

NOTES:

- THE HIGH LEVEL INPUTS ARE INTENDED FOR SIGNALS WHICH HAVE BEEN "PRE-AMP'D" TO 8.5Vpp@40V. THESE INPUTS ARE DESIGNED FOR 8.0Vpp SIGNALS FROM AN MCC1 AUDIO DISTRIBUTION MODULE.
 --- DO NOT USE SPEAKER LEVEL SIGNALS WITH THIS AMP. ---
- LINE LEVEL SIGNALS SHOULD BE 1.0Vpp - 2.0Vpp. 0.5Vpp SIGNALS CAN BE USED, HOWEVER THE OUTPUTS WILL NOT BE DRIVEN TO FULL POWER WITH THIS LEVEL INPUT SIGNAL. NEVER APPLY SIGNALS TO THE LINE LEVEL INPUTS AND HIGH LEVEL INPUTS AT THE SAME TIME.
- ADDRESS LINES ARE GROUND INPUTS. IF ONLY ONE AMPLIFIER IS ATTACHED TO THE 485 DATA BUS, LEAVE ADDRESS LINES FLOATING. (REF: MCC-19-102)
- SEE MCC DOCUMENT # MCC-19-188 FOR EIA-485 DATA BUS WIRING GUIDELINES.
- FOR 102027-3, -4, & -5 SEE MCC DOCUMENT # MCC-19-180 FOR INSTALLATION/OPERATION.
- DO NOT CONNECT ANY SPEAKER OUTPUT TO GROUND OR +28V.
- FUSES: USE ONLY 6 AMP FAST BLDV.
- SPEAKER WIRES SHOULD BE TWISTED PAIR CONSTRUCTION.
- MATING CONNECTOR KIT AVAILABLE FOR J1, J2 & J3. ORDER NUMBER: 656019, 656018 & 656021.
- J3 IS A RS-232 PORT FOR CONNECTING TO A PC FOR AMPLIFIER SETUP.
- PART NUMBER OF CONEC, INC.
- PART NUMBER OF ITT CANNON.
- "REMOVED"
- SETUP SOFTWARE IS USED TO SET 102027-3, 102027-4, & 102027-5 HIGH-PASS AUDIO FILTERS ON LEFT/RIGHT AUDIO CHANNELS AND LOW-PASS FILTER ON SUB-WOOFER CHANNEL. THE CUTOFF FREQUENCY RANGE FOR HPF & LPF IS 100HZ, 120HZ, 140HZ, 160HZ, 180HZ, 200HZ, 220HZ OR 240HZ. UNIT IS SHIPPED WITH LEFT/RIGHT HIGH-PASS SET AT 200HZ AND SUB-WOOFER LOW-PASS SET AT 220HZ. HIGH-PASS AND LOW-PASS FILTERS HAVE -12dB/OCTAVE ROLLOFF.
- THE 102027-3 & 102027-4 AMPLIFIERS DEFAULT TO A "CABIN SPEAKER OFF" STATE AT POWER UP. THE 102027-5 AMPLIFIER WILL FUNCTION ACCORDING TO THE TABLE BELOW.

102027-5 AMPLIFIER FUNCTIONALITY AT STARTUP

AMPLIFIER CONDITION	PIN STATUS AT STARTUP (CONNECTOR J1)	
	MUTE (PIN 5)	REMOTE TURN ON (PIN 6)
CABIN SPEAKER OFF	GND	FLOAT
CABIN SPEAKER OFF	GND	+28VDC
CABIN SPEAKER OFF	FLOAT	FLOAT
CABIN SPEAKER ON	FLOAT	+28VDC

②
③

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	DRWEN
-	0C	(1) REDRAWN WITH CHANGES. (2) CHANGED NOTE #15 AND ADDED TABLE FOR CLARIFICATION.	2/01/2008	048
13B	0	(1) RE-ADDED PART REFERENCE TO THE DISCONTINUED -1 & -2 AMPLIFIERS (2) CHANGED TABLE IN NOTE #15 TO MATCH DESIGN.	2/09/2008	048

WIRE DESCRIPTION - J3	
CONNECTOR DESCRIPTION	MATING CONNECTOR
PART NUMBER: -J3	PART NUMBER: -J3
CONCIP: CONECTOR	CONCIP: CONECTOR
024484: BACKSHELL	024484: BACKSHELL
020419-01: MALE SOCKETLOCK	020419-02: FEMALE JACKPOST
WIRE DESCRIPTION	CIRCUIT TYPE
1: NC	N/A
2: NC	N/A
3: RS-232 TX	NON-ISOLATED AMP TX
4: RS-232 RX	NON-ISOLATED AMP RX
5: GND	N/A
6: GND	GROUND REFERENCE
7: NC	N/A
8: NC	N/A

WIRE DESCRIPTION - J2	
CONNECTOR DESCRIPTION	MATING CONNECTOR
PART NUMBER: -J2	PART NUMBER: -J2
0008P005A30X: CONECTOR	0008P005B30A1X: CONECTOR
1300110208: CRIMP SOCKET	
WIRE DESCRIPTION	CIRCUIT TYPE
1: 0VDC	DC SUPPLY VOLTAGE
2: GND	DC RETURN
3: SPEAKER SUB +	SPEAKER LEVEL AUDIO OUTPUT
4: SPEAKER SUB -	SPEAKER LEVEL AUDIO OUTPUT
5: SPEAKER RIGHT +	SPEAKER LEVEL AUDIO OUTPUT
6: SPEAKER RIGHT -	SPEAKER LEVEL AUDIO OUTPUT
7: SPEAKER LEFT +	SPEAKER LEVEL AUDIO OUTPUT
8: SPEAKER LEFT -	SPEAKER LEVEL AUDIO OUTPUT

WIRE DESCRIPTION - J1	
CONNECTOR DESCRIPTION	MATING CONNECTOR
PART NUMBER: -J1	PART NUMBER: -J1
04041P: CONECTOR	04041P: CONECTOR
020281: BACKSHELL	020281: BACKSHELL
020419-01: MALE SOCKETLOCK	020419-02: FEMALE JACKPOST
WIRE DESCRIPTION	CIRCUIT TYPE
1: NC	N/A
2: DATA BUS TX (+)	DATABUS WIRING
3: DATA BUS TX (-)	DATABUS WIRING
4: REMOTE TURN ON	+28VDC INPUT
5: AUDIO COMMON	DC RETURN
6: HIGH LEVEL AUDIO - LEFT	HIGH LEVEL AUDIO INPUT
7: ADDRESS BIT 1	GROUND INPUT
8: ADDRESS BIT 2	GROUND INPUT
9: DATA BUS AUDIO - LEFT	DATABUS WIRING
10: DATA BUS AUDIO - RIGHT	DATABUS WIRING
11: LINE LEVEL AUDIO - LEFT	LINE LEVEL AUDIO INPUT
12: LINE LEVEL AUDIO - RIGHT	LINE LEVEL AUDIO INPUT
13: HIGH LEVEL AUDIO - RIGHT	HIGH LEVEL AUDIO INPUT

DIAGNOSTIC LED

A DIAGNOSTIC LED HAS BEEN INCLUDED TO HELP WITH THE INSTALLATION/ADJUSTMENT OF THIS AMPLIFIER.

LED OFF: NORMAL OPERATION
 LED BLINKING: CLIPPING IS OCCURRING IN THE OUTPUT SECTION.
 LED ON SOLID: WIRING ERROR OR APPROACHING THERMAL LIMIT.

■ HIGH LEVEL INPUTS ARE DESIGNED TO ACCEPT "PRE-AMP'D" AUDIO SIGNALS FROM AN MCC1 AUDIO MIX/DISTRIBUTION MODULE.
 DO NOT CONNECT SPEAKER LEVEL SIGNALS TO THIS AMPLIFIER.

MID CONTINENT CONTROLS, INC.
 (316)789-1049
 801 NORTH RIVER
 DERBY, KS 67037

AMPLIFIER - 3 CHANNEL
 HIGH POWER, HALF DUPLEX

FINISH: ANODIZE TYPE II
 CLASS II, BLACK-NIL-A-0625

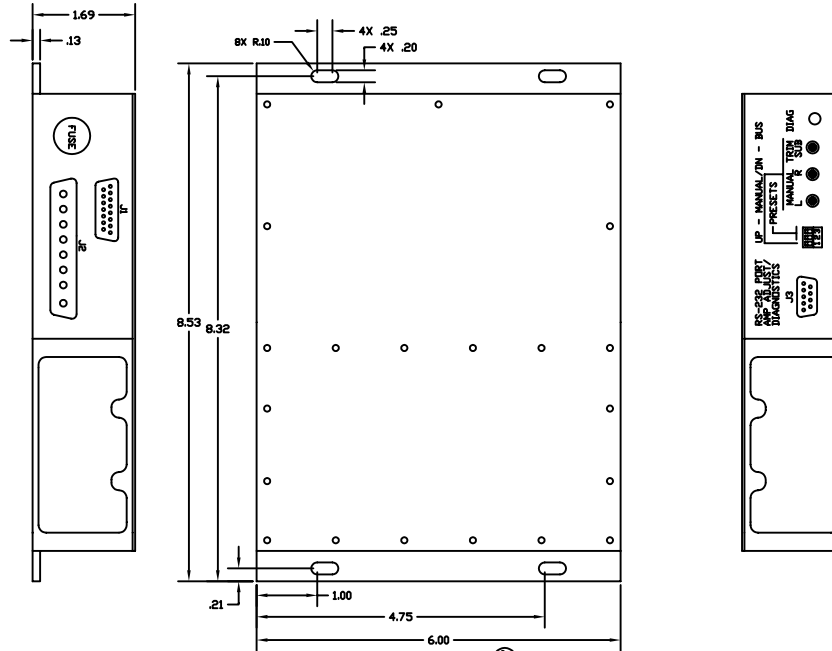
MATERIAL: N/A

SIZE: DRAWN: DLS DWG NO: 102027 REV: G
 SCALE: 1/1 DATE: 02/24/2004 SHEET: 1 OF 2

16 15 14 13 12 11 10 9

NOTES:
 1. SEE SHEET ONE FOR NOTES.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	DRAWN
SEE SHEET 1 FOR REVISIONS				



- ① DISCONTINUED AMP
- ② DISCONTINUED AMP
- ③ 3 CHANNEL AMP
- ④ 3 CHANNEL AMP
- ⑤ 3 CHANNEL AMP

MID-CONTINENT CONTROLS, INC. (316) 788-0000 821 NORTH RIVER DERBY, KS 67037		AMPLIFIER - 3 CHANNEL HIGH POWER, HALF DUPLEX	
FINISH: ANODIZE TYPE II CLASS II, BLACK-ML-A-0625 MATERIAL: N/A		SIZE DRAWN: D DRAWN: DLS SCALE: 1/1	DWG NO.: 102027 DATE: 02/24/2004 SHEET 2 OF 2

16 15 14 13 12 11 10 9