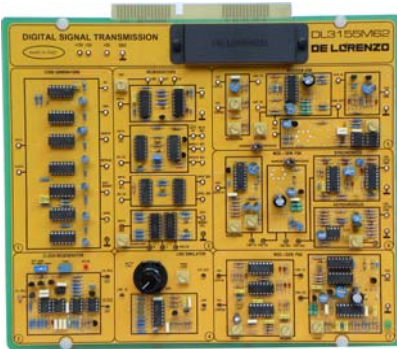




## DIGITAL SIGNAL TRANSMISSION



DL 3155M62

### Theoretical topics:

- The transmission of digital signals
- The base band transmission analysed through the study of NRZ, RZ, Manchester, Biphase, DPSK and duo-binary coders and decoders
- The numerical modulators and demodulators to realize, verify and test the ASK, the FSK, the PSK modulation
- Fault simulation

### Circuit blocks:

- NRZ (Non Return to Zero) coding and decoding
- RZ (Return to Zero) coding and decoding
- Manchester coding and decoding
- Bi-phase coding and decoding
- Duo-binary coding and decoding
- ASK modulation and demodulation
- FSK modulation and demodulation
- PSK modulation and demodulation

This board needs the DL 3155M62A.

## AUXILIARY BOARD



DL 3155M62A

- Clock and carrier generator, obtained by a single quartz source at 2.4576 Mc/s with a selectable clock frequency of 2400, 4800, 9600, 19200 or 38400 cycles / sec,
- Pseudo-random data generator that generates two random sequences of 1 and 0 of different length, 15 bits and 255 bits,
- Bit Error Rate (BER) meter,
- Digital delay equalizer,
- Artificial noise generator, that generates a quasi-white spectrum signal in the band 2 - 40 kHz,
- Jitter meter.