

INTERFACE PDP-8E  
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Products : Teletype 30 Series.  
 Category : TG  
 Kit No. : MKT/ITF/01  
 Modification : Interface to connect PDP-8E (PDP-11, PDP-15) to Teletype model 33 ASR with UCC6.

1. GENERAL

This modification provides the possibility to connect computer PDP-8E (PDP-11, PDP-15) to Teletype model 33 ASR with UCC6.  
 This concerns connection of the input/output circuit and external control of the Teletype reader in on-line mode.  
 The Teletype model 33 ASR is equipped with call control unit UCC6.

2. DOCUMENTATION REQUIRED

For standard wiring information: see Teletype diagram set WDP 0316.

3. THEORY OF OPERATION (see figure MKT/ITF/01/1)

The Teletype 33 ASR has been wired for full-duplex operation and 20 mA input current SMD.  
 Connection of a 14 VDC voltage between pt. 2 and pt. 9 of circuit card GEA 018-2A causes operation of relay RLA. Operation of relay RLA closes contact A and if "Reader on/off control" is in the on-position and the local/line switch is in the line-position, the reader trip magnet is operated and in consequence the reader is switched on.  
 In the local-situation contact A has no influence, because it is shortened by the local/line switch. In this case there is no question of external reader-control.  
 The input- and output-circuits of Teletype 33 ASR are connected to the PDP-computer via Molex-connector J2/P2 directly.

- Notes:
- . pin nrs. 1, 3 and 4 of circuit card GEA 018-2A are used to operate relay A by means of other voltages
  - . suppression-filters are mounted over contacts L1-2 and 1-2 of the local/line switch
  - . this modification may be used without any changes in combination with the modifications MKT/RDS/01 reader step and MKT/RCA/01 reader control automatic
  - . Teletype keyboard must be wired for 8th bit always mark. In some cases a non-parity Altmode keyboard (UK 800) is necessary (arrangement with customer).

4. MODIFICATION KIT CONTENTS

<u>Quantity</u>	<u>Part No.</u>	<u>Description</u>
1	GEA 018-2A	circuit card, including wiring
2	153631 TTY (or eq.)	suppression-filter
1	34070 Amp (or 35115 Amp)	wire-connector
1		interface cable, 6 wire, 4 m length with mounted:
(1	182540 TTY	Molex-connector, 15 pins, marked "2"
(1	1-480460-0 Amp	connector AMP male N-lock



5. INSTALLATION (see figures MKT/ITF/01/1 and 01/3)

- 5.1 Disconnect the mains supply.
- 5.2 Remove the Teletype cover.
- 5.3 Wire Teletype 33 ASR for full-duplex operation (see Teletype diagram set WDP 0316, sheet 1180 SD-B4).
- 5.4 Wire Teletype 33 ASR for 20 mA input-current SMD (see Teletype diagram set WDP 0316, sheet 1180 SD-B1).
- 5.5 Mount circuit card GEA 018-2A to call control unit UCC6 (see figure MKT/ITF/01/3).
- 5.6 Remove blue wire from pin 3 of connector P4 in the UCC6.
- 5.7 Connect this blue wire to the blue wire of circuit card GEA 018-2A pt. 6, by means of the Amp wire-connector.
- 5.8 Connect blue/white wire of circuit card GEA 018-2A pt. 7 to L2 of the UCC6 local/line switch.
- 5.9 Connect white wire of circuit card GEA 018-2A pt. 8 to L1 of the UCC6 local/line switch.
- 5.10 Connect following wiring of circuit card GEA 018-2A to connector P2 of the UCC6:  

