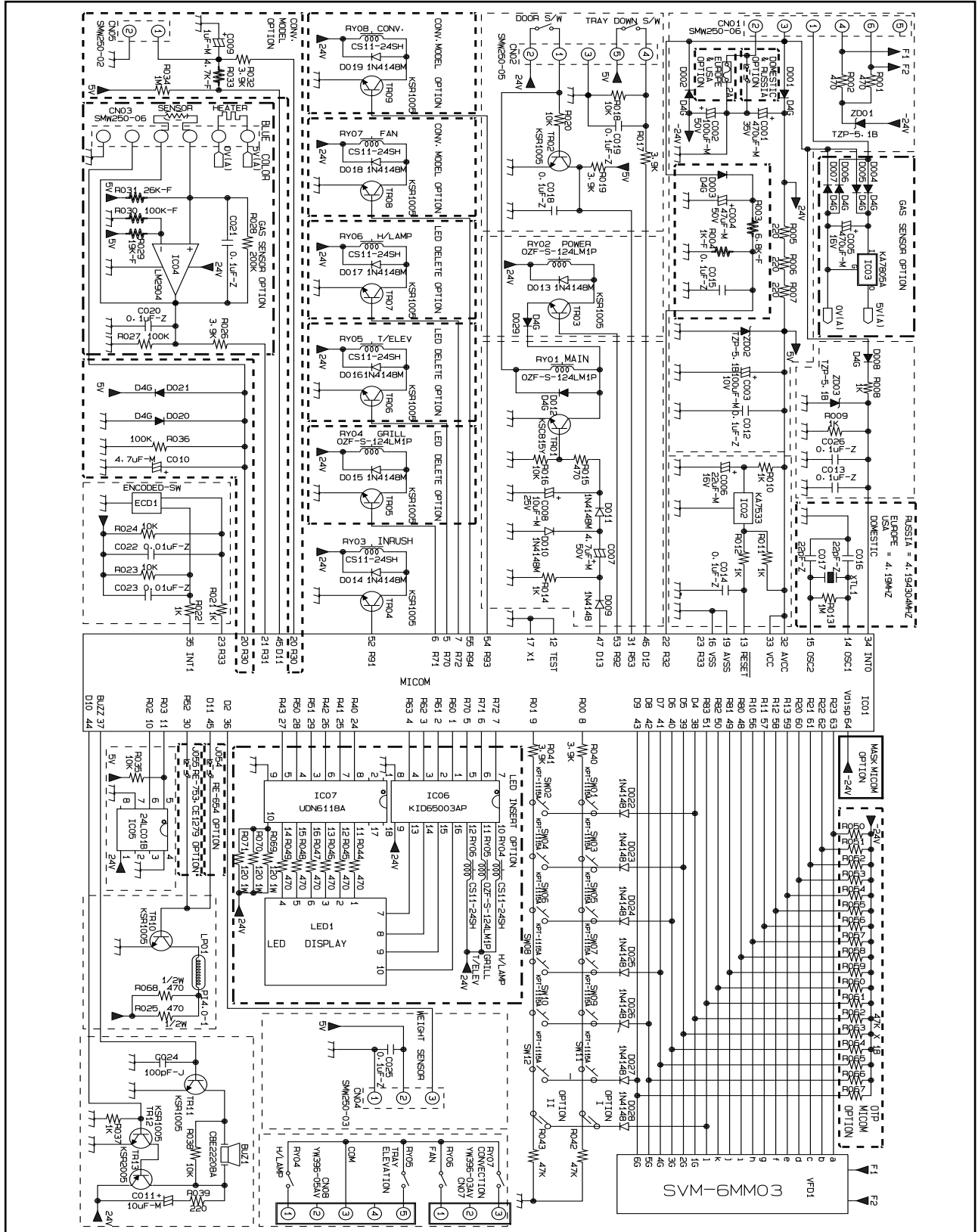






## 9. P.C.B Diagrams

### 9-1 P.C.B Diagrams



## 9-2 P.C.B Parts List

| Parts No.   | Description         | Specification                  | Q'ty | Remarks   |
|-------------|---------------------|--------------------------------|------|---|
| 1003-001033 | IC-SOURCE DRIVER    | TD62781AP DIP 18P 300MIL OCTAL | 1    | IC07  |
| 3501-001015 | RELAY-POWER         | 24V 21 8mA 16A 1FormA 20mS 10m | 3    | RY01~03   |
| 3501-001016 | RELAY-MINIATURE     | 24V 12 5mA 5A 1FormA 8mS 4mS   | 5    | RY04~08   |
| 3710-000132 | CONNECTOR-SOCKET    | 12P 1R 2 5mm STRAIGHT SN       | 2    | CN11,12   |
| 3711-000797 | CONNECTOR-HEADER    | BOX 2P 1R 2 5mm STRAIGHT SN    | 1    | CN05  |
| DE07-10086A | V.F.DISPLAY         | SVM 06MM25 RED/GRN 6 68 81 7X8 | 1    | VFD1  |
| DE07-90019A | LAMP-PILOT          | PI4 0 1 DC12V 60MA ORG DI4 1 L | 1    | LP01  |
| DE13-20016A | IC-VOLT REGU        | KA7805A TO 220AB 1A 0/125C     | 1    | IC03  |
| DE13-20017A | IC-DRIVE            | KID65003AP DIP 16P STICK TR AR | 1    | IC06  |
| DE30-20016A | BUZZER              | CBE2220BA STICK                | 1    | BUZ1  |
| DE34-20071A | SWITCH-ROTARY       | DC10V 1MA SH PA 1005A 003 000  | 1    | ECD1  |
| DE37-90020A | CONNECTOR ASSY      | YJN25012 PLATE 73MM WHT        | 2    | CN9,10  |
| DE61-90065A | HOLDER-DIGITRON     | NYLON#66 BLK                   | 1    | -   |
| de91-20570A | ASSY PCB AUTO-MAIN  | 230V50HZ CE1279                | 1    | -   |
| 0401-001002 | DIODE-SWITCHING     | 1N4148M 100V 200mA 500mW 3nS D | 10   | D009~14,18,19,22,23   |
| 0401-001002 | DIODE-SWITCHING     | 1N4148M 100V 200mA 500mW 3nS D | 4    | D024~27   |
