

JTM05 Command List:

The face recognition we are using is 320X240 pixel color camera, and thermal resolution is 80X60

1) Faces Block temperature request

For the position X, Y is according the image left top corner as coordination, and the size is in pixel.

All coordination and size is relative the 320X240 pixel. For example, we found a forehead block on the screen top-left corner and size X is 30 Y is 20 pixels. Then we will send (0, 0) as position and X as width 30, length is 20

PC to JTM05

Initial Bytes (4 bytes)	Package		Command (1 Byte)	Face Number (1 Byte) (MAX 5)	Face #1								If have Face #2 to #5	End Byte	XOR CHECKSUM (1 Byte)
	Byte length (Bytes need to checksum) (2 Bytes)				X Position (2 Bytes) (Max 240)		Y Position (2 Bytes) (Max 320)		Width (2 Bytes) (Max 50)		Length (2 Bytes) (Max 50)				
	High Byte	Low Byte			High Byte	Low Byte	High Byte	Low Byte	High Byte	Low Byte					
AA AA 00 02	XX	XX	01	XX	XX	XX	XX	XX	XX	XX	XX	XX	.....	0x03	XX

XOR CHECKSUM

JTM05 -> PC hot point's temperature inside the block:

Initial Bytes (4 bytes)	Package Byte length (2 Bytes)		Command (1 Byte)	Blackbody Temperature (=Reading*100-10000)		Room Temperature (=Reading *100-10000)		Face #1 Temperature (=Reading*100-10000)		If have Face #2 to #5	End Byte	XOR CHECKSUM (1 Byte)
	High Byte	Low Byte		High Byte	Low Byte	High Byte	Low Byte	High Byte	Low Byte			
AA AA 00 02	XX	XX	01	XX	XX	XX	XX	XX	XX	.....	0x03	XX

XOR CHECKSUM

2) Ask for whole thermal Image

PC to JTM05:

Initial Bytes (4 bytes)	Package Length (2 Bytes)		Command (1 Byte)	End Byte (1 Byte)	XOR CHECKSUM (1 Byte)
	High Byte	Low Byte			
AA AA 00 02	00	02	03	0x03	01

JTM05 -> PC:

Initial Bytes (4 bytes)	Package Length (2 Bytes)		Command (1 Byte)	Blackbody Temperature (=Value*100-10000)		Environment Temperature (=Value*100-10000)		Thermal Image 1Frame 80X60 Pixels (9600 Bytes) (=Value*100-10000)				End Byte (1 Byte)	XOR CHECKSUM (1 Byte)
	High Byte	Low Byte		High Byte	Low Byte	High Byte	Low Byte	1P	2P	.....	4800p		
AA AA 00 02	25	87	02	XX	XX	XX	XX	Each Pixel has 2 bytes				0x03	XX

XOR CHECKSUM

3) Ask for block thermal Image

PC to JTM05 Send data:

Initial Bytes (4 bytes)	Package Length (2 Bytes)		Command (1 Byte)	Face								End Byte (1 Byte)	XOR CHECKSUM (1 Byte)
				X Position (2 Bytes) (Max 240)		Y Position (2 Bytes) (Max 320)		Width (2 Bytes) (Max 50)		Length (2 Bytes) (Max 50)			
				High Byte	Low Byte	High Byte	Low Byte	High Byte	Low Byte	High Byte	Low Byte		
AA AA 00 02	XX	XX	03	XX	XX	XX	XX	XX	XX	XX	XX	0x03	XX

XOR CHECKSUM

JTM05 -> PC Reply:

Initial Bytes (4 bytes)	Package Length (2 Bytes)		Command (1 Byte)	Blackbody Temperature (=Value*100-10000)		Environment Temperature (=Value*100-10000)		Forehead Thermal Image 1Frame (=value*100-10000)				End Byte (1 Byte)	XOR CHECKSUM (1 Byte)
				High Byte	Low Byte	High Byte	Low Byte	1P	2P	.....	Width X Length		
AA AA 00 02	XX	XX	03	XX	XX	XX	XX	Each Pixel has 2 bytes				0x03	XX

XOR CHECKSUM

4) LED Control

PC to JTM05:

Initial Bytes (4 bytes)	Package Length (2 Bytes)		Command (1 Byte)	Red (1 Byte)	Green (1 Byte)	Blue (1 Byte)	White (1 Byte)	End Byte (1 Byte)	XOR CHECKSUM (1 Byte)
				0: off 1: on	0: off 1: on	0: off 1: on	0: off 1: on		
	High Byte	Low Byte							
AA AA 00 02	00	XX	04	XX	XX	XX	XX	0x03	XX

XOR CHECKSUM

JTM05 -> PC:

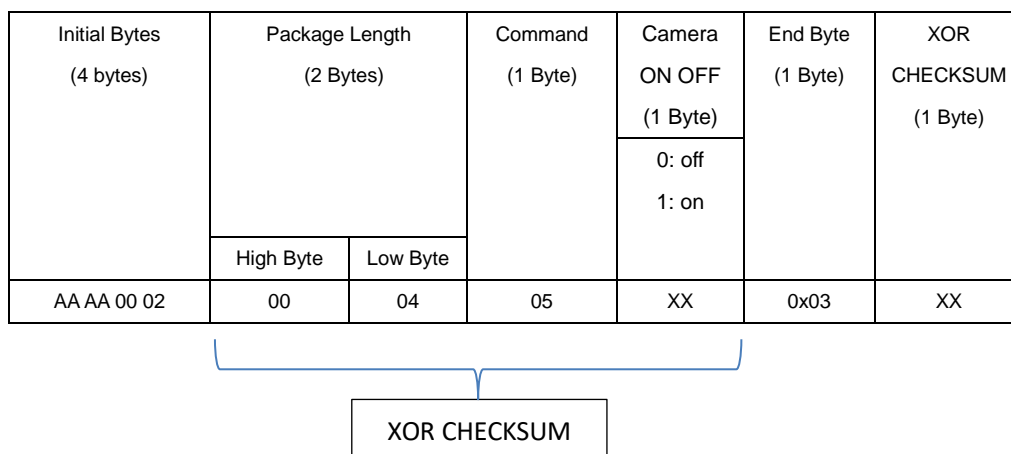
Initial Bytes (4 bytes)	Package Length (2 Bytes)		Command (1 Byte)	Red (1 Byte)	Green (1 Byte)	Blue (1 Byte)	White (1 Byte)	End Byte (1 Byte)	XOR CHECKSUM (1 Byte)
				0: off 1: on	0: off 1: on	0: off 1: on	0: off 1: on		
	High Byte	Low Byte							
AA AA 00 02	00	XX	04	XX	XX	XX	XX	0x03	XX

XOR CHECKSUM

5) Color Camera Control

Default color camera is power off

PC to JTM05:



JTM05 -> PC:

