

The DesignaKnit USB SilverLink 3 for the Silver Reed PE1



The USB Silverlink 3



The USB Silverlink 3 Plus

What these links do

- Uploading stitch patterns from the Silver Reed PE1 into DesignaKnit. Mylar sheets can be read into the PE1's memory and then uploaded to DesignaKnit.
- Downloading from DesignaKnit to the Silver Reed PE1, which can then be used with any of the Silver Reed electronic machines, including the SK840 or Knitmaster 580 with the AG50 intarsia carriage.
- Interactive knitting with almost any knitting machine (Silverlink 3 Plus only). Knitters who have pacemakers fitted should be aware that the KnitLink Arm contains a magnet. It is not an especially strong magnet, but please observe the normal guidelines concerning the proximity of magnets to pacemakers.

Other cable links for Silver Reed knitting equipment including the Serial Silverlink 3 are described here: <https://softbyte.co.uk/cablelinkssilverreed.htm>

Part List

1. The DesignaKnit USB Cable.
2. CD with test program and USB drivers.
3. The magnetic KnitLink Arm (Silverlink 3 Plus only).

Fitting the cable

The round connector attaches to the PE1.

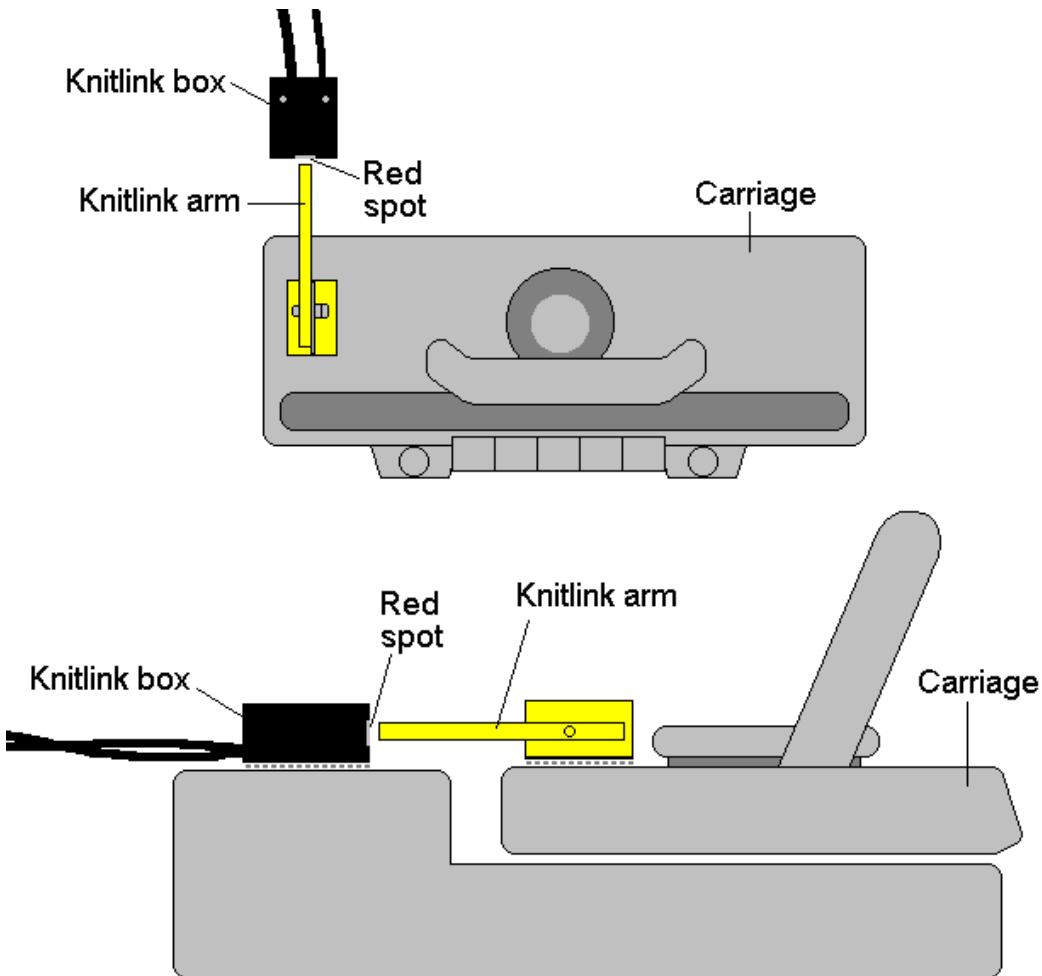
The rectangular connector attaches to a computer USB port.

