

21CBP4A (RCA, Sylvania)**21FLP4** (G-E, Westhse.)

These 21" tubes—by far the most popular types in their respective lines—can replace many other electrostatically - focused 90° CRT's. Major specifications include: aluminized screen; straight electron gun; over-all length 18"; neck length 5½" (2" shorter than most types they replace); inner and outer aquadag coating used as high-voltage filter capacitor.

Can replace following types:

- 21ALP4,-A,-B** Discard ion trap.
- 21ANP4,-A** Discard ion trap; add aquadag-grounding spring.
- 21ATP4,-A,-B** Discard ion trap.
- 21BAP4** Direct replacement.
- 21BNP4** Direct replacement.
- 21BTP4** Discard ion trap.
- 21CMP4** Discard ion trap.
- 21CVP4** Recommended by all except Sylvania. Direct replacement.
- 21CWP4** Recommended by all except Sylvania. Direct replacement.
- 21DNP4** Recommended by RCA and G-E only. Discard ion trap.

21ACP4A (G-E)**21AMP4A** (RCA)

Electromagnetically-focused, these near-equivalent 90° tubes have a nominal over-all length of 20", neck length of 7½", aluminized screen, and an external aquadag coating. The RCA type (but not the G-E) requires a single ion trap.

Can replace following types:

- 21AQP4,-A** Add aquadag-grounding spring.
- 21BSP4** Direct replacement.
- 21CUP4** Direct replacement.

24AEP4 (G-E, RCA, Sylvania)

This "short-neck" 90° tube has the same specifications as the 21CBP4A and 21FLP4, except for the 24" screen size and 19½" over-all length.

Can replace following types:

- 24ANP4** Discard ion trap.
- 24DP4,-A** Discard ion trap.
- 24YP4** Discard ion trap.
- 24ZP4** Discard ion trap.

24CP4A (G-E, RCA)

A 24" counterpart of the magnetically-focused 21ACP4A and 21AMP4A, this tube measures 21½" in over-all length. Discard the ion trap when a G-E replacement is installed, but not if the new tube is an RCA.

Can replace following types:

- 24ADP4** Direct replacement.

24CP4 Direct replacement.

24QP4 Direct replacement.

24TP4 Direct replacement.

24VP4,-A Direct replacement.

24XP4 Add aquadag-grounding spring.

27RP4 (G-E, RCA)

The largest member of the magnetically-focused 90° group, this 27" tube is basically the same as the 24CP4A except for size. Over-all length is 23". The RCA version requires a single ion trap, but the G-E does not.

Can replace following types:

- 27EP4** Add aquadag-grounding spring.
- 27GP4** Direct replacement.
- 27NP4** Direct replacement.

17BJP4 (G-E, RCA)

Here's a 90° tube for portables and small table models. Like its larger brothers in the electrostatically-focused series, it has a short (5½") neck and needs no ion trap. Total length is 14⅝", averaging an inch shorter than the other types it replaces.

Can replace following types:

- 17ATP4,-A** Discard ion trap.
- 17AVP4,-A** Discard ion trap.
- 17BUP4** Discard ion trap.
- 17CBP4** Discard ion trap.
- 17CLP4** Discard ion trap.

17DKP4 (RCA, Sylvania)

This 110° tube is designed for late-model slim-line portables, being only 10-11/16" long with a 3-9/16" neck.

Can replace following types:

- 17DTP4** Direct replacement.
 - 17DLP4** Recommended by Sylvania only.
- If trouble is encountered with substitution, change grid no. 1 connection from pin 6 to pin 2 of socket.

17BWP4 (G-E)**17CSP4** (RCA)

Of somewhat older design than the 17DKP4, these two 110° tubes have a greater length (12 5/16") and require a deeper cabinet.

Can replace following type:

- 17BVP4** Direct replacement.

14CP4A (G-E)**14EP4** (RCA)

Quite a few "universal" replacement CRT's are being made available to keep older-model TV sets operating—for example, these aluminized 14" tubes with 70° deflection and magnetic focus. Measuring 16¾" in length, these types have a 7½" neck.

In this and all following categories, the RCA replacement tube needs a single-magnet ion trap, whereas the G-E tube has been modified from the original specifications so that the ion trap is no longer needed.

Can replace following types:

- 14CP4** Direct replacement.
- 14BP4,-A** Direct replacement.
- 14DP4** Change from double to single ion trap, if replacing with 14EP4. Add aquadag-grounding spring.

16KP4A (G-E)**16RP4A** (RCA)

A "step-up" in size from the 14" tubes just discussed, these 16" rectangular types are 18¾" long and have a 2-kv higher anode-voltage rating. Other specifications are similar to those of the 14CP4A and 14EP4.

Can replace following types:

- 16QP4** Replace double ion-trap magnet with single type, if replacing with 16RP4A.
- 16UP4** Check physical clearances; original tube has ⅝" shorter neck than replacement.
- 16XP4A** Direct replacement.
- 16TP4** Recommended by G-E only. Check physical clearances, as indicated for 16UP4.

20CP4D (G-E)**20DP4C** (RCA)

Moving up one more notch to the 20" rectangular size, we find these two slightly different 70° types capable of replacing each other. Several older versions of these same types, bearing different letter suffixes, can also be replaced; however, careful attention should be paid to the following notes to insure a correct substitution.

Can replace following types:

- 20CP4,-B,-C** Add aquadag - grounding spring.
- 20CP4A** Direct replacement. Original not aluminized.
- 20DP4,-B** Add aquadag-grounding spring.
- 20DP4A** Direct replacement. Original not aluminized.

20HP4D (G-E, RCA)

This tube is the same size as those just mentioned, and has the same electrical specifications except that it is electrostatically focused.

Can replace following types:

- 20HP4,-B,-C** Add aquadag - grounding spring.
- 20HP4A** Direct replacement. Original not aluminized.
- 20LP4** Direct replacement.
- 20MP4** Direct replacement.