The electronic anti-scale system

The green alternative to water softeners

MADE IN GERMANY

German Technology

Absolutely Magnetism-Free

No Salt

No Chemicals

No Maintenance

25 YEAR WARRANTY

FAQs - Frequently Asked Questions

How do I choose the right model size? Please check the pipe diameter in the area where you want to install Vulcan. Then choose the unit that is designed for this size.

Do copper or synthetic pipes need a limescale protection device at all? Yes. Copper and plastic pipes are prone to calcifications, too. The smoother a surface is the longer it can resist the process of calcification, but once a first layer of limescale has built up, the incrustation process proceeds just as fast as on any other surface.

Up to which degree of water hardness can Vulcan be applied? Vulcan operates within a high performance frequency range. It can thus be successfully applied even on water with a particularly high degree of hardness.

Does the Vulcan treatment have a softening effect on the water? As the water treated by Vulcan does not lose any minerals, such as calcium and magnesium, the composition of the water remains unaltered. It feels noticeably softer, though. You are sure to feel this effect when showering or washing your hair. The treatment does not change the measured water hardness, but modifies the shape of its components.

How long does it take Vulcan to sanitize the pipes? Vulcan reduces limescale and rust slowly without negatively affecting the pipes. The cleaning process takes about as long as it took the incrustations to develop.

Which pipe materials are the devices suitable for? Vulcan is suitable for all pipe materials: iron, copper, plastic, stainless steel, PVC, compound pipes, PE-X, etc.

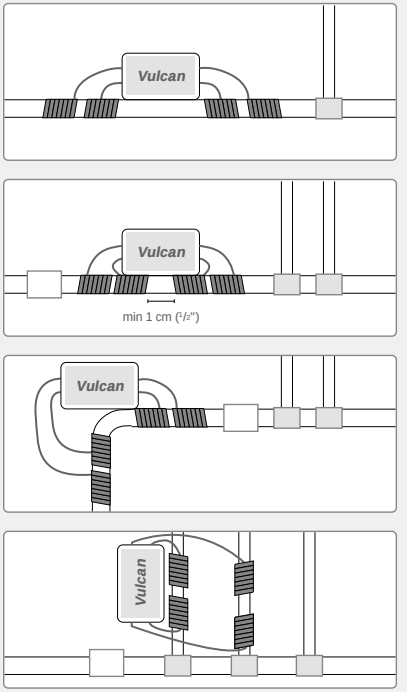
Which voltage range is the electronic plug-in power supply unit suitable for? All Vulcan power supply units are suitable for voltage ranges between 87 Volt – 260 Volt and 50 Hz – 60 Hz. They operate on 48 VDC.

What are the power costs of Vulcan per year? Vulcan is completely maintenance-free. The cost of electric energy per year amounts to approx. USD 3 - 7 (2-6 €).

Installation Examples

1. For optimal water treatment Vulcan is best installed near the water meter or at the main water supply.
2. The impulse band windings can be placed on the left side, on the right side or underneath the electronic device. Leave a safe distance of at least ½" (1 cm) between the bands.
3. Vulcan can be installed vertically, horizontally or at any other angle. If there is no space available on the pipe the electronic block can also be wall-mounted.
4. In case of limited space the windings can be placed partly on the main pipe and partly on the distributor pipe.

All these different installations are possible because the treatment impulses extend over several meters to either side of the pipes.



Installation Notes

1. Protect the electronic unit, the impulse bands and the power supply against humidity and water.
2. Use the provided electronic switching adaptor only.
3. Do not cut the impulse bands nor the 48 V power cord of the power supply unit.
4. Do not remove the end caps or the impulse band insulation.
5. The operating temperature of Vulcan ranges from -13°F to 122°F (–25°C to +50°C).
6. Clean the device with water only.
7. Temperature peaks on heating element surfaces should not exceed ~203°F (~95°C).

Installation Instructions — Residential Line

1. Put the two cable ties through the fixing holes at the bottom of the electronic device. Now place the device onto the pipe. Use the cable ties to latch the device to the pipe.

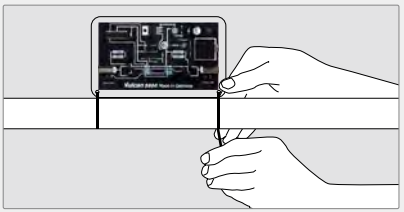
2. Connect one of the impulse bands to the device and use another cable tie to latch it to the pipe.

