

TASCAM
TEAC Professional Division

SERVICE MANUAL

M-200 Series

Mixing Consoles

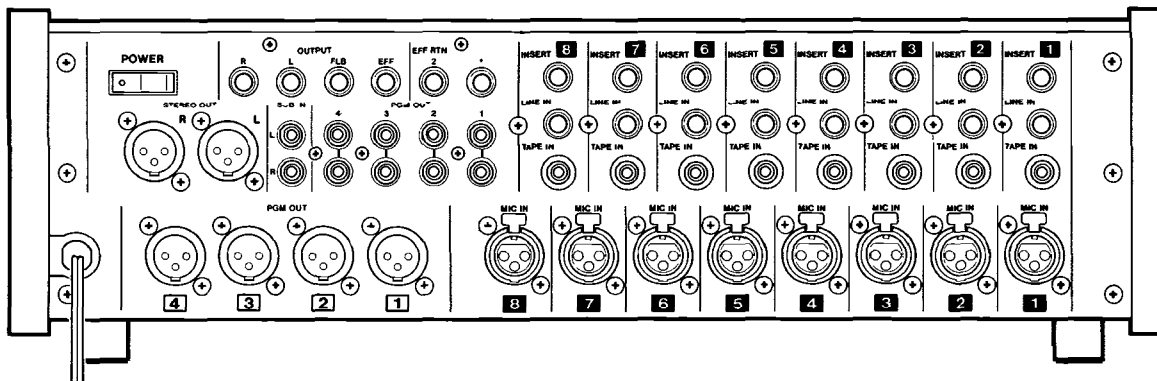
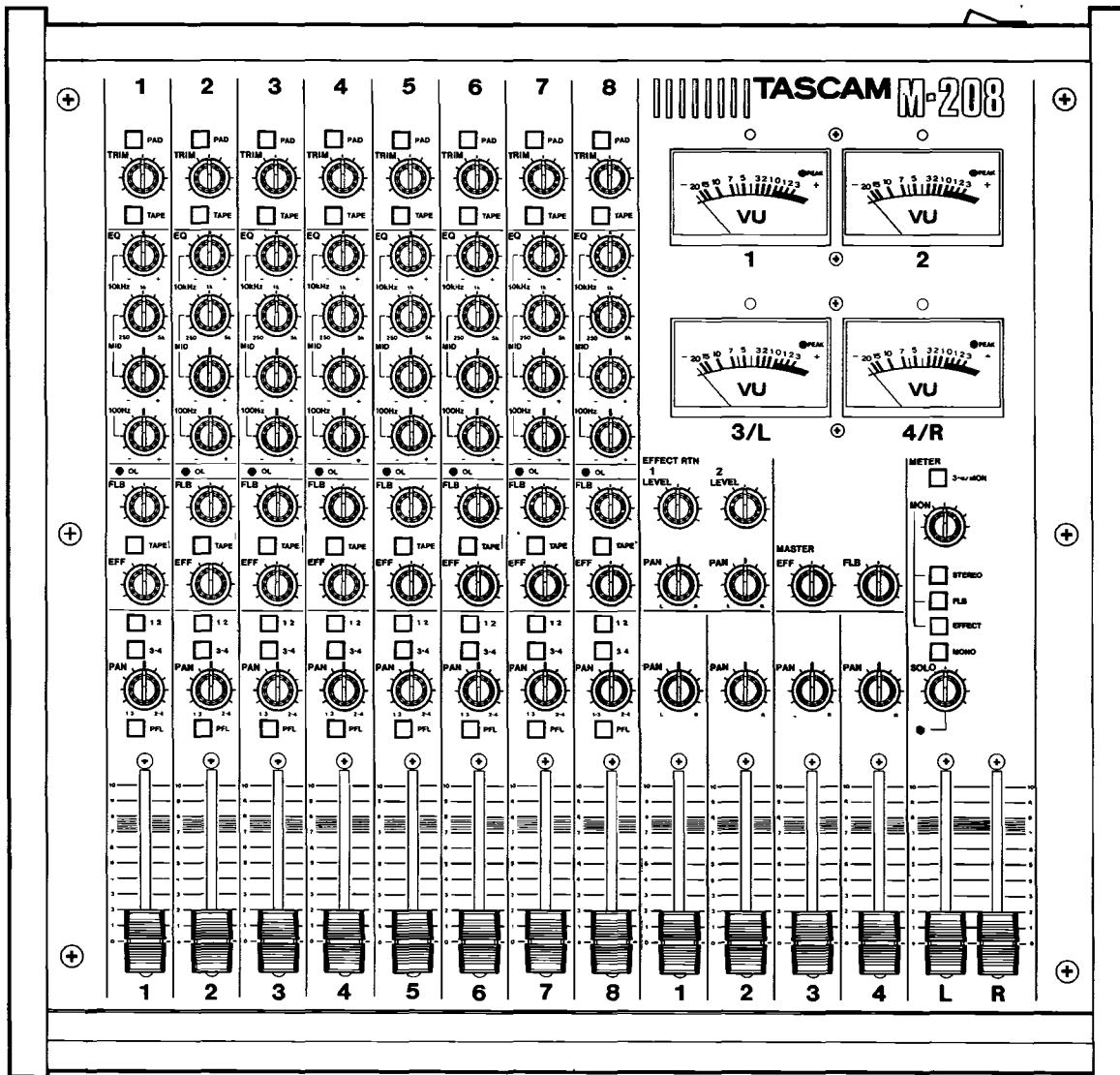
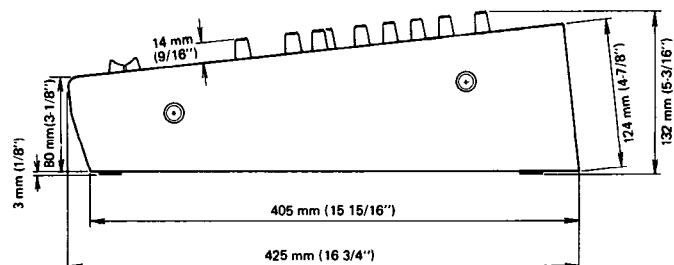
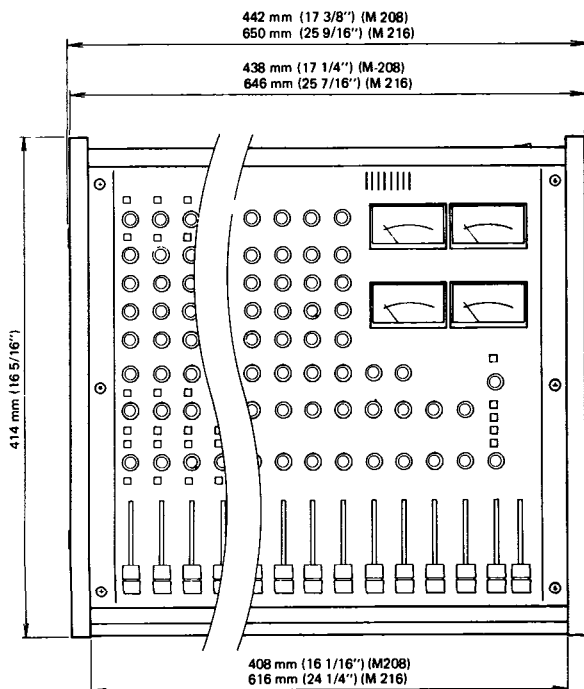


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- NOTES: 1. All resistor values are in ohms.
 2. Capacitor values are in microfarads (UF) (PF = picofarads).
 3. Parts marked with Δ are safety critical components.
 They must always be replaced with components specified by TEAC.
 4. In this manual, 0 dBV is referenced to 1.0 Volt, and 0 dBu to 0.775 Volt.
 5. PC boards shown viewed from foil side.
 6. Service data are found where they are necessary.
 Improvements may result in service data changes without notice.



1. SPECIFICATIONS

M-208

ELECTRICAL CHARACTERISTICS

| | | | |
|-----------------------------------|-------------------------------------|-------------------------------|---|
| Mic Input | XLR type, balanced | Nominal Output Level | 0 dBu (0.8 V) |
| Source Impedance | 200 ohms to 600 ohms nominal | Maximum Output Level | +20 dBu (8 V) |
| Input Impedance | 2.8k ohms | 1/4", unbalanced | |
| Nominal Input Level | -60 dBV (1 mV) | Output Impedance | 100 ohms |
| Minimum Input Level | -70 dBV (0.3 mV) | Minimum Load Impedance | 2k ohms |
| Maximum Input Level | +28 dBV (25 V)/TRIM to min., PAD on | Nominal Load Impedance | 10k ohms |
| Line Input | 1/4", unbalanced | Nominal Output Level | 0 dBu (0.8 V) |
| Input Impedance | 22k ohms | Maximum Output Level | +20 dBu (8 V) |
| Nominal Input Level | -10 dBV (0.3 V)/PAD on | Effect Output | 1/4" |
| Minimum Input Level | -50 dBV (3 mV)/PAD off | Output Impedance | 100 ohms |
| Maximum Input Level | +35 dBV (56 V)/TRIM to min., PAD on | Minimum Load Impedance | 2k ohms |
| Mic/Line Pad | 30 dB attenuation | Nominal Load Impedance | 10k ohms |
| Channel Overload Indicator | Set to light at 25 dB above nominal | Nominal Output Level | 0 dBu (0.8 V) |
| Tape Input | RCA Type | Maximum Output Level | +20 dBu (8 V) |
| Input Impedance | 10k ohms | Foldback Output | 1/4" |
| Nominal Input Level | -10 dBV (0.3 V) | Output Impedance | 100 ohms |
| Maximum Input Level | +18 dBV (8 V) | Minimum Load Impedance | 2k ohms |
| Effect Return Input | 1/4" | Nominal Load Impedance | 10k ohms |
| Input Impedance | 4.3k ohms | Nominal Output Level | 0 dBu (0.8 V) |
| Nominal Input Level | 0 dBu (0.8 V) | Maximum Output Level | +20 dBu (8 V) |
| Minimum Input Level | -10 dBV (0.25 V) | Headphone Output | |
| Sub Input (STEREO) | RCA Type | Load Impedance | 8 ohms, stereophones |
| Input Impedance | 22k ohms | Maximum Output Level | 1.5 W + 1.5 W |
| Nominal Input Level | -10 dBV (0.3 V) | Insertion | 1/4" |
| Maximum Input Level | +18 dBV (8 V) | Output Impedance | 100 ohms |
| PGM Output | | Minimum Load Impedance | 2k ohms |
| XLR Type, unbalanced | | Nominal Load Impedance | 10k ohms |
| Output Impedance | 100 ohms | Nominal Output Level | -10 dBV (0.3 V) |
| Minimum Load Impedance | 2k ohms | Maximum Output Level | +18 dBV (8 V) |
| Nominal Load Impedance | 10k ohms | Input Impedance | 5.2k ohms |
| Nominal Output Level | 0 dBu (0.8 V) | Nominal Input Level | -10 dBV (0.3 V) |
| Maximum Output Level | +20 dBu (8 V) | Maximum Input Level | +18 dBV (8 V) |
| RCA, unbalanced | | Equalizer | |
| Output Impedance | 490 ohms | Type | Shelving-High, Low Sweepable-Mid |
| Minimum Load Impedance | 2k ohms | Frequency | 10 kHz (High) 250 – 5kHz (Mid) 100 Hz (Low) |
| Nominal Load Impedance | 10k ohms | Boost/Cut | ±12 dB (High, Low) ±15 dB (Mid) |
| Nominal Output Level | -10 dBV (0.3 V) | Peak Indicator Level | 10 dB above nominal |
| Maximum Output Level | +10 dBV (3 V) | Power Requirements | |
| Stereo Output | | U.S.A./CANADA | 120 V AC, 60 Hz, 27 W |
| XLR Type, unbalanced | | Europe | 220 V AC, 50 Hz, 27 W |
| Output Impedance | 100 ohms | U.K./Australia | 240 V AC, 50 Hz, 27 W |
| Minimum Load Impedance | 2k ohms | General Export | 100/120/220/240 V AC, 50/60 Hz, 27 W |
| Nominal Load Impedance | 10k ohms | | |

PERFORMANCE CHARACTERISTICS

| | |
|---|---|
| Equivalent Input Noise | UNWTD (20 – 20 kHz)/ IHF A WTD |
| 150 ohm source | -128 dB/-130 dB |
| Signal-to-Noise Ratio | |
| Input – Output | UNWTD (20 – 20 kHz)/ IHF A WTD |
| 8 Mic – PGM | 60 dB/62 dB |
| 1 Line – PGM | 81 dB/83 dB |
| 8 Line – PGM | 72 dB/74 dB |
| 1 Line – Effect/Foldback | 80 dB/82 dB |
| 1 Line – Stereo | 80 dB/81 dB |
| 1 Tape – PGM | 83 dB/84 dB |
| Total Harmonic Distortion (THD) | |
| 1 Mic to 1 PGM Output ^{1, 3)} | 0.03 %, 20 Hz – 20 kHz |
| 1 Line to 1 PGM Output ^{2, 3)} | 0.025 %, 20 Hz – 20 kHz |
| Intermodulation Distortion (IMD) | |
| 1 Mic to 1 PGM Output ^{1, 3)} | 0.06 %, SMPTE |
| 1 Line to 1 PGM Output ^{2, 3)} | 0.045 %, SMPTE |
| Frequency Response | |
| Any Input to Any Output | 20 Hz – 25 kHz ^{+1 dB} / _{-2 dB} nominal level |
| Cross-Talk (1 kHz) | Better than 60 dB |
| Dimensions (W x H x D) | 442 x 132 x 425 mm (17-3/8" x 5-3/16" x 16-3/4") |
| Weight | 8.5 kg (18-12/16 lbs.) net |

- 1) Level for measurement – 50 dB above nominal with Pad engaged; EQ off.
- 2) Nominal input level used for measurement; EQ off.
- 3) 30 kHz Low Pass Filter connected during test.

In these specifications: 0 dBV is referenced to 1.0 Volt; 0 dBu is referenced to 0.775 Volt. Actual voltage levels are also given in parenthesis (0.316 Volt for -10 dBV is rounded off and given as 0.3 Volt, and 0.775 Volt for 0 dBu as 0.8 Volt).

Changes in specifications and features may be made without notice or obligation.

M-216**ELECTRICAL CHARACTERISTICS**

| | | | |
|-----------------------------------|-------------------------------------|-------------------------------|--|
| Mic Input | XLR Type, balanced | Nominal Output Level | 0 dBu (0.8 V) |
| Source Impedance | 200 ohms to 600 ohms nominal | Maximum Output Level | +20 dBu (8 V) |
| Input Impedance | 2.8k ohms | 1/4", unbalanced | |
| Nominal Input Level | -60 dBV (1 mV) | Output Impedance | 100 ohms |
| Minimum Input Level | -70 dBV (0.3 mV) | Minimum Load Impedance | 2k ohms |
| Maximum Input Level | +28 dBV (25 V)/TRIM to min., PAD on | Nominal Load Impedance | 10k ohms |
| | 1/4", unbalanced | Nominal Output Level | 0 dBu (0.8 V) |
| Line Input | | Maximum Output Level | +20 dBu (8 V) |
| Input Impedance | 22k ohms | Effect Output | 1/4" |
| Nominal Input Level | -10 dBV (0.3 V)/PAD on | Output Impedance | 100 ohms |
| Minimum Input Level | -50 dBV (3 mV)/PAD off | Minimum Load Impedance | 2k ohms |
| Maximum Input Level | +35 dBV (56 V)/TRIM to min., PAD on | Nominal Load Impedance | 10k ohms |
| | 30 dB attenuation | Nominal Output Level | 0 dBu (0.8 V) |
| Mic/Line Pad | | Maximum Output Level | +20 dBu (8 V) |
| Channel Overload Indicator | Set to light at 25 dB above nominal | Foldback Output | 1/4" |
| | RCA Type | Output Impedance | 100 ohms |
| Tape Input | | Minimum Load Impedance | 2k ohms |
| Input Impedance | 10k ohms | Nominal Load Impedance | 10k ohms |
| Nominal Input Level | -10 dBV (0.3 V) | Nominal Output Level | 0 dBu (0.8 V) |
| Maximum Input Level | +18 dBV (8 V) | Maximum Output Level | +20 dBu (8 V) |
| Effect Return Input | 1/4" | Headphone Output | |
| Input Impedance | 4.3k ohms | Load Impedance | 8 ohms, stereophones |
| Nominal Input Level | 0 dBu (0.8 V) | Maximum Output Level | 1.5 W + 1.5 W |
| Minimum Input Level | -10 dBu (0.25 V) | Insertion | 1/4" |
| Sub Input (STEREO) | RCA Type | Output Impedance | 100 ohms |
| Input Impedance | 22k ohms | Minimum Load Impedance | 2k ohms |
| Nominal Input Level | -10 dBV (0.3 V) | Nominal Load Impedance | 10k ohms |
| Maximum Input Level | +18 dBV (8 V) | Nominal Output Level | -10 dBV (0.3 V) |
| PGM Output | | Maximum Output Level | +18 dBV (8 V) |
| XLR Type, unbalanced | | Input Impedance | 5.2k ohms |
| Output Impedance | 100 ohms | Nominal Input Level | -10 dBV (0.3 V) |
| Minimum Load Impedance | 2k ohms | Maximum Input Level | +18 dBV (8 V) |
| Nominal Load Impedance | 10k ohms | Equalizer | |
| Nominal Output Level | 0 dBu (0.8 V) | Type | Shelving-High, Low Sweepable-Mid |
| Maximum Output Level | +20 dBu (8 V) | Frequency | 10 kHz (High) 250 — 5 kHz (Mid) 100 Hz (Low) |
| RCA, unbalanced | | Boost/Cut | ±12 dB (High, Low) ±15 dB (Mid) |
| Output Impedance | 490 ohms | Peak Indicator Level | 10 dB above nominal |
| Minimum Load Impedance | 2k ohms | Power Requirements | |
| Nominal Load Impedance | 10k ohms | U.S.A./CANADA | 120 V AC, 60 Hz, 33 W |
| Nominal Output Level | -10 dBV (0.3 V) | Europe | 220 V AC, 50 Hz, 33 W |
| Maximum Output Level | +10 dBV (3 V) | U.K./Australia | 240 V AC, 50 Hz, 33 W |
| Stereo Output | | General Export | 100/120/220/240 V AC, 50/60 Hz, 33 W |
| XLR Type, unbalanced | | | |
| Output Impedance | 100 ohms | | |
| Minimum Load Impedance | 2k ohms | | |
| Nominal Load Impedance | 10k ohms | | |

PERFORMANCE CHARACTERISTICS

| | |
|---|---|
| Equivalent Input Noise | UNWTD (20 – 20 KHz)/ IHF A WTD |
| 150 ohm source | -128 dB/-130 dB |
| Signal-to-Noise Ratio | |
| Input – Output | UNWTD (20 – 20 kHz)/ IHF A WTD |
| 16 Mic – PGM | 57 dB/58 dB |
| 1 Line – PGM | 81 dB/83 dB |
| 16 Line – PGM | 67 dB/69 dB |
| 1 Line – Effect/Foldback | 78 dB/80 dB |
| 1 Line – Stereo | 80 dB/81 dB |
| 1 Tape – PGM | 83 dB/84 dB |
| Total Harmonic Distortion (THD) | |
| 1 Mic to 1 PGM Output^{1, 3)} | 0.03 %, 20 Hz – 20 kHz |
| 1 Line to 1 PGM Output^{2, 3)} | 0.025 %, 20 Hz – 20 kHz |
| Intermodulation Distortion (IMD) | |
| 1 Mic to 1 PGM Output^{1, 3)} | 0.06 % SMPTE |
| 1 Line to 1 PGM Output^{2, 3)} | 0.045 %, SMPTE |
| Frequency Response | |
| Any Input to Any Output | 20 Hz – 25 kHz ^{+1 dB} / _{-2 dB} nominal level |
| Cross-Talk (1 kHz) | Better than 60 dB |
| Dimensions (W x H x D) | 650 x 132 x 425 mm (25-9/16" x 5-3/16" x 16-3/4") |
| Weight | 12 kg (26-7/16 lbs.) net |

- 1) Level for measurement – 50 dB above nominal with Pad engaged; EQ off.
- 2) Nominal input level used for measurement; EQ off.
- 3) 30 kHz Low Pass Filter connected during test.

In these specifications: 0 dBV is referenced to 1.0 Volt; 0 dBu is referenced to 0.775 Volt. Actual voltage levels are also given in parenthesis (0.316 Volt for -10 dBV is rounded off and given as 0.3 Volt, and 0.775 Volt for 0 dBu as 0.8 Volt).

Changes in specifications and features may be made without notice or obligation.

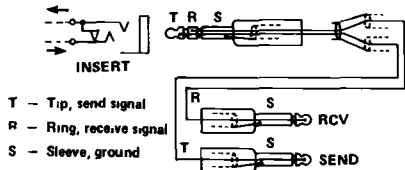
2. LEVEL SETTING AND OPERATION CHECK

The only adjustment points inside the apparatus are semi-fixed resistors R905 and R906, used for setting the meter level.

In the following descriptions, 0 dBV is referenced to 1 VRMS, and, 0 dBm/0 dBu, to 0.775 VRMS.

2-1. Input Faders, PGM Master Faders and PAN Controls (INSERT → PGM OUT)

1) Using an insertion plug shown in Fig., apply a -10 dBV (0.3 V), 1 kHz signal to the Ring and Sleeve contacts of the plug inserted into the INSERT ⑩ Jack.



2) Raise the Input Fader ⑪ in the channel to which the test signal is connected up to the uppermost, maximum position, rotate the PAN Control ⑫ in the same channel fully left (counterclockwise), and press the Buss Assignment Switches ⑬ (both "1-2" and "3-4") in the channel.

3) Fully open the PGM Master Faders ⑭ (uppermost position) and check that the PGM OUTs 1 and 3 (XLR-type connectors) ⑮ provide +20 dBu ±1 (approx. 7.8 V) and that there is then no waveform distortion registered. (With the PAN Control set to the 12 o'clock position, the PGM OUT level will drop 2.5 dB ±1.)

4) With the PAN Control set to the fully left position (i.e., +20 dBu at PGM OUT), lower the

PGM Master Faders (1 and 3) for a +10 dBu (2.54 V) reading at PGM OUT, and confirm that the PGM Master Faders are then in the shaded area between 7 and 8.

5) Repeat checks for PGM OUTs 2 and 4 (by rotating the PAN Control fully right and adjusting the corresponding PGM Master Faders).

6) Lower the Input Fader and confirm that its setting to the shaded area between 7 and 8 provides a 0 dBu (0.775 V) reading at PGM OUT.

7) Check all remaining channels in the same manner (by connecting the test signal to INSERT in the channel to be checked, and lowering, with the PGM Master Faders left as previously set, the corresponding Input Fader for a 0 dBu reading at the assigned PGM OUTs).

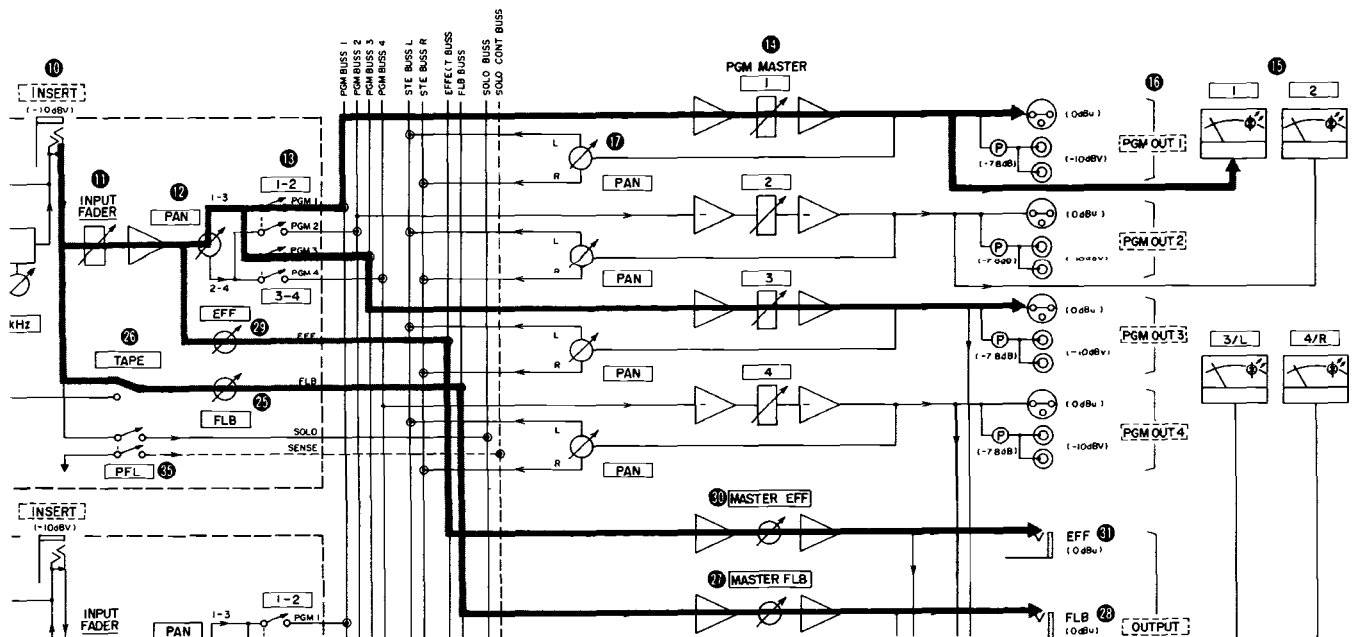
Nominal level at the RCA parallel connectors is -10 dBV (0.3 V).

