

## 2 YEAR LIMITED WARRANTY

The SME LD20D Leak Tracker is warranted to be free from defects in material and workmanship under normal use for 2 year from date of purchase. In the event of a malfunction or failure of this product during this period, the purchaser should properly package the entire unit and return it to the place of purchase with proof of purchase, which includes date of purchase (for example, a receipt or sales slip) SME Limited will replace the unit free of charge.

This warranty is limited to the original retail purchaser and is not transferable. The warranty does not cover damage due to accidents, abuse, tampering, normal wear and tear, freezing water or misuse, nor does it cover damage resulting from service by unauthorized personnel. Any indication that the unit has been tampered with will void the product warranty.

**LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT. SME SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE, WHETHER DIRECT OR INDIRECT. THIS WARRANTY IS EXPRESSLY GRANTED IN LIEU OF ALL OTHER WARRANTIES EXCEPT IMPLIED WARRANTIES. ALL IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO: THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE PERIOD OF THIS EXPRESS WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This Warranty gives you specific rights and you may also have other rights, which vary, from state to state.

In the event you have any questions concerning the use and care of your SME product or concerning service under this warranty or otherwise, please write to:

SME Limited, 2850 North Pulaski, Chicago, IL, 60641



# LD20-D LEAK TRACKER

## Directions for Installation

(Please read carefully before starting the Installation)

Before attempting to install the LD20-D Leak Tracker read through this installation guide and decide if you are prepared to complete the project with the knowledge and equipment you have, or whether you need to get help from a professional plumber. Also, that your water supply is within the LD20-D Leak Trackers specification range.

The installation must comply with Federal, State and local building codes, please contact your local Building Inspector prior to starting the project.



FCC ID : SSULD20D100  
FCC ID: SSULD20D200

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) this device may not cause harmful interference, and  
(2) this device must accept any interference received, including interference that may cause undesired operation.

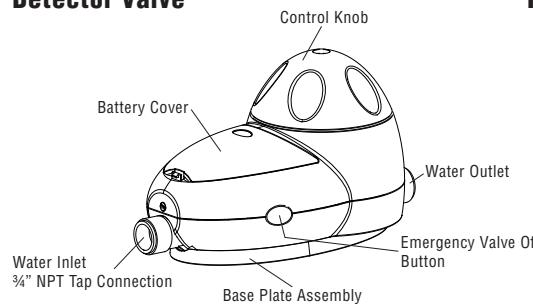


**PLEASE LEAVE THIS DOCUMENT WITH THE HOME OWNER**

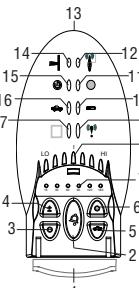
## SECTION 1-Planning the Installation

The SME LD20-D Leak Tracker system has two basic components, an intelligent Detector Valve and a Remote Controller. For maximum protection the Detector Valve must be installed in the cold water riser as close as practical to the point where the riser enters the property after the water meter and main shut off valve but before any branch line, in this way all water runs and point of use outlets within the property will be monitored. The Leak Tracker Detector Valve must not be installed in the hot water branch line.

### Detector Valve



### Remote Controller



If your home is fitted with any of the following they must be considered in the installation:

**Sprinkler System** - If the cold water riser supplies a fire sprinkler system in the property the Leak Tracker Detector Valve must be installed after this branch.

**Water Softener** - If a water softener is installed in your home water can flow depending on the make and model for up to 60 minutes during the regeneration process. The Leak Tracker will consider this regeneration flow as a normal condition and will set its-self accordingly if the auto set-up feature is used. This means that whilst the "real" water use in a property may only be for a maximum of 15 minutes at any time the Leak Tracker will operate on a reduced sensitivity based on the water softener requirements rather than the "real" flow pattern for the home. This "unreal flow" can be eliminated by installing the Leak Tracker after the water softener.

**Irrigation System** - Lawn and general irrigation systems present the same problem as water softeners and we recommend that the irrigation branch run is taken off before the Leak Tracker

**Climatic Conditions** - Both the Leak Tracker Detector Valve and the Remote Controller must be installed in an area that is protected from freezing temperatures, rain, snow and direct sunlight.