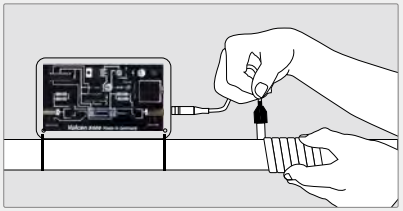
3. Wind the impulse bands around the pipe producing a coil. Make sure you wind the band tightly to the pipe and place the windings close to each other.

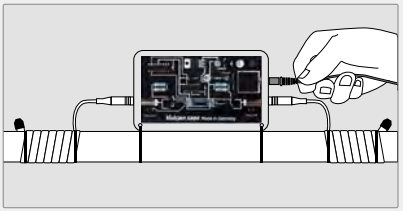
4. Latch the end of the impulse band to the pipe using another cable tie. Now repeat the procedure with the second impulse band.

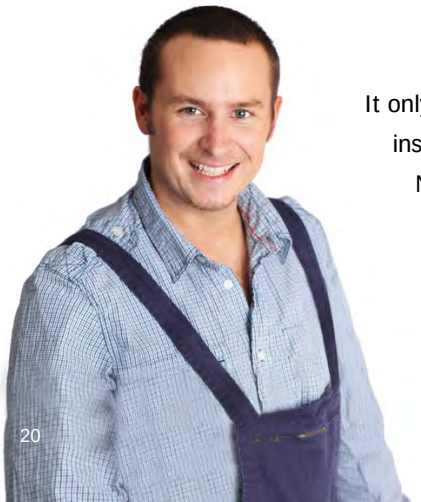
5. **First plug the connector into the upper right in-jack of the device and then connect the power supply unit with an electrical outlet.**

6. The red pilot lights will illuminate as soon as the device starts to operate. Vulcan works from now on maintenance-free.

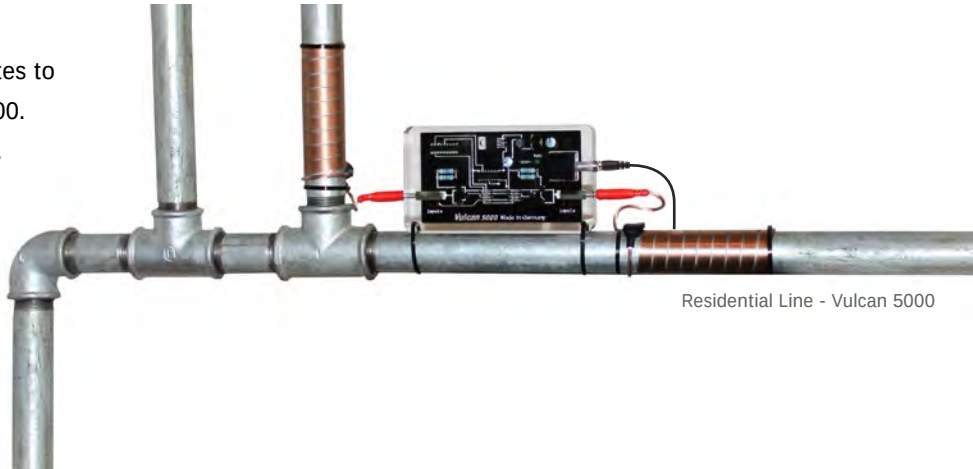








It only takes 10 minutes to install a Vulcan 5000. No tools needed.



Residential Line - Vulcan 5000

Installation Instructions — Commercial and Industrial Line

1. Put the two cable ties through the fixing holes at the bottom of the electronic device. Now place the device onto the pipe. Use the cable ties to latch the device to the pipe.

2. Plug one of the impulse bands into the bottom impulse band in-jack and latch it to the pipe using another cable tie.

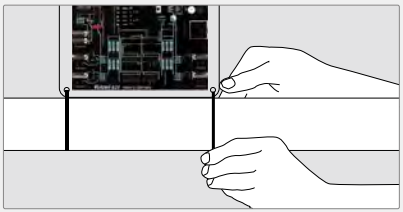
3. Wind the impulse band around the pipe producing a coil. Make sure you wind the band tightly to the pipe and place the windings close to each other.