2-2. EFF/MASTER EFF Pots and FLB/MASTER FLB Pots (INSERT → EFF OUTPUT/FLB OUTPUT)

1) With the Input Faders set as 2-1-6), rotate all the EFF ⑳, MASTER EFF ㉑, FLB ㉒ and MASTER FLB ㉓ Pots fully right, clockwise (maximum position) and check that EFF OUTPUT ㉔ and FLB OUTPUT ㉕ provide a +8 dBu (1.95 V) ±2 reading.

2) Adjust the EFF MASTER/FLB MASTER Pots for a 0 dBu (0.78 V) reading at the respective output jacks. The Pots should then be in the 2 to 3 o'clock position.

3) Check all remaining channels in the same manner.



2-3. Stereo Master Faders (SUB IN→STEREO OUT)

- 1) Apply a -10 dBV (0.3 V), 1 kHz signal to the SUB IN L and R Jacks 18.
- 2) Fully open the Stereo Master Faders L and R 19 (uppermost, maximum position) and check that the STEREO OUTs register a +10 dBu (2.45 V) ±1.5 level. Then, lower the Stereo Master Faders for a 0 dBu (0.78 V) reading. The Faders should then be in the shaded area between 7 and 8. (With the MONO Switch 21 depressed, the output level at STEREO OUT L and R will lower 6 dB ±0.5.)

2-4. Master PAN Controls (PGM OUT→STEREO OUT)

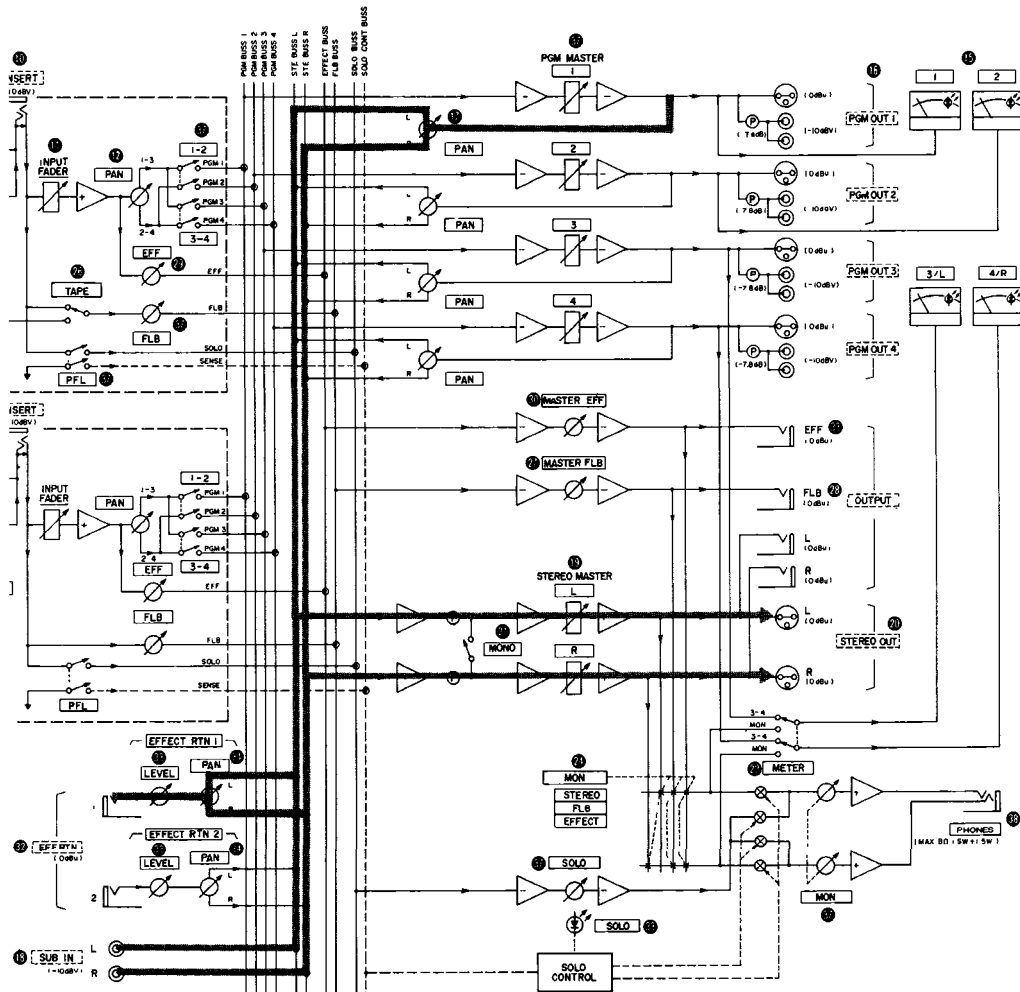
- 1) With the same conditions as in 2-1 (0 dBu at the XLR-type PGM OUT connectors) and as in 2-3 (0 dBu at STEREO OUT with the Stereo Master Faders set to 7 to 8 position), rotate the Master PAN Control 17 in the relative channel fully left and check that the STEREO OUT L Connector provides a 0 dBu reading. Then

rotate the Master PAN fully right for a 0 dBu reading at the STEREO OUT R connector.

Also note that the level reading at STEREO OUT L/R lowers 2.5 dB ±1 when the Master PAN is set to the 12 o'clock position.

2-5. EFFECT RTN LEVEL/PAN Controls (EFF RTN→STEREO OUT)

- 1) With the Stereo Master Faders set as in 2-3, apply a 0 dBu (0.775 V), 1 kHz signal to the EFF RTN Connector "1" 32.
- 2) Rotate the EFFECT RTN 1 LEVEL Control 33 fully right, clockwise (maximum position), and confirm that the output level at STEREO OUT L (and R) is +7 dBu ±2 when the PAN Control 34 is set to L (and then to R). Also, check that adjusting the LEVEL Control approximately to the 3 o'clock position provides a 0 dBu reading at STEREO OUT. (The level at STEREO OUT will drop 2.5 dB ±1 when the PAN is set to the 12 o'clock position.)
- 3) Repeat checks for the EFFECT RTN system "2."



2-6. TRIM, PAD and OL LED (MIC IN, LINE IN→INSERT)

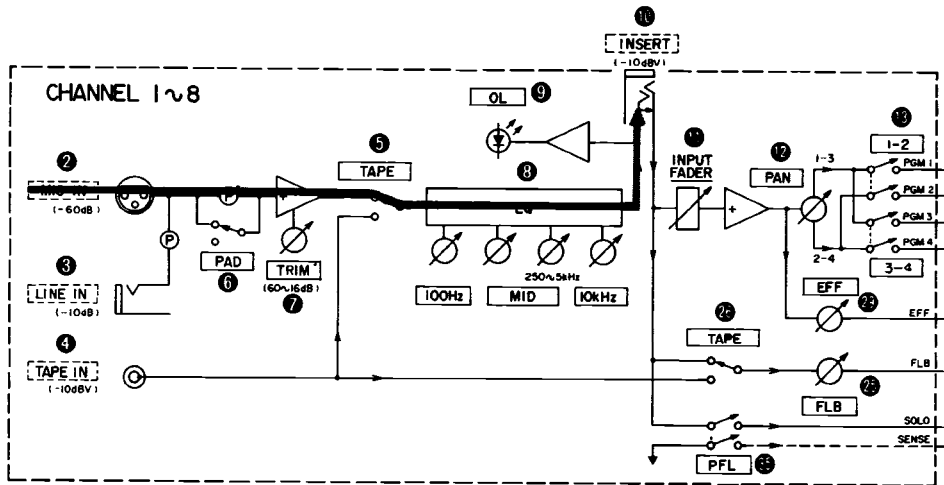
- 1) Connect a level meter to the Tip and Sleeve contacts of the insertion plug used in paragraph 2-1.
- 2) Set the EQ Controls ⑧ to the center, 12 o'clock position and apply a -60 dBV (1 mV), 1 kHz signal to the MIC IN Jack ②.
- 3) Adjust the TRIM Control ⑦ for a -10 dBV (0.3 V) output level reading at INSERT ⑩. The TRIM should then be in the 3 to 4 o'clock position.
- 4) Check for the same -10 dBV (0.3 V) level reading at INSERT by applying a -10 dBV signal to the LINE INPUT Jack (and to the TAPE IN Jack with the TAPE Select Switch pressed on). Also, confirm that the output level at INSERT (of the signal coming from the MIC IN and LINE IN Jacks) drops 30 dB ±1 when the PAD Switch ⑥ is pressed on.
- 5) With the output level at INSERT set to -10 dBV, confirm that OL LED ⑨ turns on when the input level is increased 27 dB and

turns off when the input level is decreased 4 dB (from the 27-dB-up point).

2-7. EQ Characteristics

With the output level at INSERT set to -10 dBV as in 2-6, vary the EQ settings and input frequencies and check the output level reading at INSERT varies as shown in the chart.

| Input Frequencies (Hz) | EQ Knob Settings | INSERT Send Level (dB) |
|------------------------|-------------------------|---|
| 10 k 20 k | 10 kHz | - (Min.) -13 ±1.0 |
| 10 k 20 k | | + (Max.) +13 ±1.0 +15 ±1.5 |
| 100 20 | 100 Hz | - (Min.) -13 ±1.0 |
| 100 20 | | + (Max.) +13 ±1.0 +15 ±1.5 |
| 190 - 250 | MID 250 Hz (Fully L) | - (Min.) -15 ^{+2.0} _{-6.0} |
| | | + (Max.) +15 ^{+6.0} _{-2.0} |
| 900 - 1,500 | MID 1 kHz (Center) | - (Min.) -15 ^{+2.0} _{-6.0} |
| | | + (Max.) +15 ^{+6.0} _{-2.0} |
| 5k - 6k | MID 5 kHz (Fully R) | - (Min.) -15 ^{+2.0} _{-6.0} |
| | | + (Max.) +15 ^{+6.0} _{-2.0} |



2-8. VU Meters

When the XLR-type PGM OUT Connectors provide a 0 dBu (0.775 V) reading as in 2-1, check that the VU Meters ⑮ selected register 0 VU. If necessary, adjust semi-fixed resistors R905 (Ch. 1 and 2) and R906 (Ch. 3 and 4) on the Meter PCB Ass'y. (The Meter PCB Ass'y is located on the back of the VU meters and accessible by opening the rear panel of the mixer.)

2-9. Peak LEDs (in the VU Meters)

With the output level reading at PGM OUT set to 0 dBu as in 2-8, check that the Peak LED turns on when the output level is increased to +11 dBu (+11 VU on the meter) and that it turns off when the output level is decreased to +8.5 dBu (+8.5 VU on the meter).

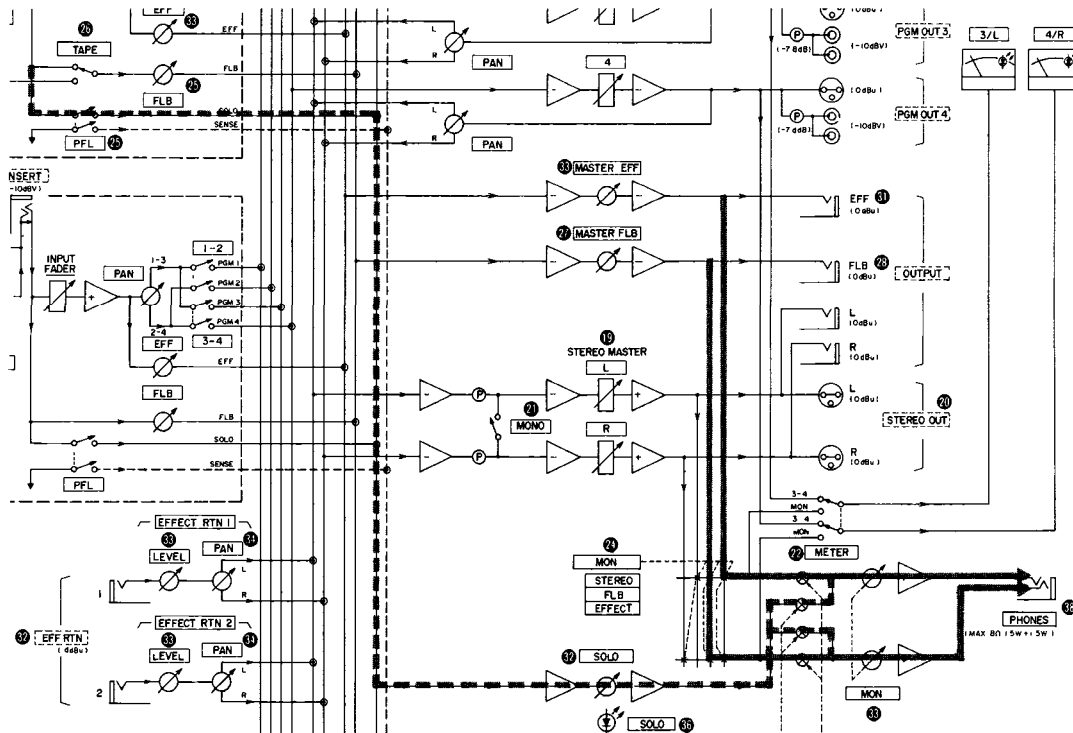
2-10. Headphone Monitor Output

With EFF OUT/FLB OUT and STEREO OUT set to nominal as in 2-2 and 2-3, select the monitor sources available at the Headphone Jack 38 using the MONitor Select Switches 24 and adjust the MONitor Level Control 23 to confirm that the Headphone Jack (with a 8-ohm load attached) provides for each of the three monitor sources a maximum output level of 1.5 W (or more). Also, confirm that the output level is 1 VRMS when the MONitor Level Control is set approximately to the 1

to 2 o'clock position.

2-11. PFL Function

When a signal is applied to the INSERT Jack as in 2-1, press the PFL Button 35 on and check that a Pre-Fader signal is available at the Headphone Jack by adjusting the SOLO 37 and MON 23 Controls (when the PFL Button is in the down, on position, signals coming from the MONitor Select Switches are disconnected from the Headphone Jack).



2-12. Frequency Response

Frequency Response is measured with the input and output levels set to nominal as in previous sections. Check that the frequency range is within the following limits:

20 Hz to 25 kHz +1.0 dB
-2.0 dB

2-13. Distortion Check

Distortion is also measured with the input and output levels set to nominal.

Connect a 1 kHz signal to the input connectors and the output connectors to a distortion meter through a 30 kHz low-pass filter. Specs are as follows:

1 MIC → PGM OUT 0.03 % or less
(30-dB PAD inserted, 30 dB above nominal input level)
1 LINE → PGM OUT 0.025 % or less

1 LINE → EFF OUT/FLB OUT 0.025 % or less
1 LINE → STEREO OUT 0.025 % or less

2-14. S/N Ratio

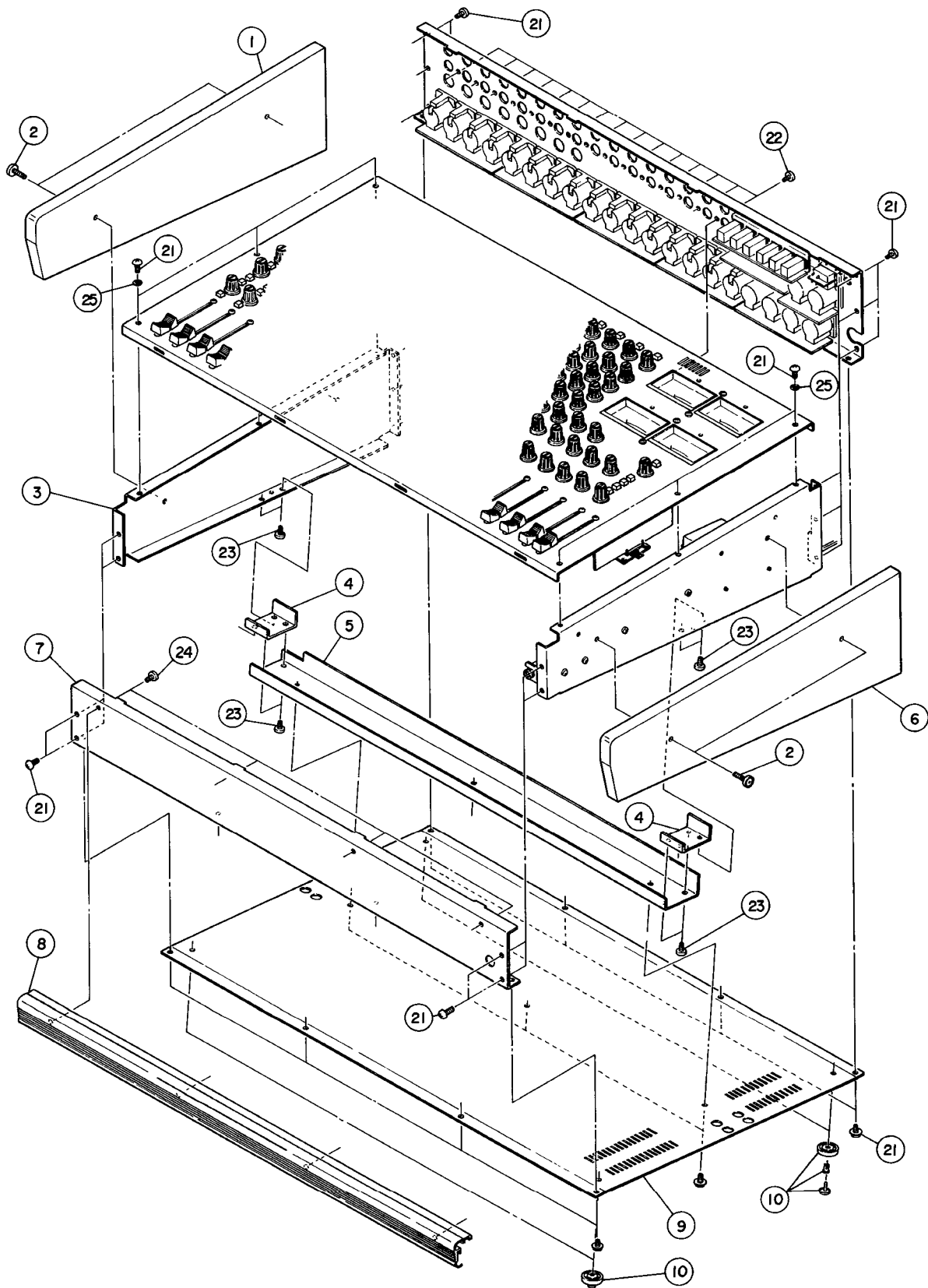
S/N ratio is also measured with the input and output levels set to nominal and a 150-ohm dummy load connected to the MIC IN connectors.

Specs are as follows:

| | M-208 | | M 216 | |
|---|----------------|--------|---------------|--------|
| | DIN(20-20 kHz) | IHF(A) | DIN(20-20kHz) | IHF(A) |
| 1 MIC → PGM OUT (through 150-ohm Dummy) | 70 dB | 72 dB | 70 dB | 72 dB |
| Σ MIC → PGM OUT (through 150-ohm Dummy) | 60 dB | 62 dB | 57 dB | 58 dB |
| 1 LINE → PGM OUT | 81 dB | 83 dB | 81 dB | 83 dB |
| Σ LINE → PGM OUT | 72 dB | 74 dB | 67 dB | 69 dB |
| 1 LINE → EFF OUT | 80 dB | 82 dB | 78 dB | 80 dB |
| 1 LINE → FLB OUT | 80 dB | 82 dB | 78 dB | 80 dB |
| 1 LINE → STEREO OUT | 80 dB | 81 dB | 80 dB | 81 dB |
| 1 TAPE → PGM OUT | 83 dB | 84 dB | 83 dB | 84 dB |

3. EXPLODED VIEWS AND PARTS LISTS

EXPLODED VIEW-1



EXPLODED VIEW-1

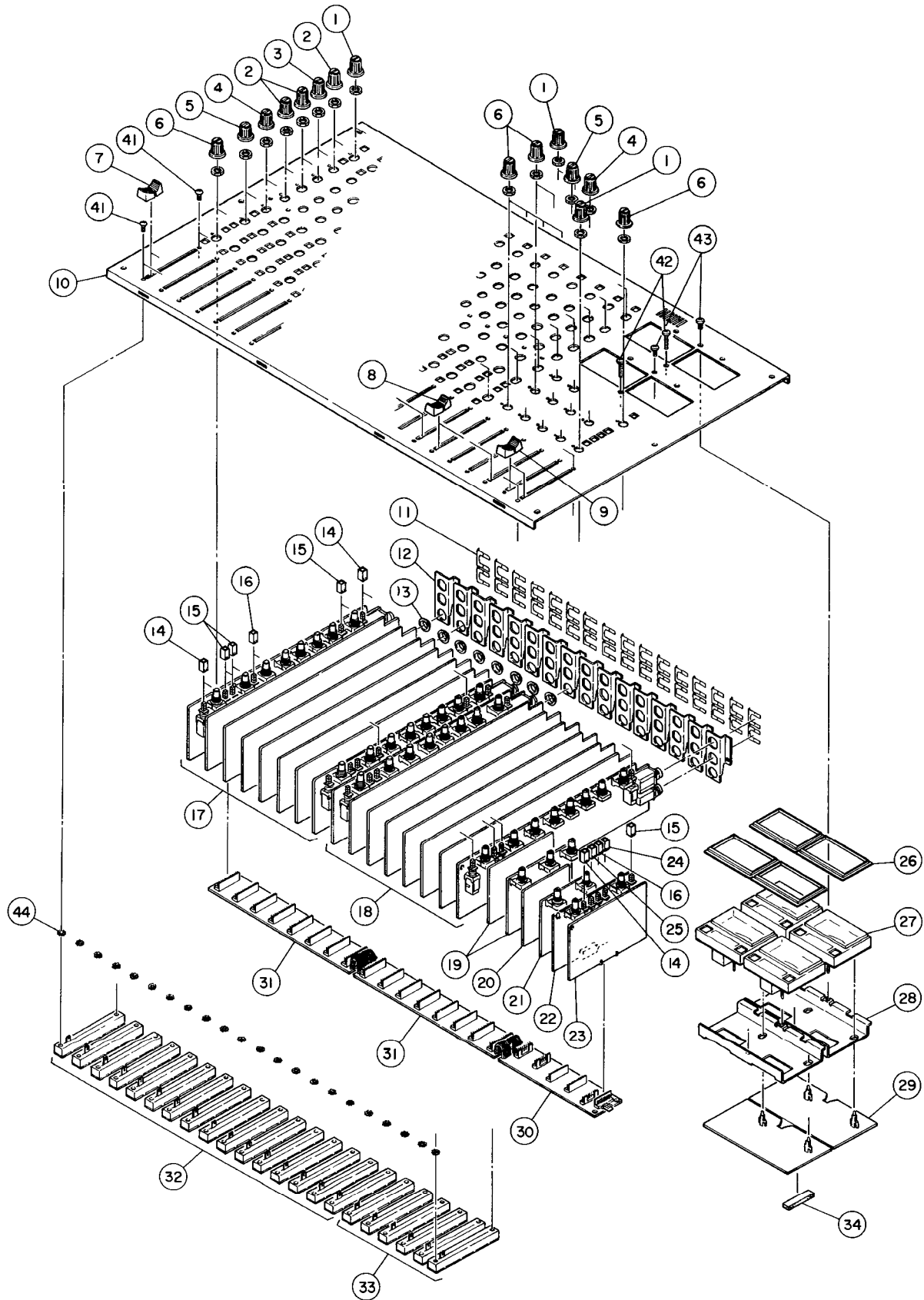
PARTS MARKED WITH * REQUIRE LONGER DELIVERY TIME.

| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|-------------|-----------------------------|---------|
| 1- 1 | *5800713800 | SIDE-BOARD, L | |
| 1- 2 | 5504411000 | SCREW, SIDE-BOARD | |
| 1- 3 | *5800713100 | CHASSIS, SIDE; L | |
| 1- 4 | *5800662602 | HOLDER, CHANNEL | |
| 1- 5 | *5800713700 | BRACKET, BOTTOM COVER; B | [M-216] |
| | *5800713600 | BRACKET, BOTTOM COVER; A | [M-208] |
| 1- 6 | *5800713900 | SIDE-BOARD, R | |
| 1- 7 | *5800713500 | PANEL, FRONT; B | [M-216] |
| | *5800713300 | PANEL, FRONT; A | [M-208] |
| 1- 8 | *5800712400 | SASH, FRONT; B | [M-216] |
| | *5800712300 | SASH, FRONT; A | [M-208] |
| 1- 9 | *5800714400 | COVER, BOTTOM; B | [M-216] |
| | *5800714300 | COVER, BOTTOM; A | [M-208] |
| 1-10 | 5730003300 | FOOT, FF-008(P4X6) | |
| 1-21 | *5780964008 | SCREW, TRASS TAP M4X8 (BLK) | |
| 1-22 | *5781163006 | SCREW, BIND TAP M3X6 (BLK) | |
| 1-23 | *5781074008 | SCREW, PAN TAP; M4X8 (BLK) | |
| 1-24 | *5781023006 | SCREW, PAN TAP; M3X6 | |
| 1-25 | *5785224100 | WASHER, FIBER 4X10X0.5 | |

