

KRAMER



USER MANUAL

MODEL:

Galil 2-C

Closed-back Ceiling Speakers



Galil 2-C Quick Start Guide

This guide helps you install and use your product for the first time. For more detailed information, go to <http://www.kramerav.com/manual/Galil-2-C> to download the latest manual or scan the QR code on the left.

Step 1: Check what's in the box

- ✓ Galil 2-C Full-range Closed-back Ceiling Speaker

Step 2: Choose the best location

Ideally, locate the speakers above the main listening area. Before doing so, be sure that:

- The desired location is free of obstructions, such as electric piping, AC ducts or water lines, and so on
- There is enough space behind the mounting surface for the speakers
- The rear side of the speakers is not blocked by wall studs or other objects

Step 3: Install the speaker

Always switch OFF the power on each device before connecting it to your **Galil 2-C** speaker. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **Galil 2-C**.

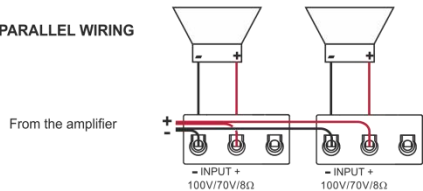
To install the speakers:

- Cut the ceiling tile
- Route the wires from the amplifier to the speaker through the ceiling
- Remove the speaker grille, adjust the tap setting and then reinstall the grille

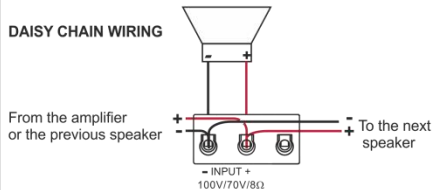


- Remove the back-can and punch out the appropriate knockout hole. Use a grommet or cable gland to pass the wires through the back-can
- Connect the speaker wires (parallel or daisy-chain) and then snap the back-can in place
- Push the spring clamps upwards so that the speaker can be inserted through the cutout hole

PARALLEL WIRING



DAISY CHAIN WIRING



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1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront video, audio, presentation, and broadcasting professionals on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Our 1,000-plus different models now appear in 14 groups that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Routers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Video Products; GROUP 12: Digital Signage; GROUP 13: Audio; and GROUP 14: Collaboration.

Congratulations on purchasing your Kramer **Galil 2-C** Closed-back Ceiling Speakers, which can be installed in any location that requires emergency systems according to **EN 54-24 Type A** and is ideal for general purpose applications, such as:

- Hotel lobbies and conference rooms
- Shopping malls
- Factories
- Universities and schools
- Classrooms and training rooms
- Boardrooms and presentation venues

EN 54-24 Type A Certified Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings.

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual



Go to <http://www.kramerav.com/downloads/Galil-2-C> to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

2.1 Achieving the Best Performance

To achieve the best performance:

- Use only good quality connection cables (we recommend Kramer high-performance, high-resolution cables) to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Do not secure the cables in tight bundles or roll the slack into tight coils
- Avoid interference from neighbouring electrical appliances that may adversely influence signal quality
- Position your Kramer Speakers away from moisture, excessive sunlight and dust

Note that you need to use external equalization to comply with the EN 54-24 standard.



This equipment is to be used only inside a building. It may only be connected to other equipment that is installed inside a building.



Do not open the housing of the speaker; doing so may reduce the quality of the sound.

2.2 Recycling Kramer Products

The Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring it to be collected and recycled. To comply with the WEEE Directive, Kramer Electronics has made arrangements with the European Advanced Recycling Network (EARN) and will cover any costs of treatment, recycling and recovery of waste Kramer Electronics branded equipment on arrival at the EARN facility. For details of Kramer's recycling arrangements in your particular country go to our recycling pages at <http://www.kramerelectronics.com/support/recycling/>.

3 Overview

The **Galil 2-C** is a 2.5" full-range high-performance fireproof closed-back speaker with ceramic terminals and a plastic self-extinguishing back-can. The **Galil 2-C** is specially designed to meet the requirements for fire alarm systems in public spaces.