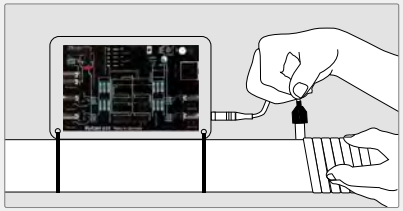
4. Latch the end of the band to the pipe using another cable tie. Now plug another impulse band into the in-jack on the opposite side and repeat the procedure.

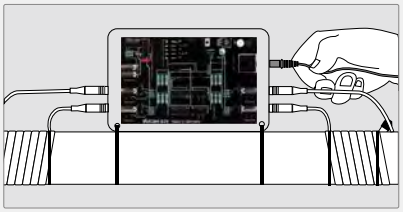
5. Plug another impulse band into the next impulse band in-jack and, according to the device type, repeat steps 2 - 4 until all impulse bands are in use. All impulse bands must be wound tightly around the pipe and fastened with cable ties.

6. **First plug the connector into the upper right in-jack of the device and then connect the power supply unit with an electrical outlet.**

7. Programming: Set the programm by touching the twin metal sensors on the left side simultaneously.

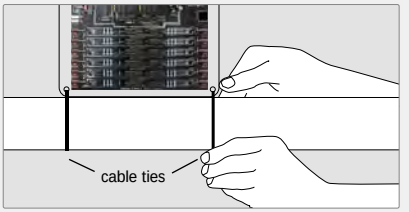




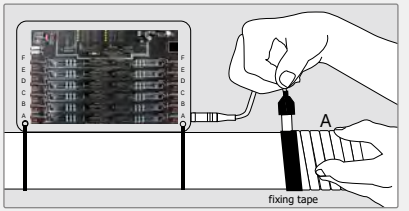


Installation Instructions — X-Pro Line

1. Put the **cable ties** through the fixing holes at the bottom of the electronic device. Now place the device onto the pipe. Use the cable ties to fix the device to the pipe.



2. Plug now **impulse band A** into the bottom impulse band in-jack A and latch it to the pipe with the **fixing tape**.

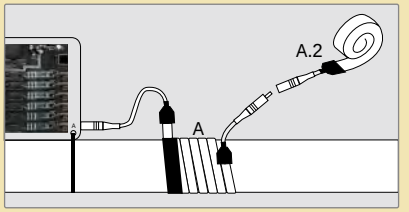


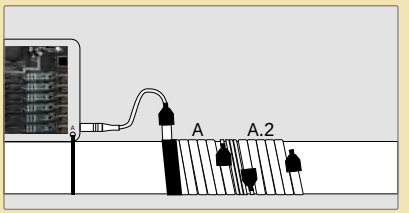
3. Wind the impulse band around the pipe producing a coil. Make sure you wind the band tightly to the pipe and place the windings **close to each other**.

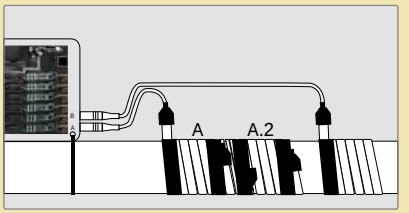
4. Latch the end of the band to the pipe with the fixing tape.

4.2. Only for Vulcan X-Pro 2

*Connect the end plug of **impulse band A** with the plug of **impulse band A.2** and wind this impulse band A.2 directly next to the impulse band A and fix it with the fixing tape.*



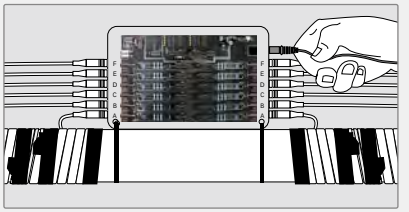




5. Plug the other **impulse band A** into the in-jack on the opposite side and repeat the procedure 2. to 4.

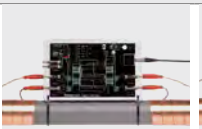
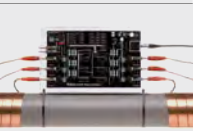
6. Plug **impulse band B** into the next impulse band in-jack B and repeat step 2 - 5 until all impulse bands are in use. All impulse bands must be wound tightly around the pipe and fixed with the fixing tape.

