

JetBox 8180 User Manual

Windows XP Embedded

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Chapter 1 Overview

The JetBox 8180 is a ready-to-use Intel Atom 1.6GHz based computer with system memory 1GB DDRII RAM and system chipset 945GSE + ICH7M. Korenix, devoted to improve the usability of embedded computer in industrial domain, integrates device drivers, protocol stacks, system utilities, supporting services for Windows XP embedded in a CompactFlash card or in a 2.5" HD and installed in the JetBox 8180 to let users experience the computer in a simple way.

Combining all major interfaces, such as one Gigabit Ethernet port, four USB2.0 ports, one RS-232/422/485 port, one DVI (dual display option), and high definition audio into its compact design with DIN-rail type mounting, the JetBox 8180 communication computer provides flexible connectivities, as a result becoming a perfect front-end device for industrial applications.

Chapter 2 Windows XP Embedded Software

Specification

The JetBox XP embedded version provides abundant protocol stacks, common system utilities, and popular supporting services and application development environment to make the JetBox an easy and convenient programming platform. The software features of the JetBox XP embedded version are listed in following sections of this chapter and the JetBox file system is NTFS.

□ NTFS file system: The NTFS File System driver (NT File System); Use NTFS instead of FAT for optimum file system security.

2-1 Protocol Stacks

The JetBox supports following protocol stacks: DHCP, IPv4, DNS, IPsec, HTTP, TCP, UDP, ICMP, IGMP, ARP, TAPI, TSP, SNMP, NTP, ICS, PPP, CHAP, EAP, Telnet, SNTP, FTP, SMTP,

PPPoE, PPTP, NetBIOS

- DHCP Client Service: registers and updates Internet Protocol (IP) addresses and Domain Name System (DNS) records for your target system.
- IP Security Services: this component provides IP Security (IPsec) services for all IP traffic.
- Microsoft-Windows-HTTP Services: implement the functionality of the HTTP protocol on a server.
- TCP/IP Networking: implements the core TCP/IP protocol stack, which includes the IPv4 version of the following protocols: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), raw, Internet Control Message Protocol (ICMP), Internet Group Membership Protocol (IGMP), and Address Resolution Protocol (ARP). The component also includes Wshtcpip.dll, which is the Winsock provider for TCP/IP to enable socket-level communication over TCP/IP.
- **TAPI:** A Telephony API (TAPI) Telephony Service Provider (TSP).
- □ Simple Network Management Protocol (SNMP): SNMP is an agent service that provides management systems with information about activities that occur in the Internet Protocol (IP) network layer. The SNMP agent monitors network traffic, and retrieves and updates local management information based on the requests from the SNMP manager. The agent also notifies registered managers with traps when significant events occur.
- □ **Time Service Core:** Synchronizes a workstation's clock with other computers using Network Time Protocol (NTP) version 3. This component increases accuracy by incorporating algorithmic enhancements from NTP 4.

2-2 System utilities

The JetBox supports following system utilities: Windows command shell, telnet, FTP, web-based administration manager, wireless zero configuration

2-3 Supporting Service

The JetBox supports following supporting services: T

Telnet Server: allows users to connect to Telnet servers from remote computers.

- □ **FTP server:** used for transferring files to and from remote computer systems via a network
- □ **IIS Web Server:** allows you to create and manage Web sites.
- □ **Dial-up networking service:** RAS client API and PPP, support extensible authentication protocol (EAP) and RAS scripting
- □ **COM+ Services:** the next evolution of Microsoft Component Object Model (COM) and Microsoft Transaction Server (MTS).
- Disk Management Services: support for disk and volume management operations. The component implements a Component Object Model (COM) interface that can be used to query and configure disks and volumes (both basic and dynamic). The component also monitors disk arrivals and removals and other changes in the storage subsystem.
- □ **Remote Registry Service:** Enables remote users to modify registry settings on this computer.