**Old Steel Systems** - If the Leak Tracker Detector Valve is to be fitted into an old galvanized iron system or if debris is likely to be a problem in the system a Y-type filter of the appropriate size should be installed before the Detector Valve in the riser. Valves will be required either side of the Y-type filter to allow the filter element to be periodically cleaned.

Depending on the specification of the plumbing system in your home (copper, galvanized iron, CPVC or PB) fittings will need to be purchased to fit the Leak Tracker Detector Valve into the existing pipe-work; fittings are readily available through your local plumbing supply store. If you are unsure or have galvanized iron or PB pipe work we would advise that you contact a professional plumber.

As the Detector Valve is battery operated (4 x AA cells: 1.5V not supplied) there is no restriction as to where it can be installed relative to available power outlets.

Should the optional power pack be specified the Detector Valve must be installed within 6 feet of a 110-volt alternating current wall mounted (not ceiling mounted) power outlet. Do not use a trailing lead if a power outlet is not within 6 feet of the Detector Valve you must have one installed by a professional electrician in compliance with building codes.

As the Remote Controller "talks to" the Detector Valve by radio frequency (RF) the Remote Controller may be plugged in to any wall mounted (kitchen, hall, diner) 110-volt alternating current power outlet within the living area of your home that is no more 100ft in a straight line from the Detector Valve.

Under certain circumstances the type of building materials used in your home may block the RF signal in a specific location, if a signal cannot be received move the Remote Controller to a new location.

## Both Detector Valve and the Optional Power Pack must only be used in wall mounted 110 Volt alternating current power outlets.

The Detector Valve and the Remote Control are factory registered to each other in the same way as are cordless telephones and will only work together; serial numbers are affixed to both parts for identification should the parts become mixed.

**Note:** Before you start the installation ensure that you have all the fittings and expertise to complete the project as once started the water to your home will be shut-off until the project is completed. If you are uncertain about any aspect of the installation you may wish to hire a professional plumber to undertake the installation of your Leak Tracker Detector Valve.

### Content of Packaging

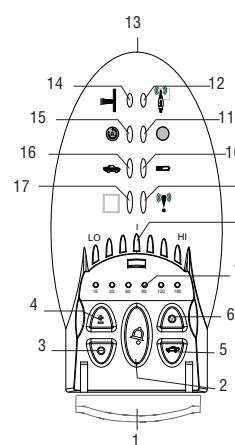
Please check the contents of your Leak Tracker LD20-D package as soon after purchase as possible.

#### Pack Content:

- 1 – Detector Valve with mounting screws
- 1 – Remote Controller
- Installation Guide
- User Guide
- Warranty Statement
- Registration Card

## SECTION 2-Know your LD20D Leak Tracker

### REMOTE CONTROLLER



**1. Protective Button Cover Flap.** To ensure no accidental control inputs can be made to the system keep the protective flap closed during normal use.

**2. Valve Close Button.** Use of this control will shut off the incoming water supply. The valve must then be manually reset.

**To ensure reliable service the valve must be tested once every month by pressing this button. Failure to do this will invalidate the Guarantee**

**3. Manual / Auto Selector.** When pressed, this button will alternately select either manual or auto modes. The selected mode will be indicated by an illuminated LED 15 or 11.

**4. Manual Time Adjust.** (Use in manual mode only) Pressing this button repeatedly will select the desired water flow time on the time display (7). This time is the time that water is allowed to flow continuously before the alarm is sounded indicating a problem. The valve closes after a further 10 minutes if the reset button is not pressed cancelling the alarm. If during this manual mode no flow occurs for 12 hr, the flow control time will automatically set to the minimum time setting of 15 minutes. The initial setting is then restored following the first usage of water.

**5. Away Mode Selector.** This mode should be selected if the property is to be left unoccupied for longer than 24 hrs. In the event of any abnormal flow or leak the water supply is closed after a period of 10 minutes on flows below 10 l/hour or 2 minutes where the water flow is high, i.e. in the event of a significant leak or a burst pipe.

**6. Reset.** The Reset button is used to cancel an alarm signal or for cancelling any incorrect user input.

**7. Manual Time Display. (15 - 180 minutes)** Displays the time setting when the manual control function is selected or the unit has auto set.

