

VISUAL INSTRUCTION  
ULTRAPROBE 10,000SD  
Leak Detection



# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## FUNDAMENTALS



**Leak Detection** is for **Waste Identification** and **Energy Conservation**. Using the Ultraprobe 10,000SD with the **Scanning Module** (SCM) with the **Rubber Focusing Probe** and/or the **Long Range Module** (LRM) Can Support Identification, Quantification, and **Organized Repair**.



The **Four Main Reasons** why Leak Detection is an Invaluable Asset to Facilities:

- Safety
- Economics
- Environmental Impact
- Quality Control

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



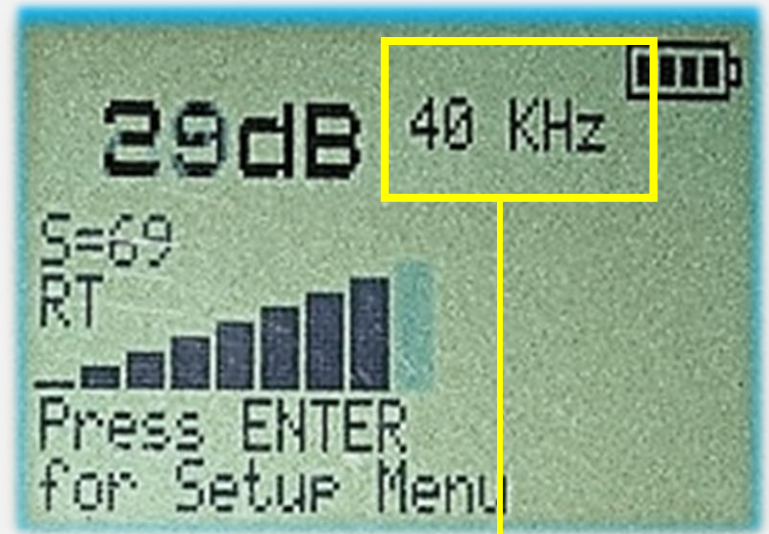
Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## INITIAL SETUP



To Power On the Ultraprobe 10,000SD, **Pull and Hold** the Instrument **Trigger**. Keep Trigger Pulled for Instrument to Remain **ON**. The Unit Will Power On in the **Main Display**.



The **Ultraprobe 10,000** Will **Power On** Displaying the Main Display View, Centered at **40 kHz** with **Sensitivity** at 70 (Maximum). (Unless Previously Changed)

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## INITIAL SETUP



To Set Up the UltraProbe 10,000SD for **Leak Detection**, Center the Frequency to **40 kHz** Using the Sensitivity Dial. “Click” Dial Until “KHZ” is Flashing, Then Spin to the Desired Frequency.

Once **40 kHz** is Reached, Click the **Sensitivity Dial** Again to Set that Frequency.



Then Insert the **Scanning Module (SCM)** or **Long Range Module (LRM)** into the **Module Port**. Modules are Removed by Pulling Module Straight Out of Port Without Twisting.

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## LONG RANGE MODULE



The **Long Range Module** is Recommended When Scanning at Long Distances. Increasing Safety By **Doubling** the Scanning Distance Capacity. Assess **Inspection Environment** Prior to **Module Selection**.



With a **Ten (10) Degree Field of Reception**, the **LRM** is Ideal for Detecting and Confirming Leak Source Locations at a Distance. The **LRM** is **NOT** Used to **Quantify** Leak Values.



