## Color Controller: E-7100 (Machine Code: D380) SERVICE MANUAL

February 2008 Subject to change

## **Safety Information**

When using this machine, the following safety precautions should always be followed.

### **Safety During Operation**

In this manual, the following important symbols are used:

### **WARNING**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

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Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

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- Connect the power cord directly into a wall outlet and never use an extension cord.
- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- To avoid hazardous electric shock, do not remove any covers or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:
- 1) You spill something into the machine.
- 2) You suspect that your machine needs service or repair.
- 3) The external housing of your machine has been damaged.

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- Protect the machine from dampness or wet weather, such as rain and snow.
- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.
- When you disconnect the plug from the wall outlet, always pull the plug (not the cable).
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

#### ACHTUNG (Deutch)

• Die batterie darf nur durch eine des gleichen Typs ersetzt warden, da anderenfalls Explosionsgefahr besteht.

• Sie die debrauchten Batterien entsprechend den gegebenen Anweisungen.

#### **Power Cord Precautions**

To reduce the risk of electric shock or damage to the equipment:

- User the appropriate power cord which was set up by your manufacturer's authorized service provider.
- Do not place objects on AC power cords or cables. Arrange them so that no one may accidentally step on or trip over them.
- Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.
- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

### Power Supply

The socket-outlet shall be installed near the product and shall be easily accessible.

#### Netzanschluss (Deutch)

Die Wandsteckdose sollte in der Nähe Geräts installiert und leicht zugänglich sein.

### **WARNING**

• Use of controls, adjustment or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

#### ▲IMPORTANT SAFETY NOTICES

#### PREVENTION OF PHYSICAL INJURY

1). Before disassembling or assembling parts of the controller, make sure that the

AC power cord is unplugged.

2). The wall outlet should be near the controller and easily accessible.

3). Note that some components of the controller are supplied with electrical voltage even if the main power switch is turned off.

4). If any operation check has to be made with exterior covers off while the main switch is turned on, keep hands away from electrified or mechanically driven components.

#### **OBSERVANCE OF ELECTRICAL SAFETY STANDARDS**

1). The controller must be installed and maintained by a customer service representative who has completed the training course on the controller.

2). The danger of explosion exists if the battery on the motherboard is incorrectly replaced. Replace the battery only with the equivalent type recommended by the manufacturer. Discard the used motherboard battery in accordance with the manufacturer's instructions and local regulations.

#### SAFETY AND ECOLOGICAL NOTES FOR DISPOSAL

1). Dispose of replaced parts in accordance with local regulations.

2). When keeping used lithium batteries in order to dispose of them later, do not put more than 100 batteries per sealed box. Storing larger numbers or not sealing them apart may lead to chemical reactions and heat build-up.

#### Symbols:

Symbol	What it means
•	Refer to section number/document
Ĩ	Screw
E	Connector

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# TABLE OF CONTENTS

Safety Information	1
Safety During Operation	1
Power Cord Precautions	2
Power Supply	2
Netzanschluss (Deutch)	2
1. Installation	
Installation Requirements	7
Environment	7
Machine Level	7
Minimum Space Requirements	8
Power Requirements	8
Installation Flow Chart	10
Machine Installation	
Setting Customer Expectations	
Unpacking the E-7100	
Front and Back Panels	12
Connecting E-7100 to the Copier	14
Startup and Initial Setup	17
Verifying the Connection (Local Test Print)	19
Verifying Connection to the Network	20
Installing Optional Features	22
Overview	22
Activate / Deactivate an Optional Feature Using a Dongle	23
2. General Operations For Servicing	
Start-Up, Shut-Down, and Reboot	25
Starting the Copier and the E-7100	25
Shutting Down the Copier and the E-7100	25
Shutting Down the E-7100 Only	26
Restarting the E-7100	
Rebooting the E-7100	27
Cancelling the Current Print Job	
Printing the Configuration Page or Test Sheets	
Running the E-7100 Setup	

To Access the Setup Menu	
To Exit from the Setup Menu	
Backup / Restore the System Settings	
To Access Configure Webtools Using a Internet Web Browser	
To Back up E-7100 Settings	
To Restore the E-7100 Settings	
3. Replacement	
General Caution	
Cover Removal	
Side Cover for the E-7100	
Unit Removal	
Video Board	
Diagnostic LED Board	
Hard Disk Drive (HDD)	
Power Supply Unit	
Fans	40
Motherboard	41
Memory – 1GB DIMM	43
CPU and Cooling Assembly	
Lithium Battery	46
Gigabit Ethernet PCB	47
Cables Connected to the Front Panel	48
Soft Power Push Button	
4. Software Maintenance	
General Notes and Cautions	51
Clearing the Queued Print Jobs in the E-7100	53
Restoring the E-7100 to Factory Defaults	54
System Software Installation Procedure	
Overview	
Installing System Software over the Network Port	
Installing System Software Using a USB Drive	61
Patch Installation Procedure	66
5. Troubleshooting	

Overview	67
LED Diagnostic Codes	68
Errors and Suggested Actions	71
Start-Up Problems	71
System Problems	74
System Software Installation	75
Network Problems	79
Printing Problems	80
Test the Voltage Supplies	85
6. Detailed Section Descriptions	
Block Diagram and Functions	87
Print Data Processing	89
Flow Chart	89
7. Specifications	
General Specifications	91

# 1. Installation

## Installation Requirements

#### Environment

- Temperature Range: 5°C to 40°C (41°F to 104°F)
- 2. Humidity Range:
  - 10% to 90% RH
- 3. Ambient Illumination:

Less than 1500 lux (do not expose to direct sunlight or strong light)

4. Ambient Dust:

Less than 0.10 mg/m3

- 5. If the place of installation is air-conditioned or heated, do not place the machine where it will be:
  - 1) Subjected to sudden temperature changes
  - 2) Directly exposed to cool air from an air-conditioner
  - 3) Directly exposed to heat from a heater
- 6. Do not place the machine where it will be exposed to corrosive gases.
- 7. Do not install the machine at any location over 3,048 m (10,000 feet) above sea level.
- 8. Place the controller on a strong and level base.
- 9. Do not place the machine where it may be subjected to strong vibrations.
- 10. Do not connect the machine to a power source shared with another electrical appliance.
- 11. The machine can generate an electromagnetic field, which could interfere with radio or television reception.

#### **Machine Level**

- 1. Front to back: Within  $\pm 5^{\circ}$  (0.2") away from level
- 2. Right to left: Within  $\pm 5^{\circ}$  (0.2") away from level

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### **Minimum Space Requirements**



Place the machine near the power source, providing clearance as shown.





You may place the machine [A] on the right side of the large capacity tray or copier as shown (top view) in the illustration.

#### **Power Requirements**

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- Insert firmly the plug in the outlet.
- Avoid using an outlet extension plug or cord.
- Ground the machine. Avoid using a 3-pronged adapter in a 2-hole ungrounded outlet.

- Use the supplied AC power cord with this product.
- 1. Input voltage level: 100 240V, 50 60Hz; 3A
- 2. Do not put anything on the AC power cord.

## **Installation Flow Chart**

Recommended installation steps are as follows:



1

## **Machine Installation**

#### Setting Customer Expectations

Before installation, the customer should be informed of the following:

- Some nodes on the network may be unavailable for up to one hour.
- The copier may be unavailable for up to one hour
- The site administrator should be available during the installation for assistance with network connectivity issues.
- Equipment downtime and impact on the network can be minimized if the site administrator installs a network node for the E-7100 and confirms network connection for the E-7100 installation.
- The site administrator should have a networked computer available during the installation. The appropriate software should already be installed. Documentation for the networked computer and the network operating software should be available.
- The site administrator should install the user software shipped with the E-7100 (user documentation is also included) onto the networked PCs and Mac OS computers that will print to the E-7100.

#### Note

 This guide covers hardware installation and service. It provides general information on connecting the E-7100 to the customer's network. For network setup and configuration information, refer the site administrator to the "Configuration and Setup" manual.

#### Unpacking the E-7100

- 1. Open the box and remove the packing material.
- Remove the contents from the top container. Inspect the contents for visible damage. The top container should include the following items:



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[A]: E-7100	[F]: Screw (M3 x 2)
[B]: Fierydriven Keytop	[G]: Protection Plate (For E-7100)
[C]: Fierydriven Logo	[H]: Protection Plate (For E-Copier)
[D]: Media Pack	[I]: Gigabit Ethernet PCB
[E]: Interface Cable	[J]: AC Power Cord

- 3. Give the Media Pack [D] to the site administrator.
- 4. Take the remaining components out of the top container.
- 5. Remove the top container and any packing materials.
- 6. Carefully lift the E-7100 out of the box.

### Front and Back Panels

After unpacking the E-7100, familiarize yourself with the front and back panels before you connect the E-7100 to the Copier.

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#### g380v102

#### Front Panel

[A]: Soft Power Push Button
[B]: Front Panel USB Port
[C]: Power Indicator
[D]: HDD Access Indicator



Back Panel

[A]: Diagnostic LEDs (For service use only)
[B]: Service Switches (For service use only)
[C]: Power Connector
[D]: Main Power Switch
[E]: Gigabit Ethernet connector
[F]: LAN Connector (For customer use)
[G]: Not used (Monitor port)
[H]: Not used (Serial Port)
[I]: Back Panel USB Ports

### Connecting E-7100 to the Copier

#### Preparation for Installing the Color Controller E-7100

After you unpack the E-7100, connect the E-7100 to the copier before you connect it to the network. This is to confirm that there are no problems with the hardware and controller itself.

### **WARNING**

• Turn the controller main power switch and copier main power switch to off and disconnect the power cords before you do these procedures.





- 1. Disconnect the ARDF connector [A] (⊑ x 1).
- 2. Remove the rear upper cover [B] ( $\hat{\mathscr{F}} \times 3$ ,  $\hat{\mathscr{F}}$  stepped x 2).
- 3. Remove the rear lower cover [C] ( $\hat{\mathscr{F}} \times 2 \hat{\mathscr{F}}$  stepped x 2).



4. Remove the controller box cover [A] ( $\hat{\mathscr{F}} \times 16$ ).



- 5. Remove the I/F slot cover [A] of slot C ( $\hat{\mathscr{F}} \times 1$ ).
- 6. Insert the Gigabit Ethernet PCB [B] ( $\mathscr{F} \times 2$ ).
- 7. Turn the copier main power switch on, and enter SP mode.
- 8. Change the network setting of SP5193-001 from "0" to "1".
- 9. Press the **On** switch (operation switch) on the copier operation panel and wait until the **On** indicator is off.
- 10. Turn the copier main power switch off.
- Connect the interface cable [C] to both of the Gigabit Ethernet connectors. Attach this with the prong of the protector plates [D] and [E] (\$ x 1 each).

#### • Note

- Make sure that the Gigabit Ethernet PCB [B] is inserted straight and firmly.
- 12. Connect the appropriate AC power cord to the power connector at the back of the E-7100.



