

SW-PLC2 Networks

Safety, Operation, Maintenance & Parts Manual

SW-PLC2

rev. A



Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

Form #914

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SECTION 1 SW-PLC2 NETWORKS OPERATION

1.1 General Information

SW-PLC2 Networks is a sawmill option that automatically lowers the saw head to a preset cutting height.

The saw head height measurement is made continuously and is independent of gear box wear, saw head chain wear, etc. The data about saw head height are not lost even when the sawmill power is turned off and then on again.

The SW-PLC2 Networks is based on a programmable logic controller (PLC), a magnetostrictive measuring strip (which reads current saw head heights), a programmable control panel and a rotational speed controller used in asynchronous motors.



FIG. 1-1

1.2 Modes of Operation

The SW-PLC2 controller can work in the following modes of operation:

- MANUAL mode,
- REFERENCE-DOWN automatic mode - the controller references the current blade height and automatically moves the saw head **down** the distance determined by the selected board thickness,
- REFERENCE-UP automatic mode - the controller references the current blade height and automatically moves the saw head **up** the distance determined by the selected board thickness,
- PATTERN automatic mode – allows the operator to program a series of log cuts calculated from the bed,
- BYPASS mode,
- Analog/Digital mode – when the current analog module output channel is damaged, the operator can select the digital outputs to control the up/down speed,
- Modes of Setting the Saw Head for a Preset Cut – the saw head stops at the target cutting height or overshoots the target height and then returns.

Besides, the SW-PLC2 Networks has a BUMP UP function that can be used to automatically move the blade up a particular distance after each cut, allowing the head to return with the blade clear of the log or cant.

The SW-PLC2 controller can store:

- eight board thickness dimensions,
- four Pattern mode programs,
- four head return height values (Bump Up dimensions)

1.3 Control Panel Components

The photo below shows the SW-PLC2 Networks control panel. A description of each control panel component is provided below.

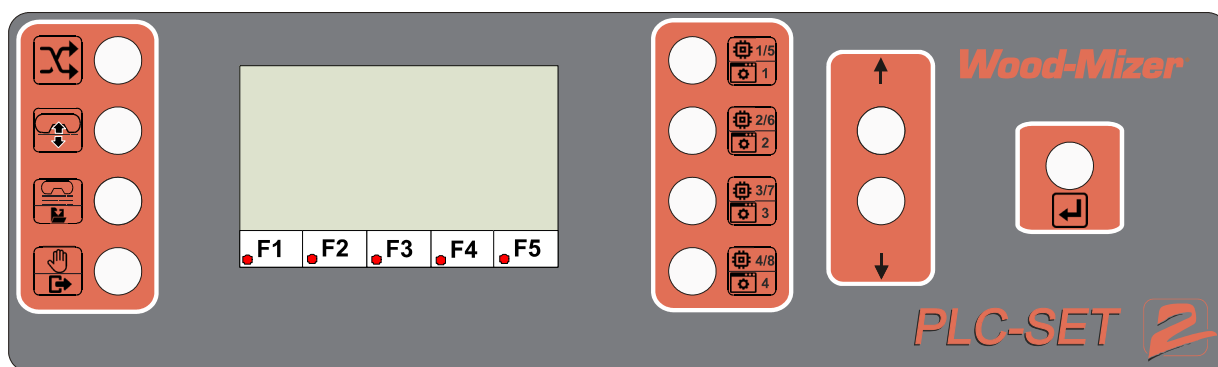







FIG. 1-2

 **BYPASS** button – used to bypass SW-PLC2 Networks when the controller or the power supply is damaged or it is necessary to lower the saw head below 25 mm from the sawmill bed.


 **REFERENCE UP/DOWN** button – activates the Reference mode of sawing.

 **PATTERN/SAVE PROG** button – used to enter the Pattern mode or to store a program in one of the four memory positions. (This will be described later in our instructions.)

 **MANUAL/EXIT** button – lets the operator switch from the current mode of sawing (REFERENCE or PATTERN) to the MANUAL mode as well as exit other settings of the Networks.

 **MEM1-8/PROG1-4** buttons – used to save desired board thickness dimensions or programs in the controller memory and to select a given board dimension or program.

UP/DOWN arrows – used to change parameters such as: board thickness, kerf value, etc.

 **ENTER** button – confirms entered changes.

F1 key – used to change the kerf value.

F2 key – allows the user to program a height to which the saw head will be raised before returning.

F3 key – used to program the head return height (constant value entered by the operator).

F4 key – allows the operator to set the speed of saw head up/down movement in MANUAL mode

F5 key – used to check values on the analog inputs and outputs and to select one of the two modes of up/down motor speed control: analog or digital. After pressing this button a second time, it is possible to set the analog output and select one of the two modes of setting the saw head for a preset cut.

1.4 Blade Kerf Setting

For maintaining accuracy (dimension) of the sawn boards it is especially important to set the blade kerf. The kerf setting can be whole numbers only (not fractional ones, e.g. 1.2, 2.3, etc.). The typical Wood-Mizer blade's kerf is 2 mm and this value should be entered into the Networks memory.

