



Zebra[®] P120*i*[™] Card Printer

User's Manual



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Foreword

This manual contains installation and operation information for the Zebra P120*i* card printers manufactured by Zebra Technologies Corporation.

Copyright Notice

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Trademarks

Zebra is a registered trademark of Zebra Technologies Corporation. Windows and MS.DOS are registered trademarks of Microsoft Corp. All other trademarks or registered trademarks are marks of their respective holders.

Warranty Information

Note • Products returned must be packaged in the original or comparable packing and shipping container. In the event equipment is not so packaged, or if shipping damage is evident, it will not be accepted for service under warranty. Surface Transportation charges for return to customers in the continental United States is paid by Zebra. Otherwise, Zebra pays CPT (carriage paid to) nearest airport, customer pays customers, duties, taxes, and freight from airport to destination. If Zebra determines that the product returned for warranty service or replacement is not defective as herein defined, the customer will pay all handling and transportation costs.

Printers

All Zebra Card Printers are warranted against defects in material or workmanship for twelve (12) months from the purchase date.

Proof of purchase or shipment date is required to validate the warranty period. The warranty becomes void if the equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed by the user.

Printheads

Since printhead wear is part of normal operation, the original printhead is covered for a twelve (12) month period.

To qualify for this warranty, the printer must be returned to the factory or to an authorized service center. Customers are not required to purchase Zebra supplies (media and/or ribbons) for warranty qualification. If the use of other manufacturer's supplies has caused any defect in the printhead for which a warranty claim is made, the user is responsible for Zebra's labor and material charges required to repair the defect. The warranty becomes void if the printhead is physically worn or damaged; also if it is determined that failure to follow the preventive maintenance schedule has caused the defect in the thermal printhead for which a warranty claim is made.

Spare Parts

All parts, maintenance kits, replacement printheads, options kits, and accessories are warranted to be free of defects in material and workmanship for 90 days (except where otherwise denoted) from date of purchase. This warranty become void if the item is modified, improperly installed or used, or damaged by accident or neglect.

Return Materials Authorization

Before returning any equipment to Zebra Technologies Corporation for in-warranty or out-of-warranty repair, contact Repair Administration for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside. Ship the equipment, freight prepaid, to the address listed below:

• For USA, Latin America, and Asia / Pacific:

Zebra Technologies Corporation Zebra Card Printer Solutions 1001 Flynn Road Camarillo, CA. 93012-8706.USA Phone: +1 (805) 578-5001 FAX: +1 (805) 579-1808

• For Europe and Middle East:

Zebra Technologies Corporation Zebra Card Printer Solutions Pittman Way, Fulwood Preston, PR2 9ZD Lancashire, U.K. Phone: +44 - 1 - 772 - 797555 FAX: +44 - 1 - 772 - 693000

Product Disposal



Product Disposal Information • Do not dispose of this product in unsorted municipal waste. This product is recyclable, and should be recycled according to your local standards. For more information, please see our web site at: http://www.zebra.com/environment

Declarations of Conformity

00/00/07550	EMC Directive	EN 55022 (1998)	RF Emissions control
89/336/EEC modified by 92/31/EEC and	EMC Directive	EN 301489-3 V1.4.1	RF Emissions and Immunity for radio equipment
93/68/EEC	EMC Directive	EN55024 (2001)	Immunity to Electro-Magnetic Disturbances
73/23/EEC modified by 93/68/EEC	Low voltage Directive	EN 60950-1 (2001)	Product safety
1999/5/CE	R&TTE Directive	EN300330-2 V1.1.1	Radio Frequency Interferences

For a formal certificate, please contact the Compliance Office at Zebra's Camarillo facility.

EUROPE: Norway Only: This product is also designed for IT power system with phase to phase voltage 230V. Earth grounding is via the polarized, 3-wire power cord.

- FI: "Laite on liitettävä suojamaadoitus koskettimilla varustettuun pistorasiaan"
- SE: "Apparaten skall anslutas till jordat uttag"
- NO: "Apparatet må tilkoples jordet stikkontakt"

FC.

Model P120*i* conforms to the following specification: FCC Part 15, Subpart A, Section 15.107(a) and Section 15.109(a) Class B digital device.

Supplemental Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference's by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet, prepared by the Federal Communications Commission, helpful:

How to identify and resolve Radio/TV Interference Problems. This booklet is available from the U.S. Government printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4. Use of a shielded cable is required to comply within Class B limits of Part 15 of FCC Rules. Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by Zebra may cause, harmful interference and void the FCC authorization to operate this equipment.

Industry Canada Notice

This device complies with Industry Canada ICS-003 class B requirements.

P120*i* Printer Model

The Zebra Product Number tells a story:

Here is a quick review of the Zebra Card Printer Series numbering and lettering system to help you.

Model numbers include identifiers that specify options using the following lettering conventions:

Part Number	Description
P 120 <i>i</i>	Base Printer
	P120i Color Card Printer
	Smart Card Options
0	None
	Magnetic Encoder
0	None
M	Yes (select defaults below)
	Magnetic Encoder Defaults
0	None
1	Stripe Down, HiCo
	Memory Expansion
0	None
	Interface
AA	USB Only
	Power Cords
I	U. S. and Europe
U U	U. K. and Australia
	Windows Drivers and User Documentation / Training CD
A_	Free Demo Software CD with Windows Drivers and User Documentation / Training
	included on one CD (Software & Documentation Package) which contains Multi-
	language documentation - English, Spanish, French, German, Chinese, and Italian
	Windows Drivers and User Documentation / Training included on one CD (Software
-	& Documentation Package) which contains Multi-language documentation -
D 	English, Spanish, French, German, Chinese, and Italian
	No Starter Kit
	Starter kit (including 200 - 30 mil PVC cards and one YMCKOK ribbon, part
Evenue	number 800015-948
P120i-0M10A-ID0	P120i Printer, Magnetic Stripe Encoder (HiCoDn), Standard Memory, USB Interface, US and Europe Power Cords, Windows Driver and User Documentation
Accessories	
105862-001	P120i Card Sense TM single card upgrade kit
105912-912	P120 <i>i</i> Cleaning Kit, includes 4 print engine cleaning cards and 4 feeder cleaning cards

lcons

Throughout this manual, different icons highlight important information, as follows:

Note • Indicates information that emphasizes or supplements important points of the main text.



Important • Advises you of information that is essential to complete a task, or points out the importance of specific information in the text.



Electric Shock Caution • Warns you of a potential electric shock situation.



Electrostatic Discharge Caution • Warns you of a situation where electrostatic discharge could cause damage to electronic components.



Caution • Advises you that failure to take or avoid a specific action could result in physical harm to you, or could result in physical damage to the hardware.



