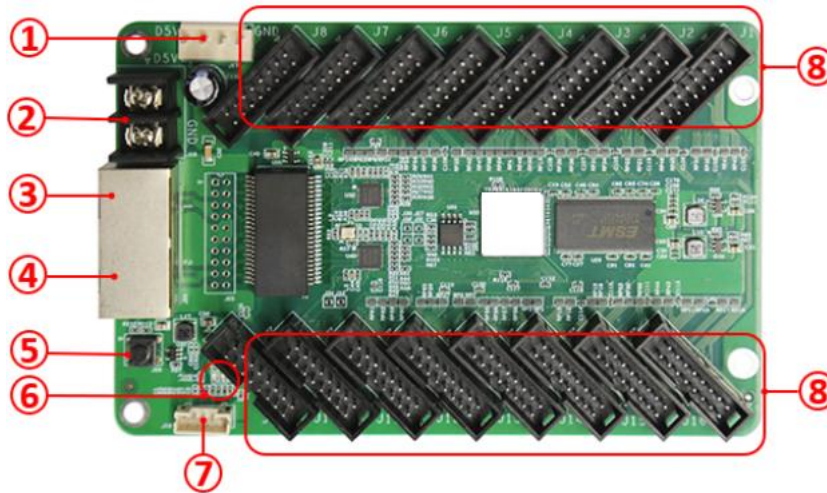# D75E

Receiver Card

Description

This receiver card is a cost-effective product designed to better facilitate cost savings, minimize failure points and lower failure rates for our customers. On the basis of making full use of the technical advantages of the receiver card, the most common HUB75 adapter board on the market is integrated into the receiver card, enabling a more reliable, hassle-free and affordable solution while ensuring a high quality display.

Features

- Integrate 16 HUB75 interfaces, eliminating the need for an adapter board, providing greater convenience and lower costs.
- With fewer plug-in connectors for lower failure points and failure rates.
- Support the conventional chip for high refresh, high grayscale and high brightness.
- Support mainstream conventional chips, PWM chips and Silan chips on the market.
- With a new grayscale engine for better performance in low greyscale.
- Eliminate detail problems such as darkening of a line, reddish low gray and ghosting caused by the design of the unit board.
- Support high-precision integrated point-by-point correction of chroma and brightness.
- Support any scan type between static and 64 sweeps.
- Support flexible point extraction, row and column extraction, and data group offset, allowing for easy implementation of various shaped and creative displays.
- Support 32 RGB signal outputs on a single card.
- Support a large load carrying area.
- Support an ultra-wide operating voltage ranging from DC 3.8V to 5.5V.

Specifications

Model	D75E
Control System Parameters	
Single Card Control Area	Conventional: 128×1024 pixels, PWM: 256×1024 pixels
Any Exchange of Network Ports	The network port can be used regardless of input and output.
Card-to-Card Synchronization	Nanosecond synchronization between cards
Display Module Compatibility	
Chip Support	All mainstream LED driver chips, including conventional chips, PWM chips and Silan chips
Scan Type	Any scan type between static and 64 sweeps.
Supported Module Specifications	Assembly of any row and column within 8192 pixels
Wiring Direction	Support left-to-right, right-to-left, top-to-bottom and bottom-to-top wiring.
Number of Data Sets	32 sets of full color data
Data Folding	Support same direction folding, reverse folding, same direction folding in 4 parts, etc.
Data Exchange	Support 32 sets of data exchange freely.
Module Point Extraction	Support any point extraction.
Module Row and Column Extraction	Support any row and column extraction.
Data Serial Transmission	Support serial in the form of RGB, R16G16B16, etc.
Compatible Devices and Interface Types	
Communication Distance between Devices	CAT 5e cable ≤100m recommended
Compatible Transmission Devices	Gigabit switch, Gigabit fiber transceiver, Gigabit fiber switch
DC Power Supply Interface	Pin header VH3.96mm-4P, barrier terminal block - 8.25mm-2P
HUB Interface Type	Self-contained HUB75 interface
Physical Parameters	
Board Dimensions	Length 145.2mm, width 91.7mm
Input Voltage	DC 3.8V~5.5V
Rated Current	0.6A
Rated Power Consumption	3W
Storage and Transport Temperature	-40℃~125℃
Operating Temperature	-25℃~75℃
Anti-static Capacity of Human Body	2KV
Weight	100g
Environmental Monitoring & Remote Control (Requiring a Multifunction Card)	

Monitoring Function	Support real-time monitoring of environmental information such as temeprature, humidity and smoke
Remote Control	Support the remote relay to switch the on/off of the device
Other Functions	
Point-by-Point Calibration	Support
Loop Backup	Support
Shaped Screen	Support shaped screens through any offset of data sets. Support various shaped displays such as spherical screens, diamond-shaped screens, cubic screens, and irregular-shaped screens.

Hardware Introduction
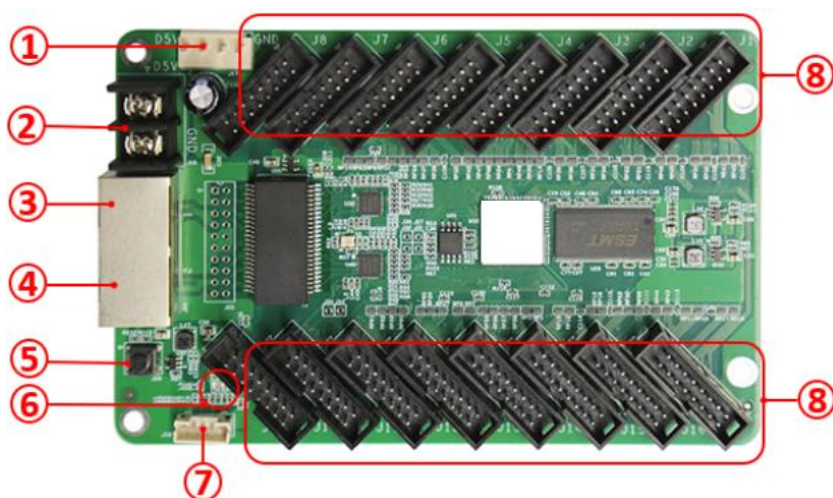
SN	Name	Functions		Remarks
1	Power Input 1	Connect a DC 3.8~5.5V power supply to power the receiver card.		Only one of them is used.
2	Power Input 2	Connect a DC 3.8~5.5V power supply to power the receiver card.		
3	Network Port A	RJ45 for network signal transmission.		Dual network ports for free access with intelligent system identification.
4	Network Port B	RJ45 for network signal transmission.		
5	Test Button	Self-contained test program for four monochrome displays in red, green, blue and white, as well as horizontal and vertical scanning displays.		
6	Power Indicator	If the red light is normally on, the power supply is normal.		D1
	Signal Indicator	Flashing 1 time/second	The receiver card is working properly and the network cable is connected properly.	D2

		Flashing 10 times/second	The receiver card is working properly and the box is in the calibrated state.	
		Flashing 4 times/second	In the loop backup state, the receiver card works in the backup transmitter card state.	
7	External Interface	External interface for indicator lights and the test button.		
8	HUB Interface	HUB75 data interface, J1~J16 for connecting display unit boards.		

Dimensions and Mounting Hole Diagram

Unit: mm
Tolerance: ±0.1mm