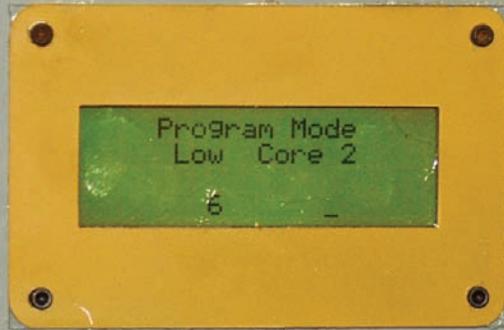


**RH-2004 VERSION III**

# **BAKER**

## **Products**

### **BAKER BAND SAWMILL SETWORKS MANUAL**



**ADJUST**

**CORE  
1**

**HIGH/UP**

**CORE  
2**

**SET  
1**

**HIGH**

**SET  
2**

**LOW/DOWN**

**P  
R  
O  
G  
R  
A  
M  
R  
U  
N**

**LOW**

**NEXT  
CORE  
3**

**PREV  
CORE  
4**

**SET  
3**

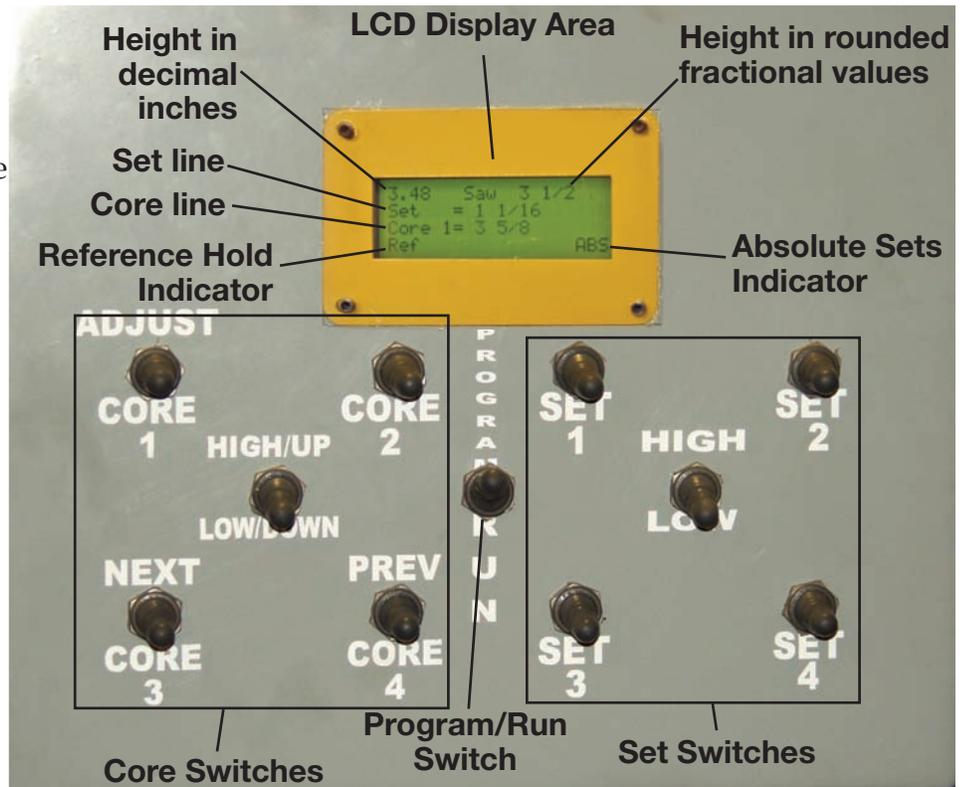
**SET  
4**

# SECTION 1

## Panel:

Top-center on the Networks user panel is the display. All details about the LCD displays are covered in Section 2. Just below and to the left of the LCD display is the **CORE Select Pad** made up of five switches, which control the eight CORE values available on the RH-2004 Version III Baker Products Networks System. In the center of the five CORE Select

**Figure A**



switches is a switch labeled with **high/low** positions. When the **high/low** switch is in the selected **low** position, the surrounding momentary\* toggle switches represent LOW CORES one (1) through four (4). Starting in the upper left corner is CORE #1 then directly to the right is CORE #2. On the bottom row left is CORE #3 and bottom-right is CORE #4. With the **high/low** switch in the **high** position, the surrounding switches represent HIGH CORES one (1) through four (4).