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Getting Started



Unpacking Your Card Printer

Your P120*i* printer ships in a cardboard carton, protected by styrofoam inserts and a protective anti-static bag. Keep all packaging material in case you need to move or re-ship the printer.

- 1. Before opening and unpacking the printer, inspect the carton to ensure that no damage occurred during shipment.
- 2. Ensure that you have a clean and nearly dust free environment for proper operation and storage of the printer.
- 3. Unlatch and remove the handle, open the printer carton, and remove the styrofoam packing material from the top of the printer.



Controls and Indicators

- 4. Lift the printer out of the carton by holding it on both sides of the bottom and lifting the printer gently from the carton.
- 5. Remove the box containing the printer accessories from the shipping carton.
- 6. Make sure the following accessories are included with your P120*i* printer:
 - a. Software CD-ROM
 - b. Quick Start Guide
 - c. Cleaning Kit
 - d. 120 vac and 230 vac Power Cords
 - e. Power Transformer
 - f. USB Printer Cable

If any items are missing, please contact your dealer.



Controls and Indicators

Your P120*i* printer is equipped with a Multi Function LCD Readout Panel to provide printer status information. The readout is controlled by the multi-function control button directly below the viewing window.

Power Switch

The power switch is located at the rear of the printer unit, bottom right.

Power Socket

The power socket is located at the rear of the printer, to the left of the power switch.



USB Port

The USB port is located at the rear of the printer unit, bottom left.

Multi-Function LCD Panel



The LCD Panel can display the following messages:

Message	Mode
Operational	
INITIALIZING	Scrolling
READY	Fixed
DOWNLOADING DATA	Fixed

Message	Mode			
PRINTING MONO	Fixed			
MAG ENCODING	Fixed			
PRINTING CYAN	Fixed			
PRINTING YELLOW	Fixed			
PRINTING MAGENTA	Fixed			
PRINTING BLACK	Fixed			
PRINTING OVERLAY	Fixed			
DOWNLOADING FW	Fixed			
CLEANING PRINTER	Fixed			
Warnings				
CLEAN PRINTER	Fixed			
REMOVE RIBBON THEN CLOSE LID	Scrolling			
INSERT FEEDER CLEANING CARD	Scrolling			
REMOVE FEEDER CARD	Scrolling			
PRESS BUTTON TO CONTINUE	Scrolling			
FEED LONG CLEANING CARD IN EXIT	Scrolling			
CLEANING PRINTER	Scrolling			
INVALID MAGNETIC DATA (encoding stops)	Scrolling			
REMOVE RIBBON	Fixed			
Errors (Printer will not operate	÷)			
OUT OF RIBBON	Fixed			
MECHANICAL ERROR	Fixed			
OUT OF CARDS	Blinking			
PRINTER OPEN	Blinking			

Printer Installation



Installing the P120*i* Printer



Caution • Do not power the printer with USB attached to your computer at this time. The driver will prompt you when it is time to plug in and power up your printer.

To install the P120*i* Printer on Windows 2000 and Windows XP operating systems, insert the User Documentation, Drivers, and Training CD, included with your printer, into your computer and InstallWizard will walk you through the required installation steps. The InstallWizard will:

- Automatically install the User Interface when the driver CD is inserted.
- Start the installation process when the **Install Printer Driver** menu item is selected from the Main Menu.
- Allow you to install Ethernet drivers, if you plan on networking your card printer via an external print server
- · Check to see which operating system you are using
- Detect previous versions of the driver and clean up any unnecessary Windows registry entries. You must select "Remove" from the install options to remove any previous driver versions.
- Install the new driver files
- Reboot your computer

Print Driver Installation

Install the P120i Printer driver as follows:



- 1. Insert the **P120i User Documentation, Drivers, and Training** CD into the CD drive of the host computer. The **Select Language** window will open.
- 2. From the **Select Language** window, choose the appropriate language for your system. The Main Menu will open in the selected language.

Zebra Card Printer Solutions		Value Line ۳110/P120
Printer Driver	Documentation	Support
View README	View CD README	Register Your Product **
Install Adobe Acrobat	> Warranty *	Media List *
VInstall Printer Driver	Vuser's Manual *	> Web Site **
D P110i	P110i	Vser Training *
P120i	P120i	 P110i P120i
	Exit	
	* Requires Acrobat ** Requires active internet connection	

3. From the Main Menu, select Install Printer Driver.



4. The InstallShield Wizard will be installed and a progress window will be displayed. Once the InstallShield Wizard has been installed, the **Welcome to InstallShield Wizard** window will open.

Zebra Value Line Card Printer	2.00.05	ж
2	Welcome to the InstallShield Wizard for Zebra Value Line Card Printer	
4	The InstallSheak# Wicard will install Zebra Volve Line Card Printer on your computer To continue, click Next	
	Carcel	-

5. On the Welcome to InstallShield Wizard window, click the <u>Next</u> button. The Select Features window will open.

	the you want to install
	Install USB proter drivers. This is the datest
	Install Ethamet printer drivers
~	1 _{//}



Important • **Important** • Installation of ethernet printer drivers will also allow the printer to be connected via USB.

- 6. From the Select Features window:
 - a. If this printer is to be a stand alone unit, click the **Install USB printer drivers** button. The **License Agreement** window will open. Proceed to **USB Installation**.
 - b. To use this printer with an external print server, ethernet printer drivers are required. This procedure will also install the USB printer drivers. Select **Install Ethernet printer drivers**. The **License Agreement** window will open.

Press the PAGE DO	Whiley to see the res	I of the agreement		
License Agreement	e.			
FEAMWARE - MPC the rights and rents (EULA') You will be software and/or far the EULA	ORTANT, READ CAR Sons described in this re acked to review and wave will not acted on	EEERIA TECHNOLOG EFULLY De swe to cen John Technologies E Letter teccopt or not ac your computer where a chyour signature that yo	Aully read and unde rd-User License Ac cept the terms of the r antitype accept to	estend all of promoti EULA This e terms of
		ng License Agreement? Inter you must accept th		the ratio will

7. Accept the License Agreement by clicking the **Yes** button. The **Card Image Rotation** window will open. Proceed to **Ethernet Installation**.

USB Installation

•	

If you reject the License Agreement by clicking the **No** button, the installation process will terminate.



1. Accept the License Agreement by clicking the **Yes** button. The **Select the Setup Type** window will open.

Zebra Value Lin	e Cord Printer 2.00.05
Setup Type Select the Set	e Type to install.
Please select	a setup type
* Company	All program features will be mutalled. (Flequines the most disk space.)
C Cuptom	Choose which program features you want installed Recommended for advanced users
) (22(12(1)))	(geck [jeck Cercel

- 2. From the **Select the Setup Type** window:
 - a. If you are willing to accept the default settings for your printer, select the **Complete** installation option, click the **Next>** button. Proceed to **Complete Installation**.
 - b. If you want to choose your own particular settings for certain printer functions, select the Custom installation option, click the Next> button. The Card Image Rotation window will open. Proceed to Custom Installation.

