USER HANDBOOK

C-6000i

Computerized Jigging Reel

.

Revision 1.00

This user handbook covers version 2.22 of the *C-6000i* program.

It may also be useful for earlier versions of the *C-6000i* program but some functions mentioned will not be applicable.

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INTRODUCTION

Dear Customer,

We are pleased to welcome you to the group of many fishermen who have been practical enough to choose the *C-6000i* computerized jigging reel for their boats. At the same time we would like to take the opportunity to direct your attention to a few points which we believe to be helpful to you.

This manual describes the procedure for installation of the reel and its connection to the electrical system of the boat as well as its configuration and use. Take all the time you need to read the manual from the beginning to the end. It is our experience that the more time taken to study the manual, the fewer problems are encountered and the better utilization of all the powerful features of the jigging reel. Even though you don't use these features at first, you will know that they exist which makes it much easier for you to use them later when you really need them.

Your C-6000i computerized jigging reel has been subjected to a strict quality control test during which all parameters were tested under various conditions. It was also tested to ensure that it is completely watertight and pressure proof. We are convinced that it will operate trouble free for years.

Finally we at DNG Sjóvélar wish to congratulate you on your acquisition of the new *C-6000i* computerized jigging reel and we are confident that it will yield many good catches in the years to come.

Good catch with jigging reel from DNG.

OVERVIEW

Main Features of the C-6000i Jigging Reel

The ***C-6000i*** is a very sophisticated fishing device. The basic task of the machine can be divided into three parts. The first one is to pay out the line with a leader and a sinker at its very end and detect when the sinker hits the bottom. The second one is to perform some jigging action to attract the fish and detect when the fish bites the hooks. The third one is to haul the fish up to the surface.

Some of the *C-6000i* features include:

- Low current consumption, high efficiency.
- Operates on both 12V and 24V electrical systems.
- Completely watertight
- Communications between machines
- Built in and user definable fishing systems
- Search systems
- Adapts to almost every circumstance.
- Fishing system for squid and mackerel.
- User definable jigging movement (learns to jig).

Manual Overview

This manual is written to serve as a complete guide for the installation and use of the *C-6000i* jigging reel for both experienced users and beginners. It consists of the following sections:

INSTALLATION

This section describes the installation of the reel i.e. how it should be mounted and its connection to the electrical system. A short description about how the line is installed on the drum is also included.

DISPLAY

The display shows a lot of information for the user. This section describes how the information is organized on the display.

CONTROLLING THE REEL

The reel is controlled by means of only four touch pads. This section describes how they are used.

SCREENS

The parameters that are used to adapt the reel to the current circumstances are organized in six sections called screens. This section describes the parameters found on each of the screens and their function.

TROUBLESHOOTING

If you ever experience problems with your jigging reel take a look at this section, you might find an explanation here.

APPENDIX A - WARRANTY

This section describes the warranty for the jigging reel. Read it carefully!

APPENDIX B - ACCESSORIES

This section briefly describes the accessories available for the *C-6000i* jigging machine.

Main Parts of the Reel

On Figure 1 you can find the main parts of the jigging reel labeled with number ranging from 1 to 14. The numbers refer to an explanation of the function shown on next page. Numbers in parentheses indicate the page

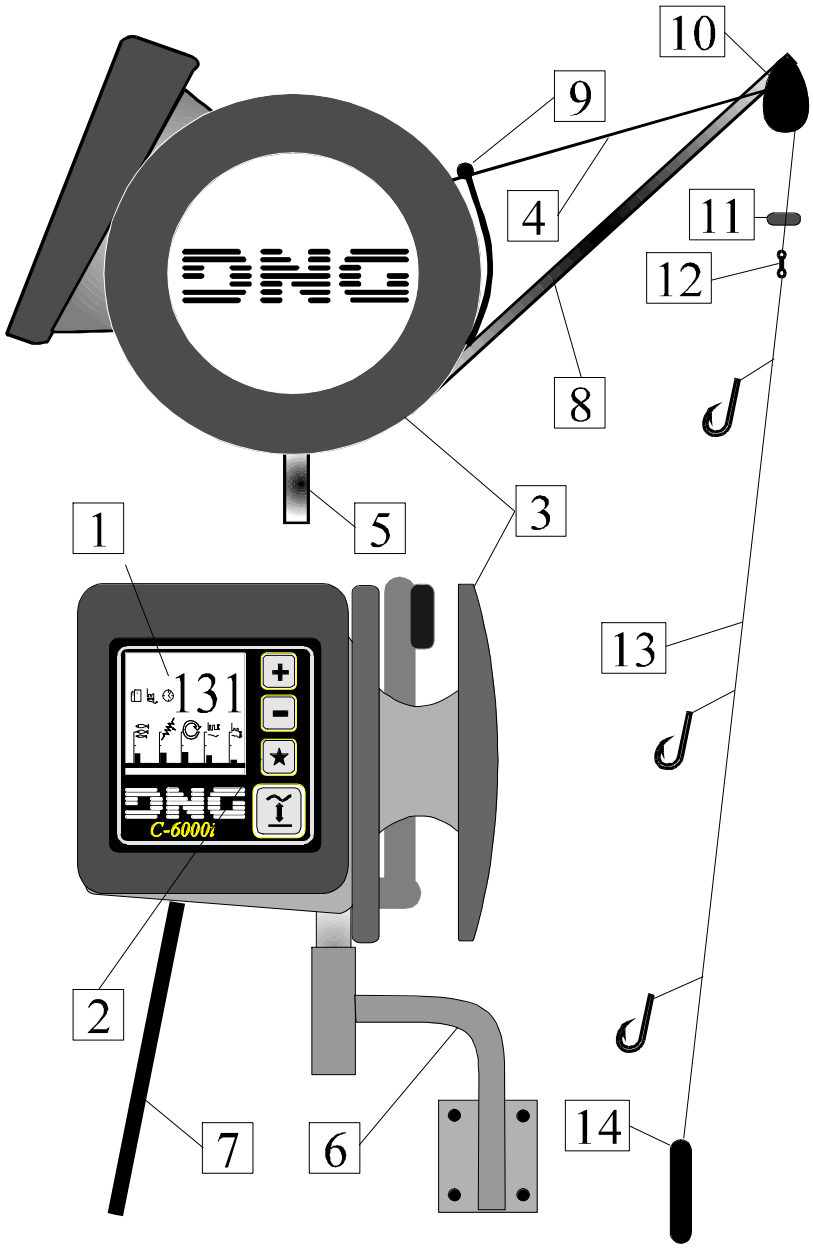

Figure 1

where you can obtain more detailed information about any specific item.

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Display. It shows the values of the parameters that are used to control the reel. It always shows the depth of the line, the voltage of the batteries and the turning speed of the drum. ***(10)***

2 **Control panel.** It has four touch pads that are used to select and change parameters and to control the reel. ***(12)***

3 **Drum.** It contains the line. The drum can accommodate more than 300 meters of line with diameter of 1.8mm and 800 meters of Dynema line with diameter of 1.2mm.

4 **Line.** A monofilament line with diameter of 1.8 - 2.0mm or Dynema line with diameter of 1.0 - 1.2mm is usually used.

5 **Reel Foot.** Metal pipe extending downward from the computerized jigging reel and designed to fit into a mounting pipe for the reel on the gunwale of the boat.

6 **Mounting pipe.** Stainless steel or galvanized metal pipe, firmly bolted to the boat. ***(6)***

7 **Power Cable.** Connects to 12V or 24V batteries. ***(6)***

8 **Arm.** The arm carries the pulley and together they guide the line from the reel into the water.

9 **Slack sensor.** This arm senses the slack of the line. It is very important that it can move freely. ***(33)***

10 **Pulley.** The pulley guides the line from the arm.

11 **Stop Ring.** Its function is to stop the line when the reel has hauled it in and only the leader remains outside the gunwale. The swivel is too big to be pulled through the stop ring and hence the reel will not be able to haul in any more line when the stop ring is at the pulley.***(9)***

12 **Swivel.** The swivel connects the leader and the line and it prevents the line from turning when the leader is turned.

13 **Leader.** The leader (trace) is at the end of the main line. The hooks are attached to the leader and at its very end is the sinker. A weaker line is used in the leader than the main line since you usually want it to break before the main line does in case of too much strain. A good example is when the sinker gets stuck in a rocky bottom or a wreck.

14 **Sinker.** The sinker pulls the line down to the bottom. Usually a sinker weighing 2 - 2.5Kg is used but different weights can be used, depending on circumstances. ***(7)***

INSTALLATION

Mounting the Reel

The foot of the reel fits into a regular one inch metal pipe (external foot measurement is 26.67 mm). The pipe should preferably be made of stainless steel. The pipe must be firmly bolted on to the gunwale. Figure 2 shows a drawing proposing two different ways of mounting.

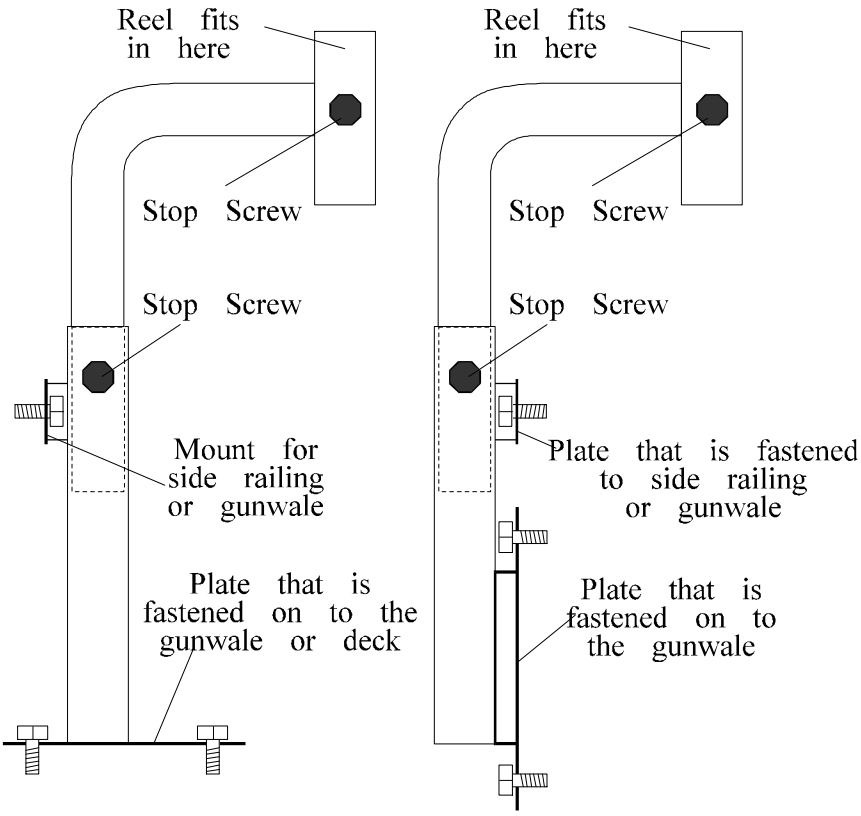

Figure 2

Electricity

The power cable should be of suitable length. The cable has four wires, two $4mm^2$ power wires and two $0.75mm^2$ communication wires. The power wires are red and black. The red wire is the plus or positive and the black wire is the minus or negative. The machine should be connected to connection box supplied by DNG or distributors. The connection box should contain a two pole circuit breaker (fuse) for each machine as well as an overload voltage protection unit (both supplied by DNG). The circuit breaker should be of the type B10 (10A, fast).