13. Remove the blank key [A] on the operation panel of the copier and discard it.

#### 🔂 Important 🔵

- Make sure that the blank key [A] is the third from the bottom.
- 14. Install the "Fierydriven" key top [B] in the empty slot.



15. Attach the Fiery Decal [A] to the copier front cover.

### Startup and Initial Setup

1. Connect the power cord of the copier to a power outlet and switch on the copier main power.

• Note

- The copier must be turned on before you turn the E-7100 on.
- Make sure that all firmware modules for the copier are updated to the newest versions. If they
  are not, update them before you turn on the E-7100. (
   Copier Service Manual)
- 2. Turn the main power switch on the E-7100 back panel to ON.
- 3. Press and release the soft power push button on the front panel of the E-7100.
- Allow startup to proceed without interruption, while you watch the diagnostic LEDs on the back panel of the E-7100.
- 5. When the diagnostic LEDs remain at '00', go to the copier operation panel and press the **Fierydriven** key. 'Please wait' may be shown on the copier operation panel.
- Within about three minutes, the language selection screen is shown. (If this screen is not shown, then press the Fierydriven key again.)
- 7. Select the desired language button, and touch "Continue".
  - English

- Dutch
- Spanish
- Italian
- German
- French

🖺 Lan	guage Setup	Continue
Dutch	German	
English	Italian	
French	Seenish	
		d380i500

#### Note

- After you have selected a language, you cannot change the language unless you perform "Factory Defaults" (
   Restoring the E-7100 to factory defaults) or re-install the system software.
- The default settings for the E-7100 depend on the language selection as follows:

		Selected Language & Measurement Units		
		English - US	English - Metric / Dutch / Spanish / Italian / German/ French	
PS Setting	Default Paper Sizes	US	Metric	
PCL	Paper Size	Letter	A4	
Setting	Paper Size System Pages	US	Metric	

If you selected "**English**" at the language selection screen, you are prompted to select the Measurement Units. Select either "**US**" or "**Metric**", and then touch "**Continue**".

<u>L</u>	Measurement Uni	ts	Cancel	Continue
	US	Metric		
				4380150

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- 8. The System will reboot. After a few minutes, to confirm that the reboot was successful, press the "Fierydriven" key.
- 9. Now the E-7100 can be used with the default settings (minimum setup).

Note

• The E-7100 setup options should be configured later by the site administrator.

#### Verifying the Connection (Local Test Print)

After you connect the E-7100 to the copier, print the Test Page and the Configuration Page to verify that the connection between the E-7100 and the copier is good.

- 1. Make sure that the copier is not in use.
- Check the settings in the following table, and make sure that Letter or A4 paper is loaded in at least one of the paper trays of the copier.

	PS Setting Default Paper Size		PCL Setting Paper Size for System Setting	
Setup Option	"US"	"Metric"	"US"	"Metric"
Configuration Page requires	Letter	A4	-	-
PS Test Page requires	Letter	A4	-	-
PCL Test Page requires	-	-	Letter	A4

- 3. On the operation panel of the copier, press the "Fierydriven" key to access the Fiery menu screen.
- 4. Move to the "Fiery" tab.

Main	Job List	Tools	Scan		Login
🖹 Idle					
Fire lefe	Server 1	Jamo '	E-7100-0890	2	
Printable In	IP Addre	ess:	133.139.166	. 36	
	Hard Dri	ive:	65.0 GB Fre	e out of 65.3 GB	
Setup	Contact	Info:			
Run Diagnost	ics				
Clear Serve	Installe	ed Options:	EFI Secure	Erase	
Restart Fie	ry				
					10001500

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5. Touch "Printable Info".

Fiery Info	1	Click to print fol	lowing pages1	
Printable Info	B	P5 Test Page	Configuration	Job Log
Setup Run Diaenostics		PCL Test Page	Color Owrts	E-mail Log
Care Server		we star	and the second second	CTR 1

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- 6. Print the following pages:
  - Configuration Page
  - PS Test Page
  - PCL Test Page
- 7. Examine the quality of the test pages.
  - All patches should be visible, but it is acceptable if they are very faint in the 5% and 2% ranges.
  - Each patch set should show uniform gradation from patch to patch as the shade lightens from 100% to 0%.
  - Poor image quality may indicate that the copier needs service. For more information, see the documentation provided with the copier.

#### Verifying Connection to the Network

The E-7100 provides twisted pair connectivity to an Ethernet network.

Cable requirements:

- 10BaseT (Ethernet): Unshielded Twisted Pair (UTP), Category 3 or higher
- 100BaseTX (Fast Ethernet): UTP, Category 5 or higher (4-pair/8-wire, short length)
- 1000BaseT (Gigabit Ethernet): UTP, Category 5e or higher (4-pair/8-wire, short-length)

#### Note

- If the print engine is 230V, use a shielded network cable.
- 1. Turn off the E-7100 power before connecting the E-7100 to any network device.
- 2. Connect the network cable to the LAN connector on the E-7100.
- 3. Make sure that the copier power is switched on.
- 4. Turn the power switch on the E-7100 back panel to ON.
- 5. Press and release the soft power push button on the front panel of the E-7100.

- 6. Allow startup to proceed without interruption, while you watch the diagnostic LED on the back panel of the E-7100. When the diagnostic LEDs show '00', go to the copier operation panel.
- 7. Press the Fierydriven key on the copier operation panel to access the fiery menu screen.
- 8. Move to the Fiery tab.
- 9. Touch "Setup".

Main	Job List	Tools	Scan	Per-	Login
📑 Idle			· ·		
Fiery Info	Server N	ame:	E-7100-C890		
Printable In	IP Addre	55:	133.139.166.36		
Frincabite II	Hard Dri	ve:	65.0 GB Free ou	t of 65.3 GB	
Setup	Software	version:			
0.0	Contact	Info:			
Hun Diagnost	ICS				
	Installe	1 Options:	FET Secure Eras	٥	
Restart Fie	ry	a operador	Li i Decure Lias	-	
					d380i502a

- 10. You are asked to enter an administrator password. (The default is "Fiery .1")
- 11. Ask the site administrator to configure the Setup options.

#### Note

- It is the site administrator's responsibility to configure the correct setup options for the network and user environment. The default settings in the setup may be adequate, but they may not be optimal for the user's environment. Refer the site administrator to the "Configuration and Setup" manual for setup information.
- 12. After configuring the Setup options, verify the network connection.
- Ask the site administrator to install the printer driver on a client PC, and to make a test print from that PC.

## **Installing Optional Features**

#### Overview

The system software for the E-7100 contains the following optional features:

- EFI Hot Folders
- EFI Auto Trap
- EFI Spot On

Initially, the above three optional functions cannot be used. When the customer purchases these options, a hardware USB dongle which includes a license for the optional feature will be provided.

After the license for the feature is transferred to the E-7100, the dongle will be locked to that particular E-7100 (a unique value will be written to the dongle).

 To transfer the license from the dongle to the E-7100, you turn off the E-7100 power, connect the dongle, turn on the E-7100 power, wait for the E-7100 to get to the idle condition, then remove the dongle. The feature is now activated. There is a detailed procedure on the next page.

After this, the same dongle cannot be used on another E-7100, unless the license is first removed from the original E-7100 using that dongle. (You must use the same dongle.)

 To remove the license from the E-7100, do exactly the same procedure that you use when you transfer the license from the dongle to the E-7100. This deactivates the feature.

When the feature is removed from the original E-7100, the unique value will be removed from the dongle. The dongle can now be used on another E-7100.

If a dongle that has already a unique value (had its unit ID locked to a E-7100) is inserted into another E-7100 unit, the dongle will have no effect.

The number of times the license can be removed from the E-7100 is limited as shown in the table below. (Activate 4 times and deactivate 3 times.) When this limit is reached, the dongle can no longer be used to remove the license, so the license will stay on the E-7100. If a dongle is inserted to remove a feature but the limit has been reached, there will be no effect.

E-7100 Power Turned On (or E-7100 Rebooted) with Dongle Connected	Activates/Deactivates the feature on the E-7100	License Transferred to
l st time	Activates	E-7100
2nd time	Deactivates	Original Dongle
3rd time	Activates	E-7100
4th time	Deactivates	Original Dongle

5th time	Activates	E-7100
óth time	Deactivates	Original Dongle
7th time	Activates	E-7100
8th time and after	No effect	No effect

### Activate / Deactivate an Optional Feature Using a Dongle

The optional feature dongle can be used to either activate or deactivate a feature. The operation for both of these procedures is exactly the same, and the successful activation or deactivation can be confirmed by printing the configuration page.

The purpose of the ability to remove the license (deactivation) is to handle cases where the license was accidentally installed on the wrong E-7100 unit.

Immediately after the E-7100 main power is turned on or the E-7100 is rebooted, the E-7100 checks for the presence of the feature activation dongle.

- 1. Print the configuration page of the E-7100. (
  Printing the Configuration Page or Test Sheets)
- 2. With the configuration sheet, check the condition of the optional feature that you will activate/ deactivate. (If activated, the option name will appear on the configuration page.)
- 3. Shut down the E-7100 and turn the power of the E-7100 OFF. ( Shutting Down the E-7100 only)
- 4. Insert the dongle in one of the USB ports.
- 5. Make sure that the copier main power is already ON.
- 6. Turn the power switch of the E-7100 ON, then press and release the soft power push button on the front of the E-7100.
- 7. Wait for the E-7100 to come to the idle status. During this startup sequence, the optional feature will be activated/deactivated.

Note

- If the E-7100 already has a particular feature activated, and a new dongle for the same feature is inserted, the license will not be affected and the new dongle will remain active.
- If the E-7100 already has a particular feature activated and the matching dongle is inserted, the feature will be removed, and the dongle can then be re-used on another E-7100 unit.
- 8. Remove the dongle from the USB port.

### 

- Do not forget to remove the dongle at this time.
- If you leave the dongle in the USB port and the E-7100 main power is restarted or the E-7100 is rebooted, then the condition of the optional feature will be reversed. (For example, if you

wanted to activate the feature, it is now deactivated.) The only exception is that after you activate a feature for the 4th time, it cannot be deactivated.

- 9. Print a configuration page (
   Shutting Down the Copier and the E-7100).
- 10. On the configuration page, check if the desired optional feature is activated/deactivated. (If activated, the option name will appear on the configuration page.)

If you have activated an optional feature, keep the configuration page. You may need it later for troubleshooting purposes, as shown in the following caution.

### 

- After an optional feature has been activated, the optional feature license information is kept inside the U601 chip on the video board of the E-7100.
- If the U601 chip becomes defective, the following are needed as evidence in order to get a new U601 chip and optional feature dongle:
- The defective U601 chip
- The configuration page that shows that the defective U601 chip had the optional feature license installed.
- Therefore, always print a configuration page and keep it when you activate a new optional feature on the E-7100.



