



# Light Stitches

E-Textiles for Education



## i-POD/Phone Holder Kit Instructions

## **Kit Contents**

- Sewable Battery Holder
- Coin cell battery
- 1 colour changing LED
- Conductive thread
- Metal press stud fastener
- Black felt
- Green and yellow self adhesive felt

## **You will need:**

- Sewing needle
- Long pointed pliers
- Scissors
- Sewing machine for pouch border (or can be hand sewn)

1. Cut out a design for the front of your pouch using the self adhesive felt. We have included a simple template for a headphones/heart design, but you can use your imagination to make whatever design you wish.



2. Work out how the design will sit correctly on your black felt when the poppers would be joined together and then stick them on. We are using the LED on the heart, so before we stick it on, gently push the legs of the LED through the self adhesive felt and stick onto the black felt, continuing to push through



the material from the front to back.



3. Turn your design over to show the inside of the pouch and where you will be creating your electronic circuit. You can mark where you will be folding it using tailors chalk. Bend each of the legs of the LED in opposite directions. The positive leg is the longest and should be on your right as you look at it.

Then using a pair of small pliers, bend each LED leg round into a loop.



3. Hand sew using conductive thread from the negative side of the Battery holder, to the negative leg of the LED. (Be careful so your running stitch is not to be seen on the front of the fabric). Secure tightly and cut thread.

Then sew from the positive leg of the LED, to the open half of the press stud fastener below (which is on the outer design face) secure tightly and cut thread.



4. Sew from the positive side of the Battery holder to the male part of the press stud above, secure tightly and cut thread.

Place the coin battery into the battery holder.

Now when the felt is folded inwards and the press studs fastened, this will serve as the connection to make the light on your design turn on!



Finish off by sewing up the sides with conventional thread using either a sewing machine or hand sew.

---> Positive running stitch

- - -> Negative running stitch

