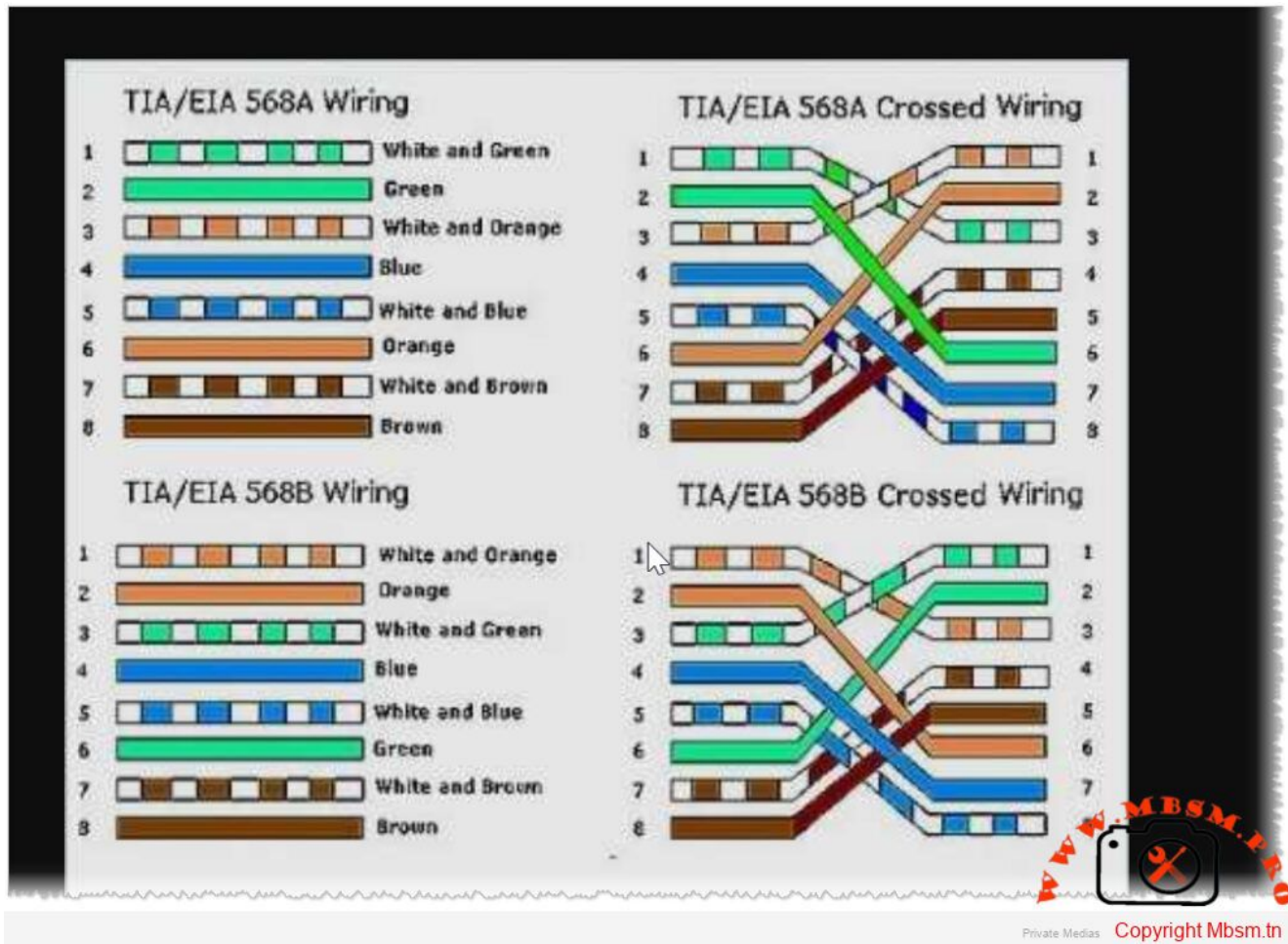


# T568A and T568B Standards

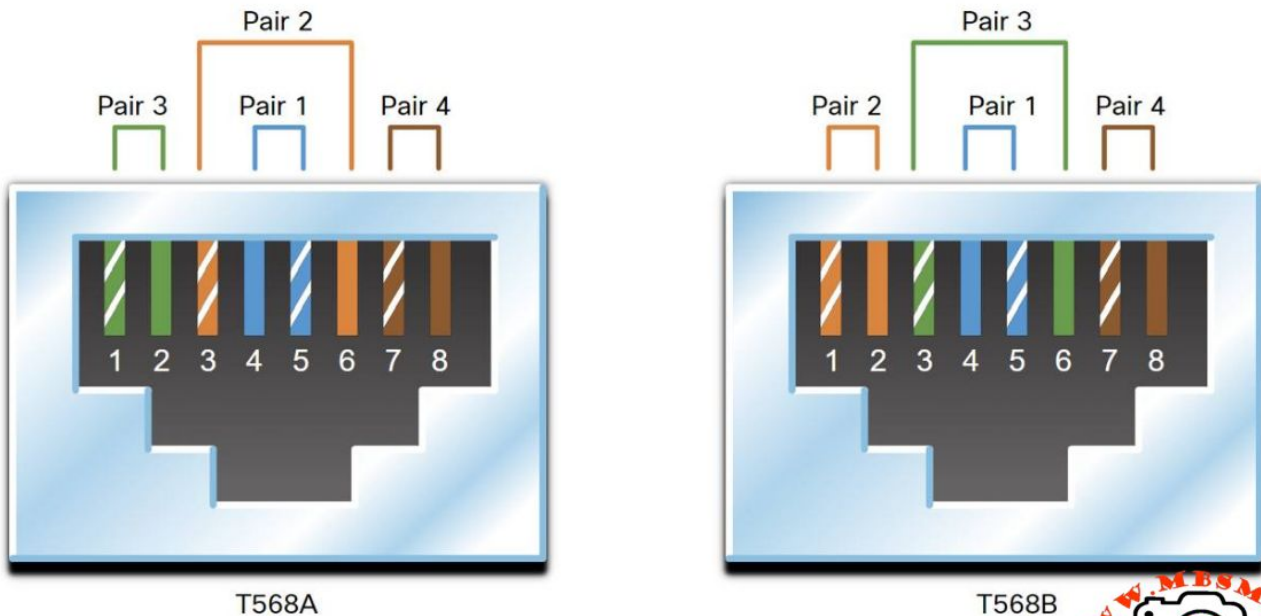
Category: Microservices

written by Mbsm.tn | 19 February 2025



The T568A and T568B standards refer to two wiring schemes used for terminating twisted-pair Ethernet cables, specifically Category 5e, 6, and higher types of network cables. These standards define the pin assignments for the eight conductors in a typical RJ-45 connector, which is commonly used for Ethernet connections.

## T568A and T568B Standards



T568A

T568B



### Key Points:

1. **T568A and T568B are both valid standards** for wiring Ethernet cables.
2. The main difference between them is the arrangement (or color order) of the individual wires within the cable.
3. Both standards provide identical performance when used correctly.
4. The choice between T568A and T568B often comes down to organizational preference or existing infrastructure.

### T568A Wiring Standard

The T568A standard was introduced earlier and is sometimes preferred in

government or older installations. Here's the pinout:

<b>Pin</b>	<b>Wire Color</b>
1	White/Green
2	Green
3	White/Orange
4	Blue
5	White/Blue
6	Orange
7	White/Brown
8	Brown

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## **T568B Wiring Standard**

The T568B standard is more widely used today, especially in commercial and residential settings. Here's the pinout:

<b>Pin</b>	<b>Wire Color</b>
1	White/Orange
2	Orange
3	White/Green
4	Blue
5	White/Blue
6	Green
7	White/Brown
8	Brown

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## Differences Between T568A and T568B

- The primary difference lies in the positions of the orange and green wire pairs:
  - In **T568A** , the green pair is on pins 1 and 2, while the orange pair is on pins 3 and 6.
  - In **T568B** , the orange pair is on pins 1 and 2, while the green pair is on pins 3 and 6.
- The blue pair remains unchanged in both standards, occupying pins 4 and 5.

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## Important Considerations

1. **Consistency** : It doesn't matter which standard you use as long as you are consistent across your entire network. Mixing T568A and T568B within the same installation can cause connectivity issues unless a crossover cable is intentionally created.
2. **Crossover Cables** : A crossover cable swaps the transmit and receive pairs at each end. This is typically achieved by using one end with T568A and the other with T568B. Modern Ethernet switches and devices often auto-negotiate this, so crossover cables are less common now.
3. **Straight-Through Cables** : Most Ethernet cables are straight-through, meaning both ends follow the same wiring standard (either T568A or T568B).
4. **Industry Preference** : T568B is more prevalent in modern installations due to its alignment with telephone wiring conventions.

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By adhering to these standards, you ensure reliable and consistent network performance. Always verify the wiring scheme during installation to avoid potential errors