Custom Installation

ebra Value Line Card Printer 2.00.05	2
Setup Type	
Choose the setup type that best suits your needs	
Cent image rotation by 180 degrees	
# No rotation	
C From side by 190 degrees only	
C Back aide by 180 degrees bely	
C Front and back by 100 degrees	
	101 Sec. 101 Sec. 101 Sec. 101
	(geck (jext) Cercel

1. In the **Card Image Rotation** window, select the rotation desired, then click the **Next**> button. The **Print on Both Sides** window will open.

Setup Type			
Choose the setup type that best	ruhi you needa		
Print on both sides. Applies only	ti double sided pres	wrs.	
17 (201)			
CHO			
			 1000

2. In the **Print on Both Sides** window, select Yes or No, and click the **Next>** button. The **Monochrome Conversion** window will open.

Setup Type			
Choose the setup type that best suits your needs			
Monachrome Conversion			1.000
# Dhater			
C Hallione coarse			
	(Back	Lints	Cencel

3. In the **Monochrome Conversion** window, choose the conversion type required. Click the **Next>** button. The **Network Printer Components** window will open.

Zebra Value Line Cord Printer 2 00.05			3
Setup Type Choose the setup type that best suits your needs			
Select Network driver installation options			
C Install retwork primer components			
Constant install network printer components			
		-	
	(gack	Eliota.	Cercel

- 4. From the Network Printer Components window
 - a. Select the **Install network printer components** option and click the **Next>** button. The **Default network ribbon** window will open.
 - b. Select the **Do not install network printer components** option and click the **Next>** button. Proceed to **Encoder Settings**.

Installing the P120i Printer

Choose the setup type that best suits your needs		1 200
Select Network driver installation uptions		
/ MOXO is the default tehron, ribbon		
 VMCKDK is the default network ribbon 		
C VMCVC is the default retwork abbon		
C YMCU/K is the default retwork sibbon		
C K is the default retwork robin		

5. In the **Default network ribbon** window, choose the desired default network ribbon, and click the Next> button. The **Enter First IP Address** window will open.

Zebra Value Line Card Printer 2.00.05	×
Enter Text Please enter information in the field below.	K
You can enter up to three IP addresses for network prin an IP address. Please enter the first IP address.	ters. Make sure to follow this exact format for
	
InstellShield	< Back Next > Cancel

6. Enter the **IP address** of the first printer into the text box and click the **Next** button. The **Enter Second IP Address** window will open.

Zebra Value Line Card Printer 2.00.05		2
Enter Text Please enter information in the field below.		4
Please enter the second IP address. Leave field	blank if you have no additi	onal netowrk printers.
	,	
	2	1
	< <u>B</u> ack <u>N</u> e	xt > Cancel

7. If you are installing a second network printer, enter the **IP address** of the second printer into the text box. If you are installing only one network printer, leave text box blank. Click the **Next** button. The **Enter Third IP Address** window will open.

Zebra Value Line Card Printer 2.00.05	×
Enter Text Please enter information in the field below.	
Please enter the third IP address. Leave field blan	k if you have no additional netowrk printers.
,	
InstallShield	
	<back next=""> Cancel</back>

8. If you are installing a third network printer, enter the **IP address** of the third printer into the text box. If you are installing only one or two network printers, leave text box blank. Click the **Next** button. Proceed to **Encoder Settings**.

Encoder Settings

Zobra Value Line Cord Printer 2.00.05 Setup Type Choose the setup type that best suits your needs	×
Elicade tely	
0.00	
• III	
	lack (jack) Cancel

 In the Encode Only window, choose Yes or No. If you choose Yes, the printer will be set up to ONLY encode magnetic stripes on cards. No printing of cards will occur. Click the Next> button. The Select Encoder Coercivity window will open.

Setup Type			1
Choose the setup type that best suits your needs			
Select Encoder Coersivity settings			1.000
# Fred			
C High Osensway			
C Low Coensively			
	4 gack	Lines.	Cercel

2. In the **Select Encoder Coercivity** window, choose coercivity settings that match the type of cards being encoded, then click the Next> button. The **Track 1 Settings** window will open.

Track 1 settings		1.00
# 1501	C SDr	
C 1602	C 6Bt	
C (50)	C 75r	
C 304		
C 484		

3. In the **Track 1 Settings** window, select the required track settings for Track 1 and click the Next> button. The **Track 1 Density** window will open.

Zobra Value Line Cord Printer 2.00.05 Setup Type Choose the setup type that best suits your nee	54	X
Track 1 density		
# 210 DFE		
CINER		
1924 (1971) -	(jack [jack)	Cercel

4. In the **Track 1 Density** window, select the density of track 1 and click the Next> button. The **Track 2 Settings** window will open.

Trock 2 settings		
C 1501	C 50r	
@ 8505	C 68t	
C (50)	C/25x	
C 304		
C 484		

5. In the **Track 2 Settings** window, select the required track settings for Track 2 and click the Next> button. The **Track 2 Density** window will open.

Zebra Value Line Cord Printer 2.00.05	×
Setup Type Choose the setup type that best suits your needs	
Track 2 density	
C 210 DE1	
# 1599	
•Estk	Liket) Carcel

6. In the **Track 2 Density** window, select the density of track 2 and click the Next> button. The **Track 3 Settings** window will open.

Track 3 settings		
C 1601	C 504	
C 1902	C 48t	
# 1003	C 784	
C 384		
C 484		

7. In the **Track 3 Settings** window, select the required track settings for Track 3 and click the Next> button. The **Track 3 Density** window will open.

Zobra Value Line Cerd Printer 2 00.05	x
Setup Type Choose the setup type that best suits your needs	
Track 3 density	
# (110F)	
C 7589	
(gack)	Not? Ourcel

8. In the Track 3 Density window, select the density of the track and click the Next> button.



- 9. You will be asked if you want to apply the custom settings.
 - a. If you select Yes, the settings you selected in the previous windows will be applied.
 - b. If you choose **No**, the default settings will take effect.

Whether you select **Yes** or **No**, the **Select Program Folder** window will open. Proceed to **Complete Printer Installation**.

Ethernet Installation



Important • If you reject the License Agreement by clicking the No button, the installation process will terminate.



1. Accept the **License Agreement** by clicking the **Yes** button. The **Card Image Rotation** window will open.

Choose the setup type that best suits your needs		
		1
Cent image rutation by 180 degrees		
(# No cotation)		
C From side by 180 degrees only		
C Dack side by 180 degrees bely		
Front and back by 180 degrees		

2. In the **Card Image Rotation** window, select the rotation desired, then click the Next> button. The **Print on Both Sides** window will open.