The **Galil 2-C** speaker features:

- A multi-tap power transformer for selecting 8Ω (bypassing the transformer) or 70V/100V power settings that are suitable for an array installation
- 10W RMS power
- Intelligible and supreme clarity for both sound and music
- A thermal fuse that prevents it from burning and damaging the amplifier so that if one of the speakers in an array installation malfunctions, the other speakers can continue working undisturbed
- Heat-resistant wires that can endure high temperatures
- Ceramic Terminal Block which is heat resistant at high temperatures
- Two 20.5mm knockout holes and two 11mm knockout holes on the back-can for passing the cables through via grommet/cable gland
- Two spring clamps for quick and easy ceiling installation
- An ABS enclosure which makes it a light-weight speaker

3.1 Defining the Galil 2-C

[Figure 1](#) defines the **Galil 2-C**:

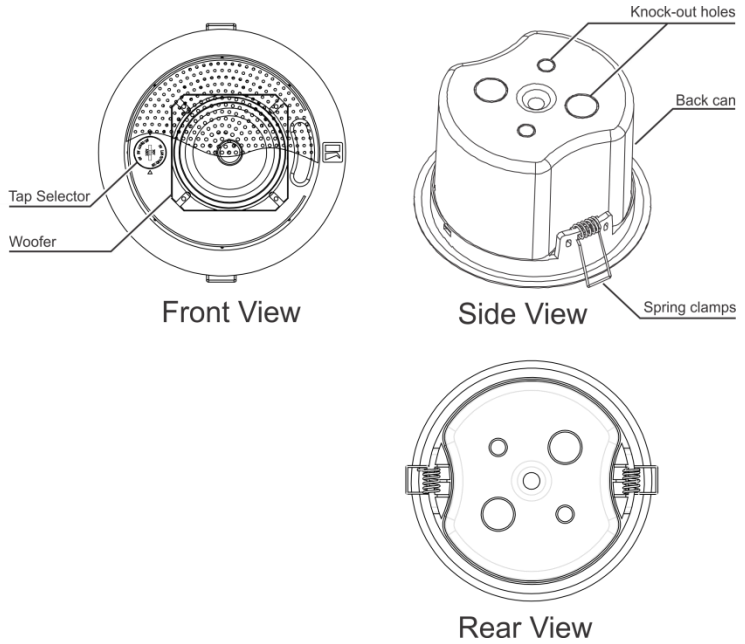


Figure 1: Galil 2-C Closed-back Ceiling Speaker

4 Installing the Galil 2-C Closed-back Ceiling Speakers

This section explains how to install the **Galil 2-C**, that is:

- Choosing the best place to locate your speaker (see [Section 4.1](#))
- Cutting the ceiling tile (see [Section 4.2](#))
- Mounting a Speaker (see [Section 4.3](#))
- Setting up an array installation (see [Section 4.4](#))
- Painting the speakers (see [Section 4.5](#))

4.1 Choosing the Best Location

Ideally, locate the speakers above the main listening area. Before doing so, be sure that:

- The desired location is free of obstructions, such as electrical piping, AC ducts or water lines, and so on
- There is enough space behind the mounting surface for the speakers
- The rear side of the speaker is not blocked by wall studs or other objects

4.2 Cutting the Ceiling Tile

To cut the ceiling tile, do the following:

1. Print the cutout template from our Web site and make sure that the template size is correct (12.6cm in diameter).
2. Cut the template.
Keep the cutout template for later use as a mask, as you may want to paint the speakers (see [Section 4.5](#))
3. Mark the opening in the correct location by tracing the hole in the template.
4. Cut out the hole according to the template or with a circular cutter set to the appropriate cutout size.
Initially, you can cut a smaller area inside the marked hole just to be sure that the space above the speaker is clear

5. Route the wiring from the amplifier to the speaker's cutout hole, taking care not to place them next to electrical wires or at least at a distance of about two feet from an AC line.



Do not nail or staple the speaker wires.

4.3 Mounting the Speaker

To mount the speaker

1. Remove the grille using a grille remover device, and adjust the speaker to the appropriate tap setting (see [Figure 2](#)).



Figure 2: Adjust Tap Selector

2. Reattach the grille:
 - Push the grille fastener into the hole in front of the baffle
 - Press the grille into place until the front of the grille is flush with the rim of the baffle
 - Check that the grille is securely seated
3. Remove the back-can by gently pushing the two snaps in the snap holes with a screwdriver.
4. Punch out a knockout hole (a small or a large one) that fits the size of the grommet/cable gland you are about to use.
The speaker cable should fit the grommet/cable gland with minimum space left (see [Figure 3](#)).



Make sure you use a UL94 V-0 compliant grommet/cable gland.



