

VM Service Installer & User

Installer & user manual VM Service

> 9UMENX512-1200 Release: 210707



VM Service

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1. Package installation

1.1. Introduction

The VM Service package is a PC [®]Windows application to manage the VMX5 System.

FEATURES (USER login)

- Full or partial BackUp/Restore of the system parameters
- In the case of spare parts it allows reloading of the original parameter configuration onto the function card
- Twin system parameterization for repetitive installations
- Raw parameter visualization (memory data format only)

FEATURES (SUPERVISOR login)

- All of the above, plus...
- Selective Restore: OPTIONS & CALIBRATIONS
- Software Up-Grade and Down-Grade (with rules and limitations)

The application performes backup and restore of the complete set of the VMX5 system's parameters with the following limitations:

With USER login it is only possible to execute the <u>RESTORE</u> operation using a data file created from an equivalent device with the same software version installed.

This document is related to VM Service installation and use starting from version 12.0



1.2. VMX5 System architecture



1.3. Installation package

The VM Service is available with the following part number:

9SRVMX5xxUSWP0 – VM Service package with USB 2.0 interface

xx = indicates the software version

The kit supplied includes:

- Pen drive containing VM Service software, documentation
- USB/RS-485 serial converter with drivers

The cable for connecting the VMX5 system to the control PC is supplied separately, depending on the required length.



1.4. System requirements

Minimum requirements of the host PC:

- Pentium III 1 GHz processor or equivalent
- 128 MB Ram (256 MB recommended)
- 50 MB Hard Disk free
- VGA graphic card with minimum resolution 640x480 (SVGA 1024x768 recommended)
- USB port
- Operating system
 - o XP SP2
 - XP SP2Vista
 - Windows 7, 8.x, 10
- Additional operating system requirements:
 - Windows Installer 3.1
- Other requirements may be necessary on dedicated platforms

1.5. Installation

1.5.1. Installation of the USB/RS-485 serial converter driver

The USB-BSLink serial converter comes with a kit including:

- USB-BSLink hardware converter p/n 9CSUSB23003000
- USB extension cable
- Pen drive containing drivers and multi-language documentation



To install the driver:

- Insert the pen drive
- Put the converter inside the USB port of the PC
- Wait for the device to be recognised and follow the instructions of Windows

Note: refer to the provided documentation for detailed information



1.5.2. VM Service installation on a stand-alone PC

The procedure will install the following components:

- VM Service application
- Auxiliary Windows components (if necessary)

1.5.2.1. Procedure

To install the VM Service package:

- Click on *Start* in Windows, select **Run**...
- Enter <E>:\VMX5Service\Setup\Setup.exe (where: <E> is the USB drive).
- Select "VM Service"
- Continue by following the instructions





Read carefully and accept the conditions of the licence agreement.

VMSERVICE v120 - InstallShield Wizard	x
License Agreement Please read the following license agreement carefully.	4
GENERAL CONDITIONS - LICENCE FOR THE USE OF SOF TWARE	^
1. IMPORTANT PREMISE - TO BE READ CAREFULLY: BALANCE SYSTEMS S.r.I. hereby grants a non exclusive, non transferable, unlimited in time licence to use the software program	
belonging to Balance Systems S.r.I. (SOFTWARE) as described in the I accept the terms of the license agreement I do not accept the terms of the license agreement	•
InstallShield	el

Select the target of installation. To install on a generic stand alone PC unit (i.e. notebook), select "PC Generic" option.

VMSERVICE v120 - InstallShield Wizard	
Setup Type Select the setup type that best suits your needs.	
Select the features you want to install, and deselect the features you do not want to install. Click Next to continue.	
PCU® Siemens HMI Advanced (Windows XP®)	
PCU® Siemens Sinumerik Operate (Windows XP®)	
PCU® Siemens Sinumerik Operate (Windows 7®)	
○ PC GE® Fanuc (Windows XP Embedded®)	
Generic PC	
InstallShield ————————————————————————————————————	



• Choose the features to install (VM25, VM15, VM SYSTEM AUTO DETECT)

VMSERVICE v120 - InstallShield Wizard	×
Setup Type Select the setup type that best suits your needs.	2
Select the features you want to install, and deselect the features you do not want to ins Click Next to continue.	stall.
• VM SYSTEM AUTO DETECT	
© VM25 SYSTEM	
© VM15 SYSTEM	
InstallShield	
< Back Next > (Cancel

Choose the destination folder: (default) C:\BalanceSystems\VMX5\Service\

VMSERVICE v120 - InstallShield Wizard	X
Choose Destination Location Select folder where setup will install files.	No.
Setup will install VMSERVICE v120 in the following fold	er.
To install to this folder, click Next. To install to a differer another folder.	it folder, click Browse and select
Destination Folder	
C:\BalanceSystems\VMx5\Service\	Browse
InstallShield	ack Next > Cancel



Click install to continue.

VMSERVICE v120 - InstallShield Wizard
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield Cancel

• Wait for the complete installation of the components.

VMSERVICE v120 - InstallShield Wizard	
Setup Status	
The InstallShield Wizard is installing VMSEF	3VICE ∨120
Removing backup files	
InstallShield	Cancel



VMSERVICE v120 - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed VMSERVICE v120. Click Finish to exit the wizard.	
< Back Finish Cancel		

NOTE:

Previous version of the VM Service package will be removed automatically while the configuration files are maintained.

1.5.2.2. Folders diagram

Structure of the folders after installing in "C:\"



where:

Folder	Description
BalanceSystems	Main folder
VMX5	VMX5 applications folder
Service	VM Service application folder
Scada	Communication layer and dll
Doc	Documentation folder
DataBck	Backup file storage folder



1.5.3. VM Service installation on machine control [®]Siemens PCU

The procedure will install the following components:

- VM Service application
- Auxiliary Windows components (if necessary)

1.5.3.1. Procedure

Start the [®]Siemens PCU in WINDOWS mode:

- Turn on the PCU
- During the start phase, press "3" as soon as the white screen with the version indicated in the lower right-hand corner appears
- Enter user ID: "auduser"
- Enter the manufacturer's password
- Press Enter

To install the VM Service:

- Click on Start in Windows, select Run...
- Enter <Drive>:\Setup\Setup.exe (where: <Drive> is the usb pen drive)
- Continue by following the instructions...