The two communication wires are connected to terminal blocks in the connection box. The brown wire connects to one terminal block and the blue one to another. **For illustration see supplied connection diagram.**

Note: A polarity reversal will not harm the reel in any way but it will result in an operational failure of the machine while incorrectly connected. If nothing happens on the screen when power is applied, check the polarity of the connection.

Switching the Power On

When the machine has been mounted and connected to the electric system, the power can be applied by the switch on the circuit breaker (or an optional switch). The machine takes a few seconds to perform a power on self-test and then displays the program version and serial number for 2 seconds. Then the main screen (screen 1) will appear on the display. It is necessary to turn the drum as much as one turn to initialize. Then the machine enters *Stop state* and the drum can no longer be turned freely.

Note: Each time power is applied the reel won't work if not initialized by turning the drum. This will, however, happen automatically when the sinker is thrown overboard.

High and Low Voltage

If the voltage of the electrical system rises above approximately 32V the overload voltage protection unit in the connection box will short-circuit the output of the circuit breaker which then disconnects the reel from the electrical system. If on the other hand, the voltage is too low (below 10V on a 12V system and below 20V on a 24V system) the machine will flash the value of the voltage measurement on the display and emit a sound as a warning. If the voltage continues to drop, it will finally result in an operational failure of the reel. This will however, not harm the machine in any way but it can harm the batteries of the electrical system.

Line and Sinker

Figure 3

When the reel has been mounted and power applied, the line is fitted on the drum. Figure 3 shows a typical configuration when fitting the line on the drum. It should be wound quite densely and hence some resistance to the pull of the reel is necessary. Fasten the line to the drum (there is a hole in the drum for that purpose but the cap of the drum must be removed) and press the MAIN pad two times (to enter *Hauling state*). The reel will then start turning the drum and reel in the line slowly. If you are comfortable with more speed, press the PLUS pad and the power will increase to full hauling power. Control the reel with one hand the line with the other. Be careful not to get your hand stuck in the line and wear a glove to protect your hand and fingers. When the entire line has been fitted on to the drum press the MAIN pad again to stop the reel. Now the line must be properly threaded (see Figure 4 on page 9). It is not necessary to use a stop-ring but then a certain parameter must be set (see section STOP AT ZERO on page 30).

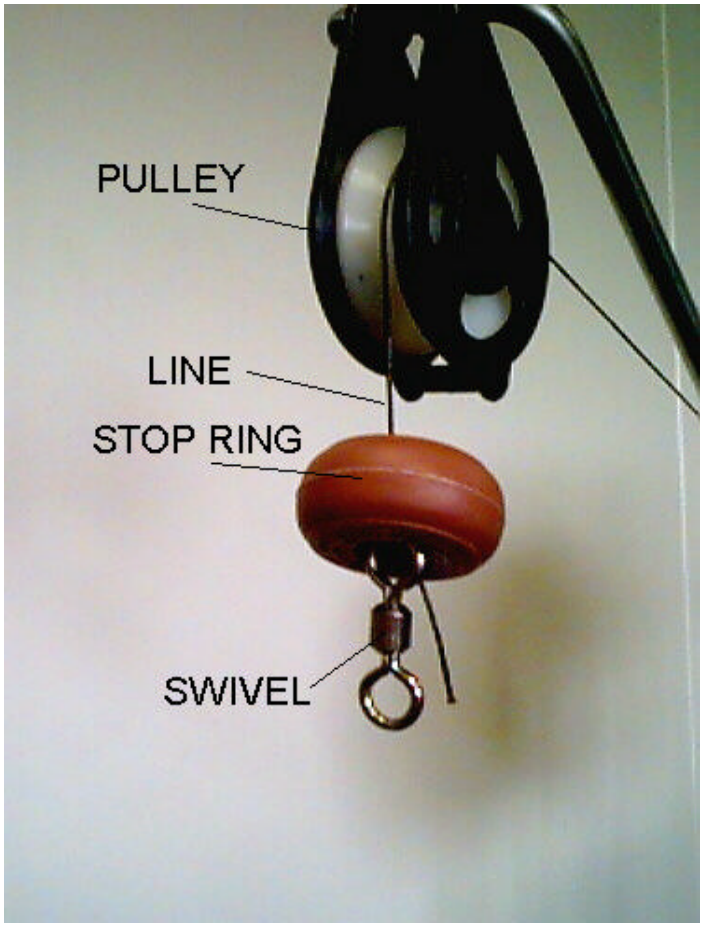

Figure 4

Note: The reel will not work properly if the line does not go through the slack sensor arm.

A sinker is used at the end of the leader. The reel is factory tested with a sinker weighing 2Kg. When the line is to be released you only have to throw the sinker and the leader overboard and then press the MAIN pad to enter *Pay-out state*.

Note: The weight of the sinker affects fish sensitivity, so if another weight than 2Kg is used, the fish sensitivity parameter must be adjusted accordingly (see section FISH SENSITIVITY on page 16).

DISPLAY

The parameters that control the reel are shown as icons on the display (see Figure 5 for an illustration). The values of the parameters are shown below the icons. Only a part of all the parameters can be shown on the display at one time along with other information. The parameters are grouped into five categories that we call screens and only one screen is shown on the display at one time. Each screen is labeled from one to five. These screens also show other information like the speed of the drum, the battery voltage etc. The user controls the reel by moving between these screens and adjust the values of the parameters.

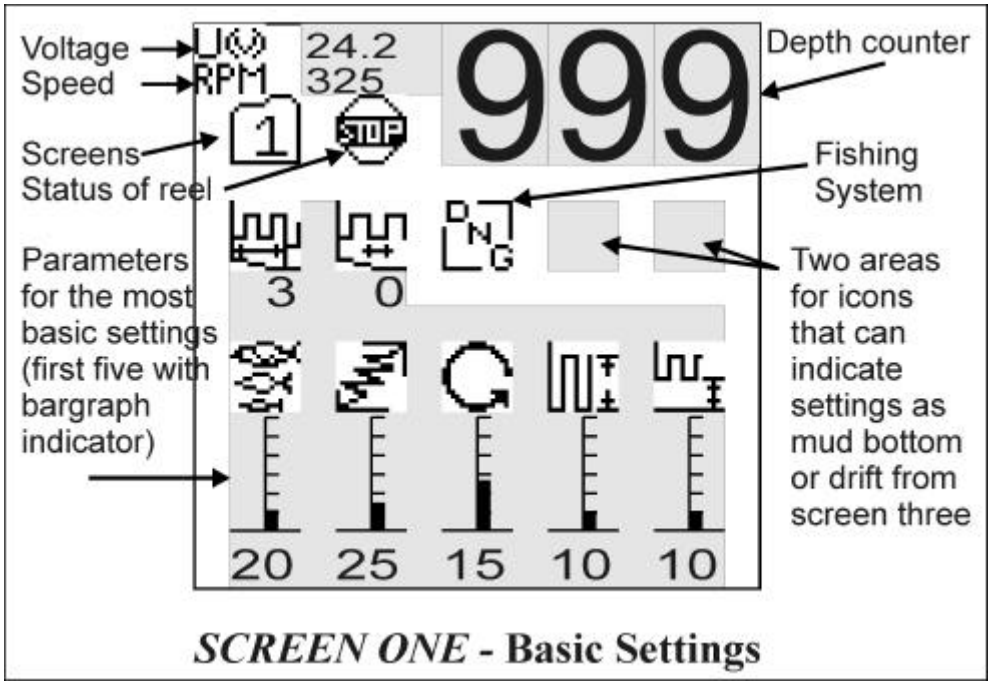

Figure 5

The top third of the display is used for information only and will not change when moving between screens. It shows the battery voltage and the speed of the drum. It also shows the depth (the unit is optional: meters, feet and fathoms) and the status of the reel i.e. if it is jigging, paying out, hauling or in stop position.

Jigging	Hauling	Own jig (the number can be 1-5)	Stop position	Paying out	Paying out with slow down

This one third of the screen also shows the label for the screen i.e. an icon with a number that indicates which screen is active. This same icon is used to move between screens and that is the only part of this one third of the screen that can be reached by the user.

The five screens are organized in such a way that the basic parameters (the ones that are most frequently used) are shown on the first screen, fishing systems are shown on the second screen, miscellaneous parameters on the third one and jig types on the fourth. The fifth screen shows parameters that are mainly used for maintenance.

On screen three and five there is additional information for the user. This will be explained in the following chapters (see sections "SCREEN THREE – Miscellaneous Parameters" on page 27 and "SCREEN FIVE - Maintenance" on page 33).

If the cursor is flashing on one of the screens and none of the touch pads is pressed for one minute, then screen one will automatically be displayed and the cursor will stop flashing.