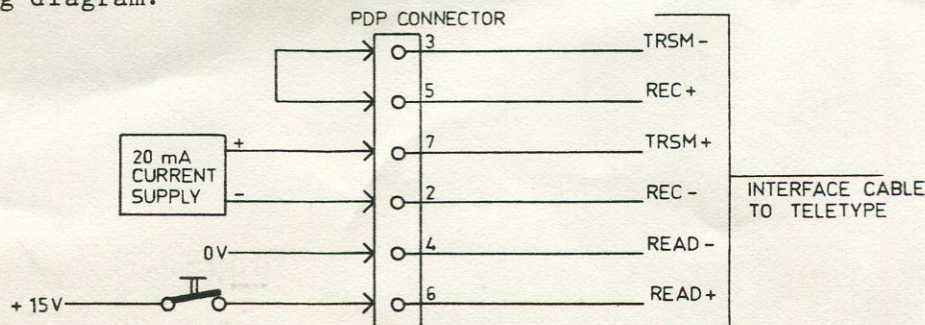
circuit card GEA 018-2A pt.	1	to	connector P2	pin	2
"	"	"	"	"	9
"	"	"	"	"	13
"	"	"	"	"	14
"	"	"	"	"	15
"	"	"	"	"	12
- 5.11 Mount the suppression-filters over contacts L1-2 and 1-2 of the local/line switch.
- 5.12 Connect the interface cable to connector P2 of the UCC6.
- 5.13 Modify Teletype keyboard for 8th bit always mark (see Teletype diagram set WDP 0316, sheet 9334 WD).  
 If a non-parity Altmode keyboard is asked for, the existing keyboard must be replaced by keyboard UK 800.
- 5.14 Replace the Teletype cover.

6. ADJUSTMENTS

None.

7. TEST

Simulate the signals, as provided by the computer usually, according to following diagram:



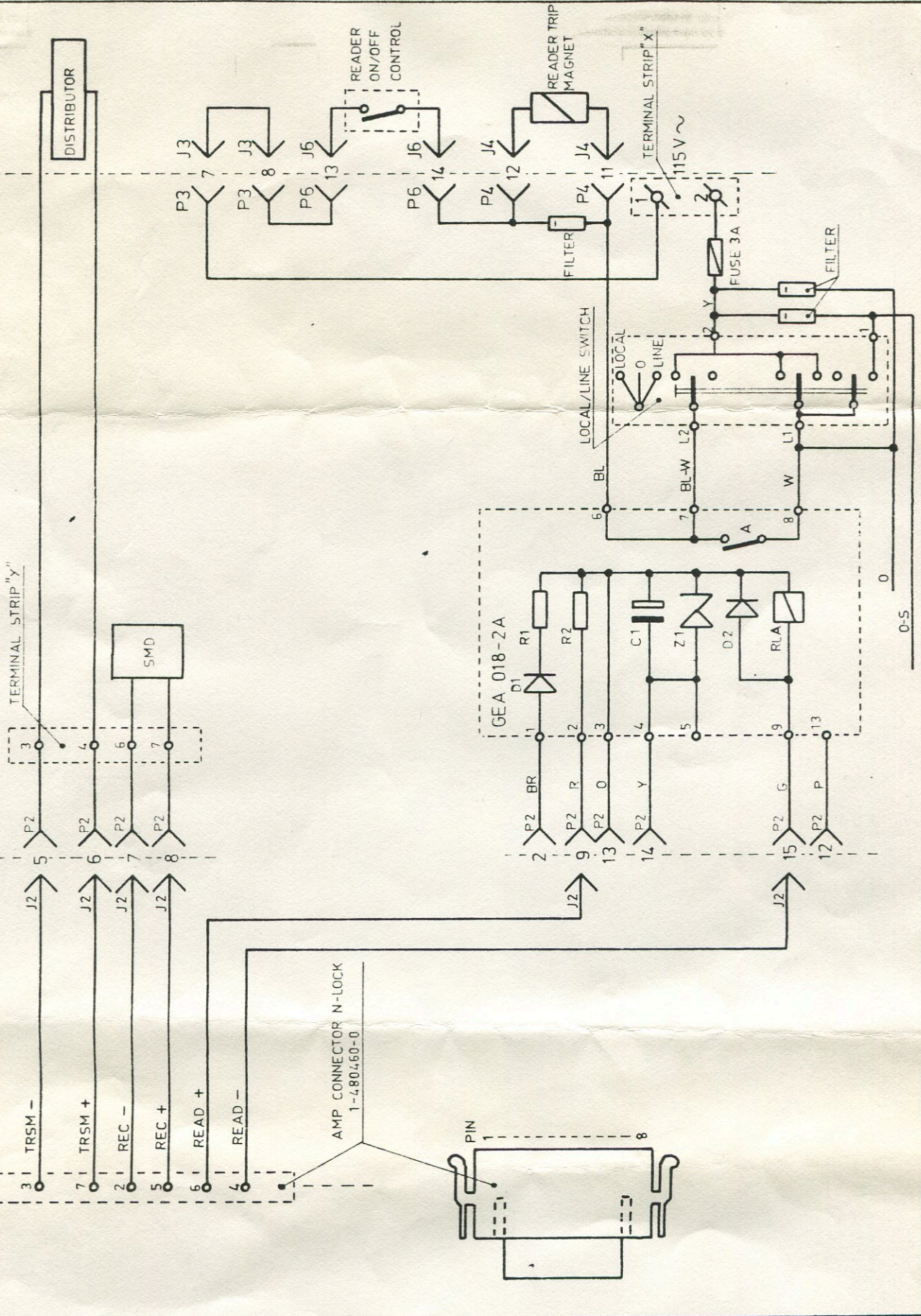


PDP8E/11/15

INTERFACE CABLE (± 4 m.)

CALL CONTROL UNIT UCC 6

SUB UNITS



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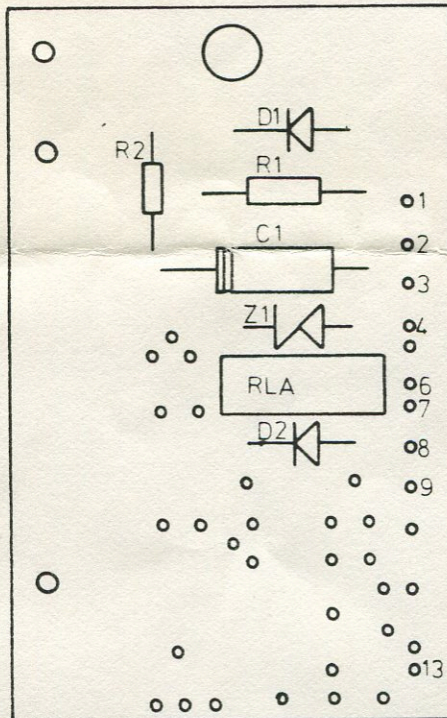
### INTERFACE PDP 8E (PDP 11, PDP 15)

Datum	Wijz	Par	Opm.
09/08/74		T.R.	

Tek. nr.
MKT/ITF/01/1



GEA 018-2A



- C1 - 220  $\mu$ F 16V
- D1 - BYX 36
- D2 - 1N914
- R1 - 1k $\Omega$  5,5W
- R2 - 390  $\Omega$  1/4W
- RLA - NATIONAL RH 12V
- Z1 - 1N963A 1/3W

