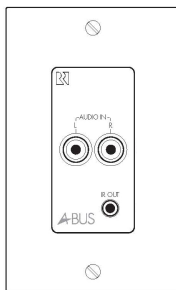


A-LC3 SERVICE MANUAL

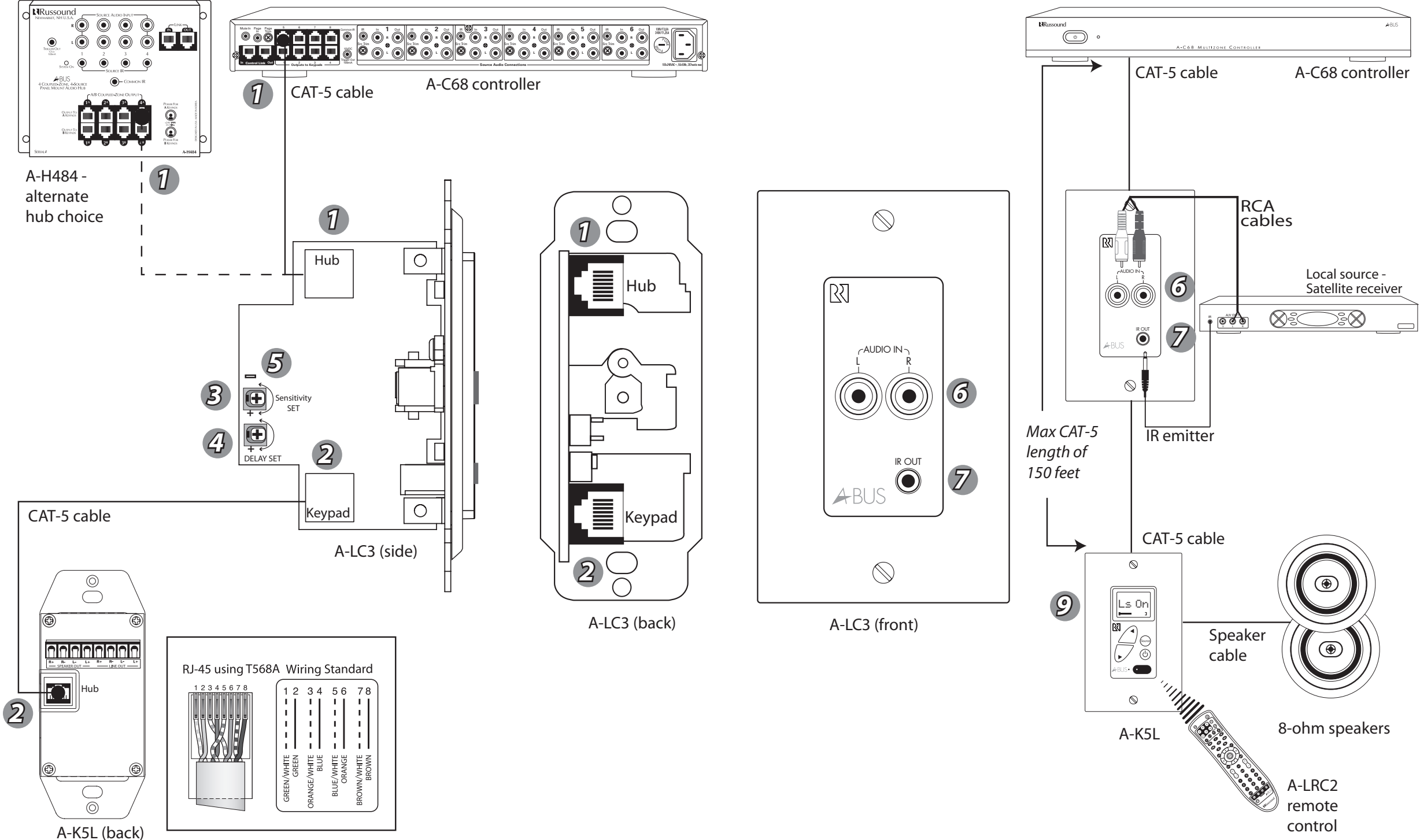


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CONNECTION DIAGRAM FOR A-LC3. REFER TO THE NUMBERED INSTRUCTIONS ON REVERSE. DIAGRAMS ARE NOT TO SCALE.



CONNECTION INSTRUCTIONS FOR A-LC3. REFER TO NUMBERED DIAGRAM ON REVERSE.

1 RJ45 Connector for CAT-5 (Hub/Controller)

The RJ45 “Hub” input provides a connection for the CAT-5 cable from an A-BUS hub/controller. Use the T568A wiring standard. The recommended maximum length for standard CAT-5 cable is 150 feet. Before connecting the A-LC3, disconnect the power supply from the A-BUS hub/controller and disconnect the Status power supply if used.

2 RJ45 Connector for CAT-5 (Keypad)

The RJ45 “Keypad” input provides a connection for the CAT-5 cable to the amplified keypad. Use the T568A wiring standard. The recommended maximum length for standard CAT-5 cable is 150 feet. Before connecting the A-LC3, disconnect the power supply from the A-BUS hub/controller and disconnect the Status power supply if used.