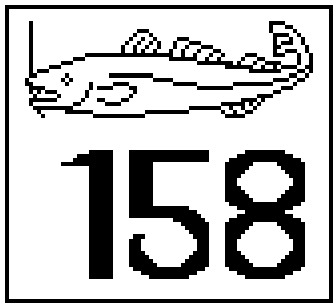

Figure 6

If the reel detects fish on the hooks, then a window will appear (see Figure 6) which shows the depth where the fish was detected. The window will be removed the next time one of the pads is pressed. This window will not appear if the user is altering parameters on one of the screens.

CONTROLLING THE REEL

The Basics

The reel is controlled by means of the touch pads on the front panel. These pads are used to move between the five screens, select icon on the active screen and change the value of the corresponding parameter. One of the pads changes the status of the reel. Each pad has a special function as described below.

The ***MAIN*** pad has two functions. Each time it is pressed it switches the reel between three *states* i.e. *hauling*, *stop* and *pay-out*. If the pad is constantly pressed for more than 5 seconds the reel will enter *Free state* and releases control of the drum which can then be turned freely.

Note! If the sinker is in the water while in Free state, it will pull out the line until the sinker hits the bottom.

The ***MODE*** pad has only two functions, it moves the cursor between icons and it is used to access a window where the depth of false bottom can be altered and the depth where the reel slows down when paying out the line. This will be explained later (see section “Slow down when paying out” on page 14).

When this pad is pressed the first time the cursor will start flashing on the first icon on the screen one. If it is pressed while the cursor is flashing then the cursor will move to the next icon on the screen. If it is pressed constantly for more than two seconds the cursor will move to the first icon on the screen and if screen one is the active one, the cursor will disappear (stop flashing).

The ***MINUS*** pad has three different functions: decrease values of parameters, deactivate/remove settings and store own jig.

Its main function is to decrease values of parameters, i.e. if the cursor is flashing on an icon for a parameter (icon with a number below it) one can decrease the value by pressing this pad.

The second function is to deactivate or remove a setting e.g. a false bottom if it has been set or to clear the depth counter (see section “Set zero point (clear depth counter)” on page 15 for details).

The ***PLUS*** pad has two functions, increase and select/set. The main function is to increase values of parameters. The second function is to select or activate a setting. For instance if the cursor is flashing on the icon for the fishing system the user wants to use he can select (activate) it by pressing this pad. Another example is if the user wants to set a false bottom it can be done by pressing this pad at the desired depth when the reel is in the *Pay-out state* and the cursor is not flashing.

Advanced Features

All touch pads have their basic functions but they can also be used to access more advanced features. The main pad doesn't give access to any features but the other three do. Let's take a closer look at each one of the advanced features:

False bottom

There are two ways to set/clear a false bottom. One of them is by working in a special window that is accessed with the MODE pad. The other one is by pressing the PLUS/MINUS pad when the reel is paying out.

Let's begin with the first one:

If screen one is the active one and the cursor is not flashing then a special window (see Figure 7) can be accessed by pressing the MODE pad for five seconds.

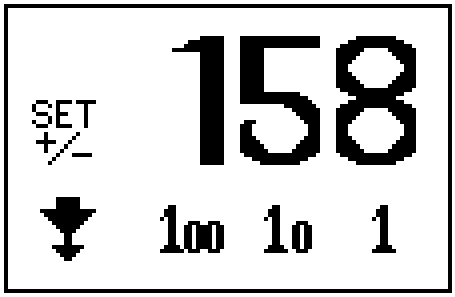

Figure 7

The icon in the lower left corner of the window will start flashing. The function of this icon will be explained later in this section (see Slow down when paying out on page 14). Now the next three icons can be used to alter the digits in the three digit figure in the window. When the figure has been set to the depth of the false bottom, go to the "SET +/-" icon and press the PLUS pad. Now a line will appear beneath the depth counter indicating that a false bottom has been set. The icon in the lower left corner of the window will start flashing again and you should press the MINUS pad to exit the window. The depth of the false bottom can always be reviewed by accessing this window again. To exit the window without changing anything press the MINUS pad when the icon in the lower left corner is flashing.

The same method can be used to change the depth of the false bottom. To clear the false bottom, simply go straight to the "SET+/-" icon and press the MINUS pad. Then the line beneath the depth counter will disappear indicating that a false bottom is no longer active.

The other way to set/clear a false bottom is by pressing the PLUS/MINUS pad when the reel is paying out and the cursor is not flashing on screen one. If the PLUS pad is pressed then a false bottom is set at the depth shown by the depth counter. The reel will immediately start to jig and a line will appear beneath the depth counter indicating that a false bottom has been set.

On the other hand if a false bottom has been set (there is a line beneath the depth counter) and the MINUS pad is pressed when the cursor is not flashing on screen one and the reel is paying out or jigging downwards, then the false bottom will be cleared. The reel will continue what it was doing (paying out or jigging downwards) and the line beneath the depth counter will disappear indicating that a false bottom is not active.

Slow down when paying out

Just like it is possible to set a false bottom at a certain depth, it is also possible to make the reel slow down at a certain depth when paying out the line. This is useful when fishing close to the bottom since it is less likely that the fish gets scared away when the sinker hits the bottom.

Just like the false bottom feature there are two ways to utilize this one. The first one is by accessing the same window as for false bottom by pressing the MODE pad for 5 seconds when the cursor is not flashing on screen one. Now press the PLUS when the icon in the lower left corner is flashing (see Figure 7 on page 13). Another window, very similar to the first one will open. The icon in the lower left corner is flashing and the next three icons can be used to change the three digit figure in the window. When the figure has been set to the depth where the reel should slow down, press the PLUS pad when the "SET+/-" icon is flashing. Then the window will close and the next time the reel pays out the line, a different icon for the *Pay-out state* will appear. Instead of the "arrow down" icon  there will be another one indicating that a payout with  slow down is active.

The depth of the slow down can always be reviewed by accessing this window again. By pressing the PLUS or MINUS pad when the icon in the lower left corner is flashing you will close the window without any changes taking place.

To disable (clear) this slow down function, simply access this window again and press the MINUS pad when the "SET+/-" icon is flashing.

The speed of the drum when the reel has slowed down is controlled by the parameter DOWNJIG SPEED whose function is explained on page 31.

The other way to utilize the slow down feature is by pressing the MINUS pad at the depth where the reel should slow down. The reel must be paying out the line and the cursor must not be flashing (only possible on screen one). The reel will immediately slow down to DOWNJIG SPEED and keep that speed until bottom (or false bottom) is reached. As long as this slow down feature is not deactivated, the reel will slow down at this depth each time it pays out the line. Pressing the MINUS pad again, when the reel is paying out the line and the cursor is not flashing, deactivates this function.

This feature works fine with false bottom but it must be activated before the false bottom is set if the special window is not used. Otherwise the false bottom would be cleared.

If both the false bottom and slow down features are active, by pressing the MINUS pad twice you will clear them both. The first push will clear the false bottom, the second will deactivate the slow down function.

Set zero point (clear depth counter)

Pressing the MINUS pad, when the reel is in *Stop state* and the cursor is not flashing will clear the depth counter.

It is sometimes necessary to be able to clear the depth counter. For instance if the line has broken and a new leader and sinker have been attached to the end of the line. In that case the depth counter might be far away from zero.

Another instance is if the user wants the reel to stop hauling when the leader or the swivel is at a certain place.

Fast hauling

The hauling power can be temporarily increased, without adjusting the parameters POWER FACTOR (see page 29) and HAUL (see page 16), by pressing the PLUS pad when the reel is hauling. The first time you press the PLUS pad the POWER FACTOR is increased to 10. After that the hauling power is increased by 10 each time you press the PLUS pad.

Pressing the MINUS pad once will deactivate this fast hauling feature. If it is not deactivated manually it will be done automatically when the reel stops hauling.

This feature is useful when the boat must be moved quickly e.g. when the shoal is no longer beneath the boat. By pressing the MAIN pad to make the reels haul and then press the PLUS once or twice, the reels will haul the line very fast.

Elastic hauling

The hauling power can also be decreased temporarily without changing any parameters by pressing the MINUS pad when the reel is hauling. The first time you press the MINUS pad the POWER FACTOR is decreased to zero. After that, the hauling power is decreased by 10 each time the MINUS pad is pressed.

Pressing the PLUS pad once will deactivate this elastic hauling feature. If it is not deactivated manually it will be done automatically when the reel stops hauling.

This feature is useful when lines from two or more reels have got tangled. The reels can then help by hauling elastically while the fisherman untangles the line. By pressing the MAIN pad to make the reels haul and then press the MINUS pad once or twice, the reels will haul elastically.

SCREENS

SCREEN ONE - Basic Settings

FISH SENSITIVITY

The fish sensitivity is used to select the weight that has to be added to the line (the weight of fish on the hooks) for the reel to haul it in automatically. The higher the fish sensitivity the more weight must be added to the line before the reel hauls it in.

The reel detects (in each jigging action) how much power is required to haul in the line and it compares this power to a calculated value based on the value of the fish sensitivity. If the power consumption exceeds this value the line is hauled. If the fish sensitivity is set too low (compared to the weight of the sinker) the reel will bring up small fish or even haul when there is no fish at all.

The fish sensitivity parameter can be varied from 0 to 33. The default value is 15.

Note: When we made the fishing systems we assumed that a sinker weighing 2 kg was used and the fish sensitivity is set accordingly. If, however, a lighter sinker is used a corresponding adjustment must be made to fish sensitivity, i.e. you decrease it. On the other hand it must be increased if a heavier sinker is used.

HAUL

This parameter controls the hauling speed and the line pull. The reel tries to maintain constant power. This means that if little weight is on the line the speed is high. On the other hand if there is much weight on the line then the speed will be low.

This behavior is particularly important when fishing in rough sea because it minimizes the risk of losing fish off the hooks when the boat is rocking in the waves. This is due to the fact that even though the boat is rocking, the fish is pulled at almost constant speed up to the surface.

A higher number indicates more hauling speed and harder pull. The reel slows down for the last few meters before it stops, when all the line has been hauled.

If the reel is hauling, the cursor is not flashing and the plus pad is pressed when the depth has become zero the reel will increase the speed to full hauling speed. This feature is used when hauling the line onto the drum for the first time (you don't want to haul 500 meters of line at 50rpm!). Next time you press the main pad the reel will come to a stop.