Read carefully and accept the conditions of the licence agreement.



Select the target of installation: "PC Siemens HMI Advanced" for Windows XP[®] or "PC Siemens Sinumerik Operate" for Windows XP[®] or Windows 7[®] option.

VMSERVICE v120 - InstallShield Wizard	VMSERVICE v120 - InstallShield Wizard
Setup Type Select the setup type that best suits your needs.	Setup Type Select the setup type that best suits your needs.
Select the features you want to install, and deselect the features you do not want to install. Click. Next to continue.	Select the features you want to install, and deselect the features you do not want to install. Click Next to continue.
PCU® Siemens HMI Advanced (Windows XP®)	PCU® Siemens HMI Advanced (Windows XP®)
PCU® Siemens Sinumerik Operate (Windows XP®)	PCU® Siemens Sinumerik Operate (Windows XP®)
PCU® Siemens Sinumerik Operate (Windows 7®)	PCU® Siemens Sinumerik Operate (Windows 7®)
○ PC GE® Fanuc (Windows XP Embedded®)	○ PC GE® Fanuc (Windows XP Embedded®)
◯ Generic PC	O Generic PC
InstaliShield	InstallShield
< Back Next > Cancel	< Back Next > Cancel



• Choose the features to install (VM25, VM15, VM SYSTEM AUTO DETECT)

VMSERVICE v120 - InstallShield Wizard		x
Setup Type Select the setup type that best suits your needs.		4
Select the features you want to install, and deselect the features you do not Click Next to continue.	want to install.	
• VM SYSTEM AUTO DETECT		
© VM25 SYSTEM		
© VM15 SYSTEM		
InstallShield		
< Back Next >	Canc	el

 Choose the destination folder: (default) F:\hmisl\addon\sinumerik\hmi\BalanceSystems\VMX5\ or (default) F:\Add_on\BalanceSystems\VMX5.

InstallShield Wizard	InstallShield Wizard
Choose Destination Location Select folder where setup will install files.	Choose Destination Location Select folder where setup will install files.
Setup will install VMSERVICE v120 in the following folder.	Setup will install VMSERVICE v120 in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.	To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder	Destination Folder
F:\hmishaddon\sinumerik\hmi\BalanceSystems\VM25\ Browse	F:\Add_on\BalanceSystems\VM25 Browse
InstallShield Cancel	InstallShield Cancel



• Click install to continue.

VMSERVICE v120 - InstallShield Wizard
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield Cancel

• Wait for the complete installation of the components.

VMSERVICE v120 - InstallShield Wizard	
Setup Status	
The InstallShield Wizard is installing VMSEF	3VICE ∨120
Removing backup files	
InstallShield	Cancel



VMSERVICE v120 - InstallShield Wizard					
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed VMSERVICE v120. Click Finish to exit the wizard.				
	< Back Finish Cancel				

NOTE:

Previous version of the VM Service package will be removed automatically while the configuration files are maintained.

1.5.3.2. Folders diagram

Structure of the folders after installing in "F:\...\BalanceSystems\..."



where:

Folder	Description
BalanceSystems	Main folder
VMX5	VMX5 applications folder
Service	VM Service application folder
Scada	Communication layer and dll
Doc	Documentation folder
DataBck	Backup file storage folder



1.5.4. VM Service installation on machine control [®]Fanuc PC

The procedure will install the following components:

- VM Service application
- Auxiliary Windows components (if necessary)

1.5.4.1. Procedure

To install the package on <u>Machine Control [®]GE Fanuc with O.S. [®]Microsoft Windows XP Embedded</u>, it is required the utility Framework .NET 2.0 in full format. To proceed with the correct installation, follow the procedure (read additional information in <Drive>:\Utility\NET Fw Cleanup Tool\User Guide.htm)

- Launch the tool <Drive>:\Utility\NET Fw Cleanup Tool\cleanup_tool.exe
- Follow the procedure below

To install the VM Service package:

- Click on Start in Windows, select Run...
- Enter <Drive>:\Setup\Setup.exe (where: <Drive> is the usb pen drive)
- Continue by following the instructions.





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VMSERVICE v120 - InstallShield Wizard	x
License Agreement Please read the following license agreement carefully.	5
GENERAL CONDITIONS - LICENCE FOR THE USE OF	-
SOFTWARE	
1. IMPORTANT PREMISE - TO BE READ CAREFULLY:	
transferable, unlimited in time licence to use the software program belonging to Balance Systems S.r.I. (SOFTWARE) as described in the	Ŧ
I accept the terms of the license agreement Print I do not accept the terms of the license agreement	
< Back Next > Canc	el

• Select the target of installation: "PC Fanuc" option.

InstallShield Wizard	×				
Setup Type Select the setup type that best suits your needs.					
Select the features you want to install, and deselect the features you do no Click Next to continue.	ot want to install.				
PCU® Siemens HMI Advanced (Windows XP®)					
PCU® Siemens Sinumerik Operate (Windows XP®)					
PCU® Siemens Sinumerik Operate (Windows 7®)					
PC GE® Fanuc (Windows XP Embedded®)					
🔘 Generic PC					
InstallShield					
< Back Next >	Cancel				



• Choose the features to install (VM25, VM15, VM SYSTEM AUTO DETECT)

VMSERVICE v120 - InstallShield Wizard		x
Setup Type Select the setup type that best suits your needs.		4
Select the features you want to install, and deselect the features yo Click Next to continue.	ou do not want to install.	
VM SYSTEM AUTO DETECT		
© VM25 SYSTEM		
© VM15 SYSTEM		
InstallShield		
< Back	Next > Canc	el

Choose the destination folder: (default) D:\BalanceSystems\VMX5

InstallShield Wizard	×
Choose Destination Location Select folder where setup will install files.	
Setup will install VMSERVICE v120 in the following I	older.
To install to this folder, click Next. To install to a diffe another folder.	erent folder, click Browse and select
Destination Folder	
D:\BalanceSystems\VM25	Browse
InstallShield	
	< Back Next > Cancel



Click install to continue.

VMSERVICE v120 - InstallShield Wizard
Ready to Install the Program The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield Cancel

• Wait for the complete installation of the components.

VMSERVICE v120 - InstallShield Wizard	
Setup Status	
The InstallShield Wizard is installing VMSEF	3VICE ∨120
Removing backup files	
InstallShield	Cancel





NOTE:

Previous version of the VM Service package will be removed automatically while the configuration files are maintained.