3 Adjustment for Switching Sensitivity

The rotary trim potentiometer provides adjustment of source switching sensitivity. This adjustment determines the level of signal that must be present before the A-LC3 will switch from the main source to the local source. Fully counter-clockwise is the lowest level; turn the trim screw clockwise until switching occurs.

4 Adjustment for Switching Delay

The rotary trim potentiometer provides adjustment of source switching delay. This adjustment determines the time it takes to return to the main source after the local source signal is no longer detected. Fully counter-clockwise is the lowest level; turn the trim screw clockwise until switching occurs.

5 Sensitivity and Switching Delay LED

The green LED indicator next to the sensitivity adjustment control helps the installer set the levels during installation.

When the A-LC3 is powered by the hub/controller (through RJ45 connection), the LED flashes three times to confirm hub connection. This takes 1.5 seconds, during which time the local source will not be looking for external audio. After this period, normal operation is initiated, and if any external audio is sensed it will be routed to keypads. This short power-up delay also allows A-K5L keypads to properly boot up. It is important not to send any codes to it before it is fully on-line, as the system could go out of sync.

The LED turns on when the A-LC3 switches to the local source input. Use the sensitivity adjustment with local source audio present until the LED is just above steady ON, then turn the sensitivity adjustment and additional 1/8th turn.

6 Line Level Input for Local Source

The Line Input with autosensing gold-plated stereo RCA jacks provides a stereo line-level audio input for a local source with an RCA cable connection.

7 IR Output Jack for Local Source

The 3.5mm mono IR output jack is used to connect a Russound IR emitter to a local source and transmit commands from the A-BUS keypad to the local source if remotely located (such as a closet or cabinet). When the local source input is active, all IR codes sent through the keypad will be routed to the IR emitter output on the A-LC3 (these commands will also be sent to the IR output of the last source selected by that keypad and to the Common IR output on the hub/controller, not routed only to the A-LC3).

8 Installation

Check all connections and test the system’s operation before installing the A-LC3 into the wall. Using the included hardware, install the A-LC3 into a standard UL/CSA single-gang electrical J-box.

9 Auto ON/OFF with A-K5L

The A-LC3 allows a local source to play through that room’s speakers, instead of what’s playing on the main source, and its volume is controlled using that room’s amplified keypad.

When the local source is activated, the A-LC3 automatically turns ON (if it is OFF) the A-K5L keypad in the zone. If the keypad is on, when the local source becomes active it overrides the main source audio in that room, and when inactive, returns the room to the main source audio.

When the A-LC3 is active with the A-K5L keypad, the local source will turn the keypad ON to a preprogrammed volume. This value (LsVol) is set in the A-K5L programming menu.

The A-K5L LCD screen displays “Ls On” to indicate the local source has turned the zone on. If the keypad is turned off but the local source input is still active, the keypad returns to the “Ls On” state.

When the A-LC3 loses the signal (no audio present on the line level inputs), the A-LC3 turns off the A-K5L. The zone status LED remains lit until the A-K5L is power cycled.



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Safety Instructions

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to.
4. Follow Instructions - All operating and user instructions should be followed.
5. Water and Moisture - The appliance should not be used near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.
6. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
7. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
8. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
9. Grounding or Polarization - Precaution should be taken so that the grounding or polarization means of an appliance is not defeated.
10. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
11. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
 - The power supply cord or the plug has been damaged;
 - Objects have fallen, liquid has been spilled into the appliance
 - The appliance has been exposed to rain
 - The appliance does not appear to operate normally
 - The appliance has been dropped or enclosure is damaged.
12. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
13. Care – From time to time you should wipe off the front panel with a soft dry cloth.

Limited Warranty

The Russound A-LC3 is fully guaranteed for two (2) years from the date of purchase against all defects in materials and workmanship. During this period Russound will replace any defective parts and correct any defect in workmanship without charge for either parts or labor. For this warranty to apply, the unit must be installed and used according to its written instructions. If service is necessary, it must be performed by Russound. Russound assumes no responsibility for defects resulting from abuse or servicing performed by an agency or person not specifically authorized in writing by Russound. Damage to or destruction of components due to improper use voids the warranty. In these cases the repair will be made at the owner's expense. Accidental damage and shipping damage are not considered defects under the terms of the warranty. To return for repairs, the unit must be shipped to Russound at the owner's expense, along with a Return Authorization number and documentation explaining the nature of the service required. Any product returned without prior written permission will be returned to sender. Russound sells products only through authorized Dealers and Distributors to ensure that customers obtain proper support and service. Any Russound product purchased from an unauthorized dealer or other source, including retailers, mail order sellers and online sellers will not be honored or serviced under existing Russound warranty policy. Any sale of products by an unauthorized source or other manner not authorized by Russound shall void the warranty on the applicable product.



