

EB7-4W Module

Clear-Com's EB7-4W 4-Wire Option module can be added to the KB-702, KB-702GM, KB-701, and HB-702 products. This option allows the speaker or headset station to be operated over longer distances than are possible with a standard Clear-Com intercom line. This option can also be used to connect with fiber optic transmission equipment. The EB7-4W 4-Wire Option module connection is a transformer-isolated, audio-only connection and does not convey the call signal. The module also requires local powering.

Two-channel stations can have two separate 4-wire connections with this option. The Channel Switch on the front panel selects which channel is connected.

Installation

The EB7-4W plugs onto one- or two-channel speaker or headset stations as illustrated in Figure 1.

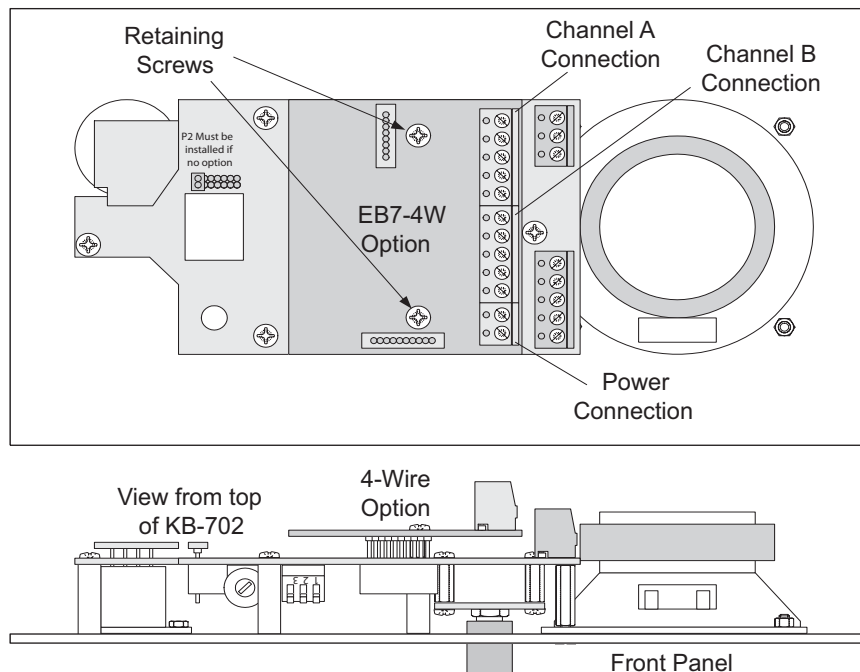


Figure 1: Installation Diagram

Use the following steps to install the EB7-4W Option Module:

1. Remove the two screws from the station's main circuit board and replace them with the supplied jackscrews.
2. Remove plugs P1 and P3. Retain these plugs for possible future use.
3. Plug the EB7-4W Option onto the main circuit board where P1 and P3 were plugged.
4. Fasten the EB7-4W in place with the two screws removed in step 1.

Powering the Station

When the EB7-4W is installed, the speaker or headset station requires local power, which can be obtained from the following sources:

20-30VDC

A suitable DC source is the Clear-Com 400067Z 30V 500mA AC-DC converter.

14-20VAC

A suitable AC source is a doorbell transformer. This can be fitted in a separate box that will contain the power-line connection and the low-voltage output can be routed to the connector on the EB7-4W circuit board.

Note: Different types of doorbell transformers are commonly available at hardware stores. Ensure that the output voltage is suitable for use with the EB7-4W.

Warning: Always follow local electrical codes. Do not install mains wiring in the same electrical box as the speaker or headset station.

Connect the two wires from the power source to the two-position, plug-on terminal strip supplied with the 4-Wire Option. Plug this connector onto the EB7-4W circuit board as shown in Figure 1.