2-4 Application Development Environment

- □ Microsoft .Net Framework 2.0 with service pack 2—includes the common language runtime (CLR) and the .NET Framework class library.
- □ Active Directory Service Interface (ADSI) Core—provides the basic functionality for ADSI by routing requests to the corresponding provider, based on the path that is provided.
- **Active Template Library (ATL)**—Supports ATL applications.
- Certificate Request Client & Certificate Autoenrollment—This component includes the common language runtime (CLR) and the .NET Framework class library.
- COM Base—The Component Object Model (COM) includes a programming model and a set of application programming interfaces (APIs), but does not include a dedicated user interface.
- **Common Control Libraries**—Provides common user interface (UI) controls.
- **Common File Dialogs**—Provides support for common dialog boxes.
- □ **Direct3D**—Infrastructure for using two-dimensional and three-dimensional graphics.
- DirectPlay—Provides a networking API that can enable any application to operate over both a peer-to-peer and client/server topology.
- DirectShow—Base filter graph and device enumeration support for all DirectShow applications. This component also provides most DirectShow filters.

- Distributed Transaction Coordinator (MSDTC)—A distributed transaction facility for Microsoft Windows systems, which uses transaction-processing technology. MSDTC uses loosely coupled systems to provide scalable performance.
- □ File-Based Write Filter (FBWF)—allows Windows XP Embedded (XPe) to maintain the appearance of read and write access to write sensitive or read only storage. FBWF makes read and write access transparent to applications.
- **Event Log**—A dynamic-link library (DLL) that runs as part of Services.exe. This component stores and retrieves events that can be viewed in the event viewer.
- □ Internet Explorer—The Internet Explorer Web browser allows customers to connect to the Internet or to an intranet (see properties via inetcpl.cpl).
- □ Mapi32 Libraries—The infrastructure for e-mail support.
- Message Queuing (MSMQ) Core—Message Queuing is a messaging infrastructure and a development tool for creating distributed messaging applications for Microsoft Windows operating systems. It provides guaranteed message delivery, efficient routing, increased security, support for sending messages within transactions, and priority-based messaging.
- □ Microsoft Visual C++ Run Time Libraries—The Microsoft C++ Runtime Library.
- **Registry Editor:** The Registry Editor (regedit.exe, regedt32.exe).
- RPC: Facilitates local remote procedure calls (RPCs) using the ncalrpc and ncacn_np protocol sequences, and provides support for dynamic endpoint resolution. The RPC name service provides remote procedure call (RPC) named services functionality, such as the RPC Locator. The RPC Named Service component exposes all RpcNs* RPC functions. The RPC server provides a variety of RPC and Component Object Model (COM) services, including RPC Endpoint Mapper, COM Service Control Manager (SCM), and COM Object Resolver.
- Smart Card Cryptographic Service Providers: Supports features such as smart card logon and improved email security. Smart cards must be able to perform certain RSA public key cryptographic operations. The functions are exposed with CryptoAPI through a CSP. Each type of smart card requires a different CSP (provided by the card vendor).
- □ Windows API: Provides the user-mode component of the Windows operating system API.
- □ Windows Media Player 10: Playback functionality for digital media that includes music, videos, CDs, DVDs, and Internet Radio for end users and developers.
- □ Windows Script Engines: A complete scripting environment for Windows, including command-line scripting, script languages, and the ability to host script engines within your applications.

□ WMI: Bundles the features that combine to create Windows Management Instrumentation (WMI).

2-5 Device Drivers

The JetBox provides following drivers in accompanied CD-ROM: Audio, LAN, SysChip, VGA, Watchdog timer

Chapter 3 Supporting Service

3-1 Telnet Server

The Telnet Server allows users to connect to Telnet servers from remote computers. When a Telnet client computer connect to the Telnet server, the remote user is prompted to enter a user name and password. By default, only user name and password combinations that are valid on the local server can be used to log on to that server.

