

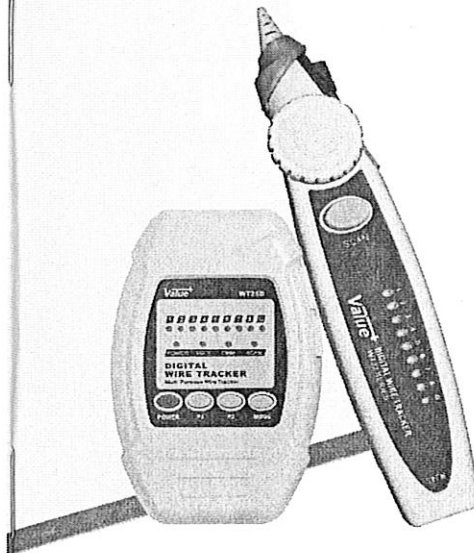
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# Value<sup>+</sup>



## WT25 Series Manual

The Value+ Model WT25C, WT25D and WT25E digital wire tracker (the equipment) is for circuit identification. By applying the digitalize signal, the equipment can minimize the noise during detection. To help the users minimizing their workload, the equipment is also designed for using on PoE-capable devices.

With careful use, the equipment will provide years of reliable service.



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## READ BEFORE USE – SAFETY INFORMATION

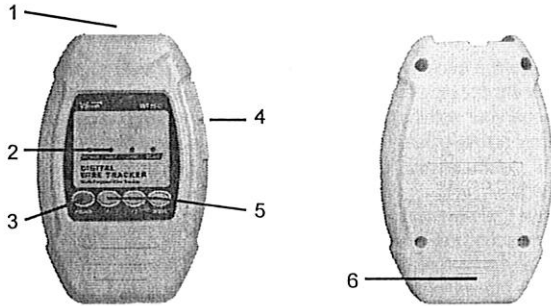
### WARNING

To ensure safe operation and service of the equipment, please follow these guidelines:

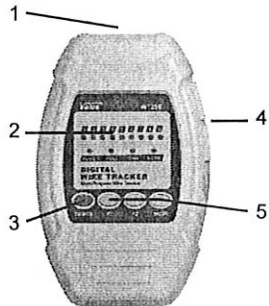
- Do not use the equipment just before, during or just after an electrical storm (electrical shock / high energy overvoltage!). Please make sure that your hands, your shoes, your clothing, the floor, switches and switching components are dry.
- Trace only non-energized wiring. Contact with live circuits can result in serious injury or death. Always disconnect power to the circuit prior to using the equipment.
- Never use the cable testing features on live circuits, except only on the network cable connecting to POE enabled devices.
- Do not use the equipment if they look damaged and / or wet.
- Never use the equipment if it just brought from a place with great temperature difference.
- Avoid to use the equipment in the environment with strong magnetic fields, strong electrostatic fields and strong RF fields.
- Read the instruction before use and follow all safety instructions.
- Use the equipment only as specified in the instruction card; otherwise, the equipment's safety features may not protect you.
- Clean the case with a damp cloth and mild detergent only. Do not use abrasives or solvents.
- Replace the battery(ies) if the power indicator is flashing.
- Remove the batteries if the equipment planned to be stored for long period.
- A " Warning" statement identifies hazardous conditions and actions that could cause bodily harm or death.
- A " Caution" statement identifies conditions and actions that could damage the Meter or the equipment under test.

# THE EQUIPMENT

## TRANSMITTER



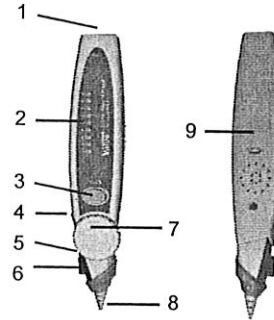
**WT25C**



**WT25D/E**

- 1) Receiver Holder
- 2) LED indicators
- 3) Power Button
- 4) External Probe Connectors
- 5) Push Buttons
- 6) Battery Door

