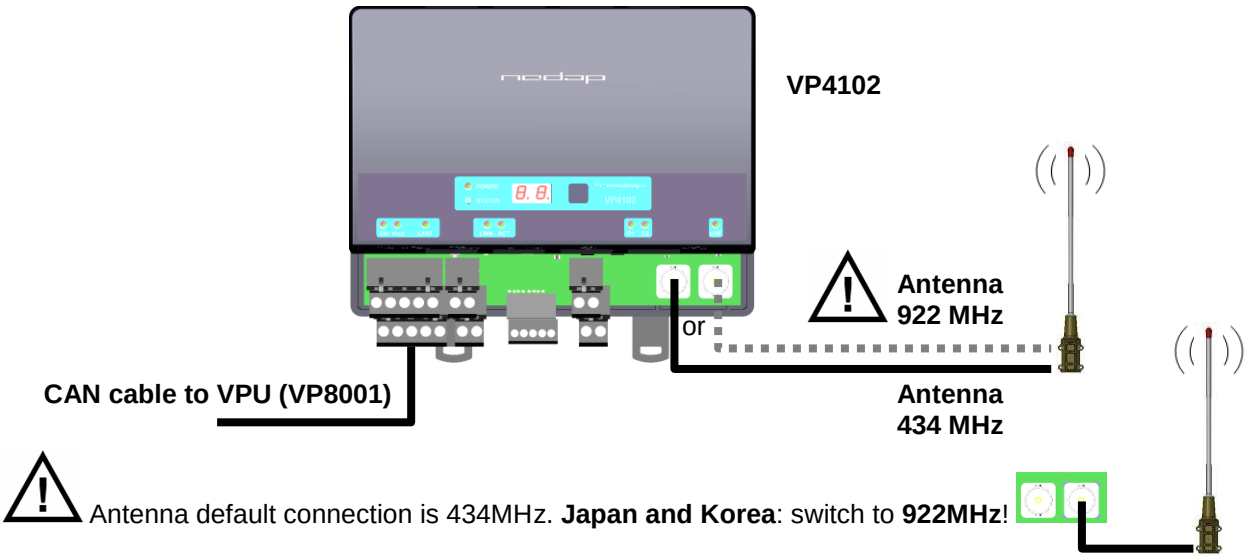
VP4102 Reader 434/922 MHz

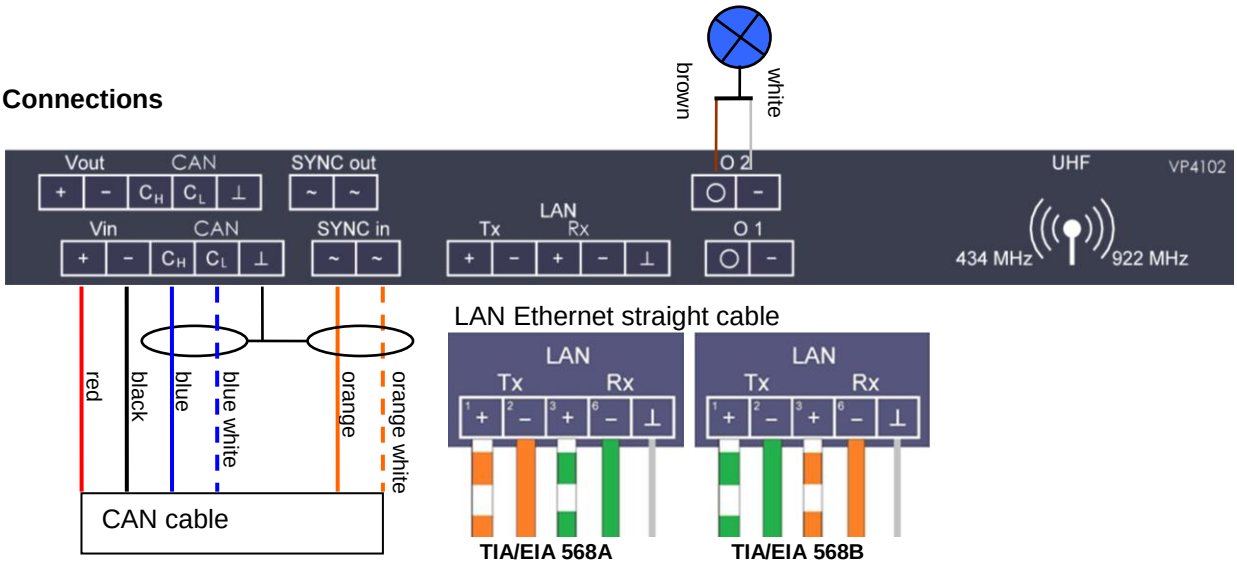
<u>This sheet is intended as quick start. See service manual for more detailed instructions.</u>

