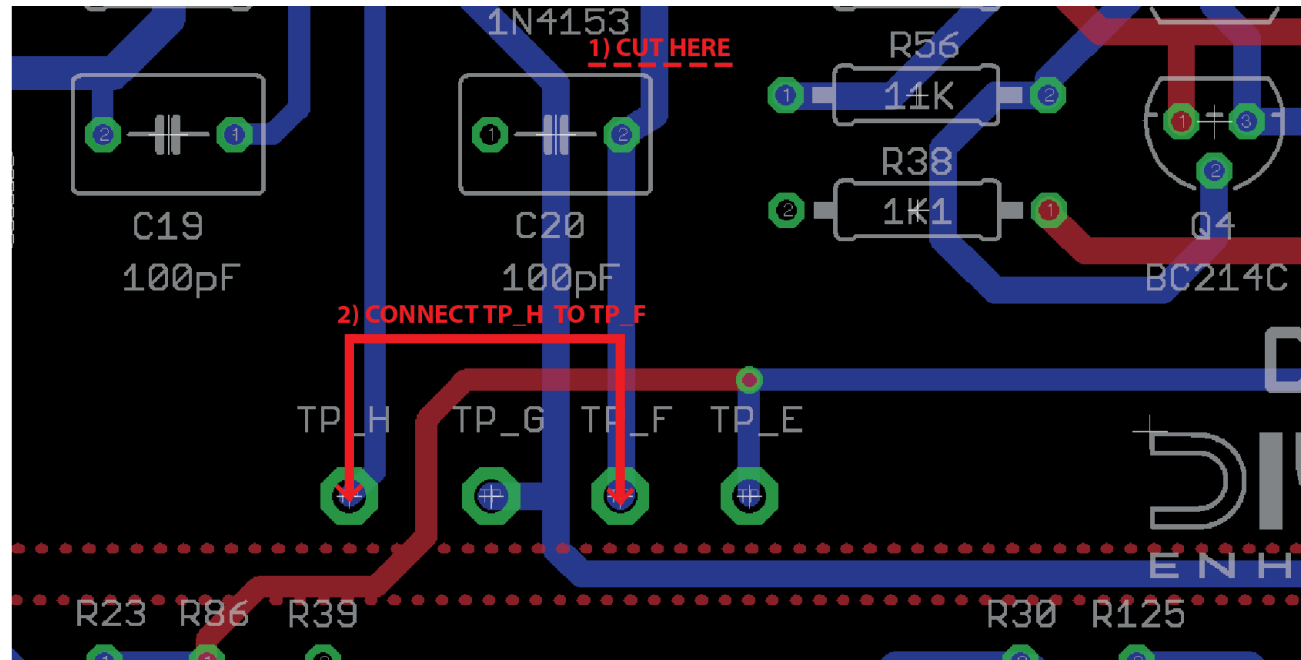


DR 609 BUILD MANUAL



DR 609 MAIN BOARD V1 FIX

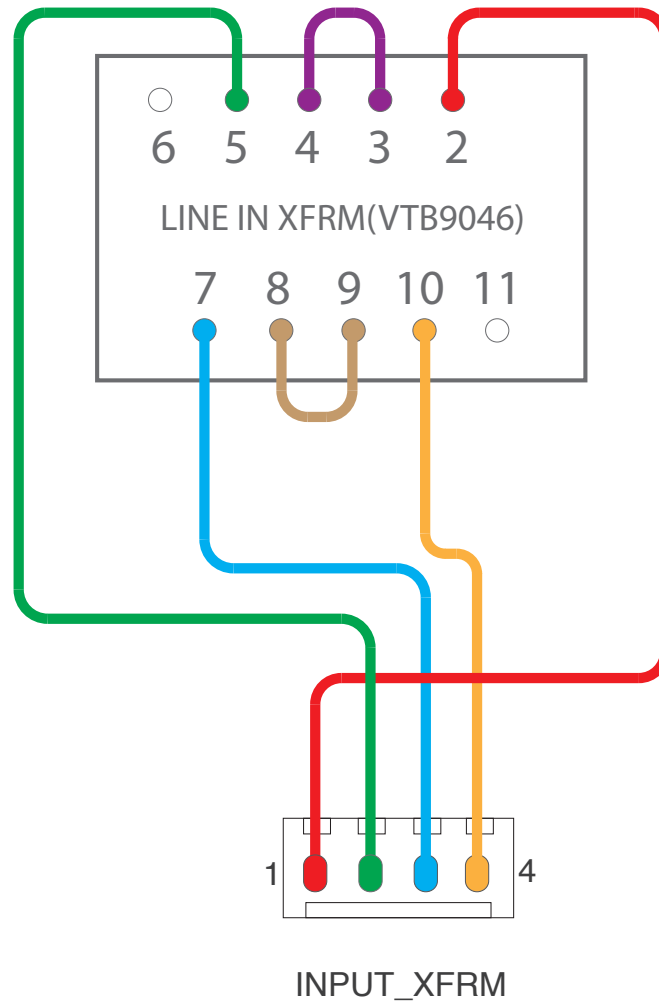
1. Cut trace
2. Connect TP_H to TP_F



DR 609 INPUT TRANSFORMER WIRING

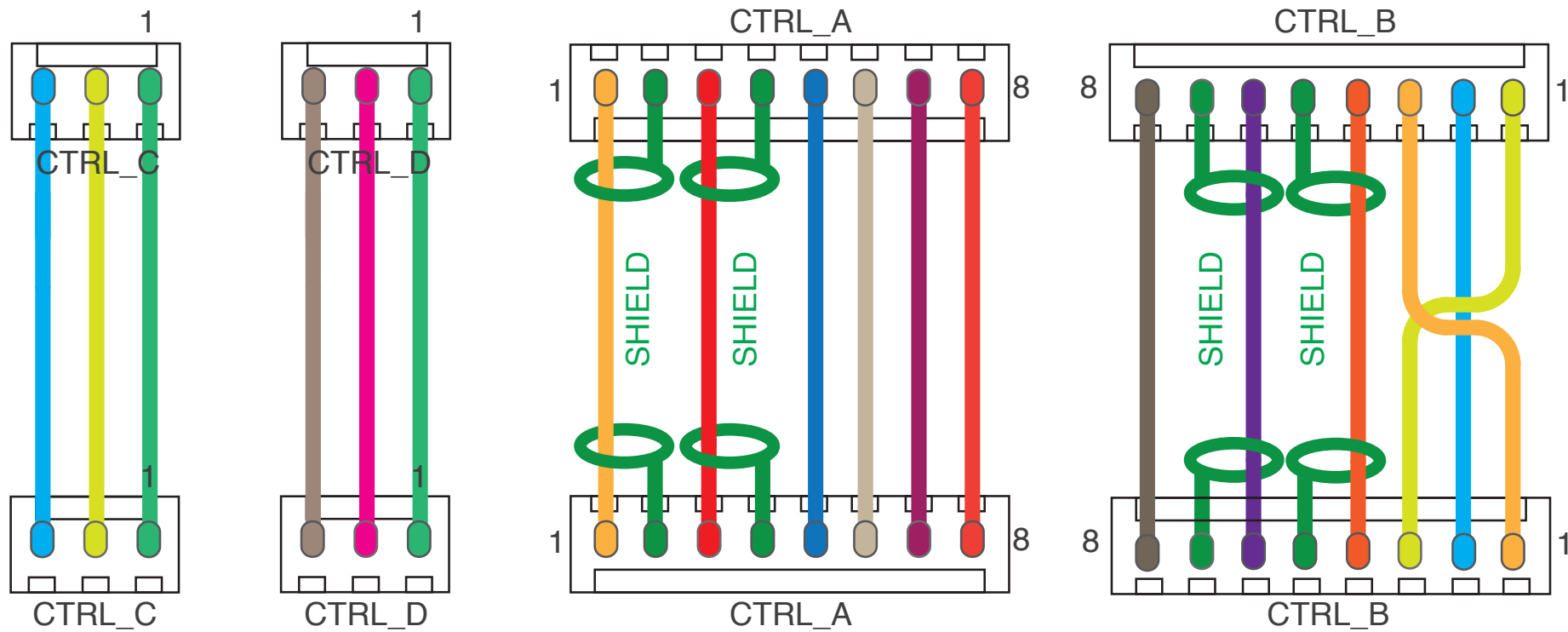
CARNHILL VTB9046 WIRED OR MARINAIR 31267