COMPONENTS LAY OUT CIRCUIT CARD GEA 018-2A



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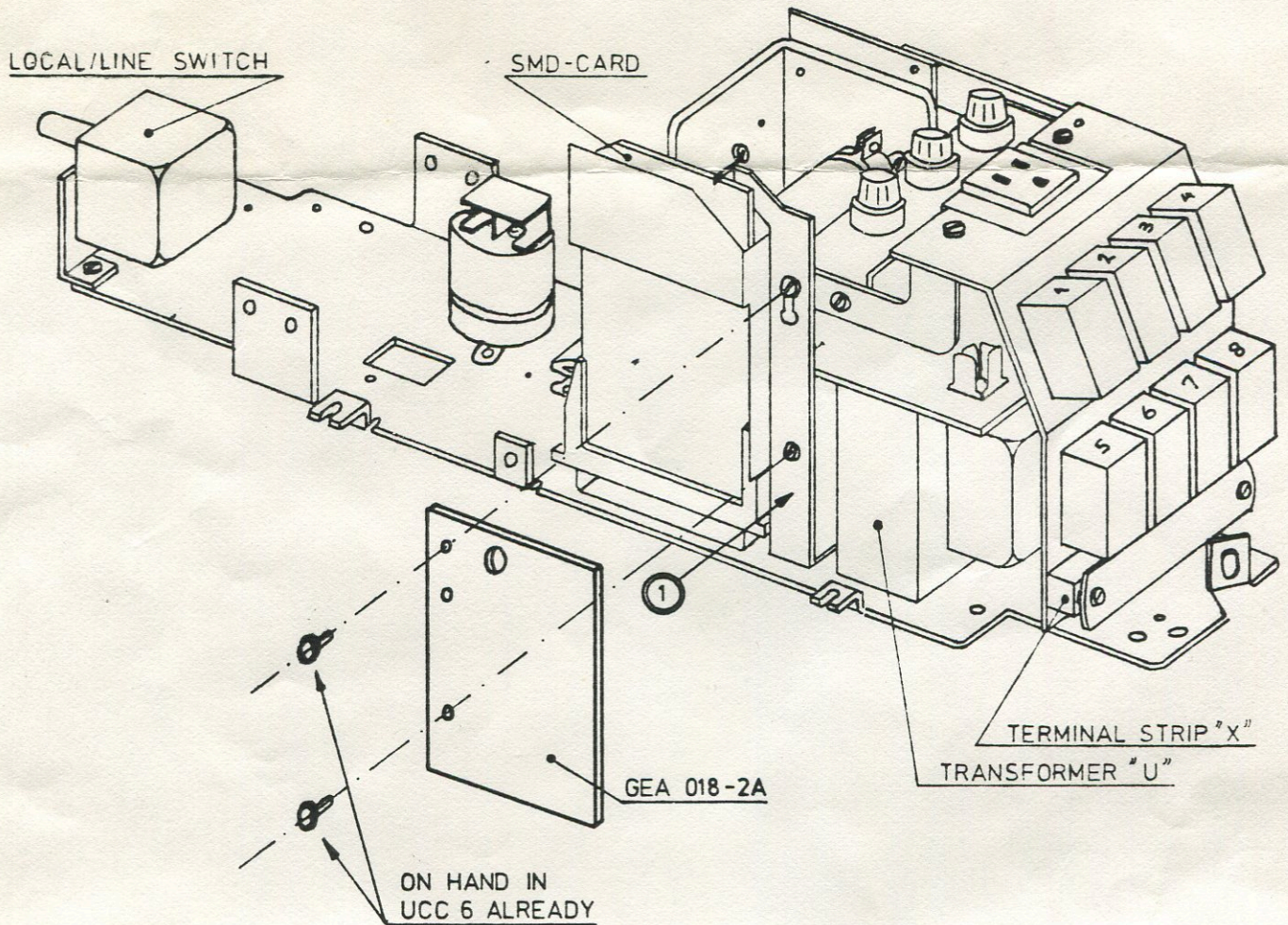
INTERFACE PDP 8E (PDP 11, PDP 15)

Datum	Wijz.	Par.	Opm.
09/08/74		T.R.	

Tek. nr. MKT/ITF/01/2



# TTY CALL CONTROL UNIT UCC 6



MOUNTING CIRCUIT CARD GEA 018-2A  
TO CALL CONTROL UNIT UCC 6



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INTERFACE PDP 8E (PDP 11, PDP 15)

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Tek.nr.

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