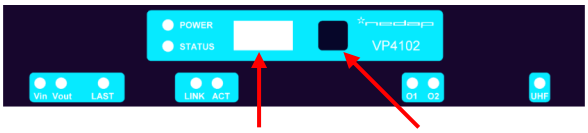
The VP4102 reader is a component that is used to receive data from Smart Tags.



Antenna default connection is 434MHz. **Japan and Korea**: switch to **922MHz**!

Connections





Display Push button

DISPLAY ADDRESS
Shows the actual logic V-pack address

SET ADDRESS
Change the logic address

DISPLAY SECTION
Show section (Default 0, not used for CAN)

SET SECTION
Change section (not used for CAN)

DISPLAY VPU ADDRESS
Shows actual VPU address (one by one)

SET VPU ADDRESS
Changes the actual VP**U** address (one by one)

SETTINGS TO DEFAULT
All address settings back to factory settings

DHCP IS ON
Press long until blinking to turn on DHCP

DHCP IS OFF
Press long until blinking to turn off DHCP

DISPLAY IP ADDRESS
Shows actual IP address (one by one)

SET IP ADDRESS (only shown in case of DHCP OFF)
192.168.1.101 (not used for CAN)

SET IP ADDRESS
192.**168**.1.101 (not used for CAN)

SET IP ADDRESS
192.168.**1.**101 (not used for CAN)