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- 11. Three tags with six labels are attached to each optional feature dongle.
  - a) Optional Feature Name: Printed
  - b) Optional dongle serial number: Printed
  - c) Installed Controller Model Name: Blank
  - d) Installed Controller Serial Number: Blank
  - e) 4 check boxes for Activation: Not checked
  - f) 3 check boxes for Deactivation: Not checked

For the labels c) to f), you can fill in the related information or check the boxes, if you want to keep a record of the status of each dongle.

# 2. General Operations For Servicing

## Start-Up, Shut-Down, and Reboot

The copier and the E-7100 have separate main power switches. During normal operation, you can leave the E-7100 main power switch in the ON (I) position.

#### Starting the Copier and the E-7100

- 1. Turn on the main power switch of the copier.
- 2. If the main power switch of the E-7100 is OFF (O), turn on the main power switch of the E-7100.
- 3. Press and release the soft power push button on the front of the E-7100.

The controller enters into the boot-up sequence.

4. After the E-7100 and the copier become idle, press the **Fierydriven** key. The Fiery menu screen will appear on the copier operation panel.

#### Shutting Down the Copier and the E-7100

- 1. Press the Fierydriven key on the operation panel of the copier. The fiery menu screen appears.
- 2. Move to the Fiery tab.
- 3. Touch "Restart Fiery".

Main	Job List	Tools	Scan	M	Login
Print	ting	Car	figuration - Oc	wirator :	No. O
Fiery In	do				
Printable	Info				
Setup		Restart Fiery	Service		
Run Diagno	otics	Ristart Sr	item		
Astart F	lery	Shut Doe	n		
					d380i504

4. Touch "Shut Down", then touch "OK".

The E-7100 enters into the shut down sequence.

The diagnostic LEDs on the back panel of the E-7100 will turn off.

Main	Job List	Toola	Scan	M	Login
Print	ting	6	orfiguration - Oc	erator.	Acres (
Fiery In	đo				
Printable	Info				
Setup		Restart Fier	v Service		
Run Diagno	otics	Restart 1	isten		
Ristart F	Hery .	940			
					380i504

 Press the On switch (operation switch) on the copier operation panel and wait until the On indicator is off.

#### Note

- Do not turn off the main power switch of the copier when the On indicator is on or blinking. Doing so could cause system problems such as hard disk drive or memory problems.
- 6. Turn the copier main power switch off.
- 7. If the E-7100 is being taken out of service, turn off the E-7100 using its main power switch. (For example, if someone needs to move the E-7100, disconnect cables, or open the chassis.)

#### Shutting Down the E-7100 Only

- 1. Press the Fierydriven key on the operation panel of the copier. The Fiery menu screen appears.
- 2. Move to the Fiery tab.
- 3. Touch "Restart Fiery".
- 4. Touch "Shut Down", then touch "OK".

The E-7100 enters into the shut down sequence.

The diagnostic LEDs on the back panel of the E-7100 will turn off.

5. If the E-7100 is being taken out of service, turn off the E-7100 using its main power switch. (For example, if someone needs to move the E-7100, disconnect cables, or open the chassis.)

#### **Restarting the E-7100**

When restarting the E-7100 to recover from a problem, try this procedure first. However, this procedure will only restart the E-7100 application software that is now running on the system OS. To reboot the system OS (for example, after downloading a patch), see the next section "Rebooting the E-7100 (**\*** Rebooting the E-7100)".

- 1. Make sure that the E-7100 is not in use.
- 2. Press the Fierydriven key on the operation panel of the copier. The Fiery menu screen appears.

2

- 3. Move to the **Fiery** tab.
- 4. Touch "Restart Fiery".



5. Touch "Restart Fiery Service"

Main	Job List	Tools	Scin	M	Login
🖹 Prin	ting	Carl	figuration - Oc	erator .	Part 1/2
Fiery 1	rđo				
Printable	Info				
Setu		Restart Fiery S	Service		
Run Diagno	ntics	Restart Sis	tum.		
Astart I	Flery .	Shut Down			
					1380i504b

6. Wait until the E-7100 becomes idle.

### Rebooting the E-7100

Use this procedure to reboot the system OS (for example, after downloading a patch).

- 1. Make sure that the E-7100 is not in use.
- 2. Press the Fierydriven key on the operation panel of the copier. The Fiery menu screen appears.
- 3. Move to the **Fiery** tab.
- 4. Touch "Restart Fiery".

Main	Job List	Tools	Scim	M	Login
Printing		Corf ig.	ration - Oc	wrator.	No. 1
Fiery Ind	to				
Printable I	Into		_		
Setup		Restart Fiery Serv	ice		
Run Diagnos	tics	Ristart System			
Astart Fi	ery .	Shut Down			
					d380i504

5. Touch "Restart System"

Main	Job List	Tools	Scan	M	Login
🛅 Print	ting	6	onfiguration - Oc	erator	No. 10
Fiery In	do				
Printable	Info				
Setur		Restart Fier	y Service		
Run Diagno	otics	Restart 1	ister		
Austart F	lery .	Shut D	own		
		-			1380i504c

6. Wait until the E-7100 becomes idle.

## **Cancelling the Current Print Job**

When you want to cancel the current print job, do the following:

- 1. Press the **Fierydriven** key on the operation panel of the copier to access the Fiery menu screen.
- 2. Move to the **Job list** tab.

Re:	tive	Held V	Printed	Secure			
Refue	Jul Title		liter	Owter/Time	Page 1	Daries	Ä
Printing	Celor Darts		Bentar	41/11/2018 45:00	1	1	Å.
Pointing	Control Parel No.		Beite	BD/RD/2008 BD/RI	- 1		
Pointing	PS fast Pase		Genter	REVALIZABLE RELET	1	14	
Printing	PG, Test Poe		Berstan	ADVERTURE ADVER	4	1.	

- 3. From the job list, touch the job that you want to cancel.
- 4. Touch "Cancel".

## Printing the Configuration Page or Test Sheets

- 1. Make sure that the E-7100 is not in use.
- 2. Press the **Fierydriven** key on the operation panel of the copier to access the Fiery menu screen.
- 3. Move to the **Fiery** tab.
- 4. Touch "Printable Info", then touch the desired key.
  - Configuration Page
  - PS Test Page
  - PCL Test Page

1.444				
Fiery Info	-	Click to print fol	lowing pages:	
Setup	8	PS Test Page	Configuration	Job Log
lun Divensitios		PCL Test Page	Color Oarts	E-mail Log
Restart Fierv		PS Font List	Control Panel Map	FTP Log
		POL Forst List		

## Running the E-7100 Setup

The following procedures show how to access the Setup menu from the Fiery menu screen.

#### Note

- When the network settings (protocol, IP Address, etc.) are already configured and the "Enable Web Service" option is set to ON, you can also configure the E-7100 setup from "Configure Webtools". To do this, use a web browser on a personal computer which is connected to the network. For more detailed instructions, please refer to the "Configuration and Setup" manual.
- When you try to get access to the Setup menu, you are always asked to input an administrator
  password. (The default password is "Fiery.1") Ask the site administrator to input the administrator
  password when you must get access to the Setup menu.

#### To Access the Setup Menu

- 1. Make sure that the E-7100 is not in use.
- 2. Press the Fierydriven key on the operation panel of the copier to access the Fiery menu screen.
- 3. Move to the Fiery tab.
- 4. Touch "Setup".

Main	Job List	Tools	Scan	Pares.	Login
📙 Idle					
			5 7144 4444		
Fiery Inf	Server M	Name:	E-7100-C890		
Printable I	IP Addre	ess:	133.139.166.36		
······································	Hard Dr	ive:	65.0 GB Free or	ut of 65.3 GB	
Setup	Software	e version:			
	Contact	Info:			
Run Diagnos	tics				
	loctal le	vd Ontions!	FEL Seques Fra		
Restart Fi	ery	a operais.	L'i secure Lia:	26	
					d380i502a

- 5. You may be asked to enter an administrator password. (Ask the site administrator to enter the password. The default password is "**Fiery.1**")
- 6. The main setup screen appears.

For the details of each setup option value, refer to the "Configuration and Setup" manual.

#### To Exit from the Setup Menu

1. At the main setup screen, touch "Exit Setup".

The Fiery menu screen will disappear.

2. When you are prompted "System Requires to Reboot for Changes to Apply", touch "Reboot now".

## Backup / Restore the System Settings

The administrator at the customer site can back up the current E-7100 configuration and restore it later.

This feature is also useful when...

- 1. The customer purchases more than one unit of E-7100 and wants to configure all of them with almost the same system configuration.
- 2. The E-7100 needs to be re-configured after system software installation.

The following items can be backed up to a configuration settings file:

- All system settings with the exclusion of Date / Time.
- Imposition templates saved in the default directory for these files on the E-7100
- Address books
- Virtual Printer settings
- Users and Groups information (login names and passwords)
- Custom spot colors

#### **Vote**

 The configuration settings file is saved on the computer from which you access Configure Webtools. Make sure that you do not save the configuration settings file to the E-7100 itself. Otherwise, when you reinstall system software, the configuration settings file residing on the E-7100 is deleted.

#### To Access Configure Webtools Using a Internet Web Browser

#### Note

- The network settings (protocol, IP Address, etc) should be already configured and the "Enable Web Service" option should be set to ON (default), in order to access the Configure Webtools.
- 1. Start your internet web browser and type the IP address of the E-7100.
- 2. Click the Configure tab on the E-7100 home page.
- 3. Click "Launch Configure".
- 4. Log on as an Administrator with the appropriate password.

(The default password is "Fiery.1".)

Backup/Restore
Backup Fiery Settings
Restore Fiery Settings
Restore Default Fiery Settings

Note

 The same menu can also be accessed from inside the Command WorkStation, Windows Edition (Server > SetUp > Server > Backup / Restore).

#### To Back up E-7100 Settings

- 1. Choose Configure > Server > Backup / Restore.
- 2. Click Backup Fiery Settings.
- 3. In the dialog box that appears, accept the default file name or type a new name for the backup file.
- 4. Click Save.

#### • Note

• The saved configuration settings file can only be restored to the same model (E-7100).

#### To Restore the E-7100 Settings

- 1. Choose Configure > Server > **Backup / Restore**.
- 2. Click Backup Fiery Settings.
- 3. In the dialog box that appears, type the name of the configuration settings file or select it from the list.
- 4. Click Open.

Note

• The server name and static IP address are restored therefore if the restore operation is used on more than one E-7100 you must reconfigure them to be unique.

2. General Operations For Servicing

# 3. Replacement

## **General Caution**

## **WARNING**

• Turn off the power and unplug the E-7100 before attempting any of the procedures in this section.

Before accessing internal components, position the E-7100 so that it is resting on its right-hand side on a flat, anti-static surface.
# **Cover Removal**

## Side Cover for the E-7100



[A]: Side cover (⋛ x 6)

# Unit Removal

## Video Board



[A]: Video board with bracket ( $\hat{\not{P}} \times 2$ )



[C]: U601

Note

- The video board that you use as a spare part does not include the U601.
- When you replace the video board, do not forget to move the U601 from the old board to the new board.

