AquiTron | AT-MPT

Mapping Procedures

INSTALLATION INSTRUCTIONS

aquilar

leak detection solutions

AT-MPT
Mapping Proceducres

Please read these instructions carefully and keep them in a safe place (preferably close to the module) for future reference. These instructions must be followed carefully to ensure proper operation.

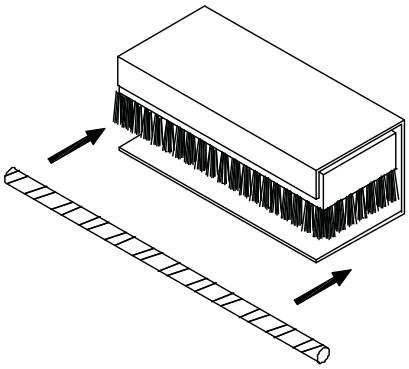
A. GENERAL INFORMATION

Mapping a TraceTek Leak Detection System provides a cross-reference between cable distances (in feet or meters) and physical references in the building or pipe system. A system map is a necessary component of all but the smallest TraceTek systems.

B. GENERAL PROCEDURE

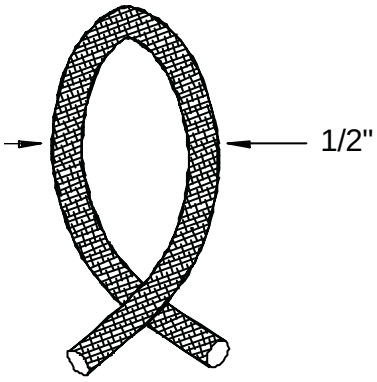
1. Start with a working copy of the floor plan of the building or drawing of the pipe layout that showswhere the sensor cable has been installed. A simple system may have only one sensor circuit, a more complex installation may have multiple individual circuits.
2. Choose any circuit and locate the portion of the circuit closest to the monitoring instrument.
3. Simulate a leak using one of two methods:

MAPPING BRUSH



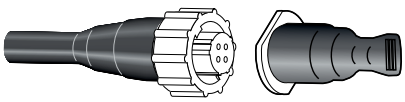
For TT1000 or TT3000, it is strongly recommended to use a mapping brush. Slip the brush onto the sensor cable and leave in place for at least ten (10) seconds. A damp cloth can also be used, it is important ensure the cable is dry at each mapping point prior to moving on to the next to prevent false readings and/service alarms. Do not use tissue as this may leave damp residue on the sensing cable.

BENDING



The mapping process for TT5000 and TT5001 is similar to the above process except that a leak can be simulated by bending the sensor cable in a tight radius as shown. Remember to hold the “leak” for at least ten (10) seconds. Do not use hydrocarbons to test/map TT5000 as this cable is single use, please refer to the relevant datasheet for further information.

MAPPING CAP



TT1100-OHP testing can be done with a mapping cap (TTMAPPING CAP-PC) at the end of each length of sensing cable.

For larger TT1100-OHP systems, the MAPPING CAP should be moved sequentially to each accessible connector. The mapping

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AT-MPT
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cap simulates a leak at the location where it is inserted into the system. At the alarm panel note the distance being reported for the "leak" location. Record this distance on the working copy of the system drawing. After the leak location is recorded on the system drawing, move on to a location further along the system and repeat the process. Mapping tags and distance readings are required every 4/5 metres. Choose locations at the corners of the room, in front of air handlers, at structural columns or other "land marks" that are unlikely to change even if the equipment in the building is rearranged in the future. Remember, that if a real leak is detected, the operator will use the "system map" to find the physical leak location based on the leak location distance reported at the alarm panel.

4. Repeat the processes above for every sensor circuit in the system.

C. TWO PERSON MAPPING OR ONE PERSON MAPPING.

If two people are available, obtain a set of low power two way radios and position one person at the alarm panel. The second person walks the floor with the layout drawing in hand. By co-ordinating efforts over the "walkie-talkies" the panel observer can report the leak location to the floor walker as each subsequent location is mapped. The floor operator can then immediately record the distance on the layout drawing and move on to the next mapping location.

If the TraceTek system is managed by a TTDM-128 alarm panel, then it is quite easy for a single operator to efficiently obtain mapping data. Here's how:

- First, synchronize the time of day on the TTDM panel with the operators wrist watch.
- At the TTDM-128 alarm panel, temporarily set the Auto Reset Function to ON. (Menu | Leak Set-up | Auto Reset | ON).
- Proceed along the cable layout simulating leak conditions with the mapping brush (TT1000, TT3000), by bending the cable (TT5000, TT5001) or use of a mapping cap (TT1100-OHP). Instead of noting the leak location on the working drawing, mark down the time that each location was mapped. (Try to wait about two minutes between mapping locations to reduce ambiguity).
- When all of the appropriate locations have been mapped with the "time", return to the TTDM Alarm Panel and take a look at the event history (Menu | Event History). By stepping back through the recorded events (use the down arrow) , your will be able to see the leak location generated and the time that each leak was detected. Transcribe the leak locations to the layout drawing using the time of event as the key.
- Remember to return Auto Reset to OFF

D. PREPARING THE FINAL MAP

Finished maps are typically prepared using AutoCAD and are a simplified floor plan or pipe diagramshowing the basic physical feature of the building or system, the approximate location of the installed sensor cable, the alarm panel location(s) and the location readings obtained during the mapping process. These are recommended every 4/5 metres. Use colours if possible. All cable connector locations should be marked to make future cable replacement easier. The intent is to provide a future operator with enough information to find a leak based on the location information displayed on the alarm panel. Detail should be sufficient to quickly and unambiguously find the spill, without too much detail to clutter the finished product. Printed maps are often laminated or framed and hung on the wall next to the alarm panel. When more elaborate building control systems are available, the map is often imported into the graphic user interface for easy on-line access when needed.

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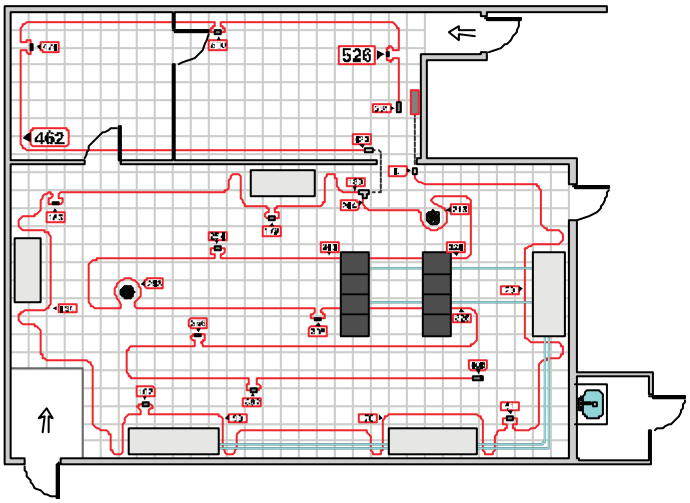
E. SAMPLE MAP



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