





Job:	
Model:	
Type:	
Date:	

### internal

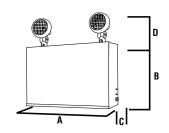
The **ESM** is configured with 120/277V input and a high-efficiency two stage charger providing precise float voltage control with low voltage disconnect protection. All components used in the circuitry are temperature compensated. Charger status is easily determined via a dual diagnostic LED display. Standard features include low voltage disconnect, AC lockout and brownout protection.

#### external

The **ESM** is constructed with a 20 gauge steel cabinet for lower wattages and 18 gauge steel for higher capacities. Terminal connectors allow for larger gauge wires to be connected for remote loads. The universal mounting pattern with key hole slots stamped into the back of the unit allows for direct mounting to various conduit boxes. Stamped conduit knockouts are supplied standard on all **ESM** units to optimize AC power source options.



## dimensions (in,mm)



Unit Size	Steel (ga)	A	В	C
(6V 18-22W)	20	12 <sup>1/4</sup> " (311mm)	5" (127mm)	3" (76mm)
(6V/12V 36W)	20	10" (254mm)	9" (229mm)	3 1/4" (83mm)
(6V 42-90W) (12V 42-60W)	18	13 <sup>1/2</sup> " (343mm)	10 <sup>1/8</sup> " (257mm)	4 1/4" (108mm)
(12V 90W)	18	13" (330mm)	10 <sup>1/8</sup> " (257mm)	8 <sup>1/2</sup> " (216mm)

NOTE: Cabinet size may vary based on product configuration. Dimension D in drawing above will vary based on heads supplied.

EVAMBLE: ECM610 21 DOW AT

#### ordering information

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Series	Operation	Pb-A (Capacity)	Ni-Cd <sup>1</sup> (Capacity)	Emergency Heads	Lamps <sup>5</sup>	Options
ESM	6 (V)	12 (6V)	22 (6V)	0 (no heads)	See lamp selection	AM (ammeter)
	12 (V)	18 (6V)	42 (6V, 12V)	1LR (single, PAR36)	on next page	AT (autotest)
		27 (6V, 12V)	54 (6V)	2LR (double, PAR36)		BZ (buzzer)
		36 (6V, 12V)	90 (6V, 12V)	1BTMR (single, MR16)		BLK (black)
		60 (6V, 12V)		2BTMR (double, MR16)		CC (custom color- specify)
				1SR (double, PAR18)		FAI <sup>2</sup> (fire alarm interface)
				2SR (double, PAR18)		IRT <sup>3</sup> (infrared testing)
				1TESSQ (single, TESTA)		LC (line cord set, 120V only)
				2TESSQ (double, TESTA)		NC <sup>1</sup> (Ni-Cd)
						SM (side mounted heads)
						TD <sup>4</sup> (time delay - specify 5, 10, 15 min)
						TP (tamper proof screws)
						VM (voltmeter)

 $\textbf{NOTE 1:} For \ nickel-cadmium \ battery, \ select \ NC \ from \ options \ and \ capacity \ from \ Ni-Cd \ column$ 

NOTE 2: Specify type of fire alarm signal: normally open, normally closed or 6, 12, 24VDC (specify voltage used)

**NOTE 3:** HHC (hand held controller for IRT) should be ordered separately (item code:476000021)

NOTE 4: Must specify input voltage and time delay (10 min standard) NOTE 5: ENSURE BATTERY CAPACITY IS EQUAL TO OR HIGHER THAN TOTAL LAMP WATTAGE



# **Technical**

## emergency heads

The **ESM** is supplied standard with two top mounted heads with LED or incandescent lamps. LED lamp options include sealed beam LED LR style lamp heads, BTMR style heads with LED MR16 lamps, SR PAR18 style heads or TESSQ square LED lamp heads. Lamp heads can be mounted either on the top or on the sides of the unit allowing for up to four (4) heads to be mounted on the largest units (2 top, 2 side or 3 on top). The LR and SR lamp head styles are constructed of high impact thermoplastic in a standard white finish. BTMR, LR and SR head types feature a unique twist locking collar that securely holds the lens and facilitates quick and easy re-lamping.

#### electrical

**BATTERY:** The **ESM** is designed with a maintenance free, sealed valve regulated lead acid battery or optional Ni-Cd battery that provides a minimum emergency duration of 90 minutes (for the listed rating). Recharge time of the battery is 24 hours.

#### mechanical

Remote lamp loads are connected to the emergency power supply with sturdy terminal connectors. These connectors allow for a large gauge of wire to be used increasing the flexibility of installation. The **ESM** is supplied standard in a durable white powder coat, baked finish. Black finish is optional and custom colors, please contact factory to specify.

#### autotest

The Beghelli Autotest system (optional) performs one 5 minute discharge test monthly. Every 6 months two 90 minute discharge tests are performed. This tests both full battery capacity and recharge capability, as required by the fire code. The information is communicated simply and intuitively to maintenance personnel via a single multi-color LED. The Beghelli Autotest system also includes 0, 5, 10 or 20 minute time delay function to allow HID lighting to restrike. IRT one button press tests unit for 90 minutes per code.

#### warranty

The **ESM** comes with a 3-year factory warranty. Lamps are not covered under the warranty. Deliberate damage, misuse, improper installation effectively cancel the warranty.

## lamp selection

	6V	12V	
Incandescent <sup>1</sup>	7.2, 9W	9, 12, 18W	
Quartz Halogen (Q) <sup>2</sup>	12W	12, 20W	
MR16 LED <sup>3</sup>	5, 7W	2, 5, 7W	
TESSQ <sup>4</sup>	N/A	5, 9, 14, 30W	
Sealed Beam LED <sup>5</sup>	N/A	6W	

NOTE 1: Available in LR lamp heads (ex: 2LR9W) and SR lamp heads (ex: 2SR18W)

NOTE 2: Available in LR lamp heads (ex: 2LR12Q) and SR lamp heads (2SR20Q)  $\,$ 

NOTE 3: Available in SEA lamp heads (ex: 2SEA5WLED), SR lamp heads (ex: 2SR7WLED) and BTMR lamp heads (ex: 2BTMR2WLED)

NOTE 4: Nomenclature example: 2TESSQ9W

NOTE 5: Available in LR lamp heads (ex: 2LR6WLEDSB)

## model rating guide Pb-A (Capacity)

Model	Input Voltage	Wattage Rating 90 Minutes
ESM 612	6	12
ESM 618	6	18
ESM 627	6	27
ESM 636	6	36
ESM 660	6	60
ESM 1227	12	27
ESM 1236	12	36
ESM 1260	12	60

## model rating guide Ni-Cd (Capacity)

Model	Input Voltage	Wattage Rating 90 Minutes
ESM 622	6	22
ESM 642	6	42
ESM 654	6	54
ESM 690	6	90
ESM 1242	12	42
ESM 1290	12	90

\* ENSURE MAX WATTS IS > TOTAL LAMP WATTAGE

