



# PRODUCT INFORMATION

Part #: **CE-HM630AWM**

Revision: 4-2014



DESCRIPTION		FEATURES						
<p><b>Challenge Electronics CHIME Tone, MEDIUM Loud; 6 to 30 Vdc; A style case Rear Panel Mounting in 1.125" (28.6 mm) Hole; Sound Pressure Level of 94 dB(A) at 30 Vdc at 61 cm; 2,900 Hz. Output Frequency; Wire Leads 5" (12.7cm) Long termination; Moderate Rate 2 pulses per second; Piezoelectric Alarm; RoHS Compliant</b></p>		<ul style="list-style-type: none"> <li>◆ Reliable Solid State Piezoelectric Technology</li> <li>◆ Corrosion resistant Stainless Steel Diaphragm</li> <li>◆ Flame Retardant Plastic</li> <li>◆ Extended storage temperature</li> <li>◆ Hermetically Sealed Alarm</li> <li>◆ Water Proof, NEMA 3R, 4X, or 12 with Gasket (not supplied)</li> <li>◆ RoHS, Lead Free Compliance</li> <li>◆ ISO 9001:2008 &amp; ISO-TS 16949:2009 Certified</li> </ul>						
SPECIFICATIONS								
Operating Mode	Medium Loud, Moderate Chime Tone		Pulse Rate	2 ± 10% Pulses per Second				
Operating Voltage	6 to 30 Vdc	Nominal Operating Voltage	24 Vdc	Operating Frequency	2,900 ± 250 Hz.			
Typical Loudness	At 6 Vdc	80 ± 5 dB(A)	At 12 Vdc	88 ± 4 dB(A)	At 24 Vdc	92 ± 3 dB(A)	At 30 Vdc	94 ± 3 dB(A)
	SPL is measured at 24" (61 cm), 25°C, Sound Level meter # 2240, Type 2, Fast Response, A-Weighted							
Typical Operating Current	10 mA at 6 Vdc		15 mA at 12 Vdc		30 mA at 24 Vdc		40 mA at 30 Vdc	
Operating Temperature	-30°C to +65°C		Storage Temperature	-40°C to +100°C				
Surge Voltage	20% over maximum Operating Voltage for less than 5 minutes							
Polarity Protection	Protected against Reversed Voltage to the Maximum Operating Voltage							
Materials	Alarm Case	Plastic, "A" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black						
	Diaphragm	Stainless Steel 304						
	Encapsulation	Silicon Potting covering SMD components topped with 2 parts epoxy potting, Black						
	Termination	Wires Leads, 18 AWG (7X32), GXL Automotive, Copper, 5.0" (127) Long, Struck 0.235 (6.0mm)						
Physical Dimensions	Length or Diameter (L/D)	1.46" (37.1 mm) Ø	Width (W)	Height (H)		1.4" (35.7 mm)		
Panel Mounting	From the Rear with Plastic Ring Nut		Mounting Hole	1.125" (28.6mm) Ø	Max. Panel Thickness	0.25" (6.3 mm)		
Approximate Weight	35 grams	Rotor Volume Control	No	Compliance	RoHS			
Available Options	Rotor Volume Control, Water Proof Gasket, Mounting Bracket, and variety of connectors terminated on the Wire Lead ends							
RELIABILITY								
Thermal Operating Temperature Test	96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature *							
	96 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature *							
Thermal Storage Temperature Test	96 hours storage at Maximum Rated Storage Temperatures *							
	96 hours storage at Minimum Rated Storage Temperatures *							
Thermal Shock Test	5 cycles of Minimum and Maximum Operating Temperature Each cycle shall be set per diagram below and is 3 hours long *							
Humidity Test	120 Hours at +60°C±2°C. 90-95% RH *							
Salt Spray	Withstand exposure to salt spray per ASTM B117 for a period of 300 hours *							
Water & Dust Exposure	Withstands water submergence and dust exposure per IP-68 *							
Vibration Test	2 Hours at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *							
Drop Test	Dropped naturally from 1 meter height onto the surface of 10mm wooden board, 2 directions upper and side of the part are applied *							
Termination Strength	Maximum of 15 pounds (6.8 Kg) load pull test							
* Reliability Test Performance	Parts should conform to original performance within ±3dB, after 3 hours of recovery and dry period							
Life Test	Intermittent	1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and maximum rated Voltage						
	Continuous	250 hours continuous operation at room temperature and maximum rated Voltage						
Warranty	For a period of one (1) year from date of shipping under normal operations conditions This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair							