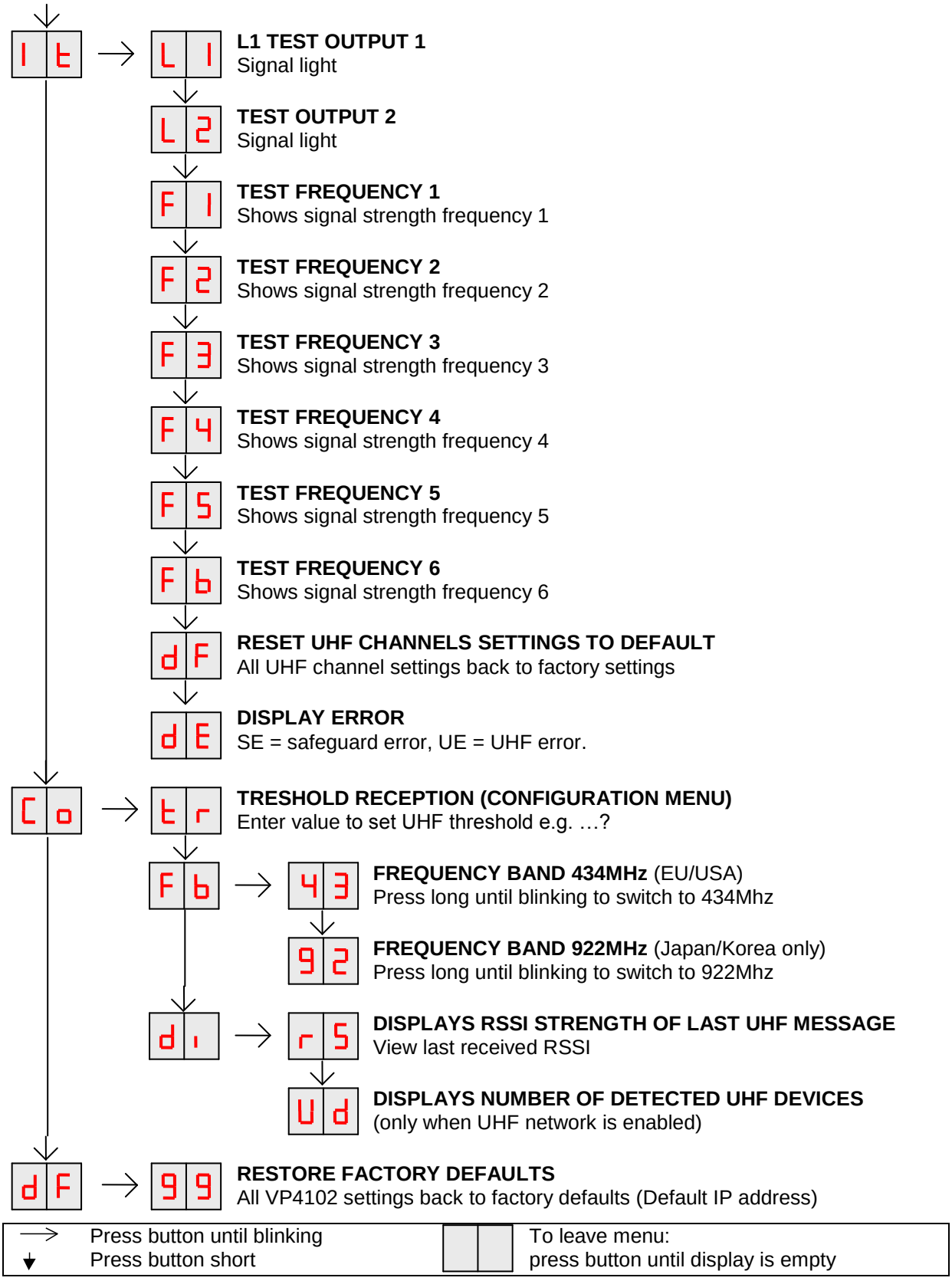
SET IP ADDRESS
192.168.1.**101** (not used for CAN)

ACCEPT NEW IP ADDRESS
(not used for CAN)

DISPLAY NETWORK MASK (only shown in case of DHCP OFF)
Shows the network mask (0, 8, 16, 24 or 32) (0= 0.0.0.0, 8= 255.0.0.0 etc.)

SET NETWORK MASK (only shown in case of DHCP OFF)
Changes the network mask (16= 255.255.0.0 etc. 32 = 255.255.255.255)

IP SETTINGS TO DEFAULT
All IP settings back to factory settings


L1 TEST OUTPUT 1
Signal light
TEST OUTPUT 2
Signal light
TEST FREQUENCY 1
Shows signal strength frequency 1
TEST FREQUENCY 2
Shows signal strength frequency 2
TEST FREQUENCY 3
Shows signal strength frequency 3
TEST FREQUENCY 4
Shows signal strength frequency 4
TEST FREQUENCY 5
Shows signal strength frequency 5
TEST FREQUENCY 6
Shows signal strength frequency 6
RESET UHF CHANNELS SETTINGS TO DEFAULT
All UHF channel settings back to factory settings
DISPLAY ERROR
SE = safeguard error, UE = UHF error.
TRESHOLD RECEPTION (CONFIGURATION MENU)
Enter value to set UHF threshold e.g. …?
FREQUENCY BAND 434MHz (EU/USA)
Press long until blinking to switch to 434Mhz
FREQUENCY BAND 922MHz (Japan/Korea only)
Press long until blinking to switch to 922Mhz
DISPLAYS RSSI STRENGTH OF LAST UHF MESSAGE
View last received RSSI
DISPLAYS NUMBER OF DETECTED UHF DEVICES
(only when UHF network is enabled)
RESTORE FACTORY DEFAULTS
All VP4102 settings back to factory defaults (Default IP address)
Press button until blinking
Press button short
To leave menu:
press button until display is empty