To set the blade kerf:

- Press  to place Networks in MANUAL mode,

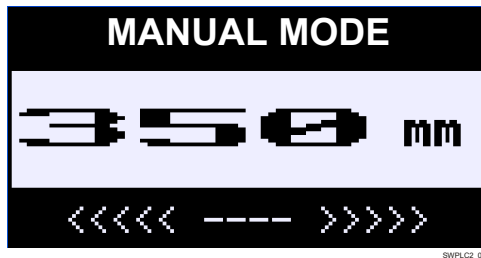


FIG. 1-3

- Press the F1 key,

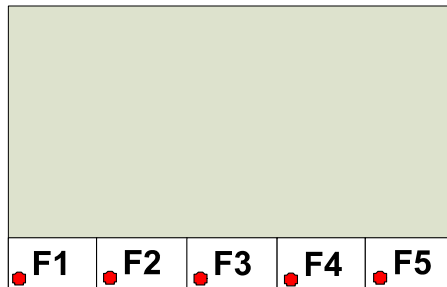


FIG. 1-4

- Using the up/down arrows, scroll to 2 mm,

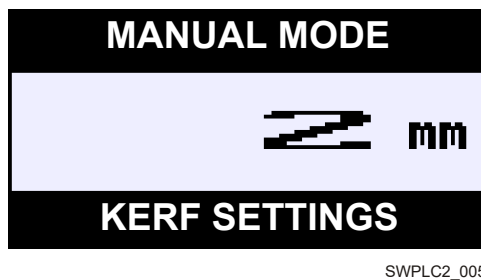



FIG. 1-5

1 SW-PLC2 NETWORKS OPERATION


Blade Kerf Setting

- Press  to confirm the setting. The message "SAVED" will appear at the top of the display window.



SWPLC2_006

FIG. 1-6

- Press  to exit the kerf setting function.

1.5 Saw Head Return Height Setting (Bump Up Function)


SW-PLC2 Networks allows the user to set a height to which the saw head will be raised before returning.

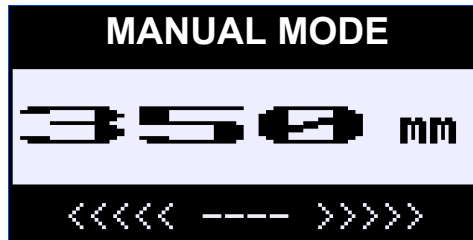
The Bump Up function can work in the following two modes:

- "CUT + VALUE" - In this mode the saw head is raised by any value entered by the operator (exact to $\pm 1\text{mm}$). This mode can be used when the sawmill is equipped with the automatic board removal system.
- "BOARD + VALUE"- In this mode the saw head is raised by any value entered by the operator + last board thickness + entered kerf value (exact to 1 - 5mm). This mode can be used when each cut board is removed manually before next cutting.

The Bump Up value setting can range from 5 mm to 50 mm.

To enter the Bump Up value:

- Press  to enter the Manual mode,



SWPLC2_007

FIG. 1-7

- Press the **F2** key,

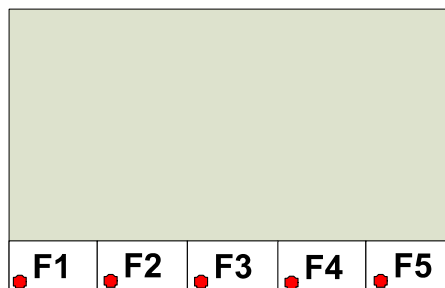
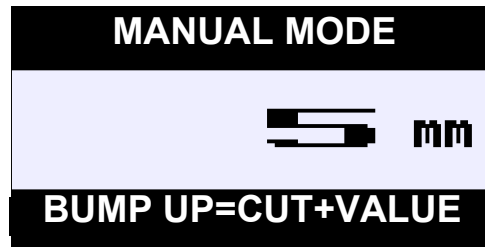


FIG. 1-8

1

SW-PLC2 NETWORKS OPERATION

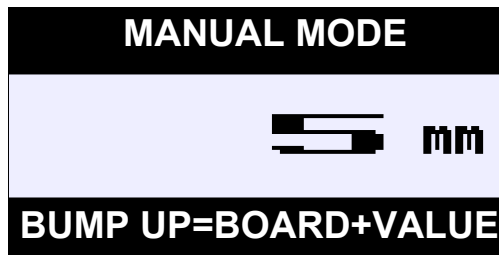
Saw Head Return Height Setting (Bump Up Function)



SWPLC2_008


FIG. 1-9

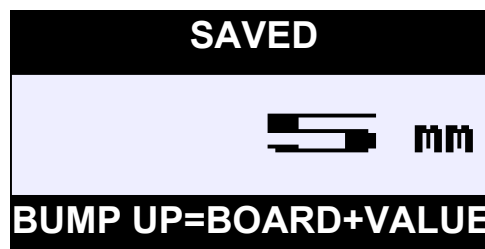
- Using the up/down arrows, scroll to the desired value (eg. to 5 mm),
- The **F2** key can be used to toggle between the Bump Up modes ("CUT + VALUE" and "BOARD + VALUE"),



SWPLC2_009


FIG. 1-10

- Press  to confirm the setting. The message "SAVED" will appear at the top of the display window.



SWPLC2_040


FIG. 1-11

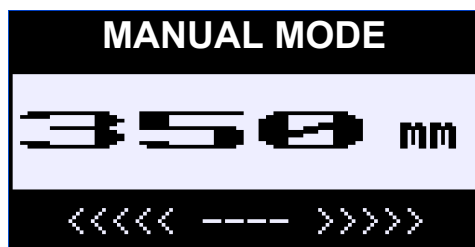
- Press  to exit the Bump Up value setting.

1.6 Saw Head Speed Setting (SPEED Function)

The Speed function of the SW-PLC2 Networks allows the user to set the speed of saw head movement in **MANUAL mode**. The saw head speed value can range from 0 to 100% of the maximum speed and can be adjusted in increments of 10%.

