1. Press the Gain key.
2. Turn the Selection dial to choose a particular gain setting, then press the Selection dial to complete your selection.

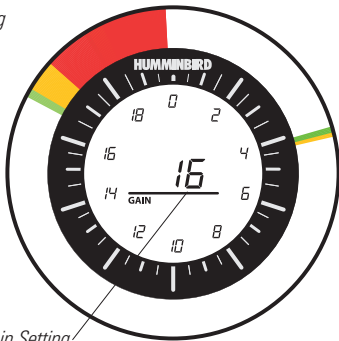
NOTE: If you do not press the Selection dial within 5 seconds of pressing the Gain key or turning the Selection dial, the gain select function will time out.

NOTE: If your control head beeps repeatedly as you turn the Selection dial, you have reached the lowest or highest level possible for the Gain.



ICE 35

The Gain setting is displayed as a narrow or wide blue line at the top of the Flasher Dial. (1 - 25, where Narrow = 1, and Wide = 25; Default = 16)



ICE 45/55

The Gain setting is shown on the Active Display. (1 - 25, Default = 16)

NOTE: If you turn the Selection dial without pressing a function key first, it will default to the Gain function.



NOISE REJECTION

Noise Rejection allows you to reduce cross-talk interference from neighboring fishfinders that are operating on the same frequency as your ICE Flasher Series™ Fishfinder.

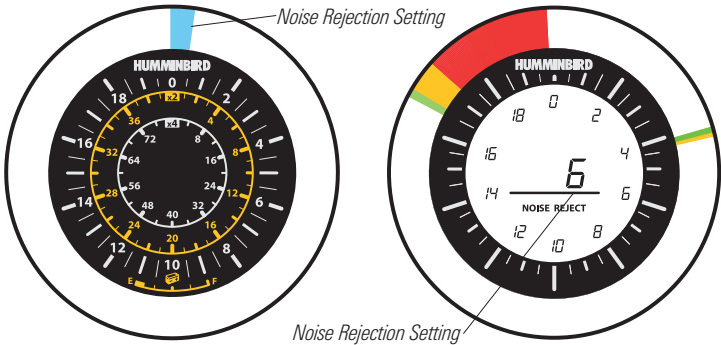
If two nearby units are operating on the same frequency, your ICE Flasher Series™ Fishfinder display might show results from the neighboring fishfinder.

NOTE: Your other option is to use the Beam key to switch to a different operating frequency (see **Beam** for more information).

1. Press the Noise key.
2. Turn the Selection dial to choose a particular noise rejection setting, then press the Selection dial to complete your selection.

NOTE: If you do not press the Selection dial within 5 seconds of pressing the Noise key or turning the Selection dial, the noise select function will time out.

NOTE: If your control head beeps repeatedly as you turn the Selection dial, you have reached the lowest or highest level possible for the Noise Rejection.



ICE 35

The Noise Rejection setting is displayed as a narrow or wide blue line at the top of the Flasher Dial. (1 - 10, where Narrow = 1, and Wide = 10; Default = 6)

ICE 45/55

The Noise Rejection setting is shown on the Active Display. (1 - 10, Default = 6)



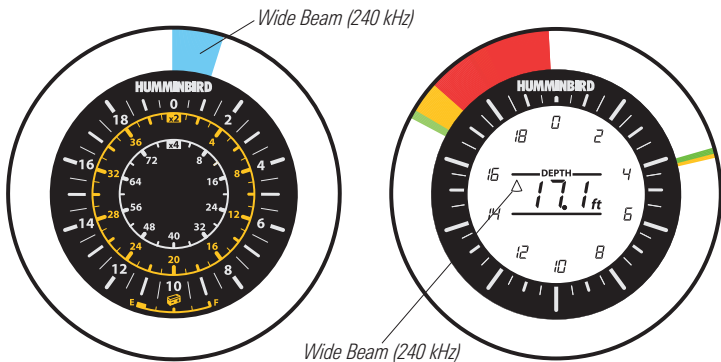
BEAM

Beam allows you to switch the frequency of your sonar beam. The Beam function allows you to eliminate cross-talk interference from neighboring fishfinders or to simply choose the type of beam that suits your fishing needs.

Selecting 240 kHz will provide a wider beam with more coverage but less detail, while selecting 455 kHz will provide a narrower beam with more resolution.

NOTE: Your other option is to use the Noise key to reduce cross-talk interference (see **Noise Rejection** for more information).

