

Tough SmartMarquee™

Uticor Marquees, rated No.1, are Designed Tough...

25 year Market Leadership

Uticor Marquees are a class in themselves. They have been used in plants through-out the world particularly in the automotive, steel, tire, canning, brewery and cement plants. Tens of thousands of Uticor Marquees have worked flawlessly in General Motor, Ford, Chrysler, Mitsubishi and Toyota plants displaying crucial information to plant personnel in their press and paint shops. **The word Uticor is synonymous with high class automotive marquees.** Uticor has consistently ranked among the very Top suppliers of Alpha-numeric message displays.

Uticor Marquees have the reputation of surviving an inadvertent forklift hit inside a plant. In fact many plant personnel will tell you that Uticor's famous PMD3000, with a heavy duty steel construction, not only survive a forklift hit, it was the forklift that got damaged.



Survives a forklift hit!

HALT-HASS Tested

Uticor Products go through HALT (Highly Accelerated Life Test) to identify and eliminate components/areas likely to fail prematurely. HALT-HASS process simulates product life over the next 20 years of operation.



96 Hour Burn-in

In addition to matched LEDs, Uticor products go through a 96 hour burn-in period to eliminate infant mortality of thousands of LEDs in a typical marquee. If you pay close attention, for example at airports, you would see that quite often a marquee would have developed dark spots on some characters. A 4 line 40 Character marquee has 7,680 individual LEDs. Even a 0.05% infant mortality (typical of LEDs and other optoelectronic semiconductors) could have four bad LEDs. 96 hour burn-in assures heating out the weak LEDs before the Tough SmartMarquee is shipped to you.



Tough SmartMarquee™

Designed for Durability, Energy Efficiency and High Temp.

Tough SmartMarquee Maintains Uniform Brightness Over Life! HOW?

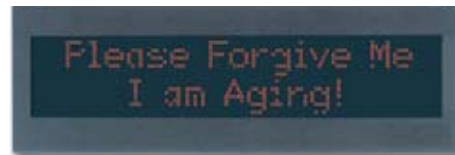
The luminous intensity of an LED depends upon the current going through it. It is also a known fact that the luminous intensity degrades over a period of time. If the current flowing through each one of the 3840 LEDs in the competitor's marquee shown to the right varies even as much as 10% and the luminous intensity differs even as much as 20%, the result would be a sign that will look great when first installed but would need replacement within a few years because some of the LEDs would be dimmer than others or simply burnt out.

In order to avoid this dilemma and have the marquee look as good as when first installed, Tough SmartMarquees accomplish this feat by:

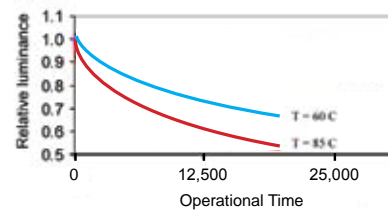
1. Using Matched Luminous Intensity LEDs
2. Carefully controlling the current through each LED
3. Reduce switching current losses to almost nothing
4. Use very efficient, 95% plus, switching power supplies
5. Perform a 96-hour burn-in test under power to weed out marginal LEDs



Uticor after 10 Years



Competitor's Marquee after 10 Years



LED Luminous Intensity Aging Curve

Energy Efficient, 1/3rd of the Power Consumption

When designing a marquee, one of the biggest challenges is to manage the power. Even though each LED may need only 10 mA of steady state current or 80-100 mA of peak current, the number of LEDs in even a small marquee is quite large.

For example, a 2 line 20 character tri-color sign has 1920 Red and 1920 Green LEDs and could theoretically draw a steady state current of 3840 x 10 mA or 38 amps, even though not all LEDs will be "on" at the same time. However, you can expect a current of 25 amps.

Most competitive marquees use rather inefficient power supplies and would thus use approximately 200 watts. That is a lot of power which results in a significant increase in internal temperature causing them to design **Thermal Overloads** or sometimes even **Fans** to keep the marquee cool. AB's Inview or Adaptive marquees for example are rated at 55° C but have an automatic **dimdown** at 55° C and an automatic shutdown at 70° C.

Not so with Uticor Tough SmartMarquee! With AVG's innovation and vertical integration strength, we have designed the Tough SmartMarquee to consume 1/3rd of typical power and have used a very efficient power switching system (Patent Pending) without sacrificing the LED luminous intensity. This innovative and efficient design automatically results in reducing the weight of Tough SmartMarquee.

RESULT:
NO OVER HEATING
NO THERMAL SHUTDOWN
 Full operation up to 60° C Ambient!