To set the saw head speed:

- Press  to place Networks in Manual mode,



SWPLC2_007

FIG. 1-12

- Press the **F4** key,

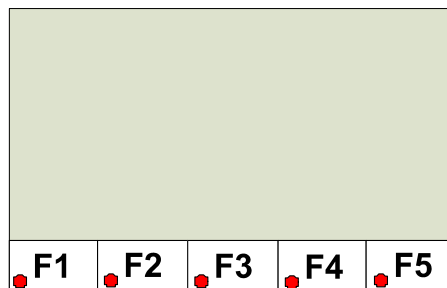
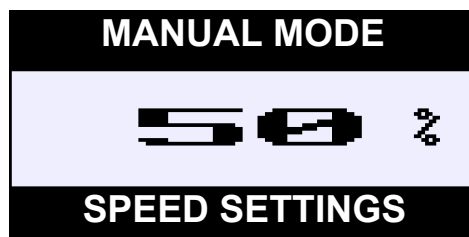


FIG. 1-13

- Using the up/down arrows, set the desired speed value, eg. 50%,




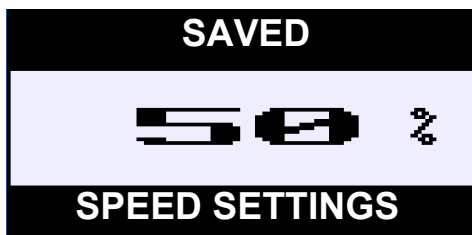
SWPLC2_010

FIG. 1-14

1 SW-PLC2 NETWORKS OPERATION


Saw Head Speed Setting (SPEED Function)

- When setting the speed value, you can use the up/down drum switch handle to check how the speed setting changes affect the real speed,
- After selecting the saw head speed, press  to confirm the setting. The message "SAVED" will appear at the top of the screen.




SWPLC2_011

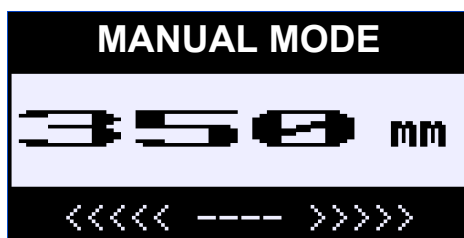
FIG. 1-15

- Press  to exit the SPEED function.

1.7 Storing Board Thickness Dimensions in Networks Memory


To modify any stored board dimension:

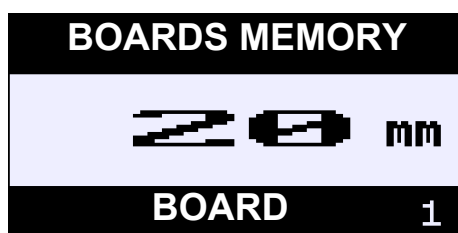
- Press  to enter the Manual mode,



SWPLC2_012


FIG. 1-16

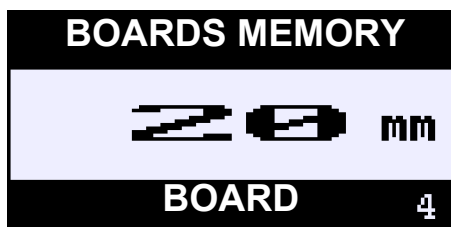
- Press one of the memory buttons, e.g. ,



SWPLC2_013

FIG. 1-17

- After pressing  once, it is possible to enter a value into the memory position No.1.
- To access the memory position No. 5, press the button again,



SWPLC2_014


FIG. 1-18

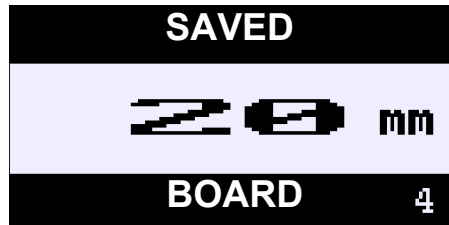
- Using the up/down arrows, set the desired value,

1

SW-PLC2 NETWORKS OPERATION


Storing Board Thickness Dimensions in Setworks Memory

- Press  to confirm the setting. The message "SAVED" will appear at the top of the screen.



SWPLC2_015

FIG. 1-19

- Press  to exit the board dimensions setting.

The entered board dimensions can be used in the REFERENCE and PATTERN modes.

1.8 Automatic Saw Head Lowering in REFERENCE-DOWN Mode

To activate the Reference-Down mode:

- Press ,



SWPLC2_016

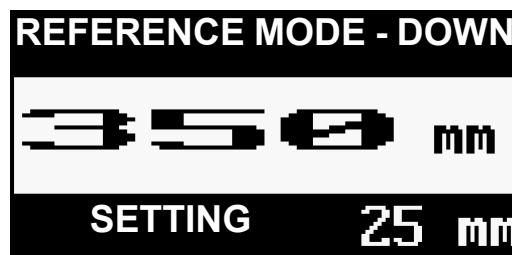
FIG. 1-20

- Using the up/down arrows or board thickness memory buttons, select the desired board thickness,

NOTE:

If the blade kerf has already been entered, Setworks will automatically take it into account when setting the saw head for each cut.

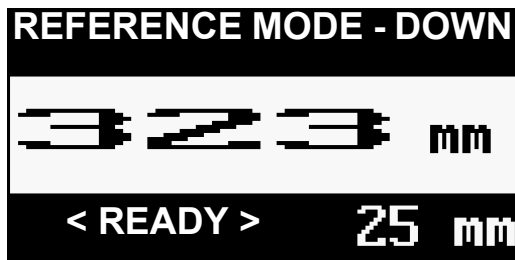
- To lower the saw head by the preset value, push the up/down drum switch handle down and release. The saw head will start moving downward and the message "SETTING" will appear on the display.



SWPLC2_017

FIG. 1-21

- When the saw head reaches the desired height, the message "READY" will appear on the display,



SWPLC2_018

FIG. 1-22

- After making the cut, raise the saw head before returning it to the front end of the log. There are two methods of raising the saw head:

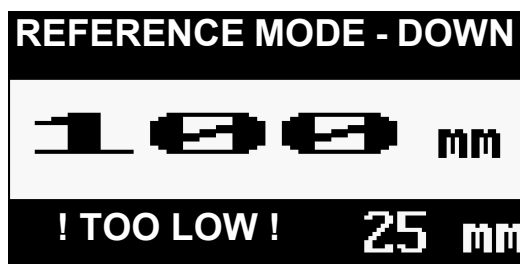
- a) By pushing the up/down drum switch handle up momentarily to activate the BUMP mode previously selected ("CUT + VALUE" or "BOARD + VALUE"),
- b) As long as the up/down handle is held in the UP position, the saw head will be raising until the handle is released to the neutral position.