Figure 3: Grommet/Cable Gland Installation

5. Mount the grommet/cable gland and pass the cables through.
6. Connect the cables to the speaker (see [Figure 5](#) and [Figure 4](#)). Connect the positive (+) red cable to the + terminal and connect the negative (-) black cable to the – terminal.



Figure 4: Ceramic Terminal Pinout

You can connect the speakers in either of the two following possible layouts:

- **Wiring in parallel:** when one input connector is removed, subsequent speakers will remain connected (see [Figure 5](#))
- **Daisy-chaining:** when one input connector is removed, subsequent speakers will be disconnected (see [Figure 5](#))



For Array installation, we recommend that you connect to the speaker by passing the audio cable through a second knockout hole.

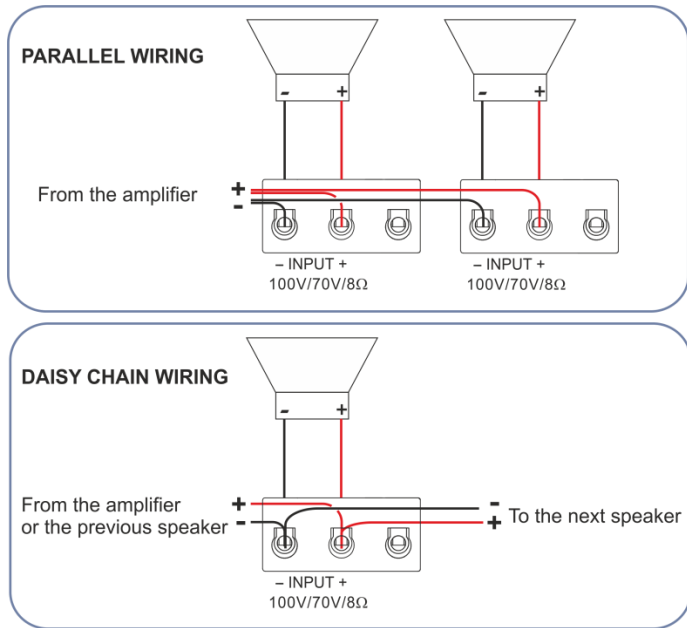


Figure 5: Galil 2-C Schematic Diagram

7. Snap the back-can in place.
8. Push the spring clamps up as close to the back-can as possible and insert the speaker through the cutout hole.
Once inside, the springs are released and clasp the ceiling (from the inside).

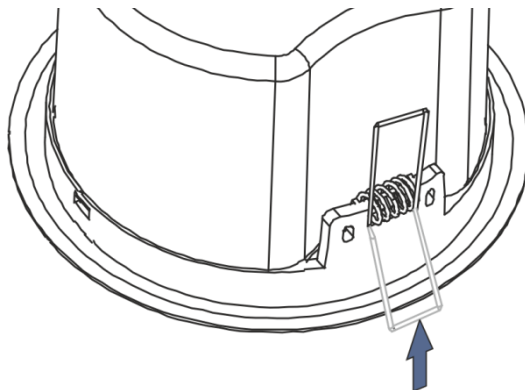


Figure 6: Pushing the Spring Clamps

4.4 Setting up an Array Installation

When installing **Galil 2-C** in an array installation layout, you have to define the distance between speakers as well as the layout pattern (square or hexagonal). The distance between speakers is set according to the speakers' dispersion angle, the uniformity of the coverage desired and the budget.

The coverage angle of the speaker determines the coverage area and the number of speakers required in the array installation. Two patterns are usually used for array installations, square (see [Figure 7](#)) or hexagonal (see [Figure 8](#)), depending on the shape of the installation area. The speakers are positioned according to their coverage area.

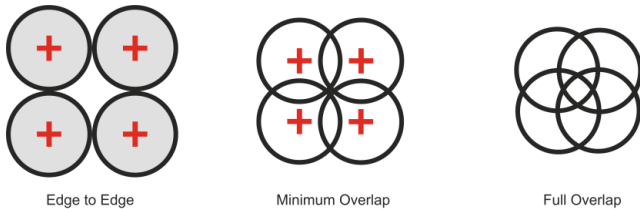


Figure 7: Square Layout

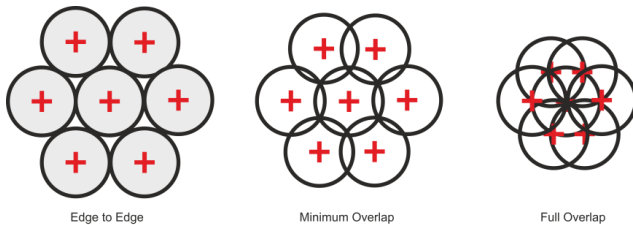


Figure 8: Hexagonal Layout

You can set the power on each speaker to get the desired power level in different installation areas.

