



Golden Rules For Conservation

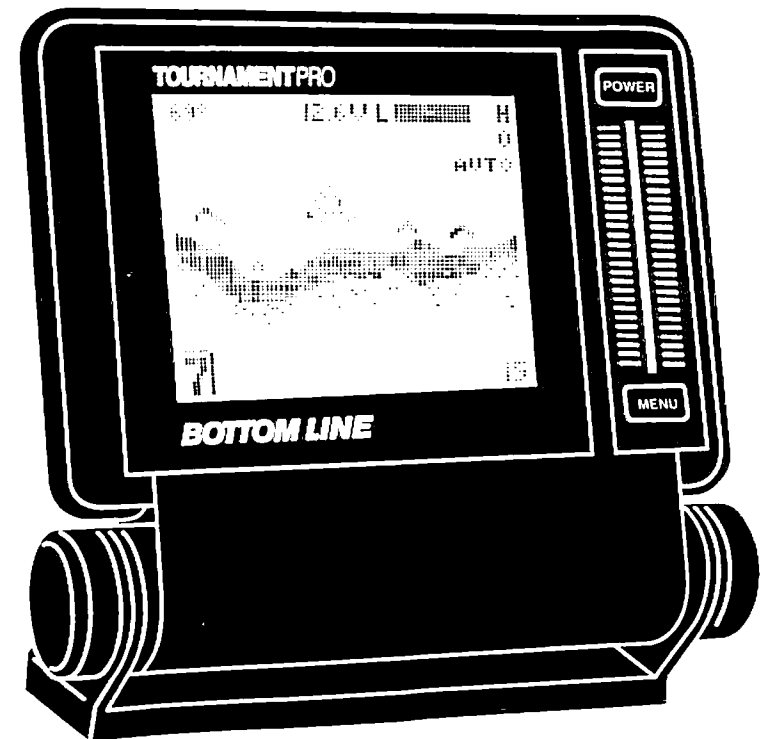
At **BOTTOM LINE**, we're committed to the protection and improvement of our fragile fishing environment, but we need your help. Here's what you can do:

- Release predator fish. Keep panfish for the table, but larger predators, such as bass, pike and walleye, are critical to a balanced fishery. Handle fish gently, and release them carefully into the area from which they were caught.
- Keep your trash. Don't discard old fishing line or other debris into the water or on the grounds around it.
- Report polluters. If the water looks or smells odd, or dying fish are visible, contact Fish and Game authorities immediately.
- Turn in poachers. Contact enforcement officers when you see a violation. Some Fish and Game departments offer toll-free hotlines for citizens' use.
- Respect waterfront property owners. Be quiet in early morning and careful when casting lures around moored boats and boat docks.
- Share information. Teaching others how to fish responsibly is a great gift to mankind.
- Monitor government. Write state and local legislators about your environmental concerns. Ask for their positions and track legislative actions on these issues.
- Study the facts. Don't support a cause without examining both sides. Be wary of groups manipulating information for self-serving interests.
- Encourage others. If you agree with our stand on conservation, share these points with sportsmen and encourage them to follow our Golden Rules for Conservation.

Computrol/BOTTOM LINE
499 E. Corporate Drive
Meridian, Idaho 83642
1-800-456-5432
208-887-1000

T Pro/P/US

OWNER'S MANUAL TOURNAMENT PRO TOURNAMENT PRO PLUS



 **BOTTOM LINE®**
See What You've Been Missing

Care of the TOURNAMENT PRO

TO CLEAN: Use a soft cloth and mild dish soap. Do not use abrasive or ammonia-based cleaners. Do not use alcohol.

TO STORE: To insure longer life, store your **TOURNAMENT PRO** indoors during long periods of non-use (i.e. winter). The temperature must not go below 0° F (- 18° C) or exceed 150° F (66° C.)

Transducer Care And Handling

Cleaning the Transducer Face

You must periodically clean the face of the transducer to remove oil build-up.

Use a mild liquid detergent and soft cloth.

Transducer Wetting

After putting the transducer into the water, rub your hand across the face of the transducer to remove dust and air bubbles.

Transducer Wiring

Secure the cabling against the bulkhead and away from other wiring and electronic equipment.

**CAUTION: NEVER
PLUG OR UNPLUG
THE TRANSDUCER
WHEN THE
TOURNAMENT PRO
IS ON!**

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BOTTOM LINE LIFETIME GUARANTEE SERVICE POLICY

ONE YEAR WARRANTY – We guarantee that all first year repairs will be absolutely free.

LIMITED MAXIMUM SERVICE CHARGE – U.S. funds \$79.95 is the maximum charge for repairs if the **TOURNAMENT PRO** is returned after the first year. This policy will remain in force for the lifetime of the fish finder.

WARRANTY ON REPAIRS – All factory repairs carry a ninety day warranty.

The foregoing warranty shall not apply to defects from:

Improper or inadequate use or maintenance by the user.

Unauthorized modifications, repair or misuse.

Operation outside the environmental specifications for the product.

This warranty is exclusive and no other warranty, whether written or verbal, is expressed or implied. In no event shall **BOTTOM LINE** be held liable for direct, indirect, special, incidental or consequential damages (including loss of profit) whether based on contract, tort, or any other legal theory. Warranty service will be performed either at **BOTTOM LINE**'s facility in Meridian, Idaho or at an authorized service center. Except for products returned from a foreign country, **BOTTOM LINE** will pay for return shipping charges to Buyer.

Send warranty repairs to:

Computrol/BOTTOM LINE
499 E. Corporate Drive
Meridian, Idaho 83642

FOR YOUR INFORMATION:

Serial # _____

Date Purchased _____

Store where purchased _____

RETAIN THIS SECTION FOR YOUR RECORDS

DETACH HERE ►



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The TOURNAMENT PRO & PRO PLUS Owners Manual