**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

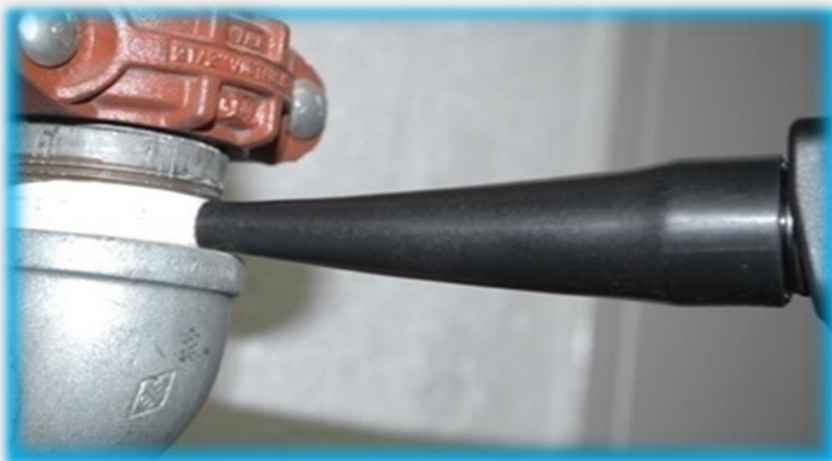
## SCANNING PROCEDURE



With the UltraProbe 10,000SD Set at **40 kHz** and the **Scanning Module** Inserted. Scan Designated Area with Even Up/Down and Side-To-Side Motions. **Listening for Rushing Air** (Leak).



Once a Leak is Heard, Locate it's Source By Using the **Gross - to - Fine Method**. A Systematic, Step by Step Method to Help **Identify** and **Locate** the Source of Leaks.



**SAFETY: WRIST STRAP WORN ALL TIMES**



# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## GROSS TO FINE METHOD



- Start With Sensitivity At **Maximum**.
- When Detected, Move Toward Leak.
- **Lower Sensitivity** And Continue Scanning.
- When Location Is Identified, Deploy **Rubber Focusing Probe**.
- **Pinpoint And Isolate** Location To Confirm Leak Source.
- Back Up **15" (38.1cm)** And Save Decibel Value For **Quantification**.

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



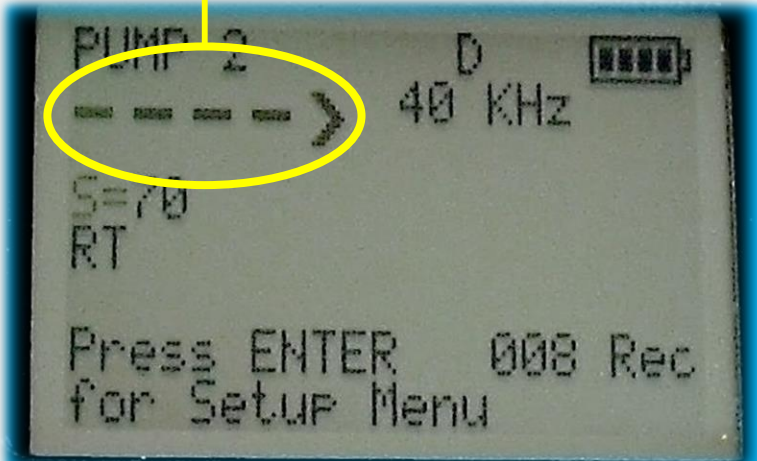
Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## SCANNING PROCEDURE



When Optimizing the **Sensitivity**, **Arrow Indicators** Alert Inspectors as to Which Direction to Spin the Sensitivity Dial. A **RIGHT** Arrow Indicates the Sensitivity is **Too Low** and the Dial Must Be Turned to the Right to Obtain a Decibel (dB). A **LEFT** Arrow Indicates the Sensitivity is **Too High**.



When the **Sensitivity** is Optimized a **Decibel (dB)** Will Populates on the Display, Ready to Be **Stored** and Permanently **Saved**.

**SAFETY: WRIST STRAP WORN ALL TIMES**



# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## SCANNING PROCEDURE



The **Factory Settings** of The **UltraProbe 10,000SD** Allow Inspectors to Name Each Test Point Within Each Route. To Turn This Function **OFF** And Allow For a “Quick Store” Function, Enter The Setup Menu, “**Text Editor Select**”.



To Enter the **Setup Menu** Options, Power On The Ultraprobe 10,000SD. Navigate to the Function Bar, “**Setup Menu**”, Then Press **ENTER**. Then Spin the Sensitivity Dial to Menu #10, **Text Editor Select**. Click the Dial to Enter the Menu, Spin to the Desired Selection, Then Click to Save. The **DMS Software** Allows For **Route Building**.

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## SAVING DATA



Using the **Gross To Fine Method**, Once a Leak Source is Identified, Saving the Decibel Value is Accomplished By Selecting **STORE Record** Within the **Function Bar**. Then Pressing the **ENTER** Button.