Located on the right side of the panel is the **SET Select Pad**, which determines board thicknesses. The SET Select Switch Pad is laid out exactly as the CORE Select Pad, representing SETS #1 through #4 LOW and SETS #1 through #4 HIGH. Directly below the LCD display is the **Program/Run** toggle switch. This switch allows the user to go into program mode, and or run mode (see Section 3 on page 5 about programming). While in Program mode the Core switches function as programming switches. As marked on the panel: Core 1 is used to increment either up or down depending on

1 \*Momentary means the switch will automatically spring back to the center position once the operator lets go of the switch. So the switch will not stay in the up position, and will always return to the center position.

which way the up/down switch is set. Core switches three (3) and four (4) represent Previous and Next respectively, and allow the user to scroll back and forth through all the adjustments operators are able to make.

## SECTION 2

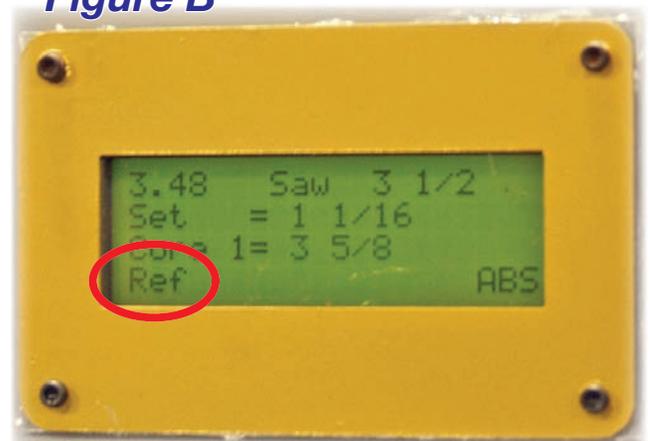
### *Display:*

The top line on the LCD display represents the blade's current elevation. In the top-left corner of the display, blade height is shown as a decimal value to the hundredths decimal place. See Figure A & B. On the top-right of the LCD display is the current blade elevation, displayed to the nearest fractional value. WHILE SAWING, THIS IS ONLY A REFERENCE. THOUGH THE FRACTIONAL DISPLAY IS ROUNDED, THE SETWORKS COMPUTER KNOWS EXACTLY WHERE IT IS TO A MUCH GREATER DEGREE OF ACCURACY THAN IS SHOWN ON THIS DISPLAY. For example, if the computer makes a core of  $3 \frac{1}{16}$ ", then because the fractional part of the display is rounded to a resolution of no more than  $\frac{1}{8}$ ", it is possible that the fractional display will jump from  $3$ " to  $3 \frac{1}{8}$ ". On line two the word **SET** is shown with its current selected value, as indicated in Figure B. Directly before the equal sign, on line two, is an active SET number, and after the equal sign is the value of that SET. Next is **CORE**, its number and value proceeding exactly as the **SET** line above. Last on the display is **Ref** (abbreviation for "Reference") on the left, and **ABS** (abbreviation for "Absolute") on the right.

### *Reference Icon (Ref):*

The **Ref** icon indicates when a location is being stored in memory. This enables a sawyer to: manually raise above previously cut material; allow several

**Figure B**



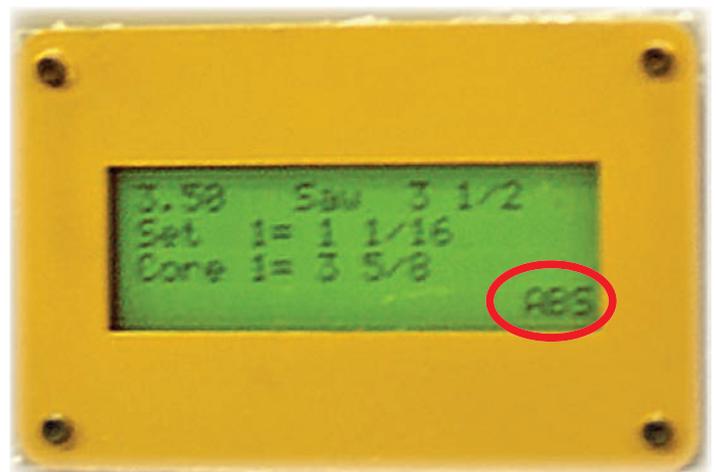
boards to build up to be eventually pulled off at once; or leave a broken slab on the log until a good board is cut to avoid jam ups from broken slab material. This option allows for a variety of sawing techniques.

The Reference Amount is activated in one of two ways. (1) First, when the user selects a SET value then manually positions the saw to cut the first slab and then activates either **SET** or **OFFSET**. This enables the sawyer to visually choose a first cut to optimize lumber yield. (2) A second way to activate Reference is to choose a CORE position, then activate **SET**. It is important to remember that when the reference icon is displayed, the saw will return to one SET down from the last SET in memory. While making regular SETS, the reference function is reset by simply flipping the same **SET** switch as before or making a new SET value choice. The “Absolute Sets” (**ABS**) works in the same way. Just simply repeat the same CORE size or select another. Either way, the **Reference icon** should disappear.

All industrial Baker Band Sawmills with RH-2004 computer networks are equipped with a remote reference reset switch located on the mill in the main operator’s control area. This remote switch allows the sawyer the ability to reset even if he can not physically reach the networks panel, which is mounted on the head frame.

### ***Absolute icon (ABS):***

**ABS** is located on line four in the bottom right corner of the LCD display. **ABS** indicates that a CORE size is being targeted. EXAMPLE: If a CORE of four (4.0) inches and a SET of one inch (1.0) is selected, the Setworks will move the blade in order to saw only one-inch-thick lumber all the way down to within four inches above the mill’s steel log bunks. Since the Setworks system calculates the

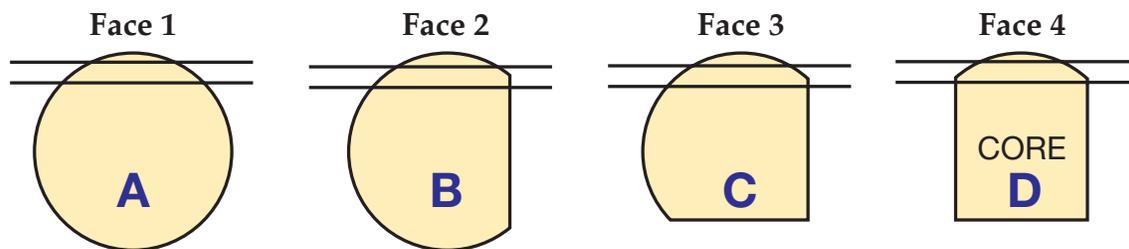


**Figure C**

optimum number of boards that can be cut, based on current blade height, selected or desired CORE, selected SET, and the allowed Kerf amount, it is better to let the Networks system position the blade for the initial slab cut. This is accomplished by manually positioning the saw approximately one-board thickness above the log and then activating the **SET joystick**. Following this technique will allow the Networks system to make consistently accurate first cuts.

## *Sawing:*

Below is a general outline meant only to familiarize new owners with Baker Products Networks. An operator's own actual sawing techniques and methods may be different.



*Sample of one sawmilling technique.*

## *Sets:*

Your Baker sawmill Networks should come pre-programmed from the factory. If not, refer to Section 3 about programming, on the next page. After a log is securely positioned on the mill, make sure that the desired board thickness is displayed on line two of the LCD display. Once this is done, either choose to manually position the blade height and cut the first slab, or position the blade height roughly one board thickness above the log and activate the **SET joystick**. Once **SET** is used, the **Ref** indicator should come on in the lower left hand side of the LCD display. If manual positioning is used for the first cut, be sure to use the **OFFSET** function after the primary cut has been made. By using either **OFFSET** or **SET**, **Ref** is activated. No matter how high the blade is raised above the first

cut, the Networks system knows where to return. Be sure **Ref** is displayed before manually moving up. After **Ref** is activated, simply continue to select **SET** each time to cut the desired number of boards off of each face. Next roll the log so that the second face can be cut. Re-select either the same **SET** thickness or you may choose to select a different thickness. It is important that the **Ref** icon disappears at this time so that it can reset to the new log height to be worked with (for the second face). This can also be achieved by moving from high to low or low to high on the **SET range selector**. Simply repeat the above procedure to cut the desired amount of boards. Remember, you have 8 pre-programmed SET thicknesses that you can choose to use at any time.