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Glossary

- ALARM** – Chimes when fish appear between the bottom and the surface.
- BTRAK** (Bottom Tracking) – Automatically adjusts zoom display to present a close-up view of the bottom.
- CONTRAST** – Allows you to adjust the contrast and brightness of the display.
- CURSOR** – The adjustable cursor allows you to determine the depth of an object.
- DEMO** – A built-in demo program which produces a replica of situations you may encounter in the water. Ideal for learning how to use the fish finder.
- DETAIL** – Adjusts the echo strength displayed on the screen.
- DETECT** – Contains the sub-menu for **FISH** and **ALARM**.
- FEET** – Displays feet, M.P.H. and degrees Fahrenheit.
- FISH** (Fish Detect) – Changes the marks on the screen into one of four fish shapes, depending on the size of the object detected.
- FLASHER** – An alternate display for viewing the underwater world.
- FREEZE** – Stops the scrolling of the display.
- GREY** (Greyscale) – Adds contrast to the bottom on the display to aid in interpreting the bottom.
- HAZARD** (Hazard Alarm) – Beeps when the bottom comes up to a predetermined depth. A great navigational feature.
- METERS** – Displays meter, KM/H and degrees centigrade.
- Pixel** – The tiny dark dots that combine to create the "view" on the screen.
- RANGE** – The depth at which the fish finder accurately reads.
- REAL** – Displays what the fish finder is viewing at the current time.
- RESET** – Allows you to return to the factory settings.
- SCROLL** – Controls how fast the view is shifted across the screen.
- Sonar** – Ultrasonic sound waves transmitted and received by the depth sounder elements at the rate of 4800 feet per second.
- STATUS** – Displays depth, water temperature, supply voltage, and speed* on the screen. ***TOURNAMENT PRO PLUS** only
- Transom** – The flat surface of the stern of a boat.
- Transducer** – Positioned below the surface of the water, this device sends and receives sonar signals.
- TRIPLOG** – Records the distance travelled.
- ZOOM** – Allows you to enlarge a particular area on the screen to see details.



Accessories, Clothing and Replacement Parts

Bottom Line offers a full line of accessories and replacement parts. These items should be available where you purchased your **TOURNAMENT PRO**. If the dealer does not carry an item you want, have them special order it for you.

We also offer a selection of quality **Bottom Line** clothing, hats and patches. These are available directly from your dealer.

Environmental Limits

The **TOURNAMENT PRO** may not operate properly if the temperature is below 0° F (–18° C) or above +140° F (60° C).

The **TOURNAMENT PRO** may be permanently damaged if stored where the temperature is below 0° F (–18° C) or above +150° F (66° C).

Facing the screen directly toward the sun may cause the display to reach its internal temperature limit and turn dark. If the screen is dark, turn it away from the sun or shield the screen from the sun's direct rays.

Specifications

Unit dimensions (HxWxD)	7" x 7 5/8" x 1"
Base dimensions	6 1/2" x 2"
Total weight	3 lbs.
Graphics viewing area	3 5/8" x 3"
Power requirement	12 Volts DC, 1/2 Amp
Range of fish finding distance	600 feet
Operating frequency	200 KHz
Transducer cone detection angle.	18° to 25 ft, 9° to 600 ft

If you read nothing else, read this!

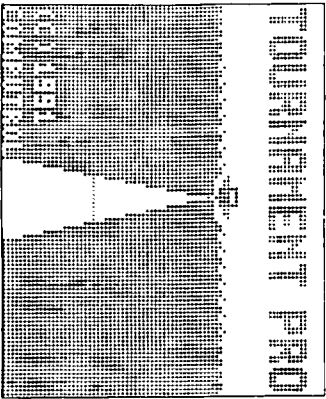
The **TOURNAMENT PRO** includes the following:

- 1) **TOURNAMENT PRO** or **TOURNAMENT PRO PLUS** head unit with mounting bracket and knobs
- 2) Power cord
- 3) Transducer, mounting brackets and hardware
- 4) Users manual and warranty card

There are **no short-cuts to the installation instructions**. They must be followed exactly for the **TOURNAMENT PRO** to operate correctly. Refer to the section on installing the **TOURNAMENT PRO**, p. 15. Even before the **TOURNAMENT PRO** is installed on your boat, you can learn how it works using a **DEMO** program that displays a simulated view on the screen. Follow these simple instructions:

Hook the **TOURNAMENT PRO** up to your boat battery, a 12 volt power supply, or a 12 volt D.C. 1/2 amp transformer available from your authorized **Bottom Line** dealer. Press the **POWER** key to turn the **TOURNAMENT PRO** on. The **TOURNAMENT PRO** screen is displayed.

Figure 1 – **TOURNAMENT PRO** Screen



Press the **MENU** key and a start-up menu is displayed (see Figure 5, p. 5.) Select **DEMO** by pressing the key pad opposite **DEMO** and a dot appears beside **DEMO**. Press **MENU** again and a demonstration program runs. The **DEMO** program simulates the **TOURNAMENT PRO PLUS**. Therefore, in **DEMO** all functions including those for the **PLUS** only are operational. To scroll through the different menus press **MENU** and read the right hand side of the display.

An excellent way to get to know the capabilities of the **TOURNAMENT PRO** is to learn the functions and adjust all keys in the **DEMO** mode using the information in this manual. When you are finished in the **DEMO** mode, press the key labeled **RESET** to erase all the changes and restore the settings back to the original factory settings.



Fishing with the TOURNAMENT PRO

How SONAR works

The **TOURNAMENT PRO** uses active SONAR, short for Sound Navigation and Ranging, to locate and mark fish. In operation, the **TOURNAMENT PRO**'s transducer sends short bursts of ultrasonic sound out into the water and then listens for echoes reflected back from fish or other underwater objects.

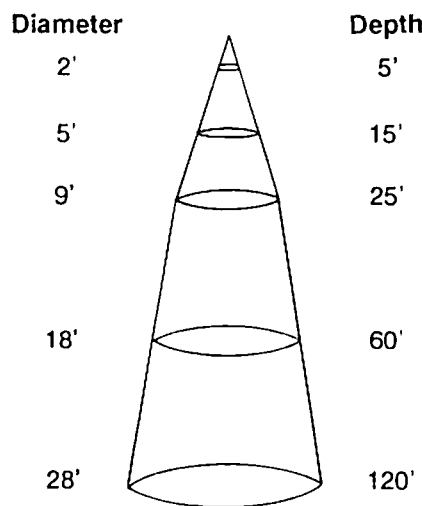
Sonar waves travel at approximately 4800 feet per second in the water. The **TOURNAMENT PRO** generates a sonar pulse then listens for an echo. The sound bounces off solid objects and returns at the same rate. The time it takes for the sound to echo back to the **TOURNAMENT PRO** is then used to calculate the distance and create a view on the screen.

Looking at the Bottom

The conventional Bottom Finding technology has just gotten better in the **TOURNAMENT PRO**. Bottom signals are easier to read and fish signals more accurate than ever before.

Figure 2 –

Sonar Coverage vs. Depth



After the SONAR pulse echoes back to the **TOURNAMENT PRO**, the reflected impulses are displayed on the screen as dark dots positioned vertically at a relative distance from the top of the screen. Each time the **TOURNAMENT PRO** sends a sonar pulse it shifts the screen one pixel column to the left. This creates a graphic picture of the objects that the boat has passed over. The marks on the right of the graphic picture represent the most current reflected sonar waves.