PIN 6 CONNECTED TO CASE(GND)
PIN 11 NOT CONNECTED



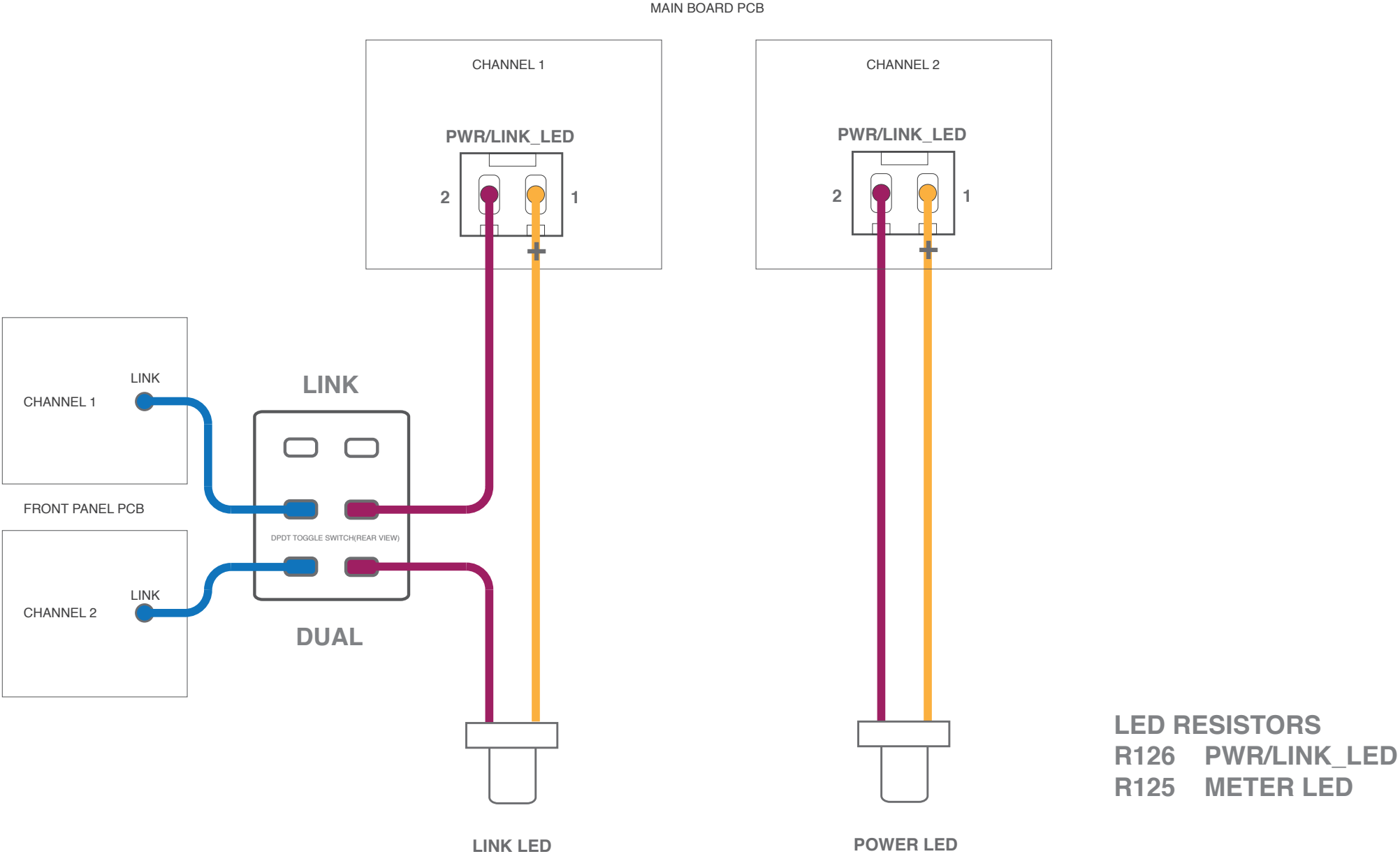
DR 609 FRONT PANEL BOARD V.1 WIRING

MAIN BOARD



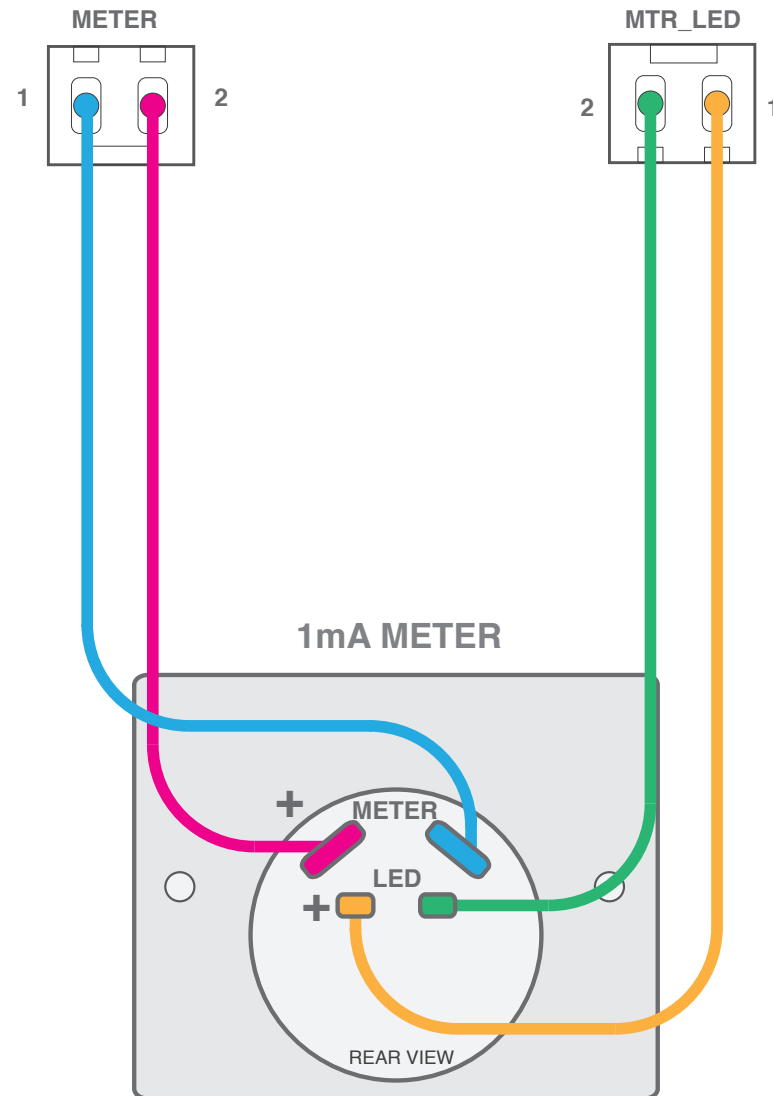
FRONT PANEL BOARD

DR 609 LINK, POWER TOGGLES AND LEDS WIRING