Setting	Default	Description
Enable NTLM	Selected	Specifies whether to use NTLM
authentication		authentication. By default, this
		component to set to use both NTLM
		and password authentication.
Enable password	Selected	Specifies whether to use password
authentication		authentication. By default, this
		component to set to use both
		password and NTLM authentication.
Operation mode	Console	Specifies the mode of operation.
		Choose one of the following from
		the drop-down box: Console, or
		Stream.
		Console mode is useful for running
		screen-oriented programs, such as vi
		(Visual Interface). Stream mode is

Setting	Default	Description
		useful for running command-line
		applications.
Maximum number of	2	Specifies the maximum number of
connections		simultaneous connections that can
		exist to the Telnet server. Set this
		value to a number ranging from 0 to
		2147483647.
Telnet port	23	Specifies the port number for the
		Telnet server to use to make Telnet
		connections. Set this port to a
		number ranging from 1 to 1023.
		To reduce the number of requests to
		the Telnet server, set the port
		number to a lesser-known port on
		the computer.

3-2 **FTP Server**

The FTP Server copies files to and from remote computer system on a network using TCP/IP. This component also allows users to use File Transfer Protocol (FTP) commands to work with files, for example, listing files and directories on the remote system.

Users can set up FTP properties at following steps.

🐮 Internet Information Services	
File Action View Help	
Internet Information Services OEM-10QUT6CF3M9 (local compt Web Sites Web Sites FTP Sites Oefault FTP Site Explore Open Browse Start Stop Pause New All Tasks Rename Refresh Help	
Opens property sheet for the current selection.	

Default F	TP Site P	roperti	es			? 🛛
FTP Site	Security A	ccounts	Messages	Home Director	у	
dentifi	cation					
Desc	ription:	Defaul	t FTP Site			
IP Ac	ldress:	(All Un	assigned)		*	
TCP	Port:	21				
Conne	ction					
	nlimited			7		
💿 Lir	nited To:		10	connections		
Conn	ection Time	but	900	seconds		
	hable Loggin ive log form					
W	3C Extende	d Log File	e Format	*	Properties	
					Current 9	Sessions
			ок 🛛	Cancel	Apply (Help

ult FTP Sit	te Properties	
P Site Secur	ity Accounts Messages Home Directory	
🛃 Allow Anoi	nymous Connections	1
Select the W	Vindows User Account to use for anonymous	access to this resource
Username:	IUSR_MACHINENAME	Browse
Password:	******	
	Allow only anonymous connections Allow IIS to control password	
FTP Site Ope	rators	
Grant operal	tor privileges to Windows User Accounts for I	this FTP site only,
Operators:	🛃 Administrators	Add
		Remove
		hemove
	OK Cancel	Apply Help
ult FTP Sit P Site Secur FTP Site Mes	te Properties	Apply Help
P Site Secur	te Properties	Apply Help
P Site Secur FTP Site Mes	te Properties	Apply Help
P Site Secur FTP Site Mes	te Properties	Apply Help
P Site Secur FTP Site Mes	te Properties	Apply Help
P Site Secur FTP Site Mes	te Properties	Apply Help
P Site Secur FTP Site Mes Banner:	te Properties	Apply Help
P Site Secur FTP Site Mes Banner:	te Properties	Apply Help
P Site Secur FTP Site Mes Banner:	te Properties	Apply Help
P Site Secur FTP Site Mes Banner:	te Properties	Apply Help
P Site Secur FTP Site Mes Banner: Welcome: Exit:	te Properties nity Accounts Messages Home Directory sages	Apply Help
P Site Secur FTP Site Mes Banner:	te Properties nity Accounts Messages Home Directory sages	Apply Help
P Site Secur FTP Site Mes Banner: Welcome: Exit:	te Properties nity Accounts Messages Home Directory sages	Apply Help
P Site Secur FTP Site Mes Banner: Welcome: Exit:	te Properties nity Accounts Messages Home Directory sages	Apply Help

Default FTP Site Pr	opertie	95			? 🔀
FTP Site Security Ad	counts	Messages	Home Directory	(E	
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Directory Listing St	yle				
O UNIX ®					
⊙ MS-DOS ®					
		ок (Cancel	Apply	Help

3-3 Web Server

The Web Server (HTTPD) implementation enables you to monitor, configure, and remotely control a device or computer through the use of a Hypertext Transfer Protocol (HTTP) server. The Web Server provides this service for network printers, scanners, and other shared equipment.