1.5.4.2. Folders diagram

Structure of the folders after installing in "D:\"



where:

Folder	Description
BalanceSystems	Main folder
VMX5	VMX5 applications folder
Service	VM Service application folder
Scada	Communication layer and dll
Doc	Documentation folder
DataBck	Backup file storage folder



2. Application setup

- Be sure that the VMX5 rack is switched on and the connection with the service PC unit is liked as indicated in the previous paragraphs.
- Launch the VM Service application:



2.1. Page description

VM Service - Ver. 12.0.1	70323	-	Α		_		×
Connection Type: Remot	te	Host Address:	10.168.0	.68		Login: Use	er B
Connection State: Conne	ected - 50	Port:	4000	Mode:	VM25		
Device	ID	Version	EE	Status			
VM25 Pan25 1	PA	12.0.161114	O-20				
Large Gauge 2	LG	12.0.160616	P-11				
Touch Detector 1	TD	12.0.170119	T-11				
MultiNet 1	MN	12.0.170323	R-11				
							С
							$\mathbf{\nabla}$
F1 F2	F3	F4		F5	F6	F7	F8
	⇒ि		(२	.+.	F∉ ⊡	Jy D
X							~

The following areas are identified on the screen:

- A. Application name and software version
- B. System and connections information
- C. Devices information area
 - Device name
 - Device ID symbol
 - Software version
 Memory version
 - Memory versionState of the operations Diagnostic errors
- D. Command bar



2.2. Setup

At the first start up it is necessary to configure some parameters.





lcon	Command Name	Button	Description
V	Confirm	F1	Confirm the setup, save data and exit the setup page
\mathbf{X}	Cancel	F2	Exit the setup page without any change
	Previous	F4	Previous connection configuration
	Next	F5	Next connection configuration
\mathbb{A}_{\otimes}	Log file	F6	Export log file
í	Info	F7	Access to user manual (pdf format)
•••• ***-	Login	F8	Access login levels management



2.2.1. Hardware connection and parameter setup

To work with the application it is necessary to connect the rack of the VMX5 system. The possibilities are described below.



Press the buttons are available.

2.2.1.1. Connection through USB/RS-485 converter

The parameters to be configured are the following:





System Type:	AUTO		-		6
		Pi	ress F4/F5 to select connection type		
		COM Port:	Balance Systems - USB/RS-485 Converter (COM10) -		Login
		Baudrate:	RIM Virtual Serial Port v2 (COM4) Balance Systems - USB/RS-485 Converter (COM10)		User
			RIM Virtual Serial Port v2 (COM5)		
F1	F2	F3	Communications Port (COM1)	F7	F8
	\mathbf{X}			(j)	<u>میں</u> <u>***-</u>

System Type:	AUTO	Ŧ				6
	Р	ress F4/F5 to s	elect conne	ction type		
	COM Port: Baudrate:	Balance Systems	s - USB/RS-485 (Converter (COM10) Port: 4000) 🔻	Login User
F1	F2 F3	9.600 19.200 38.400 57.600 115.200	F5	F6	F7	F8

The connection through USB/BSLink adapter can be performed as follow:

SCHEME 6 - Service notebook directly connected to the VMX5 rack





SCHEME 7 - Service notebook connected to the VMX5 remote control panel.



In this case the VMX5 control panel must be switched in "SERVICE" mode as follow:



until appears "System" on the screenbox

Press the command button Disconnect for Service [F3]

Press the button Change page

NOTE:

with this connection it will not be possible to backup and restore the VMX5 control panel parameters. To do this must be used the connection through ethernet (see below).



SCHEME 1 - The VM Service application is installed on the local computer where it is also installed the VMX5 HMI application.





2.2.1.2. Connection through Ethernet TCP/IP

The parameters to be configured are the following:

Parameter	Description
Host Address [192.168.0.1]	IP Address of the VMX5 Control Panel or VMX5-HMI host which is physically connected to the VMX5 rack.
Port [4000]	Number of the ethernet TCP/IP port used to connect the communication layer





SCHEME 2 - Service notebook connected to the VMX5 remote control panel.



NOTE:

This connection requires an Ethernet RJ45 "patch" cable.



SCHEME 3 - Service notebook connected to the local computer where the VMX5 HMI application is installed.



NOTE:

This connection requires an Ethernet RJ45 "patch" cable.





SCHEME 4 - Service notebook connected to a LAN through an hub or switch device.

SCHEME 5 - Service notebook connected to a LAN through an hub or switch device.





2.2.2. Login mode

The application always starts in "USER" mode:



- Press the button to access the login menu. Digit the displayed "Code" and press "OK" to activate the "SUPERVISOR" mode.

🛞 VM Service - Ver. 12.0.170323			
	Remote	VM Panel	
	Ethernet		
	Type the code: 427482	ice Notebook	ance ems
System Type: AUTO	•		2
Press	F4/F5 to select connec	tion type	
Host Address:	10.168.0.68	Port: 4000	Login User
F1 F2 F3	F4 F5	F6 F7	F8
		i	

There are two different login mode.

Mode	Description
USER	 For normal users, it allows: backup and restore operations on <u>work</u> and <u>setup</u> parameters. device software update
SUPERVISOR	 For maintainance operations, it allows: full parameter access for backup and restore, including <u>options</u> and <u>calibration</u> device software update & backgrade formatting and preparing the USB pen-drive for maintenance operation on field <u>WARNING</u> : The option and calibration data should be managed carefully. If incorrect values are restored the complete application could be damaged. During backup and restore operations which involve options and calibration, ask the support of Balance Systems service personnel.



2.3. Diagnostic and error messages

In case of errors which occur during the connection and operation a message with an error code will appear in the area indicated below.