After you receive the replacement **TOURNAMENT PRO** you will have two (2) weeks to:

- 1) Place the defective **TOURNAMENT PRO** in the replacement's shipping container.
- 2) Write the pre-assigned return merchandise authorization (RMA) number on the replacement container.
- 3) Send the defective **TOURNAMENT PRO** back to Computrol.

If you do not do this within two weeks after you receive your replacement **TOURNAMENT PRO**, your credit card authorization will be processed and you will be billed for the additional **TOURNAMENT PRO**.

Our packages can be sent Federal Express, which guarantees to deliver in two working days. All three (3) of the above transactions are covered under warranty. You may request overnight or Saturday delivery if you provide payment for the freight charge.

Return address:

Computrol, Inc.
 Bottom Line Division
 499 E. Corporate Dr.
 Meridian, ID 83642



The Bottom Line Warranty and Service

The Bottom Line Warranty

One year full warranty.

The **TOURNAMENT PRO** is fully guaranteed for one year. Any repairs will be made free of charge.

This warranty shall not apply to defects resulting from:

- improper or inadequate use or maintenance
 - unauthorized modifications, repair, or misuse
 - operation outside the environmental specifications for the product
- After the one year full warranty period, a limited maximum service charge is the most you will ever pay for each repair, subject to the same limitations as the warranty above. This year's maximum service charge in U.S. funds is \$79.95, when the unit is returned to the factory. All repairs are covered by a 90 day warranty.

Computrol/Bottom Line Service Policy

If you have any problems with the **TOURNAMENT PRO**, refer to page 21 in this manual and try our suggestions. If this doesn't fix your problem:

Call our Customer Service Representative at this toll free number 1-800-456-5432. Have ready your model #, date of purchase and description of the problem.

If after speaking to you, our Service Representative feels you have a defective unit, they will assign you a return merchandise authorization (RMA) number and three (3) options will be given to you.

1) Warranty repair return: If you choose this option, your **TOURNAMENT PRO** should be returned to Computrol immediately. Upon receipt of your **TOURNAMENT PRO**, Computrol will repair your **TOURNAMENT PRO** within three (3) working days. The three working days is from date received until date shipped. The speedy turn around directly depends on the amount of time it takes your **TOURNAMENT PRO** to get to Computrol. Please consider this when selecting a freight carrier.

2) Warranty repair exchange: If you choose this option, your **TOURNAMENT PRO** should be returned to Computrol immediately. Upon receipt of your **TOURNAMENT PRO**, Computrol will send an exchange **TOURNAMENT PRO** back to you.

3) Warranty repair, credit card exchange: If you choose this option, Computrol will immediately send you a replacement **TOURNAMENT PRO**, provided that you give your Visa or Mastercard number, and that the number can be authorized for the retail value of your **TOURNAMENT PRO**. Nothing will be done with the authorized number at this time.

Interpreting the Bottom Finding Display

Bottom Signals

A bottom of sand, hard clay, gravel, coral or shell usually gives a strong signal and a "fat" bottom graph. Muddy bottoms or bottoms covered with thick weeds, though, tend to absorb the sonar waves and return a weak signal and will be displayed as a "thin or sketchy" bottom graph.

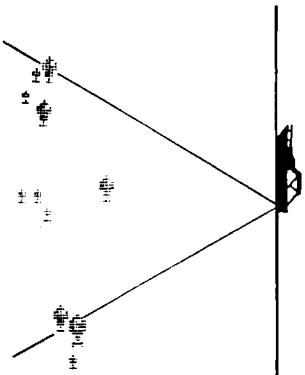
Thick weeds are the most difficult for sonar depthfinders when determining the bottom depth. (Where the bottom really starts might be hard to determine even if you stepped in these weeds.)

Fish Signals

A fish can appear as an arch on the screen. To show an arch, the fish must pass from the outside of the cone, through the center and out the other side. (Figure 3) This can happen either by the fish moving or trolling across the fish. Half-arches may result when the transducer is not perfectly vertical. While an arch is a good way of determining fish, other objects you troll across may also produce arches. A better way of determining fish is to watch for other patterns. Solid horizontal lines across the screen are often fish hovering under the transducer. These lines may go up and down suggesting some movement if they are fish.

As you get more familiar with the **TOURNAMENT PRO** and gain more experience, you will be better at recognizing fish on the screen. To improve your recognition skills, you might practice by watching for fish in **DETECT**. Use this to recognize the display differences between fish and other objects. (Humans are often better than computers at recognizing patterns and can assimilate information much faster than the computer.)

Figure 3 — Fish in Sonar Cone





The TOURNAMENT PRO Functions

The **TOURNAMENT PRO**'s keys and their use are described in this section.

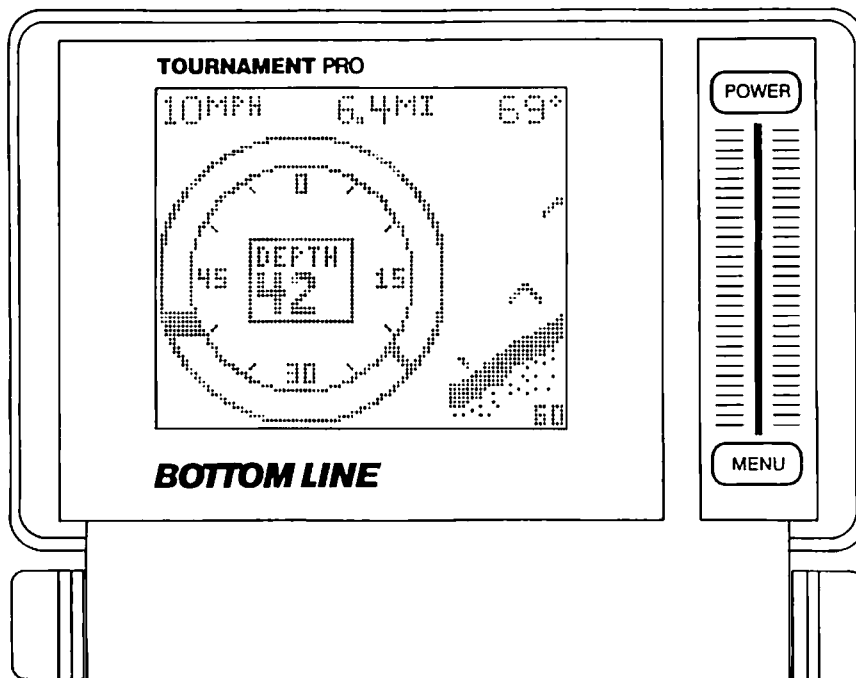
You can learn to use your **TOURNAMENT PRO** on land or on the water using the **DEMO** mode. In this mode, an on-the-water simulation allows you to explore all the functions and features of the **TOURNAMENT PRO**. Power to the **TOURNAMENT PRO** can be supplied in two ways:

- by plugging the power cord into a 12 volt battery or
- using a plug-in 12 volt DC 1/2 amp wall transformer (available from your Authorized Bottom Line Dealer).