INCLUDED ACCESSORIES

| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|-------------|-------------------------------------|---------|
| | *5700069200 | OWNER'S MANUAL [J] | |
| | *5700069300 | OWNER'S MANUAL [ALL EXCEPT J] | |
| | | [J]: JAPAN [US]: U.S.A. [C]: CANADA | |
| | | [GE]: GENERAL EXPORT [E]: EUROPE | |
| | | [UK]: U.K. [A]: AUSTRALIA | |

EXPLODED VIEW-2

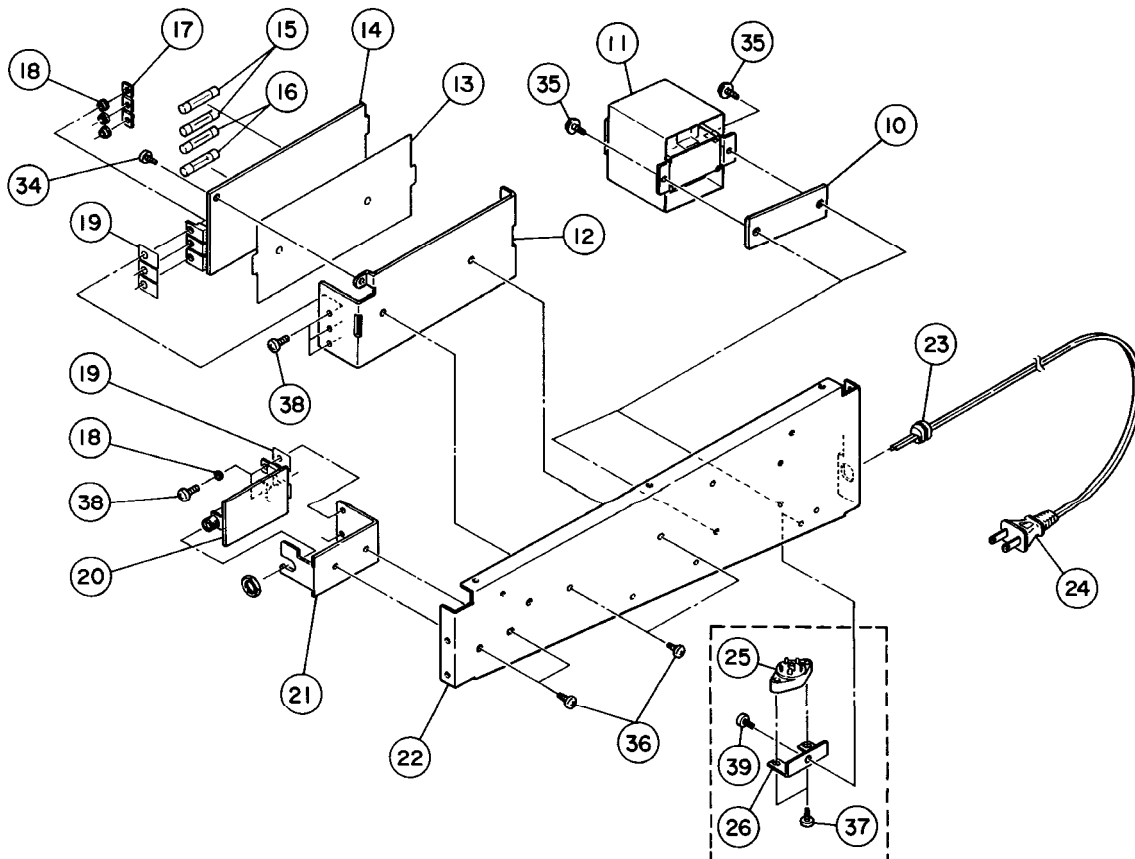
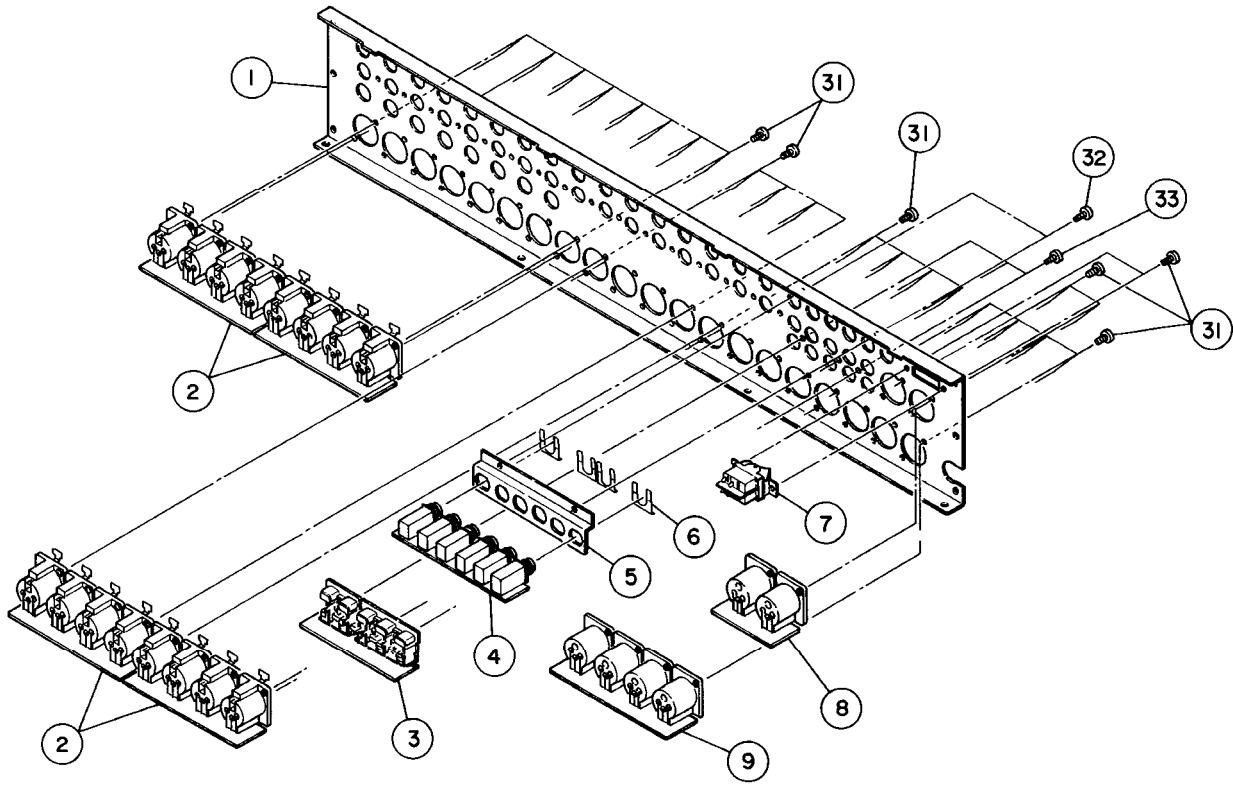


EXPLODED VIEW-2

PARTS MARKED WITH * REQUIRE LONGER DELIVERY TIME.

| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|-------------|----------------------------|--------------------|
| 2- 1 | 5800756200 | KNOB ASSY, (14);B | |
| 2- 2 | 5800756300 | KNOB ASSY, (14);C | |
| 2- 3 | 5800756600 | KNOB ASSY, (14);F | |
| 2- 4 | 5800756500 | KNOB ASSY, (14);E | |
| 2- 5 | 5800756400 | KNOB ASSY, (14);D | |
| 2- 6 | 5800756100 | KNOB ASSY, (14);A | |
| 2- 7 | 5800729200 | KNOB, FADER P | |
| 2- 8 | 5800677200 | KNOB, FADER H | |
| 2- 9 | 5800677300 | KNOB, FADER J | |
| 2-10 | *5800714100 | PANEL, TOP;B [M-216] | |
| | *5800714000 | PANEL, TOP;A [M-208] | |
| 2-11 | *5317003200 | PLATE, MOUNT | |
| 2-12 | *5800712900 | HOLDER, INPUT JACK | |
| 2-13 | *5800712800 | SPACER, PIN JACK | |
| 2-14 | 5800727700 | BUTTON, PUSH;C | |
| 2-15 | 5800727500 | BUTTON, PUSH;A | |
| 2-16 | 5800727900 | BUTTON, PUSH;E | |
| 2-17 | *5200179300 | INPUT PCB ASSY(A) | Ref. Page 21 |
| 2-18 | *5200179310 | INPUT PCB ASSY(B) [M-216] | Ref. Pages 21 & 22 |
| 2-19 | *5200178601 | E. RIN PCB ASSY | Ref. Page 25 |
| 2-20 | *5200178801 | EFF PCB ASSY | Ref. Page 27 |
| 2-21 | *5200178701 | FLB PCB ASSY | Ref. Page 27 |
| 2-22 | *5200178901 | MON PCB ASSY(A) | Ref. Page 25 |
| 2-23 | *5200179001 | MON PCB ASSY(B) | Ref. Page 25 |
| 2-24 | 5800727600 | BUTTON, PUSH;B | |
| 2-25 | 5800727800 | BUTTON, PUSH;D | |
| 2-26 | *5800727300 | ESCICHEON, METER | |
| 2-27 | 5296007100 | METER, VU | |
| 2-28 | *5800663400 | BRACKET, METER | |
| 2-29 | *5200145801 | PCB ASSY, METER | Ref. Page 30 |
| 2-30 | *5200179900 | MON BUSS PCB ASSY | Ref. Page 25 |
| 2-31 | *5200179800 | INPUT BUSS PCB ASSY | Ref. Page 22 |
| 2-32 | 5284010000 | VR, SLIDE 10KD L=60 | |
| 2-33 | 5284010100 | VR, SLIDE 5KD L=60 | |
| 2-34 | *5555570000 | CUSHION, B | |
| 2-41 | *5780423006 | SCREW, TRASS M3X6 (BLK) | |
| 2-42 | *5780022618 | SCREW, BIND M2.6X18(BLK) | |
| 2-43 | *5781162606 | SCREW, BIND TAP M2.6X6 BLK | |
| 2-44 | *5785123000 | LOCK WASHER 3F | |

EXPLODED VIEW-3



| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|--------------|--------------------------------|--------------|
| 3- 1 | *5800714200 | PANEL, REAR; B [M-216] | |
| | *5800713000 | PANEL, REAR; A [M-208] | |
| 3- 2 | *5200179700 | MIC JACK PCB ASSY | Ref. Page 30 |
| 3- 3 | *5200179100 | RCA JACK PCB ASSY | Ref. Page 30 |
| 3- 4 | *5200180000 | JACK PCB ASSY | Ref. Page 33 |
| 3- 5 | *5800712500 | HOLDER, JACK | |
| 3- 6 | *5317003200 | PLATE, MOUNT | |
| 3- 7 | △ 5300024900 | SW., POWER SDE3S [J] | |
| | △ 5300025000 | SW., POWER SDE3S [US, C, GE] | |
| | △ 5300025100 | SW., POWER SDE3S [E, UK, A] | |
| 3- 8 | *5200179600 | STE JACK PCB ASSY | Ref. Page 30 |
| 3- 9 | *5200179500 | PGM JACK PCB ASSY | Ref. Page 30 |
| 3-10 | *5800728800 | SPACER, TRANSFORMER | |
| 3-11 | △ 5320036000 | TRANSFORMER, POWER [J] | |
| | △ 5320036100 | TRANSFORMER, POWER [US, C] | |
| | △ 5320036300 | TRANSFORMER, POWER [GE] | |
| | △ 5320036200 | TRANSFORMER, POWER [E, UK, A] | |
| 3-12 | *5800713400 | HEATSINK | |
| 3-13 | *5800739000 | PLATE, INSULATOR | |
| 3-14 | *5200178501 | P.S PCB ASSY [J] | Ref. Page 33 |
| | *5200178511 | P.S PCB ASSY [US] | Ref. Page 33 |
| | *5200178521 | P.S PCB ASSY [C] | Ref. Page 33 |
| | *5200178531 | P.S PCB ASSY [GE] | Ref. Page 33 |
| | *5200178541 | P.S PCB ASSY [E, UK, A] | Ref. Page 33 |
| 3-15 | △ 5307020400 | FUSE, T1A250V [J, US, C, GE] | |
| | △ 5041140000 | FUSE, T1A250V [E, UK, A] | |
| 3-16 | △ 5307019900 | FUSE, T0.5A250V [J, US, C, GE] | |
| | △ 5041138000 | FUSE, T0.5A250V [E, UK, A] | |
| 3-17 | 5800728200 | PLATE NUT | |
| 3-18 | *5033295000 | TUBE, INSULATOR | |
| 3-19 | *5033291000 | PLATE, INSULATOR | |
| 3-20 | *5200180301 | PHONE JACK PCB ASSY | Ref. Page 33 |
| 3-21 | *5800727401 | BRACKET, HP. PCB | |
| 3-22 | *5800713200 | CHASSIS, SIDE; R | |
| 3-23 | *5534660000 | BUSHING 4N-4 [J, GE, E, A] | |
| | *5317001700 | BUSHING 4N-5 [US, UK] | |
| | *5534663000 | BUSHING 6W-1 [C] | |
| 3-24 | △ 5128027000 | CORD, AC [J] | |
| | △ 5350010700 | CORD, AC UL SPT-2 [US] | |
| | △ 5350012200 | CORD, AC CSA [C] | |
| | △ 5350010800 | CORD, AC UL SPT-1 [GE] | |
| | △ 5350008200 | CORD, AC EUR [E] | |
| | △ 5128047000 | CORD, AC [UK] | |
| | △ 5350008300 | CORD, AC ASS [A] | |
| 3-25 | △ 5302101700 | SW., VOLTAGE SELECT [GE] | |
| 3-26 | *5800728700 | BRACKET, SELECTOR [GE] | |

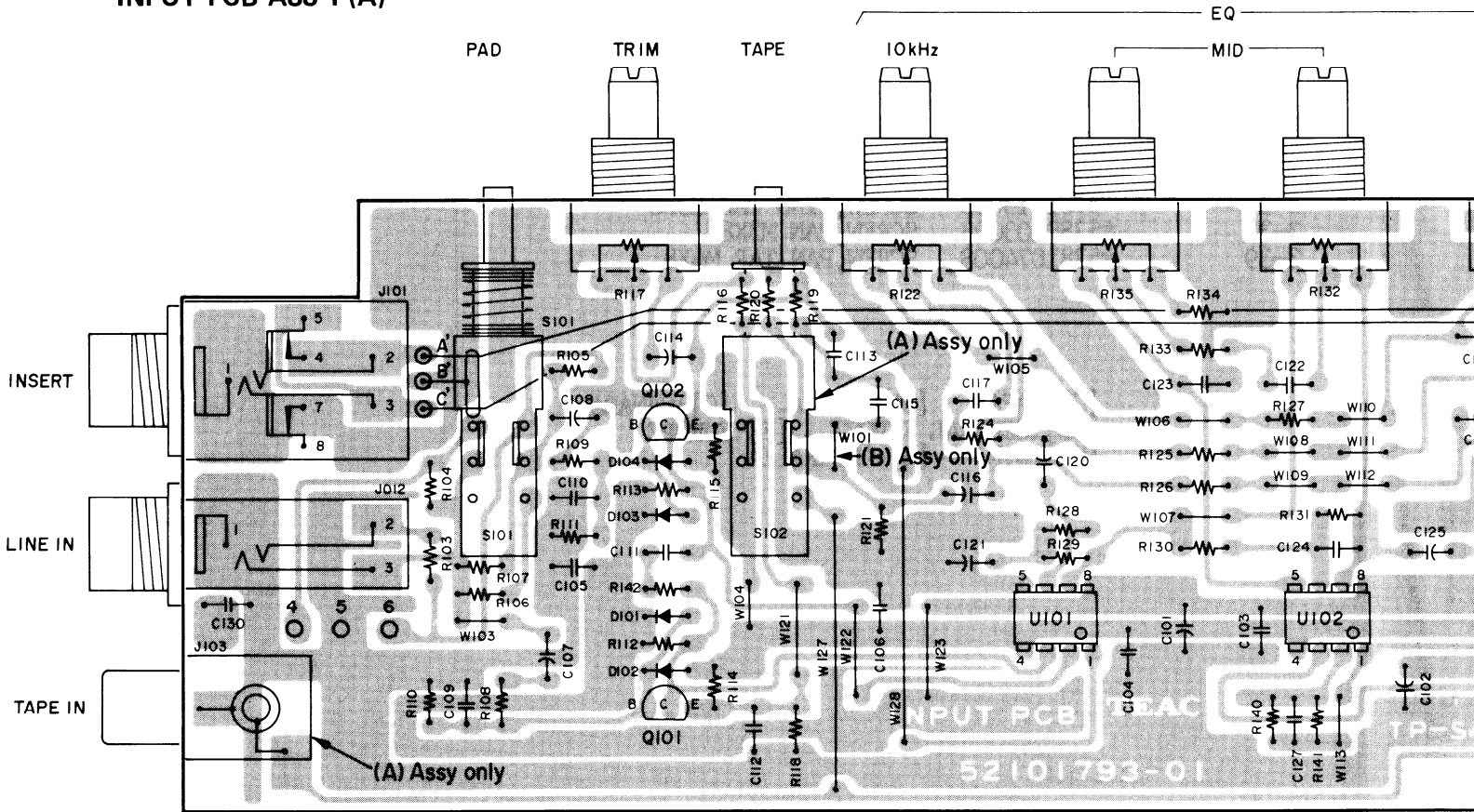
PARTS MARKED WITH * REQUIRE LONGER DELIVERY TIME.

| REF. NO. | PARTS NO. | DESCRIPTION | REMARKS |
|----------|-------------|----------------------------|---------|
| 3-31 | *5780023008 | SCREW,BIND M3X8 NI B | |
| 3-32 | *5781163006 | SCREW,BIND TAP M3X6(BLK) | |
| 3-33 | *5781103008 | SCREW,BIND TAP M3X8 | |
| 3-34 | *5781023008 | SCREW,PAN TAP M3X8(BLK NI) | |
| 3-35 | *5781514008 | SCREW,WASER HEAD TAP M4X8 | |
| 3-36 | *5781023006 | SCREW,PAN TAP M3X6 | |
| 3-37 | *5781113008 | SCREW,BIND TAP M3X8 | |
| 3-38 | *5780103008 | SCREW,PAN M3X8 | |
| 3-39 | *5781074008 | SCREW,PAN TAP M4X8 | |

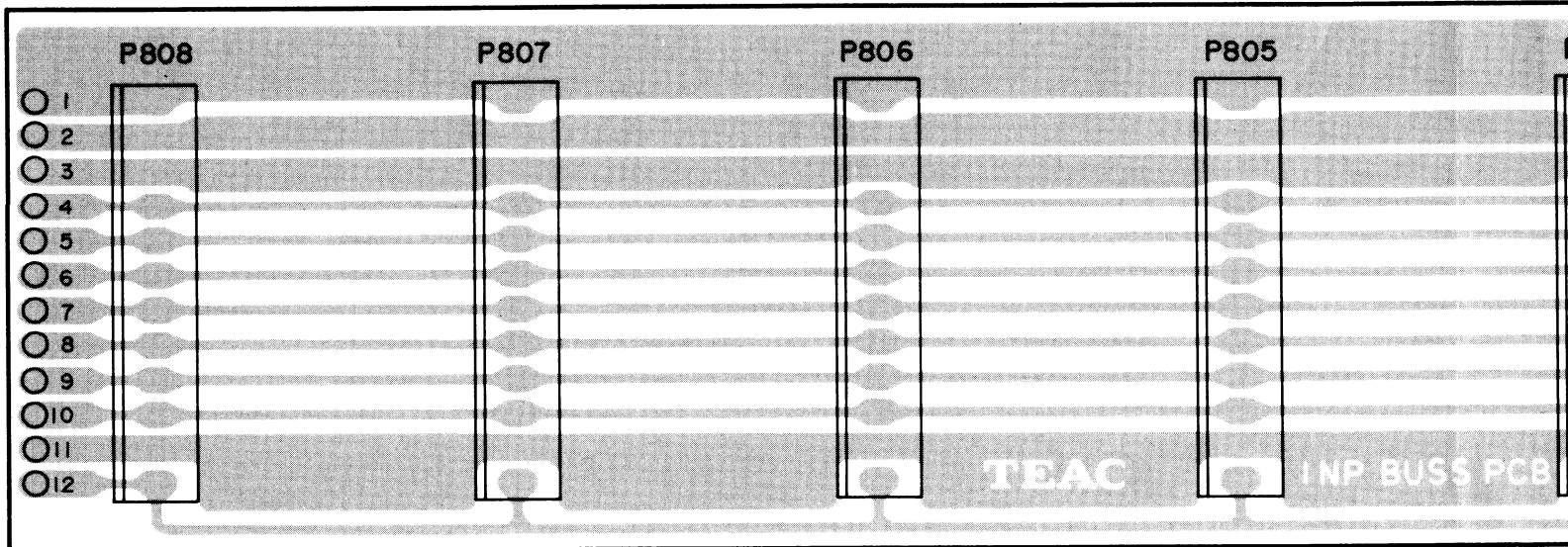
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[GE]:GENERAL EXPORT [E]:EUROPE
[UK]:U.K. [A]:AUSTRALIA

4. PC BOARDS AND PARTS LISTS

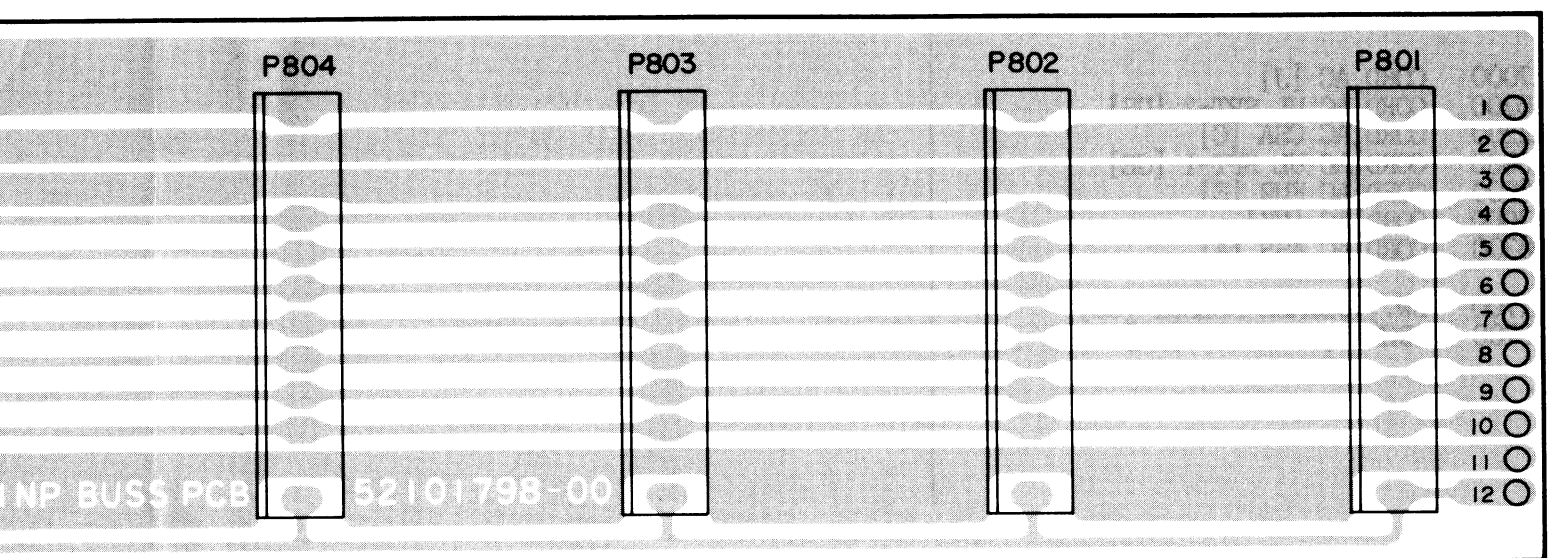
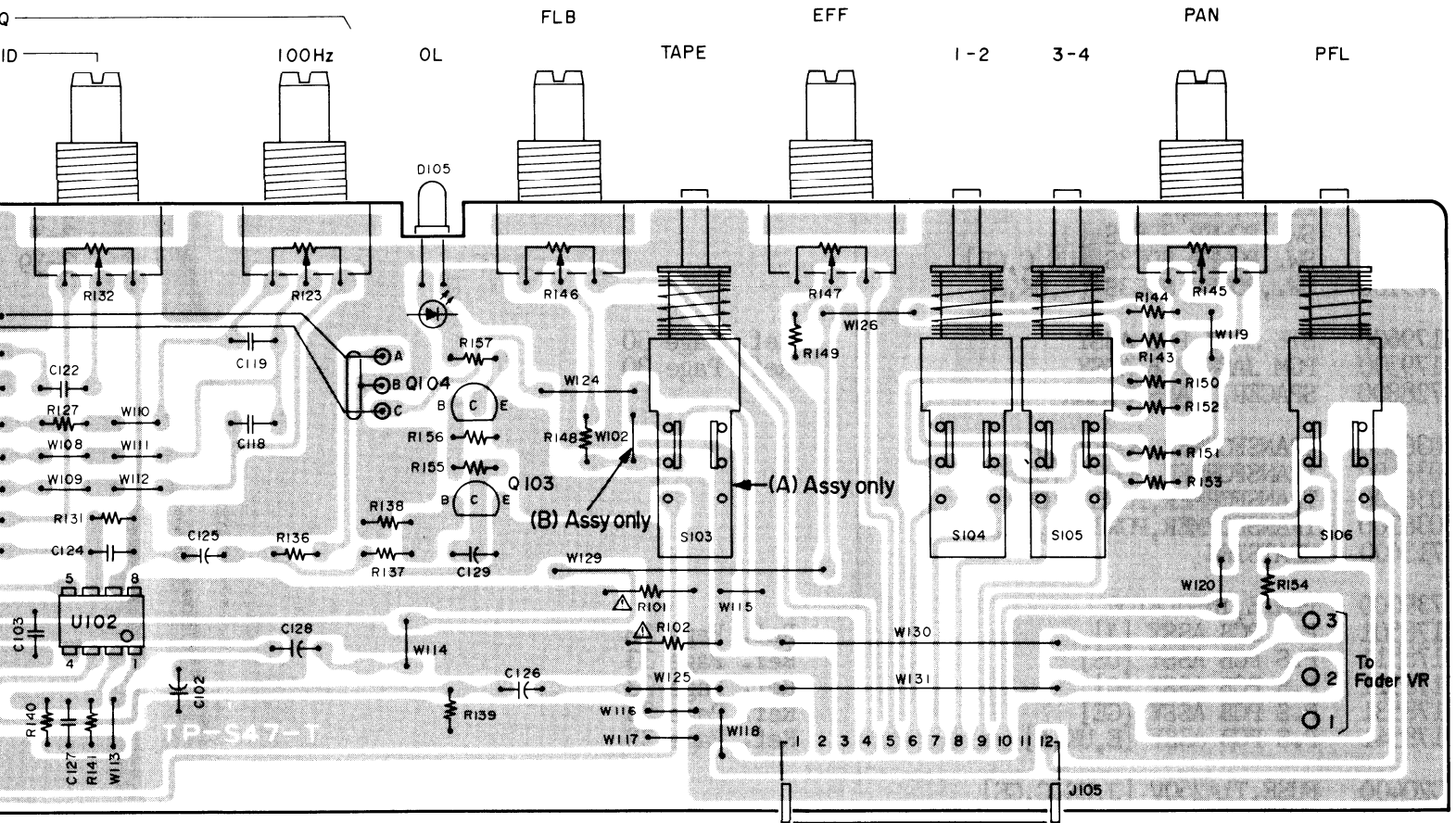
INPUT PCB ASS'Y(A)