U601: Contains option upgrade information and licensing information for the E-7100.

## **Diagnostic LED Board**



[A]: 16-pin DIAG cable (☞ x 1) [B]: DIAG board (♂ x 4)

## Hard Disk Drive (HDD)



<sup>[</sup>A]: HDD with bracket ( $\hat{\mathscr{F}} \ge 4$ )

- [B]: HDD (Â × 4)
- [C]: SATA data cable (☞ x 1)
- [D]: SATA power cable (⊑╝ x 1)
- [E]: Legacy power connector (DO NOT USE)

## **Power Supply Unit**



d380r106

- 1. Power supply cable (⊑<sup>⊥</sup> x 4).
  - [A]: Power harness.
  - [B]: HDD power connector for HDD
  - [C]: 4-pin power connector for the PW2 socket on the motherboard.
  - [D]: 20-pin power connector for the PW1 socket on the motherboard.
  - [E]: Main power switch
- 2. Power supply unit [F] ( 🖗 x 5)

#### Fans



- 1. Video board (🖝 Video Board)
- 2. Cables (⊑<sup>™</sup> x 2):
  - [A-2] from FAN2
  - [A-3] from FAN3
- 3. [FAN2]: Fan (𝑘 x 4)
- 4. [FAN3]: Fan (⋛ x 4)

#### Note

- Connect the [A-2] cable (Short) to FAN2 on the motherboard.
- Connect the [A-3] cable (Long) to FAN3 on the motherboard.

3

## Motherboard



- 1. Video board (🖝 Video board)
- 2. Fan case (🖝 Fans)
- 3. Cables (⊑<sup>™</sup> x 8):
  - [A]: 4-pin power connector from PW2
  - [B]: 20-pin power connector from PW1
  - [C]: USB cable from USB3
  - [D]: Fan cable from FAN3
  - [E]: Front panel cable from J25

PIN 1 & 3	HDD LED
PIN2 & 4	Power LED
PIN6 & 8	Soft Switch

- [F]: DIAG cable from J26
- [G]: Fan cable from FAN2
- [J]: SATA data cable from SATA0
- 4. Screws (🖗 x 4)

- 5. Memory ( Memory 1GB DIMM)
- 6. CPU Cooling Assembly ( CPU and Cooling Assembly)
- 7. CPU (
  CPU and Cooling Assembly)

#### Note

 When you replace the motherboard, remove the CPU and memory and attach them to the new motherboard (
 CPU and Cooling Assembly).

#### For reassembling:

- Make sure of where to connect the connectors for each cable.
- Make sure that all connectors are inserted firmly in the sockets. Also, do not put the connectors in the sockets the wrong way around.



	Connector			Location
[A]	SATA data cable	SATAO		
[B]	4-pin power	PW2		
[C]	20-pin power			PW1
[D]	Front panel USB port			USB3
[E]	Bottom chassis fan	FAN3		
	Soft power button cable and activity LED cables		1	For HDD LED
[F]		J25	2	For Power LED
			3	For Soft Switch
[G]	DIAG cable	J26		J26
[H]	Video interface board	PCIE2		
[1]	Top chassis fan	FAN2		FAN2
[J]	Memory	DIMM2		DIMM2
[K]	CPU fan			FAN1

## Memory – 1GB DIMM



- 1. Push outward on the levers [A-1], [A-2] on each side of the DIMM.
- 2. Slide the DIMM [B] straight out of the socket.

#### Note

- Always attach the DIMM [B] to the DIMM2 socket.
- Gently slide the DIMM straight down into the socket and press so that the levers lock the DIMM into place. Make sure that the levers close securely around the ends of the DIMM.
- DIMMs fit in the socket only one way.

## **CPU and Cooling Assembly**

#### Overview

You can replace the following parts.

- Cooling Assembly only
- CPU and Cooling Assembly (as a set). If you replace the CPU, you must replace the cooling assembly also, as a set.

The cooling assembly consists of a fan with heat sink and a clip assembly.

• Note

- Be careful not to damage the motherboard, the CPU, or the CPU socket when you replace the cooling assembly. Remove the memory before you remove the cooling assembly.
- When you want to replace the CPU, replace the CPU and the cooling assembly as a set. This is very important, because the thermal pad that is attached to a new heat sink will make a good contact between the CPU and the heat sink when heated. If you attach a used cooling assembly to a new CPU by mistake, the heat sink will not contact the CPU properly, and this will cause the CPU to overheat.

Cooling assembly removal procedure



- 1. Remove the CPU fan cable [A] from the motherboard (  ${\rm Im} x$  1).
- 2. Remove the fan heat sink [B] ( $\hat{\mathscr{F}} \times 4$ ).

#### **CPU** removal procedure



- 1. Release the locking screw to release the CPU [B] from the socket [C].
- 2. Grasp the CPU by its edges and gently lift it from the socket.

#### For Re-attaching:

- Check the location of the arrow [A] on the CPU [B] when you insert the CPU into the socket [C]. (See the illustration above.)
- Be careful not to bend the pins when you insert the CPU into the socket.
- Set the CPU in the socket completely and without forcing it.

#### Lithium Battery

## 

- There is danger of explosion if the battery is replaced with the incorrect type. Replace with only with the same lithium battery supplied as a spare part.
- Discard the used motherboard battery in accordance with the manufacturer's instructions and local regulations.



#### For Re-assembling:

- You need to re-configure the system date and time.
- To configure the system date and time, enter the 'Server setup' menu from the Setup main menu.
   (To Access the SetUp Menu)

# Gigabit Ethernet PCB



- 1. Copier rear upper cover
- 2. Copier rear lower cover
- 3. Copier controller box cover
- 4. Protector plates [A], [B] (🖗 x 1 each)
- 5. Interface cable [C]
- 6. Gigabit Ethernet PCB [D] (🖗 x 1)

### For Re-assembling:

• Make sure that the Gigabit Ethernet PCB is inserted straight.



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- 1. Side cover
- 2. Video board (🖝 Video board)
- 3. Front panel USB port cable [A] from USB3
- 4. HDD LED cable [B] from J25
- 5. Power LED cable [C] from J25
- 6. Front panel [D] (⋛ x 1)



- 7. Front panel USB port cable [A] from front panel ( $\hat{\beta} \times 2$ ).
- 8. HDD LED cable [B] from front panel.
- 9. Power LED cable [C] from front panel.
- 10. Center panel [E] from the front panel [D] ( $\hat{\mathscr{F}} \times 4$ )

#### For Re-assembling:

- Make sure of where to connect the connectors for each cable.
- Make sure that all connectors are inserted firmly in the sockets. Also, do not put the connectors in the sockets the wrong way around.

### Soft Power Push Button



- 1. Side cover
- 2. Video board (🖝 Video board)
- 3. Soft Power Push Button cable from J25
- 4. Front panel [B] (𝔅 x 1)
- 5. Soft power button cable from the front panel.

#### For Re-assembling:

• Make sure of where to connect the connectors for each cable.

3. Replacement

# 4. Software Maintenance

# **General Notes and Cautions**

You may use one of the following when you have a problem with the system software or the HDD.

- Clear Server: Deletes all queued print jobs from the E-7100
- Factory Defaults: Restores the E-7100 to the factory defaults
- System Software Reinstallation

The following table shows whether the current data on the E-7100 will remain or be deleted when each of these is used.

	"Clear Server"	"Factory Defaults"	System Software Reinstallation / Upgrade
Job Log	Not Deleted	Deleted	Deleted
Queued Jobs	Deleted	Deleted	Deleted
Scanned Jobs	Deleted	Deleted	Deleted
MailBox	Deleted	Deleted	Deleted
Archived Jobs	Deleted	Deleted	Deleted
FreeForm masters	Deleted	Deleted	Deleted
Resident Fonts	Not Deleted	Not Deleted	Deleted
Downloaded Fonts	Not Deleted	Deleted	Deleted
Language Selection	Not Deleted	Deleted	Deleted
Setup Options	Not Deleted	Deleted	Deleted
Patches	Not Deleted	Not Deleted	Deleted
Administrator Password	Not Deleted	Not Deleted	Deleted
Option Activation	Not Deleted	Not Deleted	Not Deleted

#### Note

• In "System Software Reinstallation/Upgrade", "Upgrade" refers to replacing the software with a new version. It does not refer to the application of patches. When you apply a patch, data is not deleted.

Before you use any of the above features, make sure you inform the site administrator that the indicated data and settings will be deleted and should be re-installed after the feature has been used.

#### Job Log:

The list of jobs in the Job Log and all jobs in the queues are deleted. The site administrator can use E-7100 Spooler to save a current list of jobs from the Job Log (the actual jobs are not saved, only a list of them).

#### Queued Jobs:

All queued print jobs (in the Print, Hold, and Printed queues) will be deleted.

#### Archived Jobs and Free Form masters:

Archived jobs on the E-7100 HDD and FreeForm masters are deleted. The lists of archived jobs and FreeForm masters are deleted as well.

#### Fonts:

All fonts on the HDD are deleted when you reinstall the system software. Resident fonts are reinstalled when you reinstall the system software. Any customer-supplied fonts will need to be reinstalled by the site administrator using E-7100 Downloader.

#### Administrator Password:

The administrator password will be deleted when system software is re-installed. (The administrator password will return to "**Fiery.1**" after the system software is re-installed.)

#### Configuration:

Make sure to print a configuration page before reinstalling the system software. The current Setup configuration will be lost when you reinstall the system software.

#### Compatibility:

When you upgrade the system software, make sure the latest user software is installed onto all computers that print to the E-7100. Using incompatible versions of the system and user software can result in system problems.

# Clearing the Queued Print Jobs in the E-7100

The "**Clear Server**" command allows you to clear all queued print jobs from the E-7100; which means jobs from the E-7100 Print, Hold, and Printed queues. Clear Server also clears all jobs archived on the E-7100 hard disk, the index of archived jobs, and finally, all E-7100 FreeForm masters and the index of E-7100 FreeForm masters.

#### Note

- Before using Clear Server, inform the site administrator that data on the E-7100 hard disk will be deleted.
- 1. Make sure the E-7100 is not in use.
- Press the Fierydriven key on the operation panel of the copier to access the Fiery menu screen. (
   Running the E-7100 Setup)
- 3. Move to the Login tab.



- 4. You are asked to enter an administrator password. (The default password is "Fiery.1".)
- 5. The main setup screen appears.
- 6. Move to Fiery tab.
- 7. Touch "Clear Server"



- 8. When you are prompted "Clear all jobs from all queues?", touch "OK"
- 9. The Fiery menu screen will disappear and data will be cleared before the system restarts.
- 10. Press the Fierydriven key and check if the E-7100 becomes idle.