### ***Absolute SETS (ABS):***

Now that two sides have been cut, rotate the log accordingly for cutting the third face. Make sure the desired SET thickness is selected and then choose the appropriate CORE size. **ABS** should appear in the LCD display. Press the toggle switch to the **SET** position. If the saw head moves up, select



**Figure D**

**SET** again until the saw is positioned to cut the first full slab. As boards are cut and the saw head is brought back, select **SET** again to position the head for cutting the next board. Repeat this procedure until the desired **CORE** size is reached. Once the desired **CORE** size has been reached, rotate the log to the fourth and final face

and choose the last **CORE** size to activate **ABS** once more for sizing the last side. Make sure that **Ref** disappears from the display so that the saw will re-reference to the new starting height on the last face of the **CORE**.



**Figure E**

## Section 3

### Programming:

Simply flip the Program/Run switch to RUN and scroll to the value to be changed using the **PREV** and **NEXT** toggle



**Figure F**



**Figure G**

switches. Kerf, Tare, Offset, and Height are each represented in thousandths of an inch. When setting the kerf\*, your setworks display will look like Figure F. Some operators set this a little higher than the actual Kerf so that their lumber will always be a little heavy or thick. Tare is automatically adjusted by the computer, and helps the computer make accurate sets. Offset is the amount the saw moves up when offset is activated (Figure G). You can change the Height Adjustment (Figure H) if your mill's scale is right, but it is cutting just a little too high or too low compared to what you're reading on the round measurement dial. For example, if you tried to cut a 1-inch board, but it turned out to be a 1-1/16"-thick board, you may want to adjust this Height setting to -0.062 to compensate.



**Figure H**



**Figure I**

To set scaling values scroll until the LCD says, "To adjust scaling toggle Adjust now." Then toggle **ADJUST**. "Enter Code" should display. This is to keep the scaling from being accidentally changed. Enter the code by simply toggling **CORE 1** (**ADJUST**) once and **CORE 2** once, in that order. Next, the computer should display "Scaling

Point1" (see Figure I). At this time set the saw to its lowest position possible in whole inches and

\*Kerf is defined as the linear measurement of the gap left by the cut of a saw blade. The kerf of a Baker thin-kerf saw is typically about 0.072 inches.



**Figure J**

set the computer to this value using **up/down** and the **ADJUST** switch. Usually you'll want to set it at 1 inch. Once the saw and the computer are at the same height toggle the Reference Reset toggle switch located on the mill in the operator's main control station. Now the computer should display "Scaling Point2" (as

in Figure J). Place the saw at its highest point in whole inches (usually 32") and enter that number into the computer. At this time, flip the **Program/Run** switch back to RUN and toggle Reference Reset once more.



**Figure K**

It is possible to mess this up enough to cause your computer to fail. If this occurs, turn the computer off using the **on/off** switch located on the bottom of your



**Figure L**

computer box. Then switch the **Program/Run** switch to PROGRAM and turn the computer back on. Go back into the scaling portion of programming and enter a zero (0) for Point One (see Figure K). Toggle Reference Reset twice and the computer should say "Cycle Power Now" (see Figure L).

Now, switch back to RUN and turn the computer off. When the computer is turned back on, it will be set to factory defaults. You will have to set the scaling before operating your saw.

If you have any further questions, please call 573-663-7711 and ask to speak to our service personnel. Please know your sawmill **model number** \_\_\_\_\_ and **serial number** \_\_\_\_\_ . Refer to this Setworks manual and tell the service personnel that you have an RH-2004 Version III Setworks on your mill. Baker Products also offers a helpful setworks video to aid the operator in learning how to use the setworks. Thank you for choosing Baker. We appreciate your business.



# **BAKER** **Products**

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