# SUNDOO® ADVANCED PRECISION INSTRUMENT

## ELECTRIC TEST SERIES USER'S MANUAL

#### CONTINUATION

Dear User,

Description in the manual is based on the newest products. Owing to improvement or other changes, contents of manual may differ from practical situation. Our company will reserve the right of recension at any moment. Please kindly forgive not to notify the revised places one by one.

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Test Series 电动机台 User Manual Electric Test Stand

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SJV-10K

Thank you for your patronage to purchase Electric Test Stand
Good stabiliy, wide application, wide and accurate test speed, stepless
speed adjustment, manual operation and automatic cycle. Matched to force
gauge and software, it could reach data test and stand control by computer.
It could test tension/compression, insertion/withdraw, fatigue test,
destructive test.

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## Electric Test Stand Series



# Packing List

Number	Parts Name		
1	Main Body		
2	M4 Inner Hexagon Spanner(SJH-500)		
3	M6 Inner Hexagon Spanner(Except SJH-500)		
4	M10 Inner Hexagon Spanner(SJV-5K/10K)	1	
5	M12×40 Socket Head Screw(SJV-10K)		
6	M12×30 Socket Head Screw(SJY-1000)	1	
7	D12 Flat gasket (SJV-10K/SJY-1000)		
8	D12 Spring washer (SJV-10K/SJY-1000)	1	
9	M10 Hold-down Nut	4	
10	220V Power Wire	1	
11	Manual		
12	Qualification Certificate		

#### SUNDOO® 山 度 仪器

## **Examine before Operation**

- A. Check Tighten Screw of Up Slide Carriage to be locked firmly;
- B. Turn on the power switch, then the power lamp will be light.
- C. Examine the stand whether there is abnormal sound when moving without load.

#### Manual Test

Choose the Manual mode by pressing Shift Button of Manual and Automatic Mode; Press Up or Down button all along, the test stand will work; Loosen the button, the test stand will stop work and finish test.

#### **Automatic Test**

Choose the Automatic mode by pressing Shift Button of Manual and Automatic Mode; Press up or Down button once, the test stand will work; Press Stop button, the test stand will stop and finish test.

## Caution

- A. The rated load of this test stand is SJH-500(500N),SJY-500(500N),SJY-1000 (1000N),SJV-5K(5KN),SJV-10K(10KN) please do not use it with exceeding load, which will destroy the machine;
- B. Handle lightly during using and moving;
- C. Please clean the machine by soft cloth. Dip the cloth in the water with cleanser then dry it and clean the dirt. Do not use the corrosive chemical substance, such as acetone;
- D. Do not tear down, repair, or update the machine by yourself, which may cause permanent trouble;
- E. Please keep the environment clean and prevent liquid or metal scraps from entering the engine box. Otherwise electric shock may happen and driving components may be damaged;
- F. Please keep the column and lower slide carriage hole clean;(SJV-5K/10K)
- G. Add some lubricant to screw mandrel and gear after period of time;
- H. Please pull out power connector, and make the stand away from dust and moisture if it is not used.

## Function

Test Stand, applied in tension and compression test, is assembled with SN/SKN/SH/SP (2N-5kN) Series Force Gauge. The stand adopts double-column construction with good stability, wide application range and easy operation. Furthermore, it has advantages of non-polar speed adjustment, manual or automatic operation, suitable for fields of rubber & plastic products, textile, construction, complex material, wire & cables, auto accessories, engineand scientific research, etc.

Note: When installing different force gauge, it should equip different backboard.

## Structure

#### SJH-500 Electric Horizontal Test Stand

Capacity: 500N Fuse of Main C

Stroke:210mm

Testing Speed:50-500mm/min

Max Gap:280mm

Work Voltage:single-phase 220V

Rate Current: 1.5A

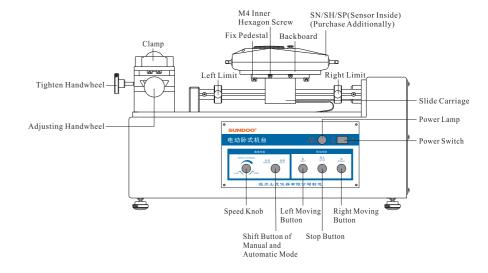
Fuse of Main Circuit:3A

Fuse of Controlling Circuit:0.5A Work Temperature:20±10°C

Store & Delivery Temperature:

-27°C~+70°C

Relative Humility:15%~80% RH







## SJY-500 Electric Vertical Test Stand

Stroke:250mm Range:

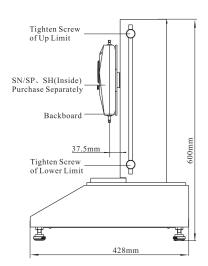
50-250mm/min, Max load: 200N 50-500 mm/min, Max load: 500N

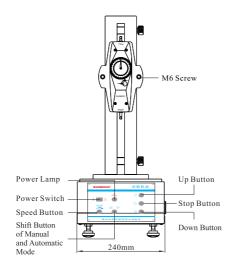
Maximum Gap:315 mm

Work Voltage: Single-phase 220V

Rate Current: 1.5 A

Fuse of Main Circuit:3 A
Fuse of Controlling Circuit:0.5 A
Working Temperature:20±10°C
Transport Temperature:-27°C~+70°C
Relative Humidity:15%~80% RH





SJY-500 Electric Vertical Test Stand

### SJY-1000 Electric Vertical Test Stand

Stroke:520mm

Range:

50-245mm/min,max load:500N 250-500mm/min,max load:1000N

Maximum Gap:560mm

Work Voltage: Single-phase 220V

Rate Current: 1.5 A

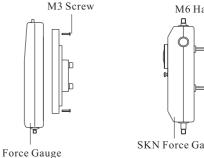
Fuse of Main Circuit:3 A
Fuse of Controlling Circuit:0.5 A
Working Temperature:20±10°C
Store & Delivery Temperature:
-27°C~+70°C

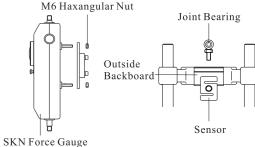
Relative Humidity:15%~80% RH

### Adjustment of Test Speed

- A. Turn the Manual/Automatic switch to Manual operation position.
- B. Pressing the Up or Down button once, the stand begins to work.
- C. Press the "Stop" button, the test stand willwill stop work.

### SJV-5K/10K Electric Vertical Test Stand





Picture 1 Installation of SN/SH/SP(Sensor Inside) Force Gauge

Picture 2 Installation of SKN Series Force Gauge

Picture 3 Installation of SH/SP(1kN-5kN)

- 1. When installing SN/SH/SP(Sensor Inside) Force Gauge, take out 4 pieces of M3 screws from toolbox, and through 4 deep hole of Small Backboard, tighten them into 4 installing hole on force gauge(Picture 1);
- 2. When installing SKN Series Force Gauge, take off 4 pieces of M6 hexangular screws of back cover, and backboard. also take off Small Backboard on test stand; through 4 hole of SKN backboard, tighten 4 pieces of M6 screws into installing hole of SKN Force Gauge by nut (Picture 2);
- 3. When installing SH/SP(1kN-5kN) Force Gauge, it should equip the SJ-021 OutsideBackboard. Loosen the 4 pieces of M6 hexangular screws, take off the SKN Backboard, fix the SJ-021 Backboard on the position of SKN Backboard by the 4 screws; take one of the joint axletree from sensor toolbox, and tighten the sensor through hole of backboard as showing in picture (Picture 3).





#### SJY-500/1000 Electric Vertical Test Stand

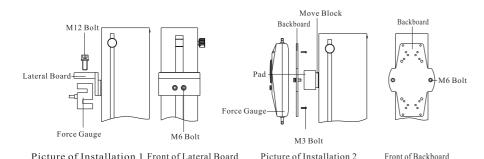
## Installation of Force Gauge

#### Installation 1:

- ①Screw M12x30 bolt into force gaugethrough hole on beam.
- ②Install required clamp at head of force gauge by M12 screw hole, adjust place and fix them.

### Installation 2:

- ①Loosen M6 screw on backboard by M6spanner, and take backboard off.
- ②When installing SN dial force gauge, firsttake off 4 pieces of M3x8 screws on backcover, and fix the gauge on backboard by M3x14 screw. When installing digital forcegauge, fix the gauge on backboard by M3x8 screw.
- ③Fix backboard(with force gauge) on heelblock by M6 screw. Please pay attention to the push pull direction of SN dial force gauge during installation.