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Tel 603.659.5170 • Fax 603.659.5388
e-mail: tech@russound.com

28-1272 Rev. 1 04/01/08



A-LC3
Local Input Module
for A-BUS® System
Installation Manual

A-LC3 Overview

The Russound A-LC3 is an in-wall local source input module used with A-BUS® hubs and controllers in a distributed audio system. An A-LC3 in a room lets a local source or portable audio component be heard over the room’s speakers independently from other rooms in the A-BUS system.

The A-LC3 connects between the A-BUS hub/controller and an A-BUS amplified keypad via CAT-5 cable. The A-LC3 automatically selects between an independent local source (e.g., portable CD player) and the source of an A-BUS system. It can be used with both single- and multi-source A-BUS hubs/controllers.

A-LC3 Features

- Auto turn ON of zone when used with A-K5L keypad
- IR emitter output for IR control of local source
- Stereo audio input
- Automatic switching between local and main source
- Switching sensitivity adjustment
- Switching delay adjustment

A-LC3 Specifications

Input Sensitivity:	1 Vrms
Power Requirements:	+24VDC, 20mA
Switching Delay:	3 to 60 seconds
CAT-5 Connections:	RJ45 connector
IR Emitter Connection:	3.5mm mono IR output jack
Dimensions (in-wall):	1.75”W x 2.875”H x 1.75”D (45x73x45mm)
Weight:	3.5 oz. (100g)



A-BUS is a registered trademark of LeisureTech Electronics Pty Ltd Australia

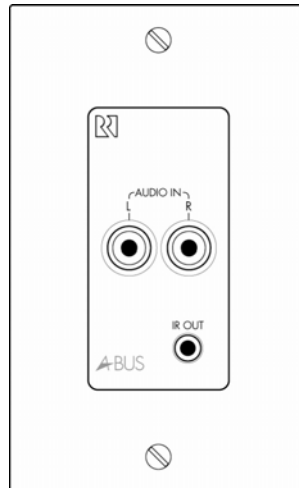
This product may be covered by one or more of the following patents: US #7,181,023, #6,389,139; EP #1004222, AU #739808, NZ #502982, Mexico #241196, Canada #CA2301062

Russound®

A-LC3

A-Bus® Local Input Module Test Procedure

Revision 1.4



The A-LC3 is an in-wall local source input module used with Russound® A-BUS® hubs and controllers in a multiroom audio system.

The purpose of this document is to provide a standardized full functional test process for the Russound® A-LC3 Local Source Input Module.

The approximate time needed to perform this test is 5 minutes.

Contents

1. Inspection	Page 2
2. Equipment Needed	Page 2
3. Connections	Page 2
4. Setup	Page 3
5. Local Source Test	Page 4
6. Revision History	Page 4

Inspection

Russound customers expect the best; defects are unacceptable. Inspect the Unit Under Test (UUT) visually for any blemishes, missing pieces and visual indications that may cause concern. Passing visual inspection is a condition of passing full test. Correct *any* defect before passing the UUT; if the UUT has defects that cannot be corrected, notify your supervisor. Inspect the UUT before and after functional testing.

