



iUP-200/201 U1 UPGRADE KIT INSTALLATION MANUAL





iUP-200/201 U1 Upgrade Kit Installation Manual

Order Number: 164857-001

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REV	REVISION HISTORY	DATE
-001	Original Issue	1/84





PREFACE

The iUP-200/201 U1 upgrade kit lets you upgrade your iUP-200/201 universal programmer to an iUP-200A/201A universal programmer. This manual tells you how to install and verify the proper operation of the iUP-200/201 U1 upgrade kit.

The following publications provide more detailed information on the iUP-200A/201A universal programmer and its operating environment:

- *iUP-200A/201A Universal Programmer User's Guide*, order number 164852

This manual describes universal programmer operation, including off-line operation.

- *iPPS PROM Programming Software/iUP-200A/201A Universal Programmer Pocket Reference*, order number 164853

This pocket reference summarizes the PROM programming software commands and the universal programmer off-line function keys.

- *iPPS PROM Programming Software User's Guide*, order number 164861

This manual describes the PROM programming software used for on-line operation of the universal programmer and the Intel personal development system (iPDS™).

- *ISIS-XX User's Guide*, order number varies

This manual is a comprehensive guide to the Intel operating system under which the iPPS runs.



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When an Intel customer engineer is not available, contact the Intel product service center.

United States customers can obtain Intel service and repair assistance by contacting the Intel product service center in their area. Customers outside the United States should contact their sales source (Intel sales office or authorized distributor) for service information and repair assistance.

Have the following information available before calling the product service center:

- The date you received the product.
- The complete part number of the product (including dash number). On boards, this number is usually silk-screened onto the board. On other products, it is usually stamped on a label.
- The serial number of the product. On boards, this number is usually stamped on the board. On other products, the serial number is usually stamped on a label mounted on the outside of the chassis.
- Your shipping and billing address.
- A purchase order number (for billing) if your Intel product warranty has expired.
- Any extended warranty agreements that apply.

Contact the Intel product service center using the following telephone numbers:

Western Region:	(602) 869-4951
Midwest Region:	(602) 869-4392
Eastern Region:	(602) 869-4045
International:	(602) 869-4391
TWX:	(910) 952-1330

Always contact the product service center before returning a product to Intel for repair. Product service center personnel will give you a repair authorization number, shipping instructions, and other information to ensure fast, efficient service. If you are returning the product because of shipping damage or if the product is out of warranty, you must have a purchase order before Intel can start repairs.

If available, use the original factory packaging when returning a product to the Intel product service center. If the original packaging material is not available, wrap the product in a cushioning material such as Air Cap SD-240, manufactured by the Sealed Air Corporation, Hawthorne, NJ. Securely enclose the product in a heavy-duty corrugated shipping carton, mark it "FRAGILE," and ship it to the address specified by product service center personnel.



WARNINGS AND CAUTIONS

This section lists the warning and caution found in the manual, along with the pages on which they appear.

Page

WARNING

Only a qualified technical person should install the iUP-200/201 U1 upgrade kit.

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CAUTION

Improper settings on the voltage select switches can damage the equipment. Refer to the installation procedures in the *iUP-200A/201A Universal Programmer User's Guide* before performing the checkout procedure described in this section.