🛞 VM Service - Ver. 12.0.170)323				_		
Connection Type: Remote		Host Address:	10.168.0	.68	Login: L	Jser	
Connection State: Connec	ted - 50	Port:	4000	Mode: VM25			
Device	ID	Version	EE	Status			
🔲 VM25 Pan25 1	PA	12.0.161114	O-20				
🔲 Large Gauge 2	LG	12.0.160616	P-11				
Touch Detector 1	TD	12.0.170119	T-11		Dia	gnostic and	error
MultiNet 1	MN	12.0.170323	R-11			messages	i
		Sy		ste	m	S	
F1 F2	F	3 F4		F5 F6	F7	F8	
	⇒[•		ک 🛃	- 4 -	ß	





Error code	Description	Action	
2	Commands locked by multinet card. The system is under control of the PLC through the multinet card. In this situation is not possible to proceed.	Wait and repeat the operation. If the multinet card does not release the control	
3	Manual mode locked by multinet card. The system is under control of the PLC through the multinet card. In this situation is not possible to proceed.	PLC side.	
6	System disconnected or switched off	Check connection to VMX5 and power supply	
15	Bad message		
22	Communication SCADA-Device timeout	Check the VMX5 network setup	
150	Communication SCADA-Service timeout	Repeat the operation	
151	Communication SCADA-Service unplugged		
160	Restore file corrupted	Repeat the restore operations. If the error	
161	Restore file corrupted	persists, use another restore file.	
255	Generic error	Restart VM Service application	



3. Service operation



lcon	Command Name	Button	Description			
	Connect	F1	VMX5 system configuration recognition			
· X	Disconnect	F1	Disconnect VMX5 service			
X	Abort	F2	Abort the command in progress			
	Backup	F3	Launch the backup function			
•	Restore	F4	Launch the restore function			
Q	View	F5	Display of the backup file contents			
.	Upgrade	F6	Firmware upgrade			
ŀ€:	USB Pen Drive Init	F7	Init an USB pen-drive for backup, restore and firmware upgrade operations			
ß	Setup	F8	Configuration			



3.1. Connection

Be sure that all the hardware connections are linked.



- Press the button to obtain the system configuration
- For each recognized device is displayed:
 - "Device" = device name;
 - "ID" = device identification symbol;
 - "Version" = software revision number;
 - "EE" = static memory version;
 - "Status" = state of the operation requested or error code (see "Diagnostic" paragraph).

🛞 VM Service - Ver. 12	.0.170323				
Connection Type: R	emote	Host Address:	10.168.0	68	Login: User
Connection State: C	onnected - 50	Port:	4000	Mode: VM25	
Device	ID	Version	EE	Status	
🔲 VM25 Pan25 1	PA	12.0.161114	O-20		
🔲 Large Gauge 2	LG	12.0.160616	P-11		
MultiNet 1	MN	12.0.170323	R-11		
MultiNet 2	MN			Searching	
					me
	I → (*	a •8	(Q .+.	Fei M
x					



3.2. Backup

3.2.1. Backup execution

The backup function allows archiving of the configuration parameters of each recognized device.

 Select the devices to be archived using Ctrl + mouse "Click" or alternatively the standard navigation / selection keypad of the PC unit.







Droce	tho	hutton
Press	the	Dutton

😽 VM Service - Ver. 12.0.170	323				
Connection Type: Remote		Host Address:	10.168.0	.68 Lo	ogin: User
Connection State: Connec	ted - 50	Port:	4000	Mode: VM25	
Device	ID	Version	EE	Status	
📝 VM25 Pan25 1	PA	12.0.161114	O-20	Backup Ok	
🔽 Large Gauge 2	LG	12.0.160616	P-11	Backup Ok	
Touch Detector 1	TD	12.0.170119	T-11	Read in Progress	
MultiNet 1	MN	12.0.170323	R-11		
	●	j + j	(く <u>上</u> F=	
	L				

• Choose the archive folder and the filename. The default folder is:

<Drive:>\BalanceSystems\VMX5\DataBck\

The backup file extension is ".bck15" or ".bck25" or ".bck"

eff Open			X
🕢 🗸 🗸 🕹 🖉 BalanceSystems 🕨 VM25 🕨 DataB	3ck 👻	Search DataBci	k 🔎
Organize 🔻 New folder			i • 🔟 🔞
 Data (E) Data A (E) amd64 BalanceSystems Capacity Icon Print68k vb20 TestMlk VM9 VM20 	Name	p.bck	Date mod 31/05/201
VM25 BackUp DataBck DataRec File <u>n</u> ame: TestBackup.bck	- 4	Ⅲ Backup (*.bck) Open ↓	Cancel



3.2.2. Backup function flow chart





3.3. Restore

3.3.1. Restore execution

The restore function allows reloading of the configuration parameters of each recognized device.

 Select the devices to be restored using Ctrl + mouse "Click" or alternatively the standard navigation / selection keypad of the PC unit.

🐻 VM Service - Ver. 12.0.170)323						
Connection Type: Remote	l	Host Address:	10.168.0	.68		Login:	User
Connection State: Connec	ted - 50	Port:	4000	Mode:	VM25		
Device	ID	Version	EE	Status			
VM25 Pan25 1	PA	12.0.161114	O-20				
Large Gauge 2	LG	12.0.160616	P-11				
Touch Detector 1	TD	12.0.170119	T-11				
MultiNet 1	MN	12.0.170323	R-11				
SELECT		S		st	e	m	S
F1 F2	F3	F4		F5	F6	F7	F8
	•	•		ک	±	÷.	ß



Press the button



• Open the data file. The file extension is ".bck15" or ".bck25" or ".bck";

특급 Open					×
🕢 🗸 🕌 « BalanceSystems 🕨 VM25 🕨 DataBo	k	▼ 49	Search DataBck	:	٩
Organize 🔻 New folder			1	•	
 Data (E) Data A (E) amd64 BalanceSystems Capacity Icon Print68k vb20 TestMlk VM9 VM20 VM25 BackUp DataBck 		Name	*		Date mod 31/05/201
DataRec	Ŧ	•	De aleva (* h ale)		•
File <u>n</u> ame: TestBackup.bck		Ŧ	Васкир (*.bck) Open ▼		▼ Cancel

Select the parameters groups to be restored





NOTE: to restore calibrations and options parameters, it is necessary to enable the "SUPERVISOR" mode.



to start the procedure

🏀 VM Service - Ver. 12.0.170	323				×
Connection Type: Remote		Host Address:	10.168.0	.68	Login: User
Connection State: Connect	ed - 50	Port:	4000	Mode: AUTO	
Device	ID	Version	EE	Status	
🔲 VM25 Pan25 1	PA	12.0.161114	O-20		
Large Gauge 2	LG	12.0.160616	P-11	Restore Ok	
Touch Detector 1	TD	12.0.170119	T-11	Read in Progress	
MultiNet 1	MN	12.0.170323	R-11		
					\sim
			_		
	⇒[ë •ë	(λ \pm	- - -: /9



• Wait for the message "Restore OK"





3.3.2. Restore function flow chart





3.4. View

This function allows the display of the backup file content saved previously.



