

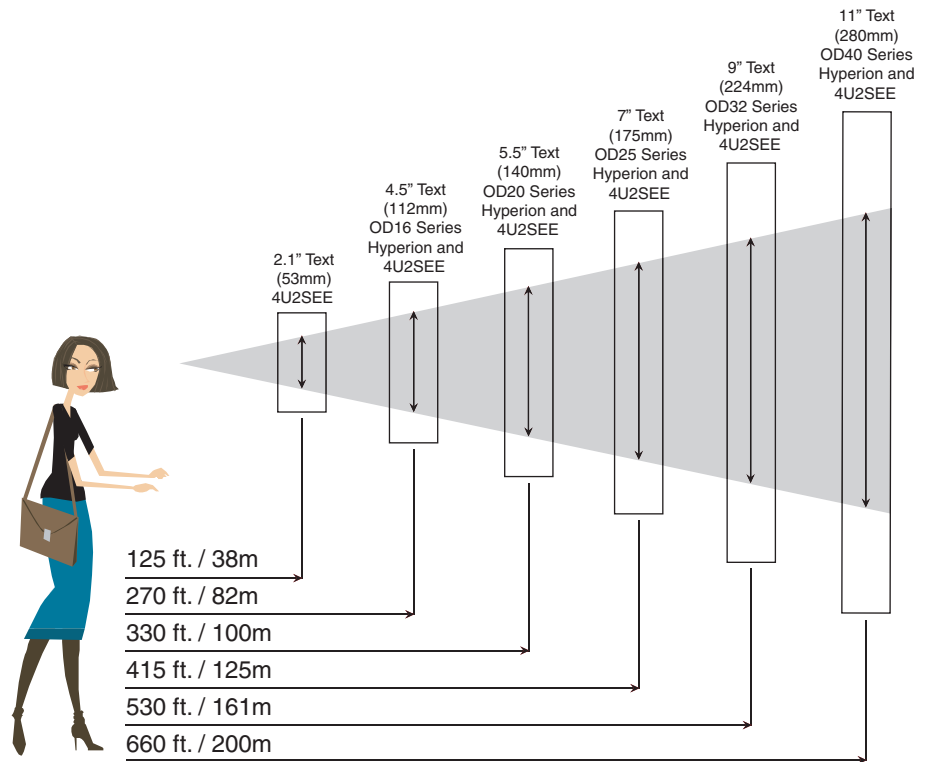
# Choosing Your Display

Factoring in Viewing Distance, Viewing Angle and Viewing Time for Electro-Matic Electronic Message Centers



## viewing distance

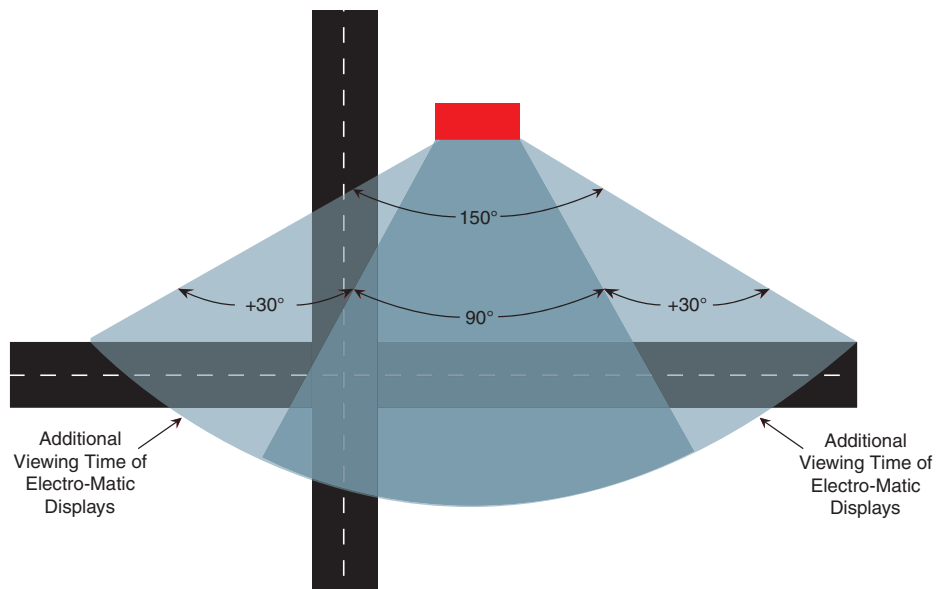
The location of the target audience or customers and the position of the Electro-Matic Display is a critical element in correctly sizing an electronic message center. The graphic to the right demonstrates viewing distances and the recommended Hyperion Electronic Message Center for the indicated distance. Of course larger text can be used to dramatize a point, but for a stationary audience what is shown is the minimum size of text to allow the selected audience to comprehend what is being presented on the Electro-Matic Electronic Message Center.