Zebra Value Line Card Printer 2.00.05	x
Setup Type	and the second sec
Choose the setup type that best suits your needs	
Field on both sales. Applies only to double soled preses.	
a train	
C 10	
(section)	1411-11-11
(gack [gast)	Cencel
	5.75

3. In the **Print on Both Sides** window, select Yes or No, and click the Next> button. The **Monochrome Conversion** window will open.

letup Type		
Choose the setup type that best suits your needs.		
Monochrame Conversion		1.000
# Divisor		
C Hallione coerse		
	(gack [just >	Cencel

4. In the **Monochrome Conversion** window, choose the conversion type required. Click the **Next>** button. The **Default network ribbon** window will open

etup Type		
Choose the setup type that best suits your needs		
Select Network driver installation uptions		1.00
# MOXO is the default tehron abbori		
 VMCKDK is the default network ribbon 		
C VMCVC is the default retwork rbbon		
C YMCU/K is the default retwork sibbon		
K is the default retwork ribbon		
		14412 11

5. In the **Default network ribbon** window, choose the desired default network ribbon, and click the Next> button. The **Enter First IP Address** window will open.

Please enter information in the field below. You can enter up to three IP addresses for network printers. an IP address. Please enter the first IP address.	Make sure	e to follow this	exact format for
	Make sure	e to follow this	exact format for
	_		

6. Enter the **IP address** of the first printer into the text box and click the **Next** button. The **Enter Second IP Address** window will open.

Zebra Value Line Card Printer 2.00.05	×
Enter Text	4.
Please enter information in the field below.	
Please enter the second IP address. Leave field b	lank if you have no additional netowrk printers.
InstallShield	
	<back next=""> Cancel</back>

7. If you are installing a second network printer, enter the **IP address** of the second printer into the text box. If you are installing only one network printer, leave text box blank. Click the **Next** button. The **Enter Third IP Address** window will open.

Zebra Value Line Card Printer 2.00.05 Enter Text Please enter information in the field below.	×
Please enter the third IP address. Leave field blank if you have no additional netowrk printers.	1
	1
InstallShieldCancel	

8. If you are installing a third network printer, enter the **IP address** of the third printer into the text box. If you are installing only one or two network printers, leave text box blank. Click the **Next** button. The **Encode Only** window will open..

obra Value Line Card Printer 2.00.05 Setup Type			14
Choose the setup type that best suits your needs			
Excade only			
C/201			
# UE			
	egeck.	Lines	Cencel

9. In the Encode Only window, choose Yes or No. If you choose Yes, the printer will be set up to ONLY encode magnetic stripes on cards. No printing of cards will occur. Click the Next> button. The Select Encoder Coercivity window will open.

Choose the setup type that best suits your needs		
Select Encoder Coercivity settings		
· Fierd		
C High Coarsivity		
C Low Coensivity		

10. In the **Select Encoder Coercivity** window, choose coercivity settings that match the type of cards being encoded, then click the Next> button. The **Track 1 Settings** window will open.

Track 1 settings		1.00
# 800	C.58r	
C 1602	C 6Br	
C-1503	C 7Br	
C 304		
C 484		

11. In the **Track 1 Settings** window, select the required track settings for Track 1 and click the Next> button. The **Track 1 Density** window will open.

s <mark>bra Value Line Card Printer 2.00.05</mark> Setup Type Choose the setup type that best suits your needs	
Track 1 density	
# 2100H	
C.7584	
(pa	(jext) Cercel

12. In the **Track 1 Density** window, select the density of track 1 and click the Next> button. The **Track 2 Settings** window will open.

bra Value Line Card Print Setup Type Choose the setup type that be		14
Track 2 settings		
C.1501	C 504	
@ (603	C 6Bt	
C (50)	C 75x	
C 384		
C 484		
	(Dack	Kot) Carcel
		and the second se

13. In the **Track 2 Settings** window, select the required track settings for Track 2 and click the Next> button. The **Track 2 Density** window will open.

letup Type		100
Choose the setup type that best suits you	reeds	
Track 2 stensity		
C 210 DET		
@ 1569		

14. In the **Track 2 Density** window, select the density of track 2 and click the Next> button. The **Track 3 Settings** window will open.

bra Value Line Card Prints Setup Type Choose the setup type that be		1
Track 2 settings		
C. 1501	C 50r	
C 1902	C \$Bt	
# 1003	C 70x	
C 384		
C 484		
	a Party Com	and I come
	(Back H	Cercel

15. In the **Track 3 Settings** window, select the required track settings for Track 3 and click the Next> button. The **Track 3 Density** window will open.



16. In the Track 3 Density window, select the density of the track and click the Next> button.

Questio	n		×
?	To apply the custo	m settings, plea	se select Yes
	Yes	No	J

- 17. You will be asked if you want to apply the custom settings.
 - a. If you select Yes, the settings you selected in the previous windows will be applied.
 - b. If you choose No, the default settings will take effect.

Whether you select **Yes** or **No**, the **Select Program Folder** window will open. Proceed to **Complete Printer Installation**.
Complete Printer Installation

below You may type a new bidder kama
Deck (jext) Cencel
4

1. In the **Select Program Folder** window, accept the default folder for the program icons, or choose a different folder. Click the <u>Next></u> button. The **Setup Status** window will open.

obra Volue Line Cord Printe Setup Status	r 2.00.05	
Zalon Value Line Card Protect	Satup is partirening the respectivel operate	
Generating script operations it	reteri 920	

2. The **Setup Status** window will show the progress of the driver installation. When driver installation is complete, the **Congratulations** window will open. Proceed to **Connect the P120***i* printer.

Connect the P120*i* Printer

The following instructions will guide you through the installation of the P120*i* printer.



Caution • Limit electrical power supplied to the P120*i* Printer to 24 VDC. Limit excess current draw to 16 amps or less, using an associated circuit breaker or other such device. Never operate the printer in a location where operator, computer, or printer can get wet. Personal injury could result. The printer must be connected to an earthed electrical power supply and properly protected against electrical surges and grounding faults. The power supply pack can only be replaced by the same product from the manufacturer.

1. Place the printer in a location that allows easy access to all sides. The printer should never be operated while resting on its side or upside down.



2. Remove the yellow CAUTION label from the back of the printer.



3. Ensure that the printer's power switch in the OFF (O) position.



Caution • Intermittent or unpredictable operation may occur from unsecured connectors. If damaged, the power cable must be replaced by an exact equivalent. The socket should always be easily accessible to power off the printer.



4. Insert the power supply plug into the power socket, attach the power cord (120VAC or 230VAC) to the power supply, then plug the power cord in to a grounded electrical socket of the proper voltage and type.