All functions are fully operational in the **DEMO** mode.

Note: *The DEMO picture is a replica of an ideal situation: perfect water, solid bottom, no disturbances and eternal fish. You will rarely be able to duplicate this in real life.*

Figure 4 – **TOURNAMENT PRO** (front)



Using the Keypad

The **TOURNAMENT PRO** has a **POWER** key, a **MENU** key and a slider bar to select and adjust the functions.

If You Are Having Problems

After Initial Installation

Verify transducer installation. Most problems are due to incorrect transducer installation.

Check all cables and connections.

Check that the transducer is underwater with no air bubbles on its surface.

Any Other Time

Check to see that no other fish finders or sonar devices are being used nearby. Listed below are the most frequent problems encountered.

Problem: Unit won't turn on.

- Is the + 12 Volts DC properly connected to the unit? Red wire must go to the positive terminal (+) and the black wire to negative (-).
- Is the power cord solidly plugged into the unit?
- Is the battery supplying between 12 and 15 Volts DC?
- Is the air temperature within the environmental limits of the **TOURNAMENT PRO**? 0° F (-18° C) to 140° F (60° C)

Problem: Unit beeps but the screen stays dark.

- The screen may be dark and just too hot to work at all. In this case immediately cover the screen or turn it away from the sun.
- When first turned on, the screen may be dim with no visible information readable. The **CONTRAST** may be too low for your viewing condition. Slide your finger up or down the slider bar to adjust the **CONTRAST**.

TOURNAMENT PRO PLUS Only

Problem: No speed reading.

- The speed wheel may get jammed with sand or weeds. Make sure it can turn freely.
- Check that all connections are solid and free from oil and dirt.

Try these suggestions and if you continue to have problems please call our Customer Service Department, at this toll free number 1-800-456-5432.



Note 4 – Propellor Interference: *Extreme turbulence and/or air bubbles created by the boat's propellor may interfere with the proper operation of the transducer if it is mounted too close to the propellor.*

Portable Usage

The **Bottom Line TOURNAMENT PRO** is well suited for portable usage. Use suction cups to attach the transducer without a speed wheel (bi-ducer) to the transom of your boat. The bi-ducer must remain below the water line and point straight down. Optional accessories are available from your dealer.

Ice Fishing

For the best performance during ice fishing, slow down the scroll rate and turn on the light. This enhances the display when the temperature is low.

POWER

Press and release the **POWER** key to turn the **TOURNAMENT PRO** on and off.

MENU

Press **MENU** to select menus. The menus will automatically disappear if there is no activity on the keypad for six seconds.

The slider bar is used to select and adjust the functions of the **TOURNAMENT PRO**. The slider bar can be used in two ways:

- when a **MENU** is displayed, touch the slider bar next to the menu word to select that function or turn it on or off
- when an adjustment scale is displayed, touch or slide your finger up or down to make your adjustment

Note: *The **CONTRAST** can be adjusted when the **TOURNAMENT PRO** is first turned on by using the slider bar.*

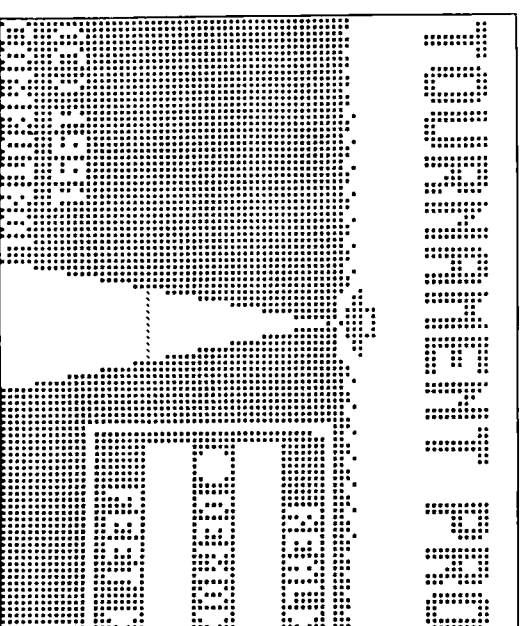
When You First Press MENU

The start-up screen is displayed when you first press **MENU**. The screen has three selections:

- REAL** (for normal on-water use)
- DEMO** (to run the demonstration program)
- FEET/METERS** (to choose feet, M.P.H. and ° Fahrenheit or meters, Km/H and ° centigrade)

Pressing the **MENU** key again will start the operation of the **TOURNAMENT PRO**.

Figure 5 – Start-up Screen





The TOURNAMENT PRO Menu

Figure 6 – Main Menu

BOTTOM	BOTTOM		
GRAPH	GRAPH		
DETAIL	ZOOM		FLASHER
GREY	CURSOR	LIGHT	STATUS
DETECT	SCROLL	CONTRAST	TRIPLOG
RANGE	FREEZE	RESET	HAZARD

The **TOURNAMENT PRO**'s functions and use are described in this section. In order to obtain a clear understanding of the functions described, we recommend that you try each of the functions using the **DEMO** mode. Every time you turn the power off on the **TOURNAMENT PRO**, the settings are saved for future use.

Selecting a Function

After the mode (**REAL** or **DEMO**) and unit of measure (**FEET** or **METERS**) are selected, press **MENU** to display the view. To access the **TOURNAMENT PRO**'s functions press **MENU** again. If there is no activity on the keypad for six seconds, the **MENU** screens will disappear for full screen viewing. To access them again, press either **MENU** or the slider bar.

Adjusting a Function

To adjust any function, press the slider bar opposite the function name. If the function is a turn **ON** or turn **OFF** mode, a dot next to the name indicates the function is on. To turn the function off, press the slider bar again and the dot will disappear. When the function you wish to adjust requires information, pressing the slider bar opposite the function will display a sub-menu (such as feet or depth, etc.) Make your changes by again pressing the slider bar opposite your choice. The function's current setting is displayed in the top portion of the screen.

