## Line Coding schemes and their characteristics

Scheme	Characteristics
Unipolar	• 0 ==> 0 V • 1 ==> +ve V
NRZ-L	• 0 ==> +ve V • 1 ==> -ve V
NRZ-I	<ul> <li>Starts at +ve V</li> <li>0 ==&gt; no change in voltage</li> <li>1 ==&gt; change in voltage</li> </ul>
Manchester	<ul> <li>0 ==&gt; ¬ </li> <li>1 ==&gt; ¬</li> </ul>
Differential Manchester	<ul> <li>Starts at +ve V</li> <li>0 ==&gt; shifting at the beginning but no change in voltage</li> <li>1 ==&gt; shifting in the middle and change in voltage</li> </ul>
AMI	<ul> <li>Starts at 0 V</li> <li>0 ==&gt; 0 V</li> <li>1 ==&gt; change in voltage (either +ve or -ve)</li> <li>First change must be +ve</li> </ul>
MLT-3	<ul> <li>Starts at 0 V</li> <li>0 ==&gt; no change in voltage</li> <li>1 ==&gt; change in voltage (transition: +ve → 0 → -ve)</li> </ul>