Figure 9 shows an example of parallel wiring in a square array installation:

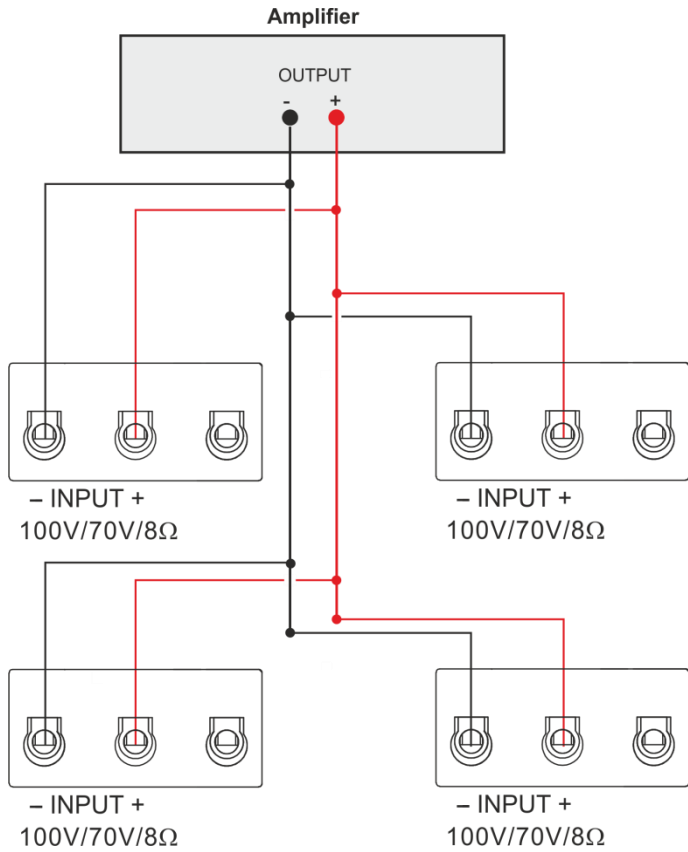


Figure 9: Square Layout Parallel Wiring

4.5 Painting the Speaker

You can paint the speakers before or after they are installed.

When painting before installation:

- Clean the rim and grille with mineral spirits or other light solvent that is unlikely to damage the surface
- Spray with color by holding the spray can at an angle of 45°



When spraying the grille, take care not to clog the holes in the grille as this will greatly reduce the sound quality of the speakers.

When painting after installation:

- Use the circle that you cut out of the template as a paint mask
- After you finish painting, remove the paint mask

5 Technical Specifications

Galil 2-C	
Audio and Power	
DESCRIPTION:	Full-range closed-back ceiling speaker
FREQUENCY RESPONSE:	90Hz to 20kHz @ -15dB 150Hz to 20kHz @ -3dB
WOOFER:	2.5" (68mm) paper cone with rubber surround
IMPEDANCE:	8Ω (transformer tap in off position)
TRANSFORMER TAPS:	70V – 3W, 1.5W, 0.75W, 8Ω/10W, Off (Lo-Z) 100V – 6W, 3W, 1.5W, 8Ω/10W, Off (Lo-Z)
SENSITIVITY (dB):	83dB SPL, 1W@1m
MAX SPL:	Continuous: 93dB Peak: 94.8dB
POWER HANDLING:	10W RMS 30W continuous program
DIRECTIVITY FACTOR (Q):	3.7, averaged 1kHz to 10kHz
DIRECTIVITY INDEX (DI):	5.7dB averaged 1kHz to 10kHz
INPUT CONNECTOR:	Ceramic terminals
Shipping and Installation	
MATERIALS:	Frame, aluminum grille, safety cord attached to grille, Plastic back-can (Self-extinguishing ABS according to UL94 V-0)
OPERATING TEMPERATURE:	-10° to +55°C (32° to 104°F)
STORAGE TEMPERATURE:	-40° to +70°C (-40° to 158°F)
HUMIDITY:	10% to 90%, RHL non-condensing
WEIGHT PER SINGLE SPEAKER:	0.5kg (1.1bs)
SHIPPING WEIGHT:	0.7kg (1.544lbs) approx.
DIMENSIONS:	External diameter: 14.4cm (5.67"); cutout diameter: 12.6cm (4.88")
INSTALLATION CLEARANCE:	Mounting depth: 9.5cm (3.74")
ACCESSORIES:	cutout template (on the Web)
COLORS:	white
Specifications are within a 10% tolerance and are subject to change without notice at http://www.kramerelectronics.com	

