KOR-MUX / TELE-Switch user manual

(english)



Art.Nr. 9370-KOR

11.02.2021

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KOR-MUX / TELE-Switch

1 Description

This KORMUX / TELE-Switch has following functions:

USED as:

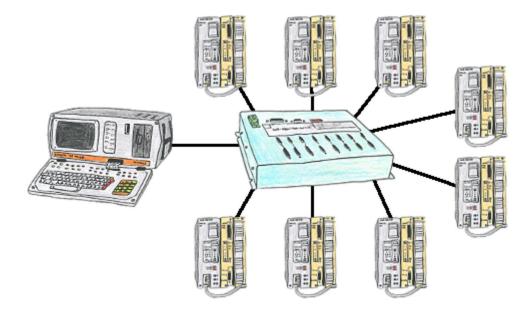
- KOR/MUX compatible to Siemens MUX 757 or
- TELE-Switch

When you use it as KORMUX, this device is compatible to Siemens MUX 757. You can connect up to 8 Siemens PLC. The choose of the plc is made by the BUS-SEL in your STEP 5 Programming tool.

When you use the device as TELE-Switch, you have to select the right plc number with the menu item TELE-Switch in your PG-TELE. Now it is for your use not important, which kind of PLC Type you use. Now it is possible, that you can use for example 8 BOSCH PLC's with one PLC-TELE, which was up to now unpossible. You can so in this way use all PLC's which are connected about V24 or TTY.

2 Connecting options

Several PLCs together



3 Installation

3.1 Hardware

Supply the KOR-MUX with 24V DC voltage and connect your programming device or Tele-Network device with a corresponding 1:1 cable to the V24 or TTY input of the KOR-MUX. Then connect the controllers, programming cable or any other with the outputs of the KOR-MUX.

4 Implementing

4.1 Function of the TELE-SWITCH as MUX (compatible with Siemens-MUX 757)

All DIP switches are turned to the following adjustment corresponding to the slave number:

DIP 1	DIP 2	meaning
OFF	OFF	channel 1 to 8 corresponding to slave 1 to 8
ON	OFF	channel 1 to 8 corresponding to slave 9 to 16
OFF	ON	channel 1 to 8 corresponding to slave 17 to 24
ON	ON	channel 1 to 8 corresponding to slave 25 to 30

The remaining DIP switches are all turned OFF. For the calling, the usual BUS-SEL is used.

By using a PC with more COM-Ports it is possible, for each COM-Port up to 8 slaves to connect.

A example for a BUS-SEL of a plc number 5 looks like so:

AS 511

KOR/MUX

ENDP 05

Caution: Device type of the TELE-Network-device connected to the the KORMUX must be KORMUX-TELE.

4.2 Function as TELE-SWITCH

Important for this kind of device is, that you connect the PLC-TELE with the TELE-Switch about the V24-line.

DIP 1	DIP 2	meaning	
OFF	OFF	channel 1 to 8 corresponding to slave 1 to 8	
ON	OFF	channel 1 to 8 corresponding to slave 9 to 16	

DIP 3 has to be turned ON.

DIP 1 and DIP 2 according to the above table. The TELE-Network device supports with this operation mode only the slave numbers 1 to 16.

The TELE-SWITCH can be operated at the PLC-or PG-socket of a TELE-Network device that is configured as PLC-TELE. In the PG-TELE, the following adjustments have to be made for calling a channel:

Menu item: TELE-SWITCH

1st line: TELE-SWITCH 2nd line: xx to ChaNr: yy xx = PG or PLC (with cursor-up/down key) yy = Channel 00 (directmode is finished) yy = Channel 01 to 16 (call corresponding slave number)

After this input, the question "Switch? YES/NO" is displayed:

• YES Input is taken over, channel is called

• NO Input is dismissed, present condition remains

If there is a call, then it is reported whether the call or the transformation respectively were successful or not. After connection clear-down, the SWITCH is automatically deactivated.

Caution: You should be shure, that the connected Port (PG- or PLC-Connector) has been configured in your PG-TELE-LINK.

5 Technical data

Supply voltage: Power consumption:	24V DC +/- 20% 12 watt		
Display:	8 LEDs for displaying the aktiv port		
Handling/Configuration:	DIP-Switch for cascadability of the ports and mode Configuration		
Interfaces:	to the PLC: 8 x TTY/20mA current loop (100 % mechanically and electr. compatible) 8 x RS232: 9,6 KBd - 115,2 KBd / fully assigned to the PD/PC: 1 x TTY/20mA current loop (100 % mechanically and electr. compatible) 1 x RS232: 9,6 KBd - 115,2 KBd / with a 1on1-cable to the PC		
Operating temperature:	0 - 55°C		
Case:	powder coated metal case with mounting flange		
Dimensions:	352 x 182 x 42 mm		
Scope of delivery:			
5 1 Dipping of TTV IN	KOR-MUX / TELE-Switch Power connector 2pins small		

5.1 Pinning of TTY-IN and TTY-OUT

Pin No.	shortcut	description	direction
1	Mext	externe Masse	Out
2	TTY IN –	Empfangsdaten –	In
3	+5V	Stromversorgung +5V	Out
4	+24V	Stromversorgung +24V	Out
5	GND	interne Masse	Out
6	TTY OUT +	Sendedaten +	Out
7	TTY OUT –	Sendedaten –	Out
8	Mext	externe Masse	Out
9	TTY IN +	Empfangsdaten +	In
10	M24V	Masse +24V	Out
11	I-Tx	20mA Stromquelle Sender	Out
12	GND	interne Masse	Out
13	I-Rx	20mA Stromquelle Empfänger	Out
14	+5V	Stromversorgung +5V	Out
15	GND	interne Masse	Out

5.2 Pinning of V24-IN:

Pin Nr.	shortform	description	direction
1	NC	not used	
2	TXD	transmit data	output
3	RXD	receive data	input
4	NC	not used	
5	GND	ground	
6	NC	not used	
7	CTS	clear to send	output
8	RTS	request to send	input
9	NC	not used	

5.3 Pinning of V24-OUT

Pin No.	shortform	description	direction
1	NC	not used	
2	RXD	receive data	input
3	TXD	transmit data	output
4	NC	not used	
5	GND	ground	
6	NC	not used	
7	RTS	request to send	input
8	CTS	clear to send	output
9	NC	not used	