7. **First plug the connector into the upper right in-jack of the device and then connect the power supply unit with an electrical outlet.**

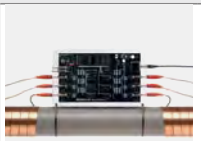


8. Programming: Set the programm by touching the twin metal sensors on the left side simultaneously.

Models and Sizes

	Residential Line		Commercial Line			
	Vulcan 3000	Vulcan 5000	Vulcan S10	Vulcan S25	Vulcan S50	Vulcan S100
						
Max. pipe Ø	1½" (~ 38 mm)	2" (~ 50 mm)	3" (~ 76 mm)	4" (~ 100 mm)	5" (~ 125 mm)	6" (~ 150 mm)
Max. capacity	3000 l/h (13 gpm)	8000 l/h (35 gpm)	15 m³/h (65 gpm)	30 m³/h (130 gpm)	70 m³/h (300 gpm)	120 m³/h (530 gpm)
Voltage	48 Volt	48 Volt	48 Volt	48 Volt	48 Volt	48 Volt
Wattage	2.2 Watt	2.2 Watt	2.5 Watt	2.5 Watt	2.5 Watt	2.7 Watt
Impulse bands	2 x 1 m (~ 2 x 39")	2 x 2 m (~ 2 x 79")	2 x 3 m (~ 2 x 118")	4 x 3 m (~ 4 x 118")	4 x 4 m (~ 4 x 13' 2")	6 x 4 m (~ 6 x 13' 2")
Band width	10 mm (~ 0.4")	10 mm (~ 0.4")	20 mm (~ 0.8")	20 mm (~ 0.8")	20 mm (~ 0.8")	20 mm (~ 0.8")
Dimensions (mm)	125/80/30 (4.9/3.1/1.2")	150/90/30 (5.9/3.5/1.2")	190/120/40 (7.5/4.7/1.6")	200/130/40 (7.9/5.1/1.6")	200/130/40 (7.9/5.1/1.6")	230/150/40 (9.1/5.9/1.6")
Frequency range	3-32 kHz	3-32 kHz	3-32 kHz	3-32 kHz	3-32 kHz	3-32 kHz
Required space	~ 250 mm (~ 10")	~ 350 mm (~ 14")	~ 500 mm (~ 20")	~ 800 mm (~ 32")	~ 900 mm (~ 35")	~ 1200 mm (~ 47")
Programs	1	1	3	5	5	10

Models and Sizes

	Industrial Line				X-Pro Line	
	Vulcan S150	**Vulcan S250**	**Vulcan S350**	**Vulcan S500**	**Vulcan X-Pro 1**	**Vulcan X-Pro 2**
						
Max. pipe Ø	8" (~ 200 mm)	10" (~ 250 mm)	14" (~ 350 mm)	20" (~ 500 mm)	30" (~ 750 mm)	40" (~ 1000 mm)
Max. capacity	180 m³/h (790 gpm)	350 m³/h (1540 gpm)	500 m³/h (2200 gpm)	800 m³/h (3520 gpm)	unlimited capacity	unlimited capacity
Voltage	48 Volt	48 Volt	48 Volt	48 Volt	48 Volt	48 Volt
Wattage	2.7 Watt	3.0 Watt	3.0 Watt	3.5 Watt	4.0 Watt	4.0 Watt
Impulse bands	6 x 8 m (~ 6 x 26' 3")	8 x 10 m (~ 8 x 32' 9")	8 x 20 m (~ 8 x 65' 7")	10 x 30 m (~ 10 x 98' 5")	12 x 25 m (~ 12 x 82')	12 x 50 m (~ 12 x 164')
Band width	20 mm (~ 0.8")	20 mm (~ 0.8")	20 mm (~ 0.8")	20 mm (~ 0.8")	40 mm (~ 1.6")	40 mm (~ 1.6")
Dimensions (mm)	230/150/40 (9.1/5.9/1.6")	280/200/50 (11.0/7.9/2.0")	280/200/50 (11.0/7.9/2.0")	310/220/50 (12.2/8.7/2.0")	340/240/50 (13.4/9.4/2.0")	340/240/50 (13.4/9.4/2.0")
Frequency range	3-32 kHz	3-32 kHz	3-32 kHz	3-32 kHz	3-32 kHz	3-32 kHz
Required space	~ 1800 mm (~ 71")	~ 2500 mm (~ 99")	~ 3400 mm (~ 11' 2")	~ 4500 mm (~ 14' 9")	~ 5600 mm (~ 18' 5")	~ 8200 mm (~ 26' 11")
Programs	10	10	10	10	10	10

German production by:
Christiani Wassertechnik GmbH
Selerweg 41, 12169 Berlin, Germany