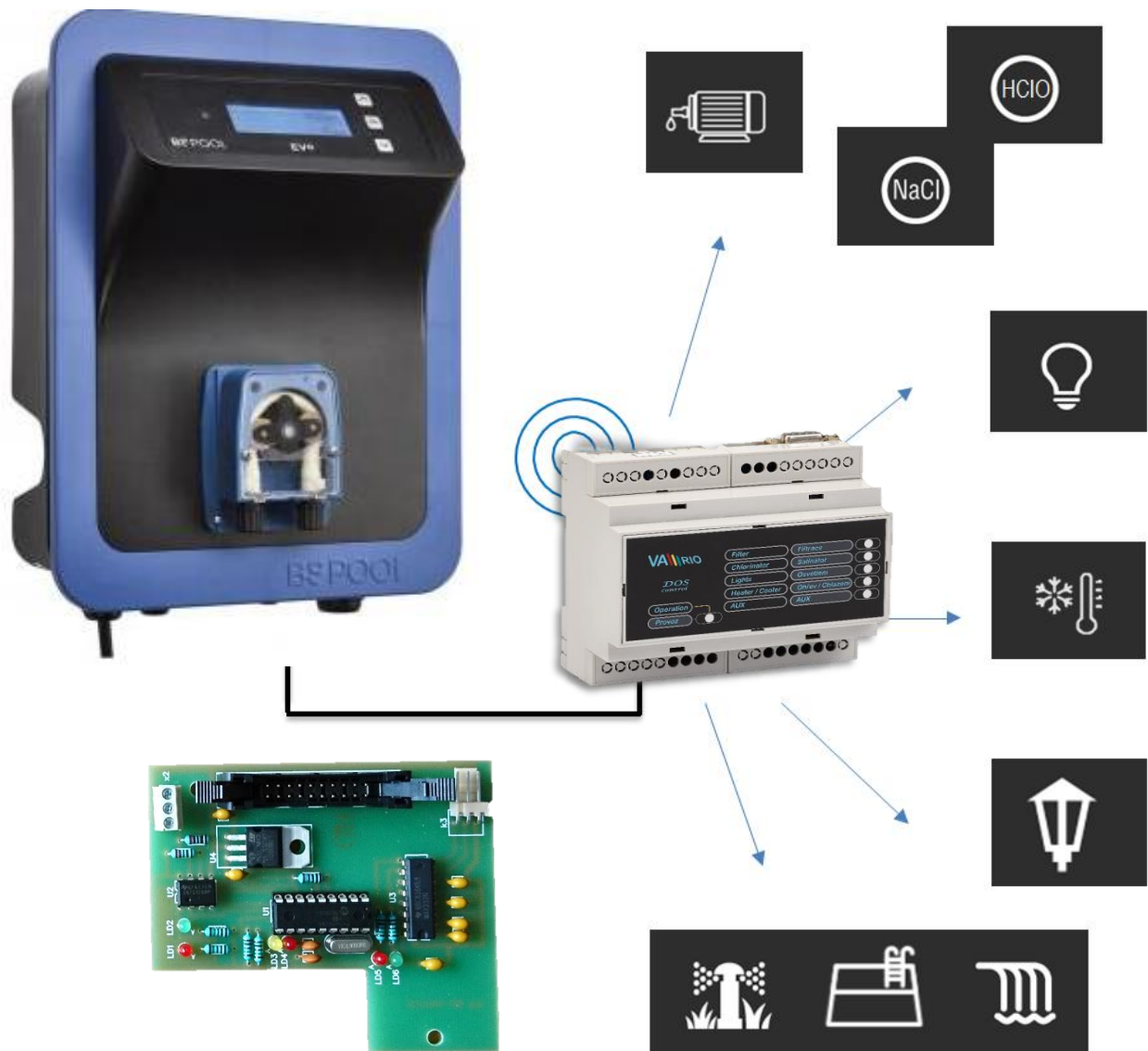# POOL TECHNOLOGY
CONTROL SYSTEM

VA\\\RIO

--- BSV installation kit ---

1. Safety instructions

Read this user manual before installation and unit activation. Should you need any explanation or should you have any doubts, do not hesitate to contact Your VArio supplier.

If you use any personal electronic medical device (peacemaker, etc.), please consult the device manufacturer concerning potential radio interference which may affect the medical device. VArio system modules use radio communication on 869,530 MHz with peak output ≤ 20mW.

The unit shall be always installed by a trained professional. Always disconnect the main power supply before performing repairs or maintenance, or before connecting additional external devices.