The Web Server applications send Hypertext Markup Language (HTML)pages to a requesting browser. Users only need to have an Internet connection and a browser to be able to make use of the Web Server functionality.

User can set up Web Server Properties at following steps.

HINTERNET INFORMATION Ser	vices		
File Action View Help			
⇐ ⇒ 🖻 🖪 😭 🞚	} 😫 💂 🕨 ■	II	
Internet Information Services OEM-10QUT6CF3M9 (local Web Sites Web Sites FTP Sites Default Web Site Comparison Service Service Service Service Se	Name	Path c:\windows\hel	system32\msmq\web ipts
-	Export List Properties Help		
<	> <	100	×
Opens property sheet for the curre	ent selection.		

Directory Securit	у 📔 Н1	TP Headers	Custom Errors
Web Site	ISAPI Filters	Home Directory	Document
Web Site Identifical	tion		
Description:	Default Web S	te	
IP Address:	192.168.1.125		Advanced
TCP Port:	80	SSL Port:	
Connections			
Connection Timeo	ut: 91	00 seconds	
🗹 HTTP Keep-Ali	ves Enabled		
🗹 Enable Logging	,		
Active log forma	t		
W3C Extended	Log File Format	V Properti	ies

Director	y Security	HTTP	Headers	Custom Errors
Web Site	19	SAPI Filters	Home Director	y Documen
Filters inst order lister		e active for this We	b site only. Filters	are executed in the
	Status	Filter Name	Priority	Add
				Remove
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ult Web	(Site Prop		Cancel	Apply He
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Web Site	ISAPI Filters	Home Direc	ctory	Documents
Directory Secu	rity	HTTP Headers		Custom Errors
Enable Conter Content should:	t Expiration			
C Expire Immed	liately			
Expire after	1	Day(s)	~	
C Expire on	Friday , F	ebruary 29, 2008	at 🚺	2:00:00 AM 👙
Custom HTTP He	aders			
			1	Add
				E dit
				Remove
Paulant Dation				Tremere
Content Rating Bating	s halo identifu to u	our users what type	of	
	it your site provide			dit Ratings
MIME Map				
To cor		MIME types the Web	. <u> </u>	
	e sends to browse r, click File Types		F	ïle Types