6 EN 54-24 Requirements

6.1 Specs according to the EN 54-24 Requirements

Type of loudspeaker:	Full-range closed-back ceiling speaker		
The loudspeaker has got "fire dome" enclosure (Yes/No):	Yes		
Mounting method to the wall or to the ceiling:	Ceiling		
Type of dedicated equalizer:	Parametric equalizer, see Section 6.2 and Section 6.3		
Type of transformer:	Mutually coupled step-down transformer		
Rated noise power (W):	10W RMS		
Rated noise power for 100V line, transformer tapping options:	100V – 6W, 3W, 1.5W, 8Ω/10W (BY-PASS), Off (Lo-Z)		
Rated noise power for another lines, transformer tapping options:	70V – 3W, 1.5W, 0.75W, 8Ω/10W (BY-PASS), Off (Lo-Z)		
Rated impedance for each transformer tapping options:	70V	100V	Impedance
	3W	6W	1600Ω
	1.5W	3W	3200Ω
	0.75W	1.5W	6400Ω
	By Pass: 10W		8Ω
Loudspeaker rated impedance:	8Ω		
Sensitivity (dB):	69dB SPL, 10W@4m		
S.P.L. (rated noise power/4m) (dB):	79.3dB SPL, 10W@4m		
Range of the supply voltage:	By pass: 0 – 9V Transformer in use: 0 – 100V; voltage supplied during tests: 100V		
Type of a terminal block (material, quantity of terminals):	Ceramic Terminal *1pc		
Type of fuse (overload, thermal), range of work temperatures:	130°C thermal cutoff		
Coverage angle 500Hz	240° -6dB		
Coverage angle 1kHz	160° -6dB		
Coverage angle 2kHz	110° -6dB		
Coverage angle 4kHz	105° -6dB		
Type of entry holes for conductors or cables:	Diameter: 11mm Diameter: 20mm		
Quantity of entry holes for cables:	2x11mm 2x20mm		
Min. and Max. cross-sectional of the connected conductors:	Min. cross-sectional area: 0.32 mm square Max. cross-sectional area: 0.52 mm square		
Working temperature, climatic category:	-10° to +55°C		
Enclosure protection degree (IP):	IP21C		
Environmental type:	TYPE A		

Frequency response:	90Hz to 20kHz @ -15dB 150Hz to 20kHz @ -3dB
Appearance and dimensional diagram of loudspeaker:	See Section 6.4
Connection of the loudspeaker with the transformer drawing:	See Section 6.5
Dimensions (max. length x max width x max. depth) of the loudspeaker with an enclosure:	154mm (Max. Dia., spring clamp included)*100mm (Max. Height)
Diameter of the diaphragm:	68mm
Dimensions of the magnetic gap (diameter):	0.625mm
Weight:	0.5kg (1.1bs)
Color:	White
Enclosure material:	ABS765A
Mark(s) and code(s) (for example, a serial number or batch code), by which the manufacturer can identify at least, the date or batch. Where any marking on the device uses symbols or abbreviations not in common use then these shall be explained.	Product Serial Number: MMYKLLNSSSSS MM=Month (for example, March=03) YY=Year (for example, 2015=15) K=Customer code (9) LL=Line number of this product on the order NN=Last two digits of order number SSSS=Individual Number of each speaker of this order (00001-99999)

6.2 Speaker Equalizer Requirements

The following are the speaker equalizer requirements:

Band 1

Frequency: 2kHz
Gain : -6dB
1/3 Octave (Q: 4.3)

Band 2

Frequency: 5kHz
Gain: +6dB
1/3 Octave (Q: 4.3)