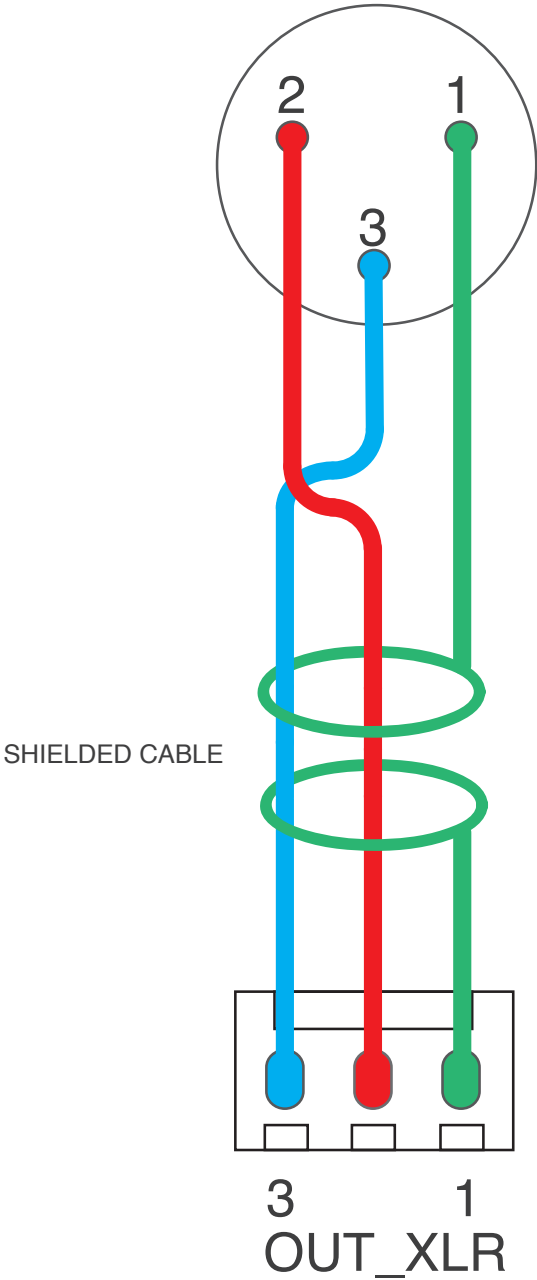
DR 609 METER WIRING

MAIN BOARD PCB

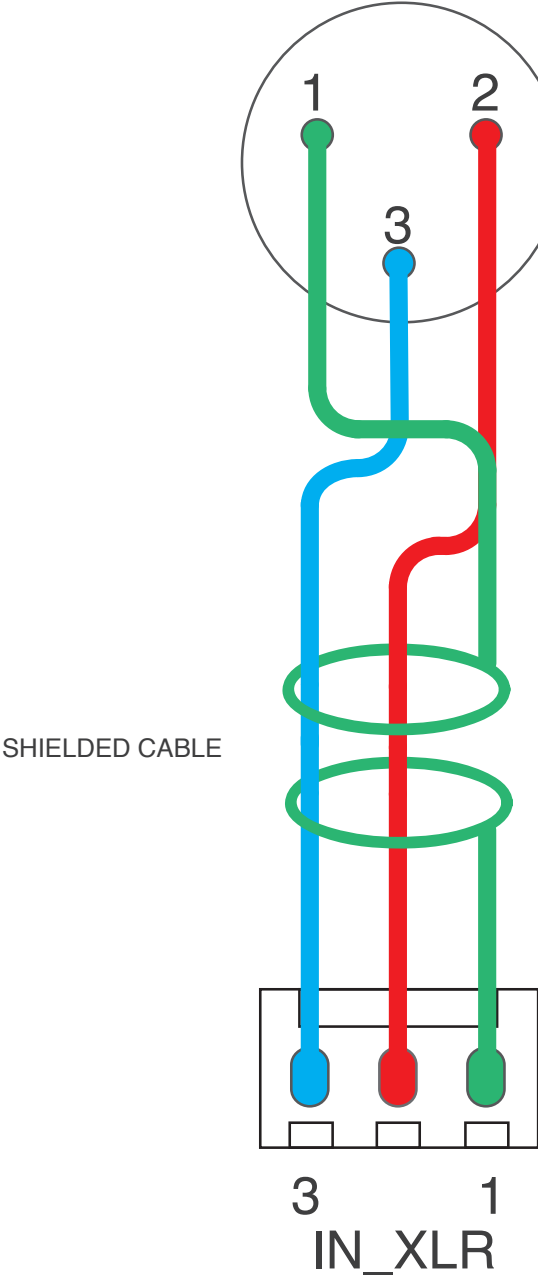


DR 609 XLR CONNECTORS WIRING

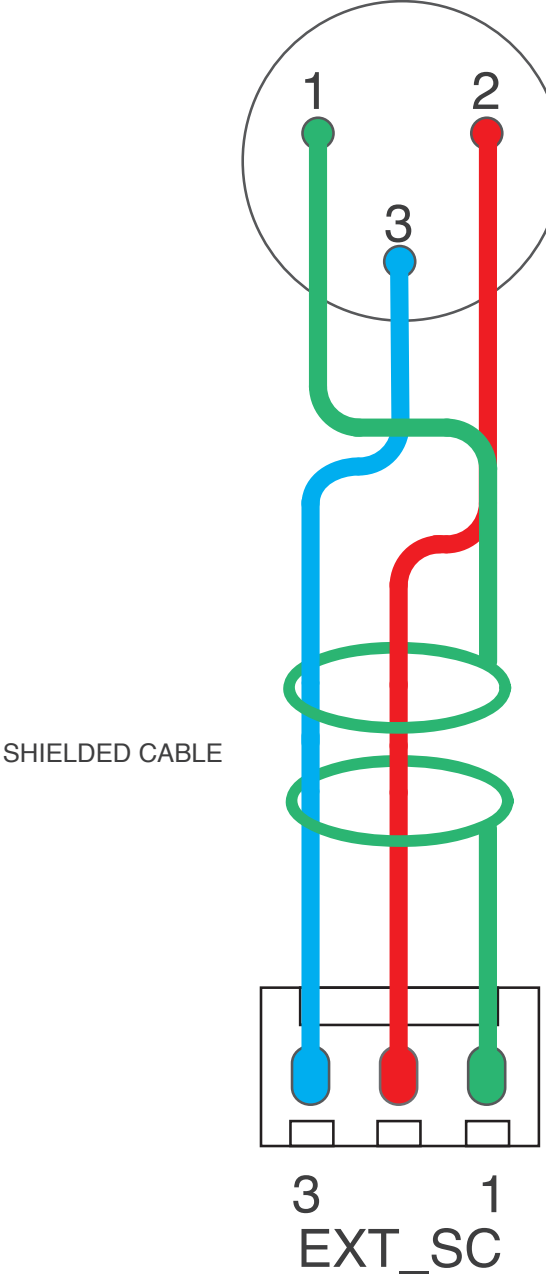
OUTPUT XLR