# **Restoring the E-7100 to Factory Defaults**

To restore the default settings of E-7100 and delete all the data stored on the HDD, use the "**Factory Defaults**" feature. Also use "**Factory Defaults**" when you want to change the language selection.

Note

- Before using "Factory Defaults", inform the site administrator that all data (including the downloaded fonts) stored on the HDD and setup options will be deleted.
- Performing "Factory Defaults" will not delete the current administrator password, which was set for the E-7100 (the initial password is "Fiery.1"). Before performing "Factory Defaults", check if the site administrator can input the current administrator password after the system software is restored.
- If a unique administrator password is already set for the E-7100, but the site administrator does not remember the password, you must re-install the system software from the DVD (or from a prepared the USB drive).

#### **Vote**

- There is a similar feature called "Restore Fiery Default Settings" in the Webtools.
- This feature will return the settings to the defaults (factory settings) but will not clear the language selection or data in the HDD, and does not require the E-7100 to reboot. For details, refer to the "Configuration and Setup" manual.
- 1. Make sure the E-7100 is not in use.
- Print a configuration page (you may refer to this configuration page when you re-enter the setup options). (
   Printing the Configuration page or Test Sheets)
- 3. Access the setup menu. ( Running the E-7100 Setup)
- 4. Touch "Factory Defaults".



- When you are prompted "Change all settings (including network) back to Factory Defaults and Shutdown?", touch "Continue".
- 6. Wait for the diagnostic LEDs on the E-7100 to turn off.

- 7. Press and release the soft power push button on the front panel of the E-7100. The E-7100 takes less than three minutes to reach the idle condition.
- 8. Go to the copier and press the **Fierydriven** key.
- 9. The language selection screen will appear. Start to configure the E-7100.

(For details, go to step 25 of the system software installation procedure. 
 System Software Installation Procedure)

# System Software Installation Procedure

#### Overview

System software should be installed in the following cases:

- You replace the HDD with a new one (on which the System Software is not installed)
- You update to a more recent version of the system software (this is not necessary when you apply a patch; it is necessary when you install a major version change)
- You have trouble with the system software (e.g. software corruption) and the problem cannot be solved by performing "Factory Defaults".
- The site administrator forgets the administrator password for the E-7100.

The system software is provided as follows:

• System Software DVD:

System software and an installation program for the network port method are included.

• USB Prep Tool CD:

Windows application program for copying the system software DVD to the USB drive, and at the same time making the USB drive bootable.

There are two ways to install/reinstall system software on the E-7100:

• Installing system software over the network port:

Connect a PC to the E-7100 interface cable, or through a hub using two network cables. Install the system software from the System Software DVD.

• Installing system software by booting the E-7100 from a USB drive:

Use the USB Prep Tool CD to install the USB Prep Tool Windows application on a PC. Then use the system software DVD, a USB drive, and the USB Prep Tool Windows application on the PC to make a bootable USB drive that includes E-7100 system software. At the customer site, connect the USB port and turn the power ON. System installation will be done automatically.

Note

- Before you start system installation, give the site administrator the opportunity to print the Job Log and to save any custom simulations.
- Also, print the Configuration Page and Font Lists.
- Backup and Restore feature are sometimes useful in order to reduce the time to re-configure the E-7100 system settings after the system installation (
   Backup / Restore the System Settings).

## Installing System Software over the Network Port

The system software DVD contains the system software and E-7100 System Software Installer. To install system software using the LAN port on the E-7100, you need:

#### Either:

Two Ethernet cables and an isolated hub/switch

Cables must be 4-pair/8-wire, short-length Cat 5 (for 100BaseT) or Cat 5e (for 1000BaseT)

Or:

- For 100BaseTX: One Category 5 or higher Ethernet cross-over cable (4-pin/8-wire, short-length)
- For 1000BaseT: One Category 5e or higher Ethernet cross-over cable (4-pin/8-wire, short-length)

#### A Windows XP/2000/Vista computer ("PC") with:

- CD/DVD drive, built in or attached
- Support for 100BaseTX or 1000BaseT

#### **Vote**

- This procedure describes using one cross-over cable. Instead of using a cross-over cable, you may use two Ethernet cables and an isolated hub/switch. (Do not connect any other devices to the hub/ switch. Do not put the hub/switch on the LAN. Do not use the hub's optical port or uplink switch.)
- If the print engine is 230V, use shielded network cables.
- 1. Print the Configuration Page (
  Printing the Configuration Page or Test Sheet).
- If possible, back up the system settings to a configuration settings file with the Backup feature (
   Backup/Restore the System Settings).
- Perform the shut down procedure from the copier operation panel (
   Shutting Down the E-7100
   Only).
- 4. When the E-7100 power is down (that is when the diagnostic LEDs are off), turn the main power switch of the E-7100 to OFF.
- 5. Disconnect all cables from the E-7100 connector panel.
- 6. Connect the Ethernet cross-over cable to the LAN port and to the Windows XP/2000/Vista PC.
- 7. Turn on the PC's power and do the following procedure:
  - Close all software applications.
  - Stop all File Transfer Protocol (FTP) and Trivial FileTransfer Protocol (TFTP) services.
  - Disable all anti-virus and anti-spyware programs.
  - Make sure that the PC is configured to obtain its IP address automatically (DHCP).
  - Remove any network cables between the PC and the customer network.
  - Disable all wireless network connections.
  - Turn off the Windows Firewall.

- Disable all power-save and hibernation settings.
- 8. Insert the system software DVD into the PC's CD/DVD drive.
- Navigate to the CD/DVD drive and click the icon for the Installer.exe file, if it does not start automatically.
- 10. Click Next at the Welcome screen. Read the Software License Agreement and click the "I Agree" checkbox if you wish to continue the installation process, then click Next.
- 11. At the Connection Type screen, make sure Ethernet is selected. Click Next to advance to the Confirmation screen.
- 12. Set the E-7100 service switches to the service mode position: ON.

#### Note

• Ignore the steps shown on the PC screen because they may be confusing at this stage of the procedure. Please continue to follow the steps of this procedure.



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- 13. Turn the main power switch of the E-7100 to ON, then press and release the soft power push button on the front of the E-7100.
- 14. Wait 10 seconds, then click Next on the PC screen.
- 15. At the Installation screen, click Next to start the installation. Wait while the files

are copied and installed.

• The progress is slow at first.

For most computers, you must wait approximately 30 min. Do not click Cancel.

 If you do click Cancel: Click Finish then turn the main power switch of the E-7100 to OFF. Wait 10 seconds, and then repeat this procedure from the beginning. If the installation terminates abnormally, you may need to reboot the PC also.

#### • Note

- If Windows detects more than one NIC card in the PC, Windows will prompt you to choose the NIC card that is connected to the E-7100. The NIC card to choose may be a card that is associated with IP Address 0.0.0.0.
- Click Exit when the screen shows that the installation is successful. Remove the System Software DVD from the PC.
- 17. Turn the main power switch of the E-7100 to OFF.
- 18. Set the service switches in the normal position (not ON).



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- 19. Disconnect the cross-over cable from the LAN port and the Windows XP/2000/Vista PC.
- 20. Reconnect all cables that you removed earlier from the E-7100 panel.
- 21. Turn on the main power switch of the copier.
- 22. Turn on the main power switch of the E-7100.
- Allow startup to proceed without interruption while you watch the diagnostic LEDs on the back panel of the E-7100.
- 24. When the diagnostic LEDs show '00', go to the copier operation panel and press the **Fierydriven** key. 'Please wait' may be shown on the copier operation panel.
- 25. The language selection screen is shown. (If this screen is not shown, then press the **Fierydriven** key again.)

Dutch	German
English	Italian
french	Spanish

Select the desired language, and touch "Continue".

English

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- Dutch
- Spanish
- Italian
- German
- French

#### Note

- After you have selected a language, you cannot change the language unless you perform "Factory Defaults" (
   Restoring the E-7100 to Factory Defaults) or re-install the system software.
- The default settings for the E-7100 depend on the language selection as follows:

		Selected Language & Measurement Unit		
		English - US	English - Metric / Dutch / Spanish / Italian / German/ French	
PS Setting	Default Paper Sizes	US	Metric	
PCL Setting	Paper Size	Letter	A4	
	Paper Size System Pages	US	Metric	

If you selected "**English**" at the language selection screen, you are prompted to select the Measurement Unit. Select either "US" or "**Metric**", and then touch "**Continue**".

<u>D</u>	Measurement Uni	ts	Cancel	Continue
	US	Metric		
				d380i50

- 26. Wait for a short time, then press the **Fierydriven** key on the operation panel. Repeat if necessary until "Please wait" no longer appears.
- 27. Press the Fiery tab to access Setup, and press Setup at the Fiery menu screen.
- 28. You are asked to enter the administrator password. (The default password is "Fiery.1".)

#### • Note

- Ask the site administrator for the other settings that are not on the Configuration pages, You must reboot the E-7100 to apply the settings. For more information, see the "Configuration and Setup" manual.
- 30. If you have been given any patches (system update files) for the version of system software you have just installed, install the patches now. See the instructions provided with each patch.

### Installing System Software Using a USB Drive

#### Preparation

To prepare a USB drive, which is bootable and includes system software, the following items should be prepared:

- E-7100 System Software DVD
- USB Prep Tool CD
- USB drive, more than 5 GB capacity
   Example: Seagate USB 2.0 Pocket Hard Drive, model number ST650211
- Windows XP SP2/Vista computer ("PC") with:
  - CD/DVD drive, built-in or attached
  - USB port (support for USB 2.0 or later is recommended)

#### **Vote**

• USB1.x can also be used, but it will take more time to copy the system software.

#### Installation Procedure

- 1. Install the USB Prep Tool application on the PC, if it is not already installed:
  - 1. Insert the USB Prep Tool CD in the PC's CD/DVD drive.
  - 2. Turn off the PC's power.
  - 3. Turn on the PC and wait while the PC boots to Windows.
  - 4. Navigate to the CD/DVD drive and click Steup.exe.
  - 5. Select Install and wait a few moments for the application to be installed on the PC.

#### 🕓 Note 👘

 After the application is installed, it will automatically launch. If you are not ready to prepare the USB drive now, you can click Cancel and remove the USB Prep Tool CD.

- After the application is installed on the PC, the USB Prep Tool CD is no longer needed. When you wish to prepare a USB drive, go to the Windows Start Menu, navigate to All Programs > Electronics For Imaging > USB Prep Tool and follow the prompts.
- 2. Prepare the USB drive.
  - 1) Remove the USB Prep Tool CD from the PC's CD/DVD drive (if it has not been removed already).
  - 2) Insert the system software DVD in the PC's CD/DVD drive.
  - 3) Attach the USB drive to the PC.

