

# WIRE HARNESS CHECKER

Continuity, Instantaneous open, and withstand voltage checker  
for wireharness, cable, etc.

## WTP Series



MODELS WTP-10/20/30 (10~30 circuits)

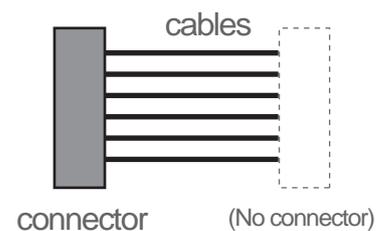
These machines checks a continuity, an instantaneous open, and a withstand voltage of wireharness or cables including the terminal connector (both or one side) up to 30 circuits.

- Tests :
- (A) open line, mixed line, shorted line (Continuity test).
  - (B) if a cable is being cut or incomplete connection by insert error of pin, etc. (Instantaneous open test).
  - (C) the circuits which may cause the short of a cable or between two pins.(Withstand voltage test)

## Special features

1. Continuity, Instantaneous open, and withstand voltage will be tested with reliability and effectively on the same test jig board.
2. As indication lamps are prepared for each circuit, you can easily find out the NG circuit.
3. Simple operation and a substantially constructed unit.
4. Detects instantaneous open circuit and indicates all instantaneous open points at the same time.
5. Input status of withstand voltage can be confirmed by indication meter.
6. The voltage of withstand voltage test can be set up any voltage between AC 0~1000V. Also, the maximum voltage of input voltage can be fixed any of 250/500/750/1000V.
7. Number of test circuit can be increase in 10 circuits. (Up to 30 circuits for WTP-10 and 20)
8. Can test the continuity and arrangement (array) of the cables in bulk(\*) at one side. (Refer to an illustration)
9. Test jig board used for WP series checker is available to use in this WTP series checkers.

(\*) One side terminals are open



## Specifications

1. Test function
  - a) Continuity test : Open>250 $\Omega$  Short<100 $\Omega$  Test voltage DC5V.
  - b) Instantaneous open test : Detects instantaneous open more than 1  $\mu$  sec.  
Maintaining lamps for all circuits.
  - c) Withstand voltage test : Leakage current 0.5/1/2/5/10mA.  
: Input time 0.2~10 seconds / circuit  
: Tests all circuit in around matches.  
Stops at NG point - Allowed to re-start.  
: Test voltage AC0~1000V continuously variable.
2. Number of test circuit : 10 ~ 30 circuit (in 10 circuit)
3. Branch circuit : Available to test (Set up the branch with program terminal)
4. Capacitance between cables : Less than 1.0  $\mu$  F
5. Indication / sound : "OK" Green LED & OK tremolo sound  
"NG" Red LED & alarm sound
6. External input & output : Input & output signal for the remote control.
7. Dimension / weight : 410(W) x 160(H) x 260(D)mm (except protrusion) / 7 Kgs.
8. Input voltage : AC100V +/- 10%
9. Power consumption : 30VA

# Test step and its function

## 1. Continuity test

Tests if the all circuits would be correctly connected turning on electricity for each circuit. (Checks if there are Open or Mix or Short circuits.)

Red LED lamp indicates the NG point.

In case of testing the one side terminal open circuit (mentioned on the item 8 of the special feature), tests the each cable in order using test probe according to the indication. If there is an Open or mis-arranged (mis-ordered) circuit, the test will stop there and not go to the next.

## 2. Instantaneous Open Test

An inferior crimp of cable, an uncertain connection, drooping out of terminal, etc. are a little bit difficult to find out its faulty at the state of stillness. By adding external forces like vibration, bend, tensile, etc., an uncertain connection part may become to instantaneous open state. By detecting this instantaneous open state, weed out the uncertain connection, which is the purpose of instantenous open test.

If detected the instantaneous open cirucit, indicates the relative circuits with blinking lamps and you'll hear an alarm sound.

## 3. Withstand voltage test

The circuit which apts to short by a hair(spring), etc. will not be found out by the test under the low voltage. So, by adding high voltage between the mutual circuits, and by checking the leakage current by discharging, this machine try to find out such errors.

This is a withstand voltage test. If the leakage current flows more than set up, the circuit will be indicated as the error and you'll hear an alarm sound.

## 4. Double continuity test

After the continuity test, instantaneous open test, and withstand voltage test, one more time the contiuiity test will be executed for the confirmation of connections.

## 5. OK sign, sound, and signal output

Only when all the above checks were passed, the "OK" sign will be indicated.



Connectors to connect to the test piece

# 2-circuit

## Continuity ▪ instantaneous open ▪ withstand voltage Checker

### Model WTP-02A

Assures to check the continuity , instantaneous open, and withstand voltage for processed flat cables, coaxial cables, shielded cable, very easily



- Flat cables will be checked regardless of its wire quantity.
- By set up to the test jig board only one time, you can check the continuity test, instantaneous test, and withstand voltage test.
- Compact size for limited space.

## Specifications

- 1) Continuity test : 2-circuit (Flat cable - serial connection with every other line.
- 2) Withstand voltage test : (a) Test voltage : AC 250 / 500 / 750 / 1000V  
(b) Leak current : 0.5 / 1 / 2 / 5 / 10mA  
(c) Input time : 0.5 / 1.0 ~ 15 seconds (every 1 second step)
- 3) External input/output : External start ▪ Reset OK signal : No voltage contact output
- 4) Display and sound : [OK] Green LED, OK beep sound  
: [NG] Red LED blinks, Intermittent beep sound
- 5) Dimension and weight : 250(W) x 140(H) x 210 (D) mm except protrude) / 5 Kgs.
- 6) Input voltage : AC 100V +/- 10%

☆ Possible to produce your special specification model on request.  
☆ Specifications to be changed without notice for improvement.

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