INPUT BUSS PCB ASS'Y



INPUT PCB ASS'Y(A)



INPUT PCB ASSY(A)

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|------------------------------|
| | *5200179300 | INPUT PCB ASSY(A) |
| | *5210179301 | INPUT PCB |
| | *5800712901 | HOLDER, INPUT JACK |
| | *5800712800 | SPACER, PIN JACK |
| | *5317003200 | PLATE, MOUNT |
| C101 C102 | 5260165252 | C., ELEC. 4.7UF/25V M USM VT |
| C103-C106 | 5173433000 | C., CERAMIC 0.010UF/50V |
| C107 C108 | 5260162950 | C., ELEC. 10UF/63V SM T-N |
| C109 C110 | 5172216000 | C., CERAMIC 220PF/50V T |
| C111 | 5170364000 | C., MYLAR 0.0033UF/100V JT |
| C112 C113 | 5172217000 | C., CERAMIC 270PF/50V T |
| C114 | 5173070000 | C., ELEC. SM 470UF/6.3V |
| C115 | 5260067050 | C., ELEC. 10UF/16V |
| C116 | 5260162550 | C., ELEC. 10UF/16V |
| C117 | 5263101620 | C., POLY 0.0030UF/100V J |
| C118 C119 | 5171860000 | C., MYLAR 0.015UF/100V J T |
| C120 | 5260162550 | C., ELEC. 10UF/16V |
| C121 | 5260161150 | C., ELEC. 2.2UF/50V |
| C122 | 5170370000 | C., MYLAR 0.0056UF/100V JT |
| C123 | 5170360000 | C., MYLAR 0.0022UF/100V JT |
| C124 | 5172208000 | C., CERAMIC 47PF/50V T |
| C125 C128 | 5260165252 | C., ELEC. 4.7UF/25V M USM VT |
| C126 | 5260162550 | C., ELEC. 10UF/16V |
| C127 | 5172204000 | C., CERAMIC 22PF/50V T |
| C129 | 5260160550 | C., ELEC. 0.47UF/50V M SM |
| C130 | 5173433000 | C., CERAMIC 0.01UF/50V |
| D101-D104 | 5224015020 | DIODE, 1SS133T-77 |
| D105 | 5225005400 | LED, SLP135B (RED) |
| J101 | 5330011400 | JACK, B11-5005 3P |
| J102 | 5330009000 | JACK, PIN 3P PHONE |
| J103 | 5330508900 | JACK, PIN 1P BLK |
| J105 | 5122383000 | CONNECTOR SOCKET 3024-12AH |
| Q101 Q102 | 5145119000 | SI. TR. 2SC-1844F 0.25 100 |
| Q103 | 5230779520 | SI. TR. 2SC1815GR 0.4 80 |
| Q104 | 5145150000 | SI. TR. 2SA-1015GR 0.4 80 |
| R101 R102 | 5183562000 | R., INCOMBUSTIBLE 2.2 1/4W |
| R103 | 5240031420 | R., CARBON R10 22K J |
| R104 R105 | 5240028220 | R., CARBON R20 1.0K J |
| R106 | 5240025420 | R., CARBON R20 68 J |
| R107 | 5240029420 | R., CARBON R20 3.3K J |
| R108 R109 | 5240023420 | R., CARBON R20 10 J |
| R110 R111 | 5240029820 | R., CARBON R20 4.7K J |
| R112 R113 | 5240029020 | R., CARBON R10 2.2K J |
| R114 R115 | 5240029820 | R., CARBON R20 4.7K J |
| R116 | 5240023820 | R., CARBON R20 15 J |
| R117 | 5282014700 | 1S1UVR 12, 5KRD |
| R118 R119 | 5240030620 | R., CARBON R10 10K J |
| R120 R121 | 5240033020 | R., CARBON R20 100K J |
| R122 R123 | 5282015100 | 1S1UVR 12, 10KB |
| R124 R125 | 5240030020 | R., CARBON R20 5.6K J |
| R126 R127 | 5240031220 | R., CARBON R20 18K J |
| R128 R129 | 5240034620 | R., CARBON R20 470K J |
| R130 R131 | 5240031220 | R., CARBON R20 18K J |
| R132 R145 | 5282015000 | 1S1UVR 12, 10KB |
| R133 R134 | 5240030420 | R., CARBON R20 8.2K J |
| R135 | 5282410900 | 1S2UVR 12, 200KCX2 |
| R136 | 5240025820 | R., CARBON R20 100 J |
| R137 | 5240033020 | R., CARBON R20 100K J |
| R138 | 5240030520 | R., CARBON R20 9.1K J |
| R139 | 5240033020 | R., CARBON R20 100K J |

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|------------|-----------------------|
| R140 | 5240029020 | R., CARBON R10 2.2K J |
| R141 | 5240029820 | R., CARBON R20 4.7K J |
| R142 | 5240025820 | R., CARBON R20 100 J |
| R143 R144 | 5240029920 | R., CARBON R20 5.1K J |
| R146 R147 | 5282014900 | 1S1UVR 12, 50KD |
| R148-R154 | 5240031420 | R., CARBON R10 22K J |
| R155 R156 | 5240030620 | R., CARBON R10 10K J |
| R157 | 5240030020 | R., CARBON R20 5.6K J |
| S101 | 5300041600 | PUSH SW 2-2 N SUN |
| S102 S103 | 5300041600 | PUSH SW 2-2 N SUN |
| S104-S106 | 5300041600 | PUSH SW 2-2 N SUN |
| U101 U102 | 5220411100 | IC, NJM4560DX |

INPUT PCB ASSY(B) [M-216 ONLY]

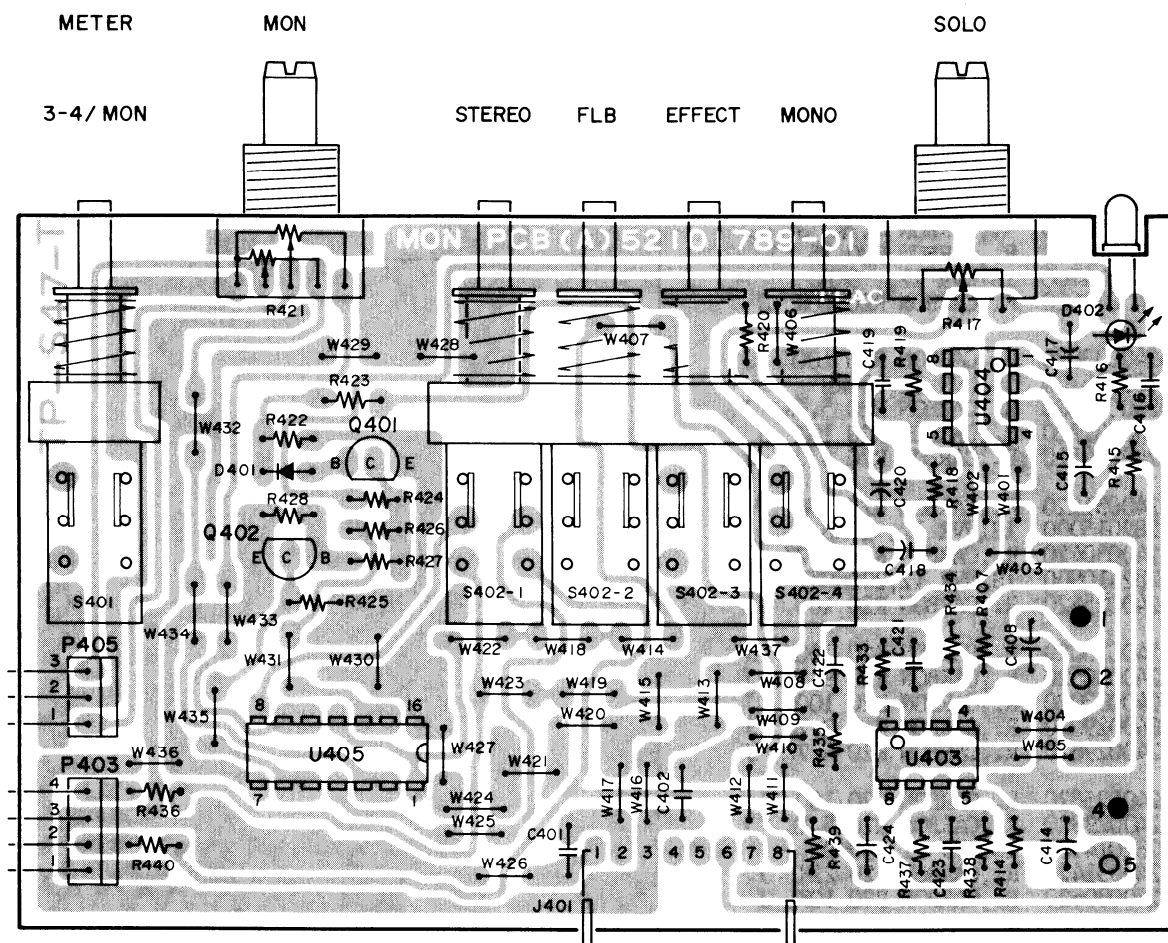
| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|------------------------------|
| | *5200179310 | INPUT PCB ASSY(B) |
| | *5210179301 | INPUT PCB |
| | *5800712901 | HOLDER, INPUT JACK |
| | *5317003200 | PLATE, MOUNT |
| C101 C102 | 5260165252 | C., ELEC. 4.7UF/25V M USM VT |
| C103-C106 | 5173433000 | C., CERAMIC 0.010UF/50V Z |
| C107 C108 | 5260162950 | C., ELEC. 10UF/63V SM T-N |
| C109 C110 | 5172216000 | C., CERAMIC 220PF/50V T |
| C111 | 5170364000 | C., MYLAR 0.0033UF/100V JT |
| C112 C113 | 5172217000 | C., CERAMIC 270PF/50V T |
| C114 | 5173070000 | C., ELEC. SM 470UF/6.3V |
| C115 | 5260067050 | C., ELEC. 10UF 16V |
| C116 | 5260162550 | C., ELEC. 10UF 16V |
| C117 | 5263101620 | C., POLY. 0.0030UF 100V J |
| C118 C119 | 5171860000 | C., MYLAR 0.015UF/100V J T |
| C120 | 5260162550 | C., ELEC. 10UF 16V |
| C121 | 5260161150 | C., ELEC. 2.2UF 50V |
| C122 | 5170370000 | C., MYLAR 0.0056UF/100V JT |
| C123 | 5170360000 | C., MYLAR 0.0022UF/100V JT |
| C124 | 5172208000 | C., CERAMIC 47PF/50V T |
| C125 C128 | 5260165252 | C., ELEC. 4.7UF/25V M USM VT |
| C126 | 5260162550 | C., ELEC. 10UF 16V |
| C127 | 5172204000 | C., CERAMIC 22PF/50V T |
| C129 | 5260160550 | C., ELEC. 0.47UF 50V M SM |
| C130 | 5173433000 | C., CERAMIC 0.01UF/50V |
| D101-D104 | 5224015020 | DIODE, 1SS133T-77 |
| D105 | 5225005400 | LED, SLP135B (RED) |
| J101 | 5330011400 | JACK, B11-5005 3P |
| J102 | 5330009000 | JACK, PIN 3P PHONE |
| J105 | 5122383000 | CON., SOCKET 3024-12AH |
| Q101 Q102 | 5145119000 | SI. TR. 2SC1844F 0.25 100 |
| Q103 | 5230779520 | SI. TR. 2SC1815GR 0.4 80 |
| Q104 | 5145150000 | SI. TR. 2SA1015GR 0.4 80 |
| R101 R102 | 5183562000 | R., INCOMBUSTIBLE 2.2 1/4W |
| R103 | 5240031420 | R., CARBON R10 22K J |

INPUT BUSS PCB ASSY

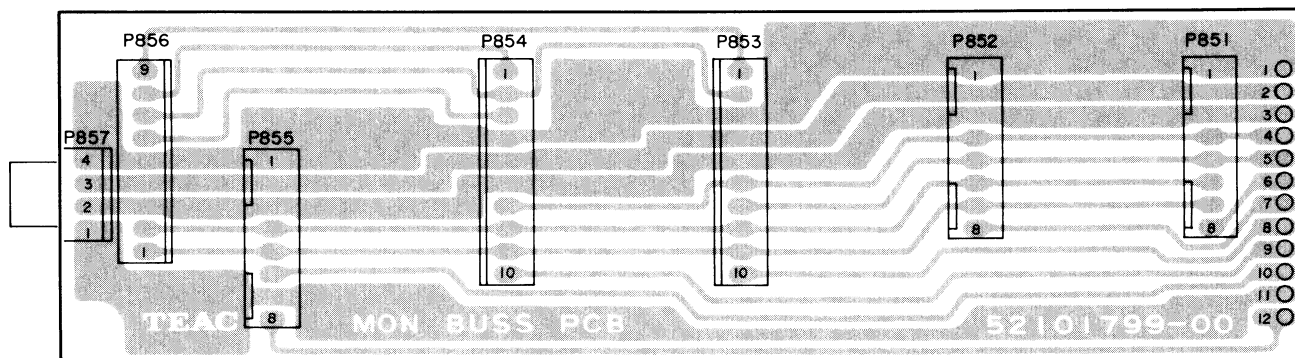
| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-----------|---------------------------------|
| R104 | R105 | 5240028220 R.,CARBON R20 1.0K J |
| R106 | | 5240025420 R.,CARBON R20 68 J |
| R107 | | 5240029420 R.,CARBON R20 3.3K J |
| R108 | R109 | 5240023420 R.,CARBON R20 10 J |
| R110 | R111 | 5240029820 R.,CARBON R20 4.7K J |
| R112 | R113 | 5240029020 R.,CARBON R10 2.2K |
| R114 | R115 | 5240029820 R.,CARBON 4.7K J |
| R116 | | 5240023820 R.,CARBON R20 15 J |
| R117 | | 5282014700 1S1UVR 12, 5KRD |
| R118 | R119 | 5240030620 R.,CARBON R20 10K J |
| R120 | R121 | 5240033020 R.,CARBON R20 100K J |
| R122 | R123 | 5282015100 1S1UVR 12,100KB |
| R124 | R125 | 5240030020 R.,CARBON R20 5.6K J |
| R126 | R127 | 5240031220 R.,CARBON R20 18K J |
| R128 | R129 | 5240034620 R.,CARBON R20 470K J |
| R130 | R131 | 5240031220 R.,CARBON R20 18K J |
| R132 | R145 | 5282015000 1S1UVR 12, 10KB |
| R133 | R134 | 5240030420 R.,CARBON R20 8.2K J |
| R135 | | 5282410900 1S2UVR 12,200KCX2 |
| R136 | | 5240025820 R.,CARBON R20 100 J |
| R137 | | 5240033020 R.,CARBON R20 100K J |
| R138 | | 5240030520 R.,CARBON R20 9.1K J |
| R139 | | 5240033020 R.,CARBON R20 100K J |
| R140 | | 5240029020 R.,CARBON R10 2.2K J |
| R141 | | 5240029820 R.,CARBON R20 4.7K J |
| R142 | | 5240025820 R.,CARBON R20 100 J |
| R143 | R144 | 5240029920 R.,CARBON R20 5.1K J |
| R146 | R147 | 5282014900 1S1UVR 12, 50KD |
| R148 | R154 | 5240031420 R.,CARBON R20 22K J |
| R155 | R156 | 5240030620 R.,CARBON R20 10K J |
| R157 | | 5240030020 R.,CARBON R20 5.6K J |
| S101 | | 5300041600 PUSH SW 2-2 N SUN |
| S104-S106 | | 5300041600 PUSH SW 2-2 N SUN |
| U101 | U102 | 5220411100 IC,NJM4560DX |

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------|
| | *5200179800 | INPUT BUSS PCB ASSY |
| | *5210179800 | INP BUSS PCB |
| P801-P808 | 5336167200 | CON.,PLUG IL-12P |

MON PCB ASS'Y (A)



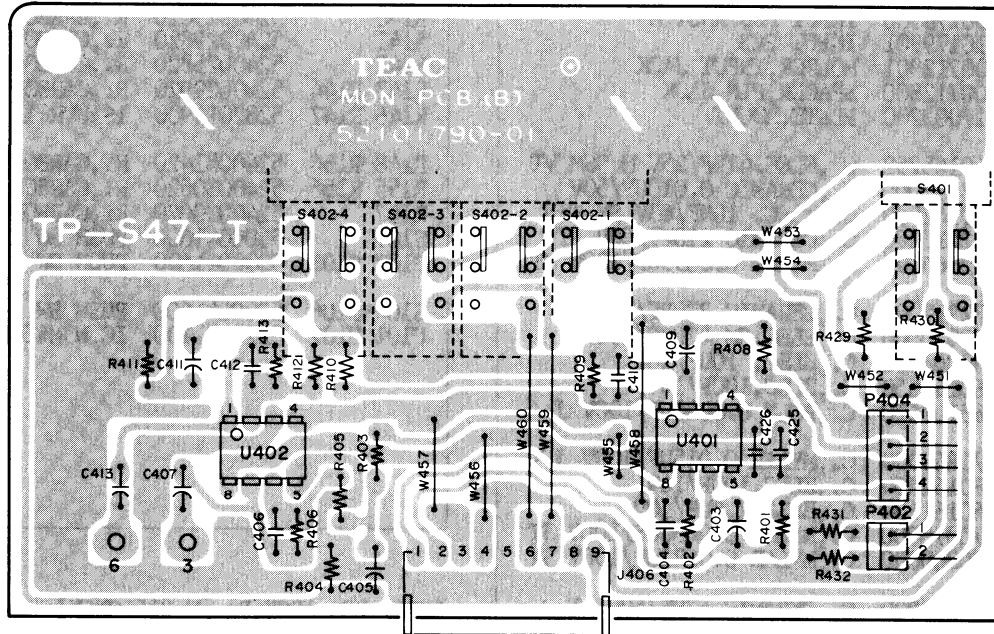
MON BUSS PCB ASS'Y



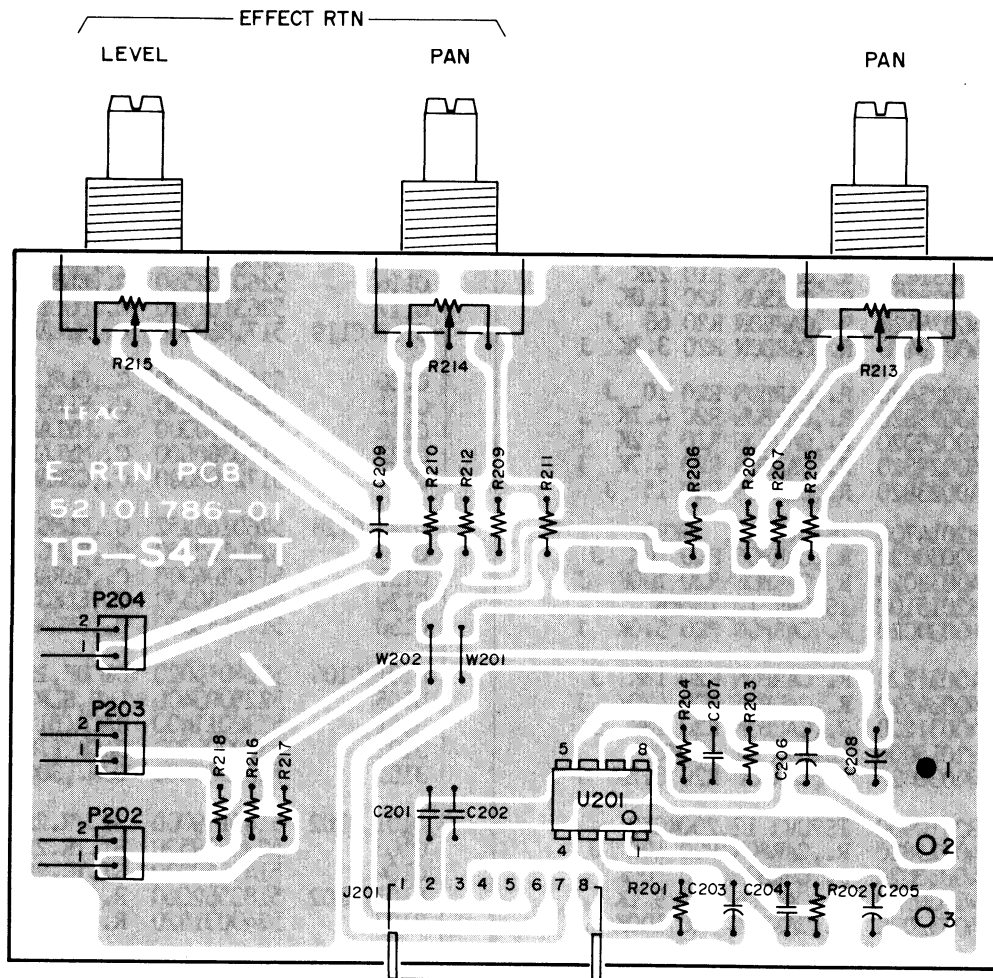
MON PCB ASS'Y (B)

MONO EFFECT FLB STEREO

3-4/MON



E. RTN PCB ASS'Y



MON PCB ASSY(A)

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200178901 | MON PCB ASSY(A) |
| | *5210178901 | MON PCB(A) |
| C401 C402 | 5173433000 | C.,SERAMIC 0.010UF/50V Z |
| C408 C414 | 5260212350 | C.,ELEC. 10UF/16V M SRA |
| C415 | 5260214750 | C.,ELEC. 100UF/10V M SRA |
| C416 | 5172208000 | C.,CERAMIC 47PF/50V T |
| C417 C420 | 5260214450 | C.,ELEC. 47UF/25V M SRA |
| C418 | 5260213050 | C.,ELEC. 22UF/16V M SRA |
| C419 | 5172204000 | C.,CERAMIC 22PF/50V T |
| C421 C423 | 5172213000 | C.,CERAMIC 120PF/50V T |
| C422 C424 | 5260214450 | C.,ELEC. 47UF/25V M SRA |
| D401 | 5224015020 | DIODE,1SS133T-77 |
| D402 | 5225005400 | LED,SLP135B (RED) |
| J401 | 5122379000 | CONNECTOR,SOCKET 3024-08A |
| P403 | 5336128400 | CON.,PLUG 8263-0411 WHT |
| P405 | 5336128300 | CON.,PLUG 8263-0311 WHT |
| Q401 | 5145150000 | SI.TR.2SA-1015GR 0.4 80 |
| Q402 | 5230779520 | SI.TR.2SC1815GR 0.4 80 |
| R407 R414 | 5240033020 | R.,CARBON R20 100K J |
| R415 R420 | 5240033020 | R.,CARBON R20 100K J |
| R416 | 5240031420 | R.,CARBON R20 22K J |
| R417 | 5282014800 | 1S1UVR 12, 10KA |
| R418 | 5240030620 | R.,CARBON R20 10K J |
| R419 | 5240032620 | R.,CARBON R20 68K J |
| R421 | 5282411000 | 1S2UVR 12, 20KCK2 |
| R422 R423 | 5240031420 | R.,CARBON R20 22K J |
| R424 | 5240030020 | R.,CARBON R20 5.6K J |
| R425-R428 | 5240031420 | R.,CARBON R20 22K J |
| R433 R437 | 5240030620 | R.,CARBON R20 10K J |
| R434 R438 | 5240028620 | R.,CARBON R20 1.5K J |
| R435 R439 | 5240033020 | R.,CARBON R20 100K J |
| R436 R440 | 5240025820 | R.,CARBON R20 100 J |
| S401 | 5300041800 | PUSH SW 2-2 N SUF |
| S402 | 5300041700 | PUSH SW 4-GANG 2-2 N SUF |
| U403 U404 | 5220411100 | IC,NJM4560DX |
| U405 | 5220036200 | IC,LC4966, |

