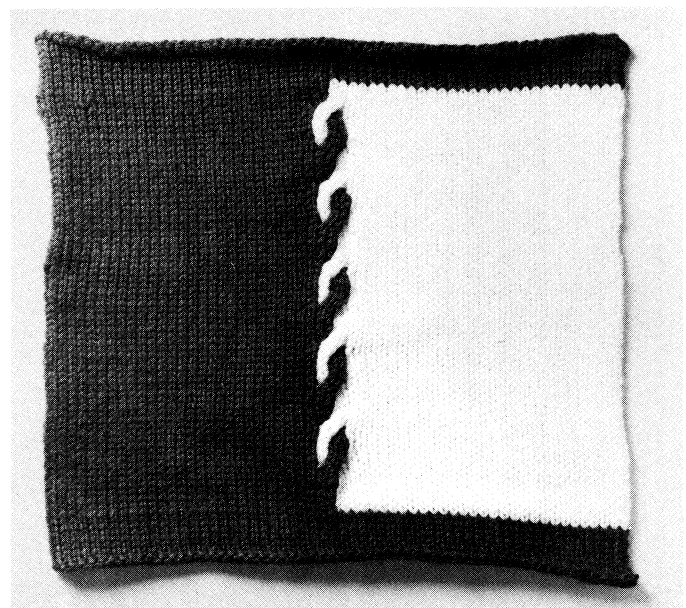# *Tips & Techniques!*

Tips & Techniques #17

TWO COLOR CABLES FOR ELECTRONIC MACHINES

Electronic machines with full bed patterning capabilities are useful for more than just large, non-repeating motifs. Simple as they look, these two color cable effects need to be knitted on any of the machines that utilize the PE-1. You need to change colors every two rows, so a color changer is a real asset, but you can change colors manually.

We've illustrated three possibilities (2 x 2, 3 x 3 and 2 x 2 multi cables) as they would be programmed for a 110 needle machine (SK-890). Even if you do not plan to knit the full width of the bed, it is best to program the full width just in case you want to make any changes as you knit. On each of the diagrams, "C" indicates the cables, "X" the right edge of the fabric, "A" all needles to the right of zero and "B" all needles to the left of zero. For the SK-860 (150 needles), increase the "A" and "B" sections by 20 squares each. For the SK-840 or SK-580 (200 needles), increase the "A" and "B" sections by 45 squares. Feed the complete design into the PE-1 in sections.

Place the N1 cam two needles to the left of zero for the 2 x 2 cable, three needles to the left of zero for the 3 x 3 cable and six needles to the left of zero for the multi cable to exactly center the design. The point cams should be placed at the edges of the fabric because, even though each color only knits half of the bed, it is still necessary to pass each point cam on every row. Do not try to move the point cams in or you will cut off the pattern. The #1 and #2 left lights should be lit on the control panel of the machine or EC-1. With the carriage on the left end of the bed, turn off the inspection light and then turn on the #3 light to double the rows. Make sure the PE-1 is ready to knit row #1 and that it always changes the row number when the carriage is on the left. You must knit two identical rows from left to right and back.

2 x 2 Cable

The cables cross every 6 rows and the design shifts to accommodate the new placement of the colors where they cross. You should mark the mylar cards for the PE-1 to beep every 6 rows as a reminder. Also, it doesn't matter
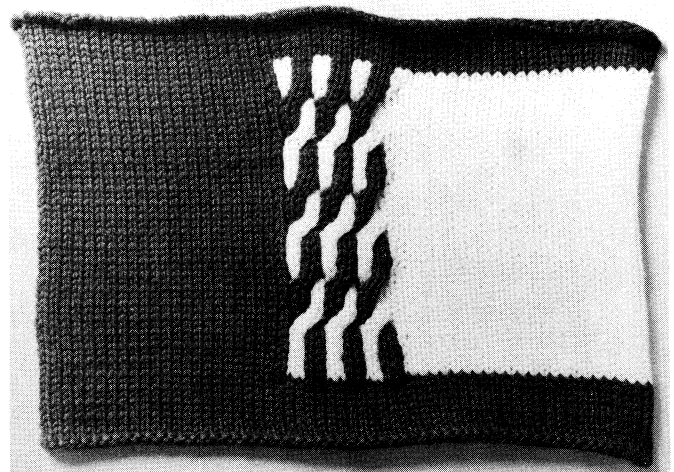
whether you cross the cables to the right or the left as long as you always cross them the same way. With the multi cable, make sure you always cross the same pairs of stitches because these are not braided or fancy cables, just three parallel cables. With all of these cables, there will be small floats behind the cables as the colors shift, but they are not large enough to cause any concern.

