

LED Display System Overview

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1. LED Display System is a multimedia hi-tech product that blended optical, electronic and acoustic signal processing technologies, and it includes the followings:

- » Display screen
- » Control computer and communication system
- » Computer and its related peripheral
- » Video peripheral
- » System software

2. System Features:

- » Available for connection to an external scanner, and accepting various pictures, graphs and handwriting inputs.
- » Accepting video signal (TV, VCR, and DVD), and showing dynamic images, and it also can show graphs and animations.

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» The control computer can act as a workstation on network, and read real-time data from specified computer, and show them on its display.

» Various methods for images display, and easy replacement for arranged programs whenever (including play sequence, time length) etc.

3. Protections for outdoor display

» They include waterproof, sun-screen, antistatic, damp proof, anti-freeze (anti-thundering, if necessary) and other features.

4. Photo of Outdoor full color led display screen (Pitch 20mm)

Back View of Led Screen



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(1). Structure description				
Each pixel consists of 4 LEDs, which are 2 red, 1 pure green, and 1 pure blue ones. Pixel pitch, 20mm; Resolution, 2500 pixels/M2, and it can be up to 10000 pixels/M2,				
(2) Technical analysis				
No.	Content	Item		
1	Color analysis	To get best white balance, color ratio is designed to be R: G: B/3: 6: 1.		
(3) Pixel data				
No.	Item	Parameter		
1	Pixel pitch	20 mm		
2	Pixel composition	2 red, 1 green and 1 blue LEDs		
(4) LED Data				
No.	Item	Wavelength	Brightness	Module No.
1	Red tube core	620-625nm	400-600mcd	Absen-OF20V-A1
2	Pure green tube core	520-525nm	1100-1600mcd	Absen-OF20V-A1
3	Pure blue tube core	465-470nm	300-600mcd	Absen-OF20V-A1
(5) Screen parameters				
1	Pixels per unit box	64 × 48 pixels, unit box size: 1280mm x 960mm		
2	Brightness	> 5500cd/M ²		
3	Brightness adjustment	Manual, 256 level		
4	Scanning method	Static		



5	Drive methods	Constant current drive / Static Latching
6	Horizontal View angle	>110 degrees (left and right)
7	Module Display Brightness Uniformity	< 5%
8	View distance	10-150 m
9	Grey scale	Homochromy 12bit
10	Display colors	36 bit color
11	Refresh Frame Frequency	360HZ
12	Control method	Video Frequency Synchronization
13	Data transfer method:	Parallel RS 422
14	Lifetime	> 100,000 hours
15	Defects rate	≤ 0.00001 (Led display line standard < 0.0001)
16	Operating voltage	AC220V/50HZ or AC110V/60HZ
17	Screen power consumption	Max: 900w/m ² ; Average: 380w/m ²
18	Color Temperature	Brightness of R,G,B adjustable by the software 256 grades, Color temperature adjustable according to requirement
19	Screen weight	<70KG/cabinet
20	Effective Communication Distance (Without relay)	Unshielded twisted pair net line transmission distance 100m, max transmission distance 130m. Multi-mode Optic fiber transmission distance 500m; Single-mode optic fiber transmission distance 10KM
21	MTBF	Not less than 10000 hours
22	Earth Leakage Current	< 2mA
23	Environment temperature	-20°C ~ +60°C
24	Operating ambient humidity	10%—95% RH
25	Systems operating platforms	WINDOWS(WIN95、WIN98、WIN2000), with a friendly UI, and interface for secondary development.