Equipment Needed

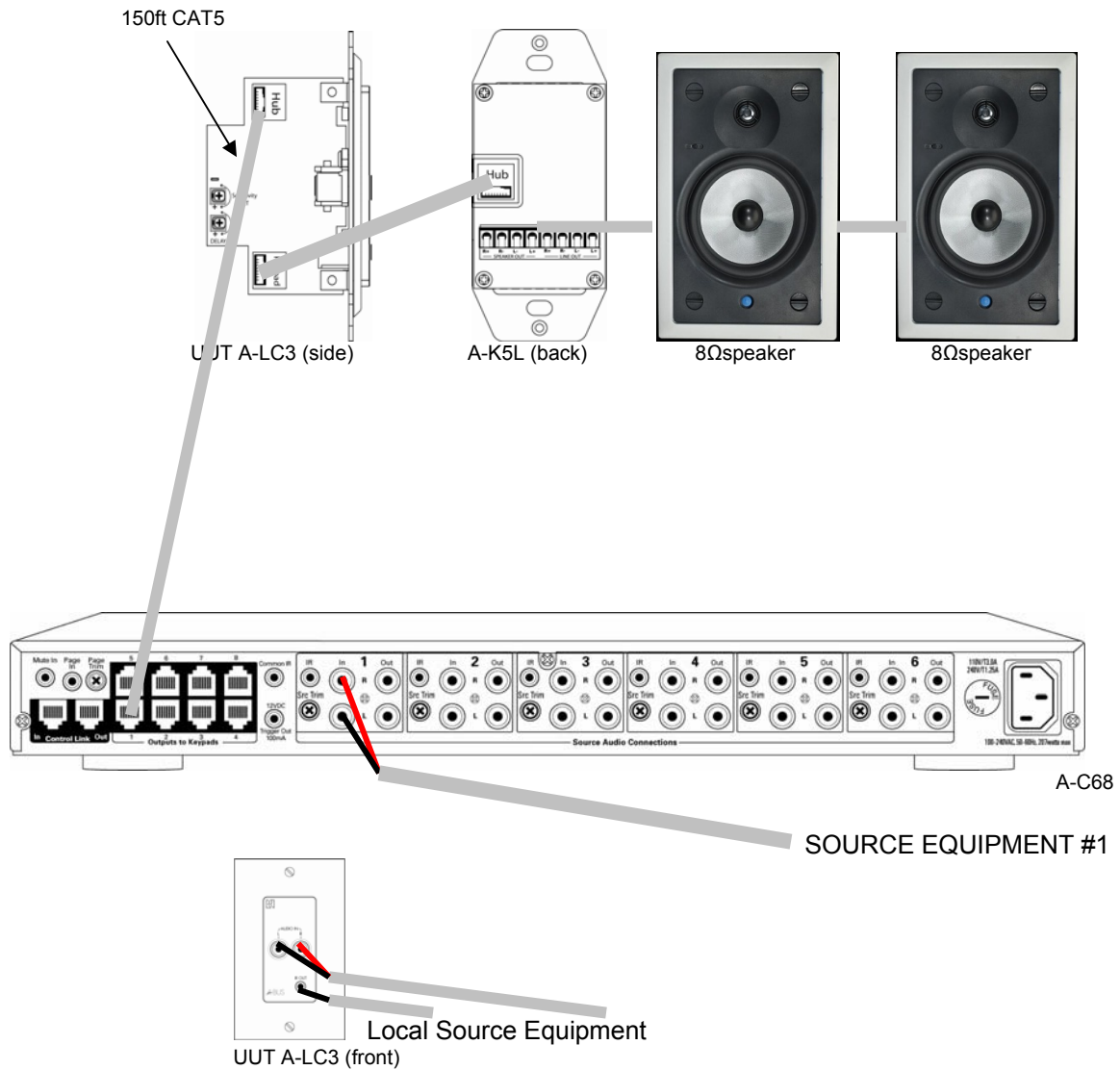
1. (2) CD player or other piece of compatible source equipment with Remote.
2. (2) 8 Ω Speaker
3. (2) 16-14 gauge stranded speaker wire
4. (4) Stereo RCA cable
5. (1) T568A CAT-5 straight-through patch cable (150 feet)
6. (1) T568A CAT-5 straight-through patch cable (3 feet minimum)
7. (1) Russound 845.1 IR emitter.
8. (1) Russound A-K5L

Connections

1. Connect source equipment #1 into A-C68 Source 1 input L & R via stereo RCA cable.
2. Connect UUT A-LC3 to ZONE 1 of A-C68 with 150 feet of CAT-5 cable.
3. Connect A-K5L to 8 Ω speakers according to the A-K5L manual.
4. Connect A-K5L keypad to UUT A-LC3 with 3 feet of CAT-5 cable.
5. Connect UUT A-LC3 IR to Local Source equipment via 845.1 emitter.
6. Connect UUT A-LC3 L and R audio in to Local Source L and R audio Out.

[*See Appendix](#)

Setup



NOTE:

- Keypad Dip Switches on the A-C68 should be set in the DOWN position when testing with A-K5L keypads.
- The update/run switch should be set to run position to begin testing.