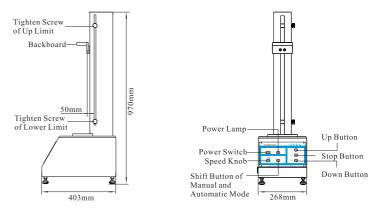


## **Examination before Operation**

- A. Lock the Retainer, Switch on the power andturn on the power switch, then the power lamp will be light.
- B. Examine the stand if there is abnormal sound with the stand moving without load.

## Manual (Automatic) Test

- A. Turn the Manual/Automatic switch to Manual operation position.
- B. Press the up and down button on the stand, hen the stand will begins to work.
- C. Loosen the button, then the stand will stopworking.



SJY-1000 Electric Vertical Test Stand

#### SJV-5K Electric Vertical Test Stand

Capacity:5000N (5kN) Measuring Stroke:200 mm

Measuring Speed:30-240 mm/min

Maximum Gap:215 mm

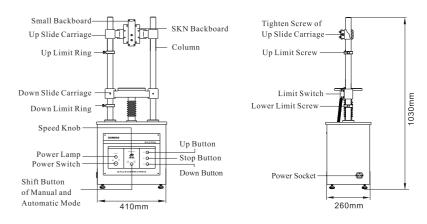
Work Voltage:Single-phase 220V

Rate Current: 1.5 A

Fuse of Main Circuit:3 A Fuse of Controlling Circuit:0.5A Working Temperature: $20\pm10^{\circ}$ C Store & Delivery Temperature:

-27°C~+70°C

Relative Humidity:15%~80% RH



SJV-5K Electric Vertical Test Stand





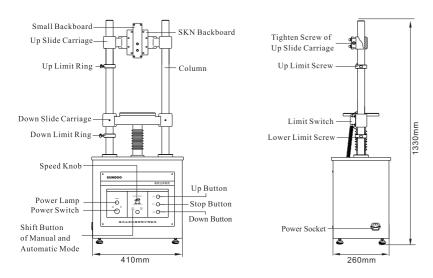
## SJV-10K Electric Vertical Test Stand

Max Capacity:10KNFuse of Main Circuit:3AStroke:200mmFuse of Main Circuit:0.5AGap between columns:215mmWorking Temperature:20±10°CVoltage:Single-phase 220VStore Temperature:-27°C∼+70°CRate Current:1.5ARelative Humidity:15%∼80% RH

Test Speed(Unit: mm/min):

Grading	1	2	3	4	5
Speed	24	48	72	96	120

When the testing speed is upper than or equivalent to Grading 3, accuracy is within  $\pm 5\%$ ; When the testing speed is lower than Grading 3, accuracy is within  $\pm 10\%$ .

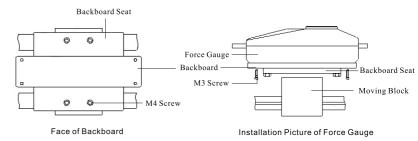


SJV-10K Electric Vertical Test Stand

# The installation of the test stand

#### SJH-500 Electric Horizontal Test Stand

#### Installation of Force Gauge



- A. Loosen 4 pieces of M4 screws on backboard seat by M4 spanner, and take backboard seat and other discreteness off:
- B. When installing SN Analog Force Gauge, take off 4 pieces of M3x8 screws on back cover of gauge, fix the force gauge on backboard by M3x14 screws; when installing digital force gauge, fix the gauge on backboard by M3x8 screws;
- C. Fix the backboard (with force gauge) on the test stand by M4 screws. Pay attention to the push and pull direction of SN Analog Force Gauge.

## **Examination Before Operation**

- A. Backboard of force gauge is fixed firmly;
- B. Turn on the power switch, power lamp is light;
- C. Examine the stand whether there is abnormal sound when moving without load.

#### **Manual Test**

Choose the Manual mode by pressing Shift Button of Manual and Automatic Mode; Pressing Left or Right Moving Button all along, the test stand will work; Loosen the button, the test standwill stop and finish testing.

#### **Automatic Test**

Choose the Automatic mode by pressing Shift Button of Manual and Automatic Mode; PressingLeft or Right Moving Button once, the test stand will work; Press Stop button, the stand will stopand finish testing.

# Adjustment of Test Speed

The test speed is adjustable during or before the test. Turn the Speed knob to the required speed.