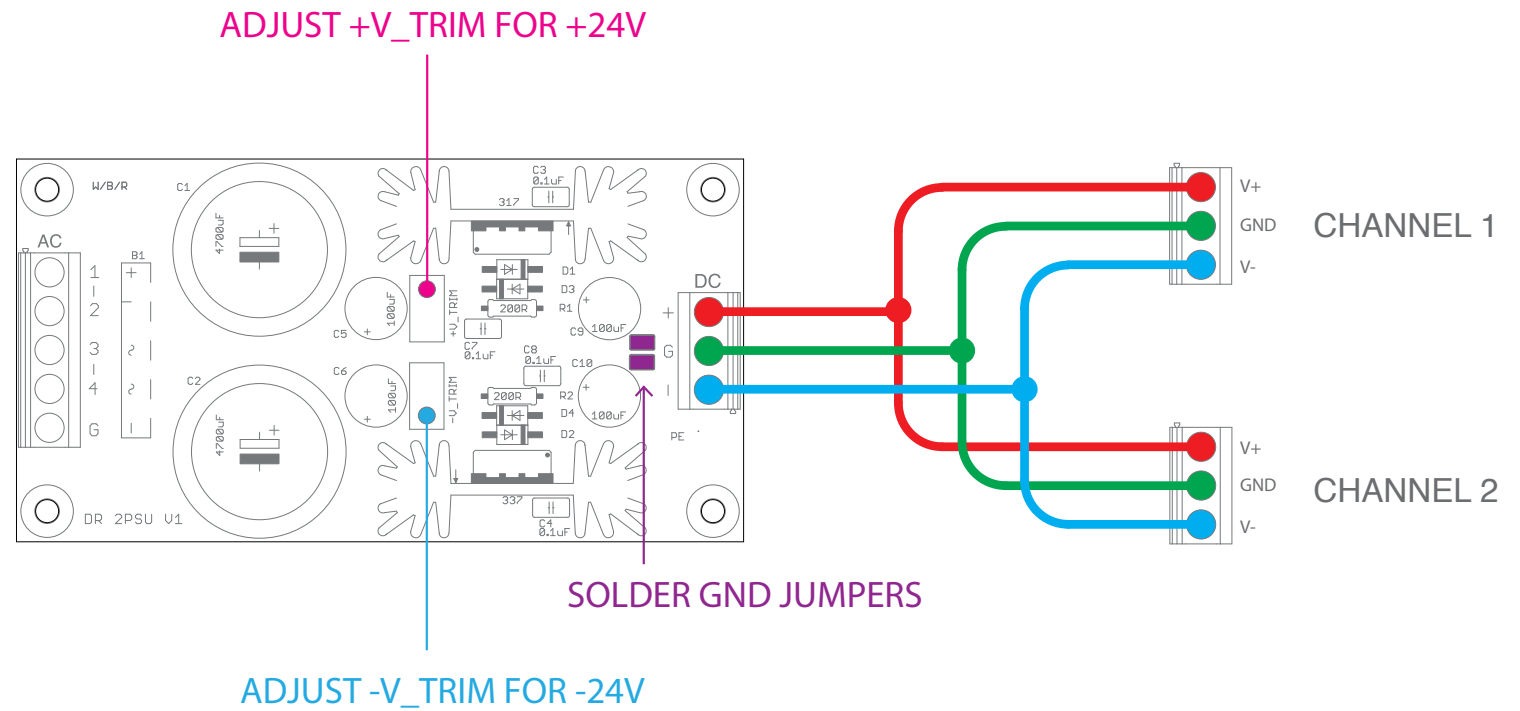
INPUT XLR



EXT SC XLR

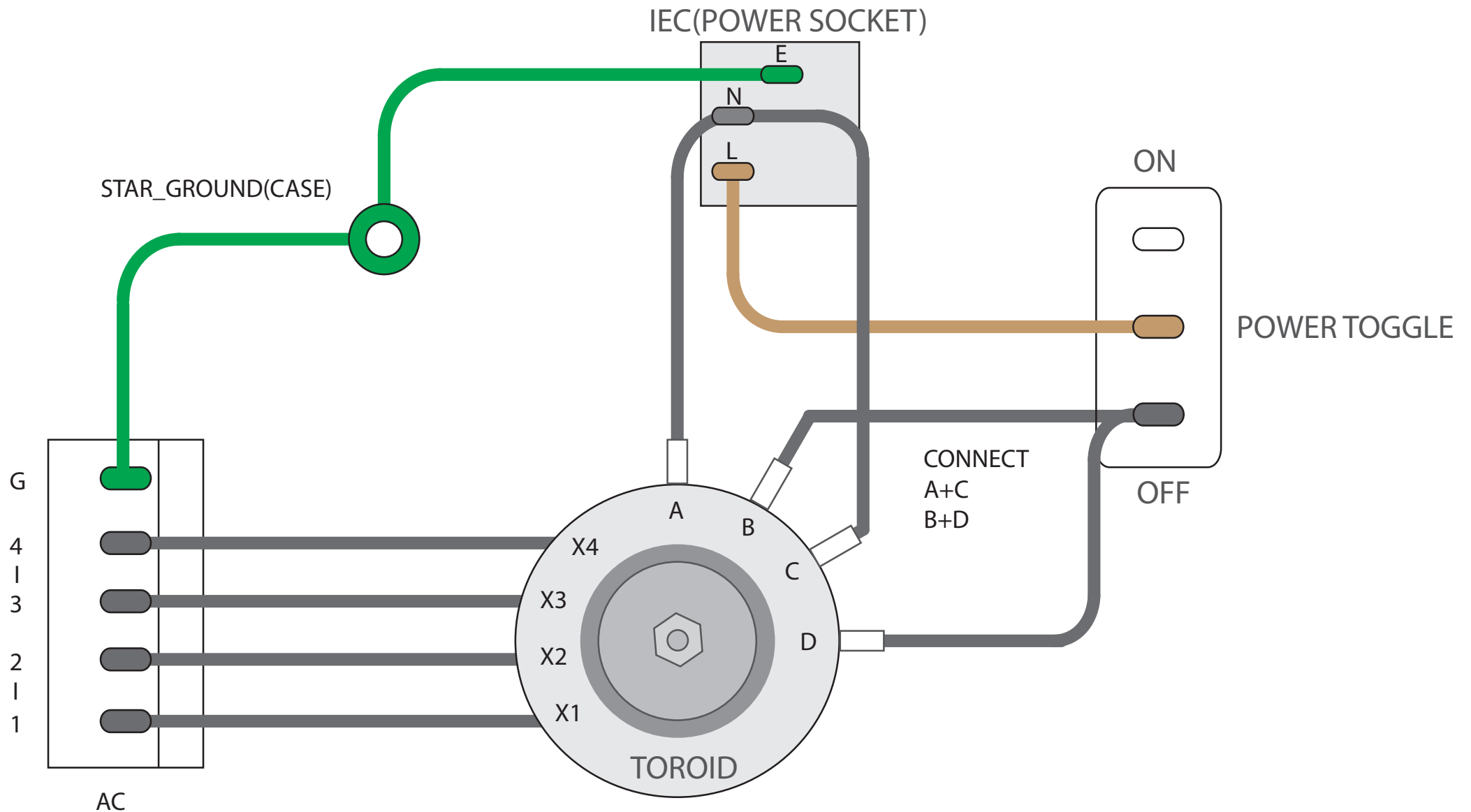


DR 609 POWER SUPPLY SETUP



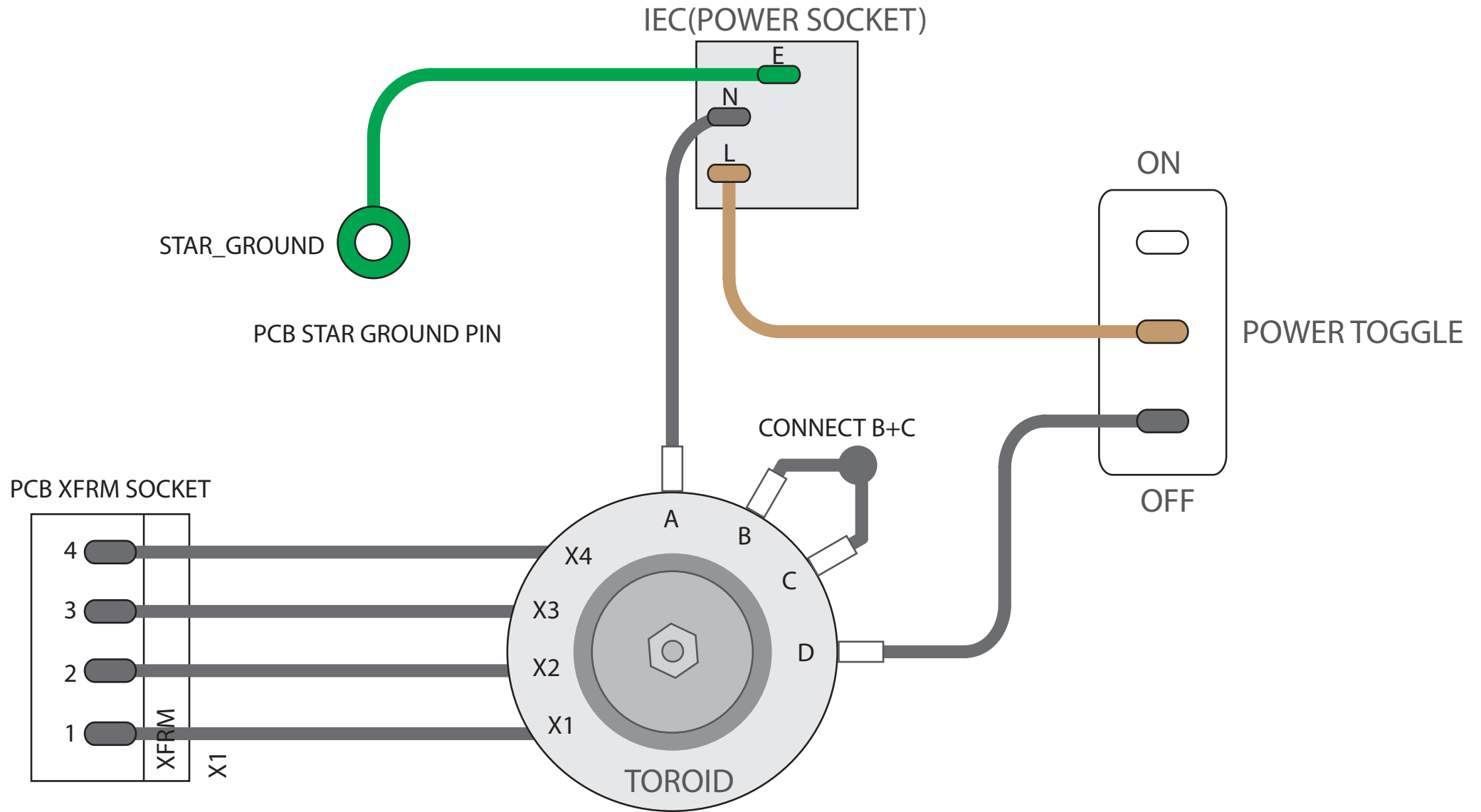
CONNECT PSU TO MAIN BOARDS AFTER ADJUSTMENTS

TOROID WIRING FOR 115V



