

067-0883-99/067-0919-99

Inquiries from various field offices indicate the above combination is desired to be programmed and used on certain older power supplies. Information on what the minimum and maximum loads required were not specified for the older power supplies. Evaluation Engineering empirically determined these values for 7904, 7704A and the 7600 Series.

Foldback currents are approximations and may vary by as much as 20%. Greater variances indicate a problem in the foldback circuit.

Some power supply types may not accommodate all voltages being in maximum current at the same time. An example is the 7904. 7000 Series oscilloscopes are rated at 16.5 watts per plug-in. 16.5 x 4 is 66 watts. The mainframe itself consumes approximately 50 watts. The 7904 power supply then must reliably provide a total of 116 watts, but not necessarily 207 watts, the total of all maximum wattages.

Currents, minimum, maximum and fold back for the three instrument supplies are:

<u>Supply</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Foldback</u>
<u>7704A</u>			
-50	.08	.48	.62
-15	.7	3.2	3.55
+ 5	.45	2.8	3.5
+15	.7	3.8	4.5
+50	.2	.62	.7
+ 5 Lights	.3	3.5	None
<u>7904</u>			
-50	.08	.54	.58
-15	.8	3.4	3.75
+ 5	.4	2.9	3.3
+15	1	3.7	3.8
+50	.2	.65	.81
+130	.036	.07	None
+ 5 Lights	.3	3.5	None

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<u>Supply</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Foldback</u>
<u>7600 (Derived from 7633)</u>			
-50	.18	.48	.52
-15	.84	2.5	3.3
+ 5	.6	2.3	3.28
+15	.6	3.0	3.2
+50	.23	.55	.64
+130	.035	.07	Fused .15A
+ 5 Lights	.01	.6	None
+15 Raw	.5	1.0	Fused 2A

Some suggestions for the wiring interface to the ULU are offered.

1. Install the same capacitance as the power supply sees when connected to the instrument in the shells of the Blue Ribbon connector; a small piece of vector board may be helpful in some cases.
2. Use as short as comfortable cables out of the Blue Ribbon connector to harmonicas. In production they use a short extension Harmonica to Harmonica with an appropriate square pin strip interconnect to prevent having to change the whole cable when the end harmonica wears out. The square pin strip is 131-1343-00.
3. Use #20 wire or larger for the power connections. #26 is okay for the sense lines.
4. One cable will service 7903, 7904, and the 7844.
5. Connections to the +130 are best made with an insulated clip lead.

Information on other supplies will be published when available. Our thanks to Jim Peterson, Evaluation Engineering and Del Weaver, Production Engineering, for supplying the foregoing information.

--Dean Hager
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Shirley 10-17