Fitting the KnitLink Arm and Box (Silverlink 3 Plus only)

The KnitLink Arm is supplied with the USB SilverLink 3 Plus but not with the USB SilverLink 3. A Silverlink 3 can be converted to a Silverlink 3 Plus just by adding a KnitLink Arm.

Move the carriage to approximately the middle of the bed.

1. Place the base of the KnitLink Arm with both layers of the fastening fabric still attached to its underside onto the carriage.
2. 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.
3. 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. The following diagram shows the top view and the side view. The carriage being illustrated is a Brother one but the same principle applies to Silver Reed.



4. 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.
5. 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 angle of the KnitLink Arm to get the positioning right, if necessary temporarily loosening its nut and bolt.
6. Press the arm base and box down firmly to make sure they stay in place.
7. Make sure that the KnitLink Arm does not catch on anything in its path when the carriage is moved, including charting devices.
8. Extra pieces of ordinary fastening fabric may be purchased and attached to other knitting machines (even non-electronic ones). The KnitLink arm and box can then be moved to any machine when required.

9. To pack your knitting machine in its case, simply pull the KnitLink Box upwards so that the two layers of fabric fastener are separated. It may be necessary to detach the KnitLink Arm from the carriage in the same way.

Installing the Driver

The process varies according to the version of Windows and whether the same driver already happens to be installed for a similar device. All the DesignaKnit cable links, and many other devices use the same driver.

Installing the driver should be done by an Administrator Windows user. If your computer doesn't offer you a choice of user names when starting up, it almost certainly means you are an Administrator user.

For the driver for Windows CE, please visit <http://www.ftdichip.com/Drivers/VCP.htm>

If your DesignaKnit computer is **not** connected to the internet, go straight to the section titled "Installing the driver from CD".

Installing the driver from the internet

Insert the USB cable into a standard USB port on your computer.

When Windows starts, or if the link is connected while Windows is running, it will recognize that the cable link has been attached and may show a message saying that it is searching for a driver. A message may appear to say that devices are being installed or it might say that the best driver is already installed. If a problem is reported please see the Troubleshooting section.

If Windows does not react when the cable link is connected for the first time, it could mean that a similar USB device has previously been installed on the computer. In this case, Windows might not search or request a driver for the cable link but may just continue to use the driver that is already installed, which may be too old to work well with your current version of Windows. If Windows does not react when the cable link is connected for the first time, please see the Troubleshooting link about updating the cable link driver.

Finally you may be presented with an instruction to restart the computer - if so, do it.

Now please go to the section titled "Telling DesignaKnit 8 which cable & port number to use"

Installing the driver from CD

Do not connect the DesignaKnit cable link yet. If the cable is already connected, disconnect it.

If the cable link was purchased after DesignaKnit 8, insert the CD that came with the cable link, otherwise insert the DesignaKnit CD to install the driver (if the DesignaKnit Setup program opens, do not install DesignaKnit again - close the window).

If Windows offers to open a folder to view the files accept that option; otherwise open a My Computer window yourself, right click on your CD or DVD drive and select Explore, Browse, or Open in a new window. Run the program whose filename begins with USBlinks_DriverInstaller. The driver will then be installed. Finally you may be presented with an instruction to restart the computer - if so, do it.

Insert the USB cable into a standard USB port on your computer.

Telling DesignaKnit 8 which cable & port number to use

1. Open Stitch Designer and select Options / Method of Knitting.

2. At the list of knitting machines, select "PE1 + machine" by left clicking it, then click the Setup button.
3. Under Link or Cable link, select "Magnetic switch link", even if you don't have the Plus cable.
4. Click on the Find Link button and then Start Search. When the link is found, then if you have a KnitLink Arm you can verify the port as follows. 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 until back again at the main Stitch Designer screen.
7. If you have an AG50 intarsia carriage, repeat the above steps but this time select "PE1 + machine + AG50" instead of "PE1 + machine". The same port number applies - so it's not necessary to use Find Link this time.