## viewing angle

With Electro-Matic Displays, one factor is a good, constant viewing angle. For all the Electro-Matic Displays, the viewing angle is 150 degrees (75 degrees each way off center). This means as the target audience draws closer to the display, it is still readable and increases viewing time.

The typical viewing angle of electronic message centers is 90°, but Electro-Matic has a 150° viewing angle.



## viewing time

Also to be considered, is your target audience moving? This introduces a viewing time element. The size of characters, the viewing angle of the display, and the speed of the target audience all translate into one important element—how much “TIME” have you allowed your target audience to read and comprehend your message?

Experience has shown that it requires an average of 5 seconds of time to read and comprehend ten characters of text.

The following chart shows the maximum viewing time a potential target audience would have to view a message based on their speed of travel and the size of the characters used. Take notice of the shaded areas for the optimal viewing time based on the number of characters to be read by the target audience.

## viewing distance versus time chart

Character Size		Maximum Viewing Distance		Viewing Time in Seconds (Optimum viewing time shaded)							
inch	mm	Feet	Meter	25 MPH	30 MPH	45 MPH	50 MPH	55 MPH	65 MPH	70 MPH	80 MPH
				40 KPH	48 KPH	72 KPH	80 KPH	88 KPH	105 KPH	113 KPH	129 KPH
2.1	53	126	38	3.4	2.9	1.9	1.7	1.6	1.3	1.2	1.1
4.5	114	270	82	7.4	6.1	4.1	3.7	3.3	2.8	2.6	2.3
5.5	140	330	101	9.0	7.5	5.0	4.5	4.1	3.5	3.2	2.8
7	178	420	128	11.5	9.5	6.4	5.7	5.2	4.4	4.1	3.6
9	229	540	165	14.7	12.3	8.2	7.4	6.7	5.7	5.3	4.6
11	279	660	201	18.0	15.0	10.0	9.0	8.2	6.9	6.4	5.6
14	356	840	256	22.9	19.1	12.7	11.5	10.4	8.8	8.2	7.2
18	457	1080	329	29.5	24.5	16.4	14.7	13.4	11.3	10.5	9.2
25	635	1500	457	40.9	34.1	22.7	20.5	18.6	15.7	14.6	12.8
30	762	1800	549	49.1	40.9	27.3	24.5	22.3	18.9	17.5	15.3
35	889	2100	640	57.3	47.7	31.8	28.6	26.0	22.0	20.5	17.9
45	1143	2700	823	73.6	61.4	40.9	36.8	33.5	28.3	26.3	23.0
50	1270	3000	914	81.8	68.2	45.5	40.9	37.2	31.5	29.2	25.6
60	1524	3600	1097	98.2	81.8	54.5	49.1	44.6	37.8	35.1	30.7

Viewing Distance is based on an Electro-Matic rule of thumb of 60 feet distance for each inch of character height.

This shaded color is for optimal viewing time for a person to comprehend 10 characters (based on Electro-Matic’s experience).

This shaded color is for optimal viewing time for a person to comprehend 20 characters (based on Electro-Matic’s experience).

### PLEASE NOTE:

Scrolling or rolling text will require longer times for the target audience to comprehend and is not recommended for moving audiences.

Also in that regard, in and out modes that take a long time also increase the comprehension times and should be avoided. If the Electronic Message Centers have too much content, then the reader will not have enough time to comprehend the message content.

For more information on Hyperion Displays contact your local dealer or log on to [www.hyperionsigns.com](http://www.hyperionsigns.com)



Curb Appeal Concepts, Inc.  
4040 Montgomery Drive • Shelby Township, MI 48316  
P: 248-670-1538 • F: 248-442-2148