







# 11 Schematic Diagrams






## 11-1 Cautions



1. The areas marked with a ,  or  on the schematic diagram designate components which have special characteristics important for safety. Replace these parts only with parts identical to those in the original circuit and those specified in the parts list. Before replacing any of these components, carefully read the “Product Safety Notice.”
2. Areas marked with a  on the schematic diagram designate controls which have been sealed for safety during manufacturing. If these controls need adjustment, they must be replaced with new controls and then sealed after their adjustment.
3. When taking measurements, pay special attention to the following:
  - 1) Do not use your instrument between primary ground (symbol ) and secondary circuit.
  - 2) Do not use your instrument between secondary ground (symbol ) and primary circuit.

## 11-2 Notes

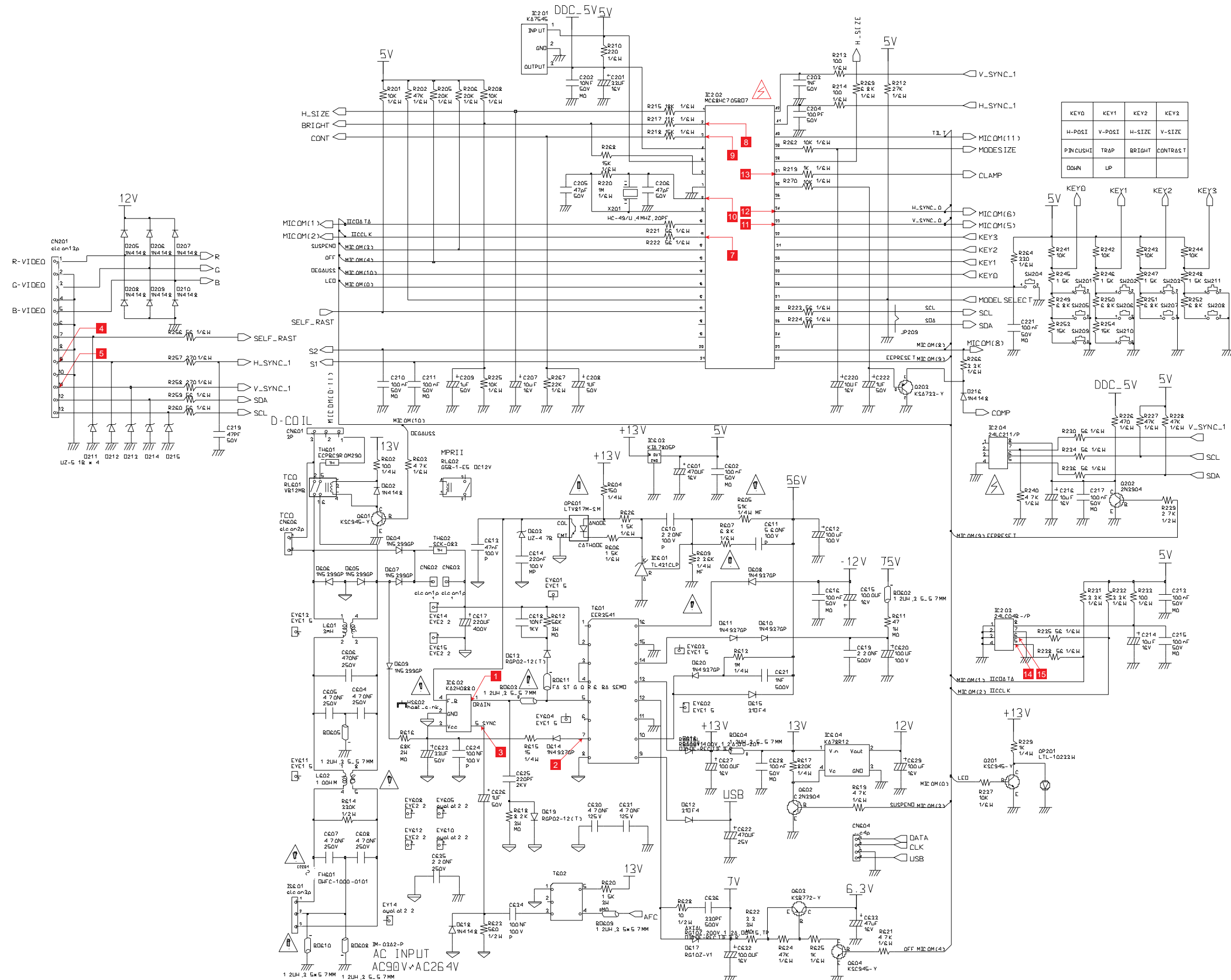
1. Resistance is shown in OHM. K = 1,000, M = 1,000,000 and the rated power of resistors not noted in the schematic diagram is 1/4W.
2. Capacitance is shown in  $\mu$ F. Capacitances not otherwise noted are shown in pF (1 $\mu$ F = 1,000,000 pF). Rated voltage of condensers not otherwise noted in the schematic diagram is 50 V.