The haul parameter can be varied from 0 to 99 but the default value is 50. (see also POWER FACTOR on page 29).

JIGGING POWER

The jigging action is performed at constant power. This means that it is not possible to maintain the same jigging speed since the speed will depend on how much weight is on the line (how much fish is on the hooks). The more weight the less speed. The higher the value of the parameter the more power will be used when jigging upwards.

The value can be varied between 0 and 79 but the default value is 10.

NOTE: If, for a given value of jigging power, the weight on the line is high enough to prevent the reel from turning the drum then it will always interpret it as fish, no matter how high the value of the fish sensitivity.

JIGGING LENGTH

Jigging length is the span of each jigging action (see Figure 8 on page 18). Each step of the jigging length parameter equals approximately 0.2m (0.66ft, 0.11fa) or there are 5steps/m (3steps/2ft, 9steps/fa). Due to the fact that the diameter of the line on the drum depends on the bulk of line on it, the above figures are not accurate. If you have a very long line on the drum and you are jigging at a small depth the diameter of the line on the drum is big and hence each step of the parameter is a little bit more than 0.2m. On the other hand if you are jigging at great depth and there is almost no line left on the drum the diameter of the line is small and hence each step of the parameter is less than 0.2m.

In future versions of the program this will be compensated for.

The jigging length parameter has 99 steps and can thus be varied from 0 to 19.8m (65ft, 10.8fa). The default value of the parameter is 20 (4m/13ft/2.2fa) (see also UNIT on page 35).

BOTTOM DISTANCE

Bottom distance constitutes the minimum distance of the sinker from bottom during the jigging operation (see Figure 8 on page 18). Each time the sinker hits the bottom, the reel will haul this length of line to maintain the distance from bottom according to the value of this parameter. The steps are the same as for the jigging length parameter.

BOTTOM TIME

Bottom time denotes the time that elapses between two bottom distance checks (see Figure 8 on page 18) i.e. the reel searches for bottom and adjusts the jig in order to keep the bottom distance correct. Each step of this parameter equals 10 seconds. The value of this parameter can be altered from 0 to 99 which equals 10sec to 16.5min. The default value is 6 i.e. one minute. If bottom time is set to 0 the reel will search for bottom in each jig.

This feature can be extremely valuable when bottom fishing. A very common situation is when fish gathers at an edge on the bottom e.g. the edge of the continental shelf. If the boat is drifting from the shallow water into deep water then the depth changes rapidly and if the distance to the bottom isn't checked frequently then the reel would be jigging far away from the bottom most of the time.

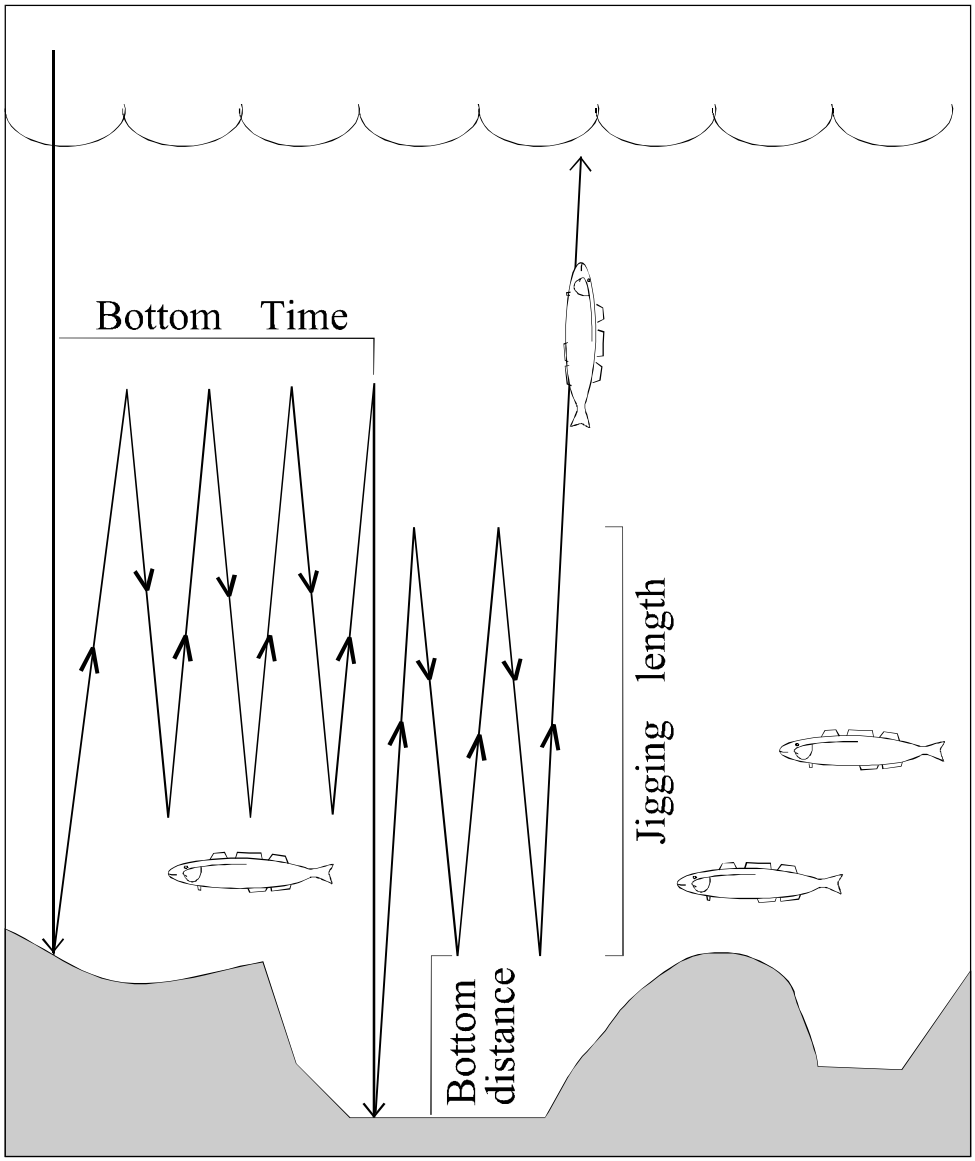

Figure 8

WAITING TIME

When the value of the waiting time parameter is not at zero the drum comes to a stop after each jigging action and it stays that way until the waiting time has elapsed (see Figure 9 on page 19). The reel will then perform one jigging motion and wait again. Each time it jigs upwards it checks if there is fish on

the line. This process continues until there is fish on the hooks or some other "time-related" function interrupts e.g. the bottom time or drift.

There are 99 steps and each step equals one second. The default value is zero. Time setting is used a great deal when fishing with bait.

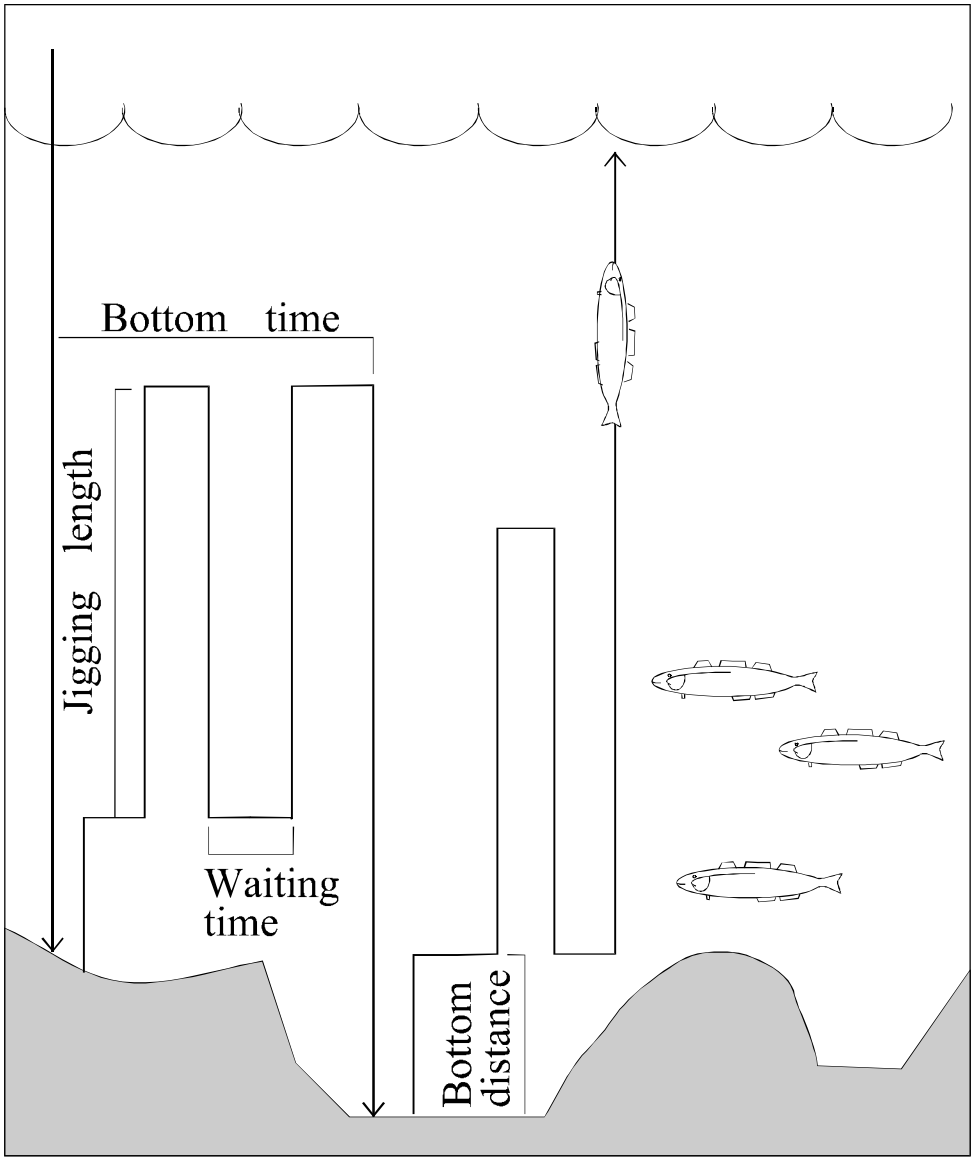

Figure 9

SCREEN ONE – Squid Settings

On screen two (see section "SCREEN TWO - Fishing Systems" on page 24) is a fishing system for Squid fishing. If it is activated, screen one will change and it will show special parameters that are only used when fishing for squid.

