

Firmware update

Publication version: VFIRMWARE/EN M/A001

User manual



Table of Contents

1. Preparations	4
1.1. Equipment and software	4
1.2. Before firmware update	5
1.3. During firmware update	5
1.4. After firmware update	5
2. Update procedures	6
3. Restoring device database	11
4. Firmware compatibility	14

1. Preparations

1.1. Equipment and software

Before firmware update, please verify that programming cables, accessories and software type / version are correct and up to date. Below is presented a list of necessary equipments & software to be used in firmware update procedure.

V200-series, Vamp 40

 VX003, RS-232 programming cable for Vamp 200 and Vamp 40-series devices.

Order code: XV003-3 (Cable length 3 meters)

USB to RS232 adapter (for VX003 serial cable).
Order code: 3P025

V300-series, V321, and V50-series

VX052, USB programming cable.
Order code: VX052-3 (Cable length 3 meters)

VAMPSET

 Computer software for configuration, firmware update, language update etc.
(Free of charge)

Get latest version of VAMPSET from: http://m.vamp.fi/products/vampset

1.2. Before firmware update

- Download and save settings from the device before starting the firmware update.
- Notice that device is not functional during updating. Protection functions are not operational and output relays may change it status during the updating process.
- Disconnect trip circuits or any other signals from device which may disturb the protected system.
- Communication protocols are not functional during updating process. Connections to SCADA or any other external system will be lost during the firmware updating.
- Ensure that laptop battery has capacity at least for 30 minutes or plug-in the laptop power supply. (Updating firmware typically lasts 10-15min).
- Make sure laptop won't go to "sleep mode" while firmware is being updated.

1.3. During firmware update

- Do not turn off the supply voltage for the device.
- Do not disconnect programming cable.

1.4. After firmware update

- Verify the parameters and settings of the device after firmware update. (Please see VAMPSET user manual, VVAMPSET/EN M/xxxx for further instructions of using comparing tool.)
- Return updated device and all connections to original state.
- Secondary side testing with relay testing equipment is recommended.

2. Update procedures

Verify correspondence of communication speed for the device to be updated and the VAMPSET configuration tool. Speed setting on relay and VAMPSET has to match.

Maximum communication speed to be used is dependent on programming cables and firmware version.

- Using VX003 cable without USB to RS232 adapter maximum speed is 38400 bps.
- Using VX003 cable with USB to RS232 adapter maximum speed is 187500 bps.
- VX052 USB programming cable maximum speed is 187500bps.
- Device with firmware 6.xx and older, maximum speed is always 38400bps.
- Device with firmware 10.xxx or newer, maximum speed is always 187500bps.



Figure 1.4-1 Device speed setting on HMI

Communication speed setting for relay can be verified and changed from the local panel. Speed setting is located under the "conf" menu as shown in the picture 1 above. Configurator level password must be provided in order to change communication speed. Start VAMPSET configuration tool. Go to "Settings" menu and select "Communication Settings...".

G Onuneu - vampser_sys						
File Edit View Setting	gs Communication Device Libra	iry Disturbance Re	cord Help Tool	s		
	Communication Settings Program Settings				CLRE	0 c 🛐
/		1				

Select communication port and define communication speed.

Untitled - Vampset_sys		
File Edit View Settings Communication Devi	ce Library Disturbance Record Help Tools	
E	Communication Settings Port COM11 T Auto port selection Local Speed: 187500 t bps Network Address: 192.188.0.1 V Enable V Enable	BUS mode Address: 1 1899 He fast reading mode onnect after 15 min esh view after writing changes
	Timeout Image: Timeout Image: Timeout Modem Timeout 8000 ms Modem Silence timeout: 10 seconds Call con Message timeout: 100 seconds Phone n	modem connection init: ATx3 mmand: ATDT umber: 132
	(Remember to change device speed also) Apply Cancel	Restore Defaults

Untitled - Vampset_sys File Edit View Settings Communication Device Library Disturbance Record Help Connect Device... F5 P Ê 6 Ctrl + F5 **Disconnect Device** Search and Select Devices Quick connect... F11 Write All Settings To Device Write Changed Settings To Device F10 Write current view to device Sync time and date from computer Boot Device F9 Run script-file Read all settings from Device Refresh Current Group From Device F8 Refresh Menu From Device Update Firmware Update Language Update Boot-code

Open "Communication" menu and select "Update Firmware".

Confirm firmware updating by selecting "yes".



Locate and select the file containing new firmware and press "open".