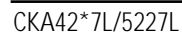
## 11-3 Abbreviations and Symbols

|   |  |   |  |
|---|--|---|--|
| MO  | R-Metal Oxide                            | WW  | R-Wire Wound                           |
| FU  | Fusible                                  | C   | R-Composition                          |
| CM  | R-Cement                                 | MPP   | Metal Polypropylene                    |
| MP  | C-Metalized Polyester                    | T   | C-Tantalum                             |
| P   | C-Polyester                              |  | Can emit X-radiation                   |
|  | Hot Ground                               |  | Cold Ground                            |
|  | Electrostatically Sensitive Device (ESD) |  | Provides special safety considerations |

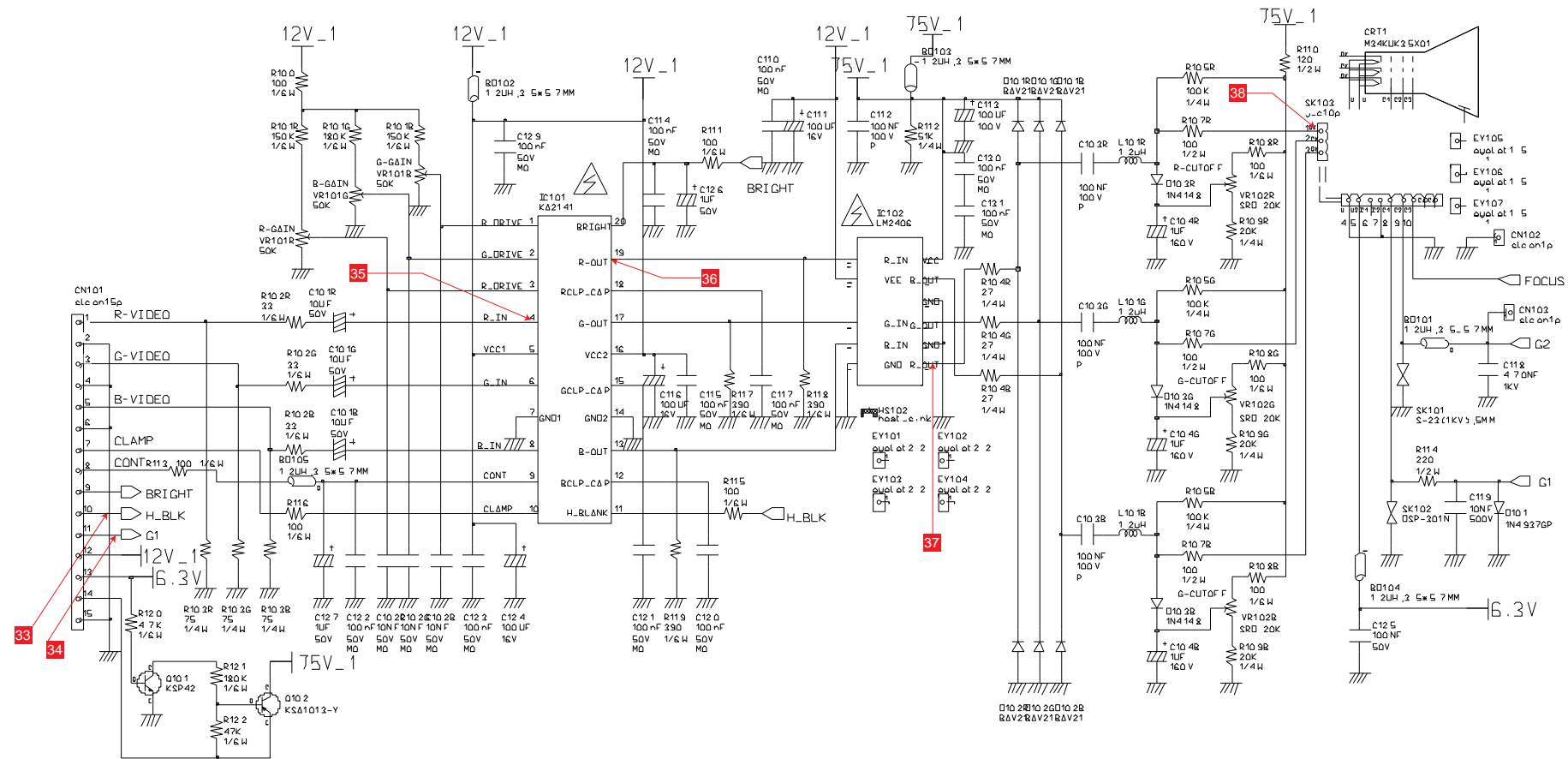
1. The secondary voltage is read with an SSVM from the indicated point to a cold ground (  ). The primary voltage is read with an SSVM from the indicated point to a hot ground (  ).
2. This schematic diagram is subject to change without notice.