**8. Economiser Water Use Gage.** This function requires the unit to have been set in the Auto Set Up mode on commissioning or at a later stage. Normally the gauge will show at least two lights in either Auto or Manual modes, the centre (amber) light is the average daily water use computed at Auto Set up, the second light shows whether the previous days water usage was great or lower than the average daily use pattern recorded at the time of set up. It is recommended that Auto Set Up facility is used to recalibrate the economiser base data if water usage patterns change due to seasonal effects such as irrigation systems, swimming pool filling or change of occupancy patterns etc.

**9. RF Signal Strength Warning.** If this light illuminates this indicates that the Controller is not in contact with the valve normally this can be corrected by moving the valve closer to the valve. Press reset (6) to cancel the light move the controller and repeat set-up procedure.

**10. Battery Low Warning.** Is illuminated when the valve batteries are expired or when the (optional) wet sensor battery is low. Individual inspection and replacement of batteries will be required. If this warning is ignored the unit will shut off the water.

**11. Manual Mode.** Lit when the manual control mode is selected.

**12. Wet Sensor Alarm.** Lit when water has been turned off by a wet sensor signal (the wet sensor is an option).

**13. Audio Alarm Beeper.**

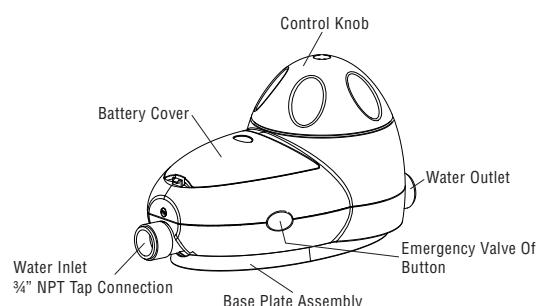
**14. Leak Detection Warning.** Is illuminated when a leak or abnormal flow has been detected.

**15. Auto Mode.** Lit when the Auto mode is selected.

**16. Away Mode.** Lit when the Away mode is selected.

**17. Plumber Mode.** When a small leak has been detected such as a toilet overflow and a plumber is not immediately available to rectify the problem, press and hold the Reset (6) button until 2 audible "beeps" are heard then immediately press the Away button (5) and release. This plumber mode will remain active for 4 days; thereafter the system will revert to the previous setting. This mode can be cancelled by pressing the Reset button (6) at any time. **Note: Water leaks above 9 l/m will alarm as normal in this setting.**

## DETECTOR VALVE



**1. Valve Charging Knob.** This Control is used to "Recharge" the valve after it has closed. To achieve this carefully rotate the knob clockwise 90 degrees from the off position until it stops (this point is indicated on the body). Carefully release the knob and it will remain in position.

**2. Valve Test Button.** This is a factory 'Test Button' and should not be operated as it will immediately result in the shutting off of the incoming water supply. The valve must then be manually reset as described in (1) above.

**3. Battery Cover.** To remove the battery covers gently press the clip in the direction of the arrow and then pull upwards. The batteries require careful insertion to ensure the correct polarity and connection. Only use prime quality AA batteries and always replace a complete set of cells. Take extreme care in the use and disposal of batteries as there is a risk of fire or explosion if cells are not handled or disposed of correctly.

**ONCE THE SYSTEM HAS BEEN SET THE CONTROLLER CAN BE UNPLUGGED AND RELOCATED TO ANOTHER SOCKET PROVIDED THIS IS WITHIN RF RANGE WITHOUT LOSING THE SYSTEM SETTINGS OR COMPROMISING THE PROTECTION.**

## SECTION 3 Tools & Materials required to install the Detector Valve to the Water Riser.

First determine the material specification of your home plumbing system, copper, galvanized iron, CPVC or PB; if the system is galvanised iron or PB (polybutylene) we recommend that you contact a professional plumber to undertake the installation of your Leak Tracker Detector Valve.

### Copper Plumbing Systems

Tube Cutter  
Hacksaw  
Jump Wire and 2-Ground Clamps  
Tape Measure  
Power Drill  
Stone Bit \_ inches  
Screwdriver

### Solder Fittings:

Felt-tipped Pen  
Propane Torch  
Emery Cloth  
Self-cleaning Soldering Paste (flux)  
Lead-free Solder  
Wire Brush  
Flux Brush  
Solder Fittings – Straight Adaptor (1" solder x 3/4" NPT F / 3/4" solder 3/4" NPT F) may be called a tap connector.