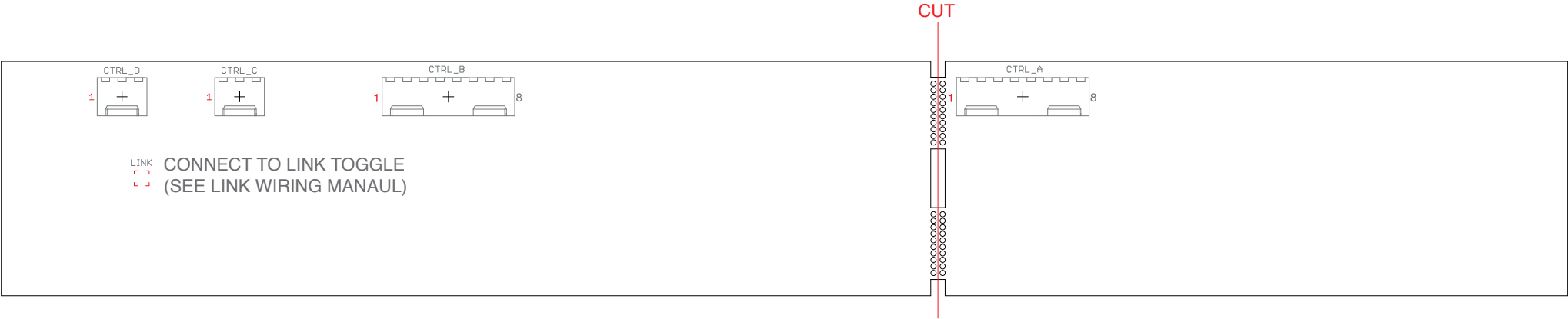
FOLLOW THE EXTRA SHIELDING FOR AC WIRES AND A B C D AND X1 X2 X3 X4 PATTERNS!

TOROID WIRING FOR 230V



FOLLOW THE EXTRA SHIELDING FOR AC WIRES AND A B C D AND X1 X2 X3 X4 PATTERNS!