### 11-4 Micom/SMPS Part Schematic Diagram





### 11-6 Video Part Schematic Diagram



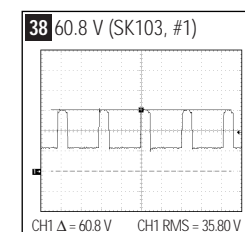
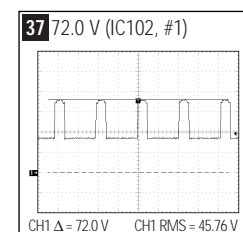
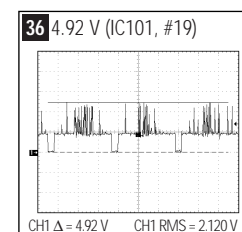
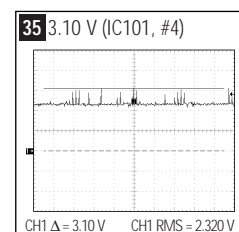
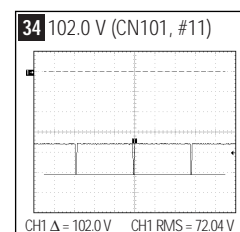
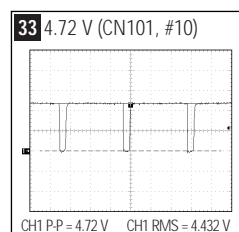
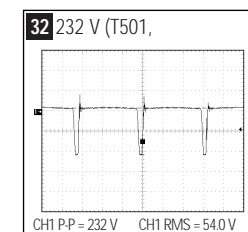
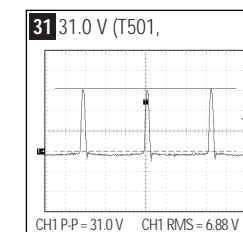
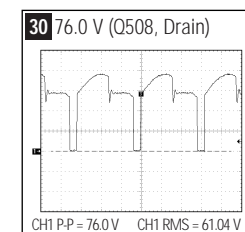
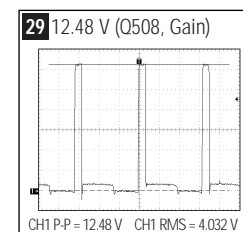
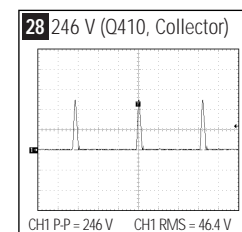
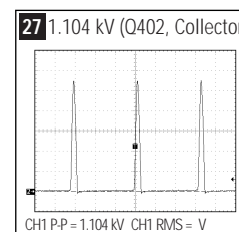
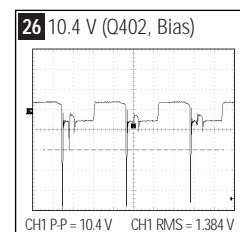
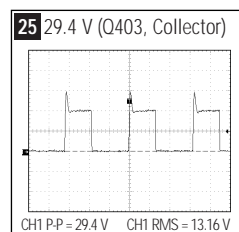
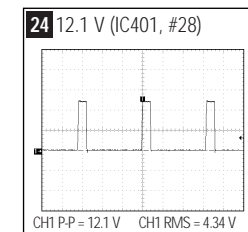
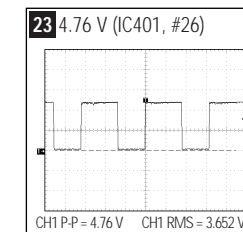
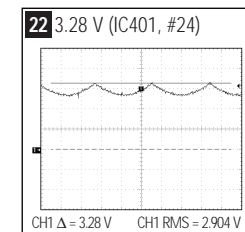
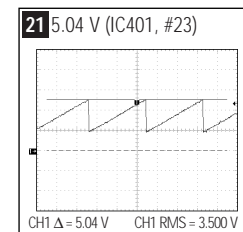