The Squid system is also used when fishing for mackerel and it has proven to be very efficient for that use. The adjustments that must be made to the values of the parameters when fishing for mackerel are explained in a special section (see section "

SCREEN ONE – Mackerel Settings" on page 22).

Figure 10

The method used to fish for squid is quite different from the conventional method of jigging. Special hooks are used since the squid actually grabs them instead of biting them (see Figure 10). The leader has many hooks (up to 50 if the machine is powerful enough) spaced approximately 1m from each other. Powerful light sources are used to attract the squid up to the surface. No jigging movement is performed, the line with the leader is simply paid out to a certain depth and then hauled back in. The haul is very special since the speed of the line is changed periodically. A specialized squid machine has a drum that is oval shaped (elliptical), which causes periodic change in the speed of the line. As long as the haul is done this way the squid will hold on to the hook. But when it has been hauled on-board and dragged horizontally for a moment, it will release the hook.

The *C-6000i* jigging reel requires accessories for squid fishing. This is due to the drum design i.e. a leader cannot be reeled onto the drum without the hooks and the line getting tangled.

The jigging reel must be installed in such a way that the fish (squid) can be hauled "on board" without the leader and the hooks being reeled onto the drum. This is possible by means of pulleys that can accommodate the leader when all the line has been reeled onto the drum.

Since the drum of the *C-6000i* is not oval the motor must simulate the special haul. The user can achieve this simulation by means of three

parameters: the hauling power, pulling time and relax time. While hauling, the power of the motor is periodically changed and the user can alter the duration of each period (see Figure 11)

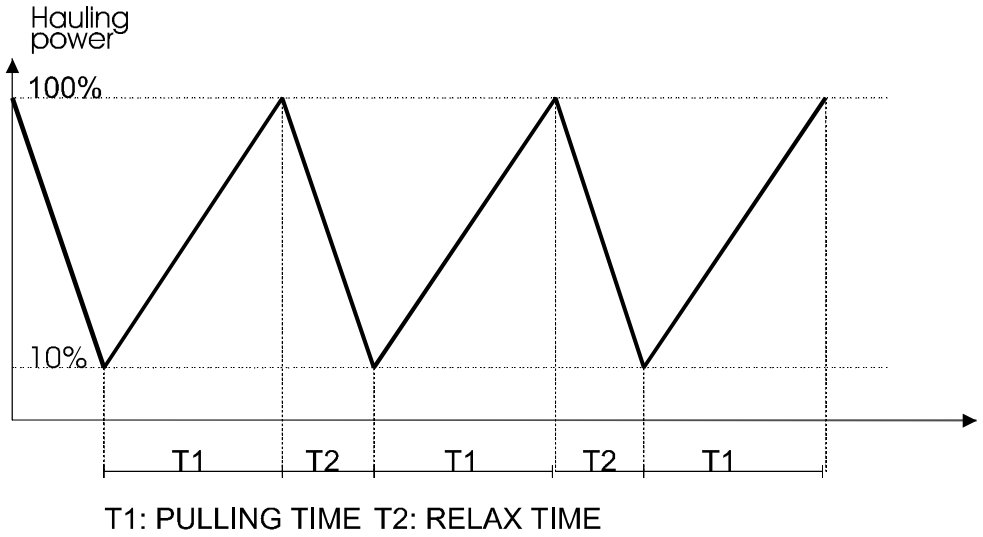

Figure 11

The first time when the reel pays out the line, the user must set a false bottom at the depth where he wants the reel to start hauling. Then the reel starts hauling the line and when it is hauled in altogether, it pays it out again until the same depth is reached. Then it starts hauling it in again etc. The user can make the reel decrease the depth of the false bottom by a certain value each time it pays out the line. This is useful when the squid is moving towards the surface e.g. due to the use of lights.

DECREASE DEPTH

Each time the line is paid out, the depth at which the reel starts to haul is decreased by this value. The step size is 0.2 meters. Default value is zero. This is useful when lighting is used to attract the squid up to the surface. The squid is then constantly moving upwards and the depth that the reel must start hauling must be decreased each time the line is paid out.

HAULING POWER

This parameter controls the hauling power. It can be varied from 0 to 99 and the default value is 30.

PULLING TIME

When the line is hauled in the power is periodically changed. This parameter controls the duration of the period where the power is increased (see Figure 11). The step size is 1/10 sec and the default value is 32 (3.2sec).

RELAX TIME

This parameter denotes the duration of the period where the hauling power is decreased (see Figure 11). Each step equals 1/10 of a second and the default value is 20 (2.0sec.)

RELEASE WAITING TIME

When the reel has hauled the line in altogether it stops for a period of one "release waiting time" before it pays out the line again. Each step equals one second and the default value is 2.

This can be useful to make sure that the squid on the last hook has released the hooks before the line is released into the water again.

HAUL WAITING TIME

The duration of a complete stop, when the line has been paid out to the depth of the false bottom, before the reel starts hauling the line. Default value is zero but it can be varied from zero to 99.

MAXIMUM HAULING SPEED

The maximum speed when hauling in the line i.e. the reel will never exceed this speed when hauling the line no matter the value of the hauling power.

This parameter is necessary when fishing with many hooks and/or strippers e.g. when fishing for mackerel. In that case the power must sufficient to haul the line when there is fish on every hook and to tear the fish off the hooks by pulling them through the stripper. But in the case when there isn't fish on every hook, the reel would haul it very fast making the "tear off" process hard to control.

The default value is 25 but the value can be varied from 0 to 50. Each step equals 10 rpm making the default value equal 250 rpm. This default value should be suitable in most cases but if fish tends to be thrown into the sea during the "tear-off" process decrease this value.

NOTE: When the squid system is active the slack sensor is inactive i.e. the line does neither have to go through the slack sensor nor the pulley of the arm.

SCREEN ONE – Mackerel Settings

The jigging reel can be used without accessories for mackerel fishing just like when fishing for cod, pollack etc. But since the fish must then be stripped off the hooks by hand and the leader must also be hauled in by hand (it cannot be wound onto the drum) it is clear that this is a very tedious job. Much greater efficiency can be achieved by use of a stripper and pulleys. The high pulling force capability of the reel makes it possible to have up to 70 hooks on the leader. Figure 12 shows a stripper made by DNG.

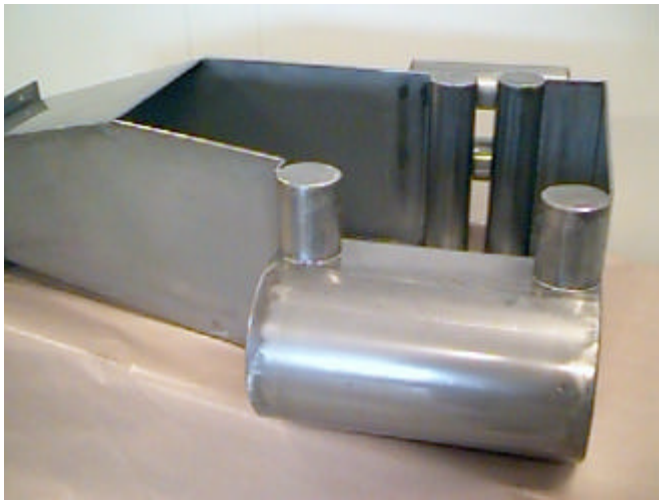

Figure 12

Figure 13

When fishing for mackerel with the *C-6000i* and a stripper, the squid program is selected (see the section "SCREEN ONE – Squid Settings" on page 19) and the special parameters on screen one adjusted as described later in this section. The leader usually has 30-70 hooks approximately 30-40cm from each other. The length of the leader (and consequently the number of hooks) depends on how long a line the pulleys can accommodate. The same thing applies as for squid fishing i.e. the hooks can never be reeled onto the drum.

The hooks used for mackerel fishing are not the same as used for conventional jigging. They are smaller and usually only red colored artificial bait (rubber) is used. Figure 13 shows an ordinary jigging hook size 12, an EZ-14 jigging hook and a mackerel hook compared to the size of a stop ring.

When the mackerel has been spotted underneath the boat the line is paid out until it reaches the same depth as the mackerel. Then a false bottom is set at that depth. Now, the reel will start hauling the line and it will continue to do so until it reaches zero depth. Then it stops for a while (see RELEASE

WAITING TIME on page 22) before it pays out the line again. When it reaches the depth of the false bottom it will start hauling the line and everything starts over again.

Only the values of two parameters on screen one must be changed.

HAULING POWER

The default value of this parameter is 30, which is probably too low in most cases. It should be increased to at least 50 but the best value depends on the number of hooks on the leader and the weight of the sinker. Common value for 60-70 hooks is 80-90.

NOTE: The HAULING POWER should always be set high enough to make the tear off process fluent. Use the MAXIMUM HAULING SPEED parameter to control the speed.

RELEAX TIME

The value of this parameter must be set at zero.

MAXIMUM HAULING SPEED

The default value (25) should be suitable in most cases. If fish tends to be thrown into the sea during the "tear-off" process decrease the value of this parameter.

NOTE: Make sure that when the last hook on the leader has been pulled through the stripper, the first hook has not been wound onto the drum and that the depth counter shows zero at the place where you want the reel to stop hauling. For detailed information about how to adjust the zero level see the section "Set zero point (clear depth counter)" on page 15.

If a stop ring (float) is used to ensure that the leader is never wound onto the drum, make sure that doesn't prevent the reel from reaching zero depth when hauling the line.

SCREEN TWO - Fishing Systems

Fishing systems hold stored values for all parameters on screen one. They also include information on what type of jig should be used (see "SCREEN FOUR - Jigging Types" on page 31) and they always set the number of steps for "step-jig" to a value of five (see "STEPS" on page 30).