- To lower the saw head for the next cut, push the up/down handle down and release.

NOTE:

It is impossible to set the saw head lower than 25 mm from the sawmill bed.

If you try to do it, the message "TOO LOW" will be displayed.




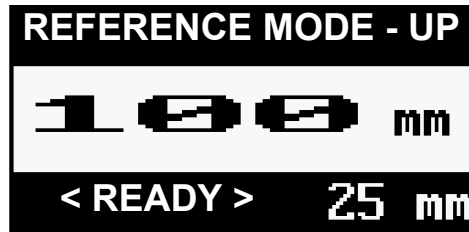
SWPLC2_019

FIG. 1-23

1.9 Automatic Saw Head Raising in REFERENCE-UP Mode

To enter the REFERENCE-UP mode:

- Press  and within a second press it again,



SWPLC2_020

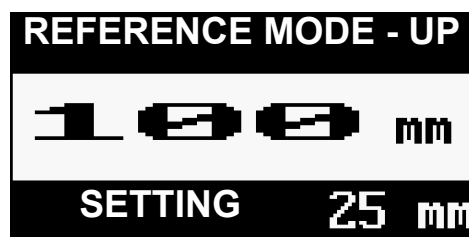
FIG. 1-24

- Using the up/down arrows or board thickness memory buttons, select the desired board thickness,

NOTE:

If the blade kerf has already been entered, Setworks will automatically take it into account when setting the saw head for each cut.

- To raise the saw head by the preset value, push the up/down drum switch handle up and release. The saw head will start moving upward and the message "SETTING" will appear on the display.



SWPLC2_021

FIG. 1-25

- When the saw head reaches the desired height, the message "READY" will appear on the display,

- To raise the saw head for the next cut of the same thickness, push the up/down handle up again.

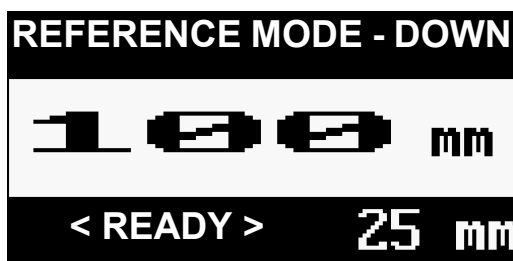
NOTE:

It is impossible to set the saw head higher than 850mm from the sawmill bed. If you try to do this, the message "TOO HIGH" will appear on the display.

1.10 Using the REFERENCE-DOWN Mode with the Preset Head Return Height

To activate the REFERENCE-DOWN mode:

- Press ,



SWPLC2_022

FIG. 1-26

- Use the up/down arrows or memory buttons to select the desired board thickness,

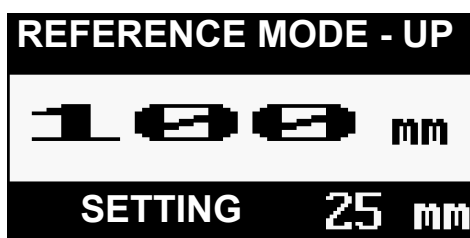
NOTE:

If the blade kerf has already been entered, Setworks will automatically take it into account when setting the saw head for each cut.

- Using the up/down drum switch handle, set the saw head above the log so that the blade clears the log along its entire length,

- Press the **F3** key to store the saw head return height. When this value is saved, the red light will be blinking.

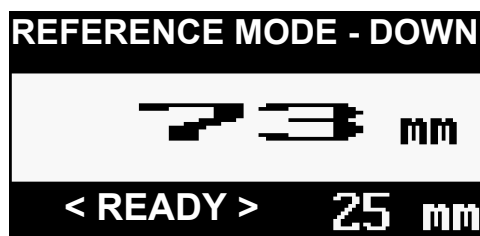
- To lower the saw head by the preset value, push the up/down drum switch handle down and release. The saw head will start moving downward and the message "SETTING" will appear on the display.



SWPLC2_023

FIG. 1-27

- When the saw head reaches the desired height, the message "READY" will appear on the display,



SWPLC2_024

FIG. 1-28

- After making the cut, raise the saw head before returning it to the front end of the log. This can be done in two ways:


- a) By pushing the up/down handle up momentarily – the saw head will be raised to the preset head return height,
- b) By holding the up/down handle in the up position – the saw head will be raising until the handle is released to the neutral position.

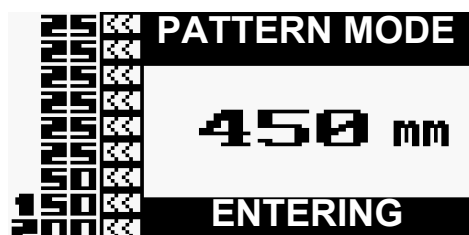
- To set the saw head for the next cut, push the up/down handle down and release.

The preset head return height can be changed during sawmill operation. To do this, first press the **F3** key to delete the stored head return height value. Then set the saw head at the desired height and push the **F3** key again to store the new head return height.

1.11 Automatic Saw Head Lowering in PATTERN Mode


To enter the PATTERN mode:



- Using the up/down drum switch handle, position the saw head at the height of the top of the log,
- Press ,



SWPLC2_025

FIG. 1-29

- If the Pattern programs have already been entered, select the desired program by pushing and holding the corresponding memory button (e.g. ).

