

Instructions

for the

Heath®

MAILBOX BOARD

Model HKA-232-5

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HEATH COMPANY

BENTON HARBOR, MICHIGAN 49022

597-5878

INTRODUCTION

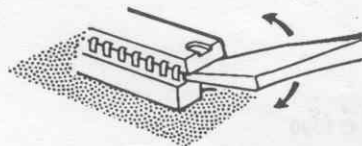
The Heath Model HKA-232-5 Mailbox Board adds a bulletin board feature to your PackKit® Data Controller. You only need to plug the Board into two existing sockets on the main circuit board and solder one wire.

INSTALLATION

- (-) Unplug the cables that are connected to the PackKit Controller, if this has not already been done.
- (-) Remove the six screws that secure the cover onto your Controller. Then carefully lift the cover so you can unplug the socket on the end of the wires coming from the battery holder. Set the screws and cover aside temporarily.
- (-) Use a small-bladed screwdriver to carefully remove any integrated circuits that may be installed at U2, U3, U4, and U5. Push the tool between each IC and the socket and carefully lift the IC free. NOTE: ICs may not be installed in all four socket.

Refer to Pictorial 1 while you perform the following steps.

- (v) Position your Controller as shown in the Pictorial.



- (✓) Store the removed ICs in conductive foam (or wrap them in aluminum foil) to protect them from static electricity. These ICs will not be needed again unless you wish to use the Controller without the Mailbox Board installed.
- (✓) Remove the screw that secures the main circuit board to the chassis at location D.

Refer to Pictorial 2 while you perform the following steps.

- (✓) Position the Mailbox Board near the Controller as shown in the Pictorial. Then crimp and solder the free end of the wire coming from the Mailbox Board to the indicated end of resistor R186 (330 Ω , orange-orange-brown).
- (✓) Hold the Mailbox Board at an angle and carefully start pins 1 and 28 of Mailbox Board plugs S101 and S102 into holes 1 and 28 of main circuit board sockets U2 and U4. Then carefully rock the Board

back and forth until all of the pins are seated in the sockets as far as possible.

- () Use long-nose pliers to hold the 1/2" spacer in position between the Mailbox Board and the main circuit board. Then use a 6-32 x 7/8" screw and a #6 lockwasher to secure the Mailbox Board to the chassis at location D.
- () Position the cover near the chassis. Then reconnect the socket on the ends of the wires coming from the battery holder to its plug on the main circuit board. NOTE: The socket and plug are polarized so you can connect it only the correct way.
- () Use the six screws you removed earlier to reinstall the cover onto the chassis.

Refer to the "User Manual" for information about using the mailbox feature.

REPLACEMENT PARTS LIST

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
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CAPACITORS

C101	21-786	.1 μ F, 50 V axial-lead ceramic
C102	21-786	.1 μ F, 50 V axial-lead ceramic
C103	21-786	.1 μ F, 50 V axial-lead ceramic
C104	21-786	.1 μ F, 50 V axial-lead ceramic
C105	21-786	.1 μ F, 50 V axial-lead ceramic
C106	21-786	.1 μ F, 50 V axial-lead ceramic

RESISTORS

R101	6-102-12	1000 Ω , 1/4-watt, 5%
R102	6-472-12	4700 Ω , 1/4-watt, 5%
R103	6-203-12	20 k Ω , 1/4-watt, 5%

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
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TRANSISTORS – INTEGRATED CIRCUITS

Q101	230-8101	VN10LM or VN10K(N3) transistor
Q102	230-8101	VN10LM or VN10K(N3) transistor
U101	444-917	27C512 IC
U102	443-1617	62256 IC
U103	443-1303	74LS379 IC
U104	443-1264	74LS158 IC

MISCELLANEOUS

85-3719-01	Circuit board
250-1240	6-32 x 7/8" screw
254-1	#6 lockwasher
255-15	1/2" spacer
432-1380	14-pin plug strip
434-299	16-pin IC socket
434-312	28-pin IC socket

YOUR HEATH PRODUCT ONE-YEAR LIMITED WARRANTY

Welcome to the Heath family. We believe you will be pleased with the performance of your new Heath product. Please read this Consumer Protection Plan carefully. It is a "LIMITED WARRANTY" as defined by federal law. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

HEATH'S RESPONSIBILITY

LABOR — For a period of one year from the date of purchase, any malfunction caused by defective parts (or defective manufacture, in the case of factory-assembled products) will be corrected at no charge to you. Heath Company reserves the right to repair or replace the product, at its option. You must deliver the product at your expense to your dealer, the Heath factory, or any of our authorized overseas distributors.

REPLACEMENT PARTS — Replacement parts are available for kit products and some Heath factory-assembled products if you wish to correct the malfunction yourself. Replacement parts listed in the manual will be supplied free for one year from date of purchase if they are factory defective. Replacement parts are warranted for the remaining portion of the original warranty period. You can obtain warranty parts direct from Heath Company by writing or telephoning us at (616) 982-3571. And we will pay shipping charges to get those parts to you... anywhere in the world. You may also take advantage of Heath's free technical consultation service. Heath reserves the right to require return of the part to be replaced.

NOT COVERED — The correction of assembly errors in kits, adjustments, calibration, and damage due to misuse, abuse, or negligence are not covered by the warranty. Unauthorized service or modification of the product or of any furnished component will void this warranty in its entirety. This warranty does not include reimbursement for inconvenience, loss of use, set-up time, or unauthorized service.

This warranty covers only Heath products and is not extended to other equipment or components that a customer uses in conjunction with our products.

REPAIR OR REPLACEMENT, AS DESCRIBED ABOVE, SHALL BE THE SOLE REMEDY OF THE CUSTOMER AND THERE SHALL BE NO LIABILITY ON THE PART OF HEATH FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO ANY LOSS OF BUSINESS OR PROFITS, WHETHER OR NOT FORESEEABLE. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

OWNER'S RESPONSIBILITY

EFFECTIVE WARRANTY DATE — Warranty begins on the date of first consumer purchase. You must supply a copy of your proof of purchase when you request warranty service.

OPERATING MANUAL — Read your operating instructions carefully so that you will fully understand the proper operation and function of your product.

ASSEMBLY — If your product is a kit, before seeking warranty service, you should complete the assembly by carefully following the manual instructions. Heath Company is not responsible for completing assembly or making adjustments on Heathkit products.

ACCESSORY EQUIPMENT — Performance malfunctions involving connections to (or interfacing with) other non-Heath equipment are not covered by this warranty and are the owner's responsibility.

SHIPPING UNITS — Damage due to inadequate packing cannot be repaired under warranty.

WARRANTY SERVICE — For warranty service, contact your dealer or place of purchase.

If you are not satisfied with our service or our products, write directly to our Director of Customer Service, Heath Company, Benton Harbor MI 49022. He will make certain your problems receive immediate, personal attention.