1. Press the Beam key to toggle between 240 kHz and 455 kHz.



ICE 35

The active frequency is displayed as a narrow or wide blue line at the top of the Flasher Dial. (455 kHz or 240 kHz, where Narrow = 455 kHz, and Wide = 240 kHz; Default = Wide)

ICE 45/55

The active frequency is shown as a narrow or wide beam on the Active Display. (455 kHz or 240 kHz, where Narrow beam = 455 kHz, and Wide beam = 240 kHz; Default = Wide)

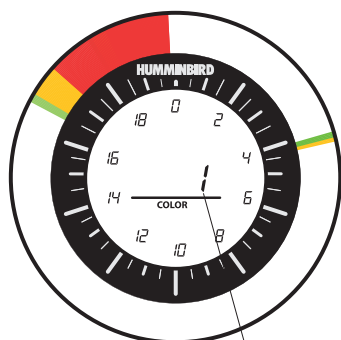


COLOR (ICE 55 Only)

ICE 35 Flasher and ICE 45 Flasher use Color Palette 1 to display sonar returns on the Flasher Dial. The Color Key, available in the ICE 55 Flasher only, allows you to choose between three color palettes so that you can view sonar return signals in higher detail. (Color Palette 1, 2, or 3; Default = Palette 1)

1. Press the Color key to choose Color Palette 1, 2, or 3.
2. ICE 55 will save the setting and display the palette immediately. Also, the palette number will be shown on the Active Display.

See **Palette 1**, **Palette 2**, or **Palette 3** for more information.



Palette Number

NOTE: The location of an object in relation to the transducer can influence how it appears on the Flasher Dial. For example, a large object might display as a weak sonar return signal if it is located on the outer edges of the transducer beam, where as a small object located at the top of the transducer beam might display as a strong sonar return signal.

Palette 1 (ICE 35/45/55)

Red

Strong Signal

Dense, large objects such as fish, thick vegetation, or hard bottom, are usually displayed as thick or thin red lines on the Flasher Dial. In Palette 1, Red indicates a strong sonar return signal.

Yellow

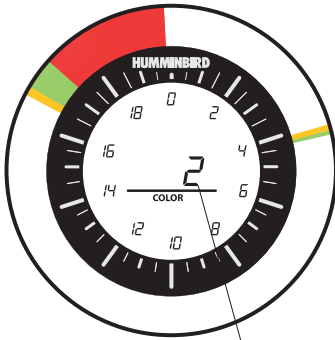
Medium Signal

Small objects such as fish, sparse vegetation, or soft bottom (sand or mud) are usually displayed as yellow lines on the Flasher Dial. In Palette 1, Yellow indicates a medium sonar return signal.

Green

Weak Signal

Light objects such as your jig, bait fish, sparse vegetation, and sometimes microscopic activity or turbulence are displayed as green lines on the Flasher Dial. In Palette 1, Green indicates a weak sonar return signal.



Palette Number

NOTE: The location of an object in relation to the transducer can influence how it appears on the Flasher Dial. For example, a large object might display as a weak sonar return signal if it is located on the outer edges of the transducer beam, where as a small object located at the top of the transducer beam might display as a strong sonar return signal.

Palette 2 (ICE 55 Only)

If you have a high-end ICE 55 Flasher, you will also have the choice of Palette 2 to display your sonar data.

Red

Strong Signal

Dense, large objects such as fish, thick vegetation, or hard bottom, are usually displayed as thick or thin red lines on the Flasher Dial. In Palette 2, Red indicates a strong sonar return signal.

Green

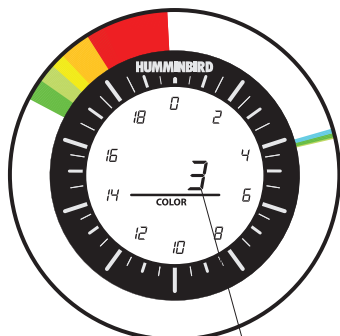
Medium Signal

Small objects such as fish, sparse vegetation, or soft bottom (sand or mud) are usually displayed as green lines on the Flasher Dial. In Palette 2, Green indicates a medium sonar return signal.

Yellow

Weak Signal

Light objects such as your jig, bait fish, sparse vegetation, and sometimes microscopic activity or turbulence are displayed as yellow lines on the Flasher Dial. In Palette 2, Yellow indicates a weak sonar return signal.



Palette Number

NOTE: The location of an object in relation to the transducer can influence how it appears on the Flasher Dial. For example, a large object might display as a weak sonar return signal if it is located on the outer edges of the transducer beam, where as a small object located at the top of the transducer beam might display as a strong sonar return signal.

Palette 3 (ICE 55 Only)

If you have a high-end ICE 55 Flasher, you will also have the choice of Color Palette 3, which is a 6-color palette.