- To enter a new Pattern program, first select the desired thickness of the first board from the sawmill bed using the up/down arrows or memory buttons. After pressing  you will move to the next board thickness position (i.e. thickness of the second board from the sawmill bed). Perform this procedure to enter all desired board dimensions. Each time any board thickness is entered and the  button is pressed, the entered value is automatically copied to the remaining board thickness positions in the list, up to the saw head height.

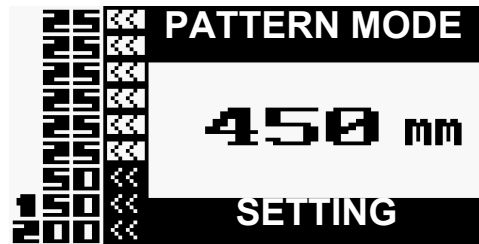
- The list of board dimensions that can be sawn from the log is shown on the left side of the display,



SWPLC2_026

FIG. 1-30

- To lower the saw head for the first cut, push the up/down handle down and release. When the saw head is being set, the message „SETTING” is shown on the display.



SWPLC2_027

FIG. 1-31

- When the saw head reaches the desired height, the message "READY" will appear on the display,



SWPLC2_028

FIG. 1-32

- After making the cut, raise the saw head before returning it to the front end of the log. There are two methods of raising the saw head:

- By pushing the up/down handle up momentarily to activate the BUMP mode previously selected ("CUT + VALUE" or "BOARD + VALUE"),
- As long as the up/down handle is held in the UP position, the saw head will be raising until the handle is released to the neutral position.

You can also use the head return height option (activated by pressing the **F3** key).

- To set the saw head for the next cut, push the up/down handle down.

NOTE:

It is impossible to set the saw head below the height of 25mm. Therefore, the minimum thickness of the last board cut from the log can be 25 mm. If you attempt to set the head lower than 25 mm from the sawmill bed, the message "TOO LOW" will be shown on the display.





SWPLC2_029

FIG. 1-33

NOTE:

If the blade kerf has already been entered, Networks will automatically take it into account when setting the saw head for each cut.

Saving a Pattern Program

Four Pattern programs can be stored in the Networks memory. To save the Pattern program, push and hold the  button. While pushing this button, press and hold any of the memory buttons (e.g. ) until the message "SAVED" is shown on the display.



SWPLC2_030


FIG. 1-34

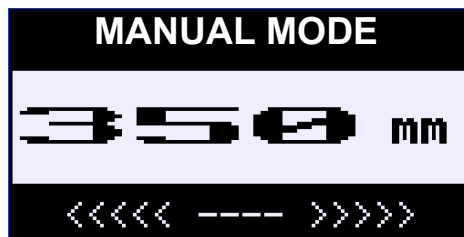
1.12 Modes of Setting the Saw Head for a Preset Cut

SW-PLC2 Networks can work in two modes of setting the saw head for a preset cut:

- LT70 sawmills: the saw head moves downward or upward until it reaches the target height and stops at this height immediately,
- LT40 sawmills: the saw head immediately stops at the target height when moving upward or overshoots the target height and then returns when moving downward. This results from the up/down system construction. **NOTE:** The saw head is set as described above to the height of 50 mm from the sawmill bed. Below this height, it is set in the same manner as in LT70 sawmills.

This parameter is factory-set. If it is necessary to set it again, perform the following steps:

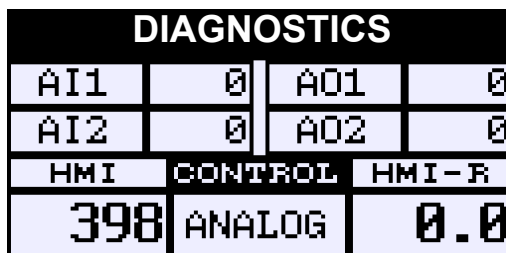
- Press  to place Networks in MANUAL mode,



SWPLC2_012

FIG. 1-35

- Press the **F5** key,



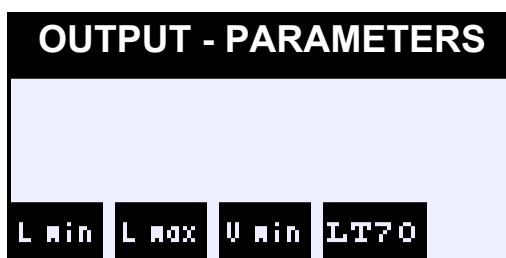
SWPLC2_031

FIG. 1-36

- Press the **F5** key again,


1 SW-PLC2 NETWORKS OPERATION

Modes of Setting the Saw Head for a Preset Cut



SWPLC2_032

FIG. 1-37

- Using the **F4** key, change the parameter to LT40 or LT70,
- Press  to return to the Diagnostic menu,
- Press the button once more to return to the MANUAL mode.

1.13 Other Settings – OUTPUT SETTINGS


In case of any problems with setting the saw head for the preset cut (e.g. the saw head oscillates around the target cutting height), the following parameters can be modified by the operator: Lmin, Lmax and Vmin (the minimum speed at which the saw head travels to the target height).

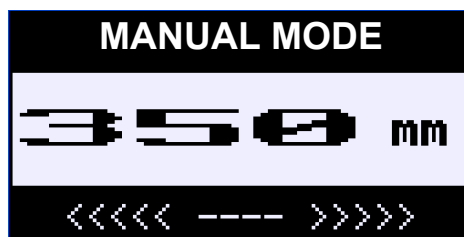
The Lmax and Lmin parameters represent distances of the saw head from the target height. The Lmax parameter is the distance where the saw head starts decelerating. The Lmin parameter is the distance at which the saw head starts moving at the minimum speed (Vmin).

Note:

Always contact Wood-Mizer Customer Service before attempting to change the parameters mentioned above.