		0 101	
	and the second s		
	Ture	Ci-+	
22/02/2012 12:40	VEE Eile	11 510 KP	
23/03/2012 12:40	VEFFILE	11 J19 KB	
15/05/2012 12:24	VEFFILe	11 403 KB	
04/06/2012 12:24	VEF File	11 738 KB	
11/07/2012 15:00	VEF File	11 694 KB	
08/10/2012 15:19	VEF File	11 388 KB	
17/10/2012 16:17	VEF File	11 388 KB	
31/10/2012 17:12	VEF File	11 450 KB	
26/11/2012 15:39	VEF File	11 493 KB	
09/01/2013 14:55	VEF File	11 503 KB	
25/02/2013 13:14	VEF File	11 547 KB	
22/03/2013 10:17	VEF File	11 557 KB	
02/04/2013 16:52	VEF File	11 557 KB	
08/05/2013 10:20	VEF File	11 620 KB	
		→ ← E F E Date modified Type 23/03/2012 12:40 VEF File 12/04/2012 11:11 VEF File 15/05/2012 12:24 VEF File 04/06/2012 13:56 VEF File 04/06/2012 13:56 VEF File 11/07/2012 15:19 VEF File 17/10/2012 16:17 VEF File 31/10/2012 17:12 VEF File 26/11/2012 15:39 VEF File 25/02/2013 13:14 VEF File 25/03/2013 13:14 VEF File 22/03/2013 10:17 VEF File 02/04/2013 10:20 VEF File 02/03/2013 10:17 VEF File	▼ E File Size Date modified Vype Size 23/03/2012 12:40 VEF File 11 519 KB 12/04/2012 11:11 VEF File 11 485 KB 15/05/2012 12:24 VEF File 11 485 KB 04/06/2012 13:56 VEF File 11 543 KB 11/07/2012 15:02 VEF File 11 694 KB 08/10/2012 15:19 VEF File 11 388 KB 11/10/2012 16:17 VEF File 11 388 KB 31/10/2012 17:12 VEF File 11 430 KB 09/01/2013 16:17 VEF File 11 430 KB 09/01/2013 13:14 VEF File 11 503 KB 25/02/2013 13:14 VEF File 11 537 KB 02/04/2013 16:52 VEF File 11 557 KB 02/04/2013 16:20 VEF File 11 557 KB 02/04/2013 16:20 VEF File 11 557 KB

Please wait until updating process is completed.

Untitled - Vampset_sys	
File Edit View Settings Communication Devic	e Library Disturbance Record Help Tools
🖻 🖬 💩 🗄 🔁 🎒 💆 🗄	1222 122 122 122 122 122 122 122 122 12
<u></u>	Serial Communication
	Updating firmware
E	010. 08:53:36 - 011. 08:53:36 -/ FIRMWARE (GS) PROGRAM HEADER: 012. 08:53:36 - sw type: VAMP GS 013. 08:53:38 - FLASH requirement (external): 3.6 Mbytes 014. 08:53:36 - FLASH requirement (internal): 0.5 Mbytes 015. 08:53:36 - JASH requirement (internal): 0.5 Mbytes 016. 08:53:36 - J STARTING UPDATE
	018.08/35/37 - FORINVAHE MOULE 2/35 019.08/35/37 - FORCING DOWNLOAD STATE 020.08/53/39 - Reset allowed 021.08/53/50 - RECEIVING DB
	Stop operation Save Log Close Window;

Confirm completion of firmware update by pressing "yes".



3.

Restoring device database

In case download process for some reasons is disturbed and download process stops, try starting firmware update again. In case update process does not continue, change communication speed in Vampset to 38400bps (if 187500bps was selected earlier) and try again.

In case "Download DB-Data" text appears on the device screen and firmware update won't continue when retrying, database of the device needs to be restored manually.

Untitled - Vampset		
File Edit View Settings Communication Devi	ce Library Disturbance Record Help	
	Settings	—
	_ Initial reading Group refresh	View
E	Image: Read Fault Logs Recommend State: Enabled Image: Recommend State: Enabled Recommend State: Enabled Image: Recommend State: Enabled Image: Recommend State: Disabled Image: Image: Image: Recommend State: Disabled Image: Recommend State: Disabled Image: I	▼ Show parameters using boxe Recommend State: Enabled ▼ Enable folder view PO-diagram style ☞ y-axis=P x-axis=Q ∽ y-axis=Q x-axis=P
	Backup directory: C1VAMP	Configurator: 2 Operator: 1
	Virte changes automatically after change Recommend State: Disabled	
	Read settings Upload disturbance recordings automatically Recommend State: Disabled	
	ОК	Cancel