#### Note

- All data on the USB drive will be lost when the USB drive is reformatted during the next step of this procedure. You may wish at this time to make sure that no valuable data resides on the USB drive.
- 4) Follow the on-screen prompts to the USB drive:
  - Start screen: Specify the drive to copy from (the drive letter of the CD/DVD drive). Specify the
    drive to copy to (the drive letter of the USB drive). Click Proceed when the Proceed button appears
    and is available.
  - Prepare screen: The progress bar and time remaining show that the files are being copied. Copying the files usually takes 15-30 minutes, but may take considerably longer depending on your PC. Do not cancel. Click Proceed when the Proceed button appears and is available.
  - Finish screen:

Confirm that the contents of the system software DVD were copied successfully to the USB drive. Click Finish to exit the application. The DVD will eject automatically. Remove the system software DVD.

3. Install system software on the E-7100 using the prepared USB drive:

1) Print the Configuration Page. Then perform the Shut Down procedure from the copier operation panel (
Shutting Down the E-7100)

- 4. When the E-7100 power is down (that is when the diagnostic LEDs are off), turn the main power switch of the E-7100 to OFF.
- 5. Disconnect all cables from the E-7100 connector panel.
- 6. Set the E-7100 service switches as shown below. ("1" ON, "2" OFF)



7. Attach the prepared USB drive to one of the USB ports on the E-7100.

#### Note

- If dust covers are attached to the USB Type A connectors, remove one dust cover using needlenosed pliers.
- Turn the main power switch of the E-7100 to ON, then press and release the soft power push button on the front of the E-7100 and wait until installation is complete. (The E-7100 shuts down automatically after installation is complete.)

The diagnostic LEDs increment quickly to initialize, then the diagnostic LEDs display 00 and increment every 30 seconds while the files transfer.

Installation takes approximately 15-25 minutes. The LED on the USB drive should show that files are being transferred.

- 9. Turn the main power switch of the E-7100 to OFF and remove the USB drive from the E-7100.
- 10. Reconnect all cables that you removed earlier from the E-7100 panel.
- 11. Set the service switches in the normal position. (Not ON)



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- 12. Turn on the main power switch of the copier.
- 13. Turn the main power switch of the E-7100 ON, then press and release the soft power push button on the front of the E-7100.

14. Allow startup to proceed without interruption while you watch the diagnostic LEDs on the back panel of the E-7100

Note

- Do not power off the E-7100.
- 15. When the diagnostic LEDs remain at '00', go to the copier operation panel and press the **Fierydriven** key. 'Please wait' may be shown on the copier operation panel.
- 16. The language selection screen is shown. (If this screen is not shown, then press the **Fierydriven** key again.)

Select the desired language, and touch "Continue".

<u>L</u>	Language Setup		Continue
Dutch		German	
English		Italian	
French		Seanish	

d380i500

- English
- Dutch
- Spanish
- Italian
- German
- French

**Vote** 

- 1) After you have selected a language, you cannot change the language unless you perform "Factory Defaults" (
   Restoring the E-7100 to factory defaults) or re-install the system software.
- 2) The default settings for the E-7100 depends on the language selection as follows:

		Selected Language & Measurement Unit		
		English - US	English - Metric / Dutch / Spanish / Italian / German/ French	
PS Setting	Default Paper Sizes	US	Metric	
PCL Setting	Paper Size	Letter	Α4	

Paper Size System Pages	US	Metric
-------------------------	----	--------

If you selected "**English**" at the language selection screen, you are prompted to select the Measurement Unit. Select either "**US**" or "**Metric**", and then touch "**Continue**".

1	Measurement Uni	ts	Cancel	Continue
	us	Metric		
				4280150

17. Wait for a short time, then press the **Fierydriven** key on the operation panel. Repeat if necessary until "Please wait" no longer appears.

- 18. Press the Fiery tab to access Setup, and press Setup at the Fiery menu screen.
- 19. You are asked to enter the administrator password. (The default password is "Fiery.1".)
- Input the customer's settings from the Configuration pages that you printed earlier. If there exists a
  backed up configuration settings file, restore it after the network configuration is completed. (
   Backup/Restore the System Settings)

#### Note

- Ask the site administrator for the other settings that are not on the Configuration pages. You must
  reboot the E-7100 to apply the settings. For more information, see the "Configuration and Setup"
  manual.
- 21. If you have been any patches (system update files) for the version of system software you have just installed, installed the patches now. See the instructions provided with each patch.

# **Patch Installation Procedure**

When a software bug is found and fixed, or a new feature is added, a patch file (ps file) may be additionally released.

The patch installation procedure may vary depending on the patch; the download destination queue or system rebooting procedure may be different. Some patches may require prerequisite patches.

Therefore, when you install a patch, make sure to carefully read the attached release note and follow the instructions.

# 5. Troubleshooting

# Overview

When a problem occurs during normal operation, check in the following order.

1. Verify that the service switches are in normal operation mode, not in a service mode. (The switches should be in the lower position.)



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- 2. Check that the Fiery menu appears on the copier's operation panel.
- Verify that the network is functioning, no unauthorized software or hardware is installed on the E-7100, and there are no problems with a particular print job or application. The site administrator can help you to verify these issues.
- Verify that the E-7100 and its connection with the copier has no problem by printing test pages. (
   Printing the Configuration Page or Test)
- 6. Check that all parts and cables are undamaged and are correctly installed and connected.
   (
   Replacement)
- 7. Try to solve the problem by performing "Clear Server" or "Factory Defaults".

Inform the site administrator that the data stored in the HDD will be deleted.

Clearing the Queued Print Jobs in the E-7100/Restoring the E-7100 to Factory Defaults)

- 8. Check if a newer version of system software, firmware, or patch for the E-7100 and copier has been released. If so, install it. (
  System Software Installation Procedure)
- If the problem will not disappear, reinstall the system software. (
   System Software Installation
   Procedure)
- 10. If the problem will still not disappear, replace parts of the hardware. (🖝 Errors and Suggested Actions)

# **LED Diagnostic Codes**

During startup, the E-7100 advances through a standard diagnostic sequence. Each diagnostic code flashes rapidly on the LED display during this sequence until the E-7100 reaches the Idle condition. In the Idle condition, the LED display shows the 00 code. This shows that the E-7100 is in normal operation mode. The E-7100 may flicker or drift from 00 during normal operation, but it will always return to 00.

If the LED display stops on a diagnostic code before the E-7100 completes the boot up process, one or more diagnostic tests may have failed. Look up the diagnostic code in the following table to determine the troubleshooting actions that you should take.

#### Note

• A component may be faulty without an error code being displayed. Also, it is possible for an error code to indicate a defective component but that component may not be defective. Use the error codes only as a guide for what to investigate further.

Before you replace a part, make sure that the parts and connectors are correctly and firmly installed.

\*<sup>1</sup>: Try in the listed order. If the problem persists, try the next one.

	LED diagnostic Code	Details (Possible cause, Suggested action *1)
	Any	• BIOS settings on the motherboard are corrupted.
		Clear CMOS using the following procedure:
		1. Turn off the controller and unplug the AC power cord.
		<ol><li>Open the controller and remove the battery from the motherboard.</li></ol>
		3. Wait a full 5 minutes.
		4. Re-install the battery.
		5. Reassemble the controller and power on. If the controller continues to stop on a diagnostic code, look up the specific code in this table.
_	One of the following:	Motherboard defective
=	CF, C0, C5, 01, 03, 05, 0E, 10, 12, 14, 16, 1B, 1D, 24, 26, 27, 29, 2B,	<ol> <li>Shut down the Copier and the E-7100. Then power on the Copier and E-7100.</li> </ol>
_	2D, 35, 37, 39, 3C, 3E, 40, 43, 53,	2. Check all cables and connections again.
	82, 83, 84, 85, 89, 94, 96	3. Replace the motherboard.
	One of the following:	Possibly one of the following:
	C1, C3, 49, 52	DIMM defective
		Motherboard defective

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LED diagnostic Code	Details (Possible cause, Suggested action *1)
	• Shut down the Copier and the E-7100. Then power on the Copier and E-7100.
	<ol> <li>Check the DIMM(s) and reseat them to remove oxidation on the connectors.</li> </ol>
	2. Replace the DIMM.
	3. Replace the motherboard.
One of the following:	Possibly one of the following:
18, 4E, 69	CPU defective
	Motherboard defective
	<ol> <li>Shut down the Copier and the E-7100. Then power on the Copier and E-7100.</li> </ol>
	2. Replace the CPU.
	3. Replace the motherboard.
23	Possibly one of the following:
	<ul> <li>Motherboard battery is defective or dead.</li> </ul>
	Motherboard defective
	1. Replace the battery.
	2. Replace the motherboard.
25, 8B, 8F	Possibly one of the following:
	• Video board is incorrectly installed in the PCI slot.
	Video board defective
	Motherboard defective
	<ol> <li>Shut down the Copier and the E-7100. Then power on the Copier and E-7100.</li> </ol>
	2. Reinstall the video board.
	3. Replace the video board. Replace the motherboard.
75, 93	Possibly one of the following:
	• HDD is faulty.
	Motherboard defective
	<ol> <li>Shut down the Copier and the E-7100. Then power on the Copier and E-7100.</li> </ol>
	2. Reconnect the power and SATA data cables to the HDD.

LED diagnostic Code	Details (Possible cause, Suggested action *1)
	3. Replace the SATA data cable.
	4. Replace the HDD.
	5. Replace the motherboard.
FF	Possibly one of the following:
	• Service switches are set to Service mode.
	DIMM missing or defective
	CPU missing or defective
	<ul> <li>Motherboard missing or defective</li> </ul>
	<ol> <li>Make sure the E-7100 service switches are set to Normal mode (away from "ON").</li> </ol>
	2. Shut down the Copier and the E-7100. Then power on the Copier and E-7100.
	3. Reconnect the power and SATA data cables to the HDD.
	4. Replace the HDD.
	5. Replace the CPU.
	<ol> <li>Check the DIMM. For details, see the Action for code C1 (above).</li> </ol>
	7. Replace the motherboard.

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# **Errors and Suggested Actions**

The most common causes of hardware problems are loose connections. Before you decide to replace any parts of E-7100, make sure that the parts and connectors are correctly and firmly installed. ( Replacement)

## Start-Up Problems

The following symptoms are described in the tables below:

- 1. When the main power switch is turned on, no power is supplied to the E-7100.
- 2. The E-7100 main power switch can be turned on, but the E-7100 will not continue to boot-up.
- 3. The E-7100 starts up and reaches 00 on the LED display. But after 5 minutes, the Fiery menu still does not appear on the copier operation panel when you press the **Fierydriven** key.
- 4. The CPU cooling fan is not working.
- 5. The CPU cooling fan is making noise.
- 6. If the Fiery menu screen does not appear on the copier operation panel when you press the **Fierydriven** key.

#### Start-Up Problem-1

#### Symptom:

When the main power switch is turned on, no power is supplied to the E-7100.