To make a change or display the current settings :

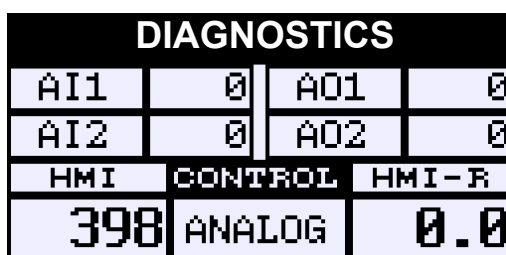
- Press  to enter the Manual mode,



SWPLC2_012

FIG. 1-38

- Press the **F5** key,



SWPLC2_031

FIG. 1-39

- Press the **F5** key again,

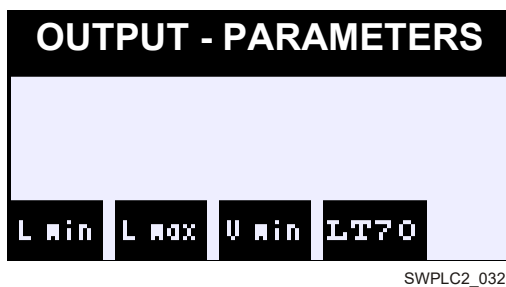


FIG. 1-40

- Select Lmin, Lmax or Vmin using the corresponding key (F1, F2 or F3),

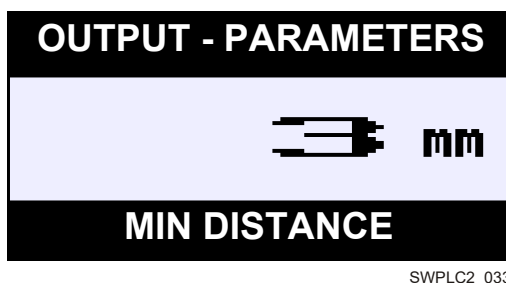





FIG. 1-41

- Use the up/down arrows to change the value,
- Press  to confirm the change,
- The message "SAVED" will appear in the display window,
- Press  to exit the output parameters editing and move to the Diagnostic menu,
- Press  again to return to the Manual mode.

1.14 Other Settings – Analog/Digital Modes of Up/Down Motor Speed Control


SW-PLC2 Networks controls the up/down motor rotational speed through a speed controller and with analog and digital outputs.

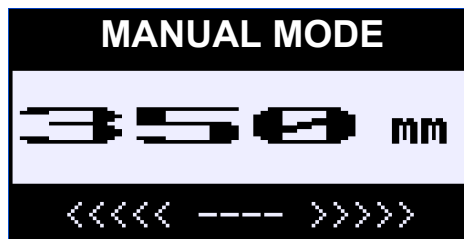
SW-PLC2 Networks is factory-configured to use the analog output. If the analog output is damaged, the operator can change the analog output to the digital one.

Note:

Always contact Wood-Mizer Customer Service before changing the output.

To make a change/ display the current settings:

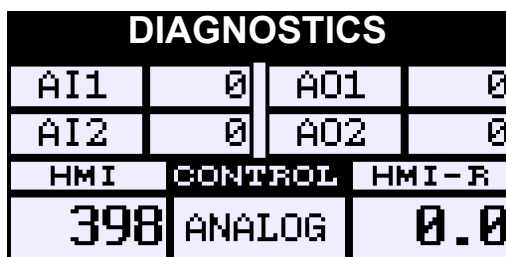
- Press  to switch to the Manual mode,



SWPLC2_012

FIG. 1-42

- Press the **F5** key,



SWPLC2_031

FIG. 1-43

- The display shows (in the "CONTROL" window) which mode Networks is currently set to: ANALOG or DIGITAL,
- To change the mode, press the ENTER button,

1


SW-PLC2 NETWORKS OPERATION

Other Settings – Analog/Digital Modes of Up/Down Motor Speed Control

DIAGNOSTICS			
AI1	0	AO1	0
AI2	0	AO2	0
HMI	CONTROL	HMI-R	
398	DIGITAL	398.2	

SWPLC2_034

FIG. 1-44

- Press  to exit the Diagnostic menu.

1.15 Return to the Factory Settings (Initial)

If Networks is not functioning properly, it may be necessary to return to the factory settings.

To restart (reset) the Networks:

- Turn the main power supply off using the main switch located on the main electric box,
- Push and hold the MANUAL/EXIT and REFERENCE buttons. Turn the power supply on.
- Release the buttons after about 3 seconds from turning the power on,
- The inscription "NETWORK RESET" will appear on the display,



SWPLC2_035

FIG. 1-45

- All parameters of the controller (such as: board dimensions, Pattern programs, output settings, mode of setting the saw head for a preset cut, ANALOG/DIGITAL mode, saw head speed in the Manual mode, kerf value, BUMP values) have returned to their factory default settings,
- After a while, the "Choose language" option will appear on the display where you can select the desired language version of the Networks display,



SWPLC2_036

FIG. 1-46

- To select the language, press the **F1**, **F2**, **F3**, **F4** or **F5** key.
- If the Networks is still not working properly, contact Wood-Mizer Customer Service.

1.16 Restrictions and Protections

- A) The minimum thickness of the last board calculated from the sawmill bed cannot be lower than 25 mm, therefore Setworks in the Automatic Mode makes it impossible to lower the saw head to the height below 25 mm. Attempting to saw below the height of 25 mm from the sawmill bed, may result in machine damage.

EXAMPLE: If the current saw head height is 80 mm and we want to cut a 60 mm thick board, the saw head should be set at the height of 20 mm (the kerf is set to 0). Because of the restriction described above it is impossible, so the display will show the message "TOO LOW". In this case the operator must decrease the last board dimension (e.g. to 50 mm).

- B) The upper limit of the saw head travel is 850mm. Setworks will automatically stop the up/down motor after reaching this height. Only downward saw head movement will be possible then and the display will show the message "TOO HIGH!".
- C) If the message "ERROR! HEIGHT SENSOR" will appear on the display,



!!!! ERROR !!!!
HEIGHT SENSOR
Check power supply and sensor connections. If error still appears, reset Setworks.

