

UNIVERSAL VALVE DRIVER

USER ASSIST DIAGNOSTIC

THE FOLLOWING CHART ASSISTS THE USER IN TROUBLESHOOTING THE ELECTRICAL SYSTEM. PLEASE REFER TO SERVICE MANUAL FOR ADDITIONAL INFORMATION.

ERROR CODE	PROBABLE CAUSE
1	CUTTER UP OUTPUT FAULT
2	CUTTER DOWN OUTPUT FAULT
3	SHIFT RIGHT OUTPUT FAULT
4	SHIFT LEFT OUTPUT FAULT
5	TILT CW OUTPUT FAULT
6	TILT CCW OUTPUT FAULT
7	ENGINE FAST OUTPUT FAULT
8	ENGINE SLOW OUTPUT FAULT
9	ENABLE 1 OUTPUT FAULT
10	ENABLE 2 OUTPUT FAULT
11	E-STOP OUTPUT FAULT
12	WRONG RF ID
13	
14	
15	
16	
17	
18	

ERROR CODE NUMBER IS THE NUMBER OF RED LED PULSES BETWEEN EVERY PAUSE. THERE ARE NO SERVICEABLE PARTS BEYOND THIS POINT. PLEASE CONTACT YOUR SERVICE PERSONNEL FOR FURTHER ASSISTANCE.

070-010-0181



KAR-TECH

UNIVERSAL VALVE DRIVER



Valve setup & calibration is painless thanks to a flexible programming interface. Dial in mins, maxes, ramps, reductions, and other parameters, and your machine is running!

An on-board histogram with "error active status" aids in identifying and diagnosing intermittent wiring faults, saving time and headaches.

Features

The Universal Valve Driver is a fully configurable, current-regulated module that offers the OEM and end-user alike the ability to take joysticks, potentiometers, or any input signal and use it to control one or many hydraulic valves at their discretion. The user is able to dictate which inputs control which outputs, mins, maxes, ramps, frequencies of the outputs, along with present valve information for all the major valve manufacturers. Real-time diagnostics as well as an integrated histogram and file transfer capabilities round out the advanced Palm Pilot-based programming side of the UVD. It accommodates up to 8 analog inputs, up to 4 digital inputs, and up to 12 outputs, allowing you the flexibility to control any equipment. RS-232 is present for the Palm interface which eliminates the use of DVM's and destructive harness probing when troubleshooting. Built from scratch to withstand abuse, all inputs are protected to allow machine voltages to be used as input, and all outputs are protected against short circuit, reverse battery, transient and inductive surges. It's housed in a IP-66, NEMA 4X enclosure, and the electronics are further silicone dip-coated to protect against moisture.

Electrical

Communication	RS-232
Supply Voltage	9V to 30VDC
Analog Inputs	8 Maximum, 0-Supply Voltage (12/24VDC), 12-bit resolution with on-board +5VDC regulated analog reference for sensors. Inputs are protected for overvoltage/transient spikes
Standard Outputs	12 proportional, current controlled outputs to adjust for variation in coil resistance or input voltage. These outputs can be configured at Kar-Tech as on/off or non-regulated proportional
Output Rating	3 amp nominal, 5 amp max.

Mechanical

Enclosure	Nylon 6/6 black
Dimensions	3" x 3" x 1.5"
Weight	~.5 lb.
Connections	7 wires, 18 AWG GXL in a flame retardant mesh loom.
Protection	Epoxy-potted enclosure
Operating Temp	-40°C to +85°C
Storage Temp	-55°C to +100°C



Input and output diagnostics provide real time data, eliminating the need for DVM's and destructive harness probing.



The UVD comes pre-programmed with settings for all major valves on the market today to keep your setup time at a minimum.