MON BUSS PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|-------------------------|
| | *5200179900 | MON BUSS PCB ASSY |
| | *5210179900 | MON BUSS PCB |
| P851 P852 | 5336166800 | CON.,PLUG IL-08P |
| P853 P854 | 5336167000 | CON.,PLUG IL-10P |
| P855 | 5336166800 | CON.,PLUG IL-08P |
| P856 | 5336166900 | CON.,PLUG IL-09P |
| P857 | 5336139400 | CON.,PLUG 8263-0411 RED |

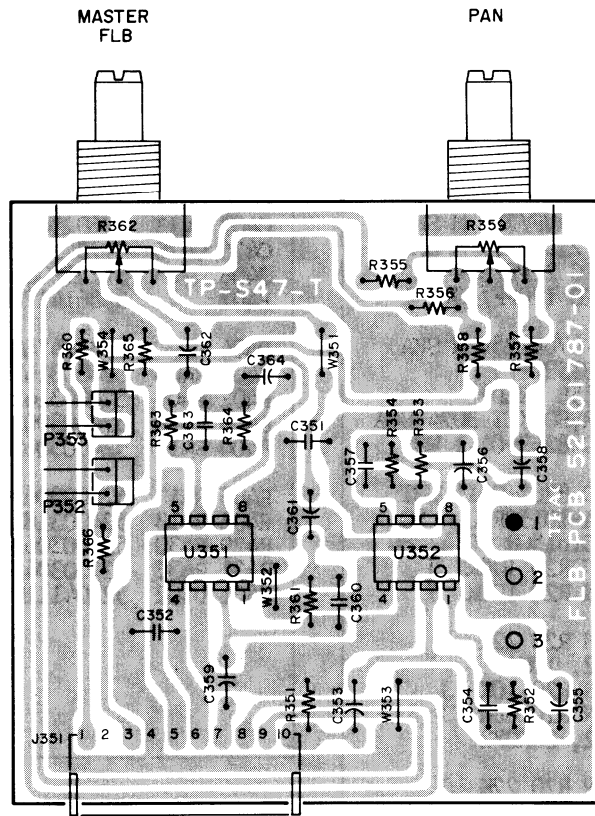
MON PCB ASSY(B)

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200179001 | MON PCB ASSY(B) |
| | *5210179001 | MON PCB(B) |
| C403 C409 | 5260214750 | C.,ELEC. 100UF/10V M SRA |
| C404 C410 | 5172208000 | C.,CERAMIC 47PF/50V T |
| C405 C411 | 5260214450 | C.,ELEC. 47UF/25V M SRA |
| C406 C412 | 5172206000 | C.,CERAMIC 33PF/50V K VFT |
| C407 C413 | 5260214450 | C.,ELEC. 47UF/25V M SRA |
| C425 C426 | 5173433000 | C.,CERAMIC 0.010UF/50V Z |
| J406 | 5122380000 | CONN., SOCKET 3024-09AH |
| P402 | 5336141200 | CON.,PLUG 8263-0211 BLK |
| P404 | 5336147400 | CON.,PLUG 8263-0411 YEL |
| R401 R408 | 5240031420 | R.,CARBON R20 22K J |
| R402 R409 | 5240031420 | R.,CARBON R20 22K J |
| R403 R410 | 5240030620 | R.,CARBON R20 10K J |
| R404 R411 | 5240030620 | R.,CARBON R20 10K J |
| R405 R412 | 5240030620 | R.,CARBON R20 10K J |
| R406 R413 | 5240031820 | R.,CARBON R20 33K J |
| R429 R430 | 5240030620 | R.,CARBON R20 10K J |
| R431 R432 | 5240030420 | R.,CARBON R20 8.2K J |
| U401 U402 | 5220411100 | IC,NJM4560DX |

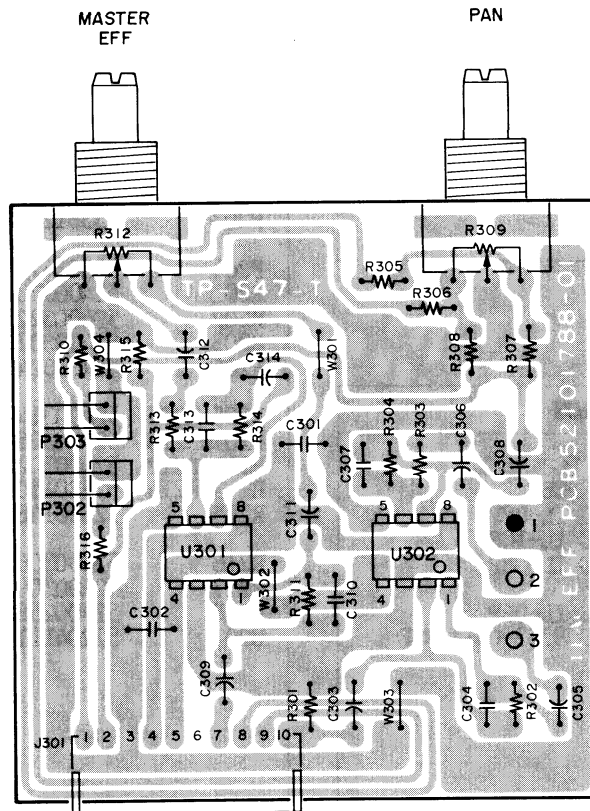
E.RIN PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200178601 | E.RIN PCB ASSY |
| | *5210178601 | E.RIN PCB |
| C201 C202 | 5173433000 | C.,CERAMIC 0.010UF 50V T |
| C203 | 5260165952 | C.,ELEC.100UF/10V M USM |
| C204 C207 | 5172204000 | C.,CERAMIC 22PF/50V T |
| C205 C208 | 5260165252 | C.,ELEC. 47UF/25V M USM |
| C206 C209 | 5260163352 | C.,ELEC. 22UF/16V M USM |
| J201 | 5122379000 | CONNECTOR,SOCKET 3024-08A |
| P202 | 5336141200 | CON.,PLUG 8263-0211 BLK |
| P203 | 5336128200 | CON.,PLUG 8263-0211 WHT |
| P204 | 5336147200 | CON.,PLUG 8263-0211 YEL |
| R201 | 5240033020 | R.,CARBON R20 100K J |
| R202 | 5240032220 | R.,CARBON R20 47K J |
| R203 | 5240030220 | R.,CARBON R20 6.8K J |
| R204 | 5240032420 | R.,CARBON R20 56K J |
| R205 R206 | 5240031420 | R.,CARBON R20 22K J |
| R207-R210 | 5240030620 | R.,CARBON R20 10K J |
| R211 R212 | 5240030220 | R.,CARBON R20 6.8K J |
| R213 R214 | 5282015000 | 1S1UVR 12, 10KB |
| R215 | 5282014800 | 1S1UVR 12, 10KA |
| R216 | 5240030620 | R.,CARBON R20 10K J |
| R217 | 5240030420 | R.,CARBON R20 8.2K J |
| R218 | 5240025820 | R.,CARBON R20 100 J |
| U201 | 5220411100 | IC,NJM4560DX |

FLB PCB ASS'Y



EFF PCB ASS'Y



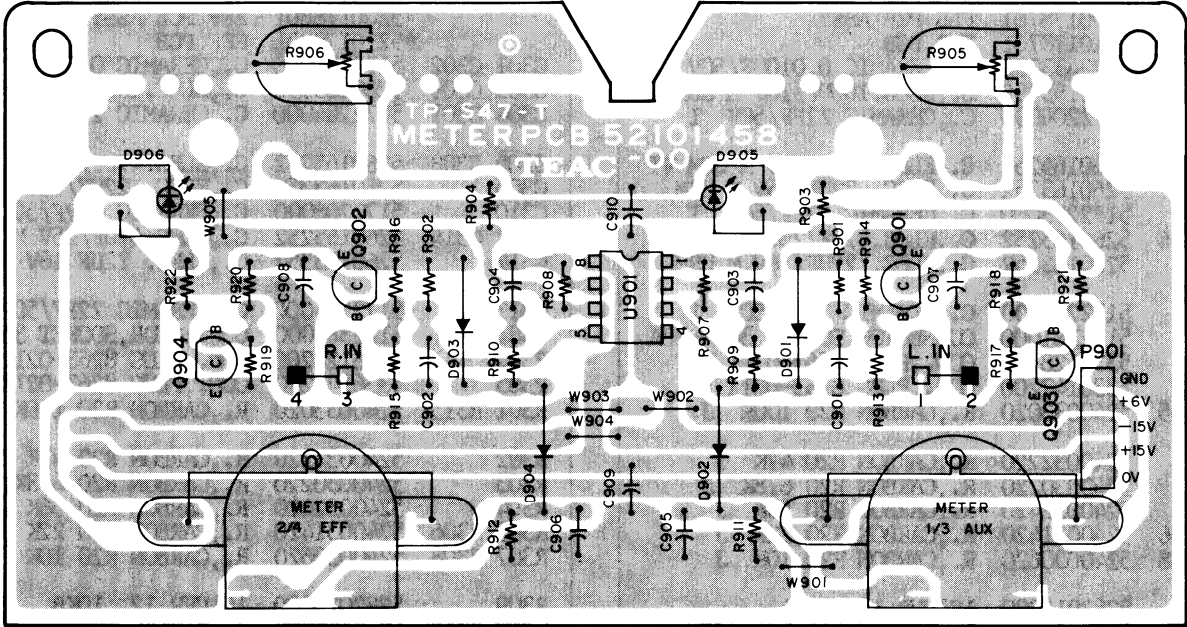
FLB PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|-----------------------------|
| | *5200178701 | FLB PCB ASSY |
| | *5210178701 | FLB PCB |
| C351 C352 | 5173433000 | C., CERAMIC 0.010UF/50V Z |
| C353 C359 | 5260165952 | C., ELEC. 100UF/10V M USM |
| C354 C357 | 5172204000 | C., CERAMIC 22PF/50V T |
| C355 C358 | 5260165252 | C., ELEC. 47UF/25V M USM VT |
| C356 | 5260163352 | C., ELEC. 22UF/16V M USM |
| C360 | 5172208000 | C., CERAMIC 47PF/50V T |
| C361 C364 | 5260165252 | C., ELEC. 47UF/25V M USM VT |
| C362 | 5260163352 | C., ELEC. 22UF/16V M USM |
| C363 | 5172204000 | C., CERAMIC 22PF/50V T |
| J351 | 5122381000 | CONNECTOR, SOCKET 3024-10A |
| P352 | 5336128200 | CON., PLUG 8263-0211 WHT |
| P353 | 5336147200 | CON., PLUG 8263-0211 YEL |
| R351 R365 | 5240033020 | R., CARBON R20 100K J |
| R352 | 5240032220 | R., CARBON R20 47K J |
| R353 | 5240030220 | R., CARBON R20 6.8K J |
| R354 | 5240032420 | R., CARBON R20 56K J |
| R355 R356 | 5240031420 | R., CARBON R20 22K J |
| R357 R358 | 5240030620 | R., CARBON R20 10K J |
| R359 | 5282015000 | 1S1UVR 12, 10KB |
| R360 R366 | 5240025820 | R., CARBON R20 100 J |
| R361 | 5240031420 | R., CARBON R20 22K J |
| R362 | 5282014800 | 1S1UVR 12, 10KA |
| R363 | 5240030620 | R., CARBON R20 10K J |
| R364 | 5240032620 | R., CARBON R20 68K J |
| U351 U352 | 5220411100 | IC, NJM4560DX |

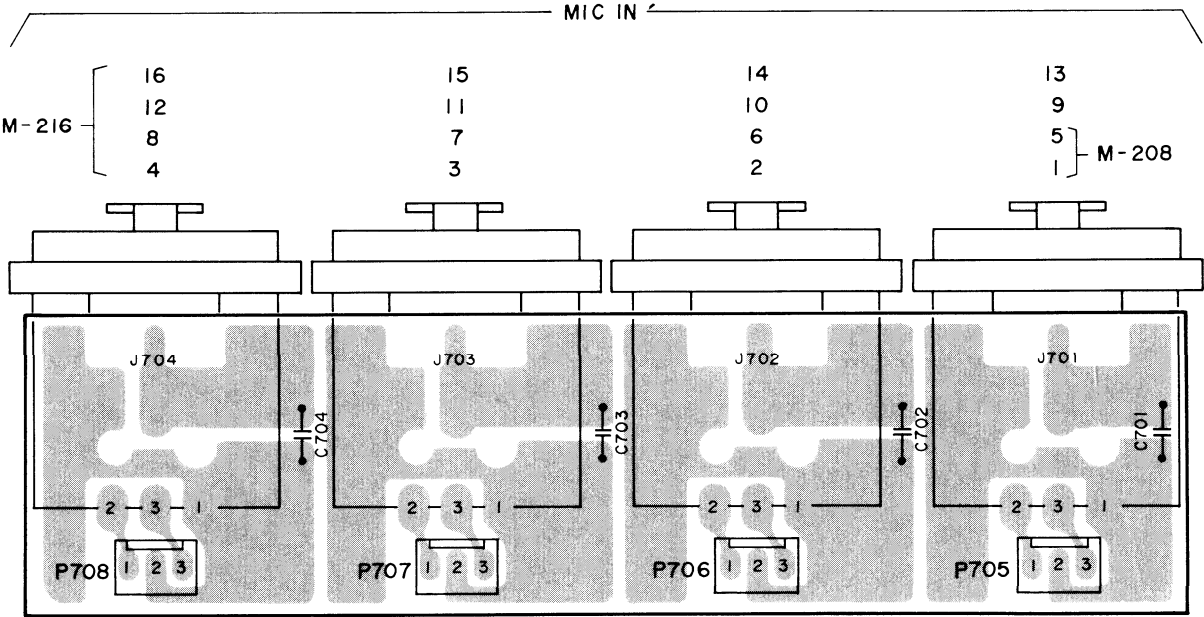
EFF PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|-----------------------------|
| | *5200178801 | EFF PCB ASSY |
| | *5210178801 | EFF PCB |
| C301 C302 | 5173433000 | C., CERAMIC 0.010UF 50V Z |
| C303 C309 | 5260165952 | C., ELEC. 100UF/10V M USM |
| C304 C307 | 5172204000 | C., CERAMIC 22PF/50V T |
| C305 C308 | 5260165252 | C., ELEC. 47UF/25V M USM VT |
| C306 | 5260163352 | C., ELEC. 22UF/16V M USM |
| C310 | 5172208000 | C., CERAMIC 47PF/50V T |
| C311 C314 | 5260165252 | C., ELEC. 47UF/25V M USM VT |
| C312 | 5260163352 | C., ELEC. 22UF 16V M USM |
| C313 | 5172204000 | C., CERAMIC 22PF/50V T |
| J301 | 5122381000 | CONNECTOR, SOCKET 3024-10A |
| P302 | 5336128200 | CON., PLUG 8263-0211 WHT |
| P303 | 5336147200 | CON., PLUG 8263-0211 YEL |
| R301 R315 | 5240033020 | R., CARBON R20 100K J |
| R302 | 5240032220 | R., CARBON R20 47K J |
| R303 | 5240030220 | R., CARBON R20 6.8K J |
| R304 | 5240032420 | R., CARBON R20 56K J |
| R305 R306 | 5240031420 | R., CARBON R20 22K J |
| R307 R308 | 5240030620 | R., CARBON R20 10K J |
| R309 | 5282015000 | 1S1UVR 12, 10KB |
| R310 R316 | 5240025820 | R., CARBON R20 100 J |
| R311 | 5240031420 | R., CARBON R20 22K J |
| R312 | 5282014800 | 1S1UVR 12, 10KA |
| R313 | 5240030620 | R., CARBON R20 10K J |
| R314 | 5240032620 | R., CARBON R20 68K J |
| U301 U302 | 5220411100 | IC, NJM4560DX |

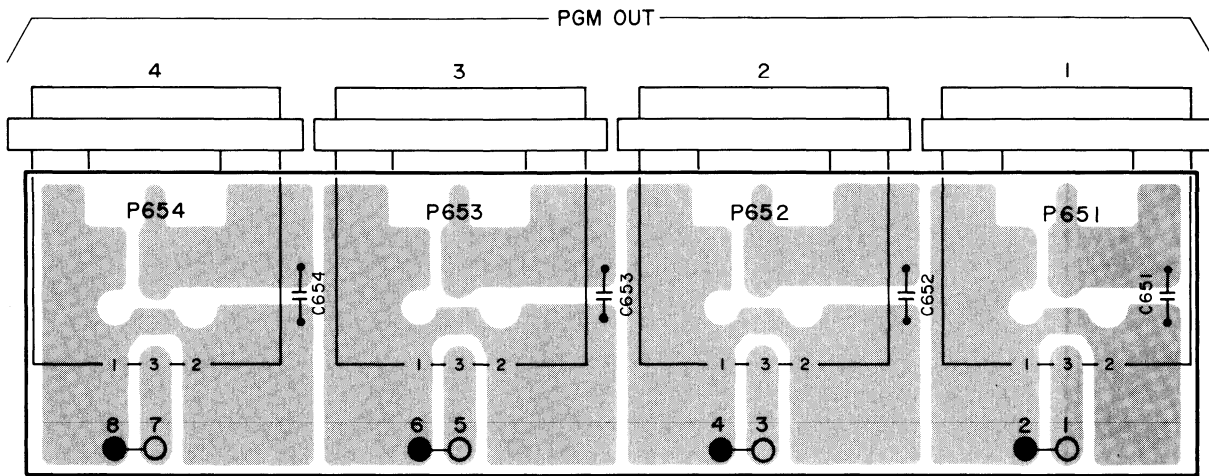
METER PCB ASS'Y



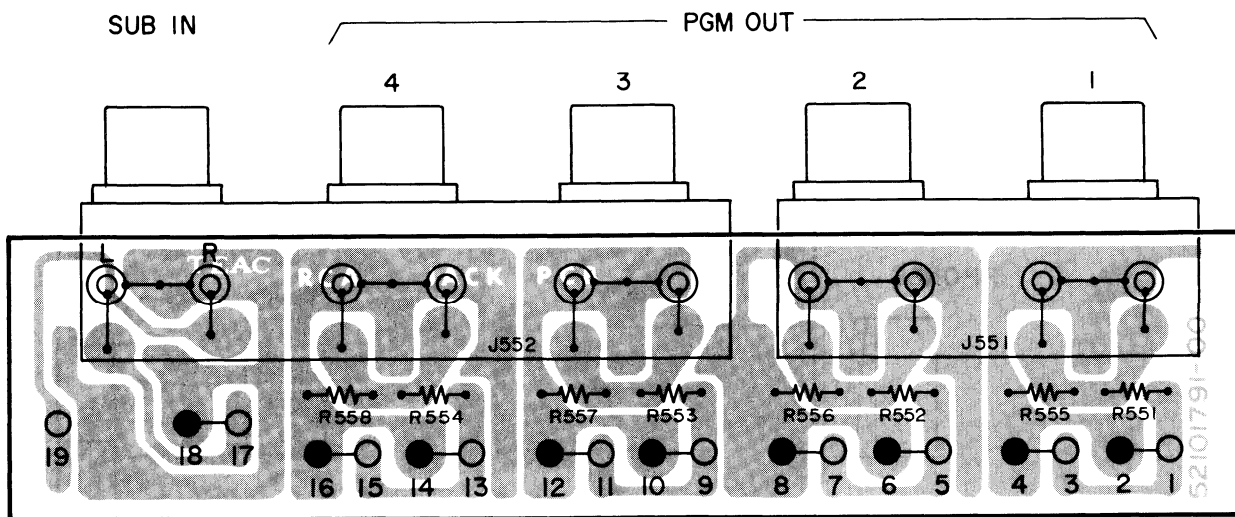
MIC JACK PCB ASS'Y



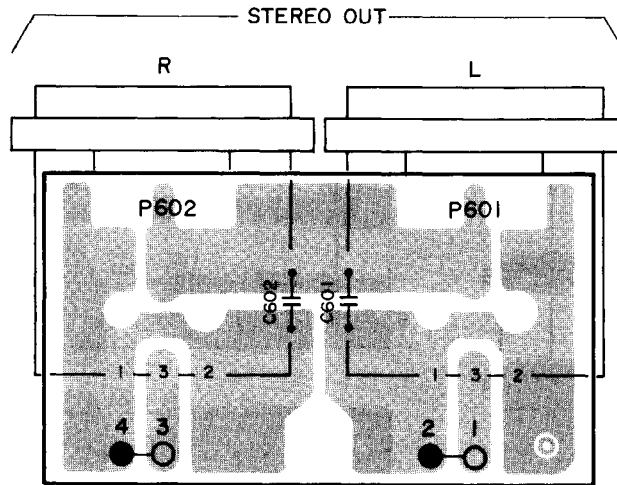
PGM JACK PCB ASS'Y



RCA JACK PCB ASS'Y



STE JACK PCB ASS'Y



METER PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200145801 | METER PCB ASSY |
| | *5210145800 | METER PCB |
| | 5800606900 | SPACER, LED |
| C901 R902 | 5260211450 | C., ELEC. 2.2UF/50V M SRA |
| C903 R904 | 5260213150 | C., ELEC. 22UF/25V M SRA |
| C905 R906 | 5260212950 | C., ELEC. 22UF/10V M SRA |
| C907 R908 | 5260211050 | C., ELEC 0.47UF/50V M SRA |
| C909 R910 | 5260212450 | C., ELEC. 10UF/25V M SRA |
| D901-D904 | 5224015400 | DIODE, 1K60 |
| D905 D906 | 5225005400 | LED, SLP135B (RED) |
| P901 | 5336139500 | CON., PLUG 8263-0511 RED |
| Q901 Q902 | 5230779520 | SI. TR. 2SC1815GR 0.4 80 |
| Q903 Q904 | 5145150000 | SI. TR. 2SA1015GR 0.4 80 |
| R901 R902 | 5240033020 | R., CARBON R20 100K J |
| R903 R904 | 5240028420 | R., CARBON R20 1.2K J |
| R905 R906 | 5053446000 | R., TRIMMER 1KB |
| R907 R908 | 5240030620 | R., CARBON R20 10K J |
| R909 R910 | 5240029020 | R., CARBON R20 2.2K J |
| R911 R912 | 5240028420 | R., CARBON R20 1.2K J |
| R913 R914 | 5240032220 | R., CARBON R20 47K J |
| R915 R916 | 5240032220 | R., CARBON R20 47K J |
| R917 R918 | 5240030620 | R., CARBON R20 10K J |
| R919 R920 | 5240030620 | R., CARBON R20 10K J |
| R921 R922 | 5240027220 | R., CARBON R20 390 J |
| U901 | 5220406700 | IC, RC4558P, TI |

MIC JACK PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200179700 | MIC JACK PCB ASSY |
| | *5210179701 | MIC JACK PCB |
| C701-C704 | 5173433000 | C., CERAMIC 0.01UF/50V |
| J701-J704 | 5334042200 | SOCKET, CANNON 3P XLB3-31 |
| P705-P708 | 5336126300 | CON., PLUG 8263-0312 WHI |

PGM JACK PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200179500 | PGM JACK PCB ASSY |
| | *5210179501 | PGM JACK PCB |
| C651-C654 | 5173433000 | C., CERAMIC 0.01UF/50V |
| P651-P654 | 5334042100 | CONNECTOR, CANNON XLB3-32 |

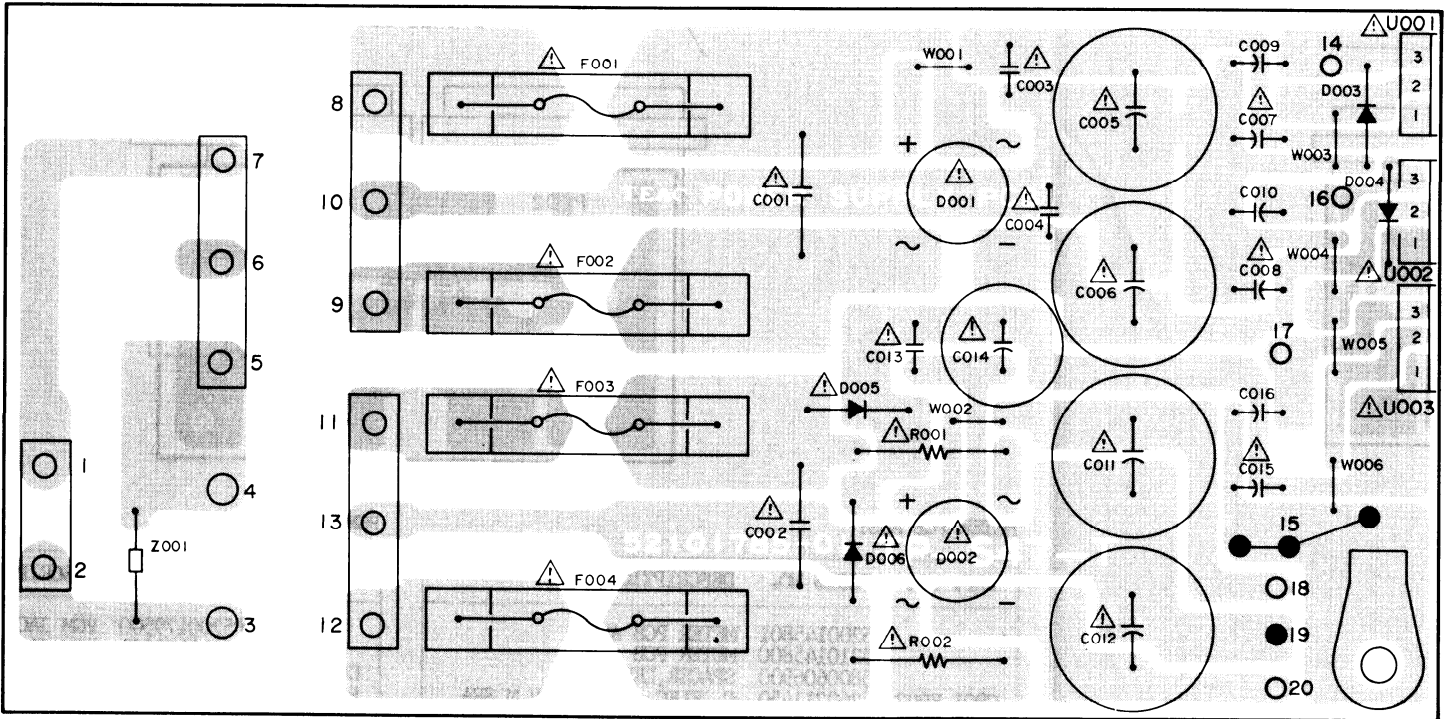
RCA JACK PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|-----------------------|
| | *5200179100 | RCA JACK PCB ASSY |
| | *5210179100 | RCA JACK PCB |
| J551 | 5330509500 | JACK, 4P YKC21-0062 |
| J552 | 5330510100 | JACK, PIN 6P |
| R551-R554 | 5240028420 | R., CARBON R20 1.2K J |
| R555-R558 | 5240028020 | R., CARBON R20 820 J |

