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Epic 950™
Master Programmer User's Guide

PN 100-06843L, Revision B, October 2013

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Change History

Rev A   Initial release   Feb 2007

Rev B   Update   Oct 2013

Important:

Before installing any equipment be sure to consult the specifications in this manual. Failure to do so may cause integration problems. Portions of this integration manual may be changed without prior notice.

Note:

Losses that can be attributed to improper installation and working procedures are not the responsibility of TransAct Technologies Inc. No part of this manual may be used to recreate any part of the Epic 950™ Printer. This manual is to be used for integration purposes only. If this manual contains any questionable information or mistakes please contact TransAct for assistance.

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Epic 950 Master Programmer User's Guide

Who Should Read This Guide?

This document provides information useful to original equipment manufacturers (OEM) who will integrate the Epic 950™ printer into their products.

What is Included In This Guide?

This document provides instructions on how to use the Epic 950 Master Programmer, a hardware and software solution that automates the process of downloading firmware to multiple Epic 950 printers.

Refer to the Epic 950 OEM Integration Manual for complete information on the mechanical, electrical, and command language requirements of the Epic 950 printer, not covered in this supplement.

About the Epic 950 Master Programmer

The Epic 950 Master Programmer is a hardware and software solution that allows firmware to be downloaded into up to 16 Ithaca® Epic 950 printers at the same time. It uses groups of 4 mounted programming stations, together with proprietary software and cabling, to allow fast, productive firmware download of multiple printers from a standard Windows™-compatible personal computer using Windows™ 2000 or XP operating systems.

This application is based around the use of an Edgeport4 adapter connected to a standard USB port on your personal computer. This Edgeport adapter is combined with Serial cable adapters internal to the programming module to connect to the Epic 950's ImPort™ download interface port. The programming module contains LED lights displaying the download status. Multiple programming modules can be chained to support a total of up to 16 printers at once. This is limited by the stacking ability of the programming modules. The Master programming software will support up to 20 devices.

The Master Programmer Software can be downloaded from TransAct's website at **www.transact-tech.com**.

Overview

Installing the Epic 950 Master Programmer involves the hardware installation of a programming module, hookup of the appropriate interface cables, and installation of the applications software. Steps involved include the following:

1. Setup and connect at least one programming module to your PC.

2. Install the Edgeport Drivers

3. Install the Master Programmer software on your computer system.

Once installed, steps for using the Epic 950 Master Programmer are as follows:

1. Use the browse function in the Master Programmer application to locate a firmware (.cbt) file to be downloaded into the printer. By selecting the check box "Download this file to all printers" you can download the same file to all the printers. Or you may select a different file for each printer by browsing for the firmware (.cbt) to the right of the communication port window.

2. Configure the reset baud rate and verify options on the master programmer software. Start the Master programming software.

3. Insert an Epic 950 printer into the programming module.

4. Connect the Epic 950 ImPort^{TM} to the programming cable on the programming module. The application automatically detects the connected printers, and downloads the firmware.

Installing the Epic 950 Master Programmer

Step 1. Setup necessary components

Your Epic 950 Master Programmer kit includes the following components:

1) Master Programmer hardware.
   The Programmer Module contains:
   i. Power supply
   ii. Edgeport4 USB to serial USB Expansion Module
   iii. Interconnect to Epic ImPort^{TM}

2) "Inside Out Networks" Edgeport Software Drivers CD.
   The Edgeport CD Contains:
   i. Drivers for Edgeport USB to serial USB Expansion Module
3) Edgeport Insulation Guide
4) USB Cable
5) Transact Master Programmer Software CD.
   The Transact CD contains.
   i. This manual
   ii. Master programmer Software

Optionally, you may purchase and chain USB hubs to support up to 20 simultaneous printers. Contact TransAct Sales or Technical Support for further information.

Step 2. Connect cabling

1. Connect the Epic 950 Programming module to the PC with the supplied USB cable.
2. Connect power to the programming module. The power supply is auto ranging and will operate at 120 or 240 VAC.

Note: Do not plug the Epic 950 printer into the Programming Adapter at this time.

If you are using an external hub to expand the number of printers to greater than 4, connect power to the USB Hub at this time. Connect the included USB cable to the hub and the hub to a USB port on your computer system.

Step 3. Install hardware

Once the master programmer has been connected to your computer system, you will see the Found New Hardware Wizard appear on your screen. Go through the standard hardware installation process at this point, using the Inside Networks CD that was packaged with the programmer. Follow the instructions in the provided in the Edgeport4 installation guide.