5. Attach USB cable to printer and computer.



6. Place the printer's power switch in the ON (|) position. The **Found New Hardware** window will open.

Found New Hordware Wo	ierd .
	Welcome to the Found New Hardware Wizard
	Windows will seerch for care in and updated software by fooking on your computer on the herdware installation CD, or on the Windows Update Wat site (with your permission) <u>Band surphyticy policy</u>
	Can Windows convect to Windows Update to search for software?
	C yes, this time only
	C Yee, now and greey time I connect a device
	if <u>f-c.rcths</u> pro
	Click Nort to commen
	General Stores

7. In the **Found New Hardware** window, select the **No, not at this time** radio button, then click <u>Next></u>. The **Insert installation CD** window will open.

Found New Herdware Would	
	This wood helps you instell software for P120-USB Cast Primer
	B your kardware canso with an installation CD or Roppy disk, insert it new
	What do you want the worand to de?
	 (ratal te sativare automatically Fiscammended) (*) instal from a later specific locator (Advanced)
	Cick Noir to continue
	Carcel Mer Carcel

8. In the **Insert installation CD** window, select the **Install the software automatically** radio button and click <u>Next></u>. The **Windows Logo Testing** window will open.

1	The software you are installing for this hardware:
	Printers
	has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important)
	Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommende that you stop this installation now and contact the hardware
	vendor for software that has passed Windows Logo testing

9. In the **Windows Logo Testing** window, select the **Continue Anyway button.** The copying files progress bar will display.

Copying Files		×
67		
KTRester DLL To C\WINDOWS\Syst	em32\spool,_\eltron_card_printerpda59	
	Concel	
	Concel	



10. If the Files Needed window opens, type in the required file location from the **Congratulations** window. When files have been successfully transferred, the **Completing the New Hardware Found Wizard** window will open.

Found New Herdware Walerd	
	Completing the Found New Hardware Wizard
	The wized has limited installing the software for:
	PT2GUS8 Ceed Priver
	Click Frenk to close the waters

- 11. Click the **Finish** button and driver installation will be complete and the **Completing the New Hardware Found Wizard** window will close.
- On the Congratulations window, click <u>Next></u>. You will be asked if you wish to open the ReadMe file



13. If you have not previously read the ReadMe file, please select Yes. The Readme file contains known issues and late breaking news related to the latest version of the Zebra Driver.

Contraction of the second s		Name of Concession, Name of Street, or other
cogratulations on installing th	te printer drivers.	
Please real the instructions below	w as they apply to your preview settings	1.00
USB Primers		
	is instructions of the Microsoft herdware wiger ou specify the following location for the usb d	
Microsoft Signature		
	ature page is displayed, planse answer 'rES ell hút install the shivers. The drivers are com	
Westpart		

14. Whether you select <u>Yes</u> or <u>No</u>, the **InstallShield Wizard Complete** window will open.

Zobra Value Line Cord Printer	2.00.05
	InstallElhield Wizard Complete Setup has twohed installing Zebra Value Line Card Printer on your computer.
	Finite Finite

15. Click the **Finish** button to complete the installation.

Change Printer Driver Options

You can change the default settings for the P120*i* Printer driver. Change the options as follows:

1. Select Start>Settings>Printers and Faxes.



2. From the Printers and Faxes list, right click the P120*i* USB Card Printer and select **Properties** from the pop-up menu. The **Printer Properties** window will open.

P120i USB Card Printer Prop	erties 6
Color Management General Sharing	Security Device Settings Ports Advenced
P1201 USB Cond Pro	
Location:	
Qomment.	
Mgdel. P120/USB Card Print	tr.
Features	
Color Yes	Paper available:
Double-sided Yes	86mmx54mm Cerd
Staple: No	
Speed Unknown	
Maximum resolution: 300 dpi	
Pipta	g Preferences
	OK Cancel

3. On the General tab, click on the Printing Preferences button to change the card orientation settings, monochrome conversion settings, various ribbon settings, or to adjust the color and head settings properties.

Color Manageme	ent	Secur	N.	Device	Setting
General	Sharing		Ports	A	dvance
sharing for Windows F	are this printer this printer, clic irewall will be omputers on th	ck Share t	his printer. It d to allow the	you share t	his printe
Do got share the share	his printer				
C Share this prin	ter				
Star's name.					_
Drivers It this printer is a Windows, you	shared with us	stall addit	ional drivers	s, so that the	
users do not ha shared printer.	rve to find the p	print drive	r when they	connect to t	90 20
			Addi	tional Drive	rs

4. On the Sharing tab, you can choose to share the printer over the network, and install additional drivers to accommodate different operating systems.

		1915	
Color M	anagement	Security	Device Settings
General	Sharing	Ports	Advanced
×	120i USB Card Printer	ents will print to the fer	stree checked
ort. Port	Description	Printer	A
LPT2	Printer Port		
LPT3	Printer Port		
COM1:	Serial Port		
	Serial Port Serial Port		
	Serial Port		
D FILE:	Print to File	R-Quest Flash	Jet series, CD Col.
USB002			Construction of the first of the last of the first of the
USB001	Virtual printer port to	rUZebra TLP384	42 👱
Add F	ort I too	elete Port	Configure Port.
			and a second
Enable b	directional support		
	inter pooling		
c Danie bi	inter pooling		

5. On the Ports tab you can select which add, delete, and configure the printer ports, as well as choose which port the P120*i* printer is assigned.

General	Sher	ing	Ports	Advenced
Color Mana	gement	Se	curity	Device Settings
Color p		the color of	n your printer b	s) with your color printer. lesed on the type of l
Autometic			ally select the profiles [Reco	best color profile from the mmended]
Monual			ault color profil isociated colo	e for all output from this r profiles
olor Profiles c	Detault color	10000000 00000000000	<none></none>	
iolor <u>P</u> rofiles c	Default color	10000000 00000000000		2 2

6. On the Color Management tab, you can add, remove, and change printer color profiles.

General Shar Color Management	ing Security	Ports	Advanced rvice Settings
			raine semila
Administrators (01WXPTG	ESCHARENDIAN	ministratose)	
CREATOR OWNER	COCHARCINEMO	mmistraturs)	
Everyone	COLLUCTION D		
Power Users (01WXPTGE	SUHWEND/Pow	er Users)	
		0.001	
		Add	Bemove
missions for Administrators	1	Add Allaw	Bemove
Print		Allaw	Deny
Print Manage Printers		Allow I	Deny
Print Manage Printers Manage Documents		Allow V V	Deny
Print Manage Printers Manage Documents		Allow I	Deny
missions for Administrators Print Manage Printers Manage Documents Special Permissions	<u>.</u>	Allow V V	Deny
Print Manage Printers Manage Documents Special Permissions		Allow 2 2	Deny
rrint Aanage Printers Aanage Documents		Allow 2 2	Deny

7. Use the Security tab to change permissions for the P120i printer.

Color Management	Security	of a local division of the local division of	evice Settings
General	Sharing F	orts	Advanced
Always evailable	100000000000000000000000000000000000000		
C Available from	12.00 AM	Te 120	GAM E
Priority 1			
Driver P120i USB Cor	d Printer	2	New Driver
C Start printing after Start printing imme	adiately		
C Start printing after Start printing imme Print girectly to the printing	last page is spooled adiately nter		
C Start printing after	last page is spooled adiately nter cuments		
 Start printing after Start printing imme Print girectly to the printing indicated doe 	last page is spooled ediately nter currents ents first		
Start printing after Start printing imme Print girectly to the pri Hold mismatched doo Print spooled docume	last page is spooled ediately nter currients ents first ints		
Start printing after Start printing imme Print greedy to the pri Hold mismatched doo Print spooled docume Keep printed docume	last page is spooled ediately nter currients ents first ints		srator Page

8. On the Advanced tab, you can choose various printer properties, install different printer drivers, and change default printer settings.