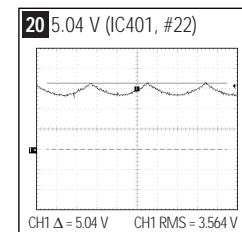
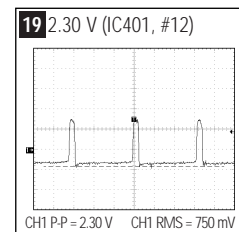
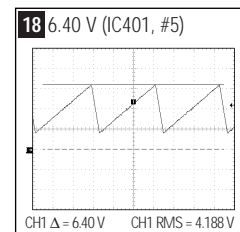
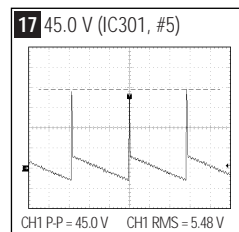
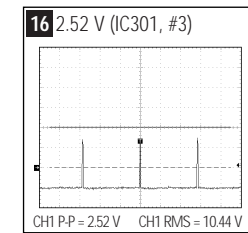
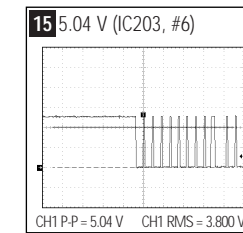
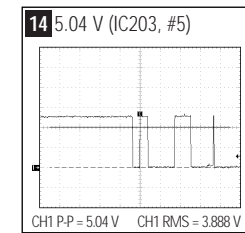
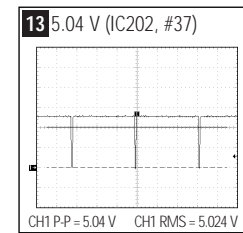
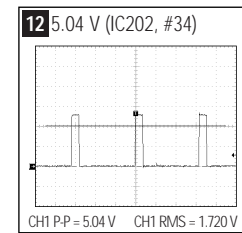
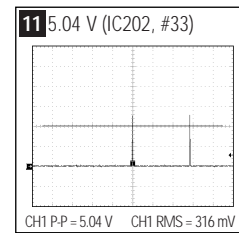
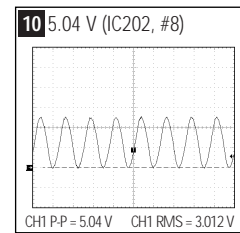
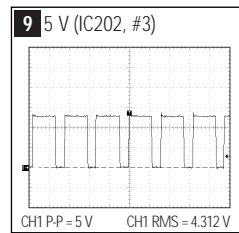
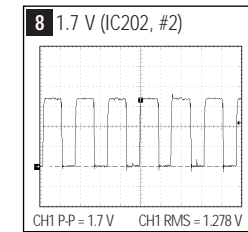
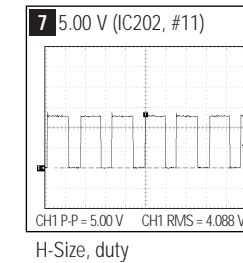
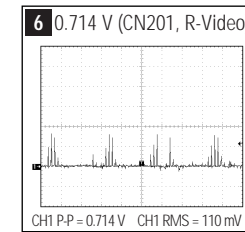
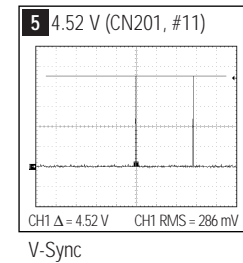
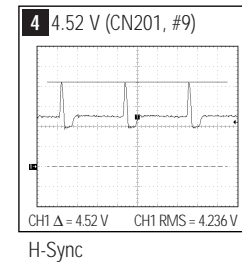
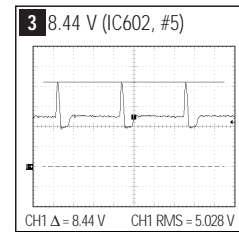
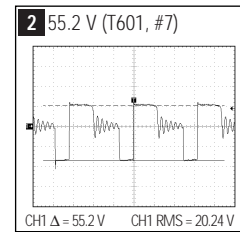
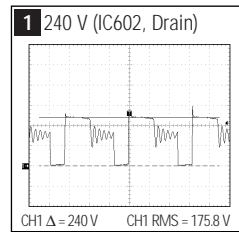