SWPLC2_037

FIG. 1-47

the blade height sensor is not working properly. In this case further work of the controller is impossible. Locate cause of the failure. First, inspect the connections between the sensor and the PLC unit.

If they are good, check the supply voltage of the sensor on the 24V power supply terminals. The voltage should be about 24V. If the supply voltage is correct and the sensor still does not work properly, reset the Setworks (return to the factory settings) as described in the previous chapter. If the sensor and the controller still do not work properly, contact the Wood-Mizer Customer Service.


- D) The message "ERROR! UP/DOWN OPERATION" shown on the display indicates the speed controller fault.

!!!! ERROR !!!!
UP/DOWN OPERATION
To cancel error, turn off power supply and after 1 minute turn it on. If error occurs again, please contact Service.

SWPLC2_038

FIG. 1-48

In this case further work of the controller is impossible. First, turn the main power supply off, wait a minute and turn the power on again. This will clear the error in the speed controller. If the fault has not been cleared or recurs, contact Wood-Mizer Customer Service.

- E) Pushing the up/down handle up during the saw head movement in the REFERENCE-DOWN or PATTERN mode, or pushing it down in the REFERENCE-UP mode will stop the saw head and place Setworks in the Manual mode. Simultaneously, the data on the height to which the saw head should be lowered/raised will be lost. This function has been added for the user's safety. A similar result can be obtained after pressing the  button.

1.17 BYPASS Function

You can bypass SW-PLC2 Networks by pressing the  button.

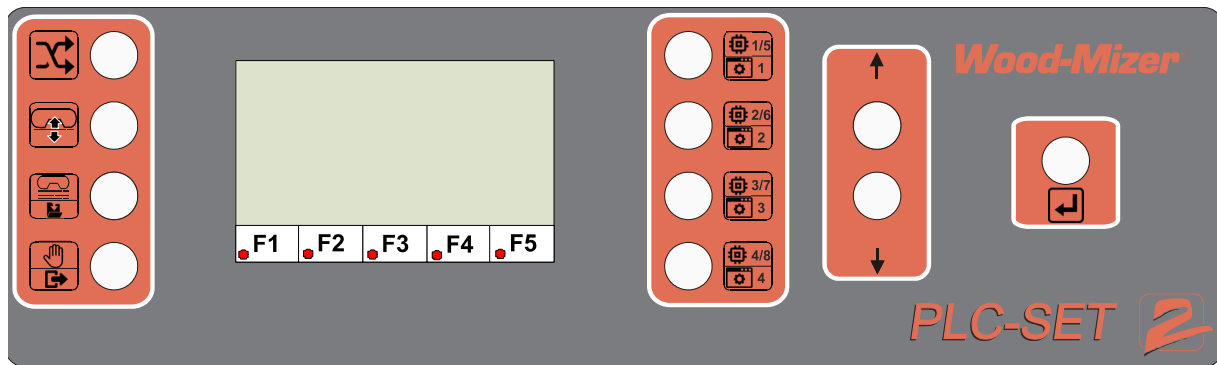


FIG. 1-49

From now on the up/down system will be working as in the standard sawmill without SW-PLC2 Networks.

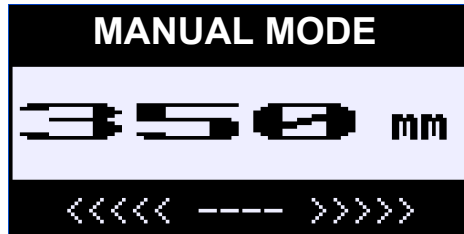
Although Networks seems to be still working (the saw head height is still being measured and displayed, etc.), in the BYPASS mode it cannot control the up/down operation.

The BYPASS function should be used in case of Networks failure or failure of any Networks components such as:

- PLC unit,
- analog module,
- blade height sensor,
- 24VDC power supply,
- display.

1.18 Blade Height Sensor Setting

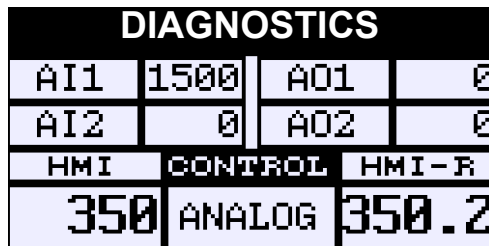
- After turning the power supply on, Networks starts in MANUAL mode by default,



SWPLC2_012

FIG. 1-50

- Push the **F5** key to enter the Diagnostic menu,



SWPLC2_039


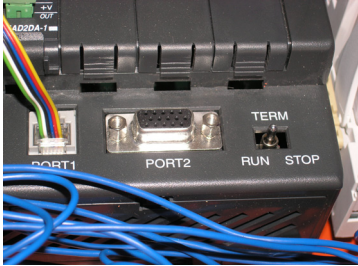
FIG. 1-51

- Move the saw head to any measurement (e.g. 350 mm) on the blade height scale located on the sawmill mast,
- Loosen slightly the sensor mounting bolts and adjust the sensor so that the value displayed in the HMI-R window is as accurate as possible,
- Tighten the sensor mounting bolts,
- Check the value in the HMI-R window again.

Now that the above settings have been made, the Networks is ready for use.