						(
	eneral	California (Sharing		orts	Advanced	
9	olor Mana	agement	<u> </u>	Security		Device Settings	
¥ Ze				Device Set	0.00		
		Model/Fir r Setting		rsion: Zebre	Value Line	e Card Printer	
	Tools	Contraction of the					
	F/W Do						
		Informatio	on Pro	operties			
	Single F About						
-							N
zi						1.	×

- 9. On the Device Settings tab, you can change settings for a Magnetic Encoder and change to and from single feed mode.
- 10. Once the P120*i* printer driver options have been configured to your satisfaction, click the OK button to save your new configuration and close the Properties window.

P120i Printer Setup



Printer Features

The following shows the features found on your P120i Printer:



Loading Ribbon Cartridge

The P120i Printer requires approved ribbon cartridges (see Appendix C). The Resin Thermal Transfer and Dye Sublimation ribbons are specifically designed for your P120i Printer.

- *i* Series Printers require the use of *i* Series ribbons for full color printing.
- Each ribbon cartridge includes an integrated adhesive cleaning roller assembly that is used to clean the cards entering the printer. Improper cleaning will reduce printer life and degrade print quality
- When the ribbon is completely used, change the whole cartridge assembly.
- 1. Place the printer power switch in the OFF (0) position



Electrostatic Discharge Caution • DO NOT TOUCH the print head or the electronic components on the print head. Discharge of electrostatic charge from the human body or other surfaces can damage the print head or other electronic components

- 2. Open printer lid by pressing the Cover Release button on the top of your printer.
- 3. Peel protective wrapper from adhesive cleaning roller by gently pulling on the tape. Discard the protective wrapper.



- 4. Insert the ribbon cartridge with the cleaning roller facing down, so the gears on the ends of the rollers fit into the appropriate slots.
- 5. Close the printer lid and push down until you hear an audible click.
- 6. Place the printer power switch in the ON (|) position



Note • Please note that the ribbon automatically synchronizes.

Loading Cards

To help you load, print, and collect cards, the P120i has the following items:

Card Feeder

The card feeder is used for loading cards, it can hold up to 100 cards of 30 mils thickness. The card feeder is located under the card feeder cover of the P120*i* printer.



Caution • DO NOT bend cards or touch print surfaces as this can reduce print quality.



Note • The surface of the cards must remain clean and dust free. Always store cards in an enclosed container. Ideally, use cards as soon as possible. If cards stick together, carefully fan or shuffle them.

Note • For Cards with magnetic stripe refer to Appendix A for loading instructions.

Load cards into card feeder as follows:

- 1. Open card feeder cover.
- 2. Slide card guide all the way to the right until it locks in place with an audible click.



3. Remove cellophane wrapper from card stack.



Note • Static charges and edge burrs from the card die-cutting process can render individual cards stuck together with significant adhesion force. These cards <u>must be</u> physically separated from each other before inserting into the feeder; if not separated, feeding or printing problems may occur.



4. Holding the card deck by the sides, hold it vertically against a flat surface such as a desktop. If the deck is too thick for your hand to hold it comfortably, use about half a deck at a time.



- 5. Push the stack back and forth to an angle of about 45° from vertical, so as to separate all of the cards.
- 6. Restore the card stack to its original squared-off condition, and place the cards in the input hopper.
- 7. Place stack of up to 100 cards into card feeder and close the card feeder cover. When card feeder cover is closed, the card guide locking mechanism will automatically be released.



Card Output Hopper

- 1. Raise the printer lid and pull the output hopper down to place it in its functional position.
- 2. When not using the printer, place the card output hopper back in its closed position to protect the printer from dust.



Printing a Test Card

With ribbon cartridge and cards loaded, your P120i printer is ready to print. To check the operation of the printer, you should print a test card.

- 1. Place the printer power switch in the OFF (0) position.
- 2. While holding down the Multi Function Button, place the printer power switch in the ON (|) position. The LCD status window will glow blue.



- 3. Keep pressing the Multi Function button until the PRINT TEST CARD message appears in the window.
- 4. Release the Multi Function button and a test card will print after a few seconds.

P120*i* **Printer Operation**



Printing

Printing with the P120*i* Printer requires the Windows Printer Driver, your card design/issuing software or printer command level programming through the printer interface.

The P120*i* Card Printer can be used with any Windows 2000, or Windows XP software application program, using the drivers provided on CD with the printer. Reference Chapter 2 for instructions on installing the P120*i* printer driver.

Creating a Sample Card

Before you begin a new printing session, print a sample card to ensure that the cards will be printed correctly. Follow the steps below to print your first card using the True Colours[™] Card Printer Ribbon Cartridge and the Windows printer driver.

- 1. Go to the Microsoft Word Software.
- 2. If the P120*i* printer was not selected as the default printer, go to File> Select Printer and choose Zebra P120*i* Card Printer from the printer names list. Close the Print dialog box.
- 3. Go to File>Page Setup.
- 4. Select the Size tab, and under Paper Size, choose Card. Under orientation, select Landscape or Portrait.
- 5. Select the Margins tab, and set the Top, Bottom, Left and Right margins to O (zero).
- 6. Press OK to close Page Setup window.
- 7. The card appears on the window.
- 8. Design a card with both black and colored text and with colored pictures similar to the sample card shown below.



Printing a Sample Card

Once you completed creating your sample card, you are ready to print. Ensure your printer has a True Colours[™] Card Printer Ribbon Cartridge installed and there is card stock in the card feeder. Reference Chapter 3 for instructions on installing the ribbon and loading the cards Print your sample card as follows:.