Red **Strong Signal**

Dense, large objects such as fish, thick vegetation, or hard bottom, are usually displayed as thick or thin red lines on the Flasher Dial. In Palette 3, Red indicates a strong sonar return signal.

Orange **Fairly Strong Signal**

Indicates a sonar return signal with an intensity in between Red and Yellow.

Yellow **Medium Signal**

Small objects such as fish, sparse vegetation, or soft bottom (sand or mud) are usually displayed as yellow lines on the Flasher Dial. In Palette 3, Yellow indicates a medium sonar return signal.

Light Green **Fairly Weak Signal**

Indicates a sonar return signal with an intensity in between Yellow and Green.

Green **Weak Signal**

Light objects and softer bottoms such as your jig, bait fish, sparse vegetation, are displayed as green lines on the Flasher Dial. In Palette 3, Green indicates a weak sonar return signal.

Blue **Very Weak Signal**

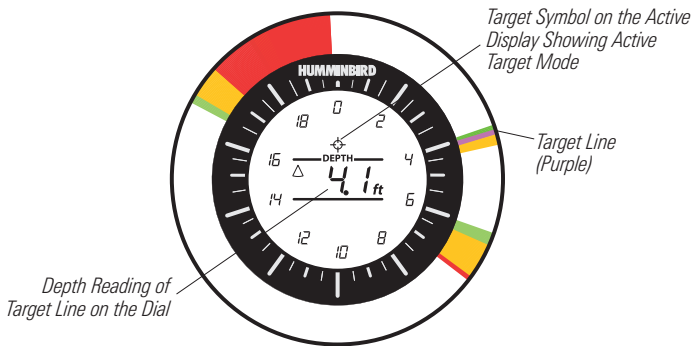
Indicates a sonar return signal with an intensity less than Green.



TARGET (ICE 55 Only)

When you activate the Target key, the ICE 55 Flasher displays the depth reading of a particular point of the Flasher Dial that you choose. (Default = Off)

1. Press the Target key. A purple line will display in the Flasher Dial.



2. Turn the Selection dial and position the purple Target line to the depth you want to read. The depth reading of the target line location will be shown on the Active Display.

NOTE: When the Target function is active, it replaces the bottom depth reading on the Active Display. To exit the Target depth reading, press the Target key.

DUAL MODE KEY FUNCTIONS

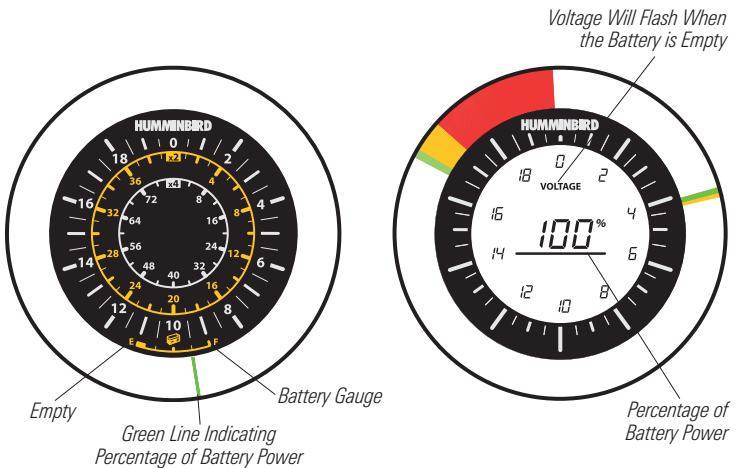
There are several additional functions that you may use by holding and pressing certain keys. Additional features include:

Backlight: Press and hold the Gain key to turn on and off the backlight for night fishing and to save battery power - ICE 45 and 55 only. (On, Off; Default = Off)

Units: Press and hold the Noise key in order to change the units of measure from feet to meters or back again - ICE 45 and 55 only. (feet, meters; Default = feet)

Battery: Press and hold the Beam key in order to see the percentage of power left on the battery.

The battery status will display on the Flasher Dial for approximately 5 seconds, and then the Flasher Dial will resume Normal operation.



ICE 35

The percentage of battery power is indicated on the battery gauge, which is located on the bottom of the Range Scale. A green line will be displayed between E and F to indicate the percentage on the battery gauge. When the battery is empty, the line will turn red. (On, Off, Default = Off)

ICE 45/55

The percentage of battery power is shown on the Active Display. When the battery is empty, the Voltage icon will flash. (On, Off, Default = Off)

MAINTENANCE

To keep both your ICE Flasher Series™ control head and your transducer working properly, perform the following maintenance tasks as needed.