Wiring the 4-Wire Module

The intercom line connector on the main circuit board does not function when the EB7-4W is installed. Instead, the 4-wire intercom connections are made to the connectors on the EB7-4W circuit board. For each channel, “Audio Out” and “Audio In,” pairs are provided. Both are balanced, 600-ohm connections. An optional jumper can be installed if the receive signal is noisy. This adds a resistive termination to the receive Audio In signal, reducing the level by 6 to 8 dB. Typical wiring is as shown in Figure 2.

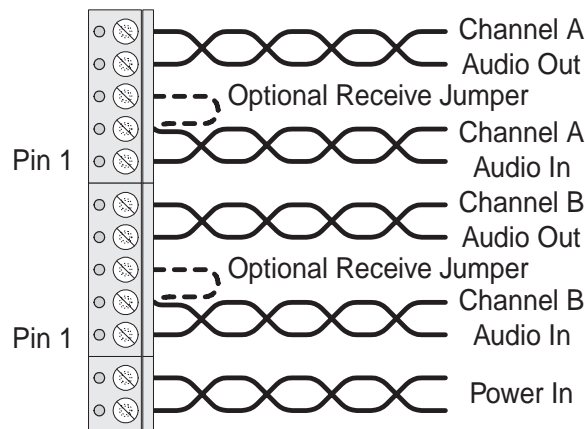


Figure 2: Typical EB7-4W Wiring

- **4-Wire Intercom Line Connections:** When the EB7-4W is used, the intercom connections to each channel are made to five-terminal plug-on connectors on the EB7-4W circuit board instead of to the connector on the KB-701 circuit board. The connections for each pin are visible on the circuit board when the connector is unplugged. The connector pinout for each channel is as follows:
 - Pins 1 and 2—Intercom Audio Input (audio to the speaker or headset)
 - Pin 3—Optional Receive Jumper (used if receive signal is noisy)
 - Pins 4 and 5—Intercom Audio Output (audio from the microphone).

When the KB-702 is used, the 4-wire intercom connection must be made to the Channel B connector.

Specifications

EB7-4W Input

Input Impedance

 $\geq 5\text{K}\Omega$

Max Level before Clipping

 $\geq 10\text{dB}$

EB7-4W Output

Output Impedance

 $\leq 600\Omega$

Power

AC Input Voltage Range

14-20 VAC

DC Input Voltage Range

20-30 VDC

Input Current (Max)

 $\leq 15\text{mA}$ (excluding KB/HB
station current)

LIMITED WARRANTY

Vitec Group Communications (VGC) warrants that at the time of purchase, the equipment supplied complies with any specification in the order confirmation when used under normal conditions, and is free from defects in workmanship and materials during the warranty period.

During the warranty period VGC, or any service company authorized by VGC, will in a commercially reasonable time remedy defects in materials, design, and workmanship free of charge by repairing, or should VGC in its discretion deem it necessary, replacing the product in accordance with this limited warranty. In no event will VGC be responsible for incidental, consequential, or special loss or damage, however caused.

WARRANTY PERIOD

The product may consist of several parts, each covered by a different warranty period. The warranty periods are:

- Cables, accessories, components, and consumable items have a limited warranty of 90 days.
- Headsets, handsets, microphones, and spare parts have a limited warranty of one year.
- UHF wireless IFB products have a limited warranty of one year.
- UHF wireless intercom systems have a limited warranty of three years.
- All other Clear-Com and Drake brand systems and products, including belt packs, have a limited warranty of two years.

The warranty starts at the time of the product's original purchase. The warranty start date for contracts which include installation and commissioning will commence from the earlier of date of the Site Acceptance Test or three months from purchase.

TECHNICAL SUPPORT

To ensure complete and timely support to its customers, VGC's User Support Center is staffed by qualified technical personnel. Telephone and email technical support is offered worldwide by the User Support Center.

The User Support Center is available to VGC's customers during the full course of their warranty period.

Instructions for reaching VGC's User Support Centers are given below.

Telephone for Europe, Middle East and Africa: +49 40 6688 4040 or +44 1223 815000

Return Material Authorization (RMA) numbers are required for all returns.