The system uses radio-frequency communication. It is forbidden to use the device near mines / quarries or any places with possible risk of explosion.
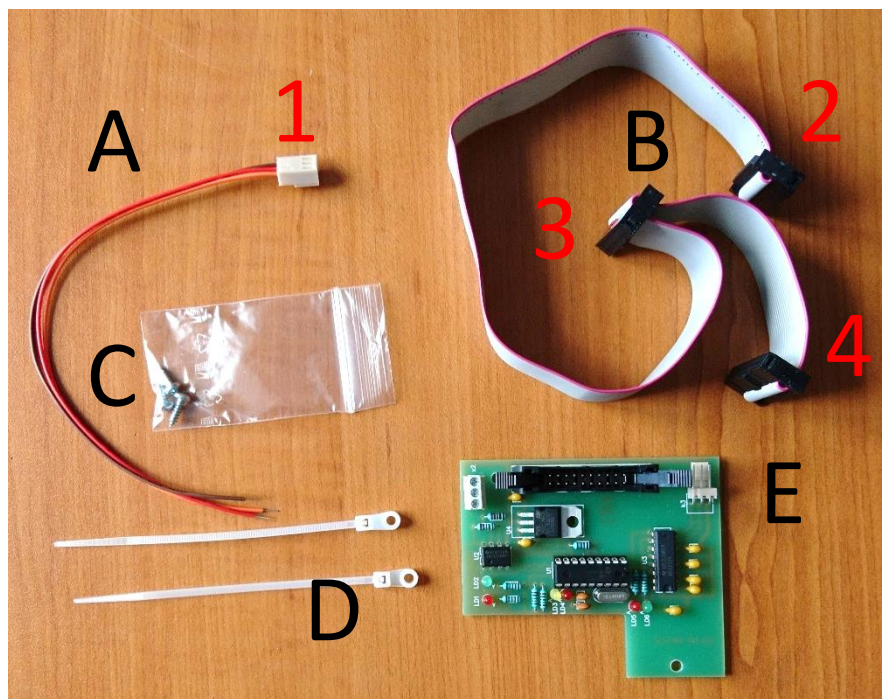
2. General Information

The BSV installation kit provides for direct communication between the VArio control system and BSV saltwater chlorinators using the ModBus RS485 communication protocol.

3. Package contents

BSV installation kit contains all parts required for installation into the VA SALT SMART saltwater chlorinator unit. The RS485 connecting cable to DIN module must be ordered separately.

A – 1x communication cable RS232 (connector 1)

B – 1x communication cable (connectors 2 / 3 / 4)

C – 3x module fixation screw

D – 2x fixation strip

E – 1x communication module

IMPORTANT:

To connect with a *separate DIN module*, order this cable:

516132 = CABLE - VARIO SEPARATE DIN
(DIN Module -> dosing unit / chlorinator)

If you have a VArio system inside a *complete Plug & Play breaker box*, a different RS485 connecting cable must be used (with different connector).
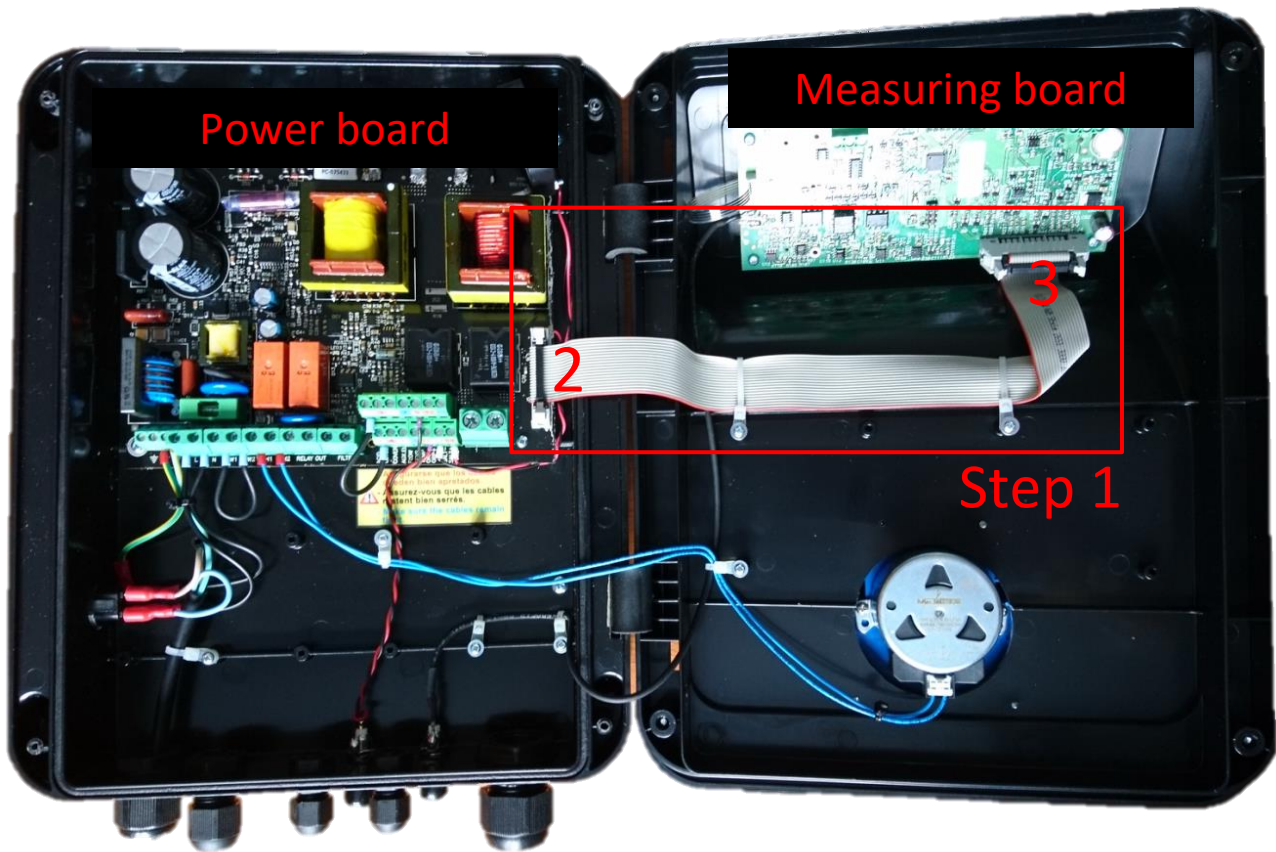For VArio in a breaker box, order this cable:

ID: 516130 = CABLE – VARIO IN BREAKER BOX
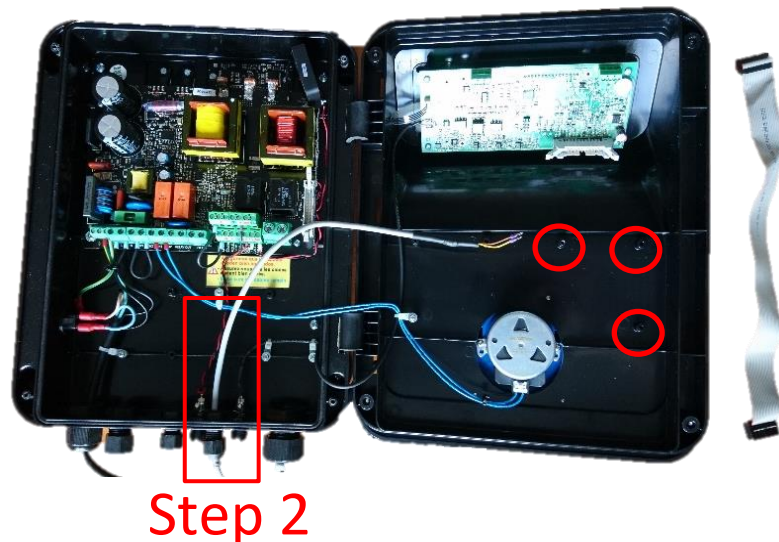(Breaker box case -> VA DOS BASIC/EXACT or VA SALT

4. BSV kit installation

The communication module needs to be installed inside the VA SALT SMART unit and connected to the DIN module with a 2-core RS232 cable.

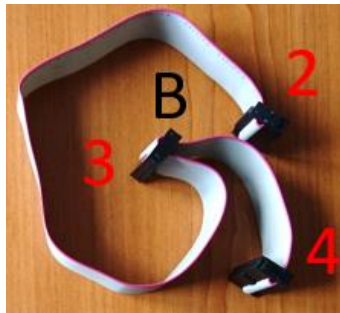Original inside setting of a VA SALT SMART unit:

1. Loosen the fixing screws including the fastening strips and disconnect the original flat grey cable from the power and measuring boards (Step 1).