- Press the button
- Open the data file. The file extension is ".bck15" or ".bck25" or ".bck"



For the selected file the following information is displayed:

- File name (example C:\BalanceSystems\VMX5\DataBck\VMX5Test.bck)
- List of the devices included in the file

For each device is indicated:

- "Device" = device name
- "ID" = device identification symbol
- "Version" = software revision number
- "EE" = static memory version



 Select the devices using Ctrl + mouse "Click" or alternatively the standard navigation / selection keypad of the PC unit.





Press the button

The application MS [®]Windows Notepad will open a text file which displays in raw memory format the parameters of the selected device. The data format is the following:

Offset	Value	HexValue	Name	Comment
Position in the memory	Decimal value	Hexadecimal value	Parameter name	Comment or description



VMX5Te	est_LG2 - N	lotepad	
File Edit	Format	View Help	
pffset	Value	HexValue Name Comment	
0000	80	0050 id.id ee id	
0002	11	000B id.ver ee version	
0004	0	0000 spare	
0006	257	0101 Ospare	
0008	0	0000 Spich	
0010	1		
0012	0	0000 Chrem Remote Channel	
0014	0	0000 pgmDigIO Section Boutputs	
0016	0	0000 md_rip Reset mode (see enum en_mi_mdrip {))	
0018	/80	0312 SpareA	
0020	90	oooo irasd[0].cig coniiguration	
0022	-1000	0000 Trace[0] cain Cain	
0024	2500	FEFERE	
0028	2 20818	REFLOI 4202006 Trasd[0] cal m	
0022	0		
0036	-200	ELECTER Trase[0] min Min dimension	
0038	2700	048C Trasd[0] max Max dimension	
0040	2500	09C4 Trasd[0]. UpRangeMis + OVERRANGE	
0042	0	0000 Trasd[0].KT Thermal coefficient	
0044	ž	0002 Trasd[0].Type Transducer type (see GCHDTYP xxx)	
0046	ō	0000 Trasd[0].spare[0]	
0048	ō	0000 Trasdiol.spareli	
0050	0	0000 Trasdľol.spareľ2l	
0052	1	0001 Trasdľ0].ctrlRic Retraction control	
0054	0	0000 Trasd[0].align	
0056	0	0000 Trasd[0].sin.ofs Sinewave offset	
0058	50	0032 Trasd[0].sin.VEcc Sinewave magnitute (Energizin	g voltage)
0060	341	0155 Trasd[0].sin.fase Sinewane phase	
0062	0	0000 Trasd[0].sin.frq	
			T
•			► 14



3.5. Software up-grade / down-grade

This function allows the software up-grade / down-grade of all the devices included into the VMX5 system.

 Select the devices to be updated using Ctrl + mouse "Click" or alternatively the standard navigation / selection keypad of the PC unit.

🛞 VM Service - Ver. 12.0.17	0323				l	- - X
Connection Type: Remote		Host Address:	10.168.0	68	Logir	n: User
Connection State: Connec	ted - 50	Port:	4000	Mode: VM25		
Device	ID	Version	EE	Status		
VM25 Pan25 1	PA	12.0.161114	O-20			
Large Gauge 2	LG	12.0.160616	P-11			
Touch Detector 1	TD	12.0.170119	T-11			
MultiNet 1 SELECT	MN	12.0.170323	R-11		nc 211)) S
F1 F2	F3	F4		F5 F6	F7	F8
	⇒₿	+		२ 🛃	_	ß



- Press the button
- Select an update package file (file type " *.BSz ", " *.BSz15 ", " *.BSz25 ") provided by Balance Systems



📑 Select an update package file provided by Balance	e Systems			×
G O ▼ J ≪ BalanceSystems → VM25 → Up	date Packa	ge 👻 🍫	Search Update Pa	ckage 🔎
Organize 🔻 New folder			:==	• 🔳 🔞
Ji VM9	*	Name	^	Date mod
🍑 VM20		Vm25 v110 1205	31 hsnka	31/05/201
🍑 VM25			stissbirg	51,05,201
📔 BackUp				i i
🌗 DataBck				
🌗 DataRec	=			
🌗 Doc				
🐌 HMI				
🌗 Service				
🌗 Update Package				
퉬 VM25 Spy & AV				
\mu EFI				
🌗 Intel				
퉲 Lyra	+	•		F.
File name: Vm25 v110 12053	1.bspkg		Balance Systems Fir	mware Uplc 🔻
			Open 🔻	Cancel

3.5.1. Operations in user mode (default)

- The contents of the update package file is compared with the configuration of the VMX5 system: For each device included in the update package file is indicated:
 - "Device" = device name
 - "Description" = type of update: firmware or software
 - "New Version" = software revision number contained in the update package file. The status of the new version compared with the current version is highlighted by color:
 - Blue: 11.0.120528 > newer
 - Green: **11.0.120405** > same
 - Black: 11.0.120110 > older
 - "Current Version" = software revision number of the device in the VMX5 system
 - "Estimated time" = required time to update the device



🎼 Updater	r					×
Available fi	rmwares in package	Vm25_v120_1702	17.BSz':			
Device	Description	New Version	Current Version	Estim. time		
Device: L	G					
🔽 LG #2	Firmware	12.0.160927	12.0.160616	1 min		
Device: N	1N					
🗌 MN #1	Firmware	12.0.161111	12.0.170323	4 min		
- Wi						
Device: P	Α					
🔲 PA #1	Software	12.0.161114	12.0.161114	1 min		
Device: T	D		$\mathbf{H}\mathbf{e}$	$T \square$		
TD #1	Firmware	12.0.161107	12.0.170119	1 min		
TD #1	FPGA	8805	8805	5 min		
	SELECT					
Allow dov	wnversioning					User
F1	F2	F3 F4	4 F5	F6	F7	F8
						***-

• Select the devices to be updated;

.



Press the button to start the procedure.

<u>NOTE</u>: Newer version will be updated automatically, same version needs to be confirmed, down-grade not allowed in user mode.



