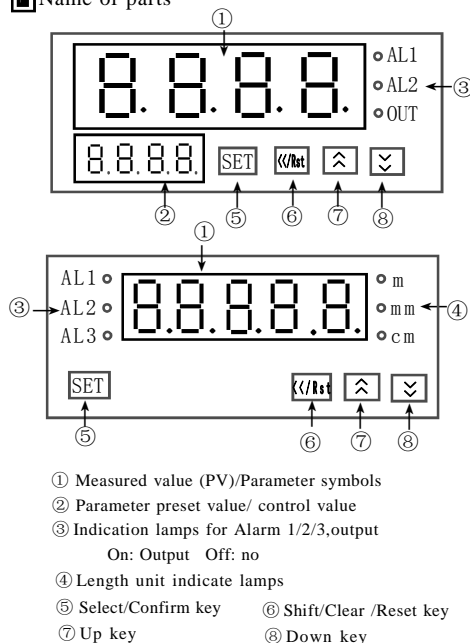# mypin

DZ series Electrical Ruler
User Manual

Thanks a lot for selecting **mypin** products!
Before operating this instrument, please carefully read this manual and fully understand its contents. If have problems, please contact our sales or distributors whom you buy from. This manual is subject to change without prior notice.

★ Applications

The instrument provide isolated samplilng power for pricision potentiom eter or resisitance.Reset shift values by exteral terminals. Up to 6 configurable control outputs for position/shifting controll. Optional data keeping/recording function and RS485,which connect to PC/PLC for remote control.
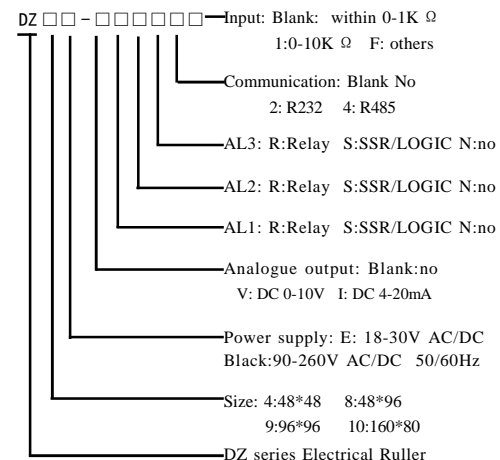
■ Name of parts

① Measured value (PV)/Parameter symbols
② Parameter preset value/ control value
③ Indication lamps for Alarm 1/2/3,output
　　On: Output　Off: no
④ Length unit indicate lamps
⑤ Select/Confirm key　⑥ Shift/Clear /Reset key
⑦ Up key　⑧ Down key

■ Specifications

Power	90-260V AC 50/60Hz or 15-30V AC/DC
Comsump.	≤ 5VA
Sampling	4 digit:≤ 16 times/sec. 5 digit:16−128 times/sec.
Accuracy	4 digit:0.3%F.S ± 2digit 5 digit:0.1%F.S
Alarm	Relay: NO AC 250V/3A or DC 30V/3A cos∅ =1
Input	Regular: Rt mA,V,etc. can be customized
Analog	0-10V or 4-20mA, free set for control output range by software
Ext. Power	DC 12/24V/30mA
Com.	RS232 or RS485 for option

Holing: 91+0.5X45+0.5mm(DR8)

■ Models

DZ □□ - □□□□□□ — Input: Blank: within 0-1K Ω
　　　　　　　　　　　　　1:0-10K Ω　F: others

　　　　　Communication: Blank No
　　　　　　　　2: R232　4: R485

　　　　　AL3: R:Relay S:SSR/LOGIC N:no

　　　　　AL2: R:Relay S:SSR/LOGIC N:no

　　　　　AL1: R:Relay S:SSR/LOGIC N:no

　　　　　Analogue output: Blank:no
　　　　　　　V: DC 0-10V I: DC 4-20mA

　　　　　Power supply: E: 18-30V AC/DC
　　　　　　　Black:90-260V AC/DC 50/60Hz

　　　　　Size: 4:48*48　8:48*96
　　　　　　　9:96*96 10:160*80

　　　　　DZ series Electrical Ruller

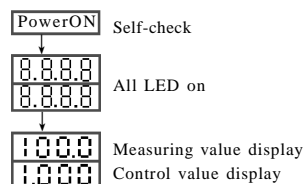For example DZ8-RR4F-5K.means 48*96*80mm size,90-260V AC/DC power supply, 2 alarms, RS485 interface,input:0-5K Ω
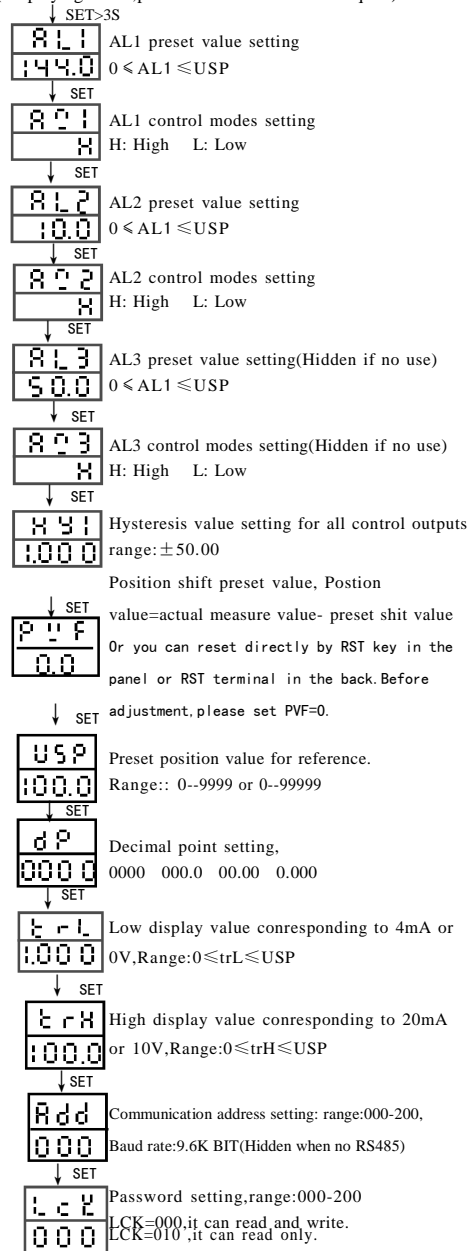
■ Parameters setting