| 0402-001103 | DIODE-RECTIFIER     | 1T4 400V 1A TS 1 TP            | 8    | D1,2,4~8,29   |
| 0501-000388 | TR-SMALL SIGNAL     | KSC815 NPN 400mW TO 92 BK 120  | 1    | TR01  |
| 0504-001014 | TR-DIGITAL          | KSR1005 NPN 300mW 4 7K 10K TO  | 8    | TR2,3,4,8~12  |
| 0504-001015 | TR-DIGITAL          | KSR2005 PNP 300mW 4 7K 10K TO  | 1    | TR13  |
| 2001-000004 | R-CARBON            | 200Kohm 5% 1/8W AA TP 1 8x3 2m | 1    | R028  |
| 2001-000273 | R-CARBON            | 100Kohm 5% 1/8W AA TP 1 8x3 2m | 1    | R027  |
| 2001-000290 | R-CARBON            | 10Kohm 5% 1/8W AA TP 1 8x3 2mm | 7    | R16,18,20,23,24,35,38   |
| 2001-000429 | R-CARBON            | 1Kohm 5% 1/8W AA TP 1 8x3 2mm  | 9    | R8~12,14,21,22,37   |
| 2001-000435 | R-CARBON            | 1Mohm,5%,1/8W,AA,TP,1.8x3.2mm" | 2    | R13,34  |
| 2001-000515 | R-CARBON            | 220ohm 5% 1/8W AA TP 1 8x3 2mm | 1    | R039  |
| 2001-000613 | R-CARBON            | 3 9Kohm 5% 1/8W AA TP 1 8x3 2m | 5    | R17,19,26,40,41   |
| 2001-000780 | R-CARBON            | 470ohm 5% 1/8W AA TP 1 8x3 2mm | 3    | R1,2,15   |
| 2001-000786 | R-CARBON            | 47Kohm 5% 1/8W AA TP 1 8x3 2mm | 2    | R042,43   |
| 2001-000776 | R-CARBON(S)         | 470ohm 5% 1/2W AA TP 2 4x6 4mm | 8    | R025,44~49,68   |
| 2001-001107 | R-CARBON(S)         | 220ohm 5% 1/2W AA TP 2 4x6 4mm | 3    | R5,6,7  |
| 2003-000160 | R-METAL-OXIDE(S)    | 120ohm 1% 1W                   | 3    | R69~70  |
| 2004-000195 | R-METAL             | 100Kohm 1% 1/8W AA TP 1 8x3 2m | 1    | R030  |
| 2004-000433 | R-METAL             | 1Kohm 1% 1/8W AA TP 1 8x3 2mm  | 1    | R004  |
| 2004-001137 | R-METAL             | 6 8Kohm 1% 1/8W AA TP 1 8x3 2m | 1    | R003  |