Mounting the transducer in the preferred manner (See Figure 13 – Preferred) will optimize the searching abilities of the **TOURNAMENT PRO**. Make sure the angle of the boat's hull stays within the lines marked on the diagram. You may have to tilt the transducer somewhat to stay within the lines, but you must **STAY WITHIN THE DOTTED LINES!** (Figure 13.) Our Customer Service Department will be glad to answer any questions you have.

Alternate Transducer Mounting – High Speed Operation

In high speed operation, drag and rooster tails can result from mounting the transducer too low. Also, water flowing to high performance engines becomes more turbulent. If drag becomes a problem, there is an alternate method to mount the transducer. Refer to Figure 13 – Alternate. Mounting the transducer in the alternate manner will give better performance at high speeds.

Changes for High Speed Operation

If high speed operation is not obtained with the transducer mounting as specified above, the following changes should be made in the order listed:

1. Loosen the two bolts holding the transducer to the mounting brackets and rotate the back of the transducer slightly down to a maximum of 5 degrees. Re-tighten the bolts and check again for high speed operation.
2. If Step 1 does not produce the desired results, loosen the four screws that mount the brackets to the transom, and lower the transducer to 1/4" below the hull. Re-tighten the screws and try again. If needed, lower the transducer until the top is flush with the bottom of the hull.
3. If you still have problems obtaining high speed operation, experiment by increasing or decreasing the angle of the transducer with respect to the bottom of the boat and by changing the distance the transducer is positioned below the bottom of the boat. Changes as small as one degree or 1/16" can produce the desired results.
4. If adjustments as indicated above fail to produce a good bottom display at high speeds, call our *Customer Service Department* at 1-800-456-5432.

Note 1 – Performance Considerations: *The more centrally located the transducer is, the better your TOURNAMENT PRO will operate.*

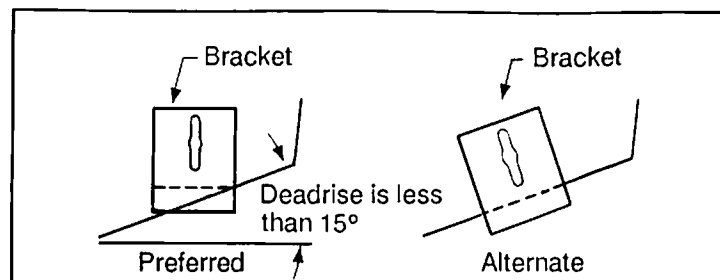
Note 2 – Aluminum Boats: *If you have an aluminum boat, avoid placing the transducer behind a row of rivets. It may be necessary to use a wooden backing plate between the transom, and the brackets. Attach a 7" piece of 1 x 6 hardwood flush with the bottom of the hull, and attach the transducer using the diagram. Be sure to varnish the wood and silicone the screw holes thoroughly to prevent leakage and damage to your boat.*

Note 3 – Water Turbulence: *Water turbulence is minimized when the transducer face is mounted below the bottom of your craft.*



degrees or less), the transducer should be mounted parallel with the surface of the water.

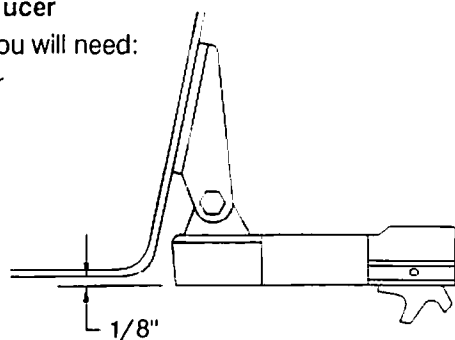
Figure 13 – Preferred and Alternate Mounting Locations



How to Mount the Transducer

To mount the transducer, you will need:

- Phillips-head screw driver
- Drill with an 1/8" bit
- Two 7/16" wrenches
- One 5/16" wrench
- Silicone caulk



Do the following:

- Refer to Figure 13.
- Follow the instructions included with the brackets; attach the transducer to the brackets, and tighten the bolts enough to hold the unit in place.
- Loosely attach the two brackets to your boat with the four #8 screws supplied.
- Adjust the brackets until the desired height is achieved, and snug up the screws.
- Determine the angle you want on the transducer face. Check that the rear of the transducer is less than 5 degrees down. Tighten the bolts.
- Remove the screws from your boat, one at a time and fill the holes with silicone caulk before re-tightening. Each time one of the screws is removed, the holes must be re-sealed. **Failure to do so can seriously damage your boat!**

Preferred Transducer Mounting – Slow Speed Operation

TOURNAMENT PRO/PRO PLUS Menus

DETAIL

The **TOURNAMENT PRO** continuously records all echoes received by the transducer. Some of the echoes are very weak because they have bounced back from small objects or objects near the edge of the transducer cone. Big objects return a strong echo. With **DETAIL** set at the highest number (at the bottom of the scale), only the strongest echoes are displayed on the screen. With **DETAIL** set at the lowest number (at the top of the scale), *all* echoes are displayed on the screen. This is your most important adjustment in determining what is in the water below.

A feature of the **TOURNAMENT PRO** is **SUPPRESS** in the **DETAIL** function. It allows you to select a particular region in the water and suppress unwanted signals in varying amounts. This is useful in dealing with surface clutter or thermoclines.

DETAIL

Press the slider bar opposite **DETAIL**. A sub-menu appears.

SUPPRESS

Press the slider bar opposite **SUPPRESS** and a triangle on the right hand side appears. Press the slider bar at the location you wish to **SUPPRESS**. Leave your finger on the slider bar and watch the screen as the triangle increases or decreases in size. The larger the triangle the more the signal is suppressed over a wider area. Pressing different locations on the slider bar will change the location of the suppressed area. Press **MENU** to exit.

ADJUST

Press the slider bar opposite **ADJUST**. A sub-menu is displayed on the right hand side of a vertical range. Move your finger along the slider bar to increase or decrease the echo strength shown on the screen. Press **MENU** to exit.