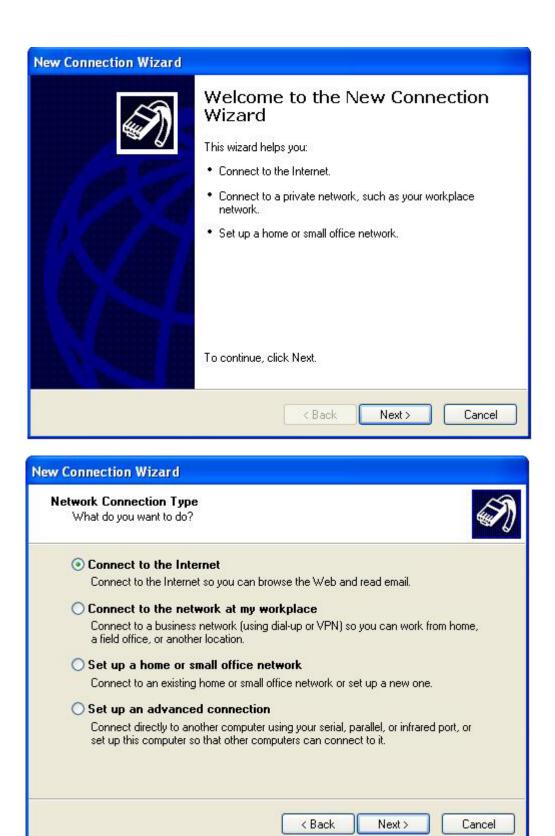
Veb Site	ISAPI	Filters	Home Directory	
Directory	y Security	H	TTP Headers	Custom Errors
Custom er ile.		n be an ab	osolute URL on this se	rver or a pointer to a
HTTPE			ntents	
400	File		'INDOWS\help\iisHelp	
401;1	File		'INDOWS\help\iisHelp	
401;2	0.007.00		'INDOWS\help\iisHelp	
401;3			'INDOWS\help\iisHelp	- 2012 - 2012 Control - 2012 Control - 2012 - 200
401;4	File	C:\W	'INDOWS\help\iisHelp	o\common\401-4.h
401;5	File	C:\W	'INDOWS\help\iisHelp	o\common\401-5.h
403;1	File	C:\W	'INDOWS\help\iisHelp	o\common\403-1.h
403;2	File	C:\W	'INDOWS\help\iisHelp	o\common\403-2.h
403;3	File	C:\W	'INDOWS\help\iisHelp	o\common\403-3.h
403;4	File	C:\W	'INDOWS\help\iisHelp	o\common\403-4.h
403;5	File	C:\W	'INDOWS\help\iisHelp	o\common\403-5.h
403 6	File	D:W	INDOWS\heln\iisHelr	n\common\403-6 h≚
		E	dit Properties	Set to Default

3-4 Dial up Network Service

The Dial-up Networking functionality in Windows XP embedded is implemented using Remote Access Service (RAS) and the Point-to-Point Protocol (PPP), Dial-up Networking allows a device to access network resource from a remote location. First, a connection is established with the remote computer, and then the device, or client, can upload and download files.

User can set up Dial-up Networking at following steps.

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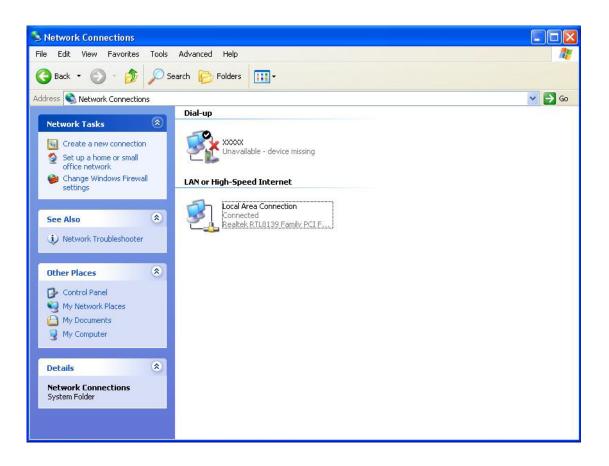


w Connection Wizard	
Getting Ready The wizard is preparing to set up your In	iternet connection.
How do you want to connect to the Inte	met?
O Choose from a list of Intern	et service providers (ISPs)
Set up my connection manual	ually
	II need your account name, password, and a a broadband account, you won't need a phone
OUse the CD I got from an IS	5P
	<pre></pre>
	< Back Next > Cancel
w Connection Wizard	< Back Next > Cancel
Internet Connection	
Internet Connection How do you want to connect to the Inte	ernet?
Internet Connection How do you want to connect to the Inte O Connect using a dial-up moder	ernet?
Internet Connection How do you want to connect to the Inter O Connect using a dial-up moder This type of connection uses a mod O Connect using a broadband co	ernet?
Internet Connection How do you want to connect to the Internet Connect using a dial-up moder This type of connection uses a mod Connect using a broadband co password	ernet?
 Internet Connection How do you want to connect to the Internet Connect using a dial-up moder This type of connection uses a mod Connect using a broadband construction Password This is a high-speed connection using refer to this type of connection as Place 	ernet? m lem and a regular or ISDN phone line. connection that requires a user name and ng either a DSL or cable modem. Your ISP may PPoE.
Internet Connection How do you want to connect to the Internet Connect using a dial-up moder This type of connection uses a mod Connect using a broadband con password This is a high-speed connection usin refer to this type of connection as Pl Connect using a broadband con This is a high-speed connection usin	ernet? m lem and a regular or ISDN phone line. onnection that requires a user name and ng either a DSL or cable modem. Your ISP may PPoE. onnection that is always on ng either a cable modem, DSL or LAN
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What is the name of the service that prov	vides your Internet connection?
Type the name of your ISP in the following) box.
ISP N <u>a</u> me	
×****4	
	< <u>B</u> ack <u>N</u> ext> Can
none Number to Dial What is your ISP's phone number?	
Type the phone number below.	
Phone number:	
You might need to include a "1" or th	he area code, or both. If you are not sure phone number on your telephone. If you aled is correct.