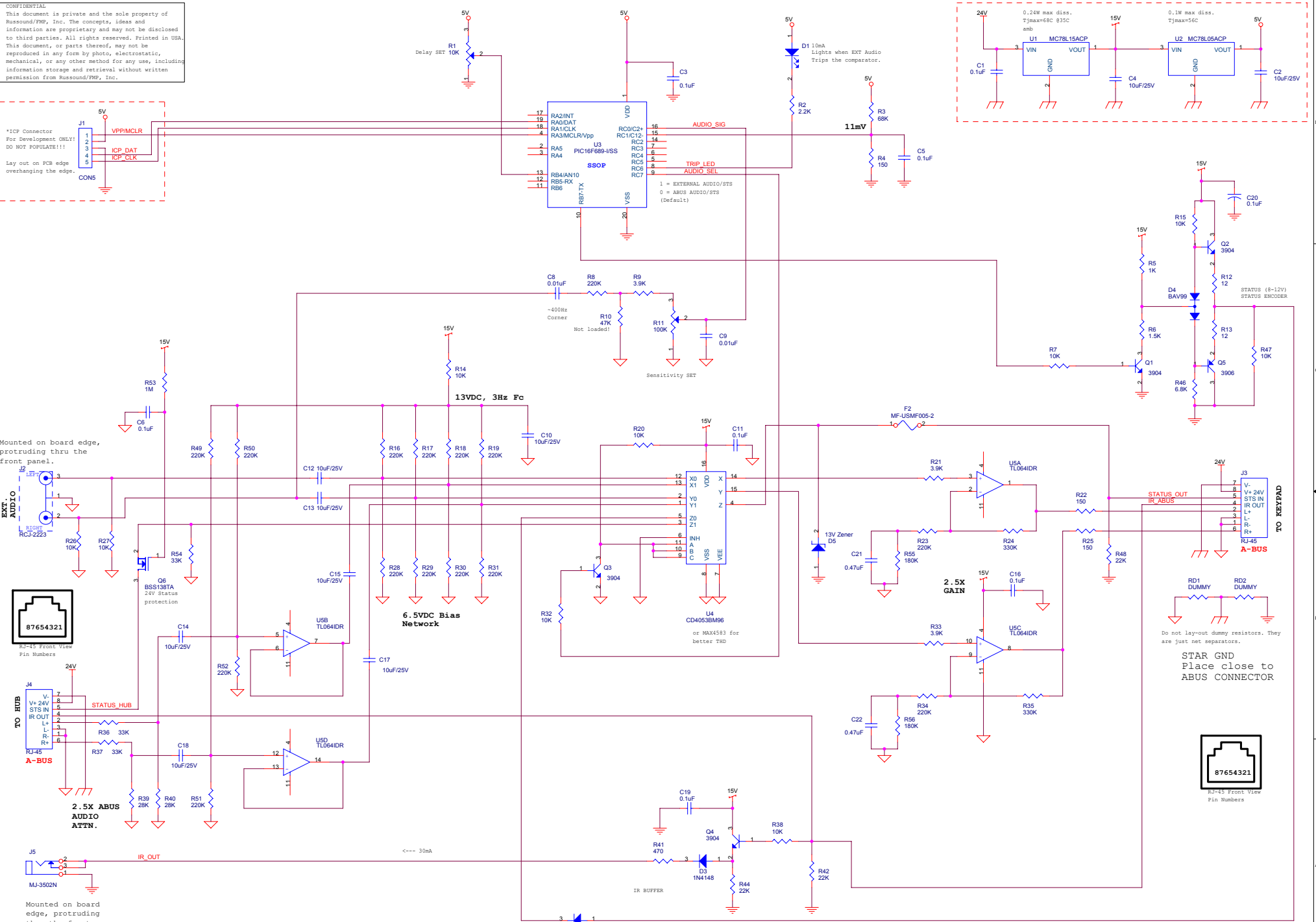
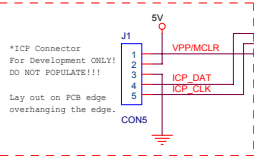
Local Source Test

1. Turn on the A-C68 Hub, and A-K5L connected to the UUT A-LC3.
2. Turn on Local Source audio and adjust Local Source Sensitivity: The LED D1 on the UUT PCB should turn on when the A-LC3 switches to the local source input. Use sensitivity adjustment (R11) with local source audio present until LED (D1) is just above steady ON, then turn sensitivity adjustment an additional 1/8th turn.
3. Set the Delay adjustment (R1) to full counter-clockwise.
4. Stop the signal from the Local Source.
5. A-K5L should turn off.
6. Press power button on A-K5L.
7. Activate Source equipment #1 connected to the A-C68 and play through the A-K5L by selecting Src 1.
8. Aim the Remote for the Local Source equipment (connected to the UUT A-LC3) at the A-K5L and press the play button to play audio from the Local Source.
NOTE: Be sure that the IR signal cannot be picked up directly by the Local Source directly when testing the IR through the A-K5L.
9. You should hear audio from Local Source connected to the UUT A-LC3. A-K5L display reads: "LS On".
10. Use the Remote for the Local Source equipment to pause the Local Source Signal.
11. After a 3 second pause, A-K5L turns off
12. Set the Delay adjustment (R1) to full clockwise.
13. Press power button on A-K5L.
14. Activate Source equipment #1 connected to A-C68 and play through the A-K5L by selecting Src 1.
15. Aim Remote for Local Source equipment (connected to the UUT A-LC3) at the A-K5L to play audio from the Local Source.
16. You should hear audio signal from Local Source connected to the UUT A-LC3.
17. Use the Remote for the Local Source equipment to turn off the Local Source Signal.
18. After a 60 second pause, A-K5L turns off.

Revision History

A-LC3 Test Procedure Revision History			
Revision	Date	Revision Summary	Initial
1.1	4/30/07	Initial release	TomS
1.2	12/17/07	Corrections	TomS
1.3	12/21/07	Corrections	TomS
1.4	3/27/08	Corrections	TomS

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Mounted on board edge, protruding thru the front panel.



TO HUB
V+ 24V
STS IN
IR OUT
L+
L-
R+
R-
RJ-45
A-BUS

2.5X ABUS
AUDIO
ATTN.

Mounted on board edge, protruding thru the front panel.

