

IB INTERNATIONAL Pty Ltd



OCMIS INSTRUCTION MANUAL GOLDEN RAIN



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(Ver. Jan07)

INTRODUCTION

The “Golden Rain” is a computerised electronic instrument designed to maximize efficiency of irrigation applications using a hard hose traveller while simplifying an otherwise complicated procedure. It automatically:

- Measures the feet of hose unwound;
- Calculates the necessary working time based on the desired programmed speed;
- Consistently indicates the feet (or meter) of hose remaining to be reeled in;
- Continuously updates the working time; and
- Automatic and precise speed compensation with each layer of hose reeled in.

KEY SYSTEM COMPONENTS

- 1 electronic computer.
- 1 speed sensor which reads the hose speed and therefore indicates the time required to reel in the hose.
- 1 electric motorized gear mounted on the by-pass of the turbine to regulate speed compensation.
- 1 12 volt 30 AH battery
- 1 (optional) solar panel to recharge battery.

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ATTENTION

If your machine has a Golden Rain computer, please require your OCMIS dealer representative to demonstrate proper use of the machine and computer. OCMIS is not responsible for product failure due to improper use of the computer of machine.

THE GOLDEN RAIN COMPUTER PANEL BOX

1. The **“MANUAL”** button is used to program the manual functions in the computer.



2. The + or - are used to increase or decrease the desired working parameters.



3. The **“START”** and **“STOP”** buttons are used to start and stop the machine during the working cycle.



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4. The “**OCMIS**” button is used to monitor the battery charge.



5. The “**BOOK**” button is used to monitor the various parameters during the working cycle when the machine is in the automatic mode. (Speed, Time, etc)



START-UP AND TESTING PROCEDURES

The correct procedure for programming should be as follows:

Turn the computer on.

1. Check to assure computer is mounted properly.
2. Program the parameters of working cycle.
3. Execute the working cycle.

Turning the computer on:

1. Hook up the battery cables and be sure the clamps are tightened onto the posts.
2. To start the computer, press the **STOP** button. If the display indicates numbers, then press - until 0 is displayed.

ENSURING PROPER MOUNTING OF THE COMPUTER

Press the “**MANUAL**” button on the display panel and a bar will appear under the hand symbol (Fig 1). At this moment the computer is in the manual mode and by pressing the “+” button the computer commands the by-pass motor to close and therefore the speed increases. By pressing the “-“ button, the by-pass opens and the speed is reduced.

fig 1





During the testing phase, press both the “-“ and “+” buttons, to verify they work properly.

Having tested the by-pass, return and press the manual button again (Fig 1). The bar below the hand disappears and the computer returns to the stop position.

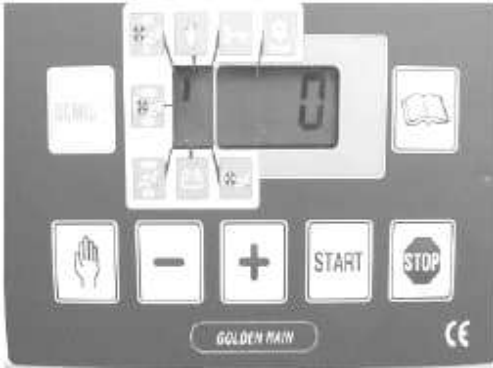
Verify that the sensor is mounted properly and is 1-2mm from the pinion gear on the reel. Slowly wind the reel so that the yellow light-ray illuminates from the sensor when it passes a gear tooth and in between each tooth the light-ray goes off. Having tested these two items, you are now ready to use the machine.

PROGRAMMING FOR USE

1. Press to **STOP** to verify the computer is ready to unwind the hose (Fig 1) and the display will show the bar next to the unwind position.

2. Pull the gun cart and unwind the hose at a consistent rate of 2-3 kph in a straight line and slow down as you get to the end of the hose. The computer should now indicate how many feet (or metres) have been unwound.

fig 1

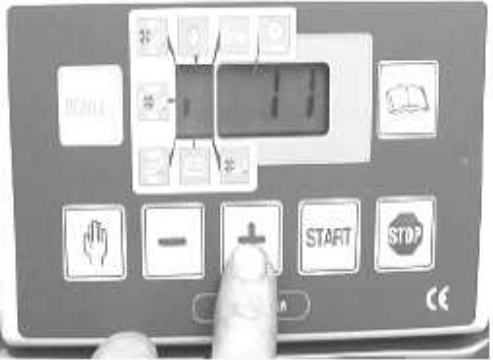


If the computer does not indicate the number of feet (metres), that have been unwound, it will not start and will not begin walking.