### Compression Fittings:

Felt-tipped Pen  
Pipe Jointing Compound or PTFE Tape  
Adjustable Wrenches  
Compression Fittings – Threaded Adaptor (1" comp x 3/4" NPT F or 3/4" comp x 3/4" NPT F) may be called a tap connector

### CPVC Plumbing Systems

Hacksaw or Tube Cutter  
Tape Measure  
CPVC Plastic Cement  
CPVC Primer  
Felt-tipped Pen  
Emery Cloth  
Plastic Fitting

## SECTION 4-Pre Installation Radio Frequency (RF) range and performance checks

1. Determine the correct location for the Detector Valve; attention must be made at this stage to the considerations outlined in the "Planning the Installation" section of this guide. Ensure that both the Optional AC input port and Valve close off button are accessible.
2. Position the Detector Valve as close to this location ideally, on a bench, remove the battery cover and fit 4 x AA batteries (not supplied) ensuring the correct polarity; It is important that a good quality battery such as Duracell, Sony or Ever-Ready are used if the time between battery changes is to be optimised.
3. The Detector Valve is dispatched from the factory in an un-cocked state and needs to be cocked prior to testing. Rotate the valve Control Knob which is on the top of the valve body 90° clockwise to "cock" the valve; you will hear the unit click when the correct rotational position is reached. Do not rotate the Control Knob anti-clockwise in either the un-cocked or cocked position. This operation may be stiff the first time the Control Knob is turned as the valve assembly is coated with a small amount of a protective gel prior to leaving the factory, this gel is safe for use in domestic water installations (NSF approved) and will flush out quickly when the installation is commissioned following installation.
4. After fitting the batteries in the Detector Valve wait 1 minute and then place the Remote Controller in a convenient 110V AC socket close to the Detector Valve - switch on the power if a switched socket is used:
  - The Remote Controller will 'bleep' three times and the lights will flash
  - When this flashing stops only the manual setting light 15, centre light 8 and a time setting light 7 should be lit (steady no flashing) the units will now be in communication with each other.
  - Should the RF warning light on the Remote Controller be lit, press and release the reset button (6) the unit will then repeat its communication programme (this may take a few seconds during which period the RF warning light will flash).
  - To test the communications, press and release the manual water shut-off button (2) on the Remote Controller and the Detector Valve will close. There will be a delay of up to 30 seconds for the Detector Valve to close **THIS IS NORMAL**

Remove the Remote Controller from the socket and move it to the desired location in your home – leave the batteries in the detector valve.

Place the Remote Controller in a convenient socket in that location, switch on the power if a switched socket is used.

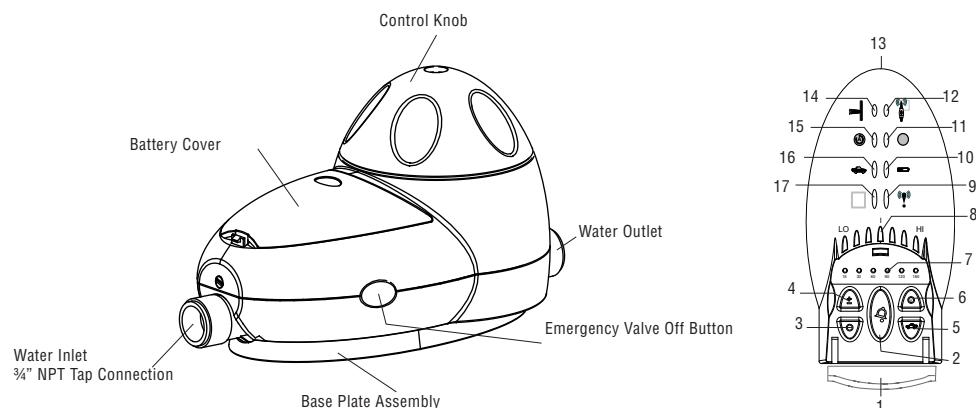
- The Remote Controller will 'bleep' three times and the lights will flash
- When this flashing stops only the manual setting light 15, centre light 8 and a time setting light 7 should be lit (steady no flashing) the units will now be in communication with each other.
- Should the RF warning light on the Remote Controller be lit, press and release the reset button (6) the unit will then repeat its communication programme (this may take a few seconds during which period the RF warning light will flash).
- Should the RF warning light (9) not extinguish repeating the above procedure up to a maximum of 5 times should the RF light still fail to extinguish this indicates that the RF as at its limit due to distance or materials of construction or a combination of both, move the Remote Controller closer to the valve and test again.