- 1. Select File>Print to open the Print dialogue box. Ensure the following settings in the Print dialogue box:
 - Printer Name: Zebra P120*i* Card Printer
 - Print to File: Unchecked
 - Page Range: All
 - Number of Copies: 1
 - Collate: Unchecked
 - Print What?: Document
 - Print: All pages in range
 - Pages per sheet: 1 page
 - Scale to paper size: No scaling

Print	? ×
Printer	
Name: Sebra P120i card printer	<u>Properties</u>
Status: Idle	
Type:	—
Where: Comment:	Print to fi <u>l</u> e
Page range	Copies
All	Number of copies:
Current page C Selection	
C Pages:	
Enter page numbers and/or page ranges separated by commas. For example,	
	Zoom
Print what: Document	Pages per sheet: 1 page 💌
Print: All pages in range	Scale to paper size: No Scaling
Options	OK Cancel

- 2. Click the OK button.
- 3. The printer will feed in a card and start printing. The data download time will vary depending on the complexity of the card design and the processing speed of the computer.
- 4. Once the printing is completed, the card is ejected from the printer into the printed card hopper.
- 5. Remove the sample card from the card output hopper and check for any discrepancies. If the sample card is correct, your P120*i* card printer is to produce more cards.



Cleaning System



Caution • PROTECT YOUR FACTORY WARRANTY!

The recommended maintenance procedures must be performed to maintain your factory warranty. Other than the recommended cleaning procedures described in this manual, allow only Zebra authorized technicians to service the P120*i* Printer.

- •NEVER loosen, tighten, adjust, or bend, etc. a part or cable inside the printer.
- •NEVER use a high pressure air compressor to remove particles in the printer.

Your P120*i* Printer includes a simple cleaning system using Pre-Saturated Cleaning Cards provided. The regular use of these cards will clean and maintain important parts of your printer that cannot be reached: including Print Head, the Transport Rollers, and the Magnetic Encoder Station (optional feature).

When to Clean

After approximately 1000 color cards have been printed, the printer LCD will prompt **CLEAN PRINTER**, or when print quality has been degraded.

How to Clean

- 1. Leave power on.
- 2. Press and hold the Multi-Function Control Button for 5 seconds.
- 3. When the cleaning cycle is initiated, the LCD message **REMOVE RIBBON THEN CLOSE** LID will display.
- 4. After the ribbon is removed and the lid is closed, the message **EMPTY FEEDER THEN CLOSE COVER** will display.



- 5. If the lid is opened and closed without removing the ribbon, the **REMOVE RIBBON THEN CLOSE LID** message will remain.
- 6. Once the cover is closed, the firmware will eject any card inside the printer. The message **EJECTING CARD** will display.
- 7. The LCD will then display **FEED LONG CLEANING CARD IN EXIT.** When the card sensor registers the presence of the cleaning card, the rollers should take the card into the printer.
- 8. When the cleaning process is done, the printer will eject the cleaning card. If the card sensor still senses the cleaning card, the message **REMOVE LONG CLEANING CARD** will display.
- 9. Once the long cleaning card is no longer sensed by the exit card sensor, the message **INSERT FEEDER CLEANING CARD** will display. Open the feeder cover and insert the feeder cleaning card.
- 10. When the feeder cleaning card has been sensed by the feeder card sensor, the message **CLOSE FEEDER COVER** will display.
- 11. When feeder cleaning is complete, the message **REMOVE FEEDER CLEANING CARD** will display.
- 12. After the card is removed, the LCD will display **READY.** You may now reload the ribbon and cards and continue printing.

Cleaning the Print Head

Use of the cleaning cards will normally do an adequate job of cleaning the printer. However, a separate Print head cleaning, using swabs, can remove more stubborn deposits when print anomalies persist. To avoid deposits, only use foam-tipped swabs.



Caution • Never use a sharp object to scrape deposits from the print head. Permanent damage to the print head will result

- 1. Place the printer power switch in the OFF (0) position.
- 2. Open printer lid by pressing cover release button and open cover fully to reveal print head mounted to inside of cover.



- 3. Clean Print Head by moving alcohol-moistened swab tip side-to-side across Print Head elements. Only use moderate force.
- 4. Allow two to three minutes for the printhead to dry before placing the printer power switch in the ON (|) position.
- 5. To reorder swabs, reference the P120*i* Printer Media List.

Troubleshooting



Troubleshooting Procedures

This section offers solutions to potential problems you may experience with your P120*i* printer.

Print Quality Issues

This section will help you resolve print quality problems The print quality is dependent on several factors. The two most important factors that will increase your print quality are cleanliness and card stock. To diagnose and fix print quality problems, follow the troubleshooting procedures below:

Example • Small spots appear on the printed card with a non-printed area or a different color.

Possible Cause:

• Contamination on the card surface

Solutions:

- Check that cards are stored in a dust free environment
- Use a different supply of cards

Possible Cause:

- Cleaning roller not installed
- Dust inside the printer and/or dirty Cleaning Roller

Solutions:

- Perform a Cleaning of the printer (reference Chapter 5)
- Check that the protective cover was removed from the ribbon cartridge cleaning roller (reference Chapter 3).
- If printing one card at a time, replace the cleaning roller located at the front of the printer (reference Appendix B).



Example • There are non-printing horizontal lines (white) on the card surfaces.

Possible Cause:

• Ribbon cartridge is not correctly positioned.

Solutions:

- Ensure that the ribbon is properly rolled onto the ribbon cores of the cartridge and that there are no wrinkles in the ribbon.
- Replace ribbon cassette.

Possible Cause:

• Print Head is dirty.

Solutions:

• Clean the Print Head

Possible Cause:

• Print Head elements are damaged (e.g. scratched or burnt).

Solutions:

• Call Zebra Customer Service for Print Head replacement information.

Example • Printing shows very pale or inconsistent results.

Possible Cause:

• Ribbon cartridge have been stored improperly or is damaged.

Solution:

• Change ribbon cartridge and print again.

Possible Cause:

• Cards may not meet specifications

Solution:

• Use a different supply of cards.

Possible Cause:

• Contrast and/or Intensity may be set to values which are too high.

Solution:

• Adjust Contrast and/or Intensity values in software.

Possible Cause:

• Dust or embedded contamination on elements of the Print Head.

Solution:

• Perform a Cleaning of the Print Head (Reference Chapter 4, Cleaning the Print Head

Example • Printing shows blurry printed image.





Possible Cause:

• Ribbon cartridge may not be correctly positioned.

Solution:

- Check that the ribbon is properly rolled onto the ribbon cores of the cartridge, with no wrinkles.
- Replace ribbon cartridge, making sure it locks in place, and print again.

Possible Cause:

• Ribbon may not be synchronized on the correct color panel position.

Solution:

• Open lid, then close lid to synchronize ribbon.

Possible Cause:

• Cards may not meet specifications.

Solution:

• Use a different supply of cards.

Possible Cause:

• Dust or embedded contamination inside the printer and/or dirty Cleaning Roller.

