## 46060 | Sure Signal



## **Applications:**

Sure signal is designed for cable installers and communications technicians for testing four-pair data/voice cable links terminated with standard, modular eight position RJ45-style jacks. The Sure Signal is the simplest tester available for identifying common wiring faults such as shorts, opens and miswires.



### **BENEFITS**

- Installed unshielded twisted pair (UTP), shielded twisted pair (STP) and screened twisted pair (ScTP) network links are quickly and easily checked for pin-to-pin wiring continuity and proper shield/screen connection where applicable.
- Simply connect the Remote Unit to one end and the Main Unit to the other. Wiring errors are easily spotted with LED lights corresponding to each wire., from one end with a single operator.
- Sure Signal test all common four-pair wiring configurations including T568A, T568B, AT&T 268A, 10BASE-T, Token Ring, TP-PMD and USOC.
- With additional Remote Units (sold separately), Sure Signal can also be used to identify cables connected to up to eight office wall outlets. Each Remote Unit can be programmed to designate one of eight different cable connections.





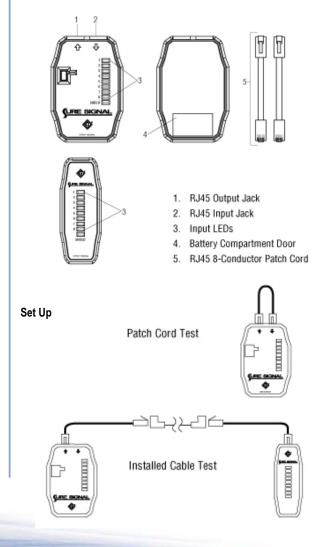
## **FEATURES**

- LEDs corresponding to each wire light sequentially allowing easier diagnosis of miswires than check pairs.
- Remote unit can be used separately as a patch cord checker to help check patch cords for wiring errors.
- Shielded test ports allow extra versatility to test shielded and screened twisted pair.
- Optional RJ45 to Coax Adapter patch cords allow the Sure Signal to be used for a coax tester saving money spent on a separate tester.
- Sequential wiremap testing allows Sure Signal to be used to test more wiring configurations than other testers.
- Diagnosis can be completed at one end saving labor hours required by testers using both ends for complete diagnosis.

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### **SPECIFICATIONS**

The Sure Signal Kit consists of a main unit, a remote unit, and two patch cords. The remote unit generates the test sequence - a signal that momentarily appears on each conductor. The test sequence begins with conductor #1 and ends with the shield. The test then repeats, beginning again at conductor #1. If the cable and connectors are good, the green LEDs of the main unit will flash in sequence. The Sure Signal is used in two ways: (1) use a remote unit alone to test a short jumper cable with RJ45 connectors or (2) use a remote unit and the main unit after installation and termination of longer network cables. In addition to the test sequence, each remote unit can be programmed to send out a unique identification signal. This identification signal uses one LED to remain dimly lit during the test sequence. Remote unit #1 sends this identification signal to LED #1, remote unit #2 sends it to LED #2, and so on. After connecting the remotes to the far end of the cables, you can use the main unit at the near end of the cables to sort them out according to the identification signals.



### **OPERATION**

#### Patch Cord Testing

1. Refer to the illustration labeled Patch Cord Test. Connect the cable to the RJ45 receptacles (labeled  $\tilde{n}$  and  $\delta$ ).

2. Turn the power ON. If the cable and connectors are good, the green LEDs will illuminate in sequence to indicate that the test signal has been received.

#### Installed Cable Test

 Refer to the illustration labeled Installed Cable Test. Connect a cable to the RJ45 output receptacle (labeled ñ). Turn the power ON.
 Connect the other end of a cable to the main unit. If the cable and connectors are good, the green LEDs will illuminate in sequence to indicate that the test signal has been received.

#### Results

The test sequence begins with conductor #1 and ends with the shield. Then the test begins again. If the cable and connectors are good, the green LEDs will illuminate in corresponding sequence to indicate that the test signal has been received.

# The following diagram shows the wiring for some typical communication cable. If the cable and connectors are good, the LEDs will flash in sequence as shown here.

#### Normal Results

					<ul> <li>= Flashing</li> </ul>				O = Not Flashing
1	2	3	4	5	6	7	8	Shield	Type of Cable
•	•	•	•	•	•	•	•	(opt'l)	USOC 8, EIA/TIA-568A, EIA/TIA-568B, AT&T 258A
٠	٠	٠	0	$^{\circ}$	٠	0	0	(opt'l)	10 Base-T
0	0	٠	٠	٠	٠	0	0	(opt'l)	8-Position Token Ring
0	0	٠	٠	٠	٠	0	0	(opt'l)	USOC 4
0	٠	٠	٠	٠	٠	٠	0	(opt'l)	USOC 6
No	tes:			For	B-co	ndu	ctor v	oice cable.	the LEDs flash in reverse

 For 8-conductor voice cable, the LEDs flash in reverse sequence (from Shield through 1).

 You can use this tester for custom-made cables, since the test sequence from the transmitter/receiver is always 1 through Shield.

#### Failure Results

Open Circuit: The LED on the open conductor will not flash. Short Circuit: Multiple LEDs will flash at the same time. Miswire: LEDs will flash out of sequence.



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