New Connection Wizard	
Internet Account Infor You will need an acco	mation ount name and password to sign in to your Internet account.
	name and password, then write down this information and store it in a e forgotten an existing account name or password, contact your ISP.)
User name:	××
Password:	•••••
Confirm password:	•••••
Use this account this computer	name and password when anyone connects to the Internet from
🔽 Make this the defa	ault Internet connection
	< Back Next > Cancel





3-5 Serial Port Operation Mode

Please refer to the HW manual for serial port setting.

Chapter 4 Software Configuration

For Windows XP embedded details, you can go to Microsoft online resources for more information.

- The Windows Embedded Developer Center, supported by the Microsoft Developer Network (MSDN), provides detailed technical information, training, and community support: <u>http://msdn.microsoft.com/en-us/library/dd256986.aspx</u>
- For general product information, please visit <u>http://www.microsoft.com/windowsembedded/en-us/default.mspx</u>

4-1 XPe Firmware Version

Go to **Start→Run** and type regedit

You can check the XPe firmware version under the directory HKEY_LOCAL_MACHINE\SOFTWARE\Korenix

Run	? 🛛
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	regedit
	OK Cancel Browse

🕺 Registry Editor				- I 🖾 🔀
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>H</u> elp				
My Computer HKEY_CLASSES_ROOT HKEY_CLASSES_ROOT HKEY_CURRENT_USER HKEY_LOCAL_MACHINE HKEY_LOCAL_MACHINE AKis Communication Classes Clents Clents Gemplus Intel Gemplus Intel Microsoft Mozilla Microsoft Mozilla Microsoft Mozilla Microsoft Microsoft	Name	Type REG_SZ REG_SZ	Data (value not set) JetBox 8160 XPe-EN-V1.0.0	

4-2 Multiple Language & Multiple User

Interface (MUI)

The JetBox platform is US English user interface and supports multiple languages such as English, Simplified Chinese, Traditional Chinese, French, German, Italian, Japanese, Korean, Russian, Spanish, Spanish, and Portuguese.

Even though the user interface is US English, other user interface support can be added to a configuration to create a localized run-time image.

Korenix provides multi-language or multi-user-interface customization service. If you have any specific requirements, please contact Korenix directly.

4-3 File-based Write Filter (FBWF)

File-Based Write Filter (FBWF) allows Windows XP Embedded (XPe) to maintain the appearance of read and write access to write sensitive or read only storage. FBWF makes read and write access transparent to applications.

FBWF manager

The FBWF Manager is a command line tool for embedded developers to quickly integrate and prototype the FBWF. FBWF Manager is intended primarily for design time use.

The FBWF Manager command line syntax follows: fbwfmgr [/? | /help /[switch] | /displayconfig | /overlaydetail | /enable | /disable | /addvolume [volumename] | /removevolume [volumename] [1|0] | /addexclusion [path] | /removeexclusion [path] | /setthreshold [threshold] | /setcompression [1|0] | /setpreallocation [1|0] /commit [volumename] [filepath] /restore [volumename] [filepath]]

The following table describes the command line switches.