1. Control parameters setting: In the displaying estate, press and hold SET key >3 sec. to enter the setting menu. Press <</RST key, LED flashes, press ∨ / ∧ key to modify,and then press SET key to confirm. Press SET key again to read the following parameters one by one.

2.Adjustment:At first,please well connect the equipment and sensor as per diagram. then power it on and enter the menu. Set USP=Preset position value wantted. PVF=0.000. In zero position,press ∨ key >5sec. unitil OK flashes,value like 0.0 or near will displays.then you finish the zero point setting.Then in preset USP position,press∧ key>5sec. until OK flashes, and actual range value displays.then you finish the range setting.
If error is big,please repeat the adjustment.

3.Positon shift operation: In displaying estate and no key operation, press <</RST key until 0 displays.It's done.

4. The instrument will return to the displaying estate without any operation for 25 sec.
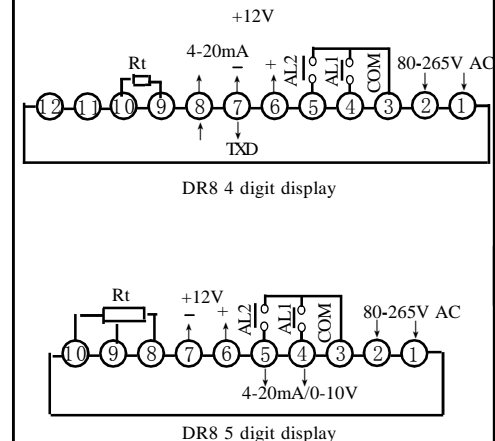
■ Operation process

PowerON　Self-check

8.8.8.8 / 8.8.8.8　All LED on

100.0　Measuring value display
1.000　Control value display

Alarm parameter setting
(Displaying estate,press SET<3sec. to enter or qutie)

SET>3S

ALI / 144.0　AL1 preset value setting
　　　0 ≤ AL1 ≤USP

SET

AΠI / H　AL1 control modes setting
　　H: High　L: Low

SET

AL2 / 10.0　AL2 preset value setting
　　0 ≤ AL1 ≤USP

SET

AΠ2 / H　AL2 control modes setting
　　H: High　L: Low

SET

AL3 / 50.0　AL3 preset value setting(Hidden if no use)
　　0 ≤ AL1 ≤USP

SET

AΠ3 / H　AL3 control modes setting(Hidden if no use)
　　H: High　L: Low

SET

HYI / 1.000　Hysteresis value setting for all control outputs range:±50.00

SET

PⴑF / 0.0　Position shift preset value, Postion value=actual measure value- preset shit value Or you can reset directly by RST key in the panel or RST terminal in the back. Before adjustment,please set PVF=0.

SET

USP / 100.0　Preset position value for reference. Range:: 0--9999 or 0--99999

SET

dP / 0000　Decimal point setting, 0000 000.0 00.00 0.000

SET

trL / 1.000　Low display value corresponding to 4mA or 0V,Range:0≤trL≤USP

SET

trH / 100.0　High display value corresponding to 20mA or 10V,Range:0≤trH≤USP

SET

Add / 000　Communication address setting: range:000-200, Baud rate:9.6K BIT(Hidden when no RS485)

SET

LcƳ / 000　Password setting,range:000-200 LCK=000,it can read and write. LCK=010 ,it can read only.

Note:When no control value setting,AL1,AL2, AL3,HY1 can be hidden. And so does ADD.

■ Diagram(Subject to real object)

DR8 4 digit display

DR8 5 digit display

★ Any changes,please refer to the labele in the meter

■ Complete products contains

★1 copy of user manual,
★1 inspection QC label,
★2 installing brachets,

We are responsible for the overal repairment for the failure of manufactorying quality within 12 months since the date of purchase. Repair fee will be charged accordingly for demage caused by improper use.The product has life-long warranty.

■ Modbus protocol will be explained with the product.

■ Main Products

■ Timer
■ Time relay
■ Temperature controller
■ Panel meter
■ Frequency/Tacho/Line-speed meter
■ Proximity sensor
■ Photo-electrical sensor
■ Transmitter
■ Sensor meter
■ Power adjustor

mypin Electrical Co.,Ltd

Web:www.mypinchina.com
E-mail: sale@mypinchina.com
Add: No.19,Beihe Road,Dongfeng Town, Zhongsahn,Guangdong,China
Tel: 86-760-23609691
Fax: 86-760-23609692