12VDC Square RGB Dynamic Color Panel



Electrical Characteristics									
Input	12VDC								
Maximum Power	35W								
Maximum operating temperature	85°C								
Size	11.5" x 11.5"								

Features

- FR4-based Board with Intelligent control LEDs
- 256 LEDs per panel for a better resolution
- UL 879 Recognized
- Built-in surge protection

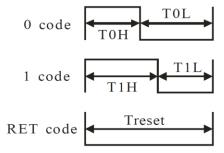
Application

- LED Screens
- Signages

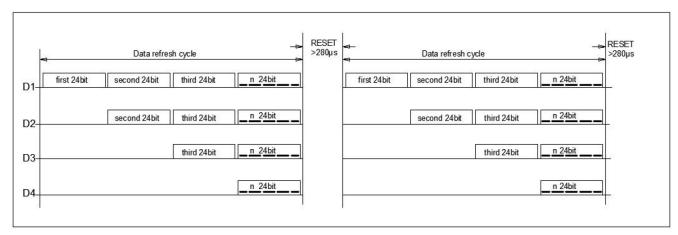
LED Characteristics										
Emitting Color	Wavelength (nm)	Luminous Intensity (mcd)								
Red	620 - 625	300 - 600								
Green	515 - 525	1500 - 2500								
Blue	465 - 475	150 - 400								

Data Transfer Time		
ТОН	0-code, high-level time	220ns - 380ns
T1H	1-code, high-level time	580ns – 1.6μs
TOL	0-code, low-level time	580ns – 1.6μs
T1L	1-code, low-level time	220ns - 420ns
RET	Frame unit, low level time	> 280µs

Sequence chart



Data Transmission Method



Note: D1 is the data from a MCU, and D2, D3, D4 ... are from the cascade circuits

Composition of 24-bit Data

G7	G6	G5	G4	G3	G2	G1	G0	R7	R6	R5	R4	R3	R2	R1	R0	В7	В6	B5	B4	В3	B2	B1	В0

Note: Date transmit in order of GRB. High bit data is first

Compatible Controllers:

T-1000S, T-780K, K-8000C