Switch	Description
24	Software Configuration Korenix

protected volumes list, overlay configuration and write through paths. The command returns:	Switch	Description
paths. The command returns:State—Indicating current filter state (enable or disable) and state for next boot.Protected Volumes—List of protected volumes including the current and next boot state.Compression—Current and next boot state for cache compression.Threshold—Current and next boot values for the overlay cache threshold.Write Through Paths—Displays a complete list of active and next boot write through paths.Pre-allocation Status—Displays current and next boot status for cache pre-allocation.overlaydetailDisplays detail on the current overlay contents for all protected volumes. The command returns: Contents—Files and folders currently in the overlay for all protected volumes including sizes (size of data in overlay) and open file handles. Memory Usage—Total amount of memory being consumed by th overlay.enableEnables the write filter on the next restart.	displayconfig	Displays all configuration information for the write filter including
StateIndicating current filter state (enable or disable) and state for next boot.Protected VolumesList of protected volumes including the current and next boot state.CompressionCurrent and next boot state for cache compression.ThresholdCurrent and next boot values for the overlay cache threshold.Write Through PathsDisplays a complete list of active and next boot write through paths.Pre-allocation StatusDisplays current and next boot status for cache pre-allocation.overlaydetailDisplays detail on the current overlay contents for all protected volumes. The command returns: ContentsContentsFiles and folders currently in the overlay for all protected volumes including sizes (size of data in overlay) and open file handles. Memory UsageMemory UsageTotal amount of memory being consumed by th overlay.enableEnables the write filter on the next restart.		protected volumes list, overlay configuration and write through
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Contents—Files and folders currently in the overlay for all protected volumes including sizes (size of data in overlay) and open file handles. Memory Usage—Total amount of memory being consumed by the overlay.enableEnables the write filter on the next restart.disableDisables the write filter on the next restart.	overlayaetall	
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Memory Usage—Total amount of memory being consumed by the overlay. enable Enables the write filter on the next restart. disable Disables the write filter on the next restart.		
overlay.enableEnables the write filter on the next restart.disableDisables the write filter on the next restart.		
enableEnables the write filter on the next restart.disableDisables the write filter on the next restart.		
	enable	-
	disable	Disables the write filter on the next restart.
	addvolume	Adds a volume to the protected volume list for next boot.
<i>removevolume</i> Removes a volume from the protected volume list for next boot.	removevolume	
<i>addexclusion</i> Adds a write through path to the exclusion list for next boot.	addexclusion	Adds a write through path to the exclusion list for next boot.
<i>removeexclusion</i> Removes a write through path from the exclusion list for next	removeexclusion	Removes a write through path from the exclusion list for next
boot.		
<i>setthreshold</i> Sets the overlay threshold value for next boot.	setthreshold	Sets the overlay threshold value for next boot.
setcompression Sets overlay compression as enabled (1) or disabled (0) for next	setcompression	Sets overlay compression as enabled (1) or disabled (0) for next
boot.		boot.
<i>setpreallocation</i> Sets cache pre-allocation as enabled (1) or disabled (0) for next	setpreallocation	Sets cache pre-allocation as enabled (1) or disabled (0) for next
boot.		boot.
<i>commit</i> Commits the changes made to the file to the underlying media.	commit	Commits the changes made to the file to the underlying media.