Telling DesignaKnit 7 which port number to use

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 equipment list by left clicking it, then click the Setup button.
3. At the top of the Knitting Machine Setup dialogue box there is 'Connected to serial port number'. Enter the port number that was found in Device Manager and click OK.
4. When back at the knitting equipment list, finish by clicking OK again.
5. If you have an AG50 intarsia carriage, repeat the above steps but this time select "PE1 + machine + AG50" instead of "PE1 + machine". The same port number applies.

Uploading from the PE1 to DesignaKnit

To upload from the Silver Reed PE1 using the SilverLink 3, the stitch pattern must first be in the memory of the PE1. An upload operation can only transfer a single pattern at a time.

1. In Stitch Designer, select Transfer / Upload.
2. Select PE1+machine or PE1+machine+AG50. Click OK.
3. Connect the SilverLink to the PE1 and to the EC1 or machine.
4. Click the Upload button in the next dialogue.
5. DesignaKnit needs to know at this point the number of rows and stitches in the pattern that is about to be uploaded. This information can be found from the PE1: enter it and click OK.
6. Follow the on-screen instructions. A bar will indicate the progress of the upload.
7. After uploading, the uploaded pattern appears on the Stitch Designer workspace, where it can be saved for future use by choosing File / Save As.

The **Extract** and Restore options on the Transfer menu apply only to Brother machines, so they are greyed out when the PE1 is the selected knitting equipment.

Downloading an Unintegrated Stitch Pattern

1. In Stitch Designer, open the stitch pattern you want to download to the PE1 and select Transfer/Download.
2. At the list of knitting machines, select the appropriate PE1 option: if you will be knitting with the ordinary carriage, choose PE1+machine, but if you will be using the AG50 Intarsia carriage, select PE1+machine+AG50. Click OK.
3. Connect the SilverLink to the PE1 and to the EC1 or machine.
4. Click on OK.
5. Click the Download button in the next dialogue and follow the on-screen instructions. DesignaKnit will ask you to connect the SilverLink to the PE1 and to the EC1 or machine. The USB SilverLink 3 obtains its power from the computer's USB port and it cannot connect to the EC1 or knitting machine. Please ignore the on-screen instruction to connect it to the EC1 or knitting machine. That instruction applies only to the serial version of this cable link.
6. A bar will indicate the progress of the download. The time taken to download will vary according to the size of the pattern.

Downloading an Integrated Stitch Pattern to the PE1

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.

In Stitch Designer, when Transfer / Integrated Download is selected, a garment piece is first chosen. The stitch pattern that has been integrated with that piece is then downloaded to the PE1 memory, so that it will be positioned at the centre of the needle bed.

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 download is required for each piece.

The garment shaping cannot be transferred to the console memory: only the stitch pattern can. The process is as follows.

1. In Stitch Designer, open the shape file that has been integrated and select Transfer / Integrated Download.
2. At the list of knitting machines, select the appropriate PE1 option: if you will be knitting with the ordinary carriage, choose PE1+machine, but if you will be using the AG50 Intarsia carriage, select PE1+machine+AG50. Click OK.
3. Connect the SilverLink to the PE1 and to the EC1 or machine.
4. The Integrate window opens. In the left column, select a garment piece. The filename of the stitch pattern that has been integrated with the selected piece should be shown in the middle column. Click OK.

5. Click the Download button in the next dialogue and follow the on-screen instructions. A bar will indicate the progress of the download. The time taken to download will vary according to the size of the pattern.

Large patterns

The memory space in the PE1 that is required for a given pattern is roughly proportional to the total number of stitches. For a given pattern DesignaKnit is able to calculate whether the total memory required for the batch will fit into the PE1 memory. If a pattern is too large to fit, DesignaKnit will give a message saying how many sections it must be divided into and asking which of those sections you want to download. Dividing into sections is done automatically - you do not have to decide how to divide the pattern. When a section number is chosen, a message shows how many rows must be knitted before the next section needs to be downloaded. Interactive Knitting will give a message reminding when the current section has been knitted and the next section must be downloaded.