## RECEIVER



- 1) RJ45 Connector
- 2) Indicators
- 3) Cable Tracing Button
- 4) Flashlight Switch
- 5) Scan Ready Indicator / Low Battery Indicator
- 6) Flashlight
- 7) Volume Adjusting Wheel
- 8) Tracing Probe
- 9) Battery Door

## PUSH BUTTONS

Button	Mode	Function	Access
Power	Any	Switch on/off the equipment	Hold down for about 1s to switch on or off the transmitter
F1 / F2	Tracing Pairs	Changing the signal frequency in analogue tracing signal	Press to change
	Cable Testing	Change the speed of testing	Press to change
Mode	Any	Switch from tracing LAN / Data cables and phone lines, cable testing, phone line voltage testing, battery voltage polarity testing and continuity test	Press to change

## OPERATING THE EQUIPMENT

### A. SELECT BETWEEN DIGITAL AND ANALOGUE TRACING SIGNAL

Press "SCAN" button on the receiver to switch between :

Functions	Standby Indication
Receiving digital signal with sound indication on finding the correct wire	Blue scan indicator switch on
Receiving digital signal with vibrating indication (WT25E) on finding the correct wire	Blue scan indicator flashing
Receiving analogue signal with sound indication on finding the correct wire	Red scan indicator switch on

### B. TRACING DATA / LAN CABLE

- 1) Connect the testing data / LAN cable to either the RJ45 or RJ11 on the transmitter if it has the plug;
- 2) Otherwise, connect the cable with alligator clip to the transmitter:
  - i. Connect the red clip to :
    - A wire in the unknown cable for cables with multiple wires.
    - The outer shield for tracing a shielded / coaxial cable.
  - ii. Connect the black clip to :
    - Another wire in the unknown cable but not in the same pair or to ground for cables with multiple wires.
    - The center conductor or ground for tracing a shielded / coaxial cables.
- 3) Switch on the transmitter.
- 4) The transmitter is ready at the mode for tracing cable and the SCAN indicator will switch on;
- 5) Otherwise, press the "MODE" button until the SCAN indicator switch on. It means that the transmitter is ready for Data / LAN cable finding.
- 6) Activate the receiver by holding down the "SCAN" button for 3 seconds. The SCAN indicator is now standby to receiving signals. Select the suitable signal and indication mode as per Section A mentioned.

- 7) Move the receiver towards a section of the wall where the cable could be located. When the loudest tone is obtained, the cable is located there.

#### Note:

- In analogue signal mode, press "F1" or "F2" button to adjust the tone for easily identify the signal from the environmental noise.
- Turn the Volume Adjusting Wheel to adjust the sound indicator to a comfort level.

### C. TRACING PHONE LINES

- 1) Connect the RJ-11 cable with the transmitter and phone jack.
- 2) Switch on the transmitter.
- 3) The transmitter is ready at the mode for tracing cable and the SCAN indicator will switch on;
- 4) Otherwise, press the "MODE" button until the SCAN indicator switch on. It means that the transmitter is ready for Data / LAN cable finding.
- 5) Activate the receiver by holding down the "SCAN" button for 3 seconds. The SCAN indicator is now standby to receiving signals. Select the suitable signal and indication mode as per Section A mentioned.
- 6) Move the receiver towards a section of the wall where the cable could be located. When the loudest tone is obtained, the cable is located there.

#### Note:

- In analogue signal mode, press "F1" or "F2" button to adjust the tone for easily identify the signal from the environmental noise.
- Turn the Volume Adjusting Wheel to adjust the sound indicator to a comfort level.

## D. CABLE TESTING (WT25D/E)

### Warning

Never use the Cable Testing features on live circuits except the power from PoE devices.

The equipment is designed to test the following cables.

Network cables : IEEE 10Base-T, EIA/TIA 568A, EIA/EIA568B, AT&T258A, Token Ring  
Phone lines : Both 2 and 4 lines  
Any metallic connection cables

- 1) Connect the testing cable with the transmitter and receiver.
- 2) Switch on the transmitter.
- 3) Push the "MODE" button until the OHM indicator switch on and SCAN indicator will flash. It means that the transmitter is ready for cable testing.
- 4) The result of measurement is indicated over the status of green LEDs at both devices.