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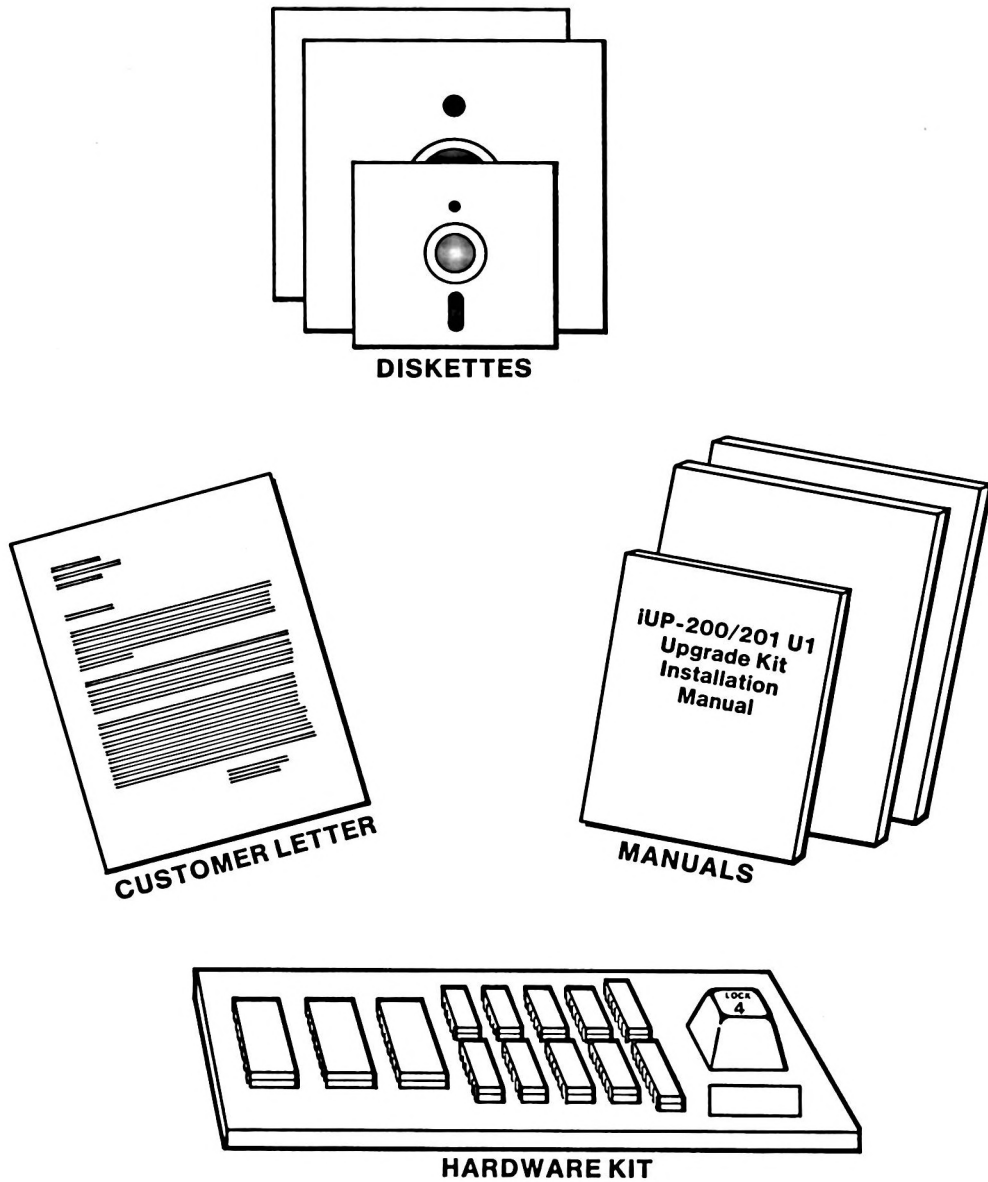
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Figure 1 iUP-200/201 U1 Upgrade Kit



iUP-200/201 U1 UPGRADE KIT INSTALLATION

GENERAL INFORMATION

The iUP-200/201 U1 upgrade kit contains the hardware and documentation you need to upgrade your iUP-200/201 universal programmer to an iUP-200A/201A universal programmer. The iUP-200/201 U1 upgrade kit adds the following features to your iUP-200/201 universal programmer:

- An additional 16K of user memory (URAM).
- The ability to lock EPROM memory from unauthorized access (for EPROMs on which this feature is supported).
- The ability to use PROMs greater than 16K bytes.

Figure 1 shows the contents of the iUP-200/201 U1 upgrade kit, and Table 1 lists the contents of the iUP-200/201 U1 upgrade kit.

Table 1 iUP-200/201 U1 Upgrade Kit Contents

Quantity	Description
1	8-inch single-sided, single-density iPPS software diskette, version 1.4
1	8-inch single-sided, double-density iPPS software diskette, version 1.4
1	5 1/4-inch double-sided, double-density iPPS software diskette, version 1.4
3	Firmware PROMs
8	16K dynamic RAMs
2	8185 static RAMs
1	Replacement keycap
1	Label, iUP-200/201 U1 upgrade kit
1	Customer letter
1	<i>iUP-200A/201A Universal Programmer User's Guide</i>
1	<i>iPPS PROM Programming Software User's Guide</i>
1	<i>iUP-200/201 U1 Upgrade Kit Installation Manual</i>

UNPACKING INSTRUCTIONS

Verify the contents of the shipping carton against the list in Table 1. If the contents of the shipping carton are damaged, keep the carton and the packing material for the carrier agent's inspection. The carrier is responsible for damage during shipment.