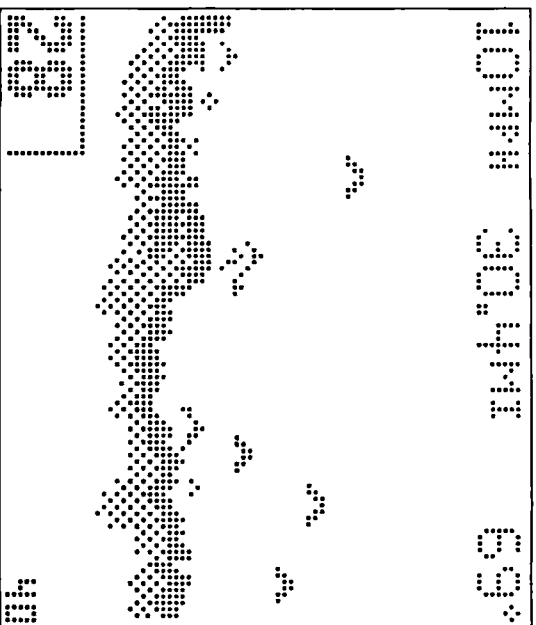
GREY – Greyscale

Greyscale helps you to determine the bottom composition and expose bottom-lying fish by adding contrast (greying) to the graph. **Greyscale** will give some of the returning signals a grey or lighter appearance. In **Greyscale**, the unit receives the initial echoes from the bottom and draws a line. It then greys (greyscales) the rest of the return. When in weeds, the unit will show the top of the weed bed as a line, then greyscale until it reaches the bottom. The bottom will again be shown as a line followed by more **Greyscale**.

Press the slider bar opposite **GREY** to turn **GREY** on or off.



Figure 7 – Greyscale



DETECT – FISH and ALARM

DETECT has two sub-menu functions; **FISH** and **ALARM**.

FISH turns the marks currently on the screen into fish shapes. It is designed to assist the less experienced user to better interpret the marks displayed on the screen. When the **TOURNAMENT PRO** detects a fish, a fish shape appears on the screen. Adjusting **DETAIL** will determine which fish symbols are displayed. The lower the **DETAIL** is set, the more small fish symbols are displayed. Their relative sizes are represented by three fish shapes and a “^” for the smallest fish

Note: *Rarely, other objects such as debris, pieces of wood, air bubbles, etc. may be marked as fish symbols.*

ALARM sounds short beeps when the **TOURNAMENT PRO** finds fish or other objects suspended in the water.

FISH

Press the slider bar opposite **FISH** to turn on or off.

ALARM

Press the slider bar opposite **ALARM** to turn on or off.

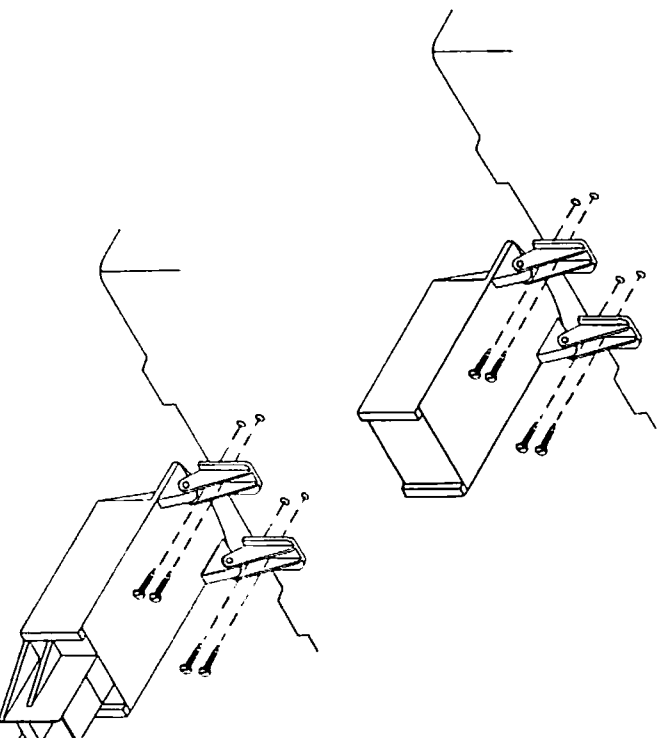
RANGE – Bottom Range

RANGE determines the depth of the water displayed on the screen. In the **AUTORANGE** mode, the bottom is automatically kept in the lower 1/3 of the screen. However, it can easily be changed from the **AUTO** mode and manually set to the range depth you choose. Reduce the **RANGE** when the fish are in the upper regions and the bottom is not important. The **RANGE**

Mounting the **TOURNAMENT PRO/PRO PLUS** Transducer

The **TOURNAMENT PRO** transducer differs from the **TOURNAMENT PRO PLUS** transducer in only one way; the transducer has no speed wheel (see Figure 12.) If you have purchased the **TOURNAMENT PRO PLUS**, you will be able to display the boat speed on your screen. The mounting instructions for both the **TOURNAMENT PRO** and the **TOURNAMENT PRO PLUS** are identical.

Figure 12 – **TOURNAMENT PRO** and **TOURNAMENT PRO PLUS** Transducer

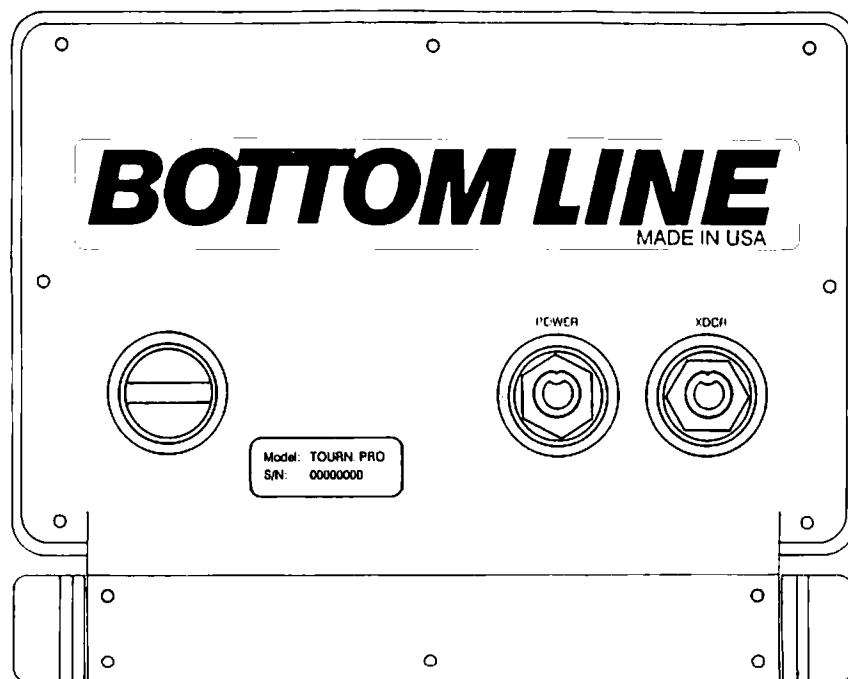


The most common place to mount your transducer is on the transom. It may be helpful to drive your boat at a variety of speeds and observe where the water flows most smoothly off the transom. Smooth, bubble-free water often flows from the center of the transom or at the base of a step.