| 2004-001976 | R-METAL             | 19Kohm 1% 1/8W AA TP 1 8x3 2mm | 1    | R029  |
| 2004-001977 | R-METAL             | 26Kohm 1% 1/8W AA TP 1 8x3 2mm | 1    | R031  |
| 2202-000127 | C-CERAMIC,MLC-AXIAL | 10nF +80 20% 25V Y5V TP 7 5    | 2    | C22,23  |
| 2202-000780 | C-CERAMIC,MLC-AXIAL | 100nF +80 20% 50V Y5V TP 3 5x1 | 10   | C12~15,18~21,25,26  |
| 2401-000247 | C-AL                | 100uF 20% 10V GP 6 3x11mm 5m   | 1    | C004  |
| 2401-000446 | C-AL                | 10uF 20% 25V GP 5x11x5 0mm     | 1    | C008  |
| 2401-000466 | C-AL                | 10uF 20% 35V GP TP 5x7 5       | 2    | C6,11   |
| 2401-000725 | C-AL                | 2200uF 20% 35V                 | 1    | C001  |
| 2401-000621 | C-AL                | 2 2uF 20% 50V TP 5x11 5mm      | 1    | C007  |
| 2801-003214 | CRYSTAL-UNIT        | 4 194304MHz 50ppm 28 AAA 12pF  | 1    | XTL1  |
| 3711-000203 | CONNECTOR-HEADER    | 1WALL 3P 1R 3 96mm ANGLE SN    | 2    | CN06,08  |
| 3711-000241 | CONNECTOR-HEADER    | 1WALL 4P 1R 3 96mm STRAIGHT SN | 1    | CN07     |
| 3711-000881 | CONNECTOR-HEADER    | BOX 3P 1R 2 5mm STRAIGHT SN    | 1    | CN04     |
| 3711-000999 | CONNECTOR-HEADER    | BOX 5P 1R 2 50mm STRAIGHT SN   | 1    | CN02     |
| 3711-001036 | CONNECTOR-HEADER    | BOX 6P 1R 2 50mm STRAIGHT SN   | 1    | CN03     |
| 3711-001038 | CONNECTOR-HEADER    | BOX 6P 1R 2 5mm STRAIGHT SN    | 1    | CN01     |
| DE09-30227A | IC-MCU              | 24LC01B/P DIP DIP EEPROM       | 1    | IC05  |
| DE13-20007A | IC-OP AMP           | KA2904 DIP                     | 1    | IC04  |
| DE13-20009A | IC                  | KA7533 DIP                     | 1    | IC02  |
| DE39-60001A | WIRE-SO COPPER      | PIO 6 SN T 52MM TAPING_WIRE    | 63   | J01~63  |