

## ? Problems

*It takes time to find the cause of RCD tripping after outlet wiring is completed.*

It took two persons seven hours to determine that the cause of the RCD tripping in the field was reverse connection of Neutral and Earth (N-E).

Existing socket testers could not find the N-E reverse connection.

## ! Clues for solution

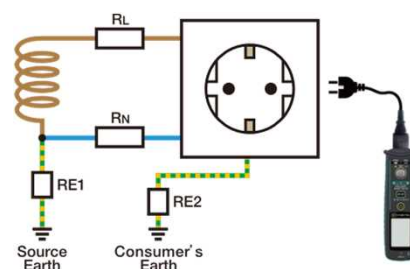
*Suspect the possibility of N-E reverse connection*

There are various causes of RCD tripping, such as overcurrent, earth fault, and power supply fault. If it is right after the outlet wiring, it is possible to overlook that the Neutral and Earth were reversed. The use of the tester dedicated for outlet wiring check is recommended to quickly find out the cause of the problem.

### For TT earth system:

In the TT earth system, the Source Earth and Consumer's Earth are separately earthed. It is possible to check the outlet polarity by using our Socket tester KEW 4506. KEW 4506 measures resistances of RN and RE and judges based on the differences of the measured resistances whether the wiring is correct or not. (Fig. 1)

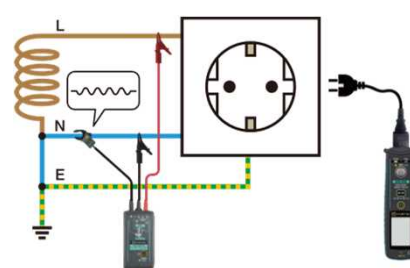
Fig.1



### For TN earth system:

In the TN earth system, Consumer's Earth are directly connected to the Source Earth via protective earth conductors and earthed. Combined use of KEW 4506 and Signal source KEW 8343 can apply test voltage to Neutral and judge the polarity of the outlet wiring. (Fig. 2)

Fig.2



## Effect

In addition to confirming the wiring of each LINE/NEUTRAL/EARTH, difficult-to-detect N-E reverse connection can now be easily found in one second, eliminating a significant amount of time loss.

## For inquiries:

