Installation Manual

Frequently Asked Questions

Which pipe materials are the devices suitable for?
The devices are suitable for all pipe materials: copper, iron, stainless steel, plastic and compound pipes.

Do copper or synthetic pipes need a scale 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 scale has built up, the incrustation process proceeds just as fast as on any other surface.

Does the Vulcan treatment have a softening effect on the water?
As the water treated by Vulcan does not lose any essential 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, however, change the measured water hardness.

How long does it take Vulcan to sanitize the pipes?
Vulcan removes scale and rust slowly without negatively affecting the pipes. The cleaning process takes about as long as it took the incrustations to develop. A faster removal would inevitably block up the pipes and may even destroy them.

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 of a particularly high degree of hardness.

How can I find out if Vulcan operates efficiently?
Red pilot lights at the band outputs indicate that the impulse generator is operating efficiently. In case these lights are not illuminated, please check the power supply voltage.

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.

What are the power costs of Vulcan per year?
Vulcan is completely maintenance-free. The cost of electric energy per year amounts to approximately 2 to 6 Euro (US$ 3 – US$ 7).

Installation Notes

1. Protect the power supply unit against exposure to direct water.
2. Use the included switching power supply unit only.
3. Do not cut the impulse bands nor the 24 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 –10° C to +50° C (14° F to 122° F).
6. Clean the device with water only.
7. Temperature peaks on heating surfaces should not exceed 95° C (203° F).

Installation Examples

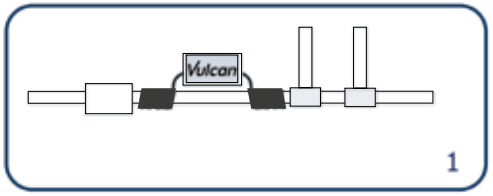
1. For optimal water treatment Vulcan is best installed near the water meter or at the main water supply (pic.1).

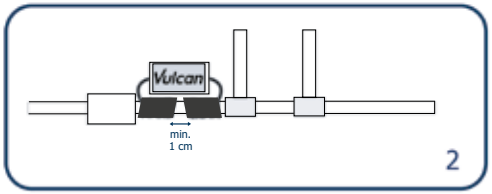
2. The impulse band windings can be placed on the left side, on the right side or underneath the electronic device. Leave a safe distance of at least 1cm ($^1/_2$″) from each other (pic.2).

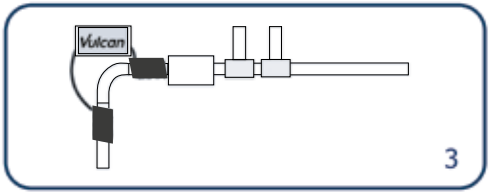
3. Vulcan can be installed vertically, horizontally or at any other angle. If there is no space available on the pipe the device can also be wall-mounted (pic.3).

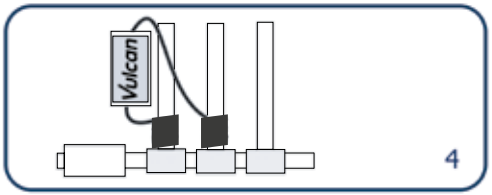
4. In case of limited space the windings can be placed partly on the main pipe and partly on the distributor pipe (pic.4).

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









Installation Instructions - Private Line

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

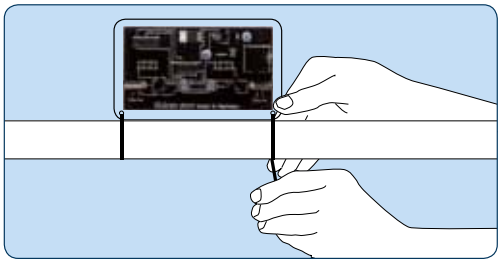
2. Connect one of the impulse bands to the device and use another band holder to latch it to the pipe.

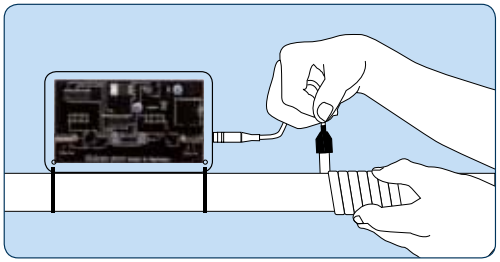
3. Wind the impulse bands around the pipe producing a coil. Make sure you wind the band tightly to the pipe and place the windings close to each other.

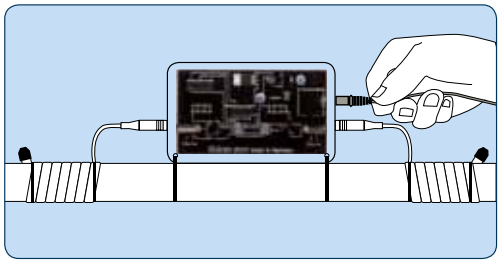
4. Latch the end of the band to the pipe using another band holder. Now repeat the procedure with the second impulse band.

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

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







Installation Instructions - Commercial Line and Industrial Line

1. Put the two band holders through the fixing holes at the bottom of the electronic device. Now place the device onto the pipe. Use the band holders 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 band holder.

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 band holder. 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 band holders.

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

7. Now adjust your Vulcan on the side sensors according to your pipe diameter to optimally treat your water.