Even when a pattern or a section of a pattern will fit in the PE1 memory, patterns wider than 60 stitches or having more than 150 rows will be downloaded in pages. If this is the case, DesignaKnit will prompt you to press the = key on the PE1 when necessary. Occasionally it is necessary to press the = key a second time before the download continues.

If you interrupt the downloading procedure by pressing the Esc on the computer keyboard, it is necessary to disconnect the cable from the PE1 for a few seconds to allow it to reset.

After downloading, the PE1 will beep, briefly display COMPLETED, beep again, and finally show OK.

Jacquard Patterns

The PE1 can accept Jacquard colour patterns with a maximum of 5 colours per row. Methods A to D and F of colour separation may be used according to preference. In Stitch Designer, select Options / Method of Knitting / Setup / Jacquard to configure the separation method.

Jacquard Patterns with Memo Information

If the transfer of memo information to the PE1 is required, Jacquard separation method D should be selected. Memo should be selected from the Palette menu to add memo numbers 1 to 7 to the colours used in the design. Numbers 8 and 9 should not be used as the PE1 will not recognize them.

If method D separation is used, the screen instructions for downloading are slightly different and include pressing the F3 key on the PE1 to indicate Jacquard knitting.

DesignaKnit does not use the buzzer column.

Uploading from PE1 to DesignaKnit

To upload, the stitch pattern must first be in the memory of the PE1. An upload operation can only transfer a single pattern at a time.

1. In Stitch Designer, select Transfer / Upload.
2. At the list of knitting machines, select PE1+machine or PE1+machine+AG50. Click OK.
3. Connect the SilverLink to the PE1 and to the EC1 or machine. The connector with the red marking goes to the EC1 and the connector with the blue marking goes to the PE1.
4. Click the Upload button in the next dialogue.

5. DesignaKnit needs to know at this point the number of rows and stitches in the pattern that is about to be uploaded. This information can be found from the PE1: enter it and click OK.
6. Follow the on-screen instructions. A bar will indicate the progress of the upload.
7. After uploading, the uploaded pattern appears on the Stitch Designer workspace, where it can be saved for future use by choosing File / Save As.

Interactive Knitting (Silverlink 3 Plus only)

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.

Knitters who have pacemakers fitted should be aware that the KnitLink Arm contains a magnet. It is not an especially strong magnet, but please observe the normal guidelines concerning the proximity of magnets to pacemakers.

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.

Updating the Driver from the Internet

From time to time the manufacturer of the chips in the cable link publishes a new driver because a modification may be necessary for it to work with newly published Windows updates. We recommend that from time to time you follow the instructions on this webpage to keep the driver updated. If you have a problem with the cable link at any time it is a good idea to update the driver before contacting technical support. <https://softbyte.co.uk/updatinganexistingdriver.htm>

Troubleshooting

- If Windows reported a problem when trying to install the driver from the internet, or Device Manager shows a yellow error icon next to the serial port, or there is a yellow error icon next to an "Unknown device", try using the driver installer. Either follow the directions in this document under "Installing the driver from CD", or from <https://www.softbyte.co.uk/cablelinksdriver.htm>.
- If your DesignaKnit computer is not connected to the internet, download a driver installer here and transfer it on a pen drive: <https://www.softbyte.co.uk/cablelinksdriver.htm>.
- Updating the cable link driver: please see <https://softbyte.co.uk/updatinganexistingdriver.htm>
- For problems with interactive knitting, please see <https://softbyte.co.uk/interactiveknittingwithbrotherpassapscreenlinks.htm>
- While interactively knitting, a message sometimes appears saying that the carriage has moved in the wrong direction, when it has not. Please see this webpage: <https://www.softbyte.co.uk/carriagedirectionerrorswithsilverlinks.htm>
- The stitch pattern on the knitted work is not the same as the pattern on the interactive knitting screen. Please see this webpage: <https://www.softbyte.co.uk/mispatterningwithsilverlinks.htm>

Updates to this manual

The document you are reading was updated in September 2018.
The most recent editions of cable link manuals may be found at
<https://www.softbyte.co.uk/cablelinkmanuals.htm>

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