DR 609 FRONT PANEL CONNECTORS

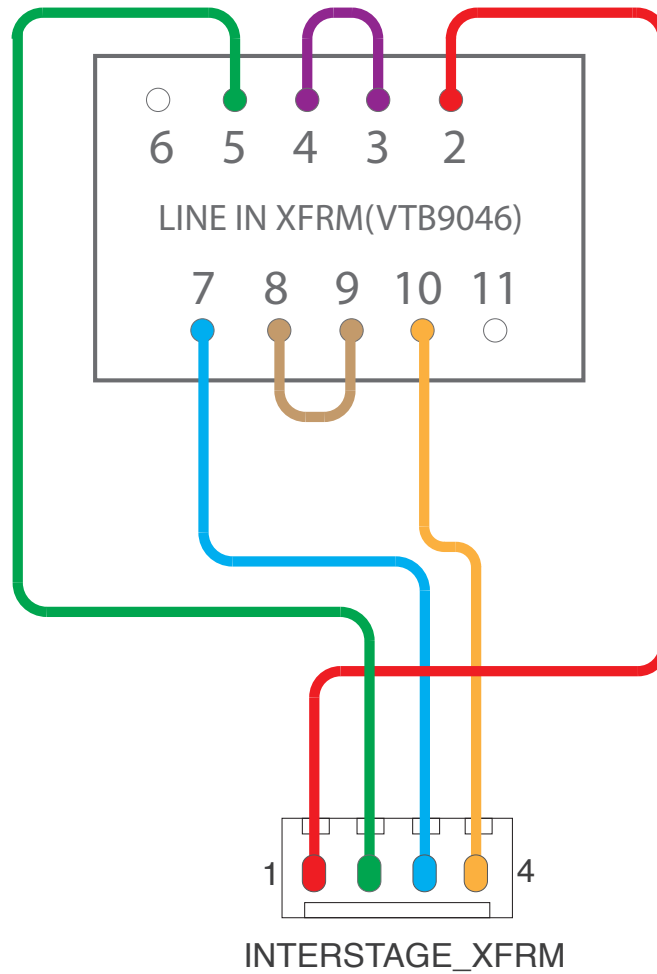


FRONT PANEL PCB REAR VIEW

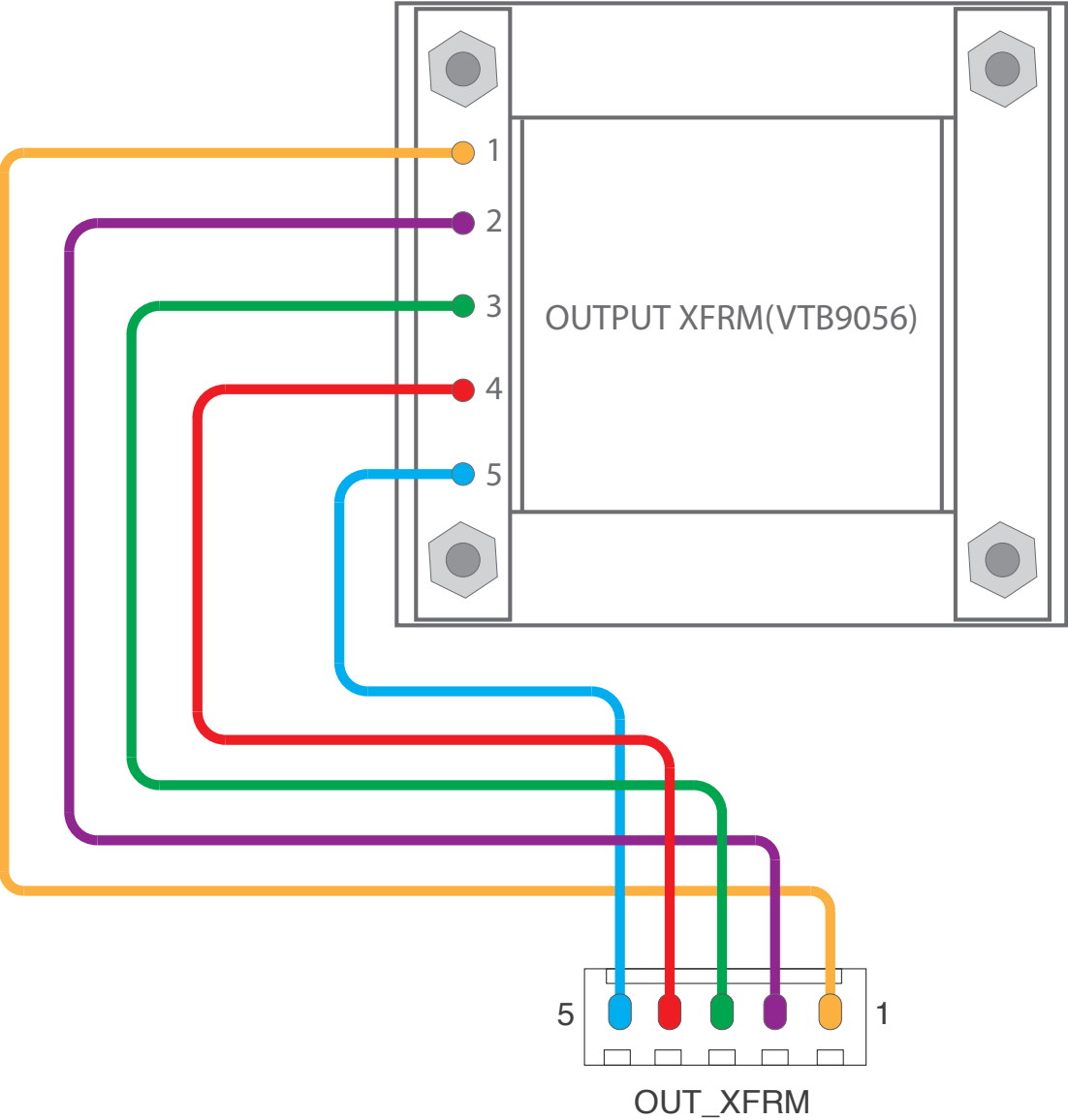
DR 609 INTERSTAGE TRANSFORMER WIRING

