## **Telegram Converter**

Note: The Telegram Converter is ready for operation if the green "LED Aktive" is flashing.



The WinPP8 test program requires a message (telegram) converter for SINAUT 8-FW DPDM messages, see Figure 3. The message converter (TeKo) converts digitally pulse-duration modulated messages (DPDM, designated as PDM in the following text) to pulse-code modulated (PCM) messages and vice-versa. During conversion, it tests if the pulses and the blocking time are correct. The set points are predefined by WinPP8. The message converter is equipped with a PDM interface and a PCM interface. Via the PDM interface, it is connected to the telecontrol system to receive and transmit PDM messages. Via the PCM interface, it is connected to the PC (WinPP8) to receive and transmit PCM messages.

Both interfaces process RS232 signals. They are electrically isolated from each other and from the power supply unit. The PDM interface is equipped with two receivers and one transmitter. The receiver and the transmitter are electrically isolated from each other.

The message converter is equipped with the following LEDs:

| Active           | Ready for operation, green, flashing. The LED starts to flash approximate 15 seconds after power ON. |
|------------------|--|
| RxD <sub>1</sub> | PDM receiver 1<br>green, lights up for positive voltage<br>red, lights up for negative voltage       |
| RxD <sub>2</sub> | PDM receiver 2<br>green, lights up for positive voltage<br>red, lights up for negative voltage       |
| TxD              | PDM transmitter<br>green, lights up for positive voltage<br>red, lights up for negative voltage      |

| Housing and connections |   |   |  |  |
|-------------------------|---|---|--|--|
| PDM interface:          | 9-pole DSUB male connector                          |   |  |  |
| Connector assignment:   | 2   | Receiver 1                                |  |  |
|                         | 4   | Receiver 1 ground                         |  |  |
|                         | 6   | Receiver 2                                |  |  |
|                         | 9   | Receiver 2 ground                         |  |  |
|                         | 3   | Transmitter                               |  |  |
|                         | 5   | Transmitter ground                        |  |  |
| PCM interface:          | 9-pole  | DSUB female connector                     |  |  |
| Connector assignment:   | 2   | Transmitter                               |  |  |
|                         | 3   | Receiver                                  |  |  |
|                         | 5   | Ground                                    |  |  |
|                         | 1-8-7 and 4-6 and 5-9 are jumpered                  |   |  |  |
| Power supply:           | 5 VDC, +-5% via DIN 45323 NEB R 1 integrated        |   |  |  |
|                         | interfacing for NES 1 plug-in connector 6,0 / 1,98. |   |  |  |
| Power consumption:      | Typically 750 mA DC                                 |   |  |  |
| Electrical isolation:   | Min. 2 kV insulation voltage between supply voltage |   |  |  |
|                         | and serial interface                                |   |  |  |
| Housing:                | Aluminium, 160 x 110 x 45 mm                        |   |  |  |
| Weight:                 | Appro   | Approx. 800 g inclusive power supply unit |  |  |

## Scope of supply

1 piece PDM ó PCM message converter

1 piece plug-in power supply unit 100-240 VAC, 50-60 Hz, 5VDC

1 piece cable, 1.8 m, 9-pole DSUB male-female connector, 1 to 1 wired

1 piece adapter unit, 9-pole DSUB female connector to banana plug