



## **Series 937A Controller**

Addendum to RS-232 / RS-485 Manual  
for PROFIBUS Option

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## Electrical Connections

Pin Number	Description
3	RxD/TxD+
8	RxD/TxD-
6	V+ (+5Vdc)
5	Ground

## Addressing

Addresses 00 through 99 (decimal) are selected on the rear panel.

GSD File: MKSI0932.GSD

ID Number: 0932 hex

Equivalent RS-232 commands in the Input and Output Memory Map and Parameter Data:

The Profibus card only does a subset of the RS-232 commands. Refer to manual for command definitions. Some commands are available through Slave Parameter Data and are not in the memory map.

Pn  
ECCn  
XCCn  
RELAYS  
RLYn=d.d.E±ee  
RLYn=0  
RLYn  
ERn  
XRn

Note: CTL and PRO commands are not available at the same time. Use Parameter Data "Protection Type" (byte 9) to select: Control Setpoint provides CTL commands and Protection provides PRO commands.

PROn=d.d.E±ee  
PROn=0  
PROn  
CTLn=d.d.E±ee  
CTLn=0  
CTLn

Note: the following commands are only available as Slave Parameter Data: enable or disable

AUTZ2                      Parameter Data byte 3  
AUTZ3                      Parameter Data byte 4  
AUTZ4                      Parameter Data byte 5  
AUTZ5                      Parameter Data byte 6

EFRONT and XFRONT Parameter Data byte 7  
 ECOM and XCOM Parameter Data byte 8

## Memory Maps

<b>OUTPUT Buffer Map</b>				
<b>Offset</b>	<b>Size</b>	<b>Format</b>	<b>Description</b>	
0	1	Bit field	Bit 0	Enable/Disable Setpoint Relay Channel 5
			Bit 1	Enable/Disable Setpoint Relay Channel 4
			Bit 2	Enable/Disable Setpoint Relay Channel 3
			Bit 3	Enable/Disable Setpoint Relay Channel 2
			Bit 4	Enable/Disable Setpoint Relay Channel 1
			Bit 5	N/A
			Bit 6	N/A
			Bit 7	N/A
1	1	Bit field	Bit 0	Enable/Disable cold cathode Channel 1
			Bit 1	Enable/Disable cold cathode Channel 2
			Bit 2	Enable/Disable cold cathode Channel 4
			Bit 3	N/A
			Bit 4	N/A
			Bit 5	N/A
			Bit 6	N/A
			Bit 7	N/A
2	4	Float		Relay Setpoint Pressure for Channel 1
6	4	Float		Relay Setpoint Pressure for Channel 2
10	4	Float		Relay Setpoint Pressure for Channel 3
14	4	Float		Relay Setpoint Pressure for Channel 4
18	4	Float		Relay Setpoint Pressure for Channel 5
22	4	Float		Protection Setpoint Pressure for Channel 1
26	4	Float		Protection Setpoint Pressure for Channel 2
30	4	Float		Protection Setpoint Pressure for Channel 4
34	4	Float		Control Setpoint Pressure for Channel 1
38	4	Float		Control Setpoint Pressure for Channel 2

INPUT Buffer Map				
Offset	Size	Format	Description	
0	4	Float	Pressure Channel 1	
4	1	Byte	1	NOGAUGE
			2	NEGATIVE
			3	CONTROL
			4	HI
			5	LO
			6	HV_OFF
			7	AA
			8	PROTECT
			9	WAIT
5	4	Float	Pressure Channel 2	
9	1	Byte	1	NOGAUGE
			2	NEGATIVE
			3	CONTROL
			4	HI
			5	LO
			6	HV_OFF
			7	AA
			8	PROTECT
			9	WAIT
10	4	Float	Pressure Channel 3	
14	1	Byte	1	NOGAUGE
			2	NEGATIVE
			3	CONTROL
			4	HI
			5	LO
			6	HV_OFF
			7	AA
			8	PROTECT
			9	WAIT
15	4	Float	Pressure Channel 4	
19	1	Byte	1	NOGAUGE
			2	NEGATIVE
			3	CONTROL
			4	HI
			5	LO
			6	HV_OFF
			7	AA
			8	PROTECT
			9	WAIT
20	4	Float	Pressure Channel 5	

24	1	Byte	1	NOGAUGE
			2	NEGATIVE
			3	CONTROL
			4	HI
			5	LO
			6	HV_OFF
			7	AA
			8	PROTECT
			9	WAIT
25	1	Byte		Reserved
26	1	Byte		Reserved
27	1	Byte		Reserved
28	1	Bit field	Bit 0	Setpoint Relay state Channel 5
			Bit 1	Setpoint Relay state Channel 4
			Bit 2	Setpoint Relay state Channel 3
			Bit 3	Setpoint Relay state Channel 2
			Bit 4	Setpoint Relay state Channel 1
			Bit 5	N/A
			Bit 6	N/A
			Bit 7	N/A
29	4	Float		Relay Setpoint Pressure for Channel 1
33	4	Float		Relay Setpoint Pressure for Channel 2
37	4	Float		Relay Setpoint Pressure for Channel 3
41	4	Float		Relay Setpoint Pressure for Channel 4
45	4	Float		Relay Setpoint Pressure for Channel 5
49	4	Float		Protection/Control Setpoint Pressure for Channel 1
53	4	Float		Protection/Control Setpoint Pressure for Channel 2
57	4	Float		Protection/Control Setpoint Pressure for Channel 4