**Note:** As a final check before moving the Remote Controller the Remote Controller power should be switched off and a battery removed from the Detector Valve. After 60 seconds replace the battery in the Detector Valve wait 2 minutes and switch on the power to the Remote Controller, this resets the RF system. Should the RF light still not extinguish the units must be moved closer together.

The RF communication between the remote controller and detector valve can take several seconds between pressing a command button and the programming of the Detector Valve. The central light on the Economiser on the controller will flash intermittently during this period, do not press any buttons while this occurs. Should a control input fail, press the reset button and repeat the original command.

**Do not attempt further installation until this test is successful.**

## SECTION 5-Installing the Leak Tracker System



### Detector Valve Fitting Installation (See visual Set-up Assistant)

1. Remove the batteries from the Detector Valve, cock the valve and then carefully separate the Detector Valve assembly into 2 parts: the upper valve and lower baseplate. To achieve this loosen and remove the 2 posi-drive screws located on either side of the unit under the battery cover. This is best done on a flat surface so as not to drop either part. There is no danger from the cocked valve.
2. Dry fit the transition fittings to the Detector Valve base plate.
3. Measure the total length of the Detector Valve and transition fittings taking into consideration any fitting sockets. Mark on the pipe to be cut, the section to be removed to accommodate the Detector Valve and transition fittings.
4. Ensure the water supply is closed off at the main shutoff valve.
5. Drain down the system, ensure that the drain down point is below the point to be cut and that the main shutoff valve is working. With the system fully drained some water will still leak out when the first cut is made in the pipe therefore have a bowl or bucket handy to catch this.
6. Make the first cut through the pipe work at the bottom mark on the length to be removed using the appropriate tool for the material of the pipe.
7. Recheck the length to be removed by holding the Detector Valve and transition fittings (loose assembled) next to the pipe.
8. Make the second through cut and remove the section of pipe.
9. Remove any burrs around the two pipe ends as necessary using emery cloth – ensure no debris falls into the pipe, protect when de-burring.

### CPVC Pipe Work

1. Fit the appropriate transition fittings to the Detector Valve baseplate 3/4 inch male thread using PTFE/Teflon tape or pipe jointing compound to ensure a seal on the thread 'do not over apply the jointing compound' only apply as the manufacturers instructions. At this point the base plate is ready to be fitted to the pipe work.
 

3/4 inch Female Adaptor	For 3/4 inch CPVC pipe
1 inch Female Adaptor	For 1 inch CPVC pipe
2. Using the baseplate as a template mark the position on the wall where the baseplate securing screws are to be fitted. Remove the baseplate and drill and fix the plugs in position.
- Caution: ensure that there is no power or water supplies running behind where you are to drill.**
3. Fit the Detector Valve and transition fittings to the pipe work using the CPVC primer and cement as the manufacturers instructions on the product.
- IMPORTANT: ensure that the direction of water flow as marked on the base plate is the same as that in the pipe work before finally fixing.**
4. Leave the cement for at least 1 hour to cure fully.
5. Secure the base plate using the plugged holes and screws provided.

- Turn on the water supply using the main shut-off valve. As the valve was cocked prior to installation the valve will be open allowing the system to be vented.
- If no leaks are present carefully refit the valve upper assembly to the baseplate ensuring the correct engagement of the valve drive spigot into its socket; these are color marked yellow. Do not over tighten the securing screws.
- Replace the batteries in the Detector Valve and replace the battery cover.

#### **Copper Pipe Work (See Detector Valve Illustrated Installation Assistant)**

- Fit the appropriate half of the transition fittings to the Detector Valve baseplate \_ inch male thread using PTFE/Teflon tape or pipe jointing compound to ensure a seal on the thread 'do not over apply the jointing compound' only apply as the manufacturers instructions. At this point the base plate is ready to be fitted to the pipe work.

