

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	Pack	kage	Command	Face		Face #1							If have	End	XOR
(4 bytes)	Byte I	ength	(1 Byte)	Number	X Position		Y Pos	sition	Width		Length		Face #2	Byte	CHECKSUM
	(Bytes	need		(1 Byte)	(2 Bytes) (2 Bytes) ((2 Byt	es)	(2 Bytes)		to #5		(1 Byte)		
	to	0		(MAX 5)	(Max	240)	(Max	lax 320) (Max 50) (Max 50		50)					
	check	(sum													
	(2 B)	ytes)													
	High	Low			High	Low	High	Low	High	Low	High	Low			
	Byte	Byte			Byte	Byte	Byte	Byte	Byte	Byte	Byte	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	Pack	kage	Command	Blackbody		Ro	om	Fac	e #1	If have Face #2	End	XOR
(4 bytes)	Byte I	ength	(1 Byte)	Temp	erature	Temperature Temperature		to #5	Byte	CHECKSUM		
	(2 B)	ytes)		(=Reading	*100-10000)	(=Rea	ading	(=Reading*100-10000)				(1 Byte)
						*100-1	0-10000)					
	High	Low		High Byte	Low Byte	High	Low	High	Low Byte			
	Byte	Byte				Byte	Byte	Byte				
AA AA 00 02	XX	XX	01	XX	XX	XX	XX	XX	XX		0x03	XX



2) Ask for whole thermal Image

PC to JTM05:

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

JTM05 -> PC:

Initial Bytes	Pack	kage	Command	Blackbody		Enviro	nment	Therm		mal Image		End Byte	XOR
(4 bytes)	Len	gth	(1 Byte)	Temperature		Tempe	erature	ıre		1Frame		(1 Byte)	CHECKSUM
	(2 B)	ytes)		(=Value*1	00-10000)	(=Value*100-10000)		80X60 Pixels			s		(1 Byte)
									(9600 Bytes)				
								(=	(=Value*100-10000)				
	High	Low		High	Low Byte	High Byte	Low Byte	1P	2P		4800p		
	Byte	Byte		Byte									
AA AA 00 02	25	87	02	XX	XX	XX	XX	Each Pixel has 2 bytes		0x03	XX		



3) Ask for block thermal Image

PC to JTM05 Send data:

Initial Bytes	Pack	kage	Command		Face								XOR
(4 bytes)	Length (1 Byte		(1 Byte)	X Position		Y Position		Width		Length		Byte	CHECKSUM
	(2 B)	ytes)		(2 B)	/tes)	(2 B)	/tes)	(2 Bytes)		(2 B)	ytes)	(1 Byte)	(1 Byte)
				(Max	240)	(Max	320)	(Max 5	50)	(Max	(Max 50)		
	High	Low		High	Low	High	Low	High	Low	High	Low		
	Byte	Byte		Byte	Byte	Byte	Byte	Byte	Byte	Byte	Byte		
AA AA 00 02	XX	XX	03	XX	XX	XX	XX	XX	XX	XX	XX	0x03	XX

XOR CHECKSUM

JTM05 -> PC Reply:

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	Initial Bytes	Pack	cage	Command	Blackbody		Enviro	nment	Forehead Th			ermal	End Byte	XOR
	(4 bytes)	Len	gth	(1 Byte)	Temperature		Tempe	erature		Image 1Frame			(1 Byte)	CHECKSUM
		(2 B)	/tes)		(=Value*1	00-10000)	(=Value*1	00-10000)	(:	(=value*100-10000)			(1 Byte)	
		High	Low		High	Low Byte	High Byte	Low Byte	1P	2P		Width		
		Byte	Byte		Byte							Х		
												Length		
	AA AA 00 02	XX	XX	03	XX	XX	XX	XX	Each Pixel has 2 bytes		0x03	XX		



4) LED Control

PC to JTM05:

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



5) Color Camera Control

Default color camera is power off

PC to JTM05:

Initial Bytes	Package	Length	Command	Camera	End Byte	XOR
(4 bytes)	(2 B ₎	rtes)	(1 Byte)	ON OFF	(1 Byte)	CHECKSUM
				(1 Byte)		(1 Byte)
				0: off		
				1: on		
	High Byte	Low Byte				
AA AA 00 02	00	04	05	XX	0x03	XX
		XOR CH	HECKSUM			

JTM05 -> PC:

Initial Bytes	Package	Length	Command	Camera	End Byte	XOR
(4 bytes)	(2 By	tes)	(1 Byte)	ON OFF	(1 Byte)	CHECKSUM
				(1 Byte)		(1 Byte)
				0: off		
				1: on		
	High Byte	Low Byte				
AA AA 00 02	00	04	05	XX	0x03	XX
		XOR CI	HECKSUM	J		