

BIOS (Boot) EPROM Installation Technical Bulletin

For Ishida AC-4000 Series Retail Scales

Introduction

This document is intended for service technicians responsible for installing and/or servicing Ishida AC-4000 series retail scales.



Authorized distributors and their employees may view or download this document from the Ishida distributor site at www.ishidaretail.com.

Overview

The FwUpdate (Firmware Wizard) program is used for revising or modifying the scale firmware (BIOS and Application firmware) for the AC-4000. A restore EPROM is provided to make scale restart and BIOS restoration possible in situations where network communication between scale and PC cannot be established or where communication is unstable. A communication error is most often caused by the corruption of BIOS firmware in the scale (see Table 1 below).

NOTE: *FwUpdate software can be downloaded from the distributor section of www.ishidaretail.com.*

Symptoms	Cause	Remedy
Scale is locked up and is unable to start when connected to PC and FwUpdate is started.	BIOS program of scale has been corrupted.	Restore BIOS firmware.
No response from scale when a PING check via FTP (file transfer protocol) is performed at PC.		

Table 1. Communications Failure Troubleshooting Chart

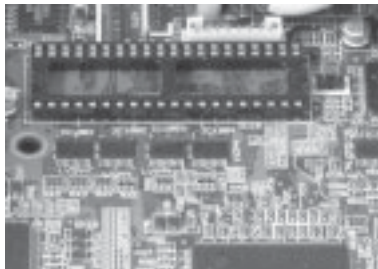
Installation

⚠ Caution *The scale will lose all memory when the following installation procedure is performed.*

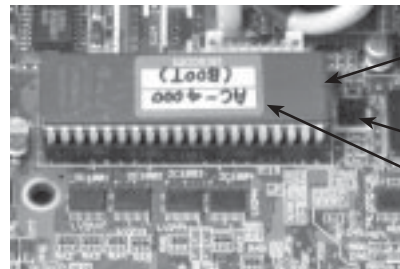
1. Turn scale power OFF.
2. Remove the keyboard assembly from the scale and install the Boot EPROM into the IC socket (IC13 of PK950 board). Install EPROM with polarity notch pointed towards short-pins. See Figure 1 below.

⚠ Caution *Improper installation of the EPROM will damage the scale.*

Before Installation



After Installation



Polarity Notch - point towards jumpered pin
Jumpered Pin
BIOS (Boot) EPROM

Figure 1. Installed BIOS EPROM

3. Install jumper on short-pins (located between IC13 and IC15).
4. Turn the scale ON. The display shows *C02-04 Apply Data Copy*. The scale goes to compulsory rescue mode when turned ON. IP address of scale is fixed as 192.168.10.1.

NOTE: *If the scale does not display "C02-04 Apply Data Copy" when it is turned on, check the following (be sure to turn the scale off first):*

- a. *Confirm the Boot EPROM is installed properly. Be sure that no pins are bent and that the polarity mark is towards the right side.*



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b, The jumper pins may be coated with a residue from the manufacturing process. Slide the jumper up and down the pins to scrape off any coating.

5. Push DOWN ARROW key one time. *C02-05 Boot Data Copy* is displayed on scale.
6. Connect with PC. Set PC IP address as 192.168.10.2. Set the Subnet Mask as 255.255.255.0.
7. Update the scale firmware using the FwUpdate.wiz program.
8. After update is completed, turn scale OFF and remove both EPROM and jumper.
9. Turn scale ON while holding down 1 key. Display shows *C00 TEST MODE*.
10. Press DOWN ARROW key twice. Press ENTER. Display shows *C02-01 SRAM CLEAR*.
11. Press ZERO key twice. Display shows *PASS*.
12. Press ENTER key. Display shows *C02-02 SETUP CLEAR*.
13. Press ZERO key twice. Display shows *PASS*.
14. Press ENTER key. Display shows *C02-03 TEST DATA SET*.
15. Press ZERO key twice. Press END key. Display shows *C01 HARDWARE TEST*.
16. Turn scale OFF and then ON again.
17. Set IP address of scale and PC as needed.

Parts Information

Use Part Number 77368 to order a Boot EPROM for the AC-4000 series retail scale.



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