

Quadrature PSK

To increase the bit rate, we can code 2 or more bits onto one signal element.

In QPSK, we parallelize the bit stream so that every two incoming bits are split up and PSK a carrier frequency. One carrier frequency is phase shifted 90° from the other - in quadrature.

The two PSKed signals are then added to produce one of 4 signal elements. $L = 4$ here.

Figure 5.11 *QPSK and its implementation*

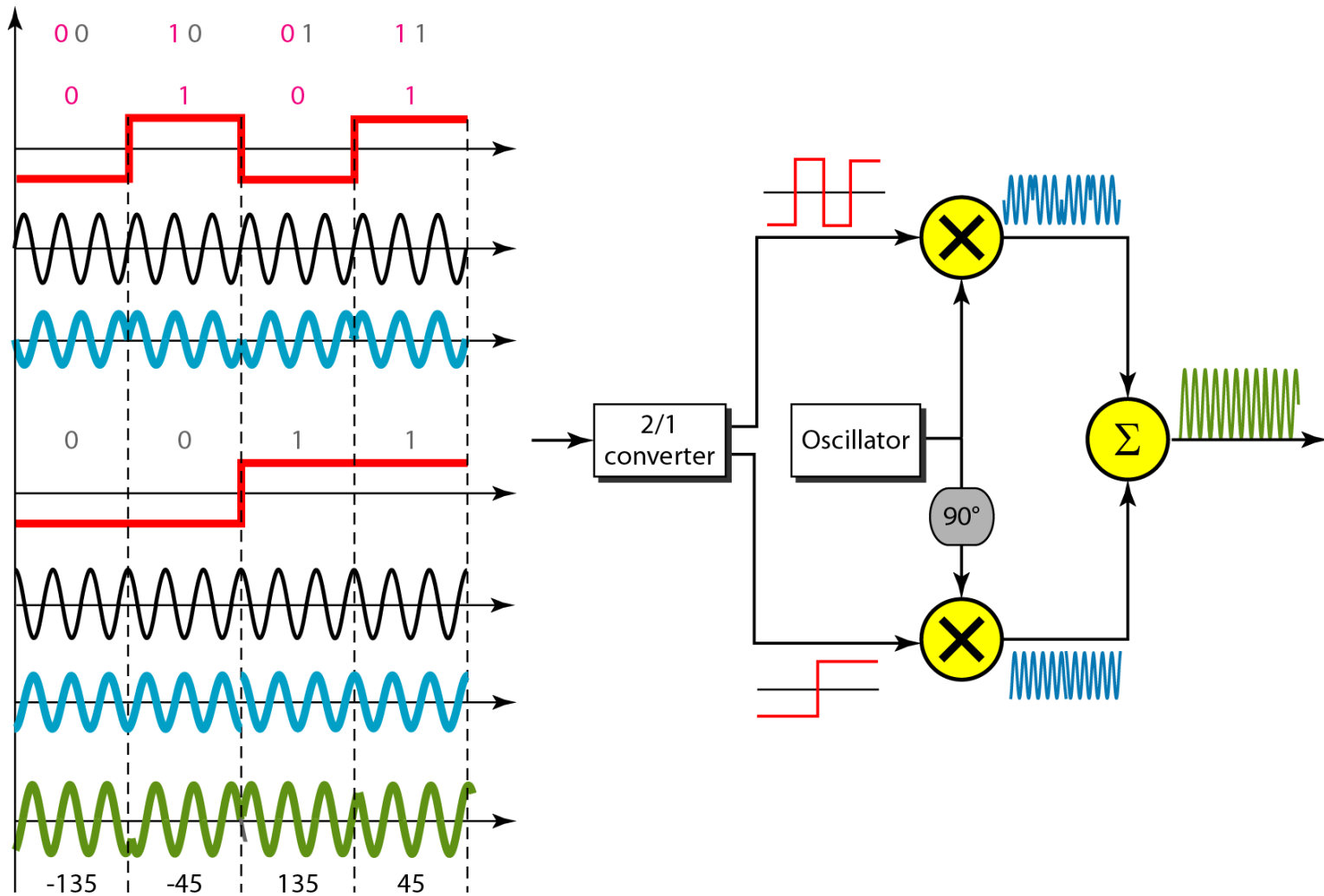


Figure 5.12 *Concept of a constellation diagram*