Table 11-1. IC101 (KA2141)

| pin # | MODES              |                   | pin # | MODES              |                   |
|-------|--------------------|-------------------|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 1.47               | 1.47              | 11    | 4.37               | 4.13              |
| 2     | 1.74               | 1.74              | 12    | 5.79               | 5.8               |
| 3     | 1.84               | 1.84              | 13    | 3.42               | 3.35              |
| 4     | 2.39               | 2.39              | 14    | GND                | GND               |
| 5     | 11.65              | 11.66             | 15    | 5.52               | 5.53              |
| 6     | 2.38               | 2.38              | 16    | 11.65              | 11.66             |
| 7     | GND                | GND               | 17    | 3.53               | 3.46              |
| 8     | 2.39               | 2.39              | 18    | 5.49               | 5.50              |
| 9     | 0.16 ~ 3.04        | 0.16~3.04         | 19    | 3.59               | 3.52              |
| 10    | 4.99               | 4.93              | 20    | 1.5 ~ 2.1          | 1.5 ~ 2.1         |

Unit: Vrms

Table 11-2. IC102 (LM2406)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 44.72              | 46V               |
| 2     | GND                | GND               |
| 3     | 43.83              | 45.09             |
| 4     | GND                | GND               |
| 5     | 44.60              | 46                |
| 6     | 75.66              | 72.77             |
| 7     | GND                | GND               |
| 8     | 3.42               | 3.35              |
| 9     | 3.53               | 3.47              |
| 10    | 11.66              | 11.66             |
| 11    | 3.59               | 3.52              |

Unit: Vrms

Table 11-3. IC201 (KIA7545)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 5.05               | 5.05              |
| 2     | GND                | GND               |
| 3     | 5.03               | 5.03              |

Unit: Vrms

Table 11-5. IC203 (24LC04B)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | GND                | GND               |
| 2     | GND                | GND               |
| 3     | GND                | GND               |
| 4     | GND                | GND               |
| 5     | 5.02               | 5.02              |
| 6     | 5.03               | 5.03              |
| 7     | GND                | GND               |
| 8     | 5.05               | 5.05              |

Unit: Vrms

Table 11-4. IC202 (68HC705)

| pin # | MODES              |                   | pin # | MODES              |                   |
|-------|--------------------|-------------------|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 0~5                | 0~5               | 21    | —                  | —                 |
| 2     | 0~5                | 0~5               | 22    | —                  | —                 |
| 3     | 0~5                | 0~5               | 23    | 5.05               | 5.05              |
| 4     | 5.03               | 5.03              | 24    | 5.05               | 5.05              |
| 5     | 5.05               | 5.05              | 25    | 3.82               | 3.82              |
| 6     | —                  | —                 | 26    | 3.68               | 3.68              |
| 7     | GND                | GND               | 27    | —                  | —                 |
| 8     | 2.46               | 2.46              | 28    | 5.05               | 5.05              |
| 9     | 2.08               | 2.08              | 29    | 5.03               | 5.03              |
| 10    | 5.03               | 5.03              | 30    | 5.02               | 5.02              |
| 11    | 5.03               | 5.03              | 31    | 5.02               | 5.02              |
| 12    | —                  | —                 | 32    | 5.03               | 5.03              |
| 13    | —                  | —                 | 33    | —                  | —                 |
| 14    | —                  | —                 | 34    | —                  | —                 |
| 15    | —                  | —                 | 35    | —                  | —                 |
| 16    | 4.94               | 4.94              | 36    | —                  | —                 |
| 17    | —                  | —                 | 37    | 4.98               | 4.98              |
| 18    | —                  | —                 | 38    | —                  | —                 |
| 19    | —                  | —                 | 39    | —                  | —                 |
| 20    | —                  | —                 | 40    | 5.03               | 5.03              |