Both warranty and non-warranty repairs are available.

Telephone for the Americas and Asia: +1 510 337 6600

Email: vitec.support@AVC.de

Once the standard warranty period has expired, the User Support Center will continue to provide telephone support if you have purchased an Extended Warranty.

For latest contact information please refer to the Service and Support section at www.clearcom.com.

WARRANTY REPAIRS AND RETURNS

Before returning equipment for repair, contact a User Support Center to obtain a Return Material Authorization (RMA). VGC representatives will give you instructions and addresses for returning your equipment. You must ship the equipment at your expense, and the support center will return the equipment at VGC's expense.

For out-of-box failures, use the following contact information:

Europe, Middle East and Africa

Tel: +44 1223 815000 Email: customerservicesEMEA@vitecgroup.com

North America, Canada, Mexico, Caribbean & US Military

Tel: +1 510 337 6600 Email: customerservicesUS@vitecgroup.com

Asia Pacific & South America

Tel: +1 510 337 6600 Email: customerservicesAPAC@vitecgroup.com

VGC has the right to inspect the equipment and/or installation or relevant packaging.

For latest contact information please refer to the Service and Support section at www.clearcom.com.

NON-WARRANTY REPAIRS AND RETURNS

For items not under warranty, you must obtain an RMA by contacting the User Support Center. VGC representatives will give you instructions and addresses for returning your equipment.

You must pay all charges to have the equipment shipped to the support center and returned to you, in addition to the costs of the repair.

EXTENDED WARRANTY

You can purchase an extended warranty at the time of purchase or at any time during the first two years of ownership of the product. The purchase of an extended warranty extends to five years the warranty of any product offered with a standard two-year warranty. The total warranty period will not extend beyond five years.

Note: VGC does not offer warranty extensions on UHF wireless intercom systems, or on any product with a 1-year or 90-day warranty.

LIABILITY

THE FOREGOING WARRANTY IS VGC'S SOLE AND EXCLUSIVE WARRANTY. THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY OTHER REQUIRED IMPLIED WARRANTY SHALL EXPIRE AT THE END OF THE WARRANTY PERIOD. THERE ARE NO OTHER WARRANTIES (INCLUDING WITHOUT LIMITATION WARRANTIES FOR CONSUMABLES AND OTHER SUPPLIES) OF ANY NATURE WHATSOEVER, WHETHER ARISING IN CONTRACT, TORT, NEGLIGENCE OF ANY DEGREE, STRICT LIABILITY OR OTHERWISE, WITH RESPECT TO THE PRODUCTS OR ANY PART THEREOF DELIVERED HEREUNDER, OR FOR ANY DAMAGES AND/OR LOSSES (INCLUDING LOSS OF USE, REVENUE, AND/OR PROFITS). SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR THE LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. IN ANY EVENT, TO THE MAXIMUM EXTENT PERMITTED UNDER APPLICABLE LAW, VGC'S LIABILITY TO CUSTOMER HEREUNDER SHALL NOT UNDER ANY CIRCUMSTANCES EXCEED THE COST OF REPAIRING OR REPLACING ANY PART(S) FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD AS AFORESAID.

This warranty does not cover any damage to a product resulting from cause other than part defect and malfunction. The VGC warranty does not cover any defect, malfunction, or failure caused beyond the control of VGC, including unreasonable or negligent operation, abuse, accident, failure to follow instructions in the manual, defective or improperly associated equipment, attempts at modification and repair not approved by VGC, and shipping damage. Products with their serial numbers removed or defaced are not covered by this warranty.

This warranty does not include defects arising from installation (when not performed by VGC), lightning, power outages and fluctuations, air conditioning failure, improper integration with non-approved components, defects or failures of customer furnished components resulting in damage to VGC provided product.

This limited warranty is not transferable and cannot be enforced by anyone other than the original consumer purchaser.

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