The transducer is designed to mount slightly below the bottom of the boat. The brackets have slots that allow you to make vertical adjustments in the mounting.

We recommend the transducer be centrally located with the nose between 1/8" and 1/4" below the hull. If the boat has only a slightly "V"ed hull (15

Figure 11 – Tournament Pro (back)



How the Transducer Works

The **TOURNAMENT PRO** uses reflected ultrasonic sound waves to locate and identify objects in the water. The ultrasonic sound waves, called sonar, are generated in the water by the transducer which converts electrical energy into mechanical energy. This same transducer is capable of receiving mechanical energy (echoes) and converting it back into electrical energy which is measured by the **TOURNAMENT PRO**. The **TOURNAMENT PRO** then displays this electrical energy as a picture of the underwater world.

The **TOURNAMENT PRO** comes with one high speed boat-shaped transducer. If you've purchased the **TOURNAMENT PRO PLUS**, you will have a boat-shaped transducer with an attached speed wheel sensor.

number is displayed in the lower right corner and the message area will also display the **RANGE**. Although the **TOURNAMENT PRO** has a range of 600 feet, greater detail is obtained by displaying only a portion of this range. For example, a range of 180 feet means the screen will show everything from the surface (0 feet) to 180 feet below.

RANGE

Press the slider bar opposite **RANGE** and a sub-menu will appear with **AUT** (**AUTORANGE**) at the top and 600 at the bottom. Move your finger up or down the slider and watch the top of the screen for the depth you are selecting. Press **MENU** to exit.

ZOOM

ZOOM provides a highly detailed graph of the area selected below the surface. With the **ZOOM** options **DEPTH**, **WIDTH** and **BTRAK**, you define an area to zoom in on. When **ZOOM** is selected, the screen will split into two displays. On the left is a zoomed graph (marks are magnified vertically) and on the right is a full graph. A narrow zoom-bar will appear near the middle of the display indicating the area being **ZOOMed**.

DEPTH

There is a rectangle on a line between the two graphs which shows the area of magnification, called the "Zoom window." Zoom **DEPTH** allows you to adjust how deep below the surface this window is positioned. The **DEPTH** is also shown in the message area. This feature is helpful when using downriggers to view the area near the ball. It is also used with a bait cloud to look for fish feeding below it.

Press the slider bar opposite **DEPTH** and a thick bar transposed over the vertical line separating the zoom and normal graphs is displayed. Press the slider bar opposite the bar to adjust the depth of the **ZOOM** view. Press **MENU** to return to the first sub-menu, then press **MENU** again to return to the main menu.

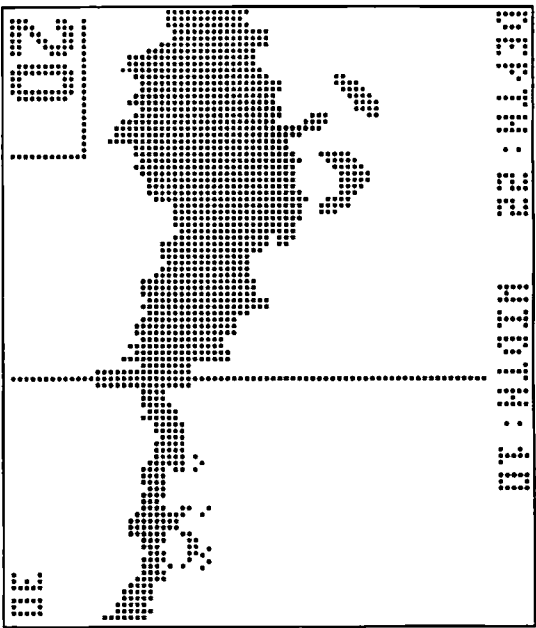
WIDTH

Adjusting the **WIDTH** determines how wide a vertical area the zoom graph displays. This area can be adjusted between 10 feet and 40 feet (3 meters and 10 meters.) The smaller the area width, the greater the detail.

Press the slider bar opposite **WIDTH** and a sub-menu appears with the smaller number at the top and the larger number at the bottom. Press the slider bar to select the setting. The **WIDTH** setting can be seen at the top of the display. Press **MENU** to return to the first sub-menu, then press **MENU** again to return to the main menu.



Figure 8 – Zoom



BTRAK – Bottom Track

The **BTRAK** displays a magnified view of the bottom on the display screen. This is useful when marking bottom-oriented fish. The width of the **BTRAK** view can be set in the **WIDTH** option.

Press the slider bar next to **BTRAK** to turn on or off.

Note: *If DEPTH is pressed, BTRAK will be turned off.*

OFF

Press the slider bar opposite **OFF** to turn off the **ZOOM** function.

CURSOR

The **TOURNAMENT PRO** has a **CURSOR** which allows you to measure the depth of an underwater object. **CURSOR** is also effective for measuring the depth of the downrigger weight and the depth of structures.

Press the slider bar opposite **CURSOR**. A horizontal line appears on the screen. Move your finger up or down the slider bar to move the **CURSOR** line to the position you wish to measure. Press **MENU** to exit.

Note: *On the TOURNAMENT PRO PLUS a crosshair appears. When the crosshair touches the target the message area displays the depth of the target, the target's echo strength and its distance behind the boat.*

Installing the TOURNAMENT PRO

Installing The Display Unit

Proper installation is essential to the operation of your fish finder. The **TOURNAMENT PRO** screen display unit should be mounted on a solid, flat surface where it will be most visible and accessible. Stainless steel is suggested for all mounting hardware and a 1" hole is recommended for routing the power and transducer cables.

Adjust the viewing angle of the display unit by loosening the two display adjustment knobs on the sides of the unit. Tilt the display unit forward or backward and tighten the two knobs after the adjustments are made.

Routing the Cable

There are several guidelines to follow when routing cables:

- away from high usage areas
- away from any danger of being cut or frayed
- away from other wiring and electronic equipment

Following these guidelines will help protect the cables and avoid interference with other electrical equipment.

Installing the Power Cord

To connect the power cord attach the two wires to the boat's 12 volt battery (or any other 12 volt battery that can supply 1/2 amp.)

- red wire to positive (+) terminal
- black wire to negative (–) terminal

CAUTION: *Do NOT connect them to the same point as a tachometer, C.B. or marine radio. Avoid connection to a circuit that is heavily used, such as the one for the trimming switch.*

Connect the power cord to the power jack on the backside of the **TOURNAMENT PRO** (Figure 11, p.16). A fuse is not supplied or required for operation, but a 5 amp fastblow fuse is recommended to be inserted in line with the red wire for added protection.



