PK-232/USB Upgrade Manual
RS-232-USB Conversion Upgrade Kit A.05107

Installation Manual
WARRANTY

TIMEWAVE TECHNOLOGY INC.
LIMITED ONE YEAR WARRANTY

WHO IS COVERED
This warranty is extended only to the original purchaser of the A.05107.

WHAT WE WILL DO
If your A.0107 fails in normal use because of a defect in workmanship or materials within one year of the date of purchase, we will repair or replace (at our option) the equipment at our factory without charge to you. Timewave will pay for the return of the warranty-repaired unit to you.

WHAT YOU MUST DO
First, double check your connections and operating procedure. If you're certain that the unit is faulty, notify Timewave Customer Service immediately. If Timewave is unable to resolve the problem by telephone or email, we will give you an RMA number and ask you to return the unit. You must pay all shipping and insurance charges for returning the unit to our factory.

WHAT IS NOT COVERED
We cannot be responsible for damage caused by accidents, abuse, misuse, improper installation, or unauthorized attempts to repair the unit. This warranty does not cover any parts of the PK-232 except the A.05107.

SERVICE WARRANTY
Timewave service work performed in connection with this warranty is warranted to be free from defects in materials and workmanship for 30 days from the date of repair. All other terms of the limited warranty apply to the service warranty.

HOW TO CONTACT TIMEWAVE
Contact Timewave Customer Service by telephone at (651) 489-5080 or by FAX at (651) 489-5066.

Mailing and shipping address is 1025 Selby Ave., Suite 101, St.Paul, MN 55104

email: sales@timewave.com
techsupport@timewave.com
service@timewave.com

web: www.timewave.com

TIMEWAVE MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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Please read before installing this upgrade kit.
Be sure to review how to order information at http://www.timewave.com to be certain that you have received the correct upgrade kit.

1. Do not attempt to install this RS-232 to USB conversion kit unless you are an experienced electronics technician. Specifically, you must be able to remove a DB-25 connector from the PK-232 PC board without damaging the traces, vias or the circuit board. If you are not sure you can complete that task, DO NOT ATTEMPT TO INSTALL THIS KIT! Timewave is not responsible for damage caused by improper removal and installation technique.

2. Be sure to download the latest driver software for the U232™ upgrade kit from http://www.timewave.com

Thank you for purchasing the PK-232/USB upgrade kit for the PK-232MBX and PK-232/DSP, and PK-232/PSK. The Timewave part number of this kit is A.05107.

This manual has two sections:
1. RS-232-to-USB interface module Hardware Installation
2. RS-232-to-USB interface module Software Installation

Section 1
RS-232-to-USB Interface Module Hardware Installation

You will need the following tools to complete this upgrade:
- Solder pencil and solder
- Needle nose pliers
- Phillips Screw driver
- Small straight-blade screwdriver
- Solder removal tools (de-soldering braid, de-soldering vacuum pump, etc.

√ Installation steps

_____1) Remove all cables and power from unit.
_____2) Remove the six screws holding the top cover on the unit.
_____3) Remove the top cover.
_____4) Remove threshold control knob from the front panel. Carefully remove the nut and washer from the bushing of the threshold control.
5) If your unit has a panel-mounted power connector and/or reset switch, carefully remove the nut and washer from the bushing of each.

6) Remove all the screws from the bottom of the PK-232 housing that hold the main board in place. There may be 6 or 7 seven screws, depending upon the model of the PK-232.

7) Remove the main PCB board assembly by lifting it up and out from the back of the PK-232. Try not to bend the leds on the led board.

**Do not attempt the following steps if you do not have experience de-soldering multi-pin connectors from PC boards!**

8) Carefully de-solder and remove the DB-25 25-pin connector on the left rear corner of the PK-232 main PC board. Do not burn the PC board with excess heat! Do not damage the vias or traces on the PC board!

9) Clean all excess solder from the vias for the DB-25 connector. Do not burn the PC board with excess heat! Do not damage the vias or traces on the PC board!

10) Insert the RS-232-to-USB interface module into the DB-25 connector vias from the top of the PK-232 Main Board with the USB connector facing the back of the PK-232 Main Board.

11) Hold the RS-232-to-USB interface module firmly against the top of the PK-232 Main Board. Carefully solder the pins of the module to the pads and vias. Use no-clean solder or clean the board with the correct solvent for your solder after the soldering is finished.

12) Carefully inspect all solder joints on the pins of the RS-232-to-USB interface module for cold solder joints and missed or partially soldered pins.

13) Re-assemble the PK-232 by reversing the order of the steps 2 through 7.

14) Attach the USB cover plate to the outside of the PK-232 top cover with the screw removed in Step 2.

15) Proceed to software driver installation before re-connecting the PK-232/USB.