For repairs to a product damaged in shipment, contact the Intel product service center (listed in the Service Information section) for a return authorization number and further instructions. You need a purchase order to start repairs; submit a copy of the purchase order to the carrier with your claim.

Intel recommends that you save the shipping carton and packing material in case you must reship the product.

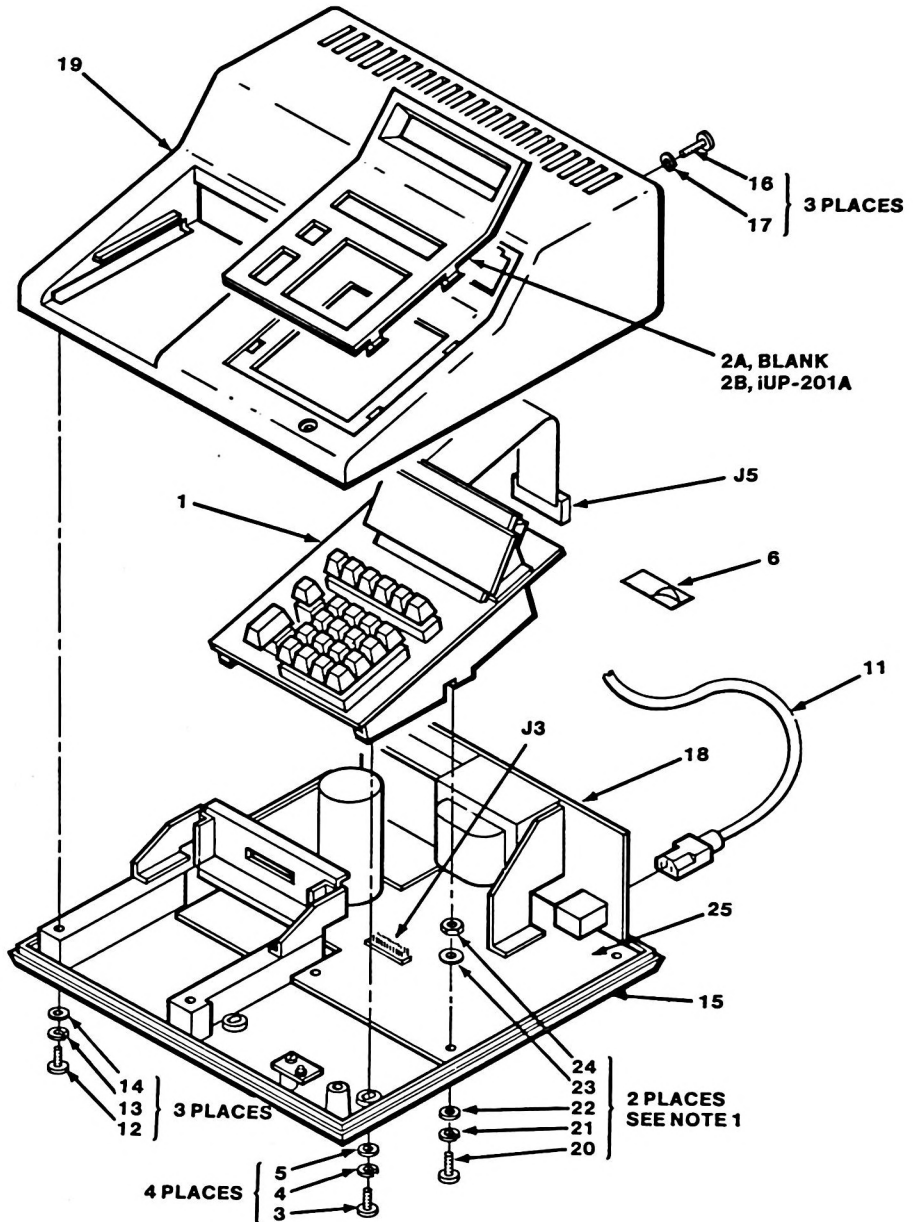
INSTALLATION PROCEDURES

All you have to do to upgrade your iUP-200/201 universal programmer to an iUP-200A/201A universal programmer is replace and install chips and a keycap and remove two jumpers. Use Figures 2, 3, and 4 as you perform the following steps to install the iUP-200/201 U1 upgrade kit:

WARNING

Only a qualified technical person should install the iUP-200/201 U1 upgrade kit.

