

Communication Parameters:

19200,8,n,1 = 19200 baud, 8 bit, no parity, 1 stop bit

Requires at least 3ms between answers and query.

Basic Registers:

Address (Hex)	Read/Write	Section	Range	Description	
0x0001	R	Bit 0..7	6	Firmware Version	
			0x84	Model Id = Isp824	
				0x83	Model Id = Isp832
				0x8A	Model Id = Isp836
0x0002	R	Bit 8..15	101	Boot (Hardware) Version decimal=101	
			0x84	Hardware Model Id = Isp824	
				0x83	Hardware Model Id = Isp832
				0x8A	Hardware Model Id = Isp836
0x000F	W	Bit 0..15	0x0001	Channel 1 Toggle Simulation " <i>dec=1</i> "	
			0x0002	Channel 2 Toggle Simulation " <i>dec=2</i> "	
			
			0x0008	Channel 8 Toggle Simulation " <i>dec=8</i> "	
			
			0x0012	Channel 18 Toggle Simulation " <i>dec=18</i> "	
			
			0x0024	Channel 36 Toggle Simulation " <i>dec=36</i> "	
			0x0081	Reset Key Press Simulation " <i>dec=129</i> " (<i>single shot</i>)	
			0x0082	Horn Key Toggle Simulation " <i>dec=130</i> " (<i>toggle</i>)	
			0x0083	Test Key Press Simulation " <i>dec=131</i> " (<i>press</i>)	
			0x0084	Acknowledge Key Press Simulation " <i>dec=132</i> " (<i>single shot</i>)	
0x0085	Test Key De-press Simulation " <i>dec=133</i> "(<i>release</i>)				

Signal Status Registers:

0x0070 or 0x0033	R	Bit 0	0/1	1= Config Eeprom Contents Valid	
		Bit 1		1= Configuration Updated since last power cycle	
		Bit 2		1= Front Panel Configuration Mode Pending	
		Bit 3		1= Test Mode Pending	
		Bit 4		1= Horn Enabled, 0=Horn Disabled	
		Bit 8		1= Output #1 Active (horn)	
		Bit 9		1= Output #2 Active (bell)	
		Bit 11		1= Output #3 (fault)	
0x0071 or 0x0034	R	Bit 0	0/1	Input #1	Input States 0=Normal, 1=Abnormal
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x0072 or 0x0035	R	Bit 0	0/1	Input #1	Activity Register States 0=Inactive, 1=Active (Indicating not yet Acked by User)
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x0073 or 0x0036	R	Bit 0	0/1	Input #1	Holding Register States 0=Normal, 1=Holding (Indicating already Acked but Abnormal)
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x0074 or 0x003F	R	Bit 0	0/1	Input #17	Input States 0=Normal, 1=Abnormal
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0075 or 0x0040	R	Bit 0	0/1	Input #17	Activity Register States 0=Inactive, 1=Active (Indicating not yet Acked by User)
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0076 or 0x0041	R	Bit 0	0/1	Input #17	Holding Register States 0=Normal, 1=Holding (Indicating already Acked but Abnormal)
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0077 or 0x004A	R	Bit 0	0/1	Input #33	Input States 0=Normal, 1=Abnormal
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	

Isp824/832/836 Modbus Register Maps

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... (cont.)

0x0078 or 0x004B	R	Bit 0	0/1	Input #33	Activity Register States 0=Inactive, 1=Active (Indicating not yet Acked by User)
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x0073 or 0x004C	R	Bit 0	0/1	Input #33	Holding Register States 0=Normal, 1=Holding (Indicating already Acked but Abnormal)
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	

ISA18.1 Configuration Dependant Registers:

Address (Hex)	Read/Write	Section	Range	Description	
0x0038	R	Bit 0	0/1	Input #1	First Alarm Indication States 0=Normal, 1=Alarm
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x0039	R	Bit 0	0/1	Input #1	Momentary Indication States 0=Normal, 1=Momentary
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x003A	R	Bit 0	0/1	Input #1	Acknowledged Indication States 0=Normal, 1=Acknowledged
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x003B	R	Bit 0	0/1	Input #1	Ringback Indication States 0=Normal, 1=Ringback
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x003C	R	Bit 0	0/1	Input #1	Red Color Indication States 0=Normal, 1=Red
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x003D	R	Bit 0	0/1	Input #1	Green Color Indication States 0=Normal, 1=Green
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	
0x003E	R	Bit 0	0/1	Input #1	Blue Color Indication States 0=Normal, 1=Blue
		Bit 1		Input #2	
		...			
		Bit 15		Input #16	

...

... (cont.)

0x0043	R	Bit 0	0/1	Input #17	First Alarm Indication States 0=Normal, 1=Alarm
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0044	R	Bit 0	0/1	Input #17	Momentary Indication States 0=Normal, 1=Momentary
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0045	R	Bit 0	0/1	Input #17	Acknowledged Indication States 0=Normal, 1=Acknowledged
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0046	R	Bit 0	0/1	Input #17	Ringback Indication States 0=Normal, 1=Ringback
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0047	R	Bit 0	0/1	Input #17	Red Color Indication States 0=Normal, 1=Red
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0048	R	Bit 0	0/1	Input #17	Green Color Indication States 0=Normal, 1=Green
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	
0x0049	R	Bit 0	0/1	Input #17	Blue Color Indication States 0=Normal, 1=Blue
		Bit 1		Input #18	
		...			
		Bit 15		Input #32	

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Isp824/832/836 Modbus Register Maps

Rev3

... (cont.) for only Isp836 model

0x004E	R	Bit 0	0/1	Input #33	First Alarm Indication States 0=Normal, 1=Alarm
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x004F	R	Bit 0	0/1	Input #33	Momentary Indication States 0=Normal, 1=Momentary
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x0050	R	Bit 0	0/1	Input #33	Acknowledged Indication States 0=Normal, 1=Acknowledged
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x0051	R	Bit 0	0/1	Input #33	Ringback Indication States 0=Normal, 1=Ringback
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x0052	R	Bit 0	0/1	Input #33	Red Color Indication States 0=Normal, 1=Red
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x0053	R	Bit 0	0/1	Input #33	Green Color Indication States 0=Normal, 1=Green
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	
0x0054	R	Bit 0	0/1	Input #33	Blue Color Indication States 0=Normal, 1=Blue
		Bit 1		Input #34	
		...			
		Bit 3		Input #36	

Color Codes:

Red Bit	Green Bit	Blue Bit	Visible Color
0	0	0	Dark / Normal
1	0	0	Red
0	1	0	Green
1	1	0	Yellow
0	0	1	Blue
1	0	1	Magenta / Purple
0	1	1	Sky Blue / Turkuaz
1	1	1	White