

# Underwater Recovery Vehicle Application

## Cattron™ Application Note

### COMPANY

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The company specializes in the following services:

- Underwater Ship Repair
- Subsea Oil & Gas Inspection, Repair, and Maintenance
- Deep Ocean Search & Recovery
- Submarine Rescue
- Engineering Services

### CHALLENGE

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Eliminate the wiring required from their shipboard control room to a lifting winch used to raise and lower their Remote Operated Vehicle.

### SOLUTION

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The customer uses a tethered Remote Operated Vehicle. They were seeking a remote control for the winch to simplify the operation. The LCR-M1 Operator Control Unit was selected with the intent to use the LCD display to show Line Out and Speed. They wanted joysticks and buttons on the controller. With the controller, they were going to use the Flashbox to experiment with the talkback display.

The programming tool (standard with CattronControl systems) enabled the customer to customize the feedback messages they wanted to display to the operator. This provided them with the flexibility make changes quickly and easily if needed.

### CATTRON PRODUCTS

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CattronControl™ system with an LRC-M1 Operator Control Unit with two-way communication and an MMCU4 Machine Control Unit with Ethernet I/P serial communication.

Contact us via [cattron.com](http://cattron.com) or e-mail us at [Request.NA@cattron.com](mailto:Request.NA@cattron.com).



## TECHNICAL DETAILS

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Here is a list of functions provided:

Slew	Right/Left	8 Bits (Lever 1 - Horizontal)
Pay	In/Out	8 Bits (Lever 2 - Vertical)
Remote Control Reset	0 Outputs (Note 2)	
Levelwind Correct (3-Pos Mom Tog.)	Fwd/Rev	2 Bits
Lights (Pb Latched Output)		1 Bit
Zero Cable Count (Pb)		1 Bit
Spare (Pb)		1 Bit
Motor-Hydro Pump Start (Pb)		1 Bit
Motor-Hydro Pump Stop/Reset (Pb)		1 Bit
Stop Switch		

Status Led Panel & LCD Display With Feedback\*

\*Feedback Information:

- LCD Line 1: Cable Out: XXXX.X Meters (16 Bits)\* \*
- LCD Line 2: Cable Speed: XXX.X M/Min. (16 Bits)\* \*
- LCD Line 3: Cable Tension: XXXX.X Lbs (16 Bits)\* \*
- LCD Line 4: Hydraulic Press: XXXX Psi (16 Bits)\* \*
- LCD Line 5: 100 Messages of Alarm With 16 Characters Each (8 Bits)\* \*
- LCD Line 6: 100 Messages Of Alarm With 16 Characters Each (8 Bits)\* \*

(Tri-Color LEDs) — (Green/Orange/Red)

- Crane: OK/Warn/Alarm
- Motor: OK/Warn/Alarm
- Hydr: OK/Warn/Alarm
- Load: OK/Warn/Alarm
- LEDs to be mounted on the OCU faceplate

\* \*The LCD messages and LEDs on the display panel are programmable with the programming tool (4prg-7640-B001) included with this system.

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