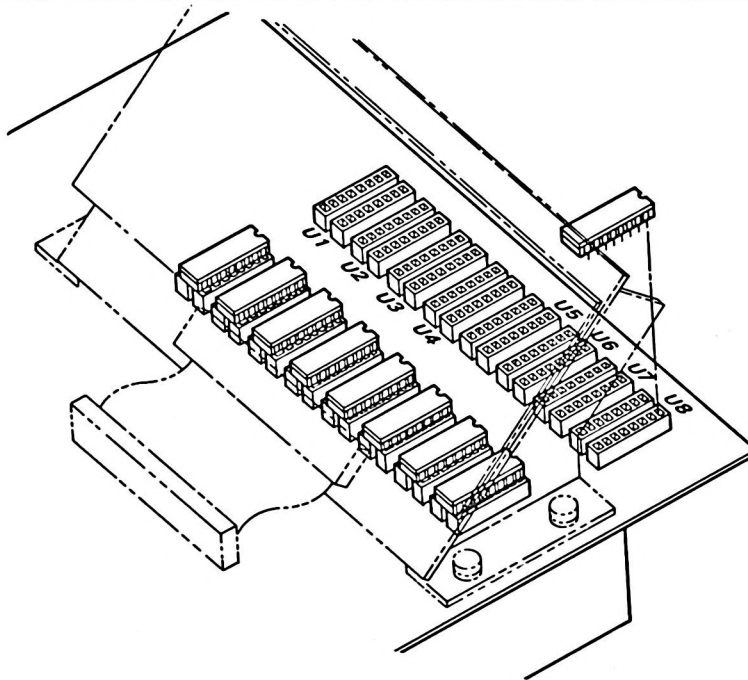
1. Switch off the iUP-200/201 universal programmer and disconnect the line cord (11) from the iUP-200/201 universal programmer.
2. Refer to Figure 2 and remove the three screws (12), lockwashers (13), and washers (14) from the front of the base (15).
3. Remove the three screws (16) and three lockwashers (17) from the top of the rear panel (18). One screw is located in the upper left corner of the rear panel (18). The other two screws are located on either side of the top portion of the heat sink.
4. Remove the top cover (19). If you have an iUP-200 universal programmer, go directly to step 10.
5. Remove the four screws (3), lockwashers (4), and washers (5).
6. Disconnect the keyboard connector (J5) from the connector (J3) on the mother board (25).
7. Remove the keyboard/display board (1).
8. Refer to Figure 3 and install the eight dynamic RAMs in U1 through U8 located on the back of the keyboard/display board.
9. Pull the key labeled 4 off the keyboard/display board (1) and replace it with the LOCK 4 key from the upgrade kit. Set the keyboard/display board (1) aside.
10. Refer to Figure 4 and remove the U27 and U28 EPROMs from the mother board.
11. Install the three firmware PROMs from the upgrade kit: 001 in U27, 002 in U28, and 003 in U29 on the mother board.
12. Install the two 8185 static RAMs in U21 and U22 on the mother board.
13. Remove the jumpers from E3 to E4 and E5 to E6. If you have an iUP-200 universal programmer, go directly to step 16.



NOTE 1: IUP-200A Connecting hardware not used when the upgrade kit is installed.

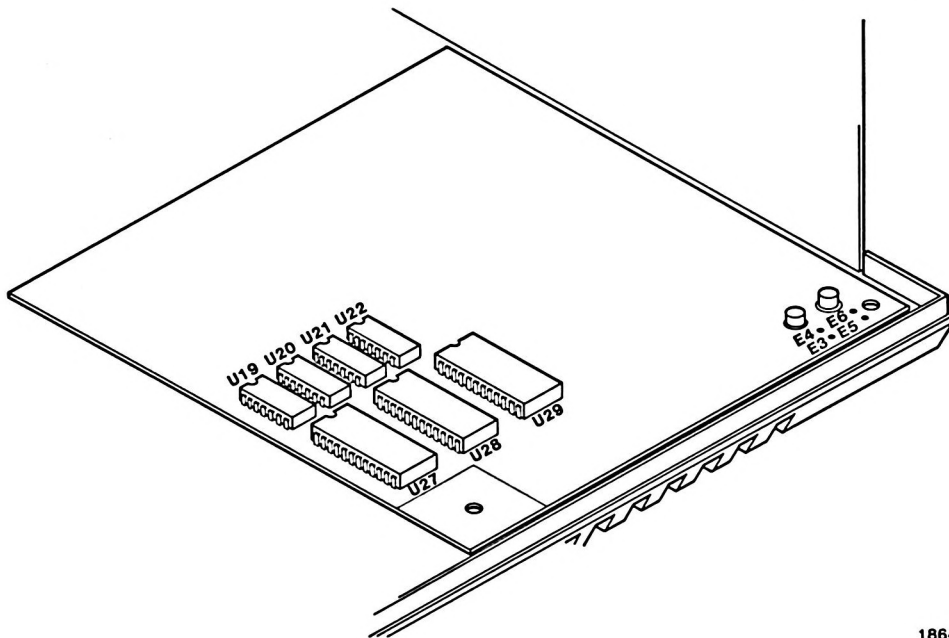
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Figure 2 Installation Drawing



