

COMPARATIVE OF FEATURES FOR ALL LOAD MANAGERS:

	MODEL NUMBER	ECX LM-A	ECX LM-B	ECX LM-C	ECX LM-D
	24V Models	Contact ECX for pricing			
	12V Models				
INPUTS	NUMBER OF INPUTS (Total number of digital input control signals that can be used to tell the sequencer/manager what actions to take. See individual input descriptions below)	4	5	5	5
	POLARITY OF INPUTS (Indicates weather the actuating input switch or button must have one side connected to Ground or to +12/24VDC)	12/24V OR GND	12/24V OR GND	12/24V OR GND	12/24V OR GND
	PROGRAMMABLE INPUT POLARITY (Indicates if the polarity of inputs can be factory or customer programmable)	FACTORY OR CUSTOMER	FACTORY OR CUSTOMER	FACTORY OR CUSTOMER	FACTORY OR CUSTOMER
	MANUAL BYPASS INPUT (Used to test the operation of all outputs)	YES	YES	YES	YES
	PARK/NEUTRAL INPUT (Signal used to enable the sequencer or manager to respond differently depending on weather the vehicle is in motion or parked)	YES	YES	YES	YES
	HIGH IDLE DISABLE SWITCH INPUT (signal used to disable the High Idle operation when code procedures require the operator to do so or when it is not desirable that the engine be accelerated to compensate for a drop in battery voltage)	NO	YES	YES	YES
	SPARE INPUT (Used for customer specific functions)	YES	YES	YES	YES
OUTPUTS	NUMBER OF OUTPUTS (Total number of external circuits that can be controlled)	11	15	15	10
	POLARITY OF OUTPUTS (A "12/24V" polarity Indicates that the output will "source" current to loads connected to Ground. A "GND" polarity indicates that the output will "sink" current from loads connected to 12/24VDC)	GND	GND	GND	12/24V
	PROGRAMMABLE OUTPUT	NO	NO	NO	NO

	POLARITY (Indicates if the polarity of outputs can be customer programmable)				
	CURRENT CARRYING CAPACITY OF EACH OUTPUT	0.35A	0.35A	0.35A	20A
	OUTPUTS INTERNALLY PROTECTED AGAINST OVERCURRENTS AND SHORTCIRCUITS	YES	YES	NO	YES
	REQUIRES EXTERNAL RELAYS TO DRIVE HIGHER CURRENT LOADS	YES	YES	YES	NO
	CAPABLE OF GRADUALLY ENERGIZING AND DE-ENERGIZING LOADS TO AVOID CURRENT PEAKS	NO	NO	NO	YES
CONTROL PANEL	REMOTE LED INDICATOR PANEL (Houses LED indicators showing the status of sequencing and load management operations)	3 LIGHTS	5 LIGHTS	5 LIGHTS	5 LIGHTS
	PROGRAMMABLE LED INDICATING PANEL (This type of panel permits the individual programming of each LED to provide customer specific indications)	NO	NO	NO	NO
	OPTIONAL REMOTE COLOR GRAPHIC DISPLAY AND CONTROL PANEL [Touch-screen type color LCD panel that displays the status of sequencing and load management operations. It also allows the operator to enter operational commands (bypass, start sequence, change load priorities, change load thresholds, etc.)]	NO	YES	YES	YES
NETWORKING	NETWORK CAPABILITY (Can be connected to a multiplexed control network to exchange information with other devices)	NO	YES	YES	YES

IDLE/HIGH-LOW VOLTAGE

<p>HIGH IDLE CONTROL (This feature increases the engine speed and, therefore, the alternator output when a drop in battery voltage is sensed. The higher engine speed is maintained thru the load management cycle and until the battery voltage returns to normal)</p>	NO	YES	YES	YES
<p>HIGH / LOW VOLTAGE MONITOR (The battery voltage is monitored and an alarm will be activated when the voltage level is above or below a predetermined value)</p>	NO	YES	YES	YES
<p>PROGRAMMABLE HIGH / LOW BATTERY VOLTAGE LEVEL ALARM (Indicates if the levels at which the battery voltage will generate an alarm can be programmed at the factory or by the customer)</p>	NO	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER

LOAD SEQUENCER

<p>LOAD SEQUENCER OPERATION (The system turns loads ON and OFF following a specific sequence to avoid subjecting the vehicle's electrical system to extreme load variations in very short time intervals)</p>	YES	YES	YES	YES
<p>PROGRAMMING OF TIME INTERVAL BETWEEN ACTIVATION (OR DEACTIVATION) OF CONSECUTIVE LOADS</p>	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER
<p>SEQUENCE LOADS "ON" OR "OFF" INPUT (Signal that commands the system to turn the loads ON or OFF, one at a time, according to the priority assigned to each of them)</p>	YES	YES	YES	YES
<p>SETTING OF "POWER ON" LOAD SEQUENCING PRIORITIES (Manner in which the loads are assigned a priority in the "power on" sequence)</p>	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER
<p>SETTING OF "POWER OFF" LOAD SEQUENCING PRIORITIES (Manner in which the loads are assigned a priority in the "power off" sequence)</p>	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER

LOAD SHEDDING

	<p>SELECTION OF LOADS TO BE SEQUENCED "ON" AND "OFF" (Manner in which the loads that form part of the turning ON or OFF sequence are selected)</p>	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER
	<p>LOAD SHEDDING OPERATION (When the battery voltage level is below its normal state, the system turns loads ON and OFF as a function of the value of the lower voltage levels reached or as a function of the time elapsed since the start of the battery voltage drop)</p>	YES	YES	YES	YES
	<p>SETTING OF LOAD SHEDDING PRIORITIES (Manner in which the shedding or reconnecting priority for each load is determined)</p>	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER
	<p>LOAD SHEDDING ENABLE INPUT (This signals turns ON/OFF the Load Manager function. Loads will then be shed and reconnected according to the operational requirements established)</p>	YES	YES	YES	YES
	<p>SYSTEM OVERRIDE INPUT (This signal will turn ON all the outputs, regardless of the setting of any other control signal. It can be used as a TEST switch to verify the operation of all outputs)</p>	YES	YES	YES	YES
	<p>LOAD SHEDDING OPERATION BASED ON DURATION OF VOLTAGE DROP(The shedding of a load is based on the time elapsed since the battery voltage reached a new lower voltage threshold. Similarly, the reconnection of a load previously shed is based on the time elapsed since the battery voltage reached a new higher voltage threshold)</p>	YES	YES	YES	YES
	<p>PROGRAMMABLE LOAD SHEDDING TIME INTERVAL (Indicates if the time elapsed between the battery reaching a new voltage threshold and the shedding or reconnecting of a load can be programmed)</p>	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PUSHBUTTON PROGRAMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER	PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER
	<p>LOAD SHEDDING OPERATION BASED ON MAGNITUDE OF BATTERY VOLTAGE DROP</p>	YES	YES	YES	YES

<p>(The shedding of a load is based on the value of the lower battery voltage threshold reached. Similarly, the reconnection of a load previously shed is a function of the value of the new higher battery voltage threshold reached)</p>				
<p>PROGRAMMABLE LOAD SHEDDING BATTERY VOLTAGE LEVELS (Indicates the manner in which the battery voltage threshold levels at which loads are shed or reconnected can be programmed)</p>	<p>PUSHBUTTON PROGRAMMABLE BY CUSTOMER</p>	<p>PUSHBUTTON PROGRAMMABLE BY CUSTOMER</p>	<p>PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER</p>	<p>PC AND PUSHBUTTON PROGRAMMABLE BY CUSTOMER</p>