Switch	Description
	The volume name can either be a case-insensitive volume device
	name (for example, "\\Device\\HarddiskVolume1"), or a drive
	letter (for example, "C:" or "D:").
	Note that the name is not the volume label that Windows
	Explorer displays before the drive letter.
	The file path must be an absolute path starting with "\".
	Note that the volume must currently be protected. Otherwise, the
	error message "The system cannot find the drive specified" is
	displayed.
restore	Discards the changes made to the file, that is, restores the files to
	its original contents from the underlying media.
	The volume name can either be a case-insensitive volume device
	name (for example, "\\Device\\HarddiskVolume1"),
	letter (for example, "C:" or "D:").
	Note that the name is not the volume label that Windows
	Explorer displays before the drive letter.
	The file path must be an absolute path starting with "\". It must
	be a file. It is acceptable that the file was deleted, in which case it
	is recovered.
	Note that the volume must currently be protected. Otherwise, the
	error message "The system cannot find the drive specified" is
	displayed.
?	Displays usage and help.
help / [switch]	Displays help information for a specific FBWF Manager switch.

If no switch is provided the FBWF Manager displays all the configuration information, just like the DisplayConfig switch.

The following table describes the input parameters.

Input field	Meaning
volumename	Full path to a volume
1	Remove exclusion list
0	Preserve exclusion list
path	Full file or directory path, including the drive letter.
	Please note that file names are passed to fbwfmgr as a command line argument,
	which means backslashes and double quotes are interpreted differently. For

	example, \"file name" becomes simply "file name" because the first backslash
	acts as an escape character. To get \"file name" , specify $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
	command line.
threshold	Overlay threshold in MB

FBWF does not resolve substituted paths, use complete file names instead.

4-4 ODBC Data Source Administrator

Go to Control Panel→Administrative tools→ODBC

This is a database source configuration tool for users to add, delete, or set up a data source and display information about the installed ODBS drivers. You can create a new data source or trace the calls to ODBC functions.

🚳 ODBC Data Source Administrator	? 🗙
User DSN System DSN File DSN Drivers Tracing Connection	Pooling About
<u>U</u> ser Data Sources:	
Name Driver	A <u>d</u> d
	<u>R</u> emove
	Configure
An ODBC User data source stores information about how t the indicated data provider. A User data source is only vi- and can only be used on the current machine.	
OK Cancel Apply	Help

4-5 Recovery CD

In some severe circumstances, such as when a run-time image is corrupted, it may be necessary to start your device from a bootable CD (recovery CD). Korenix provides the recovery CD of the JetBox to install a new copy of the run-time image that was installed onto the JetBox before it left the factory.

Following is the step by step to use the recovery CD:

- 1. Plug a USB keyboard into the JetBox
- Plug a USB CD-ROM into the JetBox and Insert the recovery CD into the USB CD-ROM
- 3. Change the BIOS boot device setting of the JetBox
 - 3.1 When the JetBox boots up, press the "Delete" key on the keyboard to enter the BIOS setting
 - 3.2 Choose the "Advanced BIOS Features" item from the "Initial Setup Screen" menu.
 - 3.3 Change the first boot device from "HDD-0" to USB-CDROM", then save and exit Setup dialogue.
- 4. The JetBox is booted from the USB CD-ROM and the recovery procedure runs automatically

4-6 Visual Studio 2005

Microsoft Windows XP Embedded is a componentized version of the Microsoft Windows XP Professional operating system that uses the same binary source code. This shared binary source code makes it possible for Windows XP Embedded to provide device operating systems that are not only scalable and feature-rich, but also fully compatible with Windows XP Professional. This means that you can use existing Windows-based applications on your devices. And you can use many of the same resources for embedded application development that are used to develop applications for Windows XP Professional. For example, application developers for Windows XP Embedded can use Microsoft Visual Studio to program to Windows application programming interfaces (APIs).

Visual Studio 2005 (VS 2005) is an integrated IDE enabling development of C++, C#, and Visual Basic and J# applications under one roof. It includes numerous features that help in building windows applications with less effort. The IDE is designed primarily for building applications with any .NET languages. The IDE includes features like an automatic build utility, a syntax highlighter, an easy-to-use debugger and many more.

Chapter 5 Customer Service

Korenix Technologies Co., Ltd. Business service: <u>sales@korenix.com</u> Customer service: <u>koreCARE@korenix.com</u>