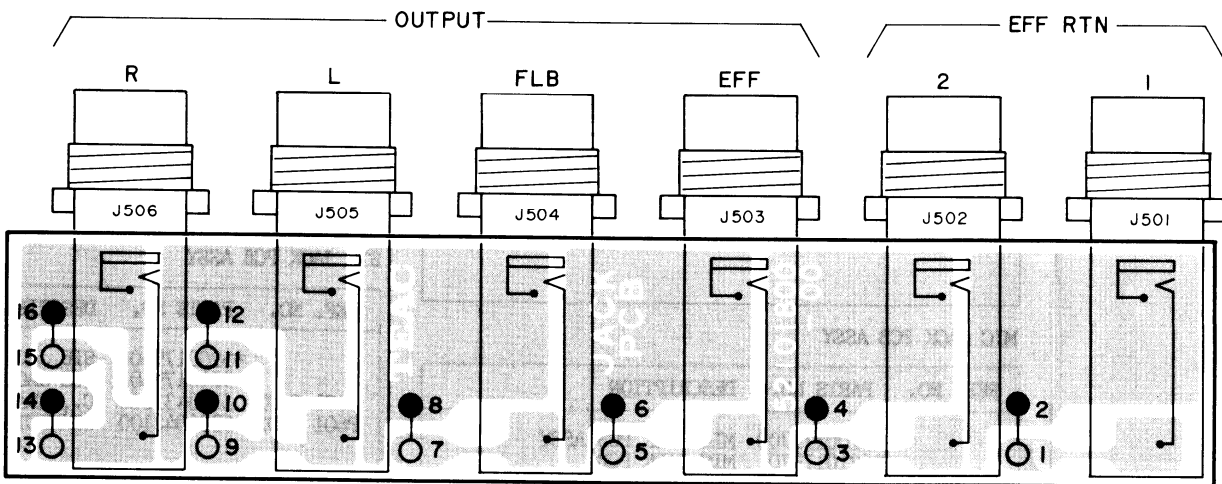
STE JACK PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200179600 | STE JACK PCB ASSY |
| | *5210179601 | STE JACK PCB |
| C601 C602 | 5173433000 | C., CERAMIC 0.01UF/50V |
| P601 P602 | 5334042100 | CONNECTOR, CANNON XLB3-32 |

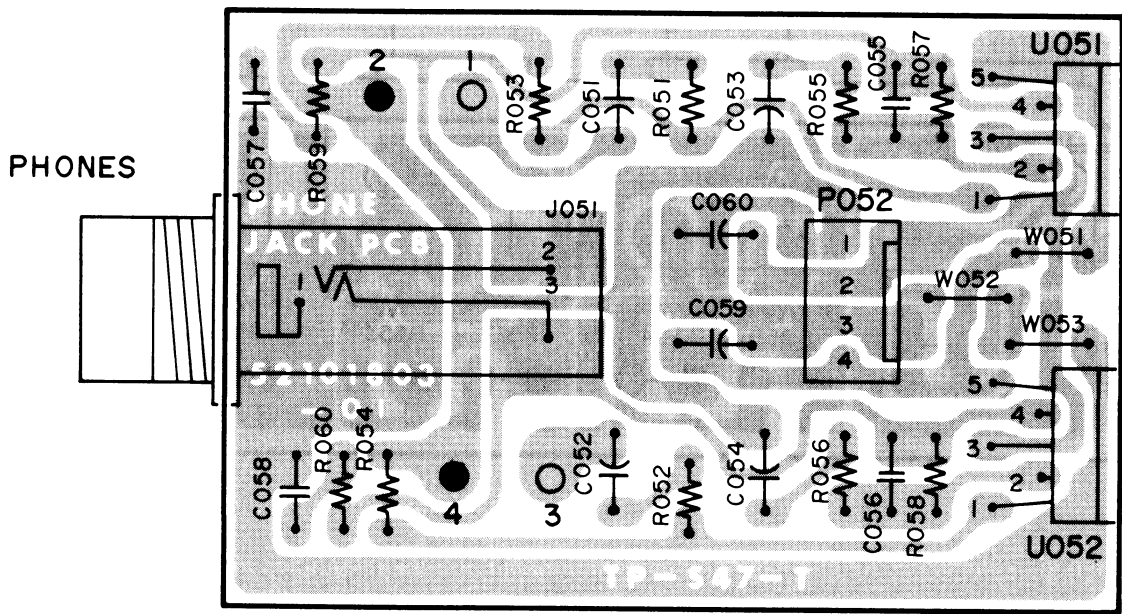
POWER SUPPLY PCB ASS'Y



JACK PCB ASS'Y



PHONE JACK PCB ASS'Y



POWER SUPPLY PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|--------------------------------------|
| | *5200178500 | P.S PCB ASSY [J] |
| | *5200178510 | P.S PCB ASSY [US] |
| | *5200178520 | P.S PCB ASSY [C] |
| | *5200178530 | P.S PCB ASSY [GE] |
| | *5200178540 | P.S PCB ASSY [E,UK,A] |
| | *5210178500 | POWER SUPPLY PCB |
| | *5327007200 | TERMINAL,LAPPING;2P |
| | *5555590000 | PLATE,PCB EARTH;A |
| | *5041237000 | HOLDER,FUSE [J,US,C,GE] |
| | *5332014200 | HOLDER,FUSE [E,UK,A] |
| | *5033291000 | PLATE,INSULATOR |
| | *5033295000 | TUBE,INSULATOR |
| | *5730007500 | COVER,CONDENSER [E,UK,A] |
| C001 C002 | △5263164500 | C.,POLYST 0.047UF 250V |
| C003 C004 | △5173433000 | C.,CERAMIC 0.010UF 50V Z |
| C005 C006 | △5173083000 | C.,ELEC. 1000UF/35V SNAP |
| C007 C008 | △5260161150 | C.,ELEC.2.2UF 50V |
| C009 C010 | 5260165252 | C.,ELEC.47UF/25V M USM VT |
| C011 C012 | △5173088000 | C.,ELEC. 2200UF 16V (SM) |
| C013 | △5173433000 | C.,CERAMIC 0.010UF 50V Z |
| C014 | △5173081000 | C.,ELEC. 1000UF/16V SNAP |
| C015 | △5260161150 | C.,ELEC.2.2UF 50V |
| C016 | 5260165052 | C.,ELEC.47UF 10V M USM VT |
| D001 D002 | △5228005000 | SILICON STACK W02 |
| D003-D006 | △5143089000 | DIODE,W03C |
| F001 F002 | △5307019900 | FUSE,0.5A-250V (T)UL [J,US,C,GE] |
| F001 F002 | △5041138000 | FUSE,0.5A-250V (T) [E,UK,A] |
| F003 F004 | △5307020400 | FUSE,1A-250V (T)UL [J,US,C,GE] |
| F003 F004 | △5041140000 | FUSE,1A-250V (T) [E,UK,A] |
| P002-P004 | 5327007300 | TERMINAL,LAPPING;3P |
| R001 R002 | △5185648000 | R.,INCOMB.F50 2.2 OHM FF |
| U001 | △5220413100 | IC,NJM78M15A, |
| U002 | △5220420500 | IC,NJM79M15A, |
| U003 | △5220411000 | IC,NJM78M06A, |
| Z001 | △5052907000 | CR.,0.01+300 400V AC [J,GE] |
| Z001 | △5052910000 | CR.,0.033+120 125V [US] |
| Z001 | △5267703800 | SPARK KILLER,4700PF/400V [E,UK,A] |
| Z001 | △5292002600 | CR., 0.033UF+120 125V [C] |

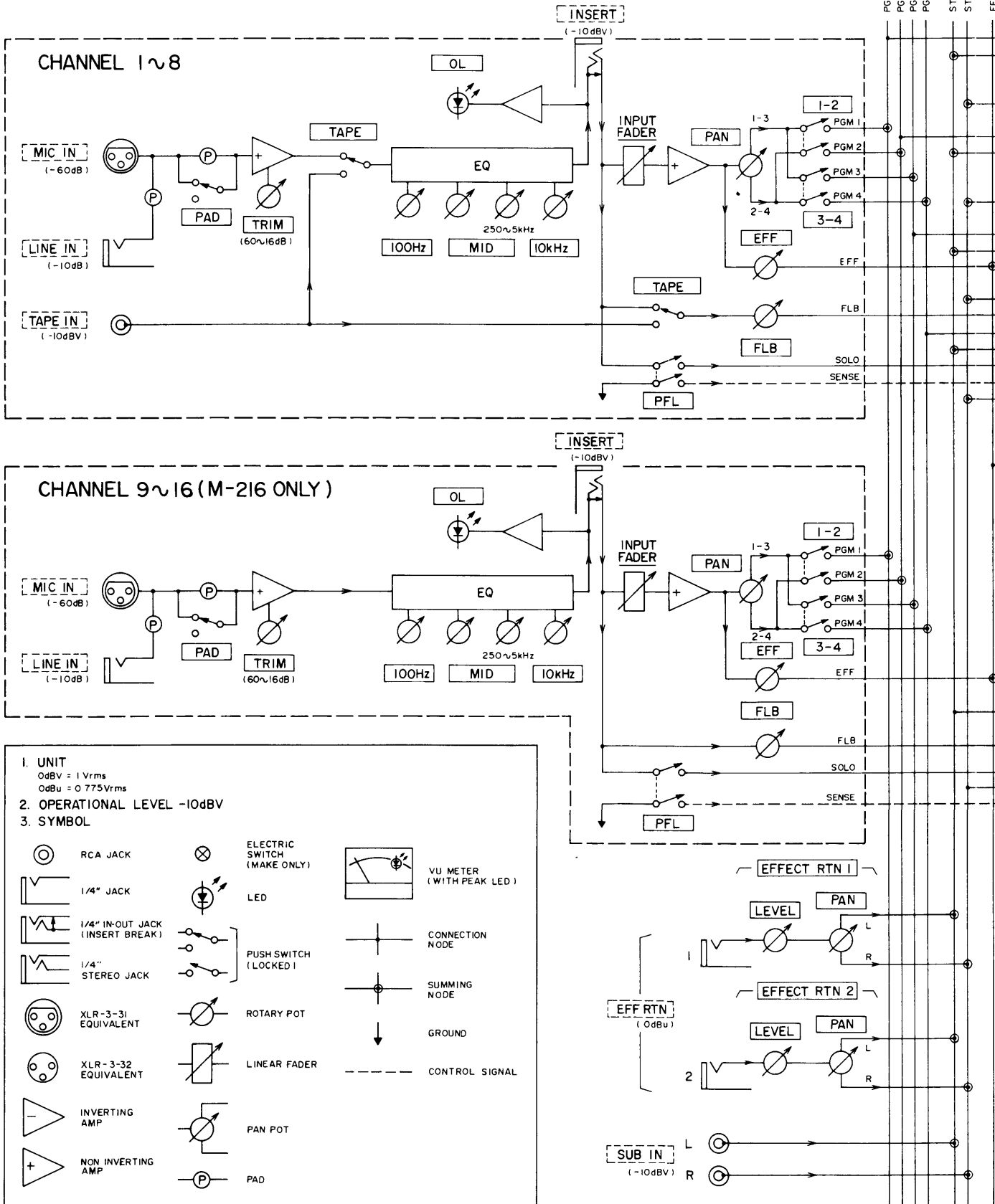
JACK PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|----------------------|
| | *5200180000 | JACK PCB ASSY |
| | *5210180000 | JACK PCB |
| | 5800712500 | HOLDER,JACK |
| | 5317003200 | PLATE,MOUNT |
| J501-J506 | 5330011500 | JACK,B11-5013 SINGLE |

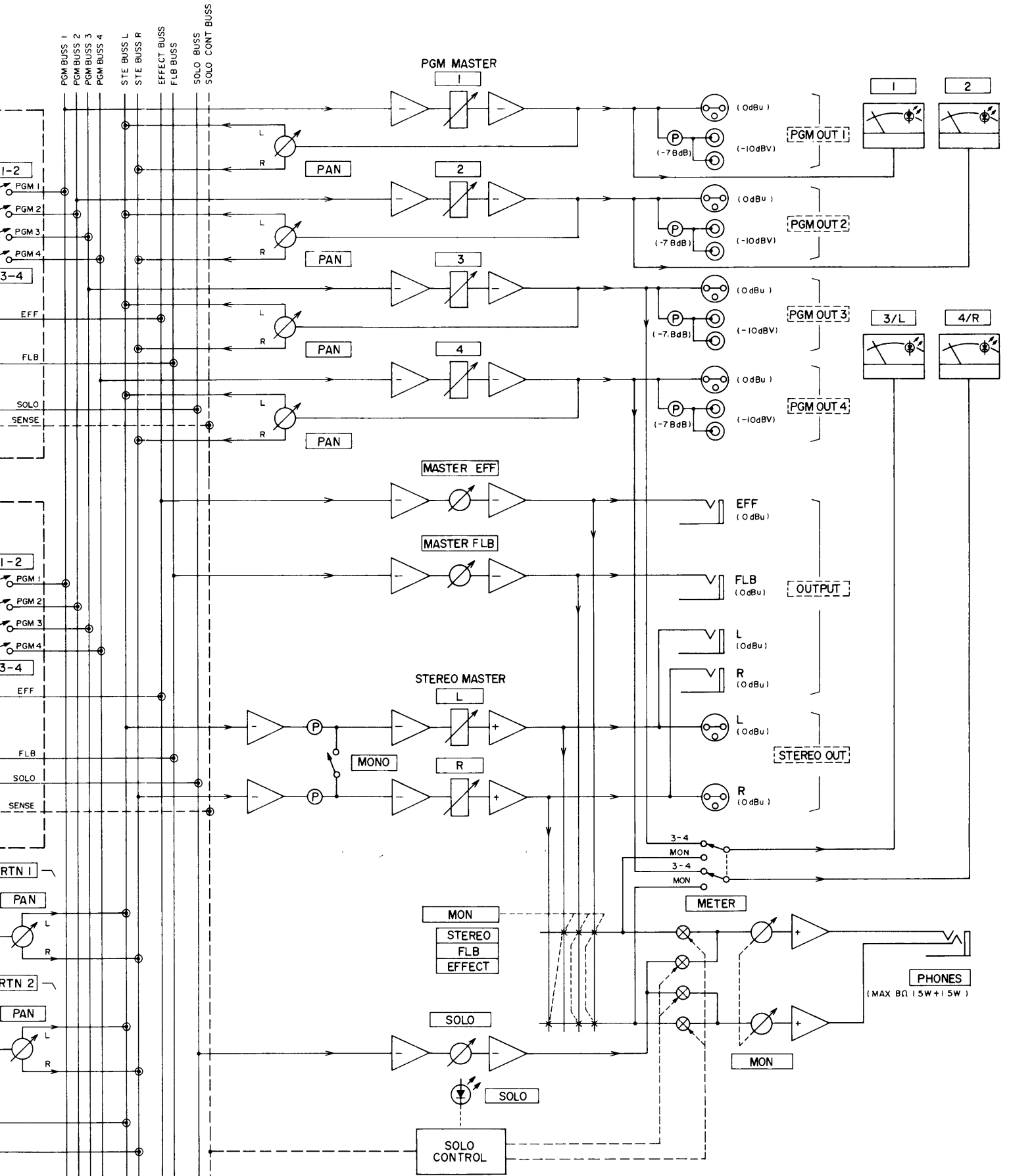
PHONE JACK PCB ASSY

| REF. NO. | PARTS NO. | DESCRIPTION |
|-----------|-------------|---------------------------|
| | *5200180301 | PHONE JACK PCB ASSY |
| | *5210180301 | PHONE JACK PCB |
| | *5317003300 | NUT (1/4" PHONE JACK) |
| C051 C052 | 5260162550 | C.,ELEC.10UF 16V |
| C053 C054 | 5260165052 | C.,ELEC.47UF 10V M USM VT |
| C055 C056 | 5172210000 | C.,CERAMIC 68PF 50V K VFT |
| C057 C058 | 5263168323 | C.,META. 0.22UF 50V J VT |
| C059 C060 | 5260165252 | C.,ELEC.47UF/25V M USM VT |
| J051 | 5330009000 | JACK,PIN 3P PHONE |
| P052 | 5336135400 | CON.,PLUG 8263-0412 RED |
| R051-R054 | 5240031420 | R.,CARBON R10 22K |
| R055 R056 | 5240028220 | R.,CARBON R20 1.0K J FT |
| R057 R058 | 5240030620 | R.,CARBON R10 10K |
| R059 R060 | 5240021020 | R.,CARBON R20 1.0 J FT |
| U051 U052 | 5220426700 | IC UPCL238V |

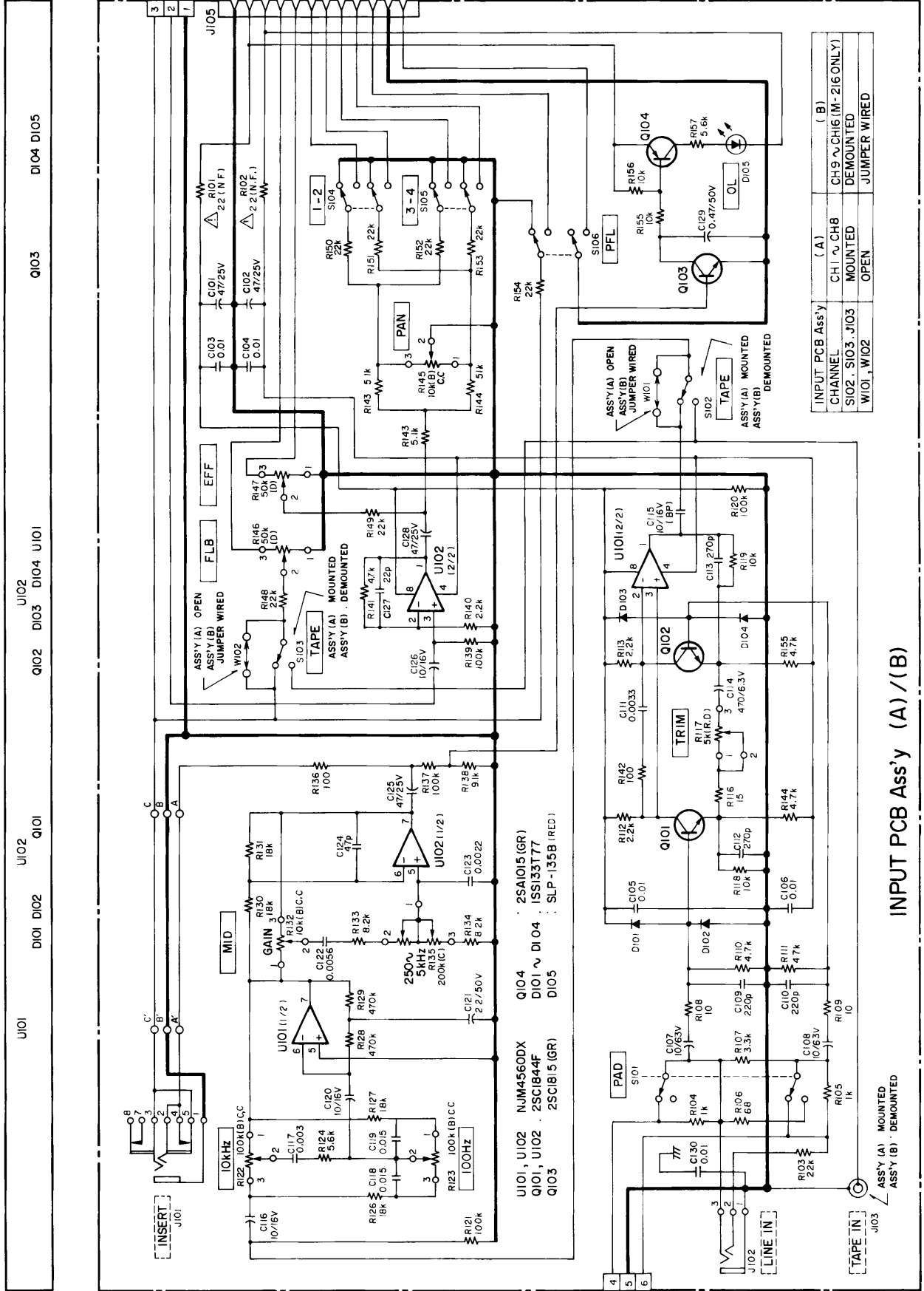
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 [GE]:GENERAL EXPORT [E]:EUROPE
 [UK]:U.K. [A]:AUSTRALIA



BLOCK DIAGRAM

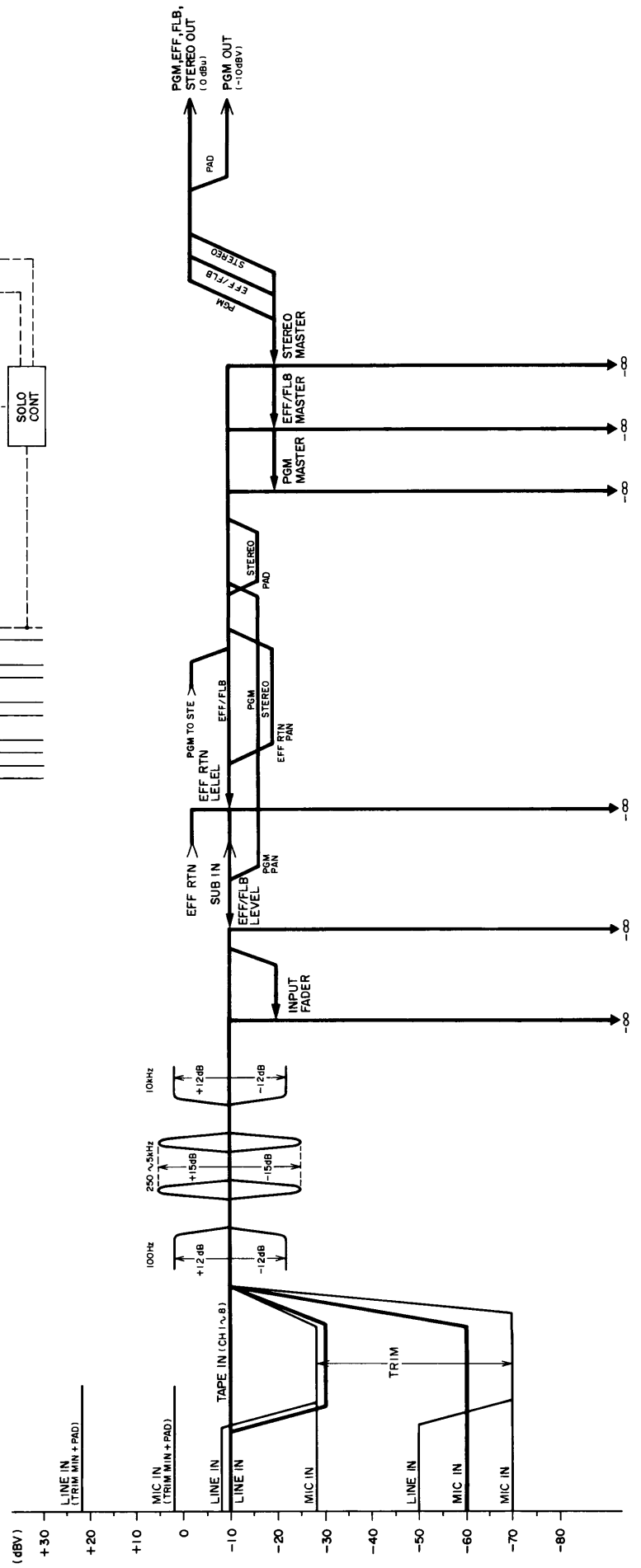
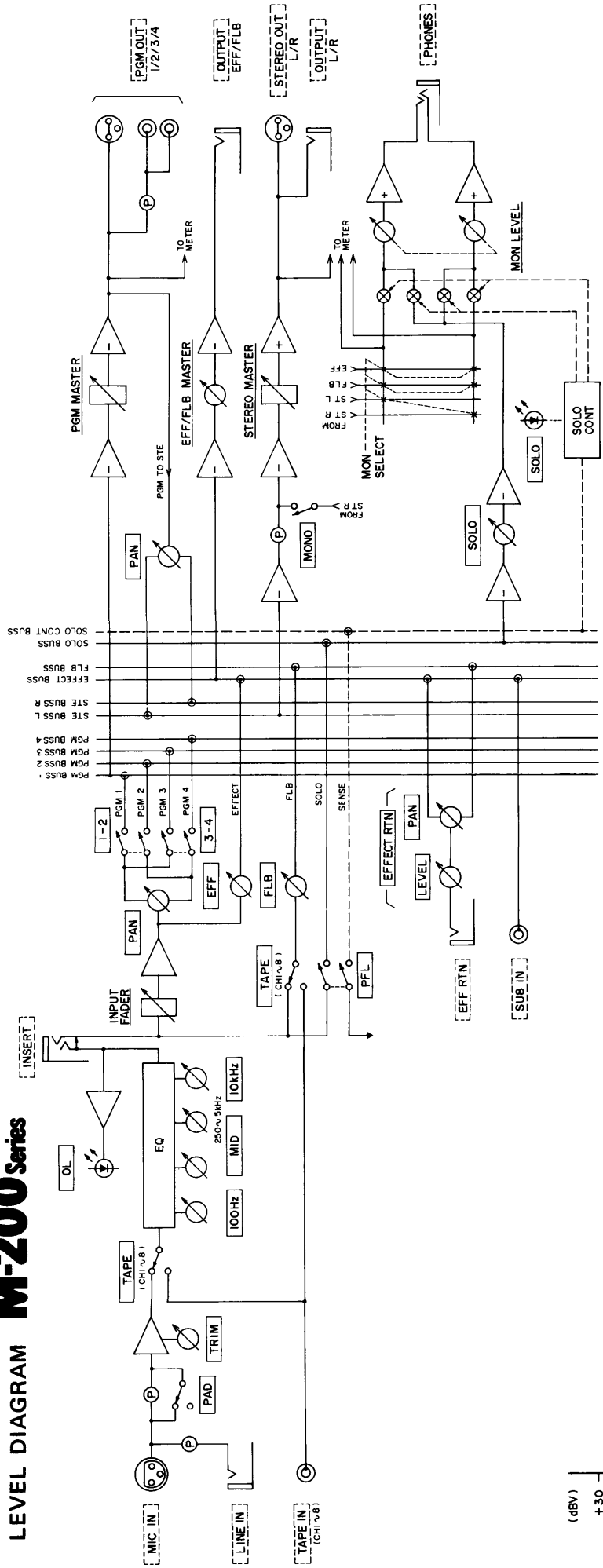


INPUT PCB ASS'Y M-200 Series



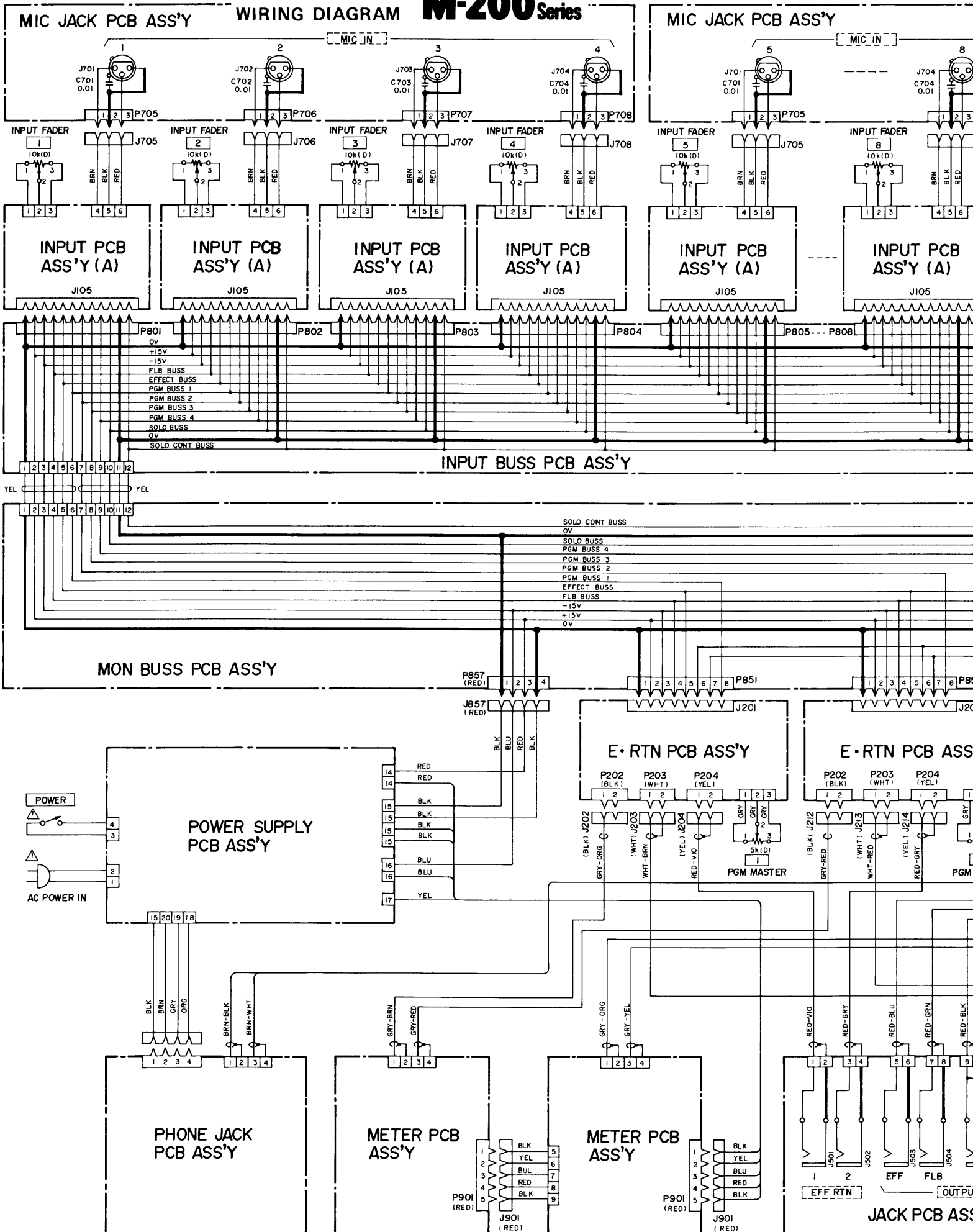
INPUT PCB Ass'y (A)/(B)

LEVEL DIAGRAM M-200 Series



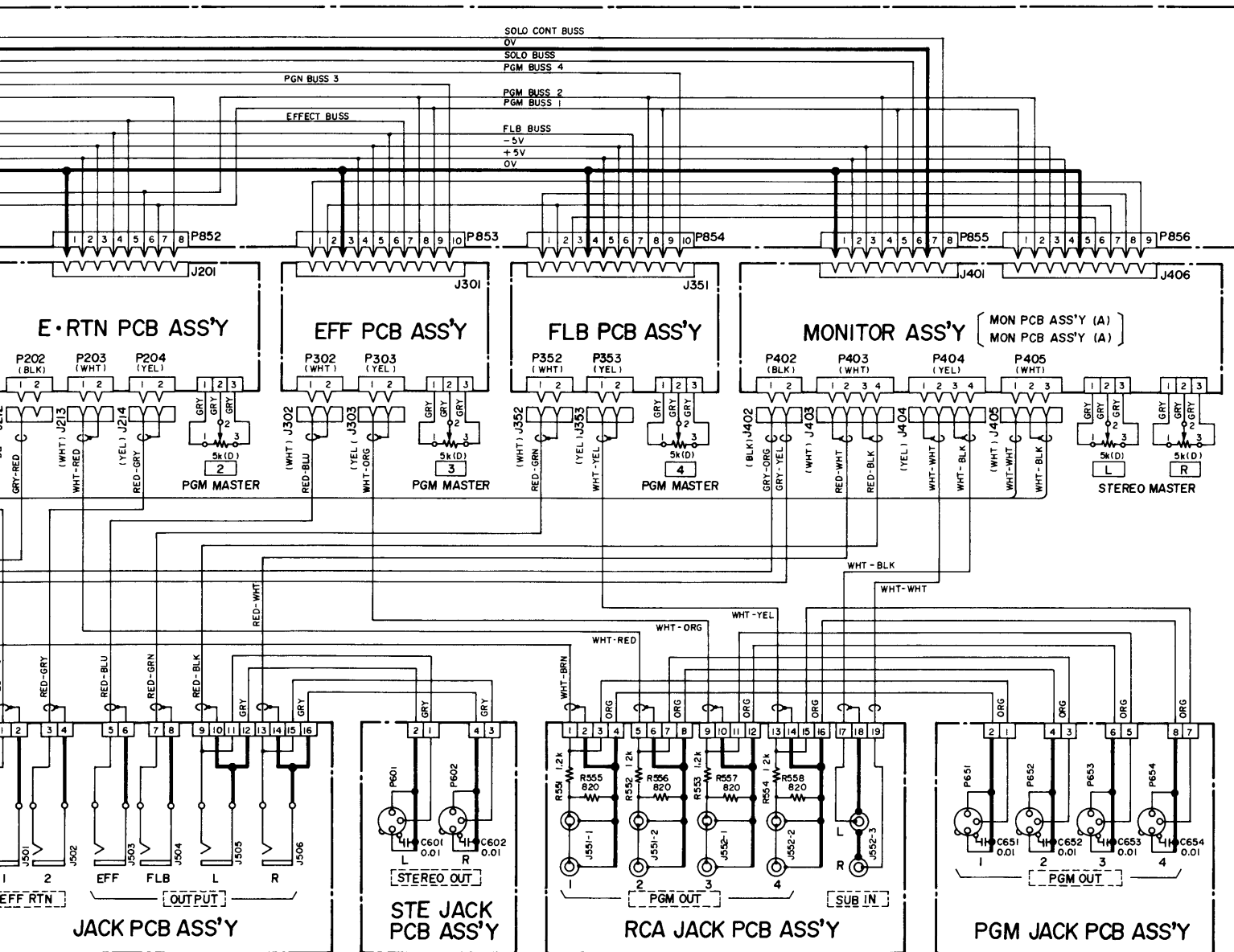
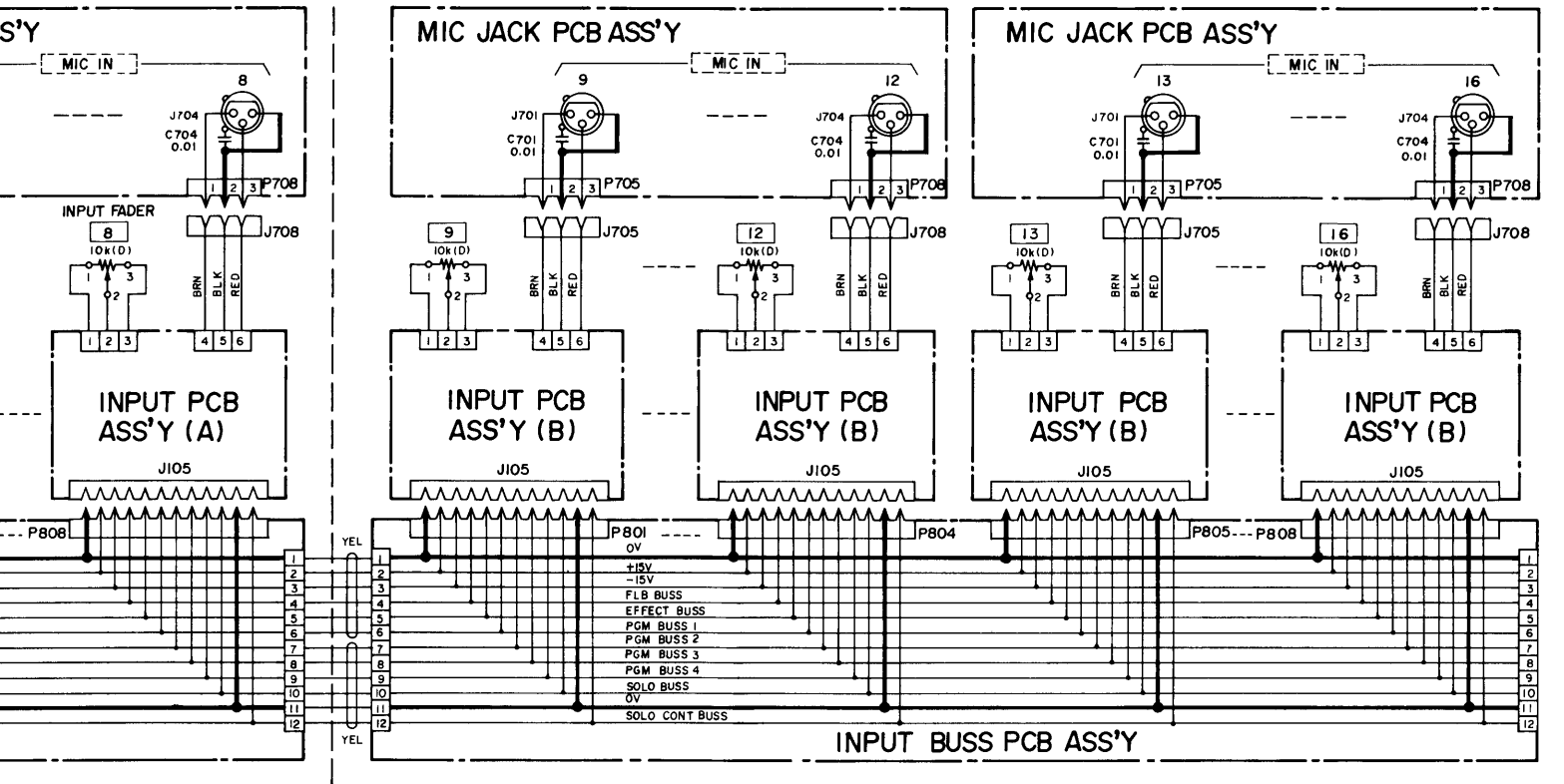
M-200 Series

WIRING DIAGRAM

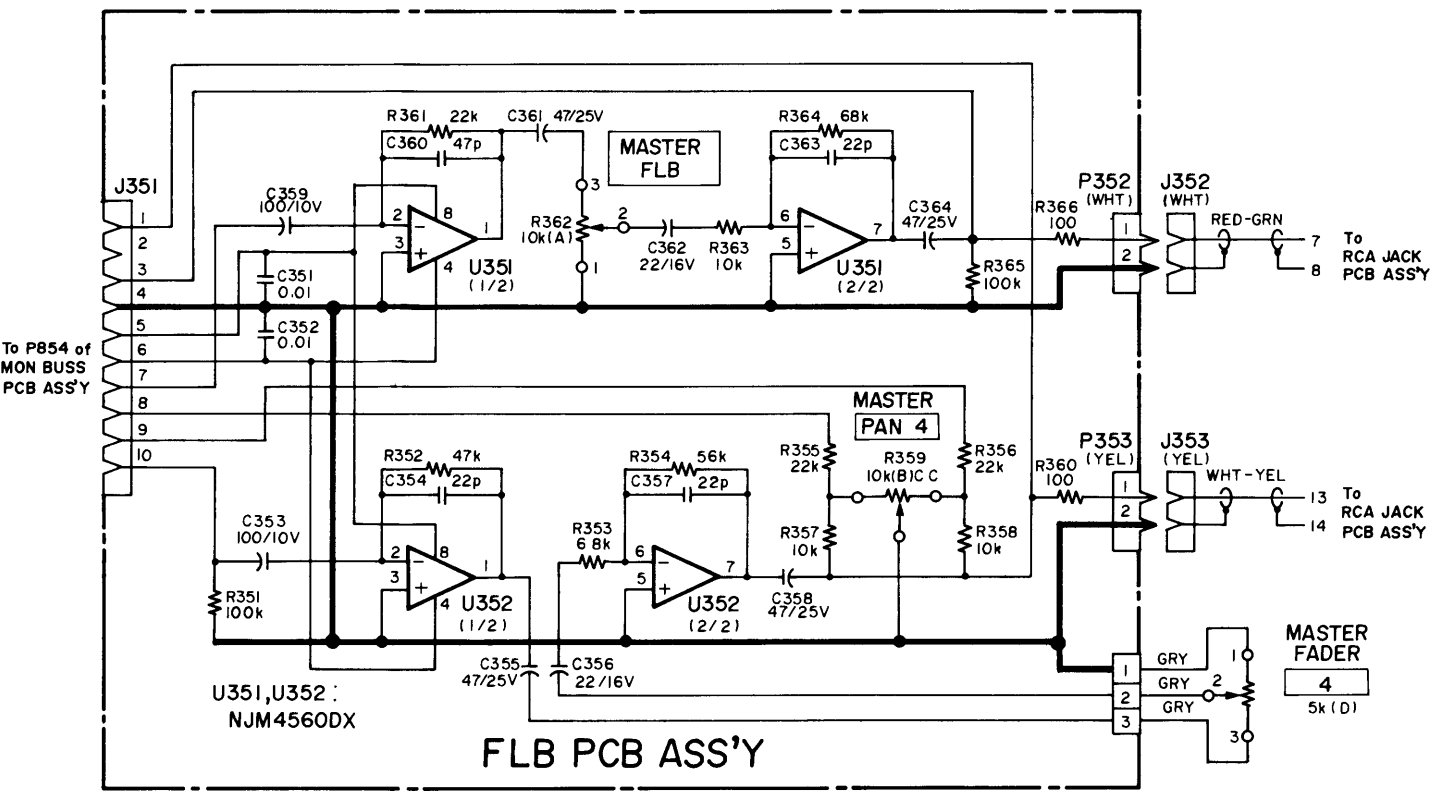
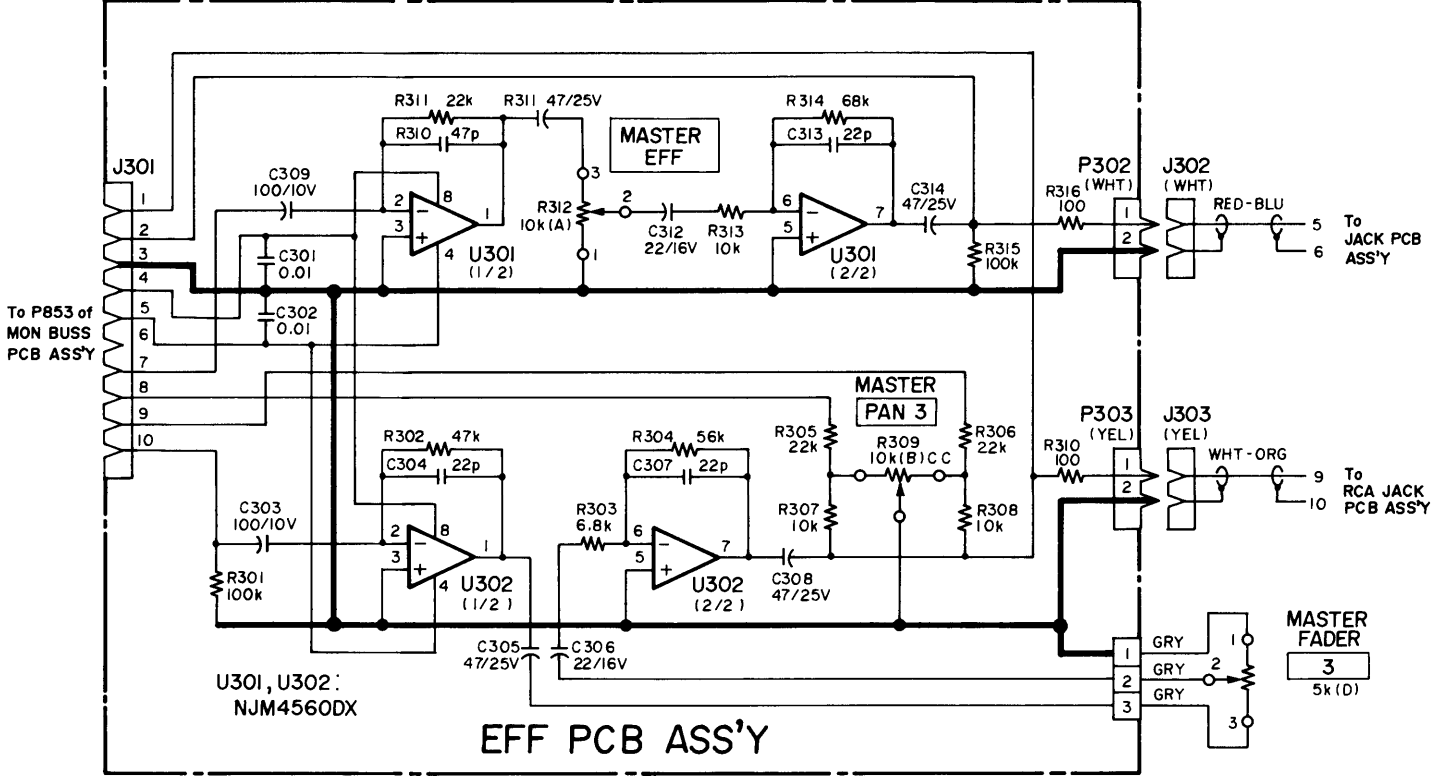