**NOTE:** For Full Detailed Instructions on Storing Record Data, See Visual Instruction: [Storing Record Information](#)

Save To Record 004?  
Turn SENS.: Change  
Press SENS.: EXIT

Press ENTER to  
STORE

STORE  
RECORD  
CONFIRMED



Once **ENTER** Button is Pressed, the Display Will Indicate the Data Point In Which the Information Will Be Stored To. Press the **ENTER** Button Again to Permanently Save the Data. A **Confirmation Prompt** Will Indicate Proper Data Saving.

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



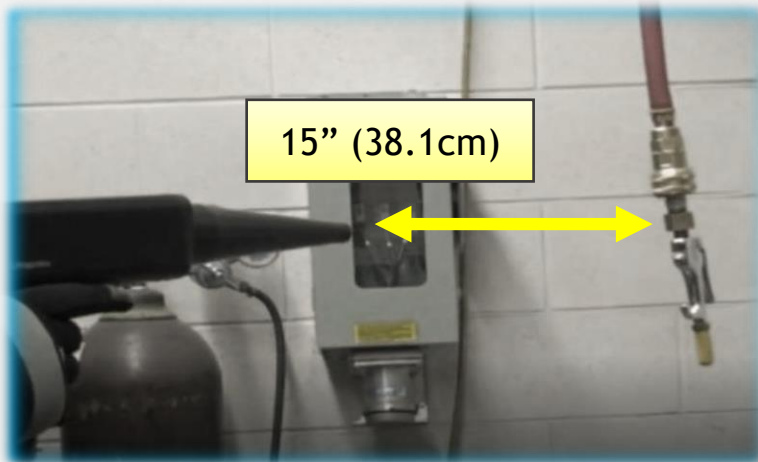
Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## LEAK QUANTIFICATION



In Order To **Quantify** a Leaks **Decibel** (dB) Value into a Monetary Value, **Proper Acquisition** and Storage is **Critical**. This Will Help to Avoid **Inaccurate** Results And Energy Savings.



Once a Leak Source is **Confirmed** and Isolated, Back Up the Ultraprobe Approx. **15 Inches** (38.1cm) From the Leak Using the **Tip of The Rubber Focusing Probe** for Measure. Then Press the **ENTER** Button to **Save the Decibel** (dB) Value.

**SAFETY: WRIST STRAP WORN ALL TIMES**

# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - Leak Detection: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## SUPPORTIVE SOFTWARE

The screenshot shows the Ultraprobe 10,000SD software interface. On the left, there is a tree view of inspection points under 'Hayes Street' and 'Compress. Room (8/8)'. The main area displays a 'Record Information' form with fields for Date/Time (9/25/2017 2:32:34 PM), Module Type (SCM), Frequency (40), Inspector ID, Mode (Real Time), Sensitivity (70), Meter Response (Fast), Offset (0), Alarm (122), Scale (Standard), Location / Machine (Relative), Point (UP3000), Instrument (Instrument), Serial Number, and a checkbox for 'Baseline?'. There is also a 'WAV File' field and a 'Record Path' field. A 'Test Result' section shows 'CHK' (Pressure) and 'ARGN' (Distance) with a '10 ft' scale.