🛞 VM Service - Ve	r. 12.0.170323				– – X	
Connection Type Connection State	e: Remote e: Connected - 50	Host Address: Port:	10.168.0.6 4000	8 Mode: AUTO	Login: User	
Device VM25 Pan25 1 Large Gauge 2	ID PA VM Service - Ver, 12	Version 12.0.161114 2.0.170323	EE 0-20	Status		
 Varge Gauge 2 VM Service - Ver. 12.0.170323 Touch Detect Main software version on instrument 'VM25 Pan25 1' already updated Do you want to proceed to the update anyway? Yes No 						
Firmware update in progress. Do NOT turn off or disconnect the rack.						
				۶] 🛃	, .	

• The progress of the operations is shown as follow

🛞 VM Service - Ver. 12.0.170	323				
Connection Type: Remote	tod E0	Host Address: 10	.168.0	0.68 Login: User	
Connection state: Connect	led - 50	Port: 40	00	mode. Auto	
Device	ID	Version	EE	Status	
VM25 Pan25 1	PA	12.0.161114	0-20		
🔽 Large Gauge 2	LG	12.0.160616	P-11	Firmware update completed!	
Touch Detector 1	TD	12.0.170119	T-11	50%	
MultiNet 1	MN	12.0.170323	R-11	No firmware Selected in the package	
				ctome	
Firmware	updat	te in progress. I	Do N	NOT turn off or disconnect the rack.	
[2/3] Uploading data to Touch Detector 1: 737792/1464830 bytes [adr=000B4000]					



• Wait for the message on screen



• Press "OK" to finish the operation and restart the connection with the VMX5 system.

😽 VM Service - Ver. 12.0.1	.70323						
Connection Type: Remo	ote	Host Address:	10.168.0	.68		Login:	User
Connection State: Conn	ected - 50	Port:	4000	Mode:	VM25		
Device	ID	Version	EE	Status			
🔲 VM25 Pan25 1	PA	12.0.161114	O-20				
🔲 Large Gauge 2	LG	12.0.160927	P-11				
Touch Detector 1	TD	12.0.170119	T-11				
MultiNet 1	MN	12.0.170323	R-11				
T <mark>ou</mark> ch Detector 2	TD			Searching	•		
F1 F2	F3	F4		F5	F6	F7	F8
		n , m					a
—X	•			\sim	—	l + C · L	P

<u>NOTE</u>: In case of new parameters managed by the new version installed, these will be initialized at their default value.



3.5.2. Operations in supervisor mode

In supervisor mode more options are available to manage the up-grade and down-grade too.

🎼 Update	r						×
Available fi	rmwares in package "	/m25_v12	20_170217.BSz':				
Device	Description	FW ID	New Version	Current Version	Estim. time	HASH	
Device: L	G						
🔲 LG #2	Firmware	1	12.0.160927	12.0.160927	1 min	3B6EEAEBB6	F4
🗌 LG #2	Bootloader	15	3011.0.111128	3012.0.170213	1 min	74B3413C366	6F
Device: P	Α						
📃 PA #	Software, Type:IM	10	12.0.161114	12.0.170321	1 min	25F4BBC026	C2
Device: T	D	_					
🔲 TD #1	Firmware	1	12.0.161107	12.0.170119	1 min	1B462F73BF8	32
🔲 TD #1	FPGA	2	8805	8805	5 min	E2DE48B783	5E
🗌 TD #1	Bootloader	15	3011.0.160420	3012.0.170213	1 min	75C80F3D27	63
Allow do	wnversioning					S	upervisor
F1	F2	F3	F4	F5	F6	F7	F8
	X						~
							***_

- For each device it is possible to select the sub-components of the firmware to be updated. Normally these operations are guided by Balance Systems service personnel.
- In any case the procedure is the same as in user mode.



3.5.2.1. Software down-grade

NOTE: Preliminary requirements

The down-grade operation is possible only if a backup file of the version desired for the target device is available. If not, all the calibration data will be lost. The target device has to be re-initialized (by Balance Systems service).

To proceed with the down-grade operation:

- 1. Execute a backup of the current configuration (see paragraph 3.2)
- 2. Execute a "full" (work, setup, options and calibrations parameters) restore using the original backup file of the version desired (see paragraph 3.3)



- 3. Do not switch off the VMX5 system otherwise the operation No.2 has to be repeated
- 4. Load the update package file (file type " *.BSz ", " *.BSz15 ", " *.BSz25 " provided by Balance Systems
- 5. Select the device(s) to be down-graded
- 6. Check "Allow downversioning" box

🛞 Updater	r						×
Available fi	Available firmwares in package "Vm25_v120_170217.BSz":						
Device	Description	FW ID	New Version	Current Version	Estim. time	HASH	
Device: L	G						
🗖 LG #2	Firmware	1	12.0.160927	12.0.160927	1 min	3B6EEAEBB	6F4
🔽 LG #2	Bootloader	15	3011.0.111128	3012.0.170213	1 min	74B3413C3	66F
Device: P.	A						
V PA #	Software, Type:IM	10	12.0.161114	12.0.170321	1 min	25F4BBC02	6C2
Device: T	D	_					
V TD #1	Firmware	1	12.0.161107	12.0.170119	1 min	1B462F73B	-82
TD #1	FPGA	2	8805	8805	5 min	E2DE48B78	35E
V TD #1	Bootloader	15	3011.0.160420	3012.0.170213	1 min	75C80F3D2	763
Allow do	wnversioning						Supervisor
F1	F2	F3	F4	F5	F6	F7	F8
						- :	<u>مى</u>
							***-



7. Press the button



to start the procedure.

😸 VM Service - Ver. 12.0.17	0323				
Connection Type: Remote Connection State: Connect	Connection Type: Remote Connection State: Connected - 50		10.168.0 12.0.170 4000	0.68 Login: Supervisor 0321 DLL Versions: 12.0.161115 Mode: VM25 12.0.161024	
Device	ID	Version	EE	Status	
🔲 VM25 Pan25 1	PA	12.0.170321	O-20		
🔽 Large Gauge 2	LG	12.0.160927	P-11	No firmware Selected in the package	
Touch Detector 1	TD	12.0.170119	T-11	40%	
MultiNet 1	MN	12.0.170323	R-11		
		Sy	(stems	
Firmware update in progress. Do NOT turn off or disconnect the rack. [1/1] Uploading data to Touch Detector 1: 32554/80664 bytes [adr=00303E98]					

8. Wait for the message on screen.





3.6. Firmware auto-update procedure (panel p/n 9PAVMX511CL300)

3.6.1. Auto-update

NOTE: this procedure is needed at any panel replacement with the new panel with p/n 9PAVMX511CL300.