#### Possible cause:

- The AC power cord of the E-7100 is not connected.
- The soft power push button is not pressed.
- Defective power supply

#### Suggested action:

- 1. Connect the AC power cord.
- 2. Press and release the soft power push button.
- Check if the connector of the power supply unit is correctly inserted into the motherboard PW1 socket.
- 4. If the connector is inserted correctly, replace the parts in the following order.
  - 1) AC Power cord
  - 2) Power supply unit
  - 3) Motherboard
## Start-Up Problem-2

#### Symptom:

The E-7100 main power switch can be turned on, but the E-7100 will not continue to boot-up.

### Possible cause:

- Motherboard, Memory or CPU is incorrectly installed.
- Motherboard defective
- Memory defective
- CPU defective
- Power supply unit defective

#### Suggested action:

- 1. Disconnect the AC power cord to the E-7100.
- 2. Check if the memory installed in the DIMM2 socket, and is it installed firmly and correctly.
- 3. Check if CPU installed properly (no pins of the CPU bent or broken)
- 4. Check if cable of the CPU cooling assembly connected to the FAN1 socket.
- 5. Try to install the following parts correctly, and then try to replace the parts in the following order:
  - Power supply unit
  - CPU
  - Memory
  - Motherboard

## Start-Up Problems-3

#### Symptom:

The E-7100 starts up and reaches 00 on the LED display. But after 5 minutes, the Fiery menu still does not appear on the copier operation panel when you press the **Fierydriven** key.

## Possible cause:

- System software corruption.
- Defective video board.
- Missing or defective security chip

- 1. Replace the interface cable. (Connecting E-7100 to the Copier)
- 2. Reinstall the system software. (
  System Software Installation Procedure)
- 3. Make sure that the U601 chip is correctly installed on the video board.

## Start-Up Problems-3

- 4. Replace the video board.
- 5. Replace the U601 chip.

## Start-Up Problems-4

#### Symptom:

The CPU cooling fan is not working.

### Possible cause:

- Incomplete cable connection.
- CPU cooling fan defective.

## Suggested action:

- 1. Check if the cable of the CPU cooling assembly is connected firmly to FAN1.
- 2. Replace the CPU cooling assembly.

## Start-Up Problems-5

### Symptom:

The CPU cooling fan is making noise.

## Possible cause:

• Dirty cooling fan.

## Suggested action:

1. Remove the cooling fan, clean it, and re-attach it.

## Start-Up Problems-6

## Symptom:

The Fiery menu screen does not appear on the copier operation panel when you press the **Fierydriven** key.

## Possible cause:

- Controller not ready
- Loose connection of the Gigabit Ethernet PCB.
- Gigabit Ethernet PCB defective
- System software corruption

## Start-Up Problems-6

• Copier SP is not properly set.

#### Suggested action:

- Check if the Gigabit Ethernet PCB is inserted straight and connected firmly into the C slot on the copier. (
   Connecting the E-7100 to the Copier)
- 2. If the above checks do not solve the problem, replace the interface cable or Gigabit Ethernet PCB
- 3. Check if SP5-193-001 is set to "1".

## System Problems

The following symptoms are described in the tables below:

- The system date on the configuration page will always be returned to an old date (factory defaults date) after you turn on the E-7100; or the time and date settings that appear on the configuration page are sometimes earlier or later than the actual time and date.
- 2. The system performs slowly or stops sometimes.

## System Problem-1

#### Symptom:

The system date on the configuration page will always be returned to an old date (factory defaults date) after you turn on the E-7100; or the time and date settings that appear on the configuration page are sometimes earlier or later than the actual time and date.

- BIOS settings were lost due to a dead battery.
- Motherboard defective

#### Suggested action:

- 1. Replace the lithium battery on the motherboard, and re-configure the system time and date.
- 2. Replace the motherboard.

## System Problem-2

#### Symptom:

The system performs slowly or stops sometimes.

## Possible cause:

- DIMM defective or faulty DIMM connection
- HDD defective

## System Problem-2

- CPU overheated and/or defective
- Motherboard defective

## Suggested action:

- 1. Reconnect the DIMM.
- 2. Replace the DIMM.
- 3. Check if the connectors of the power supply unit and HDD are firmly inserted in the sockets.
- 4. Replace the soft power push button cable or activity LED cables.
- 5. Replace the HDD.
- 6. Make sure that the CPU on the motherboard is connected correctly and that the fan cable is connected.
- 7. Replace the CPU.
- 8. Replace the motherboard

## System Software Installation

The following symptoms are described in the tables below:

- 1. The E-7100 start page fails to print from the copier after the installation is complete.
- 2. One of the following:
  - Installer screen hangs up at Waiting for E-7100 to be ready, FTP/TFTP Setup, or Transferring boot file for longer than 15 minutes.
  - Installation fails repeatedly.
- 3. Installation stalls for 5 minutes (or longer) while downloading.
- 4. Cannot load the contents of the System Software onto the USB drive using the USB Prep Tool CD.
- 5. When installing the system software from the USB drive, the E-7100 remains on for 30 minutes (or longer) after beginning the installation.
- 6. When installing the system software from the USB drive, the LED on the USB drive remains off or on (not blinking).

## System Software Installation-1

#### Symptom:

The E-7100 start page fails to print from the copier after the installation is complete.

## Possible cause:

### System Software Installation-1

• The copier is not loaded with the required paper stock.

#### Suggested action:

1. Load the copier tray with the size of paper that is appropriate for the national language selected for the E-7100 system.

## Network Port Method

## System Software Installation-2

## Symptom:

One of the following:

- Installer screen hangs up at Waiting for E-7100 to be ready, FTP/TFTP Setup, or Transferring boot file for longer than 15 minutes.
- Installation fails repeatedly.

#### Possible cause:

- There is a conflict between the installer or the security settings on the PC.
- Incorrect or defective RJ-45 cable
- The installer is not compatible with the PC.

#### Suggested action:

- Check again that you have disabled all software programs and network and security settings on the PC. Then retry the installation. Before you retry the installation, turn off the E-7100 power using its dedicated AC power switch and wait 10 seconds.
- Make sure you a using a cross-over RJ-45 cable. As an alternative, you can use two straight-through RJ-45 cables and a network hub. Connect only the PC and the E-7100 to the hub. If the cable appears damaged, replace it.
- 3. If the problem persists, retry the installation using a different PC.

## System Software Installation-3

#### Symptom:

Installation stalls for 5 minutes (or longer) while downloading.

## Possible cause:

- The service switches are set to normal mode
- Incorrect or defective RJ-45 cable

### System Software Installation-3

• Motherboard defective

#### Suggested action:

- 1. Make sure the E-7100 service switches are set to service mode (toward "ON).
- Make sure you a using a cross-over RJ-45 cable. As an alternative, you can use two straight-through RJ-45 cables and a network hub. Connect only the PC and the E-7100 to the hub. If the cable appears damaged, replace it.
- 3. Replace the motherboard.

## **USB** Drive Method

#### System Software Installation-4

#### Symptom:

Cannot load the contents of the System Software onto the USB drive using the USB Prep Tool CD.

#### Possible cause:

- The USB drive and/or PC do not meet the minimum system requirements.
- There is a conflict between the USB Prep Tool CD and the USB drive.

#### Suggested action:

- Make sure that the USB drive and the PC meet the minimum system requirements described in this manual (
   Software Maintenance – System Software Installation Procedure – Installing System Software Using a USB Drive).
- 2. If the problem persists, try using a different PC. If you have been using a laptop PC, try a desktop PC instead.
- 3. If the problem persists, try using a different USB drive.

#### System Software Installation-5

#### Symptom:

When installing the system software from the USB drive, the E-7100 remains on for 30 minutes (or longer) after beginning the installation.

## Possible cause:

- The position of the service switches are incorrect.
- HDD defective
- Motherboard defective

### System Software Installation-5

• USB drive defective.

#### Suggested action:

- 1. Make sure that the service switches are set to 1=ON 2=OFF during the USB drive system software installation.
- Check the LED on the USB drive. If the LED is not blinking (remains off or on), the drive may be connected incorrectly. Turn off the E-7100 main power switch, and reconnect the drive. Then turn the main power switch on, and press and release the soft power push button and allow the installation to resume.
- 3. Check the connection of the power and SATA data cables.
- 4. Replace the SATA data cable.
- 5. Replace the HDD.
- 6. Replace the motherboard.
- 7. Replace the CPU.
- 8. Retry the installation with a different USB drive.

## System Software Installation-6

#### Symptom:

When installing the system software from the USB drive, the LED on the USB drive remains off or on (not blinking).

#### Possible cause:

- USB drive defective or not correctly connected
- Motherboard defective
- HDD defective

- 1. Turn off the E-7100 main power switch and reconnect the USB drive. Then turn the power on, and press and release the soft power push button and allow the installation to resume.
- 2. Retry the installation with a different USB drive.
- 3. Replace the motherboard.
- 4. Check the connection of the power and SATA data cables.
- 5. Replace the SATA data cable.
- 6. Replace the HDD.

## **Network Problems**

The following symptoms are described in the tables below:

- 1. E-7100 does not communicate with the network.
- 2. Unable to connect to the network; or no LED on the 10/100/1000BaseT network connector is lit.
- 3. The system starts up slowly (seems to stop); and the Configuration Page shows an error on the "IP Address" line under "Network Setup".

## Network Problem-1

#### Symptom:

E-7100 does not communicate with the network.

#### Possible cause:

• Wrong cables because the cross-over cable and the straight through network cable look alike.

#### Suggested action:

 Check the labeling on the cable connectors and /or the wire color sequence on the connectors to make sure you are using a network straight-through cable to the customer's LAN from the RJ-45 second from the bottom.

## Network Problem-2

#### Symptom:

Unable to connect to the network; or no LED on the 10/100/1000BaseT network connector is lit.

## Possible cause:

- The cable is connected to a port that is not used.
- Defective network cable or connection
- Network problem
- Defective Ethernet interface on the motherboard

- Make sure the network cable is the correct type and connected to the correct network port on the E-7100.
- 2. Check the cable connection to the network port.
- 3. Replace the cable with a new or tested cable.
- 4. Ask the network administrator to check other devices on the network.
- 5. If other devices are not functioning, it could be a problem with the network.

## Network Problem-2

6. If the rest of the network operates correctly and the problem persists, replace the motherboard.

## Network Problem-3

#### Symptom:

The system starts up slowly (seems to stop); and the Configuration Page shows an error on the "IP Address" line under "Network Setup".

#### Possible cause:

Normal behavior. The system is searching for a nonexistent DHCP server. DHCP is enabled by default on the E-7100, but the customer's network is not using DHCP.

If the customer's network is using DHCP:

- Defective network cable or connection.
- Network problem.
- Defective Ethernet interface on the motherboard.

#### Suggested action:

- 1. If the problem persists, ask the network administrator to change the default in the E-7100 network setup.
- 2. If no LED is lit on the E-7100's network port, check the cable connection to the E-7100 and the network. Make sure the cable is the correct type.
- 3. Ask the network administrator to check other devices on the network.
- 4. If other devices are not functioning, it could be a problem with the network.
- 5. If the rest of the network operates correctly and the problem persists, replace the motherboard.