6.3 EQ Graph Shape

[Figure 10](#) defines the required EQ graph shape

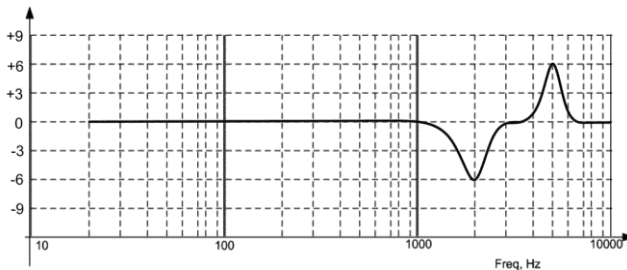


Figure 10: EQ Graph shape – Requirements

6.4 Mechanical Drawing

Figure 11 shows the Galil 2-C mechanical drawing:

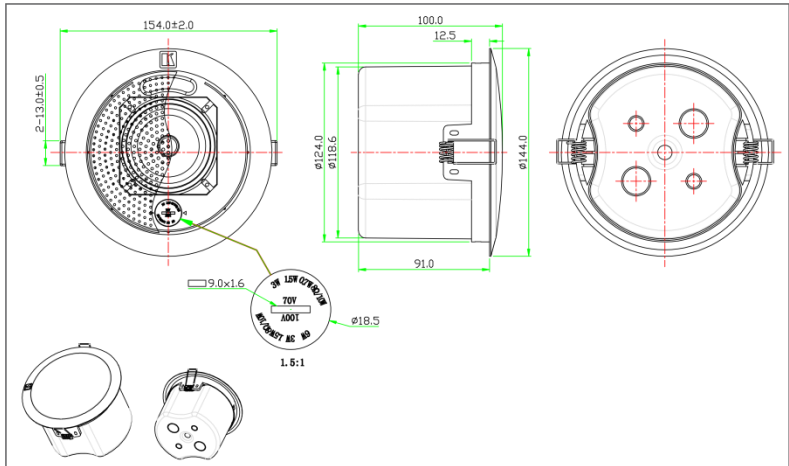


Figure 11: Galil 2-C Mechanical Drawing

6.5 Galil 2-C Electrical Schematic

Figure 12 shows the Galil 2-C electrical schematic:

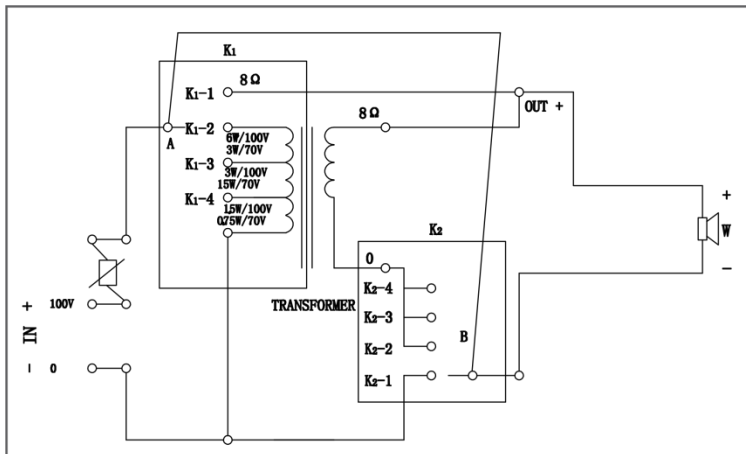


Figure 12: Galil 2-C Electrical Schematic

6.6 Declaration of Performance

According to Construction Products Regulation EU No. 305/2011

1. Unique Product identification code: **Galil 2-c**
2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4): **see product label and marking**
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer: Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings.
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5): Kramer electronics ltd 3 Am VeOlamo st. 95463 Jerusalem, Israel
5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2): not applicable
6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V: System 1
7. In case of the declaration of performance concerning a construction product covered by the harmonized standard: EN 54-24:2008 notified body No. 1488
8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued: Not applicable, see item 7
9. Declared performance: All requirements including all Essential Characteristics and the corresponding performances for the intended use or uses indicated in 3. have been determined as described in the following table:

No	Essential characteristics of the product	EN 54-24:2008	Mandated level and/or class	Assessment
		Clause		
Performance parameters under fire conditions				
	Frequency response limit	4.2	-	pass
	Reproducibility	5.2	-	pass*
	Rated impedance	5.3	-	pass
	Horizontal and vertical coverage angles	5.4	-	pass
	Maximum sound pressure level	5.5	-	pass
Operational reliability				

