

Distinguish, differentiate, compare and explain what is the main difference between Serial and Parallel Transmission in Communication. Comparison and Differences.

Difference between Serial and Parallel Transmission

1. In terms of transmission characteristics in Serial transmission, bytes are transmitted in a linear fashion, one bit at a time. while in parallel transmission bytes in a single character transmitted simultaneously.
2. In terms of comparative speed serial transmission is Slower than parallel transmission.
3. Serial transmission supports farther distance while parallel supports shorter distance.
4. Application of serial transmission is communication between two computers, Computer to an external modem, Computer to a slow printer, etc. Application of parallel transmission is within a computers bus, from computer to parallel high-speed printer.
5. In serial, all bits travel down a single wire, one bit at a time whereas in parallel each bit travels down its own wire, simultaneously with other bits.