# SuperbaKnit Interface Type B

**Adjustment of the Sensor Height and Precise Cursor Timing**

**Sensor Height**

You can change the height of the sensor by adjusting the two M3 screws at the rear side of the printed circuit board.
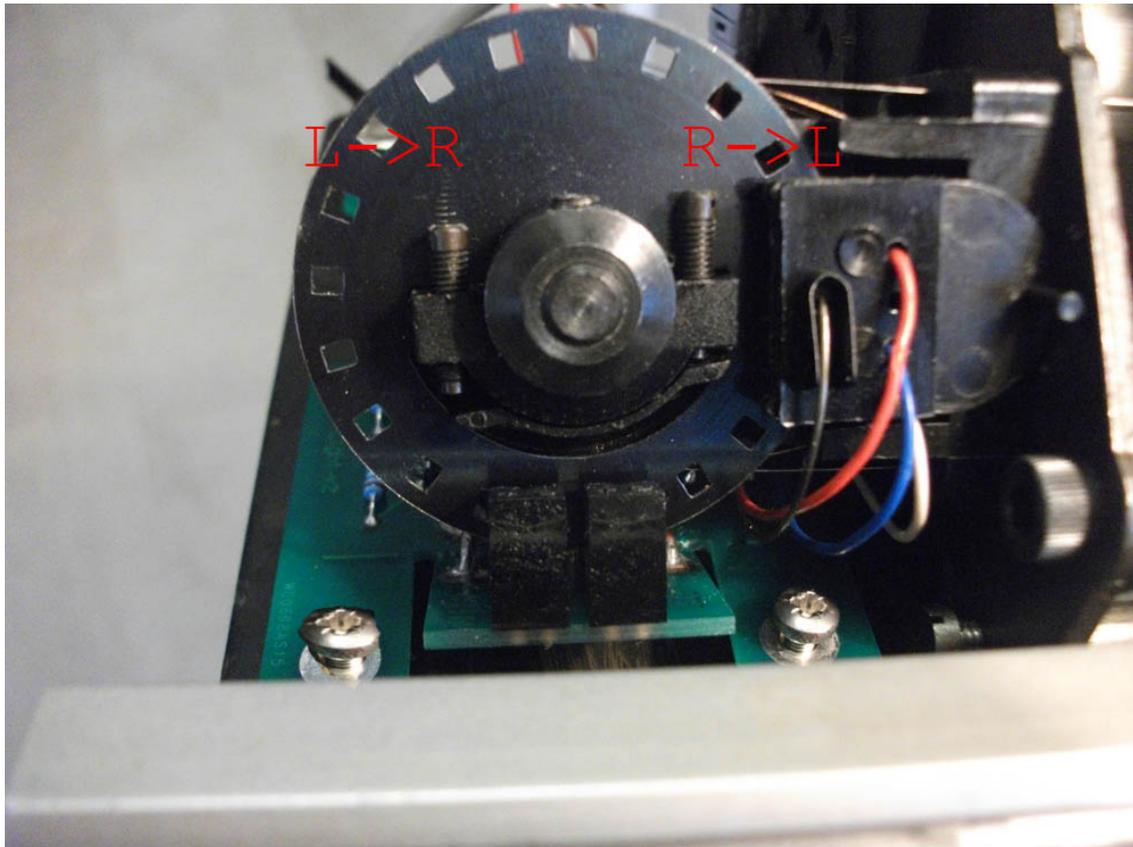


**Figure 1**

Set the cursor stops at the far ends of the needle bed. Apply power to the interface. Move the cursor a few times to the left and to the right. Move the cursor by hand slowly from left to right and then from right to left over 40-60 needles. The bicolor LED on the interface board should be blinking red/green. In the case the result is different, adjust the two M3 screws to obtain a blinking red/green LED result. Generally you will have to turn clockwise. Turn first the left screw ( as seen from the front of the machine) and the level the sensor horizontally with the outer screw.

When you stop slow movement, the color of the LED can be red or green; both colors are OK.

When you now move the cursor a lot faster over 40-60 needles, the LED should be stable red, orange or green when you stop moving the cursor. If the bicolor LED is off, you haven't moved over sufficient needles.