STAR GND
Place close to
ABUS CONNECTOR



Item	Qty. EA	Reference	Value/Desc.	Tol %	Source 1			Source 2	
					Mfg.	Part Number	Pack	Mfg.	Part Number
1	1	U1	15V regulator	N/A	ON Semi	MC78L15ACP	TO-92		or Off-Shore Equivalent
2	1	U2	5V regulator	N/A	ON Semi	MC78L05ACP	TO-92		or Off-Shore Equivalent
3	1	U3	MCU	N/A	Microchip	PIC16F689-I/SS	SSOP20G	NONE	NONE
4	1	U4	IC MUX/DEMUX	N/A	TI	CD4053BM96	DIP16SO\IPC		or Off-Shore Equivalent
5	1	U5	IC QUAD JFET-opa	N/A	TI	TL064IDR	DIP14SO\IPC		or Off-Shore Equivalent
6	4	Q1,Q2,Q3,Q4	3904	N/A	ON Semi	MMBT3904LT3G	SOT-23\132	Micro Com	MMBT3904-TP
7	1	Q5	3906	N/A	Phillips	PMBT3906 T/R	SOT-23\132	ON Semi	MMBT3906LT1G
8	1	Q6	N-CH MOSFET	N/A	Fairchild	BSS138	SOT-23\132	ON Semi	BSS138LT1G
9	1	D4	BAV99 Dual Diode	N/A	ON Semi	BAV99LT1G	SOT-23\132		or Off-Shore Equivalent
10	2	D2,D3	1N4148	N/A	Fairchild	MMBD4148SE	SOT-23\132	Micro Com	MMBD4148-TP
11	1	D5	13V Zener, 1.5W (1W)	N/A	ON Semi	1SMA5928BT3G	SMA	Micro Com	SMAJ4743A-TP
12	1	D1	LED - Green	N/A	ROHM	SML-310MTT86	0603\LED	Stanley Electric	PG1111C-TR
13	2	C8,C9	0.01UF 50V CERAMIC X7R	10%	AVX	06035C103KAT2A	0603		or Off-Shore Equivalent
14	8	C1,C3,C5,C6,C11,C16,C19,C20	0.1uF / 50V Y5V(F)	-20/80%	MURATA	GRM188F51H104ZA01D	0603	Taiyo Yuden	UMK107F104ZA-T
15	2	C21,C22	0.47uF/16V X5R	10%	AVX	0603YD474KAT2A	0603	MURATA	GRM188F51C474ZA01D
16	9	C2,C4,C10,C12,C13,C14,C15,C17,C18	CAP CER 10UF 25V Y5V	-20/80%	Taiyo Yuden	TMK316F106ZL-T	1206	Panasonic	ECJ-3YF1E106Z
17	15	R8,R16,R17,R18,R19,R23,R28,R29,R30,R31,R34,R49,R50,R51,R52	220K	5.0%	YAGEO	RC0603JR-07220KL	0603	Panasonic	ERJ-3GEYJ224V
18	3	R42,R44,R48	22K	5.0%	YAGEO	RC0603JR-0722KL	0603	Rohm	MCR03EZPJ223
19	2	R39,R40	28K	1.0%	YAGEO	RC0603FR-0728KL	0603	Panasonic	ERJ-3EKF2802V
20	9	R7,R14,R15,R20,R26,R27,R32,R38,R47	10K	5.0%	YAGEO	RC0603JR-0710KL	0603	Panasonic	ERJ-3GEYJ103V
21	3	R4,R22,R25	150 OHM	5.0%	YAGEO	RC0603JR-07150RL	0603		or Off-Shore Equivalent
22	3	R9,R21,R33	3.9K	5.0%	YAGEO	RC0603JR-073K9L	0603	Panasonic	ERJ-3GEYJ392V

23	2	R24,R35	330K	5.0%	YAGEO	RC0603JR-07330KL	0603		or Off-Shore Equivalent
24	3	R36,R37,R54	33K	5.0%	YAGEO	RC0603JR-0733KL	0603		or Off-Shore Equivalent
25	1	R2	2.2K	5.0%	YAGEO	RC0603JR-072K2L	0603	Panasonic	ERJ-3GEYJ222V
26	1	R3	68K	5.0%	YAGEO	RC0603JR-0768KL	0603		or Off-Shore Equivalent
27	2	R55,R56	180K	5.0%	YAGEO	RC0603JR-07180KL	0603		or Off-Shore Equivalent
28	1	R6	1.5K	5.0%	YAGEO	RC0603JR-071K5L	0603		or Off-Shore Equivalent
29	0	R10	47K	5.0%	YAGEO	RC0603JR-0747KL	0603	Rohm	MCR03EZPJ473
30	1	R5	1K	5.0%	YAGEO	RC0603JR-071KL	0603		or Off-Shore Equivalent
31	1	R46	6.8K	5.0%	YAGEO	RC0603JR-076K8L	0603		or Off-Shore Equivalent
32	2	R12,R13	12 ohm	5.0%	YAGEO	RC0603JR-0712RL	0603		or Off-Shore Equivalent
33	1	R53	1M	5.0%	Panasonic	ERJ-3GEYJ105V	0603		or Off-Shore Equivalent
34	1	R41	470 ohm	5.0%	YAGEO	RC0603JR-07470RL	0603		or Off-Shore Equivalent
35	1	R1	POT, 10K TOP ADJ	10.0%	MURATA	PVC6A103C01B00	POT_PVC6A		or Off-Shore Equivalent
36	1	R11	POT, 100K TOP ADJ	10.0%	MURATA	PVC6A104C01B00	POT_PVC6A		or Off-Shore Equivalent
37	0	J1	5 pin RA hdr 0.1"-Dev Only!	N/A	3M	929835-01-36	MOLEX_1X5	AMP/Tyco	640453-5
38	1	J2	RCA JACK 2X R/A RED/WHT	N/A	CUI	RCJ-2232	RCJ-2223		
39	2	J3,J4	RJ-45 Receptacle	N/A	AMP/Tyco	5555164-1	RJ45_H_520426-	AMP/Tyco	5555166-1
40	1	F2	FUSE RESETTABLE .05A 30V	N/A	Bourns	MF-USMF005-2	1210	Bourns	MF-USMF010-2
41	1	J5	AUDIO JACK 3.5MM MONO	N/A	CUI	MJ-3502N	MJ-3502N		
42	1	PCB		N/A					

rev H

A-LC3 BOM

Item	Qty. EA	Reference	Value/Desc.	Tol %	Source 1		Source 2	
					Mfg.	Part Number	Mfg.	Part Number
1	1	N/A	CPU SUB ASSY	N/A		RUS30075		
2	1	N/A	METAL BRACKET	N/A		RUS30028		
3	1	N/A	PANEL FRONT - MOLDING	N/A		RUS30027		
4	2	N/A	SCREW Pan, Phillips, M3X5, Zn Plated	N/A	McMaster	92005A114		or Off-Shore Equivalent
5	1	N/A	SCREW Sheet Metal PANHEAD PHILLIPS 4X3/8	N/A	Building Fasteners	4X3/8 PHSMSPH		or Off-Shore Equivalent
6	1	J4	HUB Label	N/A		RUS30031		
7	1	J3	KEYPAD Label	N/A		RUS30030		
8	1	N/A	Assy Drawing	N/A		RUS30026		
9	1	N/A	Approvals Sticker	N/A		RUS30035		
10	1	N/A	Serial Number Sticker	N/A		RUS30036		



COPY

Ref. Certif. No.

US-TUVR-3759

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

Product
Produit

A-BUS Multizone Multisource Audio Controller

Name and address of the applicant
Nom et adresse du demandeur

Russound/FMP, Inc.
5 Forbes Road
Newmarket, NH 03857 US

Name and address of the manufacturer
Nom et adresse du fabricant

Same as applicant

Name and address of the factory
Nom et adresse de l'usine

INGOT CORPORATION
NO.39, 21ST ROAD,
TAICHUNG INDUSTRIAL PARK
TAICHUNG CITY, TAIWAN R.O.C. (408)

Note: When more than one factory, please report on page 2
Note: Lorsque il y a plus d'une usine, veuillez utiliser la 2^{ème} page

Ratings and principal characteristics
Valeurs nominales et caractéristiques principales

AC 100-240V, 50-60Hz, 207W max.

Trademark (if any)
Marque de fabrique (si elle existe)

Russound

Model / Type Ref.
Ref. De type

A-C68

Additional information (if necessary, may also be reported
on page 2)
Les informations complémentaires (si nécessaire, peuvent
être indiqués sur la 2^{ème} page)

Complies with requirements as well as group and national differences
where applicable for AU, CA, DE, DK, MY, NO, GB, US, and SE.

A sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à la

PUBLICATION
IEC 60065 + Amd 1

EDITION
7th Edition (2001)

As shown in the Test Report Ref. No. which forms part of
this Certificate
Comme indiqué dans le Rapport d'essais numéro de
référence qui constitue partie de ce Certificat

30781094.001

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de Certification



TUV Rheinland
of North America

July 09, 2007

Page 1 of 1

Date:

Signature:

Marlies Raap

Certificate



Certificate no.

CU 72071703 02

License Holder:

Russound/FMP, Inc.
5 Forbes Road
Newmarket NH 03857
USA

Manufacturing Plant:

Hansong (Nanjing) Technology
Co., Ltd
Jiangning Development Zone
8th Kangping Rd.

211100 Nanjing
China

Test report no.: USA-WS 30781094 004

Client Reference: John Cronk

Tested to: UL 60065:2003 R11.06
CSA C22.2.60065:2003+A1:06

Certified Product: A-BUS Multizone Multisource Audio Controller License Fee - Units

Change:

Following Manufacturing Plant no longer valid:

INGOT CORPORATION
21ST ROAD, NO.39
408 TAICHUNG INDUSTRIAL PARK
TAICHUNG CITY, Taiwan - R.O.C.

(K751698)

Addition:

Manufacturing Plant: see above

(K752356)

Appendix: 1, 1-21

Inh. = 740859 / Deb. = 740859 / Fert. = 752356

Licensed Test mark:



Signature

A handwritten signature in black ink, appearing to read 'M. Raap'.

