

The DesignaKnit Serial Screenlink

for almost any knitting machine



This cable link enables interactive knitting in DesignaKnit 5 and later versions for almost any knitting machine.

When using the Screenlink, the following machines also require the KnitLink Platform: Silver Reed 360, 370, 700, and Zippy with Knitradar, and Passap/Pfaff Duo. This is because there is no convenient place on the machine to place the ScreenLink's detector box, and it must instead be placed on a small platform that attaches to the yarn mast.

Part List

1. The DesignaKnit serial cable
2. The magnetic KnitLink Arm

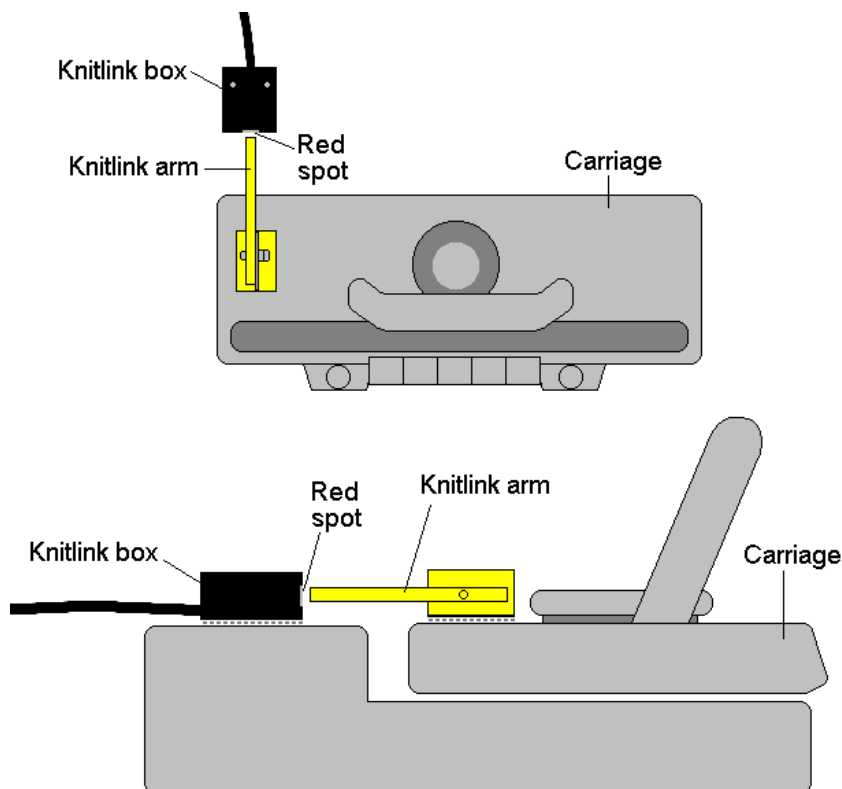
Fitting the link to the computer

This cable may be used with a DesignaKnit USB-to-serial converter. Other converters might not work for this purpose. If using a converter, install it first, referring to its own manual, which is available here: <https://www.softbyte.co.uk/cablelinkmanuals.htm>

Connect the ScreenLink to a free serial port on your computer or to a USB-to-serial converter. If the ScreenLink has a 25 pin connector, use a 25 to 9 serial adapter.

Fitting the link to the knitting machine

1. Move the carriage to the middle of the bed.
2. Place the base of the KnitLink Arm with both layers of the fastening fabric still attached to its underside onto the carriage.
3. Place the KnitLink Box with both layers of the fastening fabric still attached to its underside onto the console of your knitting machine. Direct the red spot towards you and the cable pointing away.
4. Make sure that the magnet in the end of the KnitLink Arm lines up with the red spot on the KnitLink Box and passes as closely as possible without actually touching when the carriage is moved.
5. The angle of the Knitlink Arm is adjustable. If your KnitLink Arm is black, it is quite stiff and needs some effort to bend it, but it is very strong and will not break: it can safely be bent using pliers. If it is made of aluminium, loosen the nut to adjust it, and tighten it when the arm is in the correct position.



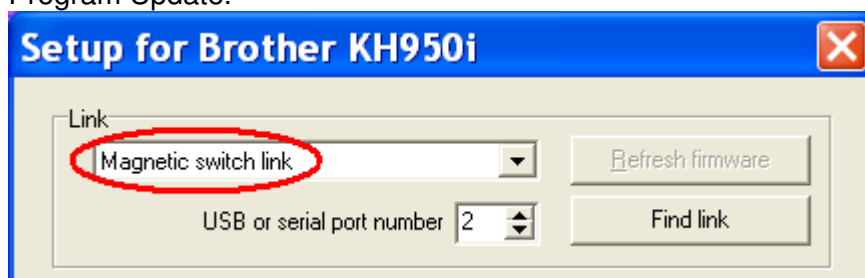
6. When positioned correctly, remove the backing strip of the fastening fabric from the base of the KnitLink Arm and fix to the carriage. Remove the backing strip of the fastening fabric from the base of the KnitLink Box and fix to the console.