You'll Get Outstanding Quality, Features, Price and...

Mixed Character Heights on the Same Line

Tough SmartMarquee is capable of displaying mixed character sizes on the same line! Other marquees limit you to use just one character size per line, which means you cannot use 2", 4", 6" or 8" character sizes on the same line.

Here is an Example!

Say we have a 2 Line, 20 Character per line marquee.
It can display either 2 lines of 20 2" characters, or 1 line of 10 4" characters.

The message you want to display is:

Temp. Zone 1: 454

And you want to see the temperature "454" 200 feet away, using 4" characters.
With competitors' marquees you either scroll your message or are forced to get a much bigger marquee at more than double the cost.

Not with Tough SmartMarquee!

Since you can mix character heights, you can achieve your objective by displaying the message like this:



This allows Temperature "454" to be visible 200 feet away and still have a 20 character 2" Marquee.



Scroll and Blink Your Messages!

With Tough SmartMarquee, messages displayed can be Stationary, Scrolling or Blinking based on the embedded codes in an ASCII string. Left-scroll messages feature "smooth scrolling", that is, letters move one LED at a time. Each portion of a letter will illuminate every dot in that row when it scrolls across the display. Upward-scrolling messages actually do not scroll at all. Rather,

they "wipe on" to the display in an upward fashion. The first section of message lines appear, then the display pauses, clears, and displays the next section of text.

Tough SmartMarquee's non-scrolling messages can contain blinking characters whereas scrolled messages cannot have blinking characters. The time interval for 'on' and 'off' states of a blinking message can also be controlled.

...Performance From the Tough SmartMarquee Family!



International Character Set

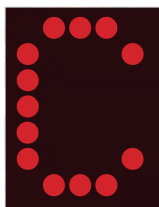
Take advantage of Tough SmartMarquee's International character set to display your messages in multiple international languages. This option is switch selectable to allow message display in U.S. English, French, Danish, Swedish, German, Cyrillic or Japanese Kana!

	AMERICA	CYRILLIC	GERMANY	ENGLAND	DENMARK	SWEDEN	FRANCE	KANA
#	#	А	А	А	ア	ア	ア	ア
\$	\$	Б	Б	Б	イ	イ	イ	イ
@	@	В	В	В	ロ	ロ	ロ	ロ
A	A	Г	Г	Г	ハ	ハ	ハ	ハ
B	B	Д	Д	Д	ニ	ニ	ニ	ニ
C	C	Е	Е	Е	ホ	ホ	ホ	ホ
D	D	Ж	Ж	Ж	ヘ	ヘ	ヘ	ヘ
E	E	З	З	З	ト	ト	ト	ト
F	F	И	И	И	チ	チ	チ	チ
G	G	Й	Й	Й	リ	リ	リ	リ
H	H	К	К	К	レ	レ	レ	レ
I	I	Л	Л	Л	ワ	ワ	ワ	ワ
J	J	М	М	М	ヰ	ヰ	ヰ	ヰ
K	K	Н	Н	Н	ヱ	ヱ	ヱ	ヱ
L	L	О	О	О	ヰ	ヰ	ヰ	ヰ
M	M	П	П	П	ヱ	ヱ	ヱ	ヱ
N	N	Q	Q	Q	ヰ	ヰ	ヰ	ヰ
O	O	R	R	R	ヰ	ヰ	ヰ	ヰ
P	P	S	S	S	ヰ	ヰ	ヰ	ヰ
Q	Q	T	T	T	ヰ	ヰ	ヰ	ヰ
R	R	U	U	U	ヰ	ヰ	ヰ	ヰ
S	S	V	V	V	ヰ	ヰ	ヰ	ヰ
T	T	W	W	W	ヰ	ヰ	ヰ	ヰ
U	U	X	X	X	ヰ	ヰ	ヰ	ヰ
V	V	Y	Y	Y	ヰ	ヰ	ヰ	ヰ
W	W	Z	Z	Z	ヰ	ヰ	ヰ	ヰ
X	X	[[[ヰ	ヰ	ヰ	ヰ
Y	Y]]]	ヰ	ヰ	ヰ	ヰ
Z	Z	^	^	^	ヰ	ヰ	ヰ	ヰ
[[
]]							
^	^							

Full 5x8 Dotmatrix Character

Uticor Marquees uses a full 5x8 Dotmatrix LED block. Unlike some others, we don't compromise the appearance of the marquee by using a 5x5 LED block to reduce cost

5x8, 1 for space



5x5