Use the Appendix C "Using the edgeport Utility program to assign the COM ports as desired. Note the COM Ports you assigned as you will want to use the same ports in the Master programming software.

Step 4. Install the Epic 950 Master Programmer Software

At this point, you should install the Epic 950 Master Programmer application, as provided in supplied media or via download.

The Master Programmer may be configured to operate from 8 to 20 printers at one time. The default is 4. To change the number of concurrent printers, create or modify a shortcut to the master programmer software and modify the command as follows:

…..\MasterBlaster.exe -ports:8

Where the number after –ports: is the number of ports you wish to use.

Note: If the path contains spaces, you will have to put everything up to but not including –ports in quotes.

Note: Do not plug the Programming Adapter into the Epic 950 printer at this time.

Using the Epic 950 Master Programmer

Start the Epic 950 Master Programmer application by selecting it from the appropriate folder of your Start menu. Once started, you will see a screen as shown in Figure 1.

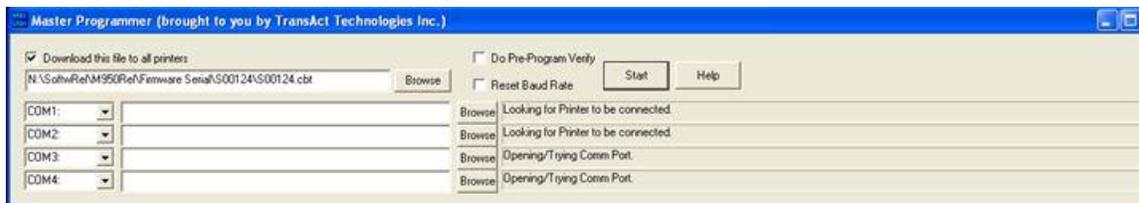Figure 1. Epic 950 Master Programmer main screen.

You will see a Browse function to select the firmware file, and a listing of the status of up to 20 COM ports to be connected to printers for simultaneous firmware download. Displayed next to each COM port listing on this screen is a status line for this port.

To use this application to load a firmware file to one or more Epic 950 printers:

1. Make sure the power switch is on the master programmer is on.
2. Use the Browse function to select a firmware (.cbt) file to download.
3. Select the COM port to be used for each connection.
4. Select Reset Baud Rate if the old firmware has a baud-rate different from the baud rate of the new firmware.
5. Press the "Start" button when everything is ready.
6. Printer down loads will start as soon as printers are attached to the Master Programmer and the imPort™ connection is made.
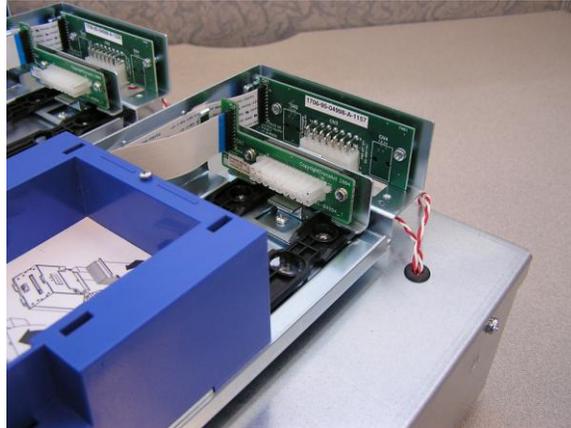

Warning: Plug in the imPort™ connection before starting the program will start the download as soon as the start button is pressed.
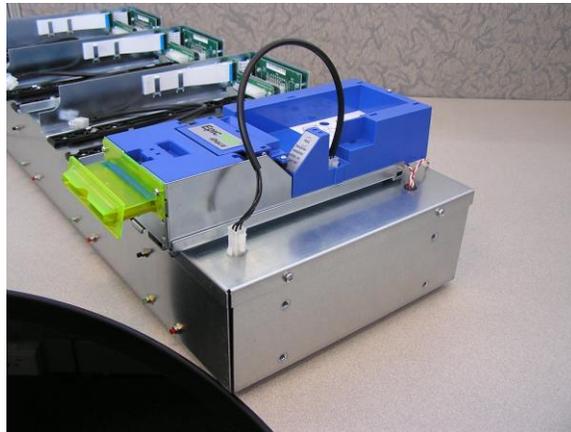
Slide an Epic 950 printer into the master programming module as shown.

Make sure it is fully seated into the connector.

Connect the m950 MP External download cable into the imPort™ connection on the printer.

Once you have connected the Programming Adapter and a firmware file has been selected in the application, the firmware will automatically start to download to the Epic 950 printer.