7. Make fine adjustments to the positioning of the arm and box by altering the position in which their fabric fasteners engage. Aim for a clearance of two or three millimetres. It might be necessary to adjust the KnitLink Arm to get the positioning right.
8. Press the arm base and box down firmly to make sure they stay in place.
9. Make sure that the KnitLink Arm does not catch on anything in its path when the carriage is moved, including charting devices.
10. You can buy extra pieces of ordinary fastening fabric and attach them to other knitting machines, and move the KnitLink arm and box to whichever machine you need to work with.
11. To pack your knitting machine in its case, simply pull the KnitLink Box upwards so that the two layers of fabric fastener are separated. You might also need to detach the KnitLink Arm from the carriage in the same way.

Telling DesignaKnit 8 which cable & port number to use

This applies whether you are using a true serial port or a USB to serial converter.

1. Open Stitch Designer and select Transfer / Download.
2. Select the required knitting machine from the Knitting Machine Selection list by left clicking it, then click the Setup button.
3. Under Link or Cable link, select "Magnetic switch link". If this choice is not available, it may mean that you need to update your DesignaKnit using Help / Web Updates / Program Update.



4. Click on the Find Link button and then Start Search. When the link is found, touch the magnetic end of the KnitLink Arm to the red spot and the screen should flash red to confirm that the correct port number has been detected. If the screen doesn't flash, set the range of ports to exclude this port number and search again.
5. When DesignaKnit finds the port number it will automatically enter that number into Knitting Machine Setup. If it reports that the link was not found, go to the section titled Troubleshooting for information about updating the driver.
6. Finish by clicking OK and OK again, then Cancel at the list of knitting equipment.

Telling DesignaKnit 7 which port number to use

This applies whether you are using a true serial port or a USB to serial converter.

Please see <https://softbyte.co.uk/usingdevicemanagertofindport.htm> for instructions on how to find the port number using Device Manager. When you have worked out which port number you are using:

1. Open Stitch Designer and select Options/Knitting Machine.
2. Select the correct machine from the Knitting Machine Selection list by left clicking it, then click the Setup button.

3. At the top of the Knitting Machine Setup dialogue box you will see 'USB or serial port number' or 'Connected to serial port number'. Enter the port number that was found in Device Manager and click OK.
4. Back at the list of knitting machines, finish by clicking OK.

Templates for punch cards & reader sheets

DesignaKnit is able to print out exact size templates for most knitting machine punch cards and reader sheets, using the Stitch Template printout format. Open the stitch pattern in Stitch Designer and select Stitch Template when printing.

Using an Integrated Template printout

Where a stitch pattern has been integrated with a garment piece, the Integrated Template format should be used rather than the Stitch Template format. Here, the stitch pattern is automatically adjusted to allow for the exact positioning of the stitch pattern on the garment piece.

An integrated stitch pattern is one which has been positioned on a garment piece, either by dragging the outline of the garment piece over the stitch pattern in Stitch Designer, or by dragging the stitch pattern over the garment piece in Original Pattern Drafting. The filename and position of a stitch pattern may be stored independently for each piece in a shape file.

Whichever way a garment piece is integrated with a stitch pattern, it is unlikely that row 1 of the garment piece will end up coinciding with row 1 of the repeating stitch pattern unit as shown on the Stitch Designer screen. It is also unlikely that the centre stitch of the garment piece will coincide with the centre stitch of the repeating pattern unit, though the interactive knitting instructions include centring each garment piece on the needle bed. DesignaKnit manages this situation by automatically shuffling the pattern vertically and horizontally by the required number of rows and stitches before downloading it. The end result is that the knitted piece exactly matches the display of the integrated piece on the Stitch Designer or Original Pattern Drafting screen.

Even if the same stitch pattern has been integrated with more than one garment piece, the positioning of the pattern on each piece is likely to vary, so the automatic shuffling of the pattern will be different, and a separate Integrated Template printout is required for each piece.

To print an Integrated Template, open the shape file in Standard Garment Styling or Original Pattern Drafting and after integrating select Print. Select the piece and then the Integrated Template format. Or the same can be done using Stitch Designer's Shapes menu,

Interactive Knitting

The manual and help for interactive knitting are available from the Help menu in the Interactive Knitting section of DesignaKnit: please see those in order to find out about the general principles of interactive knitting.

Each time the magnetic KnitLink Arm passes the KnitLink Box, a signal is generated. When Interactive Knitting has started, the signal causes the screen to progress to the next row and to show any knitting instructions that may be required.

Troubleshooting

For problems with interactive knitting, please see <https://softbyte.co.uk/interactiveknittingwithbrotherpassapscreenlinks.htm>

Updates to this manual

The document you are reading was updated in March 2017.

The most recent editions of cable link manuals may be found at <https://www.softbyte.co.uk/cablelinkmanuals.htm>

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