### Note:

Press the "F1" or "F2" to adjust the scanning speed.

## E. PHONE LINE VOLTAGE TESTING

### Warning

Never use the equipment to test AC voltage and other high voltage circuit.

- 1) Connect the testing cable with the transmitter.
- 2) Switch on the transmitter.
- 3) Push the "MODE" button until the VOLT indicator switch on which means that the transmitter is ready for checking the phone line voltage.
- 4) If voltage is present in the testing cable, either the SCAN or OHM indicator will switch on.

## F. BATTERY VOLTAGE POLARITY TESTING

- 1) Connect the cable with alligator clip between the transmitter and the testing 9V battery.
- 2) Switch on the transmitter.
- 3) Push the "MODE" button until the VOLT indicator switch on. It means that the transmitter is ready for checking the phone line voltage.
- 4) If the red clip is connect to the positive side, the SCAN indicator will switch on. Otherwise, the OHM indicator will switch on.

## G. CONTINUITY TEST

- 1) Plug the cable with alligator clip in the transmitter.
- 2) Connect the cable with alligator clip to the two ends of the testing cable.
- 3) Switch on the transmitter.
- 4) Push the "MODE" button until the OHM indicator switch on. It means that the transmitter is ready for continuity test.
- 5) SCAN indicator will switch on if the cable is good enough to let current pass though.

## AUTO POWER OFF

The equipment will automatically switch off if there is no function or button press for 30 minutes.

## SPECIFICATIONS

Temperature	Operating: 0°C ~ 40°C Storage: -10°C ~ 50°C
Relative Humidity	< 90%
Battery	Transmitter: 9V (6F22) Receiver: 9V (6F22)
Size	Transmitter: 135 x 86 x 38mm Receiver: 35 x 187 x 29mm
Weight	Transmitter: 148g (include batteries) Receiver: 103g (include battery)

	WT22C	WT22D	WT22E
<b>Basic Functions</b>			
Tracing network or phone cable in bundle of wires	✓	✓	✓
Digitalized tracing to increase the accuracy	✓	✓	✓
Tracing cables connected to ethernet hub with POE support	✓	✓	✓
Checking the correctness and quality of wire connections		✓	✓
Testing network and phone circuit voltage	✓	✓	✓
Testing continuity of wires	✓	✓	✓
Maximum cable length can be tested	3km		
Output signal level	~23Vp-p		
<b>Special Features</b>			
Vibration indication			✓
Emergency lighting in dark area	✓	✓	✓
Adjustable loudness of buzzer	✓	✓	✓
Headset support for working in noisy area	✓	✓	✓
Change of buzzer tone for identification of buzzer sound	✓	✓	✓
Low power indication	✓	✓	✓

## MAINTENANCE

### CHANGING BATTERY

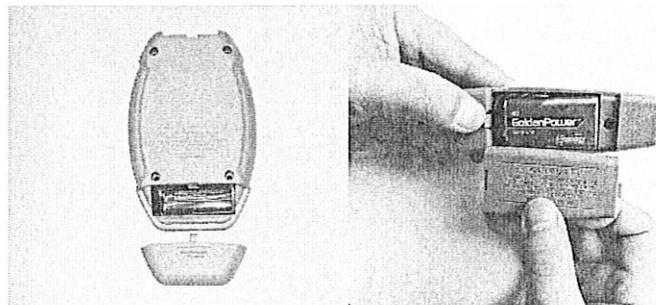


#### Warning

To avoid shock, injury, or damage to the equipment, remove all the connection before opening the battery doors.

Replace the battery if the power indicator on the transmitter is flashing and/or the low battery indicator on the receiver is flashing in red. To replace the battery, switch off the transmitter. Open the battery doors as following photos.

Replace the 1 x 9V (6F22) battery for the transmitter and 1 x 9V (6F22) battery for the receiver.



## CLEANING

### Caution

To avoid damaging the equipment, do NOT submerge them in water. Do not use abrasive cleaners, they will damage the case.

Wipe the case with a damp cloth and mild detergent. Do not use abrasives or solvents. Dirt or moisture in the jacks can affect the measurement.