CARNHILL VTB9045 WIRED OR MARINAIR 10468

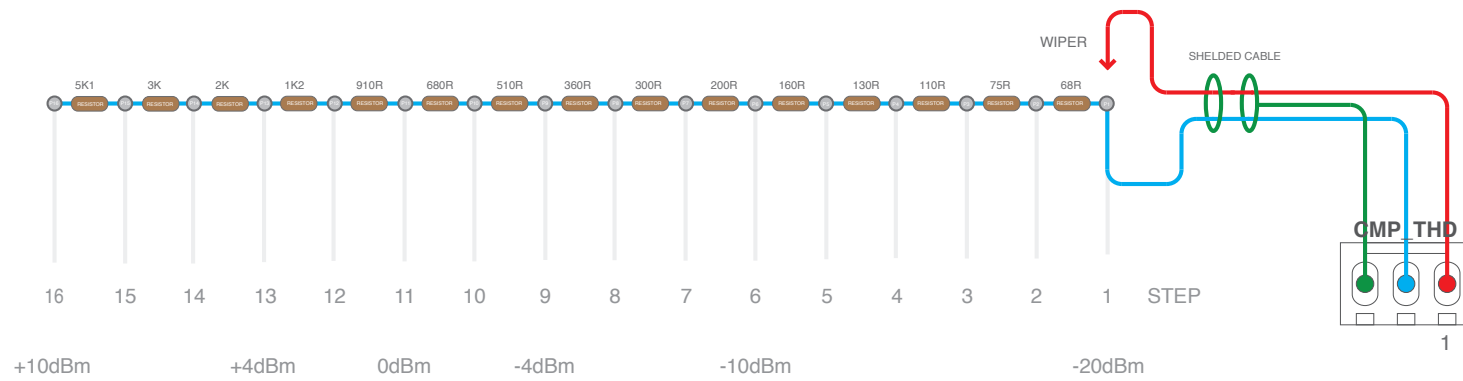
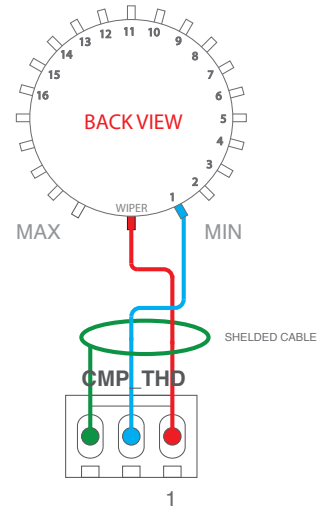
PIN 6 CONNECTED TO CASE(GND)
PIN 11 NOT CONNECTED



