LiSENSE Safe Hands-On Cleaning
Part of the Intellijets Family

Hand tools equipped with surface-detecting sensors, so that the cleaning surface must be identified before high pressure water can be engaged.

Safety

- The water activation sequences in a triple-trigger series; both sensors must recognize the surface before hand trigger can engage high pressure water.
- If the sensors are moved too far from the surface, the high pressure water will instantly shut off to eliminate risk of injury!
- Electronic signal back to the tumble box to engage/disengage water is near instantaneous, far surpassing the speed of a pneumatic signal.
- Electronic components are IP67 Rated for industrial environments.

Convenience

- Compliments existing excavator-based products to create safer work environment.
- Use traditional tooling designs that end-users have been familiar with for years and greatly reduce learning curve.
- Have your tool fit in the back seat of your truck and not on a dedicated pull-along trailer.
- Runs off 24VDC from pump, eliminating need for external power source. Alternately, the AC-to-DC converter sits remote from work area and converts 110v power to 24VDC.
What's In It?

Includes:
- (1) Mounted Circuit Board Assembly
- (2) Proximity Sensors with Mount
- (1) Manual E-Stop Cable
- (2) 30ft 4-pole Male/Female Cables
- (1) LED Signal Box
- (1) 24VDC Convertor
- (1) RSV-60-E Electronic actuated bi-mode valve

Electronic Specifications:
- IP66/67 NEMA 4X Rated Power Supply
- IP67 Rated Proximity Sensors
- IP67 Rated Cables
- Sensor Material: Stainless Steel
- Operating Temperature: -25 - 158 °F
- Water Resistant: fully submersible to 290 PSI (20 bar)

Electric vs. Pneumatic

Pneumatic actuated components have been the staple of the waterjetting industry. However, an electric signal offers considerable benefits which would enhance the safety of the operator exponentially.

For example: In an ideal controlled setting*, the Performace Time for a pneumatic air signal to travel to dump high pressure water at a remote safety valve is 2.2 seconds for every 35 feet of hose. At those same settings, however, an electric signal Response Time would be 0.06 seconds. That is more than 30 times faster water dump!

*“Ideal Controlled Settings” would be specified at 70 °F (21 °C) with 100 PSI supply and 100% voltage. Times listed are nominal manufacturer times of valves tested.
How Does It Work?

When approaching the hazards of hands-on cleaning, the common solution of many is to go "hands-free". Instead of following suit, we embraced the traditional cleaning methods that the end-user is already comfortable with, and simply made it safer.

- **A** IP 67 rated quick-disconnect connection connects Sensor to Circuit Board
- **B** Shielded Inductive Proximity Sensor with Triple-Sensing face for extreme environments
- **C** Sensor Bracket allows for sensor protection stand-off adjustment
- **D** Brush Seal creates vacuum seal for debris containment
- **E** All circuitry is sealed in protective aluminum body to ensure performance
- **F** Red LED Light turns on if manual E-Stop is engaged
- **G** Green LED Light turns on when tool receives power
- **H** Yellow LED Light turns on when Left Sensor locates surface
- **I** Yellow LED Light turns on when Right Sensor locates surface
Proximity sensors were developed for the BASF chemical plants in 1958 as an alternative to a mechanical stop. With their robust build for the industrial world and their reliability for thousands of switching cycles, they have been the cornerstone for safety and production ever since. From airplanes to rollercoasters, thousands of people everyday can rely on these components with their lives. Now you can too.