¾ inch Female Adaptor	For ¾ inch copper pipe
1 inch Female Adaptor	For 1 inch copper pipe

- Using the baseplate as a template mark the position on the wall where the baseplate securing screws are to be fitted. Remove the baseplate and drill and fix the plugs in position.

**Caution:** ensure there is no power or water supplies running behind where you are to drill.

- Fit the remaining parts of the transition fittings to the pipe work using either solder or compression as specified. If solder joints are to be used ensure that any combustible materials are protected from the heat also that no heat is applied to the base plate.

**IMPORTANT: ensure that the direction of water flow as marked on the base plate is the same as that in the pipe work before finally fixing.**

- Fit the base plate to the pipe work and connect the two parts of the transition fittings using joint compound.

- Secure the base plate using the plugged holes and screws provided.

- Turn on the water supply using the main shut-off valve. As the valve was cocked prior to installation the valve will be open allowing the system to be vented.

- If no leaks are present carefully refit the valve upper assembly to the baseplate ensuring the correct engagement of the valve drive spigot into its socket; these are color marked yellow. Do not over tighten the securing screws.

- Replace the batteries in the Detector Valve and replace the battery cover.

#### **SECTION 6-Setting Your Leak Detector**

##### **Flow Test Mode. (See Remote Controller Illustrated Set-Up Assistant)**

To check your LD20-D Leak Detector is correctly detecting water; determine that batteries have been fitted to the Detector Valve if not fit, wait 2 minutes and locate the Remote Controller in the desired power socket (as identified in the planning section of this guide) switch on the power if a switched outlet is to be used, wait a minute for the units to settle, check the RF light is extinguished.

- Press and hold the Reset button (6) until 2 "beeps" are heard, release, immediately press and release the time adjust button (4) one bleep will be heard – all lights will extinguish.

- Slowly open a faucet and the Green light adjacent to the Lo marking on the economiser will illuminate indicating Low flow.

- Open a number of faucets, the flow will need to be in excess of 2 gallons per minute, and the Red light adjacent Hi marking will illuminate indicating High flows.

- When no water is flowing in the system, neither light should be illuminated. If a light is illuminated, close the Waterminder valve by pressing and releasing the manual water shut-off button on the Remote Controller, the light will extinguish. This indicates a pre installation leak in the system. Repair this leak before setting up the economiser.

- Exit the flow test mode by pressing and releasing the re-set button 6, one bleep will be heard.

##### **Auto Economiser Set Up (See Remote Controller Illustrated Set-up Assistant)**

This mode computes the best protection flow/time settings for an occupied property and collects your water usage data for the 'economiser' function and stores the data in its memory. To automatically set up your system;

- Press and hold down the manual/auto button (3) for 5 seconds, until the economiser lights (8) flash up and down continuously, release the button.

- The lights will flash up and down for 48 hours whilst it is recording your homes water usage pattern.

- At the end of the 48 hour period the unit will indicate and automatically set to the ideal setting for your home. This will be indicated by:

- The auto light being illuminated
- The central light on the economiser being illuminated (yellow light)
- The ideal time setting being illuminated

During this 48 hour learning period only flows exceeding 180 minutes duration will trigger an alarm.

**It is important that no control inputs are made to the controller or valve during this set up period and that you use water wisely to provide a low water use benchmark.**

##### **Away Setting (See Remote Controller Illustrated Set-up Assistant)**

This mode should be selected if the property is to be left unoccupied for longer than 24 hrs. In the event of any abnormal flow or leak the water supply is closed after a period of 10 minutes on flows below 3 gallons /hour or 2 minutes where the water flow is high, i.e. in the event of a significant leak or a burst pipe.

- Test the valve by pressing the central valve close button (2)
- Re-charge the valve
- Press and release the Away button (5).
- The central light on the Economiser display will flash as the valve is setting to the away mode.
- On returning to the property press and release the Away button (5) and the unit will return to its original setting

##### **Plumber Setting**

When a small leak has been detected such as a toilet overflow and a plumber is not immediately available to rectify the problem this setting allows the property to have water whilst still providing a high degree of protection.

- Press and hold the Reset (6) button until 2 audible "beeps" are heard then immediately press the Away button (5) and release.
- This plumber setting will remain active for 4 days; thereafter the system will revert to the previous setting. This setting can be cancelled by pressing the Reset button (6) at any time.