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Figure 3 Keyboard/Display Board Rear View



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Figure 4 Detail of the Mother Board

14. Refer to Figure 2 and connect the keyboard connector (J5) to the connector (J3) on the mother board (25). Verify that the pins (J3) are properly connected with the connector (J5).
15. Position the keyboard/display board (1) over the base cover (15) and the mother board (25) mounting holes and loosely secure using the four screws (3), lockwashers (4), and washers (5). Save final positioning and securing until the top cover (19) is installed. Verify that the wires going to the power-on LED indicator are not pinched by the keyboard/display board (1) before proceeding.
16. Refer to Figure 2 and replace the top cover (19) (if you have an iUP-201 universal programmer, position the cover and keyboard/display board so that there is no binding and all mounting holes line up).
17. Secure the front edge of the top cover (19) to the base cover (15) with the three screws (12), lock washers (13), and washers (14).
18. Secure the back edge of the top cover (19) to the rear panel (18) with the three screws (16) and lockwashers (17).
19. For iUP-201 universal programmer only, verify that no keyboard keys are binding and tighten the four screws (3), securing the keyboard/display board (1) to the base cover (15).
20. Remove the protective backing from the label (6); stick the label next to the product label on the bottom side of the base cover (15).
21. Plug the line cord (11) into its socket on the rear panel (18).
22. Refer to the checkout procedures in the next section to verify that you have successfully installed the upgrade kit.

CHECKOUT PROCEDURES

Perform the following checkout procedures to verify that you have correctly installed the upgrade kit.

CAUTION

Improper settings on the voltage select switches can damage the equipment. Refer to the installation procedures in the *iUP-200A/201A Universal Programmer User's Guide* before performing the checkout procedures described in this section.

iUP-200A Universal Programmer Checkout

After installing the iUP-200/201 U1 upgrade kit, plug the iUP-200A line cord into an appropriate power outlet and turn on the power switch. Insert the appropriate iPPS software diskette into an available disk drive. (The 8-inch diskettes are for the Series II and III; the single-density diskette has Intel part number 164873, and the double-density diskette has

Intel part number 164874. The 5 1/4-inch diskette is for the Series IV.) Invoke the iPPS software as described in the *iPPS PROM Programming Software User's Guide*. If the iPPS prompt appears on the host development system console, the iPPS software was successfully invoked and you are ready to use your iUP-200A universal programmer.

If you do not get the iPPS prompt, turn off the power, turn it on again, and repeat the invocation procedure. If you still do not get the prompt, contact the Intel product service center (using the procedures described in the Service Information section).

After successfully invoking the iPPS software, refer to the the *iPPS PROM Programming Software User's Guide* for operating information.

iUP-201A Universal Programmer Checkout

After installing the iUP-200/201 U1 upgrade kit, plug the iUP-201A line cord into an appropriate power outlet and turn on the power switch. The iUP-201A universal programmer should display the following message for about five seconds after power is applied:

DIAGNOSTICS IN PROGRESS

After the power-on diagnostics have run, the iUP-201A universal programmer display should change to the following message:

IUP READY 000000 55

If these messages do not appear on the iUP-201A universal programmer display, turn off the power, turn it on again, and watch the display. If you still do not get these messages, contact the Intel product service center (using the procedures described in the Service Information section).

After the iUP-201A universal programmer successfully completes the power-up sequence, refer to the *iUP-200A/201A Universal Programmer User's Guide* and the *iPPS PROM Programming Software User's Guide* for operating information.



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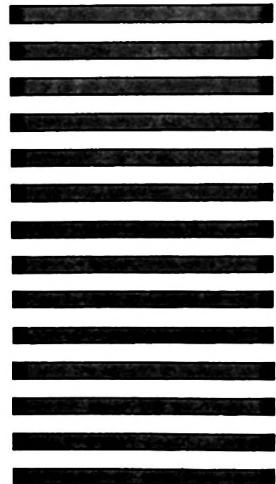
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