3. Turn on the water pressure following the operational instructions in the machine owner's manual. If inadvertently the hose was pulled out without first starting the computer, then the number of feet will not be indicated on the monitor. Turn the computer on and then indicate the number of feet (meters) unwound by pressing + or - until you arrive at the correct hose length.

4. Press the **START** button and the bar appears next to the gun-cart symbol. By using the + or -, indicate your desired working speed which will show on the screen (Fig 2).

fig 2



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5. Press the **START** button to have the machine begin working. On the left hand side of the display monitor it will indicate the number of meters (feet) unwound. At this point the computer is in the start position and within 2-3 minutes will arrive at the desired speed.

fig 3



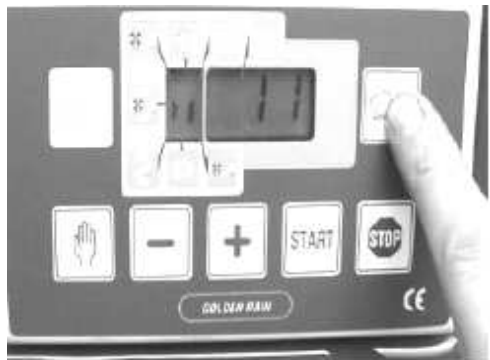
*NB: For immediate departure, you can press the **MANUAL** button and the bar appears under the hand symbol (Fig 4) and by pressing + or - the computer will open or close the by-pass until you arrive at the desired speed. Then press the **MANUAL** button again to return to the automatic mode.*

fig 4



6. On the display will show the number of feet (meters) unrolled onto the ground (Fig 5).

fig 5



7. By pressing the “**BOOK**” button the predetermined speed will show on the display (Fig 6).

fig 6

NB: When the computer is in this present mode, by pressing the + or - button, you can change the desired speed and the computer will automatically adjust the working speed.



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8. By pressing the “**BOOK**” button again, the present speed will appear on the display (Fig 7).

fig 7

9. By pressing the “**BOOK**” button still another time the display will indicate the time required to complete the programmed run.

NB: All this information can be continuously accessed by merely pressing the **BOOK** button again and again.



By pressing the “**OCMIS**” display will indicate the battery power - **IMPORTANT** - the battery should never be below 10 volts.

END OF WORKING CYCLE

When the gun cart arrives to the machine, the cart will hit a lever which will mechanically stop the winding of the hose. At this point the computer automatically registers “0” speed and then positions itself in the end of the working cycle mode. On the display will appear a 37 then 36, 35, 34, etc. until it arrives at “0”, and at this point the cycle is finished and the computer goes into the stop mode and shuts down automatically after 30 minutes.



Attention!! The computer indicates end of cycle when you put the machine in neutral with less than 49 feet (15 meters) still unwound. In this case, after stopping the computer, re-start the computer and however many feet (meters) remain on the screen, press “-“ until the computer zero's out. Then press the “**MANUAL**” button and follow the previously indicated instructions.

*Note: If you do not want to change the working speed, just push the “**START**” button twice and the machine will continue using the pre-programmed numbers.*

CHARGING THE BATTERY

Periodically verify the battery charge by pressing the “**OCMIS**” button. If “10” or below appears on the display proceed to recharge the battery. NEVER leave the battery uncharged for long periods of time because of the permanent damage that may result. During the off season, remove the battery and keep it in a warm, dry location and recharge as necessary.

INSTRUCTIONS FOR USING THE BATTERY



ATTENTION!!

The electro-lite is a diluted sulfuric acid solution - in case of contact with skin, wash immediately!! Contact medical help immediately if solution gets in your eyes.

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WARNING!!!

When recharging any battery, an inflammable gas is produced, which could cause the battery to explode.

PRECAUTIONS

Avoid sparks when attaching or charging battery. Verify correct cable placement. Verify that battery cables are placed correctly when recharging the battery (+ with +, - with -). Keep away from matches, cigarettes or any flammable objects. Do not rest metal tools on the battery. Keep children away from the battery!

TROUBLE SHOOTING

THE COMPUTER DOES NOT TURN ON

- a) Check the battery power.
- b) Internal computer fuse burned out.
- c) Battery not connected.