ICE FLASHER SERIES™ MAINTENANCE

If your ICE Flasher Series™ unit comes into contact with salt spray, simply wipe the affected surfaces with a cloth dampened in fresh water. Do not use a chemical glass cleaner on the lens, as chemicals in the solution may cause cracking in the lens. When cleaning the LCD protective lens, use a chamois and non-abrasive, mild cleaner. Do not wipe while dirt or grease is on the lens. Be careful to avoid scratching the lens.

***WARNING:** Never leave your ICE Flasher Series™ Fishfinder in a closed car or trunk; the extremely high temperatures generated in hot weather can damage the electronics.*

TRANSDUCER MAINTENANCE

If your transducer remains out of the water for a long period of time, it may take some time to wet the transducer after it is returned to the water. Small air bubbles can cling to the surface of the transducer and interfere with proper operation. These bubbles will dissipate with time, or you may wipe the face of the transducer with your fingers after the transducer is in the water.

TROUBLESHOOTING

Before contacting the Humminbird® Customer Resource Center, please read the following section. Taking the time to review these troubleshooting guidelines may allow you to solve a performance problem yourself, and therefore avoid sending your unit back for repair.

***NOTE:** Do not attempt to repair the unit yourself, as there are no user serviceable parts inside, and special tools and techniques are required for reassembly in order to maintain the waterproof integrity of the housing. Repairs should be performed only by authorized Humminbird® technicians.*

ICE Flasher Series™ Fishfinder Doesn't Power Up

If your ICE Flasher Series™ control head doesn't power up, refer to the Installation section, and make sure that:

- the power cable is properly connected to the ICE Flasher Series™ Fishfinder;
- the power cable is wired correctly, with red to positive battery terminal and black to negative terminal or ground;
- the battery voltage of the power connector is between 10.5 and 20 VDC.

Correct any known problems, including removing corrosion from the battery terminals or wiring, or actually replacing the battery if necessary.

No Bottom Reading on the Display

If there is no bottom reading visible on the display, there are a number of possible causes for this condition, including:

- check the transducer cable connection on the back of the ICE Flasher Series™ control head and make sure that the cable to the transducer has not been cut or pinched, as even a small abrasion in the cable can affect performance significantly.

No Continuous Depth Display in Very Shallow Water

Losing continuous depth when the transducer is in very shallow water is normal, because the automatic range control cannot lock onto the bottom in depths of one foot or less.

Screen Fades, Images Are Not Sharp

If the screen begins to fade, and images are not as sharp as normal, check the input voltage. The ICE Flasher Series™ will not operate on input voltages below 10.5 VDC.

2-YEAR LIMITED WARRANTY

We warrant the original retail purchaser that products made by Humminbird® have been manufactured free from defects in materials and workmanship. This warranty is effective for two years from the date of original retail purchase. Humminbird® products found to be defective and covered by this warranty will be replaced or repaired free of charge at Humminbird's option and returned to the customer freight prepaid. Humminbird's sole responsibility under this warranty is limited to the repair or replacement of a product that has been deemed defective by Humminbird®. Humminbird® is not responsible for charges connected with the removal of such product or reinstallation of replaced or repaired parts.

This warranty does not apply to a product that has been:

- Improperly installed;
- Used in an installation other than that recommended in the product installation and operation instructions;
- Damaged or has failed because of an accident or abnormal operation;
- Repaired or modified by entities other than Humminbird®.

Please retain your original receipt as a proof of the purchase date. This will be required for in-warranty service.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ON THE PART OF HUMMINBIRD® AND WILL BE THE CUSTOMER'S EXCLUSIVE REMEDY, EXCEPT FOR ANY APPLICABLE IMPLIED WARRANTIES UNDER STATE LAW WHICH ARE HEREBY LIMITED IN DURATION TO TWO YEARS FROM THE DATE OF ORIGINAL PURCHASE. IN NO EVENT WILL HUMMINBIRD® BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY RELATING TO THE PRODUCTS.

Some states do not allow limitations on an implied warranty, or the exclusion of incidental or consequential damages, so the above exclusions may not apply to you. You may also have other rights, which vary from state to state.

HUMMINBIRD® SERVICE POLICY

Even though you'll probably never need to take advantage of our incredible service policy, it's good to know that we back our products this confidently. We do it because you deserve the best. We will make every effort to repair your unit within three business days from the receipt of your unit at our factory. This does not include shipping time to and from our factory. Units received on Friday are typically shipped by the following Wednesday, units received Monday are typically shipped by Thursday, etc.

