Radio telescope under the stars

Sized for a 6 inch hoop (15 cm). The stitched design is about 4.1 × 4.7 in (10.4 × 11.9 cm).



Which color goes where: by number on page 2.
Fabric: indigo cotton or linen.

Stitch in this order

Filled parts from the back of the picture forward, then lines and knots.

1. **Long and short stitch**, 1 strand
   Far ridge, desert ground
2. **Satin stitch**, 2 strands
   Base ring, tower legs, feet, yoke, platform, back of dish, hub, satin panels, dish center, rim, struts, gold stars, sequins, poppies, poppy hearts
3. **Padded satin stitch**, 2 strands
   Pivot, feed cabin
4. **Trellis stitch**, 1 strand
   Lace panels
5. **Stem stitch**, strands by part on page 2
   Ridge line, ground folds, braces, cross ties, back truss, dish rings, ribs, poppy stems
6. **Back stitch**, 1 strand
   Lines of the song
7. **Straight stitch**, strands by part on page 2
   Small stars, sage grass

Floss

- **1 DMC 3740 Dark Antique Violet** Far ridge (dark)
- **2 DMC 3041 Medium Antique Violet** Far ridge (middle)
- **3 DMC 3042 Light Antique Violet**
  Far ridge (light), ridge line and ground folds
- **4 DMC 779 Dark Cocoa**
  Desert ground (dark), poppy hearts (darker)
- **5 DMC 3860 Cocoa** Desert ground (middle)
- **6 DMC 3861 Light Cocoa** Desert ground (light)
- **7 DMC 414 Dark Steel Gray**
  Braces and back truss, back of dish (darker), hub (dark)
- **8 DMC 318 Light Steel Gray**
  Rim and satin panels (darkest), hub (middle), yoke (darker) and 4 more parts
- **9 DMC 762 Very Light Pearl Gray**
  Lace panels (lighter), ribs and dish rings, base ring (light) and 9 more parts
- **10 DMC 415 Pearl Gray**
  Lace panels (darker), lines of the song, satin panels and rim (dark) and 5 more parts
- **11 DMC BLANC White**
  Rim and satin panels (lightest), struts (lighter), pearls, feed cabin (light)
- **12 DMC 3820 Dark Straw** Gold stars, poppy hearts (lighter)
- **13 DMC 783 Medium Topaz** Sequins (darker)
- **14 DMC 3823 Ultra Pale Yellow**
  Small stars, sequins (lighter)
- **15 DMC 522 Fern Green** Sage grass (darker), poppy stems
- **16 DMC 349 Dark Coral** Poppies (dark)
- **17 DMC 351 Coral** Poppies (middle)
- **18 DMC 352 Light Coral** Poppies (light)
- **19 DMC 524 Very Light Fern Green** Sage grass (lighter)

Stitches, continued

8. **French knot**, strands by part on page 2, two wraps
   Pearls, sequins, poppy hearts

Three ways onto dark fabric

1. **Light shines through it**
   Lay page 3 on a bright light box, tape the fabric over it and trace the lines with a white marking pencil or pen.
2. **No light shines through**
   Print page 3 on a sticky wash-away sheet, smooth it onto fabric that can be washed, stitch through both and rinse it away.
3. **White or yellow carbon paper**
   Lay it colored side down on the fabric with page 3 on top, tape the layers and trace firmly with a ballpoint pen. Go over a faint line with a white pencil.

Page 3 is the pattern at actual size (page 4 is its mirror, for an iron-on pen on a light fabric). Print it at 100% with scaling turned off. Then put the fabric in the hoop: inner ring under, drawing up, tight as a drum.

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Radio telescope under the stars

6 inch hoop

How to read it

Floss is six strands. Cut 18 inches (45 cm), pull out the number given one at a time, and lay them together.

Inside a filled shape start with two or three tiny stitches, which the filling covers. Start a line with a small knot on the back. End each thread by running the needle under the backs of a few stitches.

Each small ring is one French knot. A fine broken line inside a shape is where two shades meet: trace it, do not stitch it.

A number on the picture is a color of the list of floss on page 1. The fine lines on the colors show which way the stitches lie.

Every stitch in pictures: flossfield.com/embroidery/stitches. The first time: flossfield.com/embroidery/guides/how-to-start.



1	DMC 3740 Dark Antique Violet	**8**	DMC 318 Light Steel Gray	**15**	DMC 522 Fern Green
2	DMC 3041 Medium Antique Violet	**9**	DMC 762 Very Light Pearl Gray	**16**	DMC 349 Dark Coral
3	DMC 3042 Light Antique Violet	**10**	DMC 415 Pearl Gray	**17**	DMC 351 Coral
4	DMC 779 Dark Cocoa	**11**	DMC BLANC White	**18**	DMC 352 Light Coral
5	DMC 3860 Cocoa	**12**	DMC 3820 Dark Straw	**19**	DMC 524 Very Light Fern Green
6	DMC 3861 Light Cocoa	**13**	DMC 783 Medium Topaz		
7	DMC 414 Dark Steel Gray	**14**	DMC 3823 Ultra Pale Yellow		

How many strands

Stem stitch. 3 strands: cross ties, back truss; 2 strands: ridge line, ground folds, braces, dish rings, poppy stems; 1 or 2 strands: ribs.
Straight stitch. 2 strands: sage grass; 1 strand: small stars.
French knot. 3 strands: pearls; 1 strand: sequins, poppy hearts.

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6 inch hoop

Print at 100% and check the square below with a ruler. Fold the fabric in four: the folds meet the four ticks of the ring.



1 in
25.4 mm

Check square: 1 inch (25.4 mm) on each side.
If it measures anything else, print again at 100% with scaling off.

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6 inch hoop

Mirrored. Trace this page with an iron-on transfer pen or pencil, then press it ink side down on the fabric.



1 in
25.4 mm

Check square: 1 inch (25.4 mm) on each side.
If it measures anything else, print again at 100% with scaling off.

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