THE COMPUTER DOES NOT READ THE FEET (METERS) UNWOUND, WORKING SPEED, AND ACCELERATES TO THE MAXIMUM SPEED

- a) The sensor is too far away from the pinion gear (move closer).
- b) The sensor light ray is always on, the battery falls under 10 volts (recharge), or grease on the pinion gear (clean off).

THE COMPUTER DOES NOT REGULATE THE WORKING SPEED

- a) Verify if the motor that regulates the by-pass motor works correctly.
- b) Check to see if turbine has foreign object inhibiting the by-pass.

THE COMPUTER DOES NOT REGULATE THE SPEED - IT ACCELERATES WHEN IT SHOULD REDUCE THE SPEED

The electrical wires that go to the by-pass motor are reversed - switch wires.

PROGRAMMING A COMPUTER WHEN INSTALLING AND VERIFYING PARAMETERS

ATTENTION This must be done only a qualified OCMIS trained dealer.

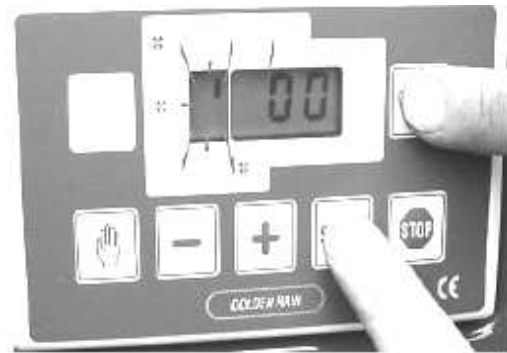
1. Turn on the computer by pressing the “STOP” button.

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2. Press the **“BOOK”** button and keep it pressed while pressing also the **“START”** button (Fig 1) then let go.

On the display appears 00 and the bar appears by the key - leave 00.

fig 1



3. Press the **“START”** button and on the left appears the number 1 and on the right appears the diameter of the reel in centimetres. Correct if necessary using the + or - until you arrive to the internal diameter of the reel (See Fig 2 - attached table).

fig 2



4. Press the **“START”** button and on the left appears the number 2 and on the right appears the number of gear teeth. Leave or correct as needed (see attached table) (Fig 3).

fig 3



5. Press the **“START”** button again and the number 3 appears on the left and on the right appears the hose diameter in cm. Leave or correct if needed using + o - (see attached table - Fig 4).

fig 4



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6. Press the “START” button again and the number 4 appears on the left and on the right appears the length of the hose - again, leave or correct as needed.

fig 5



7. Press the “START” button again and the number 5 appears on the left and on the right appears the number of wraps of hose on the reel - again leave or correct.

fig 6



8. Press the “START” button again and the number 6 appears along with a 0 for meters or I can e changed to feet by pressing + to show a 1.

fig 7



9. Press the “START” button again and the number 7 appears on the left and on the right appears the length of hose of the machine - correct by + or -.

fig 8



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10. Press the “START” button again and then number 8 appears on the left and on the right appears the length of the hose of the machine - correct by + or -.

fig 9



11. Press the “START” button again and then the number 9 appears on the left and on the right appears 00. This is the start-up code. We recommend you leave the code 00 but you can change the number up to 250 but you must remember the number. The same number to be used at number 3 where 200 appears (Fig 10).

fig 10



12. Press the “START” button and there appears 4, 8 then 0 on the right side and in that point the computer is ready.

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CODES TO BE RECORDED IN THE COMPUTER

GOLDEN RAIN

STRUCTURE	COD.	HOSE Ø	HOSE LENGHT	N. OF LAYER	REEL Ø	TEETH	REEL WIDTH
MR 40	0	40		14	660	142	580
MR 43	0	43		13	660	142	580
MR 50	0	50		11	802	142	580
MR 58	0	58		10	800	142	580
MR 63	0	63		9	800	142	580
R1	0	50		14	103	142	710
		58		12			
		63		11			
		70		10			
R1/1	0	63		14	102	175	1030
		75		12			
		82		11			
		70		13			
R2 R2/1 (90/350)	0	70		15	126	175	1140
		75		14			
		82		12			
		90		11			
R2/1	0	75		14	141	175	1140
		82		12			
		90		11			
		100		11			
R3	0	82		15	152	228	1360
		90		14			
		100		12			
		110		11			
R4	0	90		14	170	228	1360
		100		12			
		110		11			
		125		10			
R4/1	0	100		14	186	262	1510
		110		12			
		125		11			
R4/1 LAR. R4/2	0	100		14	186	262	1540
		110		13			
R4/2 125	0	125		11	186	262	1540