**Note:** Water leaks above 2 gallons/minute will alarm as normal in this setting.

## **IMPORTANT NOTICE**

**IF THE BATTERIES ARE REMOVED FROM THE DETECTOR VALVE, THE DETECTOR VALVE WILL NOT OPERATE AND THE LEAK TRACKER WILL NOT PROVIDE PROTECTION TO THE PROPERTY.**

**IF THE OPTIONAL TRANSFORMER IS USED IT IS STILL RECOMMENDED THAT BATTERIES ARE INSTALLED TO COVER FOR THE POSSIBILITY OF POWER FAILURE.**

**WHEN REPLACING BATTERIES ALWAYS REMOVE THE OLD BATTERIES AND REPLACE WITH THE NEW BATTERIES AT THE SAME TIME.**

## SECTION 7-Security System Connections

The LD20D Leak Tracker may be connected into your home security system, a professional alarm engineer should carry out this work as it could invalidate your home insurance if you undertake this.

The Leak Tracker can be installed across any free Zone on the alarm. The Leak Tracker does not require to be powered from the Alarm System as it acts as a closed/open switch.

An optional connector can be purchased through your Leak Tracker Distributor that fits directly into the AC power input port. This adaptor allows the Leak Tracker to operate with both the AC transformer and the Alarm-out together.

Should you require further information on this please feature please write to:

SME Limited, 2850 North Pulaski, Chicago, IL, 60641

## SECTION 8-Fault Finding

PROBLEMS	POSSIBLE CAUSE	SOLUTION
<b>RF light on remote controller will not extinguish during pre-installation set-up</b>		
	Batteries not installed in Detector Valve	Remove controller from power point, fit batteries to valve wait 2 minutes and replace controller in power point.
	Controller too far from valve should be no more than 100 feet but wall or floor construction materials may reduce this distance	Move controller closer to valve
	Controller may have been powered up to quickly after the batteries have been fitted to valve.	Remove batteries from valve and remove the controller from power point. Wait 5 minutes, replace batteries, wait 2 minutes and re-place controller in power point. The units should connect.
	Controller and valve must be no closer than 3 feet during initial set-up.	Separate controller and valve if to close
	Units may not have connected immediately.	Press the re-set button, when trying to connect the central yellow light will flash. Repeat this for a maximum of 5 times. If this fails remove batteries from valve and remove the controller from power point. Wait 5 minutes, replace batteries, wait 2 minutes and re-place controller in power point. The units should connect

**Note: there is a delay in communications between the valve and the controller.**

PROBLEMS	POSSIBLE CAUSE	SOLUTION
<b>Leak Tracker will not set during pre-installation set-up</b>		
	Is there any running or leaking Faucets in the property?	Close any open faucets or repair any leaks before attempting to set the Leak Detector
	Are there any constant running toilets? (leaking dump valve)	Repair any leaking dump valves before attempting to set the Leak Detector
	Is there any water flowing in the property – irrigation systems, water softener or hose?	Repair before attempting to set the Leak Detector the Leak Detector
	If no flowing water or leak can be found, close the valve	If a flow is still indicated there is a fault with the unit.
<b>Leak Tracker continually cuts off water</b>		
	Check for leaks	Repair
	Check that if the auto set-up mode has been used it has taken consideration of any irrigation or water softener system times.	Set to manual or re-programme the auto set-up ensuring that such devices are operational during the 48 hour set-up period the
	Check that the valve top is securely and correctly positioned on the base plate	Correct position and secure
<b>RF Light comes on</b>		
	Controller has been moved to far from the valve	Reposition controller closer and press re-set button
	On battery replacement the electronics requires re-setting. This will not be a problem if the controller has been left powered up during the battery replacement exercise	Remove batteries from valve and remove the controller from power point. Wait 5 minutes, replace batteries, wait 2 minutes and re-place controller in power point. The units should connect immediately, should connection not occur press the re-set button.
<b>Remote Controller warns out every 4 hours</b>		
	Batteries have been removed from detector valve	Remove controller from power point. Replace batteries in valve, wait 2 minutes and replace the controller in power point. The units should connect immediately, should connection not occur press the re-set button.

**Note: there is a delay in communications between the valve and the controller.**