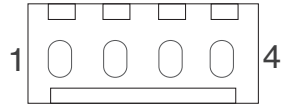
DR 609 OUTPUT TRANSFORMER WIRING
CARNHILL VTB9056 OR MARINAIR LO1173



DR 609 THRESHOLD ROTARY SWITCH

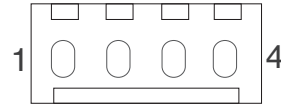


DR 609 TRANSFORMERS PINOUT



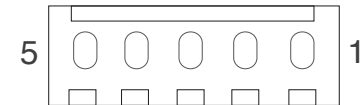
INPUT_XFRM

PIN 1 - PRIMARY +
PIN 2 - PRIMARY -
PIN 3 - SECONDARY +
PIN 5 - SECONDARY -



INTERSTAGE_XFRM

PIN 1 - PRIMARY +
PIN 2 - PRIMARY -
PIN 3 - SECONDARY +
PIN 5 - SECONDARY -



OUT_XFRM

PIN 1 - PRIMARY +
PIN 2 - PRIMARY -
PIN 3 - GND
PIN 4 - SECONDARY +
PIN 5 - SECONDARY -

DR 609 CALIBRATION

TEST PROCEDURE and PSU CALIBRATION

1. With **not installed ICs, AMP340 and not connected PSU** to MAIN boards.
Power UP compressor and then adjust PSU trims for +24V and -24V
(See DR 609 POWER SUPPLY SETUP in build manual)
2. Connect PSU to MAIN boards and check no smoke. Let it work 10-15 minutes.
3. Measure Voltage on PSU board(should be +24V and -24V).
4. Switch OFF compressor
5. Install all ICs.
6. Switch ON compressor, check PSU voltages again(should be +24V and -24V).
7. Switch OFF compressor.
8. Install AMP340.
9. Switch ON compressor, check PSU voltages again(should be +24V and -24V).

AMP340 bias adjust

1. Connect DMM(mVolt DC mode) to TP_A and TP_B.
2. Adjust AMP340 trim for 260-280mV.
3. Take unit to warm up 10-15 minutes before start next adjustments.

Unity Gain

1. Generate Sinus 1kHz 0.775V (0dBu) in your DAW.
2. Connect Signal to DR 609 INPUT XLR(PIN 2 and PIN 3).
3. Set DR 609 front panel controls to:
LIMIT - OUT, BYPASS - IN, SC - OUT, HPF - OFF, GAIN - 0dB.
4. Connect DMM(VOLT AC mode) to DR 609 OUTPUT XLR(PIN 2 and PIN 3).
5. Adjust RV1 for 0.775V (0dBu) .

DR 609 CALIBRATION

LIMITER and METER

1. Set DR 609 front panel controls to:

LIMIT - OUT, BYPASS - IN, SC - OUT, HPF - OFF, GAIN - 0dB

2. Generate Sinus 1kHz 2.45V (+10dBu) in your DAW .
3. Connect Signal to DR 609 INPUT XLR(PIN 2 and PIN 3).
3. Install JP2 and Connect DMM(DC VOLT mode) to TP_C and GND.
4. Adjust RV6 for 3 Volts.
5. Install JP1.
6. Connect DMM(AC VOLT mode) to DR 609 OUTPUT XLR(PIN 2 and PIN 3).
7. Adjust RV2 for 0.975V (+2dBu) on OUTPUT.
8. Remove JP1 and Connect DMM(DC VOLT mode) to TP_C and GND.
9. Adjust RV6 for 5 volts.
10. Install JP1.
11. Connect DMM(AC VOLT mode) to DR 609 OUTPUT XLR(PIN 2 and PIN 3).
12. Output voltage should be about 0.0775V(-10dBu).
13. Adjust RV3 for 20dB on DR 609 gain reduction Meter.
14. Remove JP1 and JP2.
15. Set DR 609 front panel controls to:

LIMIT - IN, BYPASS - IN, SC - OUT, HPF - OFF, GAIN - 0dB, RELEASE 50, LIMIT THRESHOLD 8.

16. Generate Sinus 1kHz 7.745V (+20dBu) in your DAW .
17. Connect Signal to DR 609 INPUT XLR(PIN 2 and PIN 3).
18. Connect DMM(AC VOLT mode) to DR 609 OUTPUT XLR(PIN 2 and PIN 3).
19. Adjust RV4 for 1.945V (+8dBu).
20. Set **Limit THRESHOLD** to +4 and check output level is about 1.23V(+4dBu)
21. Set **Limit THRESHOLD** to +15 and check output level is about 4.35V(+15dBu)

DR 609 CALIBRATION

COMPRESSOR

1. Set DR 609 front panel controls to:
LIMIT - OUT, BYPASS - IN, SC - IN, HPF - OFF, GAIN - 0dB, COMP THRESHOLD +10.
2. Generate Sinus 1kHz 0.775V (0dBu) in your DAW .
3. Connect Signal to DR 609 INPUT XLR(PIN 2 and PIN 3).
4. Connect DMM(AC VOLT mode) to DR 609 OUTPUT XLR(PIN 2 and PIN3).
5. Check output level is 0.775V (0dBu).
6. Set **GAIN to 2.**
7. Check output level is 0.975V (+2dBu).
10. Set **GAIN to 20.**
11. Check output level is 7.745V (+20dBu).
12. Set DR 609 front panel controls to:
LIMIT - OUT, BYPASS - IN, SC - IN, HPF - OFF, GAIN - 0dB, COMP THRESHOLD -10. RELEASE 100, RATIO 6:1.
13. Generate Sinus 1kHz 7.745V (+20dBu) in your DAW .
14. Connect DMM(AC VOLT mode) to DR 609 OUTPUT XLR(PIN 2 and PIN3).
15. Adjust RV5 for 0.775V (0dBu).
16. Decrease TEST TONE(1kHz Sinus) to 1.23V(+4dBu) and set **COMP THRESHOLD** to -20
17. Check output level is about 0.123V (16dBu +/-1dB).
18. Increase TEST TONE(1kHz Sinus) to 6.9V(19dBu) and set **COMP THRESHOLD** to +10
19. Check output level is about 3.27V (12.5dBu +/-1dB).
20. Congratulations! Now your unit ready for Rock and Roll)