- Power on VMX5 system.
- At the end of the loading the system scans the control unit and displays the firmware versions of the recognized devices.

Devi VM2(Multi Bala Gau Touc	ces 5 HMI 1 Net 1 ncer 1 ge 1 th Detecto	or 1	Version v. 11.0.15 v. 11.0.15 v. 11.0.15 v. 11.0.15 v. 11.0.15	S 1106 7 1016 7 1022 7 0603 7 1003 7	tatus

• Then a selection window will appear automatically.



- To start the auto-update procedure, select F1 by pushing the relative button. The system will automatically start to load the new firmware (the procedure will take few minutes).
- Wait until the panel restarts.



3.6.2. Enable / disable auto-update

The following instructions are useful in case you need to repeat the same upgrade operation on further VMX5 systems.

The auto-update procedure start automatically only if enabled.

Follow the procedure 3.7.2.1 to access the "Select update file" page. With button F5 it is possible to toggle ON / OFF the auto-update feature.

- Auto_v120_yymmdd_ON = Auto-update enabled
- Auto_v120_yymmdd_OFF = Auto-update disabled

Select up	date file			
Auto_v120)_170223_ON.bspkg	1.214M		
		<u>Select u</u>	odate file	
	Auto-procedure	Auto_v12	20_170223_OFF.bspkg	1.214M
	ON			
			Auto-procedure OFF	
Press [ENT	ER] to execute the comm	hand		
\checkmark	M	UTO		
		Dress (EN	TERI to execute the comma	nd
		FIESS [LN	TENT to execute the comma	
		\mathbf{V}		

NOTE: after every auto-update procedure, the system will autmatically switch "OFF" the parameter.



3.7. USB pen-drive for backup, restore and firmware up-grade

3.7.1. USB pen-drive setup

 Insert an USB pen-drive into an USB port of the PC. The pen-drive should be formatted as FAT32. If the pen-drive is not formatted the VMX5 service will do it.

F	7		
ŀ€	-	<u>)</u> :	

- Press the button to enter in the procedure
- Select an update package file (file type "*.BSz " or "*.BSz15 " or "*.BSz25 ") provided by Balance Systems and press "open" to start the creation of the device.

Select an update package file provided by Balance Systems						
😋 🕞 🗸 🔰 🕨 Computer 🕨 Windo	🔆 🕞 🗸 🕹 Computer 🔸 Windows (C:) 🔸 Release 🔸 VM25 🛛 🗸 😽 Search VM25 🖉					
Organize 🔻 New folder			≣ ▼ 🔟 📀			
🐌 MSOCache	^ Name	Date modified	Type Size			
PerfLogs Program Files	Vm25_v120_170324.BSz25	24/03/2017 14:06	BSZ25 File 38.162 KB			
Program Files (x86) Program Portable						
🎍 ProgramData						
VM25						
SWSETUP						
JESTEM.SAV	▼ 4	m	•			
File <u>n</u> ame: Vm25	_v120_170324.BSz25	✓ All BS	Firmware Files (*.bspkg;* 💌			
		Ор	en 🔻 Cancel			



VM Service - Ver. 12.0.3	170323		Trank.	
Connection Type: RS-4	85	COM Port: COM1		Login: User
Connection State: Conr	ected - 50	Baudrate: 115200	Mode: AUTO	
Device	ID	Version EE	Status	
	A Ma	kina baatable Panel U	SB Kev	
		,		\mathbf{n}
			0	J I I I I I I I I I I I I I I I I I I I
Ξ				

• At the end of the procedure, the following message will appear on screen.

.

2	MultiNet firmware ver. 12.0.161111
	To perform firmware update: power off the VM Rack; insert the USB Key into the Multinet board; power on the VM Rack and wait until the green LED stops blinking. Power off again, remove the USB key and power on
	VM25 Panel firmware ver. 12.0.161114
	To upgrade the VM Panel: power off the VM Rack; insert the USB Key in plug on the back of the panel; power on the VM Rack keeping the "Setup (8)" button pressed. Then follow the instructions on the display.
	VM25 Panel firmware ver. 12.0.161114
	To upgrade the VM Panel: power off the VM Rack; insert the USB Key in plug on the back of the panel; power on the VM Rack keeping the "Setup (8)" button pressed. Then follow the instructions on the display.
	Package file firmware ver. Vm25_v120_170217
	Folder tree to update VM25 Panel from USB is been succeeded make.
	Do you want remove now the USB key?
	Yes No





- At the end of the procedure the pen-drive will contain:
 - VMX5 PANEL software update files
 - MULTINET CARD firmware update files
 - Full system update package files
 - Folder structure for log files, backup/restore files



Folder	Description
VMX5	VMX5 applications folder.
BCK	Backup / Restore files folder.
LOG	Data log files. The log files contain all the details of the operation executed.
UPD	*.bspkg files for software / firmware update.

3.7.2. Use of the USB pen-drive

3.7.2.1. Backup, Restore, Software update

- Insert an USB pen-drive, prepared with the procedure described in the previous paragraph, into the USB port (connector H3) on the back side of the control panel.
- The VMX5 system should be switched on.



• Press the button **Change page**

until appears "System" on the screenbox.