Default back-up directory for DB-data file is C:\VAMP

🛄 Untitled - Vampset File Edit View Settings Communication Device Library Disturbance Record Help Connect Device... F5 80 🗃 🔲 🎒 COM 😭 Disconnect Device Ctrl + F5 Search and Select Devices Quick connect... F11 Write All Settings To Device Write Changed Settings To Device F10 Write current view to device Sync time and date from computer Boot Device F9 Run script-file Read all settings from Device Refresh Current Group From Device F8 Refresh Menu From Device Update Firmware Update Language Update Boot-code Read all DB texts from device Restore Device DB Device diagnostics Terminal Ctrl + T Detect External IO

Select "Restore device DB" from the "Communication" menu.

Allow device rebooting by clicking "yes".

Device Ut	ilities	X
	Device will be rebooted. Do you want to continue?	
	Yes	No

Select backup file from the list based on serial number of the device and click "open" button.

cin: 🕌 VAMP	▼ ← E ☆ Ⅲ▼			
ame	Date modified	Туре	Size	
V_50-012011.ws	06/03/2015 19:27	WS File	153 KB	
V_52-012729.ws	26/08/2014 12:40	WS File	153 KB	
V300F-000972.ws	13/05/2014 6:55	WS File	158 KB	
V300F-001177.ws	26/11/2014 10:50	WS File	165 KB	
V300F-001461.ws	24/11/2014 8:14	WS File	164 KB	
VAMP_52-007676.ws	01/10/2013 5:29	WS File	147 KB	
VAMP_59-013898.ws	20/11/2014 14:58	WS File	166 KB	
VAMP_255-020573.ws	26/05/2014 14:24	WS File	89 KB	
VAMP_255-034375.ws	19/12/2013 13:11	WS File	151 KB	
VAMP_255-046744.ws	09/01/2014 9:19	WS File	154 KB	
VAMP_255-046745.ws	09/01/2014 10:04	WS File	155 KB	
VAMP_255-046746.ws	09/01/2014 9:49	WS File	155 KB	
VAMP_255-046747.ws	09/01/2014 10:36	WS File	155 KB	
Vamp_255-048791.ws	09/01/2014 12:00	WS File	155 KB	
VAMP_255-048892.ws	18/12/2014 13:01	WS File	154 KB	
Vamp_259-047951.ws	15/09/2014 16:18	WS File	159 KB	
Vamp_300F-000586.ws	05/03/2015 0:07	WS File	153 KB	
VAMP_321-000196.ws	12/09/2014 11:42	WS File	159 KB	
VAMP_321-000355.ws	12/02/2014 8:31	WS File	151 KB	
Vamp_321-000606.ws	23/10/2014 0:33	WS File	152 KB	
Vamp_321-000695.ws	17/03/2015 15:41	WS File	166 KB	
Vamp_321-000898.ws	12/03/2014 13:23	WS File	157 KB	
VAMP_321-001088.ws	26/03/2015 12:56	WS File	151 KB	
VAMP_321-001211.ws	30/06/2014 13:48	WS File	151 KB	
VAMP_321-001614.ws	25/03/2015 14:01	WS File	166 KB	
e name: V300F-0014461	25/05/2015 14:01	Warne	100 KB	

Wait until database restoring has been completed. Device will restart after successful database restoring.

Serial Communication		
Restoring databas	ie -	
001. 09:54:41 - 9.4.2015		
Stop operation	Save Log	Close Window

4. Firmware compatibility

Limitations for firmware update:

- Version 4.xx 6.xx firmware cannot be updated to 10.xx firmware.
- Version 4.xx 6.72 firmware can be updated to latest 6.xx firmware.
- Version 4.xx firmware should be updated via 6.74 to the latest 6.xx firmware. Firmware update straight from version 4.xx to latest is not recommended.
- Version 10.xx firmware can be updated to the latest 10.xx firmware without any limitations.
- 10.xx firmware cannot be downgraded to 6.xx firmware.

In case firmware is needed to be downgraded, please contact vamp technical support <u>vampsupport@vamp.fi</u> for further instructions.

Customers Care Center

http://www.schneider-electric.com/ccc

35 rue Joseph Monier 92506 Rueil-Malmaison FRANCE

Phone: +33 (0) 1 41 29 70 00 Fax: +33 (0) 1 41 29 71 00

www.schneider-electric.com Publication version: VFIRMWARE/EN M/A001 Publishing: Schneider Electric 04/2015