

# KC868-Hx Smart Controller Communication Protocol V20.0.1

NUMBER	FUNCTION	SEND		FEEDBACK	DESCRIPTION
1	Turn ON Or Turn OFF Relay x	RELAY-SET-255, x, 1	(x is the number of Relay)	RELAY-SET-255, x, 1, OK	Turn ON the Relay x succeeded
				RELAY-SET-255, x, 1, ERROR	Turn ON the Relay x failed
		RELAY-SET-255, x, 0		RELAY-SET-255, x, 0, OK	Turn OFF the Relay x succeeded
				RELAY-SET-255, x, 0, ERROR	Turn OFF the Relay x failed
EXAMPLE		SEND		FEEDBACK	
	Turn ON Relay 2	RELAY-SET-255, 2, 1	(x is Relay 2)	RELAY-SET-255, 2, 1, OK	Turn ON Relay 2 succeeded
	Turn OFF Relay 2	RELAY-SET-255, 2, 0		RELAY-SET-255, 2, 0, OK	Turn OFF Relay 2 succeeded
2	Query the status of Relay x	RELAY-READ-255, x	(x is the number of Relay)	RELAY-READ-255, x, 1, OK	The status of Relay x is ON
				RELAY-READ-255, x, 0, OK	The status of Relay x is OFF
EXAMPLE		SEND		FEEDBACK	
	Query the status of Relay 7	RELAY-READ-255, 7	(x is Relay 7)	RELAY-READ-255, 7, 0, OK	The status of Relay 7 is OFF
3	Query the status of Inputs	RELAY-GET_INPUT-255		RELAY-GET_INPUT-255, x, OK	x is a Decimal Number The Maximum is 255(Binary is 11111111)
EXAMPLE		SEND		FEEDBACK	
	Query the status of Inputs	RELAY-GET_INPUT-255		RELAY-GET_INPUT-255, 254, OK	254:11111110----- Means input 1 was triggered
4	Turn ON Or Turn OFF Multiplex Relays(32 bit)	RELAY-SET_ALL-255, D3, D2, D1, D0	KC868-H32 Series	RELAY-SET_ALL-255, D3, D2, D1, D0, OK	Control succeeded
				RELAY-SET_ALL-255, D3, D2, D1, D0, ERROR	Control failed
EXAMPLE		SEND		FEEDBACK	
	Turn ON Relay 30, 18, 10, 1 and Turn OFF the rest	RELAY-SET_ALL-255, 32, 2, 2, 1	KC868-H32 Series	RELAY-SET_ALL-255, 32, 2, 2, 1, OK	D3(32)    D2(2)    D1(2)    D0(1) 00100000 00000010 00000010 00000001
	Turn OFF Relay 32, 20, 12, 2 and Turn ON the rest	RELAY-SET_ALL-255, 127, 247, 247, 253		RELAY-SET_ALL-255, 127, 247, 247, 253, OK	D3(127)    D2(247)    D1(247)    D0(253) 01111111 11110111 11110111 11111101
5	Turn ON Or Turn OFF Multiplex Relays(16 bit)	RELAY-SET_ALL-255, D1, D0	KC868-H16 Series	RELAY-SET_ALL-255, D1, D0, OK	Control succeeded
				RELAY-SET_ALL-255, D1, D0, ERROR	Control failed
EXAMPLE		SEND		FEEDBACK	
	Turn ON Relay 15, 13, 6, 1 and Turn OFF the rest	RELAY-SET_ALL-255, 80, 33	KC868-H16 Series	RELAY-SET_ALL-255, 80, 33, OK	D1(80)    D0(33) 01010000    00100001
	Turn OFF Relay 14, 10, 4, 2 and Turn ON the rest	RELAY-SET_ALL-255, 221, 245		RELAY-SET_ALL-255, 221, 245, OK	D1(221)    D0(245) 11011101    11110101

6	Turn ON Or Turn OFF Multiplex Relays(8 bit)	RELAY-SET_ALL-255, D0	KC868-H8/H4/H2Series	RELAY-SET_ALL-255, D0, OK	Control succeeded
				RELAY-SET_ALL-255, D0, ERROR	Control failed
EXAMPLE		SEND		FEEDBACK	
	Turn ON Relay 2 and Turn OFF the rest	RELAY-SET_ALL-255, 2		RELAY-SET_ALL-255, 2, OK	D0(2) 00000010
	Turn OFF Relay 5 and Turn ON the rest	RELAY-SET_ALL-255, 239		RELAY-SET_ALL-255, 239, OK	D0(239) 11101111
D3 D2 D1 D0 is a Decimal number; When convert to Binary, 1 means the Relay is ON, 0 means the Relay is OFF; D3 from Relay32 to Relay26; D2 from Relay25 to Relay17; D1 from Relay16 to Relay9; D0 from Relay8 to Relay1;					
7	Read all Relays's status	RELAY-STATE-255	KC868-H32 Series	RELAY-STATE-255, D3, D2, D1, D0, OK	Read succeeded
				RELAY-STATE-255, D3, D2, D1, D0, ERROR	Read failed
			KC868-H16Series	RELAY-STATE-255, D1, D0, OK	Read succeeded
				RELAY-STATE-255, D1, D0, ERROR	Read failed
			KC868-H8/H4/H2Series	RELAY-STATE-255, D0, OK	Read succeeded
				RELAY-STATE-255, D0, ERROR	Read failed
8	Turn ON all Relays	RELAY-AON-255, 1, 1		RELAY-AON-255, 1, 1, OK	Turn ON all Relays succeeded
9	Turn OFF all Relays	RELAY-AOF-255, 1, 1		RELAY-AOF-255, 1, 1, OK	Turn OFF all Relays succeeded
10	Reversal Control Relay x	RELAY-KEY-255, x, 1	(x is the number of Relay)	RELAY-KEY-255, x, 1, OK	Reversal Control Relay x succeeded
		SEND		FEEDBACK	
EXAMPLE	Reversal Control Relay 4	RELAY-KEY-255, 4, 1	(x is relay 4)	RELAY-KEY-255, 4, 1, OK	Reversal Control Relay 4 succeeded