 Tip: If you place the printer into download mode as you plug it into the programmer, it will load faster. To place the printer in down load mode, Open the cover and hold the feed switch as you are plugging the printer in to the programmer. Then make the imPort™ connection.

The Programming module has 2 LEDs for each printer, colored Red and Green, and a reset button between them. The LED behavior can be interpreted as follows:

- Red on, not blinking – Error, or firmware (.cbt) file not selected.
- Green blinking – Download in progress
- Red and Green blinking in unison – Waiting to be plugged into download port.
- Red and Green alternating blinking – Download successfully completed.

As the application is running, the status line for each COM port will display various messages as it prepares to download firmware to the attached Epic 950 printer. Once the download process starts, the status will be displayed in the COM port status line, and the Green LED will be blinking at varying rates. When the download process is complete, the Red and Green LEDs will blink in a alternating pattern, and the COM port status line will display the message "DONE PROGRAMMING THE PRINTER".

Note: If the firmware (.cbt) file is not selected and displayed in the application widow, the Red LED on the Program Adapter will be lit.

Once the firmware has been downloaded to each Epic 950 printer, the Programming Adapter may be disconnected from each printer, and the application program terminated.

Replacement Parts

Part	Stock Number
120V Power cable	06-0561
USB Cable	98-04322
M950 MP External Download cable	05-06532L
Stacking Kit	95-06844L
Transact CD	95-06870L

Assembly of optional stacking brackets

PART NUMBER: 95-06844L KIT-STACKING BRACKETS-MASTER PROGRAMMER
NUMBER OF KITS REQUIRED: ONE KIT FOR EACH ADDITIONAL MASTER PROGRAMMER ADDED.

Figure #1
The 95-06844L Kit contains; three sheet metal brackets and twelve ¼-20 hex bolts. One bracket will be mounted on each end of the programmer and the third will be mounted on the rear.
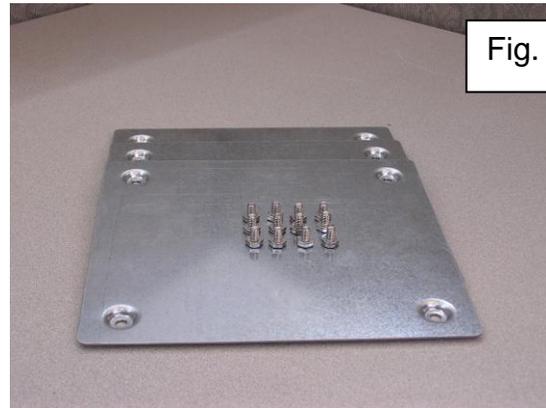

Fig. #1

Figure #2
Begin assembling by placing the two programming fixtures on their backs with the LED's facing up.
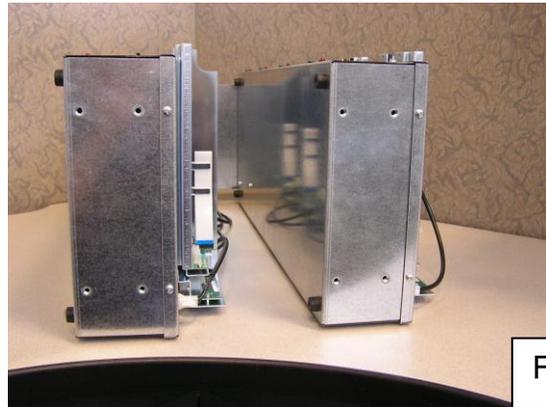

Fig. #2

Figure #3
Align the stacking plate with the two upper inserts on the lower unit and the two lower inserts on the upper unit as shown. Repeat this for the opposite side and the rear.

Fig. #3

Figure #4
TransAct Technologies recommends that this assembly does not exceed 4 units high. It is possible to fasten the base unit to a work bench by using the lower ¼-20 inserts on either end or the rear.
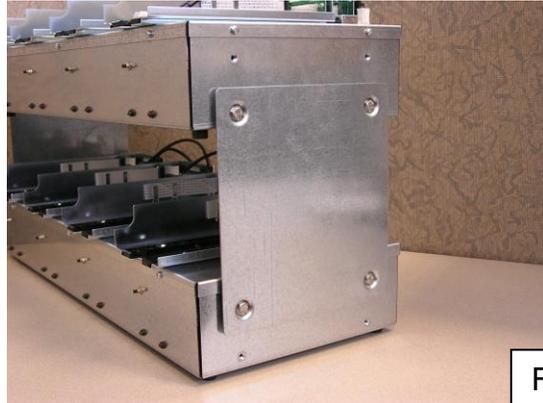

Fig. #4