The fishing systems also store information about the downward jig i.e. the factory made systems always set the parameter SPEED CONTROLLED DOWNWARD JIG (page 31) to a value of 0 (inactive) but the "OWN SYSTEMS" store the value of this parameter and the parameter DOWNJIG SPEED (page 31).

Moving the cursor to an icon for a system and pressing the plus pad, activates that fishing system. When a system has been activated the corresponding icon will be displayed on screen one.

Search systems are different from the other systems since they do not hold values for any of the parameters nor the type of jigging. If a search system is activated the reel will use the active fishing system to search the sea for fish i.e. it will jig a defined number of times (default: 10) at one depth, then haul one jig length and start jigging again, then haul one jig length etc. When it reaches the top of the search span it will check for bottom and then start all over again. The icons show the defined search span. If the reel finds fish, it sets a false bottom at that depth, deactivates the search system and hauls the fish. Next time when the user makes the reel pay out it will stop at the depth where the fish was caught and start jigging.

The user can change the search area (see SEARCH SPAN on page 30) and the number of jigs at each depth (see ***SEARCH COUNT*** on page 30). The section "SEARCH SYSTEMS: on page 26 explains how a search system works.

If a search system is activated its icon will override the icon for the fishing system as long as the search system is active. When it becomes inactive the previous icon (the icon for the active fishing system) will be displayed again.

A search system can be deactivated by moving the cursor to one of the icons for search systems and pressing the minus pad or by choosing one of the other fishing systems.

DNG

This system holds the factory settings and this is the active system when the reel is connected to a power source for the first time.

If you have trouble and have lost your way in all the parameters you can set the basic parameters to the factory setting by activating this fishing system.

FISHING WITH BAIT

This system is used when bait is to be used on the hooks instead of rubber. When fishing with bait the reel waits slightly at the bottom and at the top of the jigging motion and jigs in short and slow movements. Fish sensitivity is low.

POLLACK FISHING

Pollack fishing uses rapid jigging and high fish sensitivity. Since it is not likely that the fish will get off the hook a powerful hauling force is used for increased efficiency.

STEP JIGGING

It is similar to fishing with bait but instead of going up and down the reel jigs upwards a defined number of times (see STEPS on page 30) waiting slightly between each jig upwards. When completed it will go down to the depth where the first jig was made and start all over again.

SQUID FISHING

This system is very much different from the other systems. This is due to the fact that the method used when fishing for squid is very much different from the conventional method of jigging. For detailed information see the section "SCREEN ONE – Squid Settings" on page 19.

SEARCH SYSTEMS:

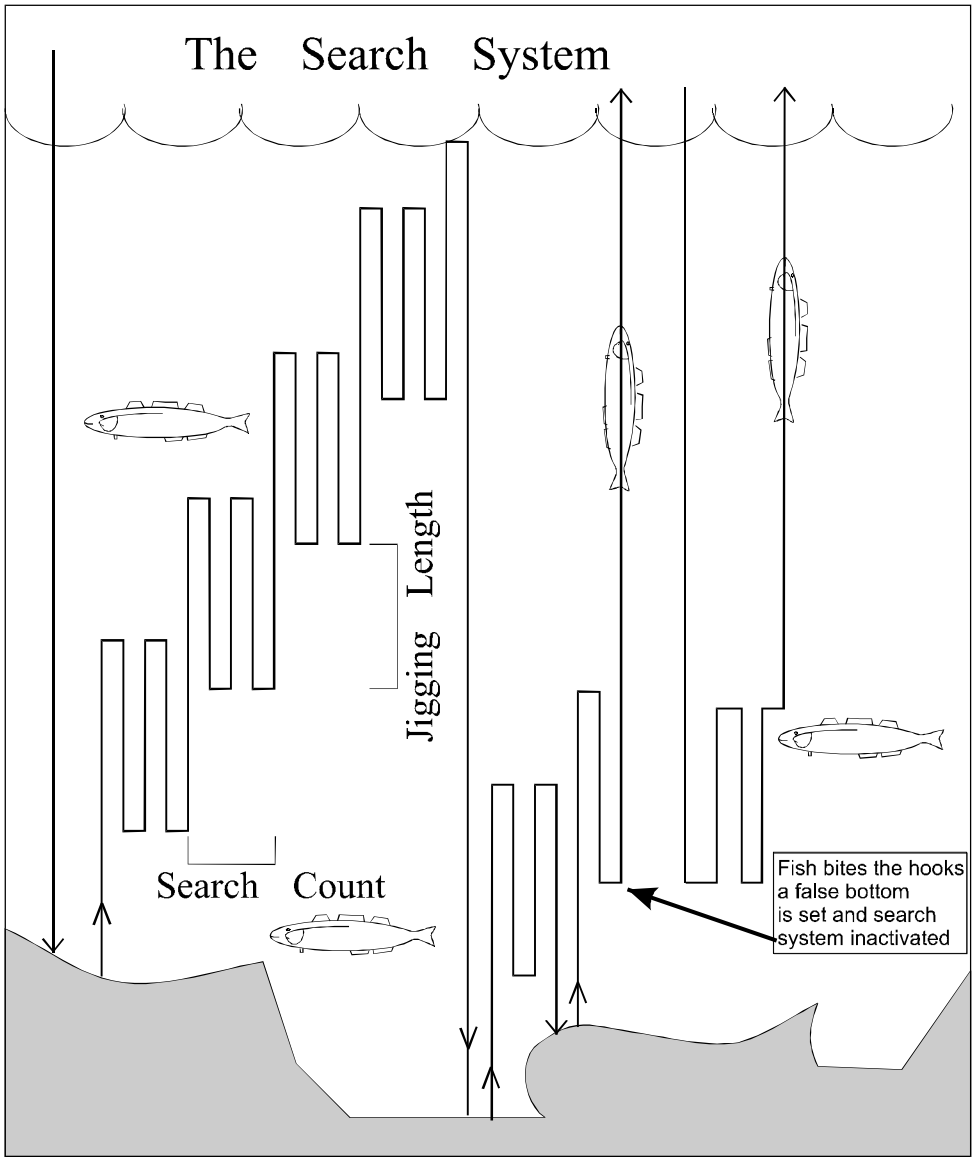

Figure 14

SEARCH ALL

In this search system the search span is from the bottom to the surface. If a false bottom is set at some depth it will search from that depth up to the surface.

BOTTOM SEARCH1

The search span is from the bottom and half-way to the surface. A false bottom can be set to change the bottom of the search span.

BOTTOM SEARCH2

Same as above but the search span is from bottom and 25% of the way up to the surface.

SURFACE SEARHC1

This system is just like the first search system with a false bottom at a depth of 8 times the jigging length. It automatically sets the false bottom at this depth and then searches from there up to the surface. If the depth at bottom is less than 8 times the jigging length the false bottom will be set at that depth and each time the sinker hits the bottom the false bottom will be set accordingly.

SURFACE SEARCH2

Exactly the same as above but the false bottom is set at a depth of 4 times the jigging length.

OWN SYSTEMS

The user can store his settings in his own system 1 to 5. Moving the cursor to the desired system (1-5) and pressing the MINUS pad does this. Then the reel stores the values of all the parameters on screen one and also the type of jig. After this, the configuration can be recalled (own system activated) in the same manner as the other fishing systems i.e. by moving the cursor to the desired system and pressing the ***PLUS*** pad.

If an own system is activated it's icon will be displayed at the same place on screen one as the icons for the other factory made systems.

SCREEN THREE – Miscellaneous Parameters

BEEP

If set at a value of one the reel will emit a sound when it finds fish and when it has hauled the line in altogether and stops. The sound when a pad is pressed cannot be turned off.

This parameter does also affect the external audio (see section External Audio in APPENDIX B - ACCESSORIES) i.e. external audio will be turned off also if the value of this parameter is zero.

LIGHT

Set to one to turn on the background lighting of the display. This is naturally a very useful feature when fishing in darkness but can also help at other circumstances to make the icons on the display clearer and easier to see. Default value at power on is zero (not turned on).

DRIFT

This parameter is used when fishing in heavy drift conditions. If not in zero position, the reel will haul the line in altogether and then pay it out again automatically. This is done in order to ensure that the line does not stray away from the boat while the fish is underneath.

The frequency of this action depends on the value of the parameter.

Each step corresponds to one minute i.e. the value of the parameter corresponds to the number of minutes that elapse between hauling in motions of the reel. Default value at power on is zero.

MUD ON BOTTOM

If fishing is carried out on a bottom that is very soft (mud or sand) the sinker may get buried and the reel thus wants to interpret the resistance as fish if this parameter is not used. If in zero position, the reel does not try to detect fish in the first few rounds of the drum and hence there is no chance that the reel will take the bottom for fish.

Usually a value of one is enough. The higher the value the longer will be the hauling distance from bottom until the reel will try to detect if there is fish on the hooks. Actually each step of the parameter equals one round of the drum i.e. if the parameter is set to three the reel will not try to detect fish for the first three rounds of the drum after the sinker hits the bottom.

Default value at power on is zero (inactive).

BOTTOM SENSE TIME

Bottom sensing is vital for correct operation of the machine. By watching the slack on the line very closely it is possible to control the pay out operation and to tell if the sinker has hit the bottom or not.

The line goes through the loop on the slack sensor arm and when the line is stretched, it pulls the arm down. On the other hand when there is slack on the line, a spring will pull the slack sensor arm back up and the reel will know that there is slack on the line. Therefore it is very important that the slack sensor arm can move freely.

This parameter controls the bottom sensing time. The higher the number the longer must be the duration of the slack before the reel interprets it as bottom. The ***RESET*** function sets this parameter to 1, which is the factory setting.

For a value of one the reel is very quick to interpret any slack as a bottom. This is good when the bottom is rocky since it minimizes the risk of getting the sinker stuck at the bottom.

On the other hand it can be inconvenient when the sea is choppy. When the boat is rocking in the waves there will, occasionally, be a slack on the line even though the sinker has not reached the bottom. In this case it is necessary to increase the value of this parameter. A value around 10 should be appropriate in most cases.