2. Slip the 2-core RS232 connecting cable leading from DIN module or breaker box through the marked cable entry. The fixation points for the communication module (E) are marked with circles (Step 2).
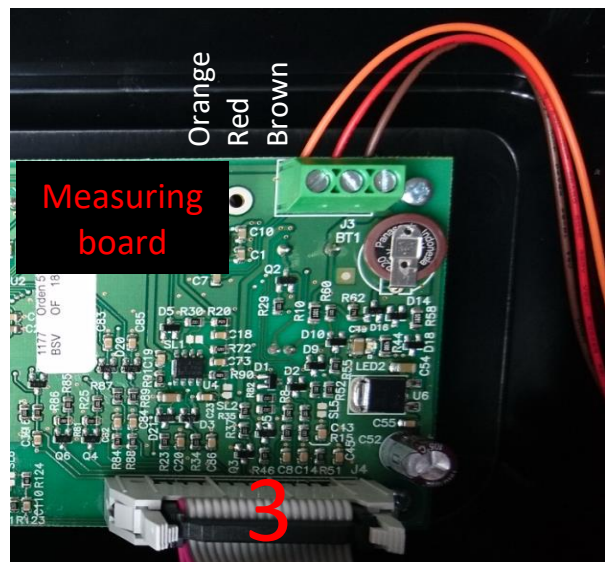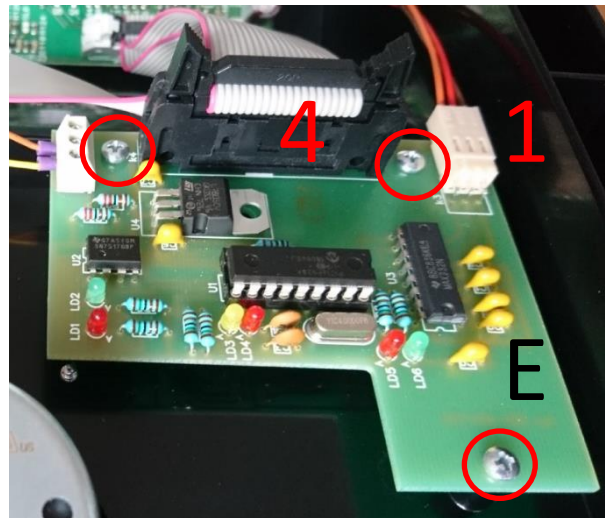
3. Fix the communication module (E) in place with the 3 screws. Prepare the communication cables (A+B) which were included in the BSV communication kit package.

4. Attach the flat grey communication cable (B) into the power board (connector 2) and measuring board (connector 3). Attach the last free connector 4 into the communication module (E).

   NOTE: If the cable is too tight, switch connectors 3 and 4.

5. Attach the communication cable (A) – the end without a connector – into the measuring board. Respect the wire colors as indicated by the picture. Connect the other end with a white connector (connector 1) into the communication module (E).

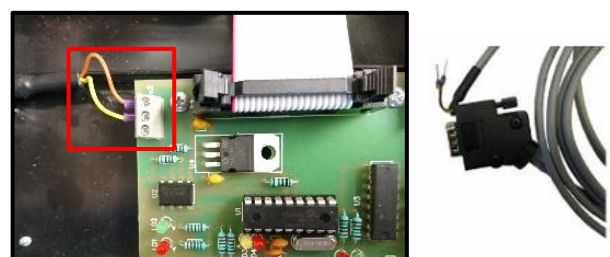6. Connect the purchased RS485 VArio connection cables as follows (always respect polarity):

ID: 516130 = CABLE – VARIO IN BREAKER BOX
(Breaker box case -> dosing unit / chlorinator