2 TROUBLESHOOTING

SECTION 2 TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
<p>Networks does not work or the display blinks alternately between white and red.</p>  <p style="text-align: right; font-size: small;">SWPLC2_041</p>	<p>Toggle switch located on the PLC controller improperly set</p>	<p>Locate the RUN/TERM/STOP switch on the PLC controller (See the figure below), set it in the RUN position and then in the TERM position.</p>  <p style="text-align: right; font-size: small;">SWPLC2_042</p>
<p>Networks does not work.</p>	<p>Bypass function disables Set-works operation.</p>	<p>Check the BYPASS button positions.</p>
<p>Display does not show real dimensions.</p>	<p>Blade height sensor improperly set</p>	<p>Loosen the sensor mounting bolts and follow the instructions located in Section 1.18 of our manual.</p>
<p>Blade height shown on the display is 0.</p>	<p>The sensor magnet is damaged or the distance between the magnet and the sensor is too long.</p>	<p>Make sure the magnet is at the distance of 5 mm max from the blade height sensor. If not, adjust the location of the magnet in relation to the sensor so the readings are correct along entire length of the sensor.</p>
<p>Networks does not stop at the target cutting height, but oscillates around this height, increasing the time of saw head setting.</p>	<p>Lmin, Lmax or Vmin parameters improperly set</p>	<p>Contact Wood-Mizer Customer Service to select appropriate values for these parameters.</p>

Display reads: **ERROR!**
HEIGHT SENSOR

!!!! ERROR !!!!
HEIGHT SENSOR
 Check power supply and sensor connections. If error still appears, reset Networks.

SWPLC2_037

- Blade height sensor does not work properly.
- Damaged cable

Inspect the connections between the sensor and the PLC unit – analog card. If they are good, check the supply voltage of the sensor on the 24V power supply terminals. The voltage should be about 24V. If the supply voltage is correct and the sensor still does not work properly, contact Wood-Mizer Customer Service for information on how to connect the cables to the other channel.

Display reads: **ERROR!**
UP/DOWN OPERATION

!!!! ERROR !!!!
UP/DOWN OPERATION
 To cancel error, turn off power supply and after 1 minute turn it on. If error occurs again, please contact Service.

Motor speed controller fault

Turn the main power supply off, wait a minute and turn the power on again. This will clear the error in the speed controller. If the fault has not been cleared or recurs, contact Wood-Mizer Customer Service.

Display does not work after turning the power supply on.

Damaged 24VDC power supply, cable connecting the display to the controller or display

Make sure the light on the 24VDC power supply is on, measure the voltage on the positive and negative terminals of the power supply, check the fuse in the power supply unit. If the power supply works properly (the green light on the PLC controller is on), the cable or the display is damaged. In such a case contact Wood-Mizer Customer Service for assistance.

SECTION 3 REPLACEMENT PARTS

To Order Parts:

- From Europe call our European Headquarters and Manufacturing Facility in Kolo, Poland at **+48-63-2626000**. Have your customer number, vehicle identification number, and part numbers ready when you call.
- From other international locations, contact the Wood-Mizer distributor in your area for parts.



CAUTION! It is strongly recommended that only original spare parts be used.

3.1 Electrical Components

See Figure 3-1. The electrical components of the SW-PLC2 Networks are listed in the table below.

View	Wood-Mizer Part #	Qty	Description
 SWPLC2_043	502698	1	CONTROLLER, PLC D0-06DR-D
 SWPLC2_044	093488-320 093489-320	1	SPEED CONTROLLER, ALTIVAR ATV320U11N4C - 3x400VAC *Select depending on the supply voltage SPEED CONTROLLER, ALTIVAR ATV320U11M3C - 3x230VAC
 SWPLC2_045	502699	1	PANEL, EA1-S3MLW-N GRAPHIC
 SWPLC2_046	501336	1	POWER SUPPLY, 24VDC 1A
 SWPLC2_047	502707	2	BRACKET, WM35 MOUNTING
 SWPLC2_048	F81086-4	3	END BRACKET, WDK 2.5 LD (802363)

TABLE 3-1

3

Replacement Parts Electrical Components

 <p>SWPLC2_049</p>	088152	9	PUSH BUTTON, XB6DA35B GREEN
 <p>SWPLC2_050</p>	088153	1	PUSH BUTTON, XB6DA45B RED
 <p>SWPLC2_051</p>	088833	1	PUSH BUTTON, XB6 DF3 B5B
 <p>SWPLC2_052</p>	088828	1	RELAY, FINDER TYPE 58.34.9.024.0050
 <p>SWPLC2_053</p>	F81086-7	6	BLOCK, YBK 2.5-3F SPRING TERMINAL
 <p>SWPLC2_054</p>	F81086-71	1	BRIDGE, UK2.5/10 10-POLE
 <p>SWPLC2_055</p>	F81086-6	1	END PLATE, NPP YBK 2.5-3F
 <p>SWPLC2_056</p>	091243	1	MODULE, DIRECT FO-4AD2DA-1 ANALOG
 <p>SWPLC2_057</p>	R80367-1	0.42	RAIL, TS 35/7.5 2M DIN SLOTTED

TABLE 3-1

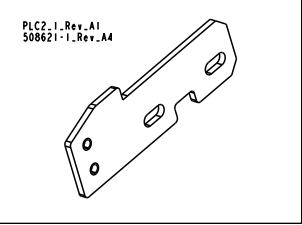


	508621-1	1	BRACKET, CAM, LIMIT SWITCH.
		1	KEYPAD, HMI SW-PLC2
	084643	1	CABLE, SENSOR BKS-S115-PU-05

TABLE 3-1

3.2 Decals

See Figure 3-2. The SW-PLC2 Networks decals are shown in the table below.

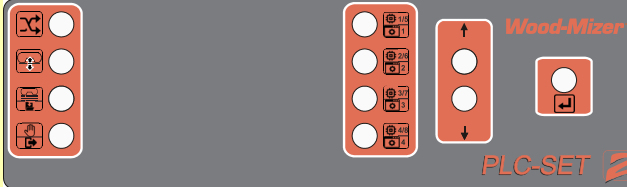
View	Wood-Mizer Part #	Qty	Description
	502708_pic	1	Decal, SW-PLC2 Networks

TABLE 3-2