When a small fish bites the hooks (not big enough for the fish sensitivity to trigger) and the reel keeps on jigging, it will not be able to jig as fast downwards since the fish resists the downward pull of the sinker. In this situation the reel sometimes comes to the erroneous conclusion that it has hit the bottom. Due to this the reel jigs a shorter distance downwards than it jigs upwards and hence is slowly moving away from the bottom. A solution to this problem is to increase the value of this parameter. This has the drawback of delaying the bottom sensing when the sinker actually hits the bottom. This delay can lead to loss of the sinker when fishing at a rocky bottom, e.g. a bottom made of lava.

POWER FACTOR

This parameter controls the elasticity of the hauling action. The lower the value the softer (more gentle) the hauling action. The power factor can be adjusted in the range of 0 to 10 but the default value (after reset) is 3.

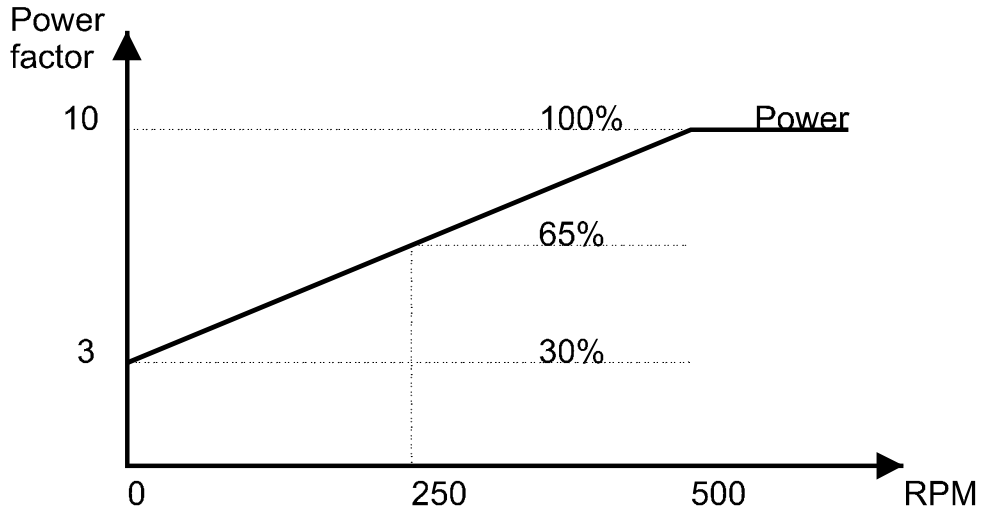

Figure 15

As an example of how the power factor works lets say that its value has been set at 3. Now the reel will use 30% of the power, as set by the hauling power parameter (see page 24), when the speed is 0 RPM and 100% when the speed is 500 RPM (see

Figure 15). At any other speed the power is linearly interpolated between these two values. In this case the power used at 250 RPM would be 65%.

This has the effect that if the power factor is set at a low value e.g. 0-5, then the reel will haul in slowly and elastically when there is some weight on the line but hauls in fast and powerfully if there is not. If the power factor is set at a value of 10, then the reel will use full power at all speeds.

STEPS

This parameter tells the reel how many steps to take in step jigging. Default is 5 (the same value as the "step jigging" fishing system sets it to).

SEARCH SPAN

This parameter tells the reel at what depth the top of the search span is. The surface is at zero and the bottom is at a value of 99. A value of 30 means that the reel should start searching at the bottom and stop when 1/3 of the distance from bottom up to the surface is left.

If one of the search systems is activated you can see how this number changes accordingly.

SEARCH COUNT

This is the number of times the reel jigs at each depth before it hauls in the line one jig length and starts jigging again. All the search systems set this parameter at a value of ten.

STOP AT ZERO

If not in zero position, this parameter tells the reel to stop as soon as the depth counter reaches zero when hauling in the line. If the value is zero the reel hauls the line until the stop ring reaches the pulley.

RESET

If you are in trouble and have lost your way in all the parameters you can reset (set the reel to the factory setting) the reel by activating the ***RESET*** function.

SLACK SENSOR OPERATION

The slack sensor arm is the only part of the reel that needs constant maintenance. To make this job as easy as possible information about it is displayed on screen three.

The icon for it can be found in the lower left corner of the display. On the left side of it two values are shown, which indicate the reading from the slack sensor (SL) and the current consumption of the reel (I(A)).

The reading from the slack sensor should be checked once in a while. This is done by watching the reading when there is no weight on the line (the slack sensor arm is all the way up) and when there is no slack on the line (the line pulls the slack sensor arm down). The reading should be 0 and 43-48 respectively.

If the reading is not correct then the slack sensor arm must be reconfigured on screen five (see the sections SLACK SENSOR UP and SLACK SENSOR DOWN on page 34).

SCREEN FOUR - Jigging Types

On this page the user can change the type of jigging (no parameters are changed) e.g. the pollack fishing system uses the ***DNG JIG*** but the user may want to use the pollack system with step jig. Then he first activates the pollack system and then moves to screen four and selects the step jig.

On this screen the user can also "record" his own jig i.e. he can turn the drum and the reel records his movements. He can then use it (playback) in his own fishing systems or e.g. instead of ***DNG JIG*** in the pollack system.

The desired type of jigging can be selected by moving the cursor to the icon for the jig and pressing the ***PLUS*** pad.

DNG JIG

The standard jigging action, going up and down. Sensing fish when moving upwards (hauling).

STEP JIG

Instead of going up and down, the line is pulled up a fixed number of times (see the parameter STEPS on page 30). Between each haul, the reel stops for a period of one ***WAITING TIME*** (see the parameter WAITING TIME on page 18).

SPEED CONTROLLED DOWNWARD JIG

If set at zero (default), the reel will pay out the line as fast as possible when jigging downwards. If set at the value of one, the reel will control the speed of the downward jig and try to maintain the speed as set by the parameter DOWNJIG SPEED.

DOWNJIG SPEED

This parameter controls the speed of the downward jig, if the speed controlled downward jig is active. The default value is 8 and each step equals 10 RPM. The default is then 80 RPM.

This parameter is also used when the slow pay out feature is used. In that case this is the lower speed.

JIGPOWER TO HAULPOWER

When the reel detects fish on the line it changes states, from jigging to hauling. Since fish is detected when jigging upwards the only change is the power i.e. it is changed from jigging power (see JIGGING POWER on page 17) to hauling power (see HAULING POWER on page 24). In order to avoid losing the fish off the hooks, the reel increases the power ten times slower than normally when hauling. This is done the first few meters. The number of meters that the reel behaves this way is controlled by this parameter. Each step equals 0.2m. The default value is 25, which equals 5m. The parameter can be varied between 0 and 99, which equals 0 –20m.

TANGLE DETECTION

This parameter, if set to a position other than zero, activates the tangling detection i.e. the machine will detect if the line is tangled with the line/leader from next jigging machine.

If the reel cannot start a single downward jig (due to a slack on the line) many times in a row it is a sign that either the depth is decreasing rapidly or what is more likely, that two reels on the same boat have their leaders tangled.

As an example of how it works, lets say that the value is set to 2 (the default value). Now, the reel is allowed to detect bottom two times in a row without being able to start a single downward jig (due to slack on the line). If it happens three times in a row, the reel interprets it as “a tangle” and starts hauling.

If the parameter is set to a value of zero this feature will be inactive.

JIG STEP SIZE

In some countries a very long jigging length is used. Normally the jigging length can be varied between 0 and 20 meters (see JIGGING LENGTH on page 17). If a longer jigging length is required then the step size can be altered. The default value is 2, which equals 0.2 meters. Each step equals 0.1 meters and the value can be varied between 1 and 99. Hence the step size can be varied between 0.1 and 9.9 meters and the jigging length between 0.1 and 980 meters.

OWN JIG

The user can record his own jig and store the recording in memories labeled 1 to 5 i.e. he can store five different jigs (recordings). This is done as follows:

First put the reel to *Stop state*. Then move the cursor to the icon for the memory that you are going to store your jig in. It is now ready to record

your movements. When you are ready, push the ***MINUS*** pad and the reel will release control of the drum, which can then be turned freely. Now the reel has started to record your movements. You can record simultaneously for a maximum of 80 seconds.

When you are finished push the ***MINUS*** pad once again. Now your jig has been stored and the reel takes control of the drum.

One big difference is between the standard jig types and recorded ones. This is that fish can be detected even though the drum is not moving.

Note! The reel starts to record when you push the minus pad and stops recording when you push it again no matter if you move the drum or not.

SCREEN FIVE - Maintenance

This screen cannot be entered if the reel is not in stop position. On this screen some maintenance parameters can be adjusted such as the signal from the slack sensor and maximum speed when paying out. In later versions the parameters for length and type of line used will be kept here.

At the bottom of the screen is this icon and on its right side are numbers in two rows. This is for information only and is used when configuring the slack sensor. The figure in the first row is the value of the signal from the slack sensor. The value of this signal is usually in the range of 90 to 160. The figure in the second row is the current consumption in amperes multiplied by ten.

SLACK SENSOR UP

This parameter is used to tell the reel the value of the slack sensor signal when there is a full slack on the line (slack sensor arm not pulled down by the line). When the slack sensor arm is pulled up against the motor housing by the spring, the value of the slack sensor signal is read from the screen. The value of the parameter is set at the same value.

Note: Only the two last digits of the value for this parameter are shown below the icon. Hence, if the value is increased from 90 to 110, then the value below the icon will change from 90 to 99, then it changes to zero and then it will change from 0 to 10.

If the value below the icon is 99 and it cannot be increased any more then the value of the parameter is 199. On the other hand if the value below the icon is 0 and cannot be decreased then the value of the parameter is 0.

If the value below the icon can be decreased from 0 to 99 or increased form 99 to 0 then you are changing the value of the parameter from 99 to 100 and vice versa.

SLACK SENSOR DOWN

This parameter is used to tell the reel, the value of the slack sensor signal, when the line is taut (the slack sensor arm is pulled down by the line). The correct method to set this parameter is as follows:

Hold the slack sensor arm down against the arm that carries the pulley. Read the value of the slack sensor signal from the screen. Set the value of the parameter at the same figure.

It is very important to keep these two slack sensor parameters correct since they affect the performance when paying out and finding bottom very much.

NOTE: The correct operation of the slack sensor can always be checked on screen three (see SLACK SENSOR OPERATION on page 30). This should always be done when the slack sensor parameters have been adjusted.