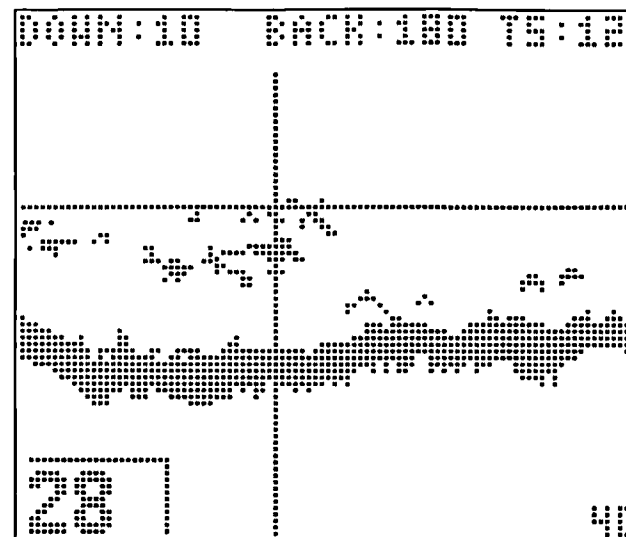
HAZARD

The **HAZARD** alarm sounds when the bottom depth becomes less than the hazard limit setting. This alarm alerts you to shallow water.

Press the slider bar opposite **HAZARD** and a sub-menu appears with **OFF** at the top and two arrows pointing down at the bottom. The double arrows increase or decrease the **HAZARD** depth in multiples of ten and the single arrows in multiples of one. Press the slider bar opposite the arrows. The **HAZARD** depth is displayed at the top of the screen.

Safety Note: Set the **HAZARD** alarm deeper than what you need, for an earlier warning signal, to allow yourself time to correct the situation.

Figure 9 – Cursor



SCROLL

SCROLL controls how fast the bottom graph is shifted across the screen. Each shift of the bottom graph is matched by a sonar pulse, so for the **TOURNAMENT PRO**, the scroll rate and the echo rate are the same thing. The **TOURNAMENT PRO** can be adjusted to scroll between 1 shift or echo per second to 8 shifts or echoes per second. Higher scroll rate is best for running at high speeds. Adjusting the scroll rate down can:

- show better definition in bottom contour at slow speeds
- show holes and ledges more clearly
- help to keep good contrast in cold conditions

Press the slider bar opposite **SCROLL** and a sub-menu appears with 1 at the top and 8 at the bottom. Move your finger up or down the slider bar to increase or decrease the **SCROLL** rate. The number of shifts or echoes is displayed at the top of the screen. The higher the number of echoes per second the faster the view will scroll across the screen. Press **MENU** to exit.

FREEZE

The **FREEZE** function stops the display from scrolling. While the screen is stopped, it can be examined more closely. All features are operational while the screen is frozen.

Press the slider bar opposite **FREEZE** to turn **FREEZE** on or off.



LIGHT

The **LIGHT** function allows you to turn on or turn off the display backlight. The **LIGHT** is required to view the screen in the dark. Upon power up, the **LIGHT** will automatically turn on. After 1 minute, the light turns off unless you go to the light function and turn it on.

Press the slider bar opposite **LIGHT** to turn the **LIGHT** on and off.

CONTRAST

The **CONTRAST** function will allow you to lighten or darken the contrast on the display screen. The viewing angle and temperature determines the suitable setting. On sunny days, when the screen heats up, turn the **CONTRAST** down. In cold weather, turn the **CONTRAST** up. If this does not produce the desired results, try adjusting the **SCROLL** (scroll rate) down. This makes the bottom graph easier to view. When you first turn the **TOURNAMENT PRO** on, the **CONTRAST** can be adjusted by sliding your finger up or down the slider bar.

Press the slider bar opposite **CONTRAST** and a sub-menu appears with a light square at the top and a dark square at the bottom. Move your finger up or down the slider bar to increase or decrease the **CONTRAST**. Press **MENU** to exit.

RESET

The **RESET** feature changes *all* settings back to the factory settings.

Press the slider bar opposite **RESET** to return to the factory settings.

FLASHER

The **FLASHER** is an alternative method of viewing the echoes returned from the water.

DETAIL

Adjusting the **DETAIL** changes the amount of signals displayed on the **FLASHER**. Press the slider bar opposite **DETAIL** and a range of numbers appears on the right-hand side of the screen. A smaller number displays more of the weaker signals, in addition to the stronger echoes. The larger numbers display less of the weaker echoes.

60 FT/20 M

Press the slider bar opposite **60 FT/20 M** to change the range to the **60 FT/20 M** scale.

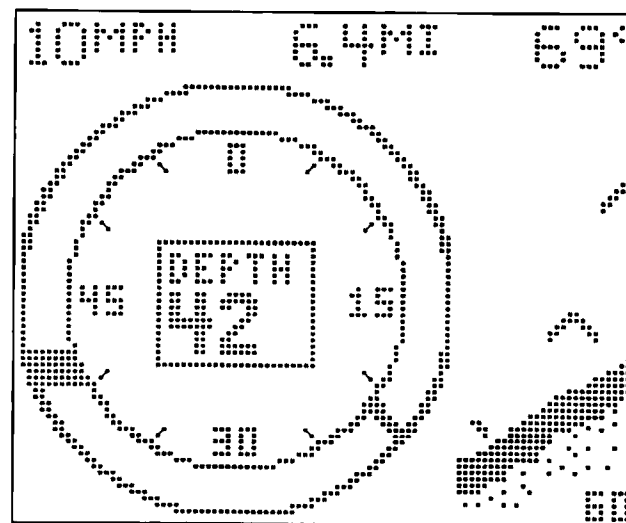
120 FT/40 M

Press the slider bar opposite **120 FT/40 M** to change the range to the **120 FT/40 M** scale.

OFF

Press the slider bar opposite **OFF** to turn off the **FLASHER** and return to the bottom graph.

Figure 10 – Flasher



STATUS

The **STATUS** screen will display depth, water temperature, battery voltage, and speed* in giant digits. This allows you to view this information from a distance. You may want to check the battery voltage before beginning your trip to ensure it will last for the duration.

Press the slider bar opposite **STATUS** to turn on the **STATUS** screen. The **STATUS** information will appear on the screen. Press **MENU** to return to the main menu.

TRIPLOG*

The **TRIPLOG** allows for the accumulation of information on distance travelled.

Press the slider bar opposite **TRIPLOG**. **RESET?** appears on the screen. Press **YES** to reset the **TRIPLOG** to zero or press **NO** to continue accumulating the distance travelled.

*Only on the **TOURNAMENT PRO PLUS**