Durability	4.3	-	pass
Construction	4.4	-	pass
Marking and data	4.5	-	pass
Rated noise power (durability)	5.6	-	pass
Enclosure protection	5.18	-	pass
Durability of operational reliability, temperature resistance			
Dry heat (operational)	5.7	-	pass
Dry heat (endurance)	5.8	-	pass
Cold (operational)	5.9	-	pass
Durability of operational reliability, humidity resistance			
Damp heat, cyclic (operational)	5.10	-	pass
Damp heat, steady state (endurance)	5.11	-	pass
Damp heat, cyclic (endurance)	5.12	-	pass
Durability of operational reliability, corrosion resistance			
Sulphur dioxide corrosion (endurance)	5.13	-	pass
Durability of operational reliability, impact and vibration resistance			
Shock (operational)	5.14	-	pass
Impact (operational)	5.15	-	pass
Vibration, sinusoidal (operational)	5.16	-	pass
Vibration, sinusoidal (endurance)	5.17	-	pass

10. The performance of the product identified in 1 and 2 above is in conformity with the declared performance in 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. Signed for and on behalf of the manufacturer by:

Bernard Malka - VP International Standardization

16 May 2016



LIMITED WARRANTY

The warranty obligations of Kramer Electronics for this product are limited to the terms set forth below:

What is Covered

This limited warranty covers defects in materials and workmanship in this product.

What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Kramer Electronics to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product.

Without limiting any other exclusion herein, Kramer Electronics does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long Does this Coverage Last

One year as of this printing; please check our Web site for the most current and accurate warranty information.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What Kramer Electronics will do

Kramer Electronics will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1. Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition. Kramer Electronics will also pay the shipping costs necessary to return this product once the repair is complete.
2. Replace this product with a direct replacement or with a similar product deemed by Kramer Electronics to perform substantially the same function as the original product.
3. Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

What Kramer Electronics will not do Under This Limited Warranty

If this product is returned to Kramer Electronics or the authorized dealer from which it was purchased or any other party authorized to repair Kramer Electronics products, this product must be insured during shipment, with the insurance and shipping charges prepaid by you. If this product is returned uninsured, you assume all risks of loss or damage during shipment. Kramer Electronics will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. Kramer Electronics will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

How to Obtain a Remedy under this Limited Warranty

To obtain a remedy under this limited warranty, you must contact either the authorized Kramer Electronics reseller from whom you purchased this product or the Kramer Electronics office nearest you. For a list of authorized Kramer Electronics resellers and/or Kramer Electronics authorized service providers, please visit our web site at www.kramerelectronics.com or contact the Kramer Electronics office nearest you.

In order to pursue any remedy under this limited warranty, you must possess an original, dated receipt as proof of purchase from an authorized Kramer Electronics reseller. If this product is returned under this limited warranty, a return authorization number, obtained from Kramer Electronics, will be required. You may also be directed to an authorized reseller or a person authorized by Kramer Electronics to repair the product.

If it is decided that this product should be returned directly to Kramer Electronics, this product should be properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization number will be refused.

Limitation on Liability

THE MAXIMUM LIABILITY OF KRAMER ELECTRONICS UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

Exclusive Remedy

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF KRAMER ELECTRONICS CANNOT LAWFULLY DISCLAIM OR EXCLUDE IMPLIED WARRANTIES UNDER APPLICABLE LAW, THEN ALL IMPLIED WARRANTIES COVERING THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THIS PRODUCT AS PROVIDED UNDER APPLICABLE LAW.

IF ANY PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES IS A "CONSUMER PRODUCT" UNDER THE MAGNUSON-MOSS WARRANTY ACT (15 U.S.C.A. §2301, ET SEQ.) OR OTHER APPLICABLE LAW, THE FOREGOING DISCLAIMER OF IMPLIED WARRANTIES SHALL NOT APPLY TO YOU, AND ALL IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE, SHALL APPLY AS PROVIDED UNDER APPLICABLE LAW.

Other Conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by Kramer Electronics or (iii) this product is not purchased from an authorized Kramer Electronics reseller. If you are unsure whether a reseller is an authorized Kramer Electronics reseller, please visit our Web site at www.kramerelectronics.com or contact a Kramer Electronics office from the list at the end of this document.

Your rights under this limited warranty are not diminished if you do not complete and return the product registration form or complete and submit the online product registration form. Kramer Electronics thanks you for purchasing a Kramer Electronics product. We hope it will give you years of satisfaction.

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KRAMER



EN 54-24 Type A



P/N: 2900-300478



Rev: 4



SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing

For the latest information on our products and a list of Kramer distributors, visit our Web site where updates to this user manual may be found.

We welcome your questions, comments, and feedback.

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