All repair work is performed by factory-trained technicians to meet exacting factory specifications. Factory-serviced units go through the same rigorous testing and quality control inspections as new production units.

After the original warranty period, a standard flat rate service charge will be assessed for each repair (physical damage and missing parts are not included). Any repairs made after the original warranty will be warranted for an additional 90 days after service has been performed by our factory technicians. You can contact our Customer Resource Center or visit our website to verify the flat rate repair fee for your product (visit the Product Support section):

<http://www.humminbird.com>

We reserve the right to deem any product unserviceable when replacement parts are no longer available or impossible to obtain. This Service Policy is valid in the United States only. This applies only to Humminbird® products returned to our factory in Eufaula, Alabama. This Service Policy is subject to change without notice.

DOMESTIC (USA) CUSTOMERS:

PLEASE DO NOT RETURN THIS PRODUCT TO STORE FOR SERVICE

For all technical issues please call **1-800-633-1468**

Or visit **www.humminbird.com**, click **SUPPORT**

Please reference product serial number and model number when contacting Humminbird®.

Returning Your Unit for Service

Before sending your unit in for repair, please contact the factory, either by phone or by email, to obtain a Repair Authorization Number for your unit.

***NOTE:** Please do not return your Humminbird® product to the store for service.*

Please have your product model name and serial number available before calling the factory. If you contact the factory by e-mail, please include your product model name and serial number in the e-mail, and use Request for Repair Authorization Number for your e-mail subject header. You should include your Repair Authorization Number in all subsequent communications about your unit.

For IN-WARRANTY service, complete the following steps:

- Obtain a Repair Authorization Number from the Humminbird® Customer Resource Center.
- Tag product with your name, street address, phone number and your assigned Repair Authorization Number.
- Include a brief written description of the problem.
- Include a copy of your receipt (to show proof and date of purchase).
- Return product freight prepaid to Humminbird®, using an insured carrier with delivery confirmation.

For OUT-OF-WARRANTY service, complete the following steps:

- Obtain a Repair Authorization Number from the Humminbird® Customer Resource Center.
- Include payment in the form of credit card number and expiration date, money order or personal check. Please do not send cash.
- Tag product with your name, street address, phone number and your assigned Repair Authorization Number.
- Include a brief written description of the problem.
- Return product freight prepaid to Humminbird®, using an insured carrier with delivery confirmation.

SPECIFICATIONS

Depth Capability	200 ft (60 m)
Power Cable Length	11", 28cm
Operating Frequency	240 kHz / 455 kHz
Flasher Dial Resolution	526
Number of Colors.....	ICE 35/45: 3 ICE 55: 6
Area of Coverage	240 kHz: 19° @ -3 dB 455 kHz: 9° @ -3 dB
Power Requirement.....	10.5-20 VDC
Power Output (RMS).....	ICE 35: 100 W ICE 45: 225 W ICE 55: 300 W
Power Output (Peak to Peak)	ICE 35: 800 W ICE 45: 1800 W ICE 55: 2400 W
Display	ICE 45/55: Liquid Crystal Diode (LCD)
Unit Housing	High-Impact Plastic
Transducer	XI 9 19
Transducer Cable Length.....	8 ft (2.4m)

NOTE: Humminbird® verifies maximum stated depth in saltwater conditions, but actual depth performance may vary due to transducer installation, water type, thermal layers, bottom composition and slope.

NOTE: Product specifications and features are subject to change without notice.

POLICY ON ENVIRONMENTAL COMPLIANCE: It is the intention of Humminbird® to be a good corporate citizen and comply and meet all known and applicable environmental regulations in the areas and countries where our products are sold. We will promote and implement environmentally sound processes in support of national and international regulations.

ROHS STATEMENT: *Product designed and intended as a fixed installation or part of a system in a vessel may be considered beyond the scope of Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.*

WEEE STATEMENT: *Product designed and intended as a portable and/or fixed installation is considered in the scope of Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE).*

CALIFORNIA PROPOSITION 65 STATEMENT: *Lead in cable jackets and boots is restricted to 300 parts per million or less as determined by ICP-AES test methods.*

NOTES

Contact Humminbird®

Contact the Humminbird® Customer Resource Center
in any of the following ways:

By Telephone

(Monday - Friday 8:00 a.m. to 4:30 p.m. Central Standard Time):

1-800-633-1468

By e-mail

(typically we respond to your e-mail within three business days):

cservice@johnsonoutdoors.com

For direct shipping, our address is:

**Humminbird
Service Department
678 Humminbird Lane
Eufaula, AL 36027 USA**



HUMMINBIRD®