Press the button Parameters









lcon	Command name	Button	Description
▼	Previous menu	F1	Previous commands menu
sys	System Backup	F2	Create a full system backup which can be used to restore the actual system only. The filename will contain info on MAC address of the actual VMX5 panel. The file (filename example) "VMX5_0060350a881d_00.bck" will be saved in the folder "\BCK\" of the USB pen-drive. <u>NOTE</u> : In the filename: 0060350a881d = MAC address of the VMX5 panel 00 = progressive number of the backup files
Mst	Master Backup	F3	Create a full system backup which can be used as master to create a twin system. This feature can be used to repeat the configuration of a system on different machines. The file "VMX5_MASTER.bck" will be saved in the folder "\BCK\" of the USB pen- drive.
rst 💾	Restore	F4	Execute a system parameters restore (work, setup and option parameters). The file "*.bck" (system "VMX5_0060350a881d_00.bck" or master "VMX5_MASTER.bck") must be present in the folder "\BCK\" of the USB pen- drive. The contents of the folder "\BCK\" of the USB pen-drive is shown to allow the file selection.
	Software Upgrade	F5	Execute the software / firmware upgrade of the full VMX5 system (panel and all the connected devices). The file "*.bspkg " must be present in the folder "\UPD\" of the USB pen-drive. The contents of the folder folder "\UPD\" of the USB pen-drive is shown to allow the file selection. Example: "VMX5_v120_120531.bspkg" update package file supplied by Balance Systems Service Dept. NOTE: In the filename: v120 = software / firmware version 120531 = date of release
	Log viewer	F6	Shows the contents of the log file for diagnostic

Further commands available in the Restore / Software Upgrade procedures

lcon	Command name	Button	Description
M	Confirm	F1	Confirm the file selection and start with the restore / upgrade procedure
Î	Delete	F1	Delete the selected file
+ 🚺	Exit	F6	Exit

• Wait for the procedure complete



Backup	Devices Version Status VM25 HMI 2 v. 11.0.120612 2 MultiNet1 v. 11.0.120405 2 Balancer 2 v. 11.0.120528 2 Gauge 1 v. 11.0.120531 2 Touch Detector 1 v. 11.0.120611 2	Devices Version Status VM25 HMI 2 v. 11.0.120612 Ø MultiNet 1 v. 11.0.120405 Ø Balancer 2 v. 11.0.120528 Ø Gauge 1 v. 11.0.120531 Ø Touch Detector 1 v. 11.0.120511 Ø	Devices Version Status VM25 HMI 2 v. 11.0.120612 2 MultiNet 1 v. 11.0.120405 2 Balancer 2 v. 11.0.120531 2 Gauge 1 v. 11.0.120531 2 Touch Detector 1 v. 11.0.120511 2
	Starting process VM25 Pan 1	Reading Touch Detector 1	Backup completed
	SERVICE	SERVICE	SERVICE
	X		
Restore	Devices Version Status VM25 HMI 2 v. 11.0.120612 0 MultiNet1 v. 11.0.120405 0 Balancer 2 v. 11.0.120528 0 Gauge 1 v. 11.0.120531 0 Touch Detector 1 v. 11.0.120611 0	Devices Version Status VM25 HMI 2 v. 11.0.120612 2 MutthNet 1 v. 11.0.120405 2 Balancer 2 v. 11.0.120528 2 Gauge 1 v. 11.0.120531 2 Touch Detector 1 v. 11.0.120611 2	Devices Version Status VM25 HMI 2 v. 11.0.120612 7 MultiNet1 v. 11.0.120405 7 Balancer 2 v. 11.0.120528 7 Gauge 1 v. 11.0.120631 7 Touch Detector 1 v. 11.0.120611 7
	Starting process VM25 Pan 1	Writing Touch Detector 1	Restore completed
	SERVICE	SERVICE	Switch off to reconfigure
	X		
Software Upgrade	Devices Version Status VM25 HMI 2 v. 11.0.120612 7 MultiNet1 v. 11.0.120405 7 Balancer 2 v. 11.0.120528 7 Gauge 1 v. 11.0.120531 7 Touch Detector 1 v. 11.0.120611 7	Devices Version Status VM25 HMI 2 v. 11.0.120612 2 MutthNet 1 v. 11.0.120405 2 Balancer 2 v. 11.0.120528 2 Gauge 1 v. 11.0.120531 2 Touch Detector 1 v. 11.0.120604 2	Devices Version Status VM25 HMI 2 v. 11.0.120612 2 MultiNet1 v. 11.0.120405 2 Balancer2 v. 11.0.120403 2 Gauge 1 v. 11.0.120631 2 Touch Detector 1 v. 11.0.120604 2
	Starting process VM25 Pan 1	Updating fw Touch Detector 1	Firmware updated successfull
		SERVICE	
	SERVICE		



3.7.2.2. Log file viewer for diagnostic



Use the buttons and to scroll the file contents. The log file is a text file, stored in the USB pen-drive in the "\LOG\" folder, which can be exported and sent to Balance Systems Service for further analysis.

lcon	Command name	Button	Description
Î	Delete	F1	Delete the selected file
+ 🚺	Exit	F6	Exit

3.7.2.3. VMX5 Panel software update (init procedure)

The following procedure should be used to re-initialize the bootloader and the software on the VMX5 control panel only.

Preliminary steps:

- Check that the following files are present on the root of the USB pen-drive. Other files can be present or not depending on the software release.
 - o uImage
 - o uImage-bw.jffs2
 - o uImage-tft.jffs2
 - o program.txt
 - o u-boot_yymmdd.bin

Procedure:

- Power off the VMX5
- Plug in the USB pen-drive into the USB port (connector H3) on the back side of the control panel



- Power on the VMX5 keeping pressed the setup button
- Wait for the message "update software ?"



Release the button

ENTER



- Droco
 - Press to execute the software upgrade or press
 - Wait for the complete execution. The process will take some minutes.
- At the end of the process the VMX5 restarts automatically for normal operation.

NOTE: If during the operation **"Bad magic number"** message **appears on screen**, it means that the USB pen-drive is not recognized correctly. Try to format the USB device or change it with a new one.



3.7.2.4. Multinet card firmware update (init procedure)

The following procedure should be used to re-initialize the firmware on the Multinet card only.

Preliminary steps:

- Check that the following files are present on the root of the USB pen-drive. Other files can be present or not depending on the software release.
 - o Boot.inf
 - o MN_01.bin
 - o Multi.inf

Procedure:

- Power off the VMX5
- Plug in the USB pen-drive into the USB port (connector K5) on Multinet card front panel
- Power on the VMX5.
- The firmware on Multinet card will be automatically updated to the newer version. Yellow and green led will start to blink.
- At the end of the procedure, yellow led will stop to blink and green led will start to slowly blink.
- Power off and Power on the system.



4. Appendix

4.1. Use with VM20 System

This product cannot be used with VM20, VM21, VM22, VM23, VM24 Systems.

4.2. Use with VM25 system version 10.x

This product cannot be used with VM25 System version 10.x.

The backup and restore operation on VM25 System released in version 10.x is managed with VM25 Service package up to version 11.x.

NOTE: in case of connection by USB/RS-485 converter the baud rate should be programmed to 9600 baud.

4.3. Customer service

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