3 x 3 Cable

Thread color #1 in the left side of the tension mast and color #2 in the right side. In addition to claw weights at the edges, it is a good idea to place one directly below the needles where the cables will cross. Begin with the carriage on the left, set for Slip. *Thread the carriage with color #1 and knit one row from left to right. Only the needles to the left of zero should have knitted. Before knitting back to the left, wrap the yarn around the first needle to the right of zero to prevent a hole. Change colors and knit two rows with color #2, then wrap the yarn around the first adjacent needle.** You will need to change color every time the carriage is on the left. If you are changing colors manually, remove color #2 from the carriage and catch it under the right

end of the bed. Also, notice that the #1 color is wrapped after knitting only one row, while the #2 color knits both rows and then wraps. Repeat from * to ** two more times, but do not wrap either color on the last repeat. The row counter will show 12 passes of the carriage, but each color will have knitted only six rows. Cross the cable, keeping color #2 clear so that it does not get trapped between the stitches. For the next repeat, there will be two stitches of each color knitting on the opposite side to account for the cable crossing. Knit this repeat exactly like the first, wrapping all rows except the last. When the cable is crossed again, the colors will return to their own sides and the pattern will begin again. Remember, if you have marked the mylar to beep every six rows, it will do so prior to knitting the last two rows of color #2. Knit those two rows and then cross the cable.
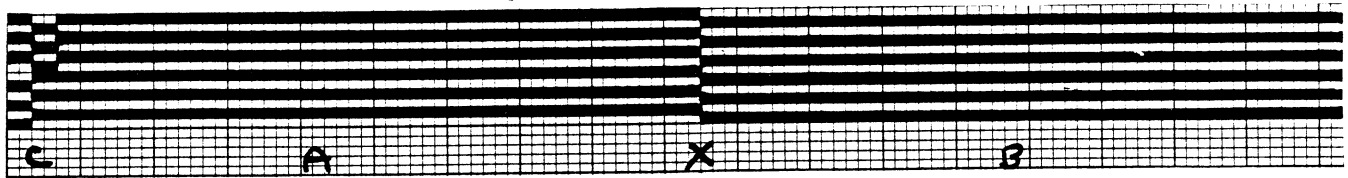
Multi Cable

The multi cable design knits exactly like the 2 x 2 and 3 x 3 cables except that you should begin knitting with color #2.
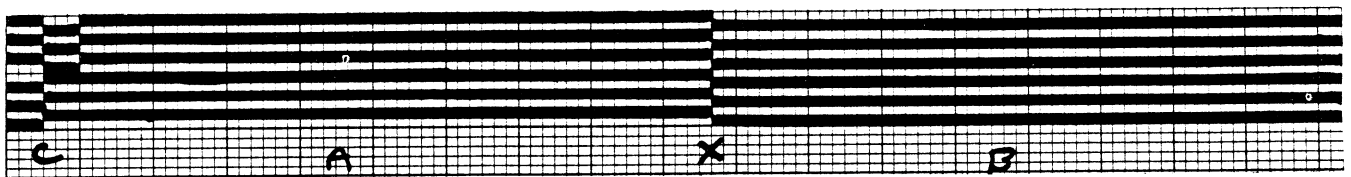
If you want to knit a fabric vertically divided without cable crossings, you only need to program the first two rows of cable design #1, wrapping only one of the colors as you knit.

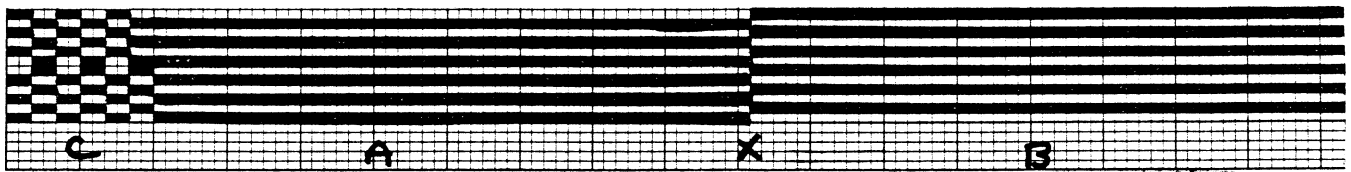If you are adventurous, you can easily expand

this idea to knit fancy cable variations. Just remember that whenever the cables cross, the colors must shift to accommodate the crossings.

2 x 2 Cable

3 x 3 Cable

Multi Cable