If the result of the fast movement is a green LED in both directions, the sensors are in the good range for proper operation. If the result is orange or red, or no proper indication at all, adjust the height of the sensors with the two M3 screws clockwise to obtain a green LED result. If the result is green, turn the two M3 screws counterclockwise until the LED becomes orange or red, or no proper indication at all. After that, turn the two M3 screws clockwise again to obtain a green LED result. When the LED result is green in both directions, the sensor board height is set at the lowest operating position.

Turn each M3 screw 2 x 360 degrees right (clockwise) and check that after fast cursor movement the LED is green in both directions.

Note: the sensor should not touch the slotted timing wheel or metal band!

**Precise Cursor Timing**

Precise cursor timing can be achieved with the 2 screws (L->R and R->L) on the timing wheel as shown in figure 1.

One screw sets the timing for carriage/cursor movement from left to right (L->R), the other for movement from right to left (R->L).

The actual needle selection moment can be observed on the bicolor Led on the board as follows:

Slow Carriage movement    R--> L :   needle selection happens on color change red to green

Slow Carriage movement    L--> R :   needle selection happens on color change green to red

Move the cursor very slow in one direction for the following procedure. Any needle position can be used for the timing setting.

Move the cursor 5 needles from right to left, then move the cursor by hand approximately 0.5 mm each time from right to left. Stop when the bicolor LED color changes from red to green. The cursor middle should be just before the next needle marker as in figure 2. If not, adjust the timing by turning the R->L screw. Turn clockwise for earlier, turn counterclockwise for later. Repeat this procedure until you're satisfied.
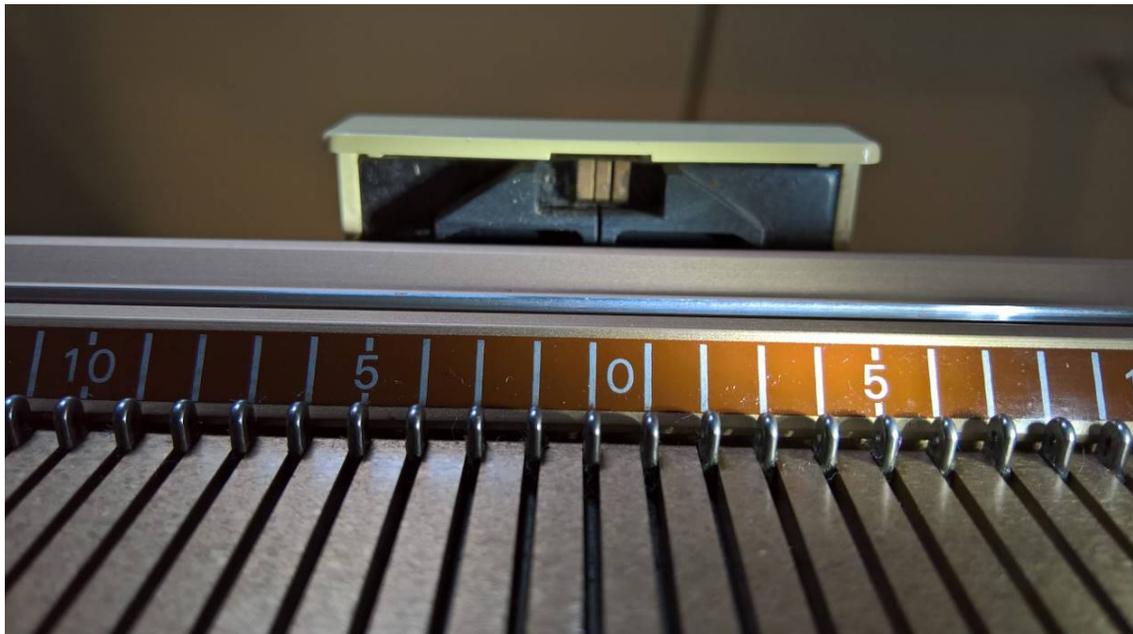


**Figure 2**

Move the cursor 5 needles from left to right, then move the cursor by hand approximately 0.5 mm each time from left to right. Stop when the bicolor LED color changes from green to red. The cursor middle should be just before the next needle marker as in figure 3. If not, adjust the timing by turning the L->R screw. Turn clockwise for earlier, turn counterclockwise for later. Repeat this procedure until you're satisfied.



**Figure 3**

If one of the screws (R->L or L->R) reaches its min or max position, the interface board horizontal position has to be adjusted. The 2 M6 bolts have to be loosened to make that possible.  The direction where the board should move is: If selection moment is too early, same direction as wheel movement in sensor. If too late, reverse direction of wheel movement in sensor. This applies to both Cursor movement directions. Move the board only +/- 1 mm and tighten the bolts again. Make sure the wheel is still running free in the sensor.

Further small adjustments might be necessary when during actual knitting needles are not selected properly, especially when the carriage speed is high. In that case the selection moment must be advanced by turning the screws as in Figure1 in the following way:

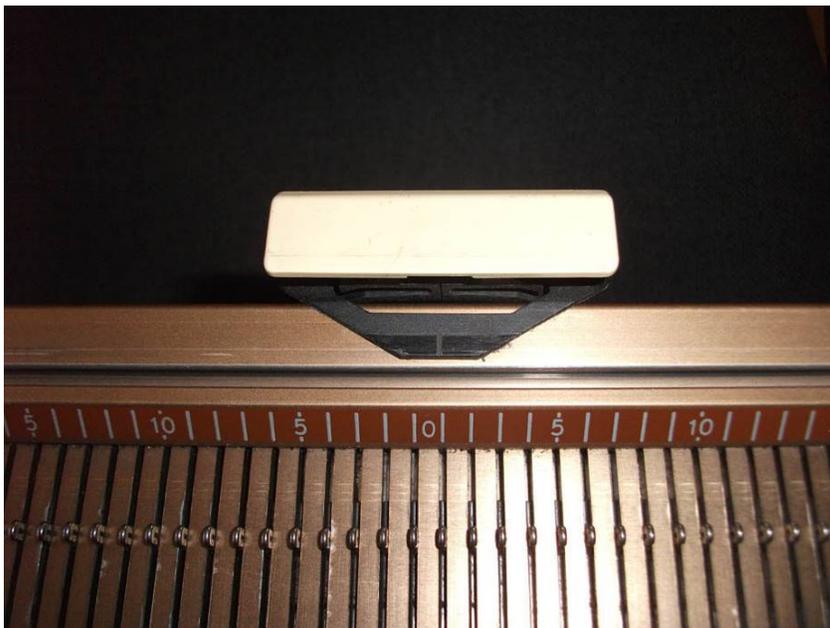For Carriage moving R->L :   Screw  R->L   clockwise
For Carriage moving L->R :   Screw  L->R   clockwise
Turn the screw 180 degrees (½ turn) and then check the needle selection again. Repeat this until you are satisfied.

The cursor may also look like the cursor in the pictures below.
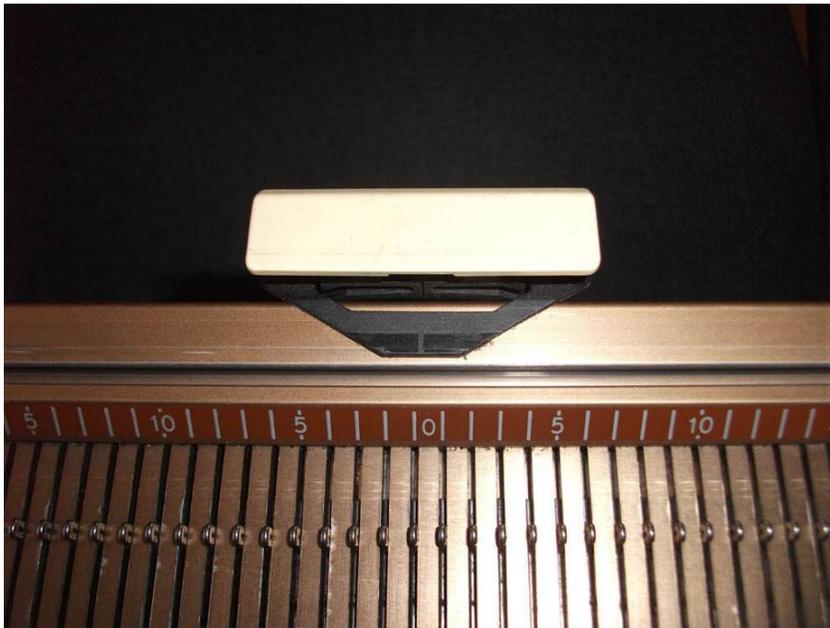


Cursor moving R->L



Cursor moving L->R.