



**AUTO MANUAL STATIONS  
MODEL 881/A881  
Microprocessor based and fully configurable**

**Introduction**

The revised and updated version of Model 881 of Pantech Instruments is A881. Pantech's Model A881 are Microprocessor based Auto Manual Controllers, and are designed to control and display control parameters. The instrument serves purpose of an A/M Controller along with an indicator with retransmission output. As an A/M controller, the instrument accepts 4-20 mA input from possible sources like DCS and gives at the output in the normal AUTO mode. During the possible breakdown, the control shifts from the AUTO mode to the MANUAL mode, and the user can now control the output 4-20 mA from the control keys provided on the front panel. This transfer is bumpless. Even in case of failure of A/M station, the controller continues its control in auto mode. The optional auto bias feature of the instrument allows even manual to auto transfer bumpless. The bias is set automatically in manual mode to allow this bumpless transfer and then it can be changed by the same push buttons in auto mode. External feedback signal o/p from the A/M station allows controller to track A/M output in manual mode. The rates of change of output (in manual mode) and bias (in auto mode) are 1% and 10% per sec.. The instrument has a 4 digit display which displays the Output parameters as configured by the user.

The instrument also accepts another 4-20 mA input, displays as a 4 digit display as configured by the user, and gives optional 4-20 mA retransmission signal. The instrument provides 24 V DC transmitter power supply to power up mA transmitter in 2 wire or 4 wire connection system. The modules incorporate low drift operational amplifiers and industrial grade components. Burn out of each module ensures a long trouble free operation

<b>Model</b>	A881 ( formerly 881 )
<b>Push Buttons Up, Down, F</b>	5 ( Up, Down, A, M, I/O, F ) Up and Down keys used to vary the output in the Manual Mode. When these keys are Used along with F ( Fast ) key the output can be varied very Fast.
<b>A</b>	Used to get back the instrument in Auto mode
<b>M</b>	Used to get back the instrument in Manual mode
<b>I/O</b>	Used to sense the Input condition : healthy or erroneous
<b>Indications</b>	4 digit green/red LED for Controller O/P ( channel – 1 o/p for DCS ) 4 digit green/red LED for Position feedback - optional 2 LEDs indication on the front fascia for : AUTO or MANUAL Indication 1 LED indication on the front fascia for Input = Output ( on channel – 1 )
<b>Inputs</b>	2 nos. of 4-20 mA ( Analog inputs ) Input 1 for channel 1 ( For Auto Manual Action , For Controller o/p , from DCS ) Input 2 for channel 2 ( For Position Transmitter ) - optional
<b>Outputs</b>	2 nos of 4-20 mA ( Analog outputs ) Output 1 on channel 1 ( Based on Auto/Manual state, Controller O/P ) [ Reverse mode also possible ] Output 2 on channel 2 ( Based on the Process Value display ) - optional
<b>O/P Load</b>	Upto 800 ohms ** additional / special o/p possible on confirmations
<b>Relay O/P</b>	2 Relay outputs ( Digital outputs ) provided First relay output on Instrument Fail Second relay output on Auto/Manual selection ** special relay outputs on confirmations
<b>Tracking</b>	Tracking time field adjustable from the front fascia only Controller O/P can be varied from this
<b>Accuracy</b>	Display accuracy of 0.15% of full span Output accuracy of 0.15% of full span
<b>Power</b>	230 V AC +/- 10% @ 50 Hz. OR 110 V AC +/- 10% @ 50 Hz OR 24 V DC // or SPECIALS
<b>Enclosure Dimensions Mounting Terminals</b>	Metal sheet powder coated / ABS Plastic 96*96 / 72*144 / 48*96 / specials ( w*h ) mm Panel / Wall / Field / specials Screw type on the back side of the instrument
<b>Amb. Temp.</b>	0-50 deg. C
<b>Humidity</b>	90% RH
<b>Password</b>	single level password protected





**PANTECH INSTRUMENTS**

#### Ordering Information

Please confirm the availability of the model by cross checking the above section.

#### Basic Model No. (Specified by first 3 digits)

A881 -Auto Manual Controller

#### Mounting (Specified by letter following 3 digits)

P-Weatherproof - Panel  
W-Weatherproof - Wall  
F-Flameproof - Wall / field  
I-IP65 grade – wall / field  
S-Specials

#### Display / No. of channels option (next digit)

1-Single ( for A/M action )  
2-Dual display ( One for  
PV, another for A/M action )

#### Power (Specified by the next digit)

1-24 V DC  
2-110 V AC  
3-230 V AC

#### S-SPECIALS

Attach A.M diagram  
Attach A.M theory from the manual

#### Auxiliary output on PV channel (Specified by the next digit)

0-None  
1-1 nos. isolated output  
S-Specials  
Additional output on A/M channel  
( Other output signals then the default A/M signal )  
0-None  
S-Special signal outputs

#### Contact outputs ( specified by next digit )

0-None  
1-A/M Fail ( Instrument fail )  
2-Auto Fail (Auto <> Manual )  
3-Both of the above types  
S-Specials  
PV = On going another process value signal



**PANTECH INSTRUMENTS**

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