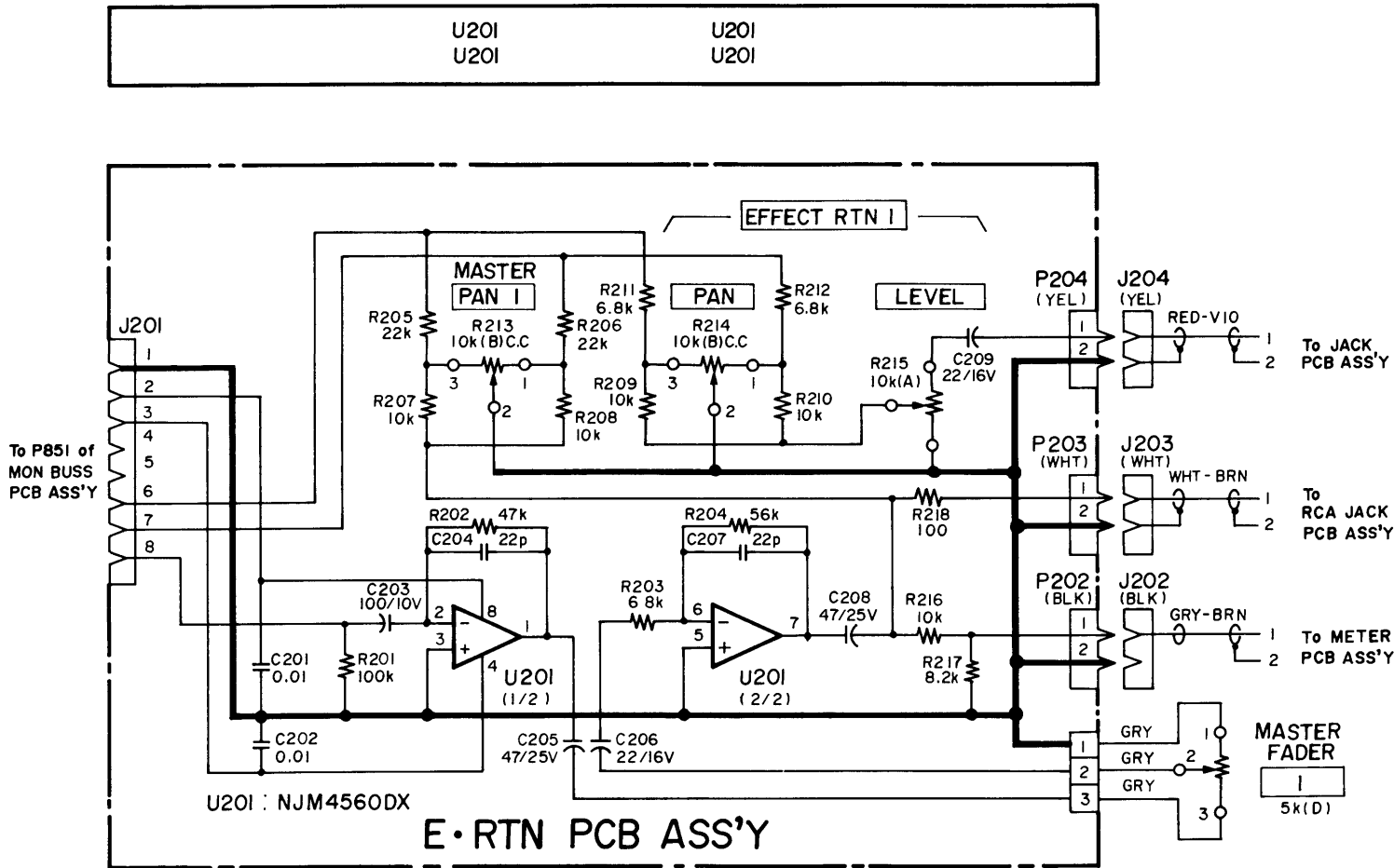
WIRING DIAGRAM

CH 9 & 16 M-216 ONLY

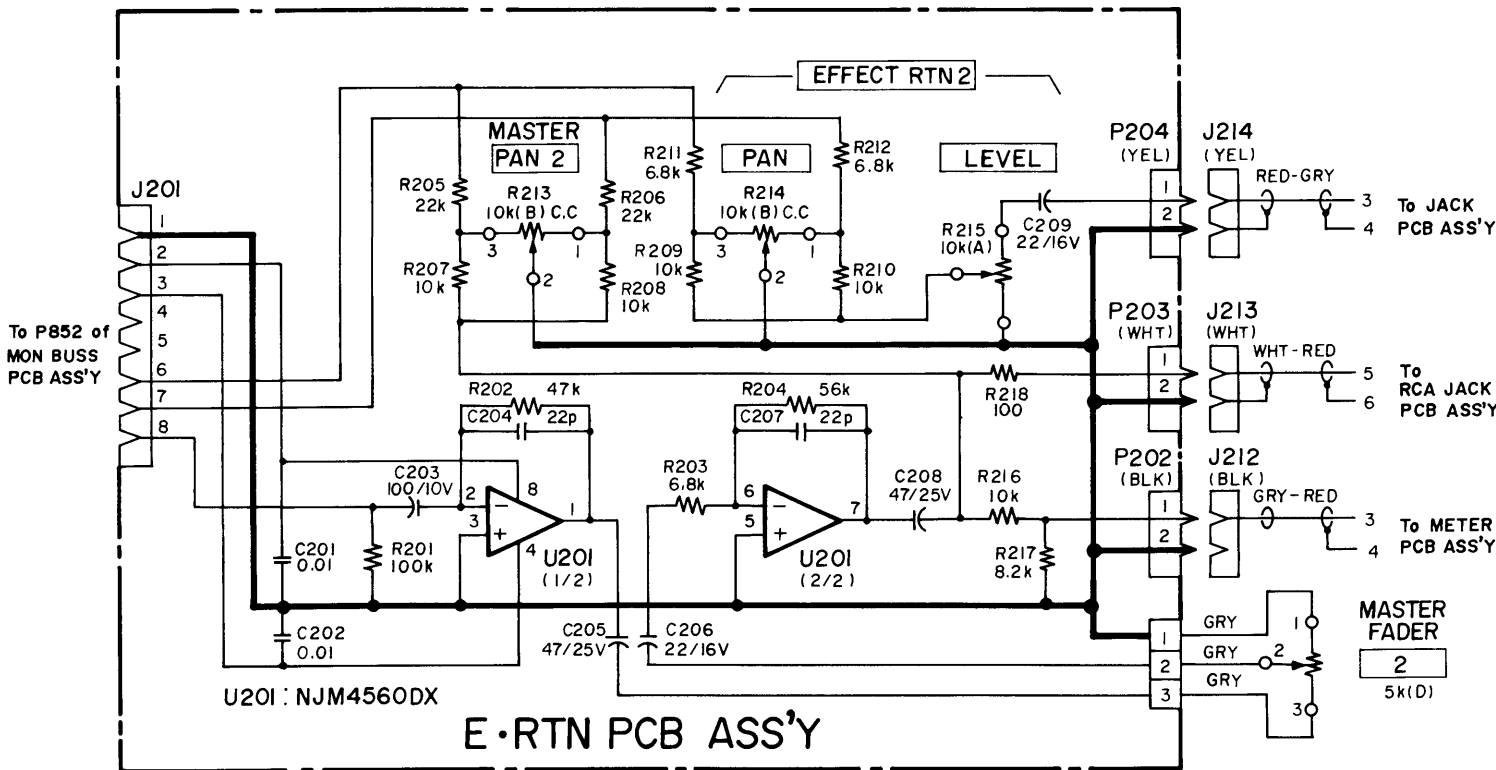


| | | | |
|------|------|------|------|
| U301 | U302 | U302 | U301 |
| U351 | U352 | U352 | U351 |



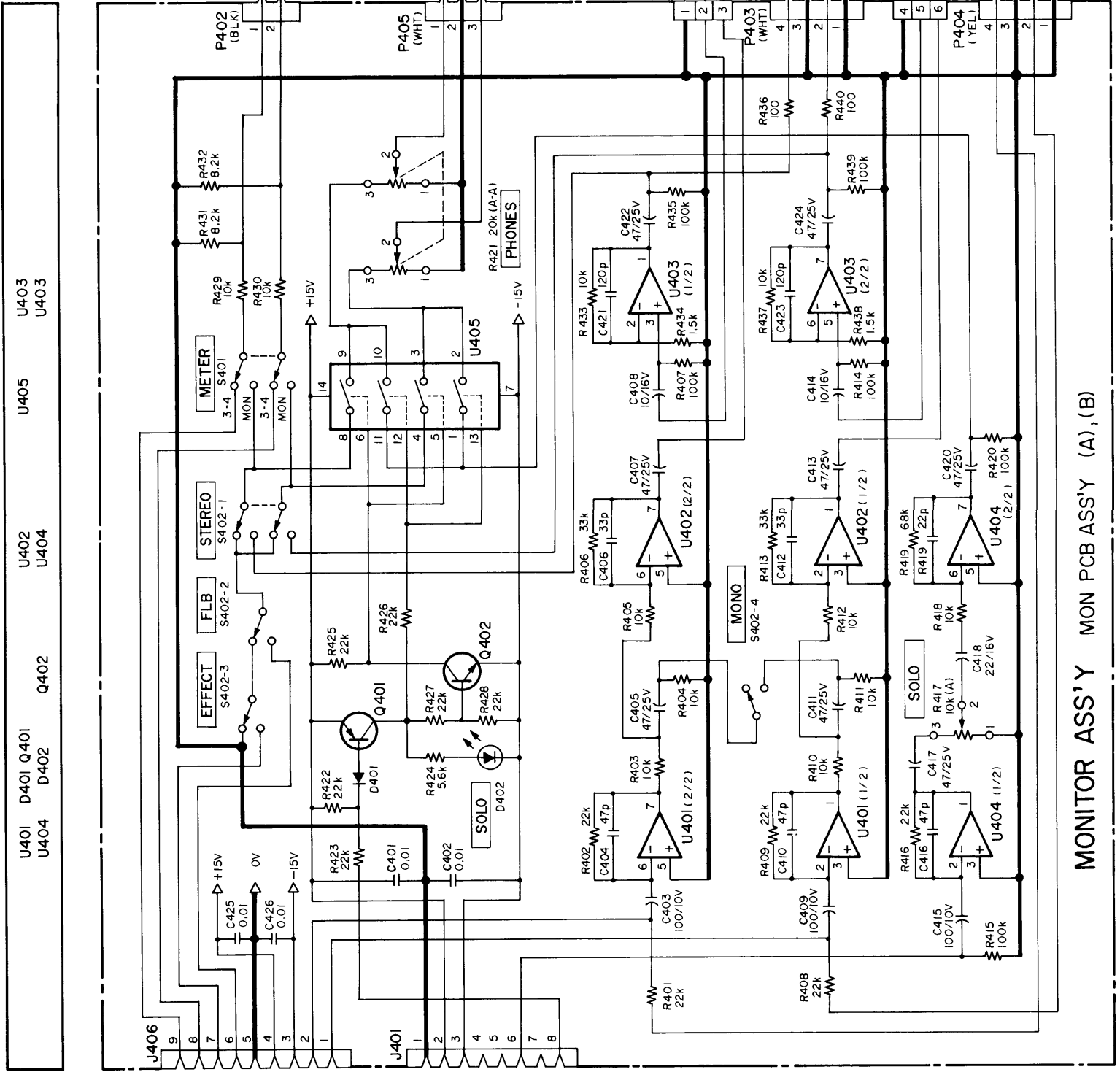


E · RTN PCB ASS'Y



E · RTN PCB ASS'Y

- U401 ~ U404 : NJM4560DX
- U405 : LC4966
- Q401 : 2SA1015 (GR)
- Q402 : 2SC1815 (GR)
- D401 : ISS133T77
- D402 : SLP-135B



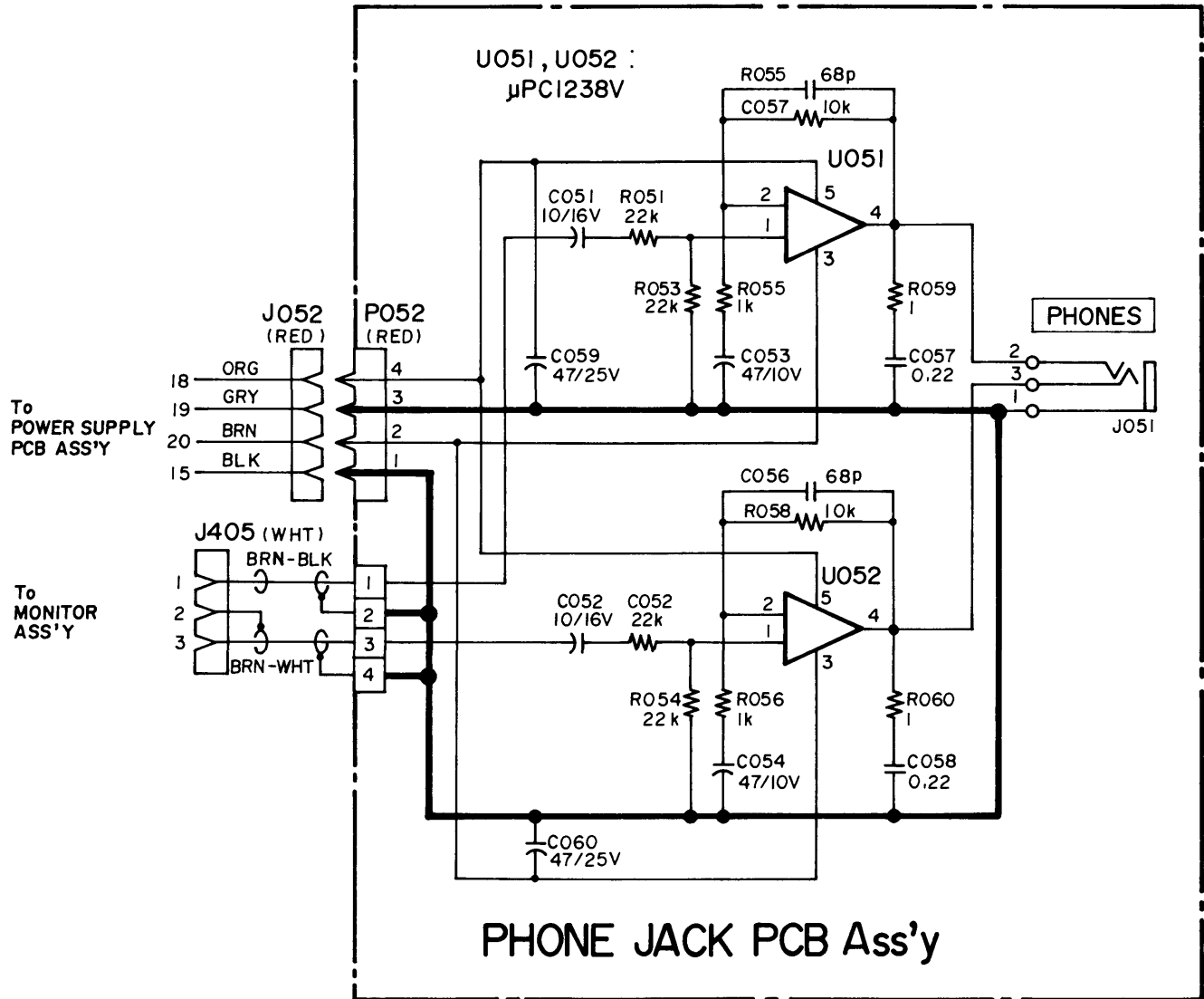
To P856 of
MON BUSS
PCB ASS'Y

To P855 of
MON BUSS
PCB ASS'Y

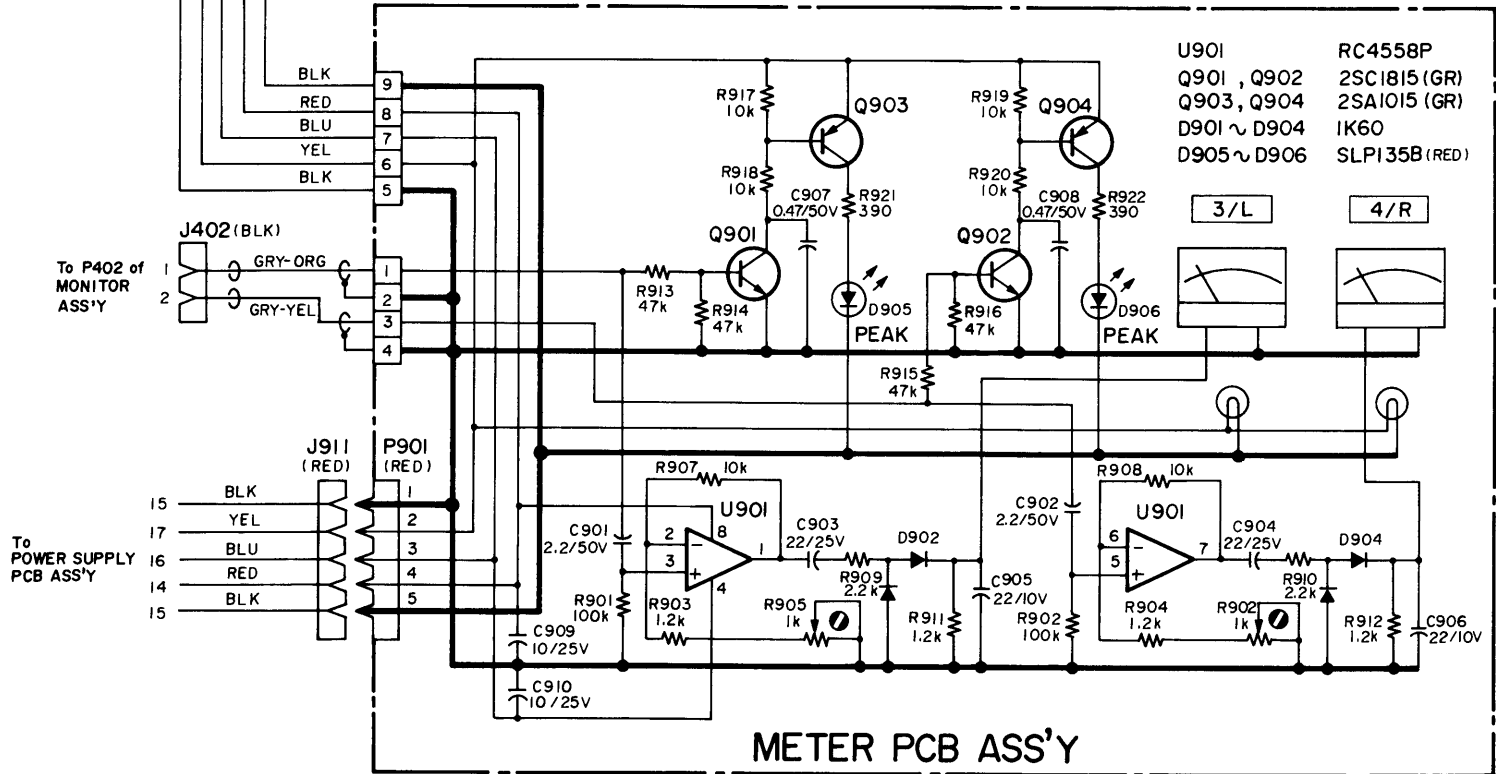
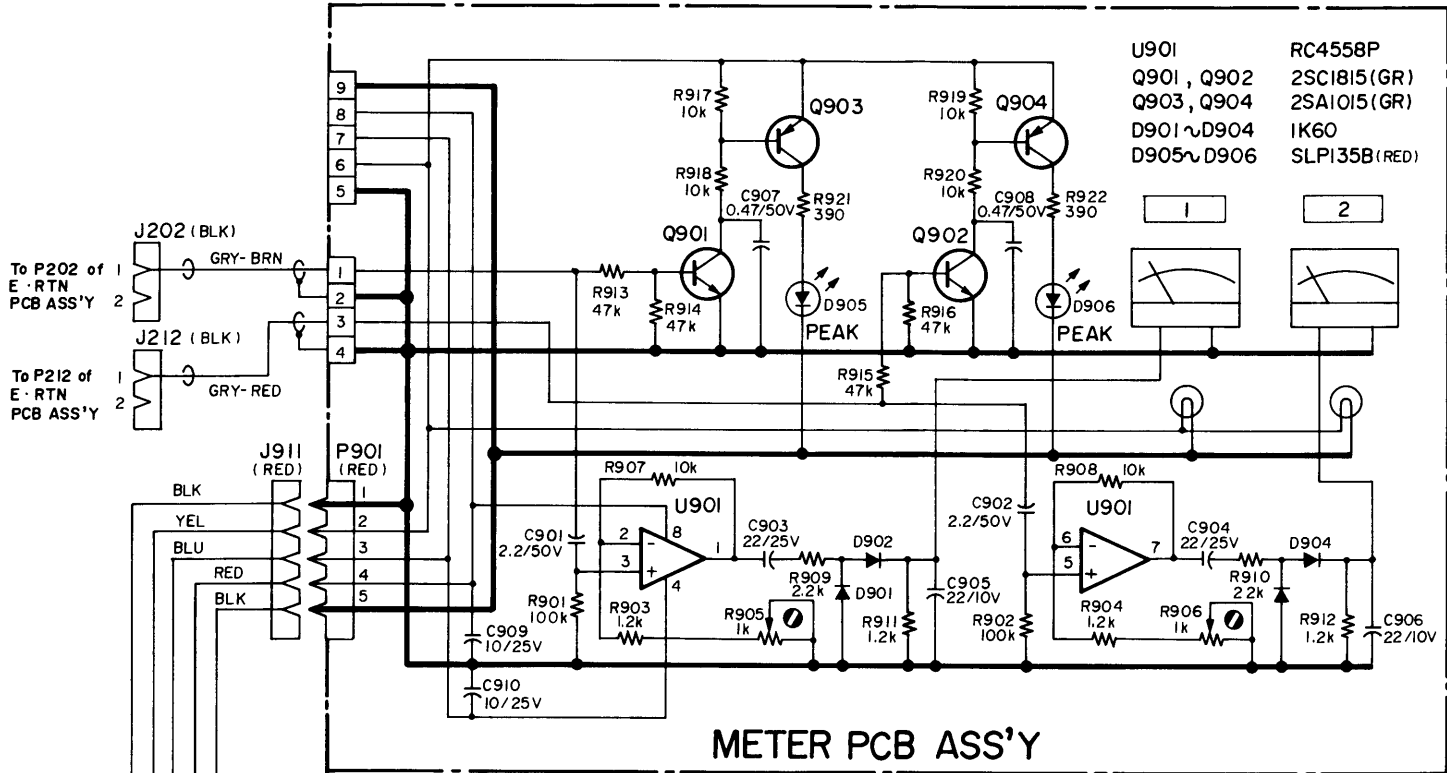
MONITOR ASS'Y MON PCB ASS'Y (A),(B)

PHONE JACK PCB ASS'Y **M-200**Series

U051
U052

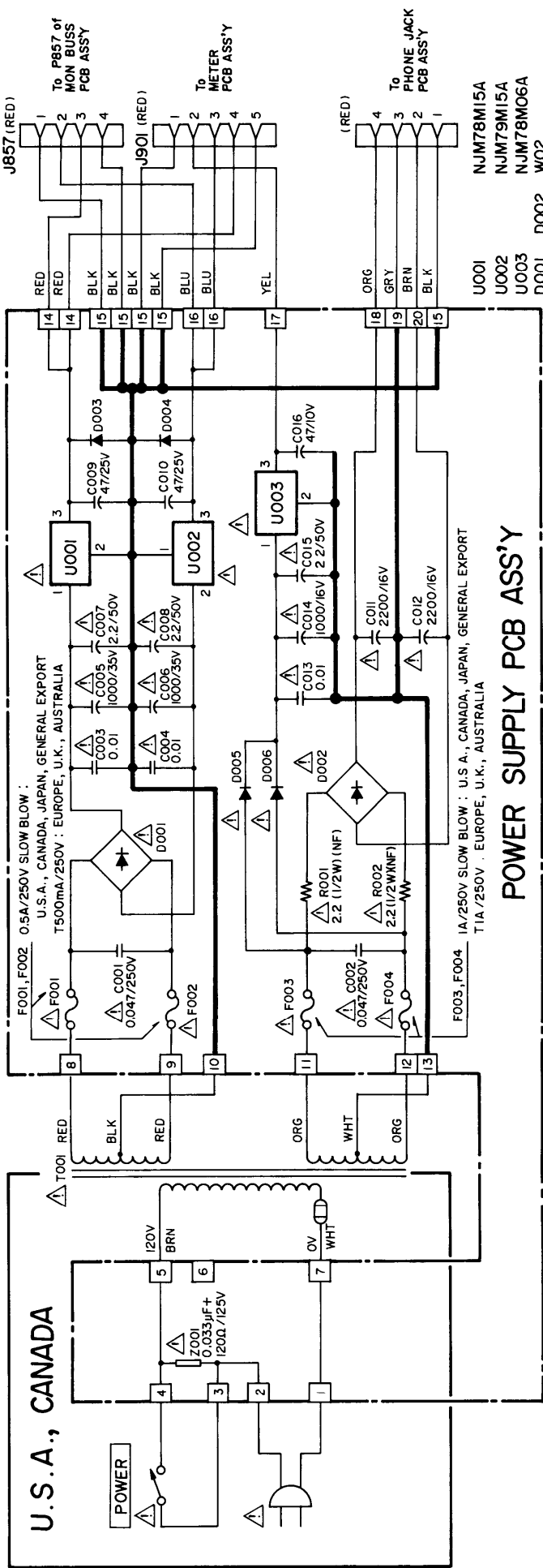


| | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|
| U901 | Q901 | Q903 | D901 | D902 | Q902 | Q904 | D906 | U901 | D903 | D904 |
| U901 | Q901 | Q903 | D901 | D902 | Q902 | Q904 | D906 | U901 | D903 | D904 |



POWER SUPPLY CIRCUIT M-200 Series

U001 U002 U003 D001 D002 D003 D004 D005 D006 D002

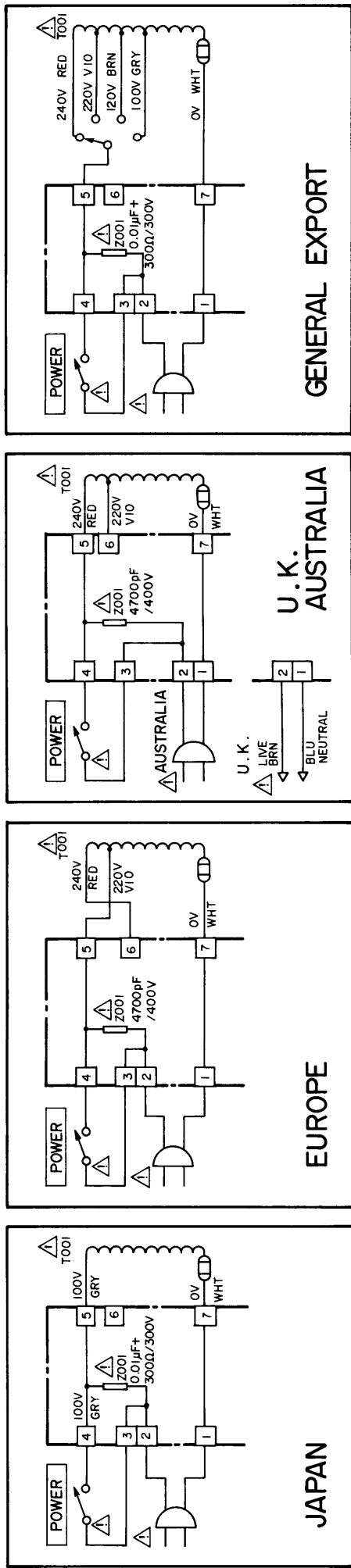


U.S.A., CANADA

U.S.A., CANADA, JAPAN, GENERAL EXPORT
T500mA/250V : EUROPE, U.K., AUSTRALIA

U.S.A., CANADA, JAPAN, GENERAL EXPORT
T1A/250V SLOW BLOW : U.S.A., CANADA, JAPAN, GENERAL EXPORT
T1A/250V EUROPE, U.K., AUSTRALIA

POWER SUPPLY PCB ASS'Y



JAPAN

EUROPE

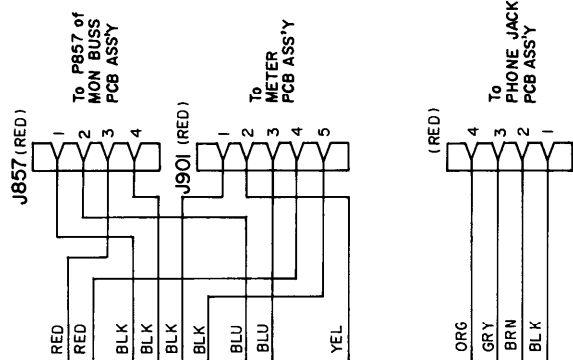
U.K.
LIVE
BRN
BLU
NEUTRAL

U.K. AUSTRALIA

EUROPE

GENERAL EXPORT

- U001 NJM78M15A
- U002 NJM79M15A
- U003 NJM78M06A
- D001 W02
- D002 W02
- D003 ~ D006 W03C



To P857 of
MON BUSS
PCB ASS'Y

To METER
PCB ASS'Y

To PHONE JACK
PCB ASS'Y

M-200 Series Mixing Consoles

TASCAM
TEAC Professional Division