Unit: Vrms

Table 11-6. IC204 (24LC211/P)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | —                  | —                 |
| 2     | —                  | —                 |
| 3     | —                  | —                 |
| 4     | GND                | GND               |
| 5     | 3.82               | 3.82              |
| 6     | 3.68               | 3.68              |
| 7     | 4.78               | 4.78              |
| 8     | 4.99               | 4.99              |

Unit: Vrms

Table 11-8. IC302 (L2M2M)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 9.57               | 9.57              |
| 2     | 13.02              | 13.02             |
| 3     | 9.54               | 9.54              |
| 4     | 11.03              | 11.03             |
| 5     | 9.54               | 9.54              |
| 6     | 9.57               | 9.57              |
| 7     | 2.12               | 2.12              |
| 8     | 2.13               | 2.13              |

Unit: Vrms

Table 11-9. IC401 (TDA9109)

| pin # | MODES              |                   | pin # | MODES              |                   |
|-------|--------------------|-------------------|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | —                  | —                 | 17    | GND                | GND               |
| 2     | —                  | —                 | 18    | 7.04               | 7.04              |
| 3     | 5.06               | 5.06              | 19    | GND                | GND               |
| 4     | 3.026              | 3.026             | 20    | 5.30               | 5.30              |
| 5     | 4.02               | 4.02              | 21    | 8.04               | 8.04              |
| 6     | 2.374              | 2.374             | 22    | 3.51               | 3.51              |
| 7     | 2.378              | 2.378             | 23    | 3.44               | 3.44              |
| 8     | 7.97               | 7.97              | 24    | 2.901              | 2.901             |
| 9     | —                  | —                 | 25    | 6.73               | 6.73              |
| 10    | 9.32               | 9.32              | 26    | 2.772              | 2.772             |
| 11    | —                  | —                 | 27    | GND                | GND               |
| 12    | -0.5               | -0.5              | 28    | 1.633              | 1.633             |
| 13    | 7.91               | 7.91              | 29    | 12.05              | 12.05             |
| 14    | 2.349              | 2.349             | 30    | 5.04               | 5.04              |
| 15    | 4.65               | 4.65              | 31    | 5.04               | 5.04              |
| 16    | 36.8mV             | 36.8mV            | 32    | 5.04               | 5.04              |

Unit: Vrms

Table 11-10. IC601 (TL431CLP)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 2.52               | 2.52              |
| 2     | GND                | GND               |
| 3     | 10.69              | 10.69             |

Unit: Vrms

Table 11-12. IC603 (7805)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 13.04              | 13.04             |
| 2     | GND                | GND               |
| 3     | 5.09               | 5.09              |

Unit: Vrms

Table 11-7. IC301 (TDA9302)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 1.09               | 1.09              |
| 2     | 12.98              | 12.98             |
| 3     | 10.90              | 10.90             |
| 4     | 10.99              | 10.99             |
| 5     | 5.5                | 5.5               |
| 6     | 12.92              | 12.92             |
| 7     | 1.09               | 1.09              |

Unit: Vrms

Table 11-11. IC602 (KA2S0880)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 189.5              | 189.5             |
| 2     | GND                | GND               |
| 3     | 19.70              | 19.70             |
| 4     | 2.389              | 2.389             |
| 5     | 4.8                | 4.8               |

Unit: Vrms

Table 11-13. IC604 (78R12)

| pin # | MODES              |                   |
|-------|--------------------|-------------------|
|       | 1024 x 768 / 60 Hz | 640 x 480 / 60 Hz |
| 1     | 12.97              | 12.97             |
| 2     | 12.11              | 12.11             |
| 3     | GND                | GND               |
| 4     | 9.22               | 9.22              |

Unit: Vrms