# TWT<sup>®</sup> DEPOSIT CONTROLLER APPLICATION GUIDELINES & TERMINAL HOOKUP

7 of 8

Solenoid

Leds

# TRIANGULAR WAVE Front Panel Wiring Terminal l ine Cord Solenoid eds Onsite Solenoid wrapped pipe

## **TWT-CSE Copper Pipe Signal Enhancer Application**

Copper pipes, although acceptable, are one of the more difficult of materials to work with. To overcome this... TWT has developed its Copper Pipe Signal Enhancer. This unit is placed between the Deposit Controller and the solenoid coil on the copper pipe as illustrated. The function of the signal enhancer is to provide a proper impedance match and to ensure maximum energy transfer between the controller and the solenoid, which, in turn, ensures enhanced treatment of the fluid.

Special Note: Copper pipe signal enhancers are to be used on copper pipes only.



The TWT® Deposit Control System will give many years of service if installed properly. Please read all instructions carefully (owners installation manual) before assembling the system. The unit is provided with a line cord. The cord should remain unplugged until the installation is complete. Mount the unit to a supporting structure using the base mounting flange, and case mounting kit supplied. Install two mounting feet to the top rear of controller case with screws supplied. Place one of the

mounting brackets on the top corner over the locating tab on each side of the unit, attach the brackets with screws provided. The two bottom mounting holes are located inside the controller in the terminal hookup area. You need to remove the front panel to locate the mounting holes at the bottom corners of the case. With the brackets in place you have a method to fasten all four corners of the controller to an appropriate surface.



### **TWT Deposit Control Unit**

The controller is supplied with a wiring kit and a strain relief connector for the solenoid coil wires. This strain relief will provide a water resistant seal for the two coil wires. You should rotate the compression ring counter clockwise to release pressure on the seal. Feed the two wires through the provided holes and tighten the compression ring. Connect the two wires to the coil terminals in the controller housing as illustrated (refer to winding instructions in owners installation manual). A standard installation will not require access to the main control circuit board, because all connections are available in the wiring terminal. The control circuit is accessed by removing the front panel of the TWT unit.

### Factory Wrapped Wire Coil Reaction Chambers Application

- To address magnetic pipe applications
- When a protected environment (code) is needed
- When on-site solenoid wrap is not applicable

The TWT Reaction Chamber is part of the patented TWT Deposit Control Technology. The Reaction Chamber provides a chamber through which the water flows and is exposed to the triangular wave signal that lies at the heart of the deposit control technology. As the fluid passes through, it is treated and then carries that treatment downstream, to condition the rest of the plumbing system, non-chemically and reliably.

When you have purchased a reaction chamber with cable and connecters with your controller unit, the correct strain relief connecter for the controller is furnished with the cable for the reaction chamber. The strain relief connecter on the controller (pipe solenoid) should be removed and replaced with the strain relief connecter provided with the reaction chamber cable. The two wires should be connected to the coil terminals in the controller housing as illustrated above.



Schematic rendering of reaction chamber hookup using wiring kit provided

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reaction chamber hookup