MAX PAY OUT SPEED

This parameter controls the maximum speed when paying out. Each step equals 10 RPM and the default value is 38, which equals 380 RPM. The value can be varied between 0 and 60.

The best value of this parameter depends on circumstances and type of line on the reel. If the sea is choppy it may be necessary to decrease this parameter, especially when using standard mono-filament line with much line on the drum. However if the sea is calm it may be possible to increase the value of this parameter and hence gain more speed and more efficiency.

BOTTOM SENSING

The reel senses when the sinker hits the bottom by watching the slack sensor signal as seen on screen three. If the parameters for the slack sensor arm are correct then this signal is in the range of 0 to 48.

When the sinker hits the bottom there will be slack on the line. If the signal drops below a certain value for a certain amount of time (see BOTTOM SENSE TIME on page 28) the reel will interpret it as bottom. This certain value, below which the slack sensor signal must drop, is determined by this parameter. The default value is 14 but it can be varied between 1 and 48.

In some cases when there is not much line left on the drum it might be necessary to decrease the value of this parameter. This could happen when fishing at much depth or when there is not enough line on the drum at all.

In these cases the slack sensor arm is not pulled down far enough when the line is taut and the slack sensor signal will be close to 14 or even below. If the slack sensor signal drops below 20 the pay out speed will drop considerably and the risk of detecting bottom falsely, due to the rocking of the boat, will increase a lot.

UNIT

This parameter changes the unit in which the depth is shown on the display. You can choose between meters, feet and fathoms. Below the icon there is a label that indicates the current unit (m = meters, ft = foot, fa = fathoms).

WEIGHT OF SINKER

This parameter is not active in this version of the program. It will be used to compensate for a sinker that does not weigh 2Kg in order to affect the fish sensitivity as little as possible.

LINE DIAMETER

This parameter is not active in this version of the program. It will be used to compensate for the diameter of the line on the drum when counting the depth.

LENGTH OF LINE

This parameter is not active in this version of the program. It will be used to compensate for the amount of line on the drum when counting the depth.

MAGNIFIED VIEW

When not at zero, the active icon (the one that is flashing) on the screen will be magnified and will appear twice as large. The parameter determines how many times an icon must have flashed before it is magnified.

If this parameter has a value of 2 (the default value) then the active icon will flash twice before it is magnified.

SCREEN ZERO - Communication

If the minus pad is pressed when the SCREEN icon is flashing and the reel is in stop position then the communication screen will appear. The communication feature allows up to five reels to be connected together, along with an external whistle and remote control.

At the moment only a few communication features are included but future versions of the program will include a number of them.

The communication capability of the reel makes it possible to upgrade the program very easily and without touching a single screw in the reel. All C–6000i jigging reels include the program upgrade capability no matter which version of the program is in use.

Before any of the communication features can be used the following parameters must be set correctly.

IDENTIFICATION

This parameter is the identification number for the reel when communicating with other equipment. If not at zero, the reel will communicate but if set at a value of one then this reel controls all communication. If set at a value of zero (the default value) it will not communicate at all.

Only one of the reels can serve as a monitor and there must always be one monitor. All the other ones must have another distinct identification number in the range of 2 to 5.

EXTERNAL WHISTLE

This parameter activates the external whistle (audio transducer). If active, then the reel will emit a sound each time a fish is detected and the reel starts to haul, and when the reel has hauled the catch up to the surface.

If at zero (the default value) then the external whistle is not used by this reel.

On the other hand if not at zero then the value will determine what type of sound will be emitted. Seven different sound combinations are available so each reel can have its own.

Each time the value is changed the reel will give an example of the sound selected.

WHISTLE WHEN UP

This parameter controls when (at what depth) the reel will whistle when it has hauled the catch up to the surface. Each step equals 0.2m and the default value is 10 (2m).

For the default value, the reel will emit the sound at a depth of 2m. This feature can be very important e.g. when fishing for cod, since the fish sometimes escapes if someone isn't ready to grab the leader and continue hauling it, before the reel has come to a full stop.

ALWAYS ONE REEL JIGGING

If the value of this parameter is not at zero then this reel will always make sure that there is one reel jigging before it hauls in the catch. If there isn't one reel jigging it will wait until another machine starts to jig before it hauls in the catch.

This feature is only feasible if all the machines are synchronized. In future versions of the program, however, then this synchronization will not be necessary i.e. all the reels will know which reels active.

Hence it will be possible in future to have two out of four reels make sure that there is always one jigging but the other two just haul in the catch when they want.

Even though the drift feature (see DRIFT on page 28) is active the reels will not haul unless there is one reel jigging.

In this version of the ***C-6000i*** program this feature is not active when using the squid system nor when using own jig. It will, however, be included in future versions.

If this feature is active and the reel detects fish on the hooks but is not allowed to haul, then the fish detection window will appear (see Figure 6 on page 11). If, while waiting for other reel to start jigging, the reel no longer detects fish on the hooks, it will not haul when allowed but the fish detection window will not be removed, to inform the user that a fish has been detected but is no longer present.

TROUBLESHOOTING

1.

The reel hauls in the line when there is no fish on the hooks, why?

A:

There can be three reasons for this behavior i.e. the value of the FISH SENSITIVITY parameter is too low compared to the weight of the sinker or the DRIFT parameter is not at zero making the reel haul every "DRIFT parameter" minute. If this is the case the icon for DRIFT appears underneath the depth counter on screen one.

If this happens only when the sinker hits the bottom then it is likely that there is mud on the bottom which the sinker gets buried in. Increasing the value of the "MUD ON BOTTOM" parameter to a value of 1 will usually solve this problem.

2.

The reel does not turn the drum and the voltage measurement shows 54V?

A:

If you turn off the reel and turn it on again within 5-10 seconds, sometimes the controller fails to start. Just turn off the reel and wait for 10 seconds before you turn it on again.

3.

The reel finds bottom before the sinker actually hits the bottom?

A:

The most simple reason for such behavior is that a false bottom is active. If this is the case then a line is written on the screen beneath the depth counter. This happens if you press the PLUS pad when the reel is paying out and the cursor is not flashing. You can remove this setting by pressing the MINUS pad when the reel is paying out and the cursor is not flashing.

If you don't have a false bottom set check the SLACK SENSOR signal on screen three. If the slack sensor is configured correctly the value is zero when the slack sensor is up against the motor house and 48 when it is down against the arm.

The third possible reason is that the value of the BOTTOM SENSE TIME parameter (28) is too low, the value of the MAX PAY OUT SPEED parameter (34) too high or a combination of both. First try increasing the BOTTOM SENSE TIME, even a value of 10 to 20 is in order. If that doesn't help try decreasing the MAX PAY OUT SPEED.

The reel pays out too slowly?

A:

It is most likely that the slack sensor is out of order and that it needs a reconfiguration. Check the SLACK SENSOR signal on screen three (30). If it is out of order it must be configured by using the appropriate parameters on screen five (33).

If the slack sensor is in order then check if the "Slow down when paying out" is active (14) or check the MAX PAY OUT SPEED parameter (34).

5.

The reel barely finds bottom and sometimes it even tangles the line!

A:

A correctly configured slack sensor is the key element when the reel pays out the line and finds bottom. First of all check the SLACK SENSOR signal on screen three (30). If it is not in order reconfigure it by using parameters on screen five (33).

The value of the BOTTOM SENSE TIME parameter (28) affects the behavior, when the sinker hits the bottom. But no matter its value, the reel should always stop paying out when the value of the slack sensor signal is close to zero.

6.

Each time the sinker hits the bottom the reel finds fish!

A:

If the bottom is soft (made of mud) the sinker may get buried at the bottom and the reel interprets the resistance as fish. Setting the value of the MUD ON BOTTOM parameter (28) to a value of one should normally solve this problem.

7.

The reel doesn't haul in when it finds fish?

A:

This can happen when using the communication feature. Then the reel is not allowed to haul since there is no reel jigging. When it finally gets permission to haul it has detected that the fish is no longer present. See ALWAYS ONE REEL JIGGING on page 36 for details.

APPENDIX A - WARRANTY

Your ***C-6000i*** jigging machine comes with a two-year hardware warranty. DNG Sjóvélar Ltd. (DNG) warrants this jigging reel against defects in material and workmanship for a period of two (2) years from the date of purchase from DNG or an authorized DNG agent. Proof of purchase (dated invoice from DNG or an authorized agent) will be required before any warranty consideration by DNG occurs.

This warranty does not cover any damage caused by negligence, non-authorized modifications nor parts installed without prior written permission from DNG.

Due to the importance of this jigging reel being completely watertight, any attempts by unauthorized individual(s) to open up the casement of the jigging reel will void this warranty.

This warranty does not apply if the jigging reel has been damaged by accident, abuse, misuse or misapplication, nor as a result of service to the jigging reel by anyone other than by DNG.

If this jigging reel has to be shipped to the nearest agent for repair the shipping cost is always at buyer's expense. If warranty applies, shipping cost back to the user is free of charge to him.

DNG is not responsible for any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use, this jigging reel. This includes damage to property and, to the extent permitted by law, damages for personal injury. This warranty is in lieu of all other warranties including implied warranties of marketability and suitability for a particular purpose.

APPENDIX B - ACCESSORIES

External Audio

Available for the ***C-6000i*** jigging machine is an external audio transducer, which connects to the jigging machine via the two communication wires. This is for those who want to make sure that they always know when the jigging reel is hauling fish. The sound effect is considerably high but can be varied a bit with a manual volume control on the transducer.

Five jigging machines can share one audio transducer, each one having distinct sound scenario.

The audio transducer is watertight and can be placed either inside or outside. See also the section EXTERNAL WHISTLE page 36.

Remote Control

In future a remote control will be available for the C-6000i jigging machine. It will allow the user to control the jigging machine remotely from the cabin and it will be able to show the status of each reel e.g. the depth counter, if it is hauling or jigging etc.

It will utilize the two communication wires in the power cable of the jigging machine to communicate with each machine.

APPENDIX C - HOW TO CONTACT US

DNG Sjóvélar Ltd. has agents in many countries. If there isn't one in your country please contact the nearest one and he will assist you or direct you to the one who takes care of your country.

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