## **Printing Problems**

The following symptoms are described in the tables below:

- 1. A test page or configuration page cannot be printed, or the images on the printed pages are abnormal.
- 2. The E-7100 appears on the list of printers on the customer's workstation, but certain jobs do not print.
- 3. A print job stops after one or few pages.
- 4. Print Quality is poor.
- 5. Pages come out blank, or tinted with green or some other color.

#### Symptom:

A test page or configuration page cannot be printed, or the images on the printed pages are abnormal.

## Possible cause:

- The copier is not ready to print.
- Copier problem
- Loose cable connection
- Interface cable defective
- Loose connection of the Gigabit Ethernet PCB
- Gigabit Ethernet PCB defective
- Video board defective
- Corrupted system software.
- HDD defective.

- 1. Make sure the copier main power switch is on and the copier is ready to print.
- 2. Check the copier operation panel for indications or messages about the copier status.
- 3. Check that the copier operates correctly. (Check if you can make hard copies without any problem)
- 4. Make sure the E-7100 main power switch is in the "ON" position.
- 5. Shut down the Copier and the E-7100. Then power on the Copier and the E-7100.
- 6. Make sure the Fiery menu screen appears when you press the Fierydriven key.
- Check if the Gigabit Ethernet PCB is inserted straight and connected firmly into the C slot on the copier. (
   Connecting E-7100 to the Copier)
- 8. Check again that the video board is present and properly connected to the motherboard.
- 9. Replace the Gigabit Ethernet PCB.
- 10. Replace the video board.
- 11. If the problem persists, you may need to service the copier.
- 12. Try "Clear Server", "Factory Defaults", or re-install the system software. (Clearing the Queued Print Jobs in the E-7100/Restoring the E-7100 to Factory Defaults)
- 13. Replace the HDD
- If replacing the HDD does not correct the problem, make sure you install the old HDD back in the E-7100.

#### Symptom:

The E-7100 appears on the list of printers on the customer's workstation, but certain jobs do not print.

#### Possible cause:

- PostScript error
- Application problem

#### Suggested action:

- Make sure 'Print to PostScript Error' in Setup is set to Yes. Check for error messages on the E-7100 output.
- 2. Print a job from a different application to determine if the problem is associated with a particular application.
- 3. Make sure the connection between the E-7100 and the workstation is operating. To do this, download a test page from the workstation or print a simple test file.
- 4. Resend the problem file.

### Printing Problem-2

#### Symptom:

The configuration page is completely or mostly blank.

#### Possible cause:

- Defective DIMM
- Corrupted system software

#### Suggested action:

- 1. Check the DIMM and reconnect it, to remove oxidation on the connectors.
- 2. Reinstall the system software. (
  System Software Installation Procedure)
- 3. Replace the DIMM.

#### **Printing Problem-3**

#### Symptom:

A print job stops after one or few pages.

## Possible cause:

• Normal process, if this occurs when printing the first copy of a multi-copy print job.

- PostScript or application error
- Defective DIMM.

### Suggested action:

- 1. The working area memory became full during ripping, and the printer switched to rip-only mode until all pages were ripped.
- 2. Cancel the E-7100 print job.
- 3. If this fails to clear the problem, turn on and off the Copier and E-7100.
- 4. If the problem persists, perform Clear Server. (Clearing the Queued Print Jobs in the E-7100)
- 5. Check the DIMM and reconnect it, to remove oxidation on the connectors.
- 6. Reinstall the system software. (
   System Software Installation Procedure)
- 7. Replace the DIMM.

## Printing Problem-4

#### Symptom:

Print Quality is poor.

### Possible cause:

- Missing or outdated printer description file.
- The application cannot find the necessary printer description file.
- Problem with the copier
- Out of calibration or calibration information/curves on the active partition are corrupted.
- Calibration information/curves on the active partition are corrupted.

#### Suggested action:

1. Make sure the necessary printer description file is installed.

For information on printer files, see "Printing from Windows and Printing from Mac OS" on the user documentation CD.

- 1. Test the copier and service it if necessary (see the copier service manual).
- Start ColorWise Pro Tools from a client computer and click the Calibration icon. Then click Restore Device in the calibrator window. Restore Device restores the E-7100 calibration information to the factory defaults. If restoring the default calibration does not solve the problem, you may need to service the copier.
- 3. If restoring the default calibration corrects the color quality, a custom calibration may have been the cause of the problem. Ask the site administrator to recalibrate the E-7100. (
   "Color Printing")

- 4. If the problem persists after recalibration, the calibration information on the HDD may be corrupted. Reinstall the system software. ( System software installation procedure)
- 5. If the problem persists, the HDD may be corrupted. Verify that all HDD cabling is correct.
- 6. If HDD cabling is correct, you may need to replace the HDD.

### Printing Problem-5

#### Symptom:

Pages come out blank, or tinted with green or some other color.

## Possible cause:

- Bad connection between the E-7100 and the Copier.
- Problem with the copier.

#### Suggested action:

- 1. Turn on and off the Copier and E-7100.
- 2. Test the copier and service it if necessary (refer to the copier service manual).

If the customer can print the Configuration Page from the copier operation panel but cannot print a job from a computer on the network, ask the network administrator to do the following:

- Check all components of the network, including cables, connectors, network adapter boards, and network drivers.
- Activate the network and use it to communicate with other printers.
- Confirm that the applicable network setting in Setup (such as AppleTalk zone, IP address, Subnet mask, and Gateway address) match the settings used in the network.

## Note

• EPS file generation is not fully standardized among applications. Some users may encounter problems while printing certain EPS files.

# Test the Voltage Supplies

To check if the power supply is working, use a multimeter at the following locations on the power supply unit.

Test the voltages on the ends of the connectors coming from the power supply unit. The following table lists the power connectors.

Connector No.	Connected To	Position	Output	Wire Color
20-pin connector	Motherboard (PW1)	1	+3.3V	Violet
		2	+3.3V	Violet
		3	Ground	Black
		4	+5V	Red
		5	Ground	Black
		6	+5V	Red
		7	Ground	Black
		8	(No output)	White
		9	+5V aux	Green
		10	+12V	Orange
		11	+3.3V and +3.3V Remote Sense	Violet
		12	-12V	Blue
		13	Ground	Black
		14	On/Off	Gray
		15	Ground	Black
		16	Ground	Black
		17	Ground	Black
		18	(Not Connected)	-
		19	+5V	Red

		20	+5V	Red
		4	+5V	Red
4-pin connector	PW2	1	+12V	Orange
		2	Ground	Black
		3	Ground	Black
		4	+5V	Red

# 6. Detailed Section Descriptions

# **Block Diagram and Functions**



d380d501

## Components

Component	Туре	Configuration
Processor	Intel Celeron M	1.86GHz
Hard Drive	Serial ATA	80GB
SDRAM	PC3200 DDR2	1GB, 240 pin
BIOS ROM	Flash	8MB
EEPROM	EEEROM	1Kbit

## Networking

Cable requirements:

87

- 10BaseT (Ethernet): Unshielded Twisted Pair (UTP), Category 3 or higher
- 100BaseTX (Fast Ethernet): UTP, Category 5 or higher (4-pair/8-wire, short length)
- 1000BaseT (Gigabit Ethernet): UTP, Category 5e or higher (4-pair/8-wire, short-length)

## Note

• If the print engine is 230V, use a shielded network cable.

## Video Board

The Video Board functions include:

- High speed data transmission
- High speed data decompression
- Engine output at maximum rated output speed

The video interface controls such aspects of the print job as:

- Hardware decompression
- Print quality enhancement technologies

## Hard Disk Drive

The hard disk drive is used to optimize many parts of the printing system as well as improving throughput and ease-of-use. The hard disk drive stores the following information:

- System software
- Non-volatile spooled print jobs
- Additional storage for compressed pages
- Non-volatile record of printed jobs (Job Log)
- Resource storage space for downloaded fonts

## Non-Volatile Memory

- The 8MB Flash Memory contains the BIOS, etc.
- The 1Kbit EEPROM holds the MAC address data.

## **Volatile Memory**

• SDRAM is one 1GB, PC3200, Double Data Rate 2 (DDR2), 240-pin.

## **Print Data Processing**

## **Flow Chart**



The key roles of each part of the print system are outlined below.

- The drivers are responsible for generating the page description on the host system and for transmitting data to the printer.
- The I/O manager mediates the connection with the network interface and establishes a device or print manager connection.
- The print manager is responsible for spooling the job (if appropriate) and for feeding jobs to the correct PDL interpreter.
- The PDL interpreters are responsible for turning page descriptions into rendered pages and for parsing job management comments.
- The compression subsystem manages compressed pages in memory.
- The page manager coordinates pages for sending to the engine for the most efficient printing, finishing, and accessory handling.
- The video subsystem is responsible for decompressing pages and feeding the engine with appropriate engine signals. The video subsystem also handles certain print quality processing functions.

# **General Specifications**

Configuration:	External Type Printer Controller Unit	
Motherboard:	CPU: Intel Celeron-M 1.86GHz Network Interface: RJ-45 Network port (1000-Base/100-Base/10-BaseT)	
Memory:	1GB (standard and max.) 240 pin SDRAM: PC3200 DDR2	
HDD:	Internal HDD: 80GB	
Operating System:	Linux	
Network Protocols:	AppleTalk (Auto switching) TCP/IP (IPv4/IPv6) SMB IPX/SPX	
Printer Description Languages:	Adobe PostScript3 (Standard), PCL5c, PCL6 (Standard)	
Supported Driver Language:	English, French, German, Italian, Spanish and Dutch	
Print Resolution:	600dpi / 4-bit / 2-bit	
Gradation:	1 bit/pixel, 2 bits/pixel, 4 bits/pixel	
Scan Resolution:	Мах. 600 dpi	
Scan Source:	ADF / Exposure Glass	
Scan Sides:	Simplex / Duplex	
Scan Destination:	Hold Queue / MailBox / Email / FTP Server/ Internet Fax Client PC Disk (E-7100 Remote Scan only)	
Scan Format:	PDF / TIFF/JPEG	
Printing Speed:	V-C2a: 60ppm B/W, 55ppm color	

	V-C2b: 75ppm B/W, 70ppm color (A4/Letter, LEF 600dpi)
Resident Fonts:	PS3: 138 fonts PCL: 80 AGFA fonts
Print Paper Size:	See the table on the following pages.
Media Type:	See the table on the following pages.
Power Consumption:	Maximum 135 W
Noise Emission: (Sound Power Level)	Sound Power Level: Less than 51db(A) Sound Pressure Level: Less than 41db(A)
Dimensions (W x D x H):	124.3mm x 362.5mm x 294.6mm, 4.9" x 14.3" x 11.6"
Weight:	5.8 kg (12.5 lb)