Dipl.-Ing. M. Raap
QA Certification Officer

Date of Issue
(day/mo/yr)

02/04/2008

Test Report Number:		30760587.001 Russound - A-Bus.doc		Test Report Summary	
Prübericht Nr.:					
Applicant:		Russound/FMP, Inc.		Tel: (603) 659-5170	
Auftraggeber:		5 Forbes Road		Fax: (603) 659-5388	
		Amplified Keypad system		John Cronk	
Type of Equipment:		Amplified Keypad system			
Gegenstand der Prüfung:					
Model Numbers:		Trademark:			
Bezeichnung:		A-BUS		Ursprungszeichen:	
Standards:		See details below		Date Of Testing:	
Prufgrundlage:				April 12 th – 18 th 2007	
Standard Number	Description	Severity Level or Limit	Minimum Acceptable Performance Criteria	Summary Result	
EN 55020:2002 +A1: 2003	Electromagnetic Immunity of broadcast receivers and associated equipment	See Below	See Below	Complies	
EN 55020 Section 5.6	Measurement of electrical fast transients	1.0kV on AC Input Power port	B	Complies	
EN 55020 Section 5.7	Measurement of immunity to induced voltages	0.15-30MHz, 130dBµV (emf) 30-100MHz, 120dBµV (emf) 100-150MHz, 120-110dBµV (emf) 1kHz, 80% AM	A	Complies	
EN 55020 Section 5.8	Measurement of immunity from radiated fields	1kHz 80% AM between 0.15 – 150MHz, 125dBµV/m 900MHz, 3V/m, 1/8 Duty Cycle, 217Hz repetition frequency	A A	Complies	
EN 55020 Section 5.9	Electrostatic Discharge Immunity	±8 kV Air Discharge, ±4 kV Contact Discharge to HCP & VCP	B	Complies	
EN 55013: 2001 +A1: 2003	Limits and methods of measurement of radio disturbances characteristics of broadcast receivers and associated equipment	See Below	See Below	Complies	
EN 55013:2001 +A1: 2003	Disturbance Power	Table 4	NA	Complies	
FCC §15.109(a) and 15.107(a)	Radiated Emissions and Conducted Emissions	Class B	NA	Complies	
EN 61000-3-2: :2000 + A2: 2005	Power Harmonics	Class A	NA	Complies	
EN 61000-3-3:1995 +A1: 2001	Voltage Fluctuation	Per Section 5	NA	Complies	
Tested only for the standards listed above, by the request of the applicant. Evaluation to other required standards for EMC compliance is the responsibility of the applicant.					
Place of Test:		TUV Rheinland of North America, 12 Commerce Road, Newtown, CT 06470 USA		NVLAP®	
Prüfört:		E-mail: info-new@tuv.com Web: http://www.tuv.com Phone: (203) 426-0888 Fax: (203) 429-4009		FOR THE SCOPE OF ACCREDITATION UNDER NVLAP LAB CODE 200111-0	
Test Result:		Unit presented for testing complied with criteria shown above. Additional information is contained in the following pages.			
Prüfergebnis:					
Tested By:		Dieter Baldamus		Checked By:	
Der Sachverständige:				Bruce Fagley	
					
July 23, 2007		July 23, 2007			
Date, Signature		Date, Signature			
Datum, Unterschrift		Datum, Unterschrift			

The test results contained in this report refer exclusively to the product(s) presented for testing. No liability may be assumed for models or products not referred to herein. This test report may not be published or duplicated in part without permission of the testing body. This test report by itself does not constitute authorization for the use of any TÜV Rheinland test mark. This report must not be used by the applicant to claim product endorsement by TÜV Rheinland, NVLAP or any agency of the U.S. Government.

TÜV Rheinland of North America, Inc., North American Headquarters, 12 Commerce Road, Newtown, CT 06470 - Tel (203)426-0888 - Fax (203)426-4009



DECLARATION OF CONFORMITY

Completed date: 12/29/08

Manufacturer's Name: Russound

Manufacturer's Address: 5 Forbes Road, Newmarket N.H. 03857

Telephone Number: 1-603-659-5170

Fax Number: 1-603-659-5388

Equipment Description: CONSUMER ELECTRONICS AUDIO DISTRIBUTION SYSTEM
CONTROLLER WITH KEYPADS.

Equipment Model Designation: A-C68, A-K3, A-K5L, A-KSC and A-LC3.

**Application of Council Directive: 73/23/EEC on the harmonization of the laws related to
Member States relating to electrical equipment designed for use within certain voltage
limits, as amended by: Council Directive 93/68/EEC and**

Council Directive 89/336/EEC on the approximation of the laws related to Member States relating
to electromagnetic compatibility, as amended by: Council Directive 93/68/EEC.

Referenced Safety Standards: Referenced EMC Standards:

CB Certificate Issued: 06/19/08

CSA C22.2.60065 : 2003 + A1 : 06

UL 60065 : 2003 R11. 06

IEC 60065 : 2001 + Amd 1

EN 55020:2002 +A1: 2003

EN 55020 Section 5.6

EN 55020 Section 5.7

EN 55020 Section 5.8

EN 55020 Section 5.9

EN 55013: 2001 +A1: 2003

FCC 15.109(a) and 15.107(a)

EN 61000-3-2: :2000 + A2: 2005

EN 61000-3-3:1995 +A1: 2001

I, the undersigned, hereby declare that the equipment specified above conforms to the above
Directive(s) and Standard(s).

Signature:

A handwritten signature in black ink, appearing to read 'Peter Engel'.

Printed Name: Peter Engel

Title: Engineering Support