Current Draw and Loudness Vs. Input Voltage		DIMENSIONS	Units	Inches	Tolerance	0.030 (0.7)
				(mm)		
Typical Output Sound Level ± 4 dB(A), with Type 2 Meter 	Input Current (mA)	<b>FRONT VIEW</b> 	<b>RING NUT</b> 	<b>SIDE VIEW</b> 	<b>REAR VIEW</b> 	
		MOUNTING HOLE-- 1.125" (28.6mm) DIAMETER				

ALARM MAKING	TYPICAL MOUNTING										
<b>On side Case:</b>  <p style="text-align: center;"> <b>Part Number</b>  <b>Sound Type</b>  <b>Operating Voltage Range / Date Code</b>  <b>Challenge Electronics</b>  <b>Made in China</b> </p> <b>On Back:</b>  <p style="text-align: center;"><b>Polarity</b></p>	<table border="1"> <tr> <td>Alarm Threads:</td> <td>1.125-24 UNF Threads, 2A Class, Major 1.118" Ø, Minor 1.063" Ø, Pitch 1.094" Ø</td> </tr> <tr> <td>Ring Nut Threads:</td> <td>1.125-24 UNF Threads, 2B Class, Major 1.120" Ø, Minor 1.073" Ø, Pitch 1.094" Ø</td> </tr> <tr> <td>Mounting Hole:</td> <td>1.25" (31.75 mm) Ø</td> </tr> <tr> <td>Panel Thickness:</td> <td>0.03 (0.75 mm) to 0.25" (6.4 mm)</td> </tr> <tr> <td>Gasket (Optional): for Water Proofing</td> <td>1.25" (31.75 mm) ID, 1.40" (35.6 mm) OD, 0.10" (2.54 mm) Thick Rubber,</td> </tr> </table>	Alarm Threads:	1.125-24 UNF Threads, 2A Class, Major 1.118" Ø, Minor 1.063" Ø, Pitch 1.094" Ø	Ring Nut Threads:	1.125-24 UNF Threads, 2B Class, Major 1.120" Ø, Minor 1.073" Ø, Pitch 1.094" Ø	Mounting Hole:	1.25" (31.75 mm) Ø	Panel Thickness:	0.03 (0.75 mm) to 0.25" (6.4 mm)	Gasket (Optional): for Water Proofing	1.25" (31.75 mm) ID, 1.40" (35.6 mm) OD, 0.10" (2.54 mm) Thick Rubber,
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PACKAGING		MARKING	TRAY		
<b>ONE TRAY:</b> 	<b>TWO BUNDLE</b> 	<b>Bundle</b>			
<b>ONE BUNDLE:</b> 	<b>SHIPPING BOX</b> 	Part Number	Dimensions	<b>X1</b>	<b>34.7 cm</b>
<b>TOP COVER</b> 		Other PN if required		<b>Y1</b>	<b>34.7 cm</b>
		Quantity		<b>Z1</b>	<b>21.2 cm</b>
		Lot and/or Date Code		<b>BUNDLE</b>	
		Bundle Number		<b>X2</b>	<b>cm</b>
		<b>Shipping Box</b>	Dimensions	<b>Y2</b>	<b>cm</b>
		Part Number		<b>Z2</b>	<b>cm</b>
		Other PN (if required)	Quantity	<b>SHIPPING BOX</b>	
		Quantity		<b>X3</b>	<b>35 cm</b>
		Lot and/or Date Code		<b>Y3</b>	<b>35 cm</b>
		PO Number	Dimensions	<b>Z3</b>	<b>22.5 cm</b>
		Net Weight			
		Gross Weight	Number of Bundles		<b>1</b>
		Box Number of Boxes	Quantity		<b>250</b>
		<b>Made in China</b>	Approximate Weight		<b>9 Kg.</b>

Revision	Description	By	Date
3-2012	Modified Dimensions Drawing	Ely Zofan	12/17/2012
4-2014	Updated Specifications	Ely Zofan	6/18/2014