| Yellow | "–" | (minus) |
| Brown | "+" | (plus) |

ID: 516132 – VARIO SEPARATE DIN
(DIN Module -> dosing unit / chlorinator)
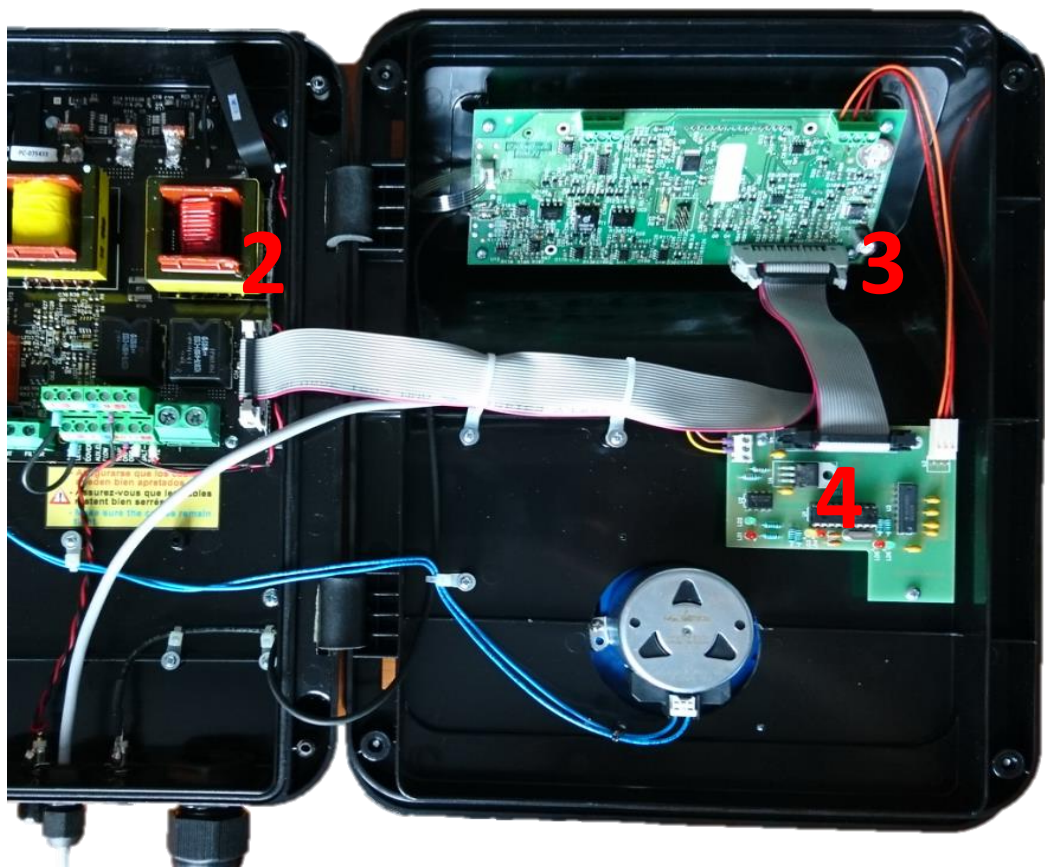
| Yellow | "–" | (minus) |
| Brown | "+" | (plus) |

7. The last step is a check of the DIP switches inside the DIN module itself – they must be in correct positions to ensure proper communication with the VA SALT SMART salinator unit. Open the front cover (lid) and place the DIP switches in positions as indicated below:

8. At this point, the kit installation should be complete – the <u>communication module (E)</u> is secured inside the chlorinator unit, all internal <u>cable connections (A+B)</u> are in place, plus the chlorinator is connected to the DIN module (breaker box) with the correct RS485 communication cable. The below picture shows the correct kit installation and connections:

5. Checking the communication functionality

When a DIN module (breaker box) is connected and the VA SALT SMART unit is powered on, you can check the functioning communication indicator on the DIN module – the communication LED.

IMPORTANT:
Flashing green LED indicates that the DIN module is powered on.
When the communication with a VA SALT SMART unit is functional, the flashing will become *faster*.

5

DECLARATION OF CONFORMITY

The company VÁGNER POOL s.r.o. hereby declares, that all below-listed products meet the necessary requirements for placing the product on the market:

Product line: **VArio – Pool Technology Remote Control System**
Directive: **RED Directive č. 2014/53/EU**

Module: **DIN Module**

Applicable norms:
EN 62368-1: 2014/A11:2017, EN 60730-1: 2016, EN 62479: 2010
EN 301 489-1 V2.1.1, EN 301 489-3 V2.1.1
EN 300 220-1 V3.1.1, EN 300 220-2 V3.2.1

Module: **WiFi Module**

Applicable norms:
EN 62368-1: 2014/A11:2017, EN 62311: 2008
EN 301 489-1 V2.1.1, EN 301 489-3 V2.1.1, EN 301 489-17 V3.1.1
EN 300 220-1 V3.1.1, EN 300 220-2 V3.2.1, EN 300 328 V2.1.1

Module: **RC Module**

Applicable norms:
EN 62368-1: 2014/A11:2017, EN 62479: 2010
EN 301 489-1 V2.1.1, EN 301 489-3 V2.1.1
EN 300 220-1 V3.1.1, EN 300 220-2 V3.2.1

Module: **Servce Module**

Applicable norms:
EN 62368-1: 2014/A11:2017, EN 62479: 2010
EN 301 489-1 V2.1.1, EN 301 489-3 V2.1.1
EN 300 220-1 V3.1.1, EN 300 220-2 V3.2.1

Conformity was checked by Technický skúšobný ústav Piešťany (TSÚ), which – based on test report No. 190500058/1-4 – issued Conformity Certificates to all of the above-listed modules.

Declaration Issue Date: **20. 3. 2019**   Producer Stamp and Signature:

VÁGNER POOL s.r.o. Nad Safinou 348
252 50 Vestec Praha-západ
IČ: 27121082 DIČ: CZ27121082

CE

More information and documentation about VArio system can be downloaded here: www.variopools.com.