LED indicators

POWER	●	Green on	Power on
	○	off	No power
STATUS	●	Slow blinking	Operating ok
		Fast blinking	Downloading or error during download
		1 short flash	V-pack not coupled
		2 short flashes	Firmware present but not active
		3 short flashes	No firmware present
Display		Blinking	IP fails or CAN fails
V in	●	Green on	Input power applied
	○	off	No power
	●	Orange	Low power, less than 20V
	●	Orange blinking	Wrong CAN-bus connection, Vin and Vout swapped
	●	Red	Error, plus and minus swapped
V out	●	Green on	Output power
	○	off	No power
	●	Orange blinking	Low power
	●	Red blinking	Error (overload, shortcut)
LAST	●	Green on	V-pack is last one on the CAN-bus
	○	off	V-pack is not last one on the CAN-bus
	●	Orange blinking	CAN-bus error and last V-pack on CAN-bus
	●	Red	CAN-bus error
	●	Red blinking	CAN-bus warning / connected wrong
LINK	○	off	LAN No connection
	●	Green	LAN connection(10 Mbps / 100 Mbps)
ACT	●	Green flashing	Network activity
	○	off	No network activity
	●	Red	Network error
O1 / O2	●	Green on	Output on
	○	off	Output off
	●	Red blinking	Output error (overload, shortcut)
UHF	●	Green on	Data receive
	○	off	No data
	●	Red	UHF Error

Specifications VP 4102	
Dimensions	143 x 120 x 68 mm LxWxH (excluding mounting rail) Weight: ± 279 gr
CAN	CAN-bus communication 125 kbit/s
Ethernet	100mbit/s max 100m
Power	Input voltage 12VDC -30 VDC Power consumption 160mA – 85mA (25VDC 100 mA) (without connected I/O such as signal lamp) Protected against reverse connection power supply
Software	Downloadable by the CAN network or ethernet
Outputs	Max. 0.4 Amp by current limiter, short-circuiting and thermal protected
Antennas	G-CXL 70-1LW/h nedap art. 4602366
Detection distance	Lactivator Realtime labels: +/- 50m dependable of antenna situation
Environment	Temperature: Operating: -10 – 55 °C, Storage: -25 – 70 °C Relative humidity: 10 – 93% non condensing
IP class	IP 30. When installed in V-box IP 65 (cover and cables installed correctly !)

Always use a NEDAP power supply VP2001 or VP2002. The Nedap guarantee-regulations are only valid when is installed as indicated in this manual. Install data cables at a safe distance from (high) powered cables
For more detailed information contact your local Nedap supplier or check the internet site.

Compliance statement (part15.19)
This device complies with part 15 of the FCC Rules and to RSS210 of Industry Canada.
Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Déclaration Conformité
Cet appareil se conforme aux normes RSS210 exemptés de license du Industry Canada. L'opération est soumis aux deux conditions suivantes:
(1) cet appareil ne doit causer aucune interférence, et
(2) cet appareil doit accepter n'importe quelle interférence, y inclus interférence qui peut causer une opération non pas voulu de cet appareil.

Warning (part15.21)
Changes or modifications not expressly approved by party responsible for compliance could void the user's authority to operate the equipment. This in particular is applicable for the antenna which can be delivered with the VP4102 System

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter with certification number 1444A-VP4102 has been approved by Industry Canada to operate with the antenna type listed below and with the maximum permissible gain and required antenna impedance indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Model: G-CXL 70-1LW/h (nedap art. 4602366)
Antenna gain: 2 dBi
Nominal impedance: 50 Ω