Record Number	Group Name	Location Name	Type of Gas	Pressure at Leak	dB Reading	Problem Description	Repaired (Y/N)	Work Order Schedule #	Identified leaks Cost Avoidance	Size of Leak CFM	Energy Avoidance (kWh)
2	Grainger Robbinsville NJ	LABELING	Air	50	9	scaffolding crossing.			\$5.45	0.1	218
3	Grainger Robbinsville NJ	COMPROOM	Air	125	45	leak on the valve body meets the pipe.			\$141.89	3.3	567
4	Grainger Robbinsville NJ	LABELING	Air	50	21	the belts.			\$22.75	0.5	910
5	Grainger Robbinsville NJ	LABELING	Air	50	13	Solenoid between the belts at DVT 10 M7			\$10.13	0.2	408
6	Grainger Robbinsville NJ	LABELING	Air	10	11				\$2.51	0.1	101
8	Grainger Robbinsville NJ	LABELING	Air	100	18	Valve on the backside of the Conveyor			\$34.66	0.8	138
9	Grainger Robbinsville NJ	BRIDGE	Air	100	54	top the dB's on the picture.			\$161.42	3.7	643
10	Grainger Robbinsville NJ	BRIDGE	Air	100	27	on the right side regulator			\$61.15	1.4	244
11	Grainger Robbinsville NJ	MEZZANIE	Air	100	36	L1			\$91.49	2.1	360
12	Grainger Robbinsville NJ	MEZZANIE	Air	50	22	coulmn 19D at asset 0363-PS-OK			\$24.61	0.6	98
13	Grainger Robbinsville NJ	FLOOR	Air	50	50	Brake under the conveyor next to Column			\$98.28	2.3	393
14	Grainger Robbinsville NJ	FLOOR	Air	50	36	17D. 6 dB's added for Doubling the			\$56.48	1.3	223
15	Grainger Robbinsville NJ	FLOOR	Air	100	41				\$109.76	2.5	430
16	Grainger Robbinsville NJ	FLOOR	Air	125	30	blaster in the maintenance shop.			\$82.42	1.9	320
17	Grainger Robbinsville NJ	FLOOR	Air	100	17				\$31.99	0.7	128
18	Grainger Robbinsville NJ	FLOOR	Air	50	56	Regulator under the conveyor.			\$118.98	2.8	475
19	Grainger Robbinsville NJ	FLOOR	Air	100	56	dB's to the valve.			\$169.86	3.9	679
20	Grainger Robbinsville NJ	FLOOR	Air	50	42	Leaking from Regulator on the Syracuse			\$73.24	1.7	293
21	Grainger Robbinsville NJ	FLOOR	Air	50	41	Double the distance 1 time adds 6 dB's			\$70.33	1.6	281
22	Grainger Robbinsville NJ	FLOOR	Air	50	41	one time adds 6 dB's			\$43.89	1.0	170



The DMS Software Allows For Data Storage and Report Generation. Download the DMS Software From [UESystems.com](http://UESystems.com). Once Downloaded, Inspectors Can Create Routes For Designated Inspection Locations Maintaining Organization and Directly Supporting Repair.

**SAFETY: WRIST STRAP WORN ALL TIMES**

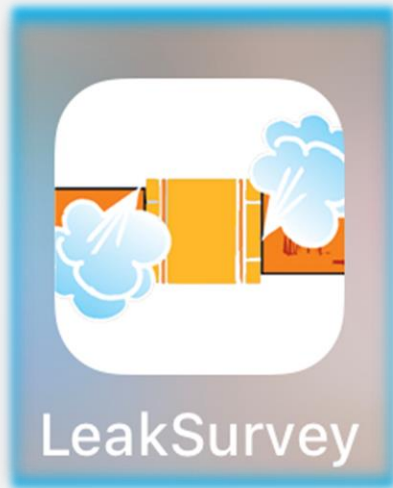
# 10,000SD LEAK DETECTION



Ultraprobe 10,000SD - **Leak Detection**: How To Guide

**NOTE:** UE DMS Software available for download at [www.uesystems.com](http://www.uesystems.com)

## LEAK SURVEY SMART PHONE APP



UE Systems Leak Survey

Rec#: 2

dB: Enter dB

Location: Enter location

Comments: Enter comments

Type of gas: Air

Pressure at leak: 100

Repaired: No

Picture:

Generate Report

Clear Data

About

Cancel

UE Systems Leak Survey

**Welcome to UE Systems Leak Management Tool**

This application is designed to be an assistant to all UE Systems digital Ultraprobes when doing leak surveys.

[Begin leak survey](#)

Show Welcome screen ☒



The **Leak Survey App** Allows For **Immediate** Leak Quantification and Report Generation. The App Communicates Directly With an Inspectors **Email** and Promotes Immediate Communication of Findings. The **Leak Survey App** Will Also Communicate With **Smart Phone Cameras** Allowing Photos Of Leak Sources to Be Incorporated into the Reporting Process.

**SAFETY: WRIST STRAP WORN ALL TIMES**