27 CHANNEL UNIT FOR DATA COMMUNICATION HDLC-X.21

LIST OF ILLUSTRATIONS

LIST OF TABLES

27.1 CHDX IDENTIFICATIONS (Line Controller for HDLC - X.21)

Type Number	: PTS-6891-002 This Channel Unit is a combination of : - GP Bus Adaptor Board, 5131 194 07900 - PTS-6858-003, CUDX, 5111 199 55670 - Panel, 5131 193 53000 The assembly is identified with 5131 194 90500
Control Unit Address	: Depending on application
Interrupt levels	: One for Receiver part and one for Transmitter part: Depending on application
Channel	: Programmed Channel
Power Consumption	: +5 Volt, 2.5 Amp. +18 Volt, 50 mAmp. -18 Volt, 50 mAmp.
Number of Lines	: 1 line
Line Interface	: CCITT X.24, X.27, CCITT X.21
Transmission Speed	: Less or equal to 4800 bits per second
Timing Control	: External clock
Transmission Type	: Full duplex, Bit oriented in data phase, Character oriented in connection phase
Data Length	: Data Phase: 16 bits Connection Phase, 8 bits
Parity Control	: Data Phase: FCS according to ECMA-40
Special features	: Forced data phase, NRZ or NRZI strap selectable
Procedures	: HDLC protocol for circuit switched networks (X.21) Byte timing not supported
Software	: TOSS driver DRDC23 (Release 11 and higher)
Test Program	: t.b.f.

CONNECTOR 1J:

Pin Number	Signal Name	Pin Number	Signal Name
1C01		1A01	
1C02		1A02	
1C03	BCI**	1A03	INCL**
1C04	IR1N*	1A04	BR1N*
1C05	IRØN*	1A05	BRØN*
1C06	0 Volt	1A06	0 Volt
1C07	PWFN	1A07	RSLN
1C08	CLEARN	1A08	ACN
1C09	0 Volt	1A09	0 Volt
1C10	TMPN	1A10	TSMN
1C11		1A11	
1C12	0 Volt	1A12	0 Volt
1C13	MADØØ	1A13	MADØ1
1C14	MADØ2	1A14	MADØ3
1C15	MADØ4	1A15	MADØ5
1C16	MADØ6	1A16	MADØ7
1C17	MADØ8	1A17	MADØ9
1C18	MAD10	1A18	MAD11
1C19	MAD12	1A19	MAD13
1C20	MAD14	1A20	MAD15
1C21		1A21	
1C22	0 Volt	1A22	0 Volt
1C23	BIØ8-N	1A23	BIØØ-N
1C24	BIØ9-N	1A24	BIØ1-N
1C25	BI010-N	1A25	BIØ2-N
1C26	BI011-N	1A26	BIØ3-N
1C27	BI012-N	1A27	BIØ4-N
1C28	BI013-N	1A28	BIØ5-N
1C29	BI014-N	1A29	BIØ6-N
1C30	BI015-N	1A30	BIØ7-N
1C31		1A31	
1C32	+5 Volt	1A32	+5 Volt

Note: ** Not used with PTS

* Are connected via Adaptor card.

Receiver interrupt: 1CØ4
Transmitter interrupt: 1CØ5

Receiver Break: 1AØ4
Transmitter Break: 1AØ5

Table 27.1 GP-SIMPLIFIED BUS INTERFACE CONNECTOR 1J

CONNECTOR 3J:

Pin Number	Signal Name	Function	Direction
3J02 3J09	T-N T-P	Transmission Line	From HLXCU3 to DCE
3J03 3J10	C-N C-P	Control Line	From HLXCU3 to DCE
3J06 3J13	S-N S-P	Signal Element Timing	From DCE to HLXCU3
3J07 3J14	B-N B-P	Byte Timing	From DCE to HLXCU3
3J04 3J11	R-N R-P	Receiver Line	From DCE to HLXCU3
3J05 3J12	I-N I-P	Indicator Line	From DCE to HLXCU3
3J08	G	Ground	

Table 27.2 X21 INTERFACE CONNECTOR 3J

CONNECTOR 4J:

Pin Number	Signal Name	Function	Direction
4B03	IVBØ-N	Internal Bus Signal	To Test tool
4B02	IVB1-N		
4B01	IVB2-N		
4A13	IVB3-N		
4A12	IVB4-N		
4A11	IVB5-N		
4A10	IVB6-N		
4A09	IVB7-N	Internal Bus Signal	To Test tool
4B13	APROGØØ	Internal Address line	To Test tool
4B12	APROGØ1		
4B11	APROGØ2		
4B10	APROGØ3		
4B09	APROGØ4		
4B08	APROGØ5		
4B07	APROGØ6		
4B06	APROGØ7		
4B05	APROGØ8		
4B04	APROGØ9		
4A03	APROG1Ø	Internal Address line	To Test tool
4A07	OSCTEST	Oscillator signal	From Test tool
4A08	0 Volt		
4A06	0 Volt		
4A04	+5 Volt		To Test tool

Table 27.3 INTERFACE TEST CONNECTOR 4J

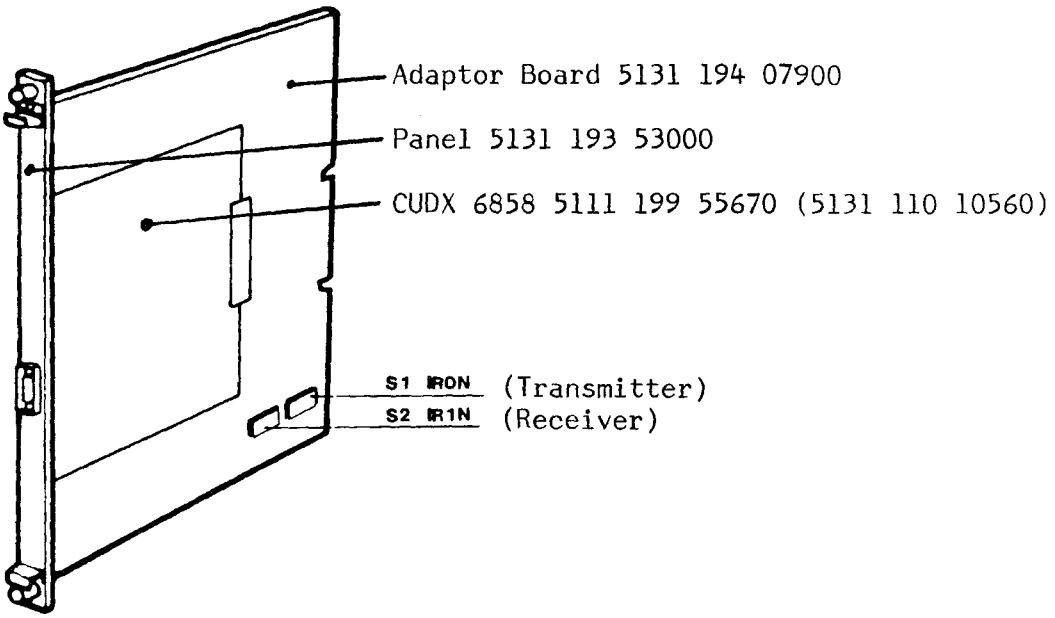


Figure 27.1 P-6891-002 (ASSEMBLY)

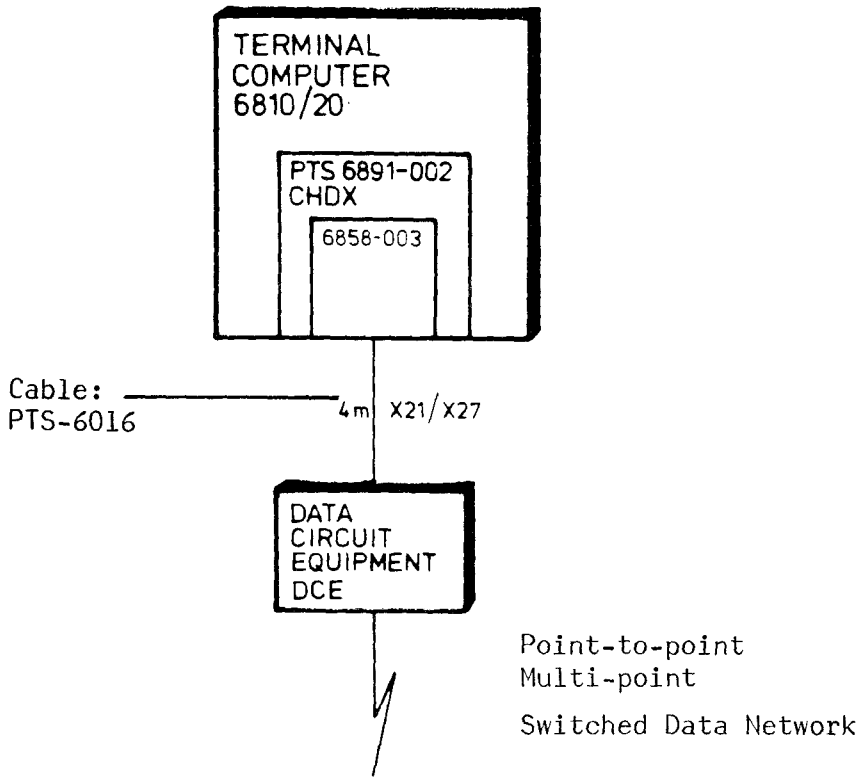
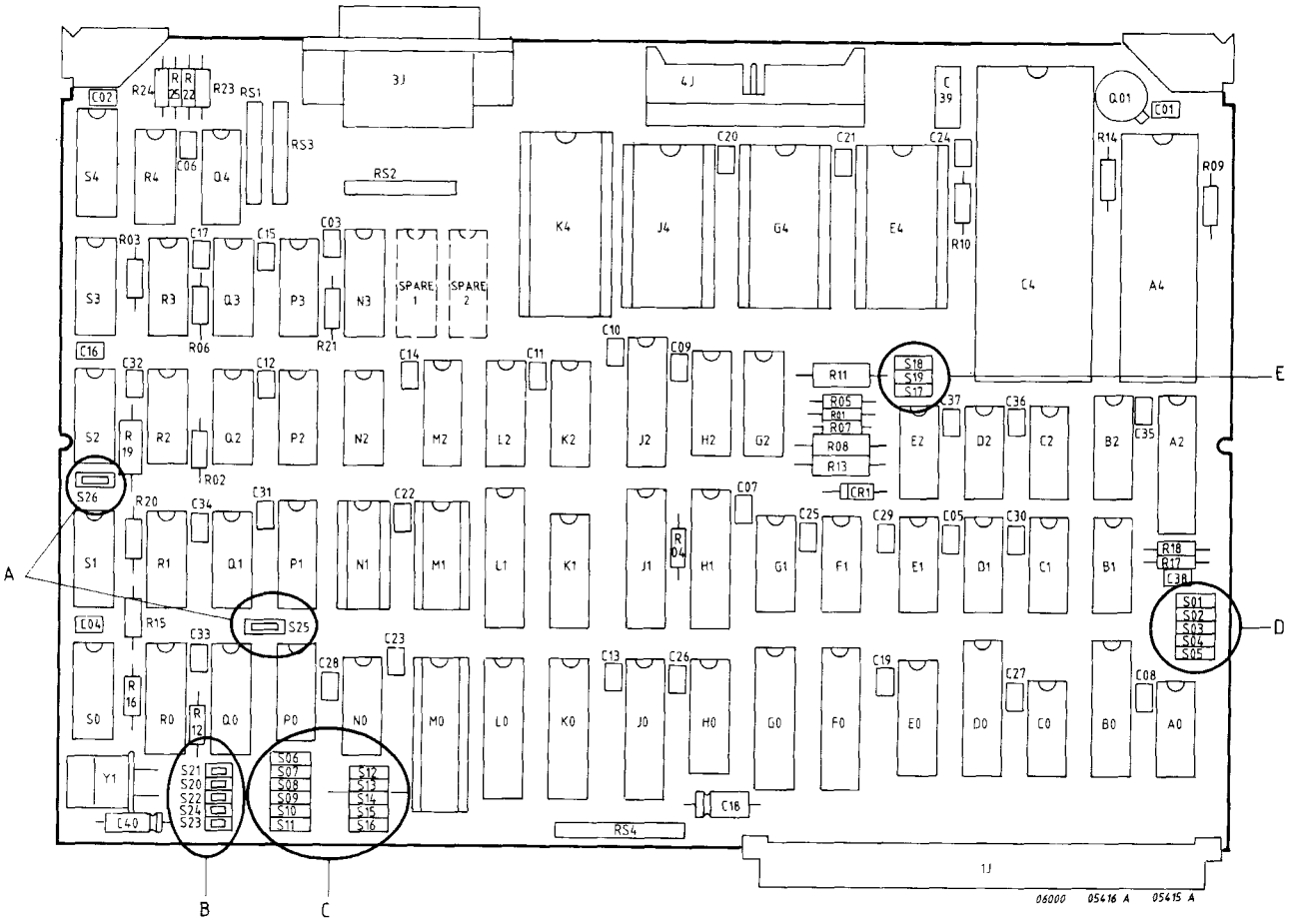
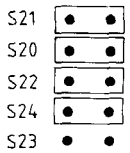


Figure 27.2 P-6891 IN A SYSTEM



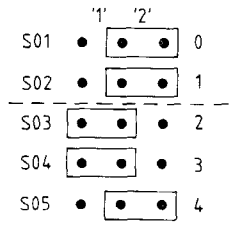
A- S26, S25: Must be fitted for normal operation.

B- Single Interrupt selected.
Receiver Interrupt Output pin: 1C04 (conn. 1J)
Transmitter Interrupt Output pin: 1C05 (conn. 1J)
See further General Purpose Bus Adaptor.



C- Interrupt Level Selection.
Not significant. The interrupt level is strapped at GP Bus Adaptor.

D- Control Unit Address Selection.
MAD10-MAD14 (S01-S05) are strapped for the Receiver part. The Transmitter part is then addressed by: (Receiver part + 1)



Example: /0C (Rec.)
/0D (Trx.)

E- S18 (Enable Oscillator) must be fitted.
S19 & S17 (NRZI or not) must be strapped according the mode selected.

Figure 27.3 STRAP SETTINGS

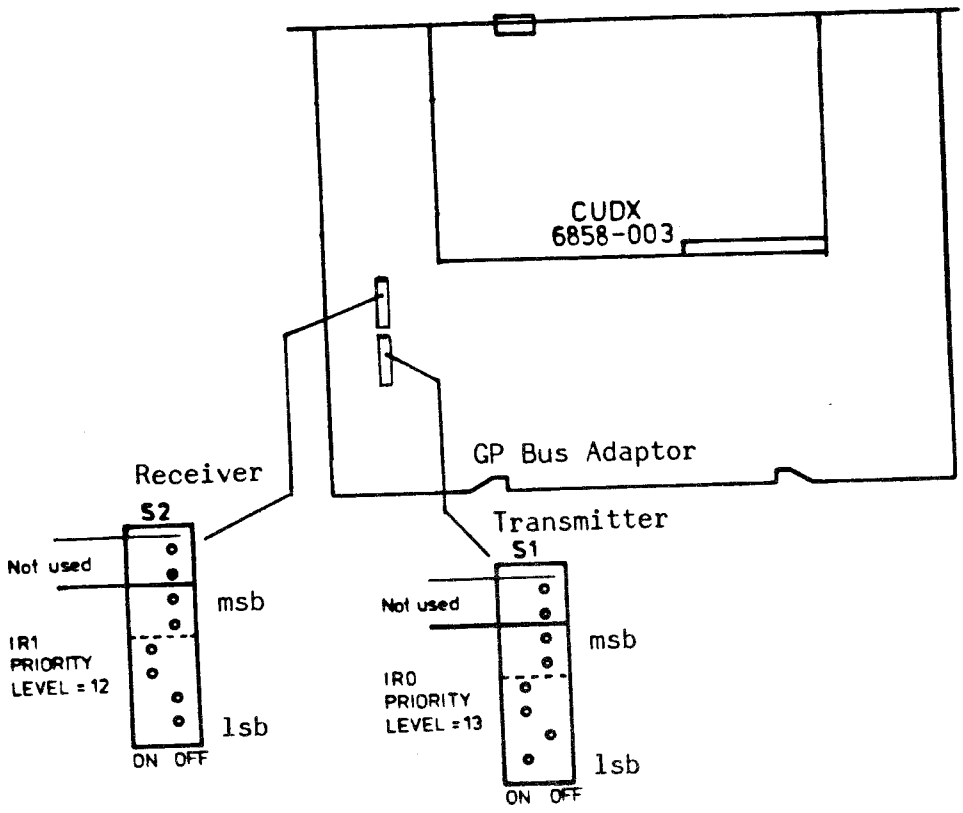


Figure 27.4 INTERRUPT SWITCHES ADAPTOR BOARD

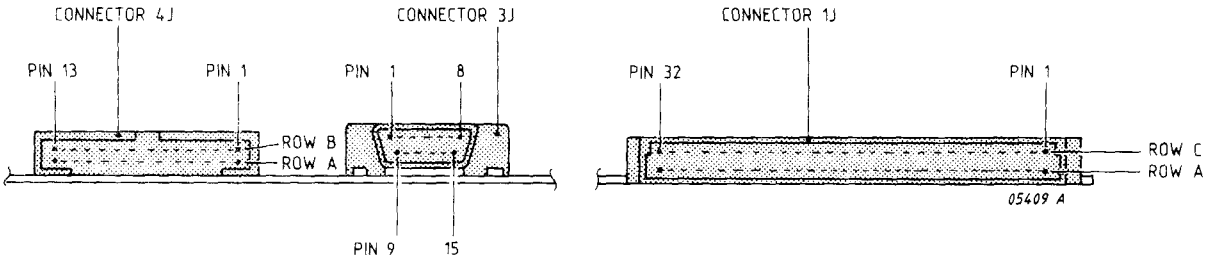


Figure 27.5 LAYOUT CONNECTORS 4J, 3J, 1J

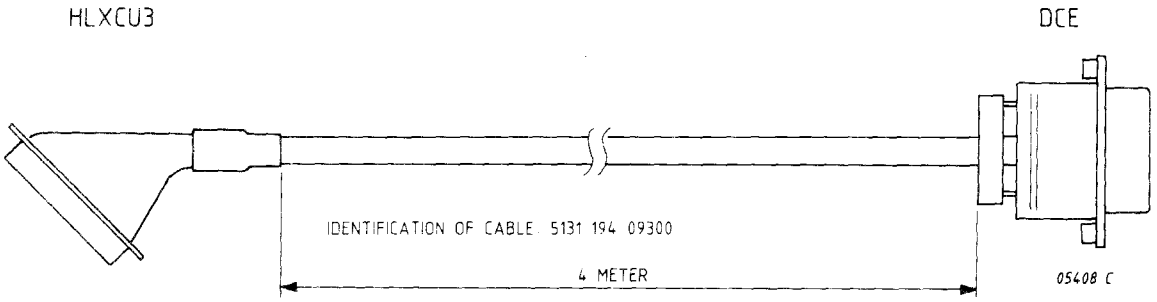


Figure 27.6 DCE CABLE PTS-6016