Solution:

- Clean the Print Head.
- Replace Cleaning Roller

Example • No printing on the card.

Possible Cause:

• Ribbon cartridge may not be installed in the printer.

Solution:

• Check for ribbon cartridge in the printer

Possible Cause

• Cards may not meet specifications.

Solution:

• Use a different supply of cards

Possible Cause

- Cable on Print Head may be disconnected
- Print Head elements may be scratched or burnt.

Solution

• Call Service for Print Head repair or replacement information.



Technical Specifications



General

- Integrated card feeder-and-flipper
- Load-N-Go[™] drop-in ribbon cartridge
- 16-digit LCD display
- Windows® drivers for 2000 and XP
- One year printer warranty
- One year (unlimited passes) printhead warranty

Color Printing

- Color dye sublimation or monochrome thermal transfer printing
- XX seconds per card full color single sided (YMCKO)
- YY seconds per card full color dual-sided (YMCKOK)
- 300 dpi (11.8 dots/mm) print resolution

Bar Code

- Code 39, Code 128 B & C with & without check digit
- 2 of 5 & 2 of 5 Interleaved
- UPC-A, EAN 8 & EAN 13
- PDF-417 2D bar code and other symbologies can be printed via Windows drivers

Cards

- Types: PVC, PVC Composite, Adhesive backed
- Card width/length: ISO CR-80-ISO 7810, 2.12" (54mm) x 3.38" (86mm)
- Magnetic Stripe-ISO 7811
- Smart Card-ISO 7816-2
- Card thickness: 30 mil (.76mm) (+/- 10%)
- Card feeder capacity: 100 cards (30 mil)
- Card output hopper capacity: 45 cards (30 mil)

Ribbons Cartridges

- Load-N-Go[™] ribbon cartridge with integrated card-cleaning roller
- i Series technology featuring contact-chip-based ribbon detection
- YMCKO: 200 cards/cartridge
- YMCKOK: 165 cards/cartridge
- Monochrome: 1000 cards/cartridge in black, blue, or white

Interfaces

• USB 1.1 (cable included)

Dimensions

- Width: 7.9 in (201mm)
- Depth: 12.9 in (328mm)
- Height: 8.5 in (216mm)
- Weight: 9.5 lbs (4.3kg)

Electrical

- 110 ~ 240 Volts AC, 50 ~ 60 Hz (auto switching)
- 16MB image memory standard
- FCC Class B, CE, UL and CUL approved

Environmental

- Operating Temperature: 60°F to 86°F (15°C to 30°C)
- Operating Humidity: 20% to 65% non-condensing
- Storage Temperature: 23°F to 158°F (-5°C to 70°C)
- Storage Humidity: 20% to 70% non-condensing
- Ventilation: Free air

Options

- Magnetic encoder (30 mil cards only), 3 track HiCo/LoCo
- CardSense[™] single card-feed mode
- Starter Kit (200 cards and 1 YMCKOK ribbon)
- Cleaning Kit (4 print engine and 4 feeder cleaning cards)

Card Dimensions

ISO standard dimensions for plain card



ISO standard dimensions for magnetic stripe card



Appendix A Encoder



Magnetic Card Stripe Encoder

This section contains information on the additional operations of the P120*i* Printers with Magnetic Card Stripe Encoder.

Introduction

Operation and maintenance requirements for the P120i Printer with the optional magnetic card stripe encoder. The magnetic encoder can be set for either high or low coercivity.

Media Loading Orientation



Caution • ONLY USE cards that comply with ISO 7810 & 7811 standards for magnetic stripe cards. The magnetic stripe must be flush to the surface of the card to work properly. Never use cards which have taped-on magnetic stripes.

The magnetic encoder is a factory installed item with the read/write head positioned below the card path, available with HICO or LOCO encoding.

When loading cards with magnetic stripes into the card feeder, please ensure that the magnetic stripe is facing the left side of the printer, and closest to the bottom edge of the card feeder.



Note • Zebra approved HICO & LOCO PVC cards are available. (Reference P120) printer Media List).



Magnetic Encoder Cleaning

Use the standard cleaning card process as described in Chapter 4. This cleans the most important parts of the printer; including the print Head, Transport Roller and Magnetic Stripe Encoder.

ISO Standard Encoding

Track #	Field Separator	Track Density	Valid Characters	# of characters
1	٨	210 BPI*	Alphanumeri c (ASCII 20~95 †)	79 ‡
2	=	75 BPI*	Numeric (ASCII 48~62)	40 ‡
3	=	210 BPI*	Numeric (ASCII 48~62)	107 ‡
*Bits per in	nch		·	•
†Except th	ne "?" character			

‡Including Start, Stop, and LRC characters. Also note that these 3 characters areautomatically managed by the magnetic encoder according to the ISO Standard Norms.



Note • Refer to the Card Printer Programmer's Manual for complete programming information.

Appendix B

Card Sense™ Single Card Feed Mode



Printing a Single Card Without Using the Feeder

For operating the P120i card printer in single card feed mode, the printer requires that the operator install an optional Card Sense[™] Single Card Feed Kit. In Single Card Feed Mode, the printer will only accept cards through the front slot, not from the card feeder.



Install Card Sense™Single Card Feed Kit

1. Set printer to OFF.



2. Open the lid and remove the ribbon cartridge.



Important • Make sure the output hopper remains closed.



3. Install the black roller from the Single Card Feed Kit into the blue tabs at the front of the printer, and press roller down firmly to lock into the tabs.

Install Card Cleaning Cartridge

Install the Card Cleaning Cartridge as follows:



- 1. Open the lid of the card cleaning cartridge.
- 2. Insert the cleaning roller into the card cleaning cartridge and close the cartridge.
- 3. Peel protective wrapper from adhesive cleaning roller by gently pulling on the blue tape, and discard the wrapper.
- 4. Slide the Card Cleaning Cartridge into the slots provided at the front of the printer. An alignment tab is located on the left side of the Card Cleaning Cartridge to ensure proper installation.



5. Insert the ribbon cartridge with the cleaning roller facing down, so the gears on the ends of the rollers fit into the appropriate slots.



6. Close the printer lid and push down until you hear an audible click. If you can not close the lid, the cleaning cartridge or the ribbon cartridge may be installed wrong.

Setting Up the Printer Driver

- 1. Go to Printer Properties
- 2. Select the Device Settings tab
- 3. Select Single Feed Properties
- 4. Select Enable Single Feed Support
- 5. Click the Apply button.



Important • You can disable Single Feed Support and return to printing cards from the hopper. You do not have to remove the components of the Single Card Feed Kit in order to operate in normal mode.

Printing a Single Card



1. Place the printer power switch in the ON (|).



2. Insert a single card into the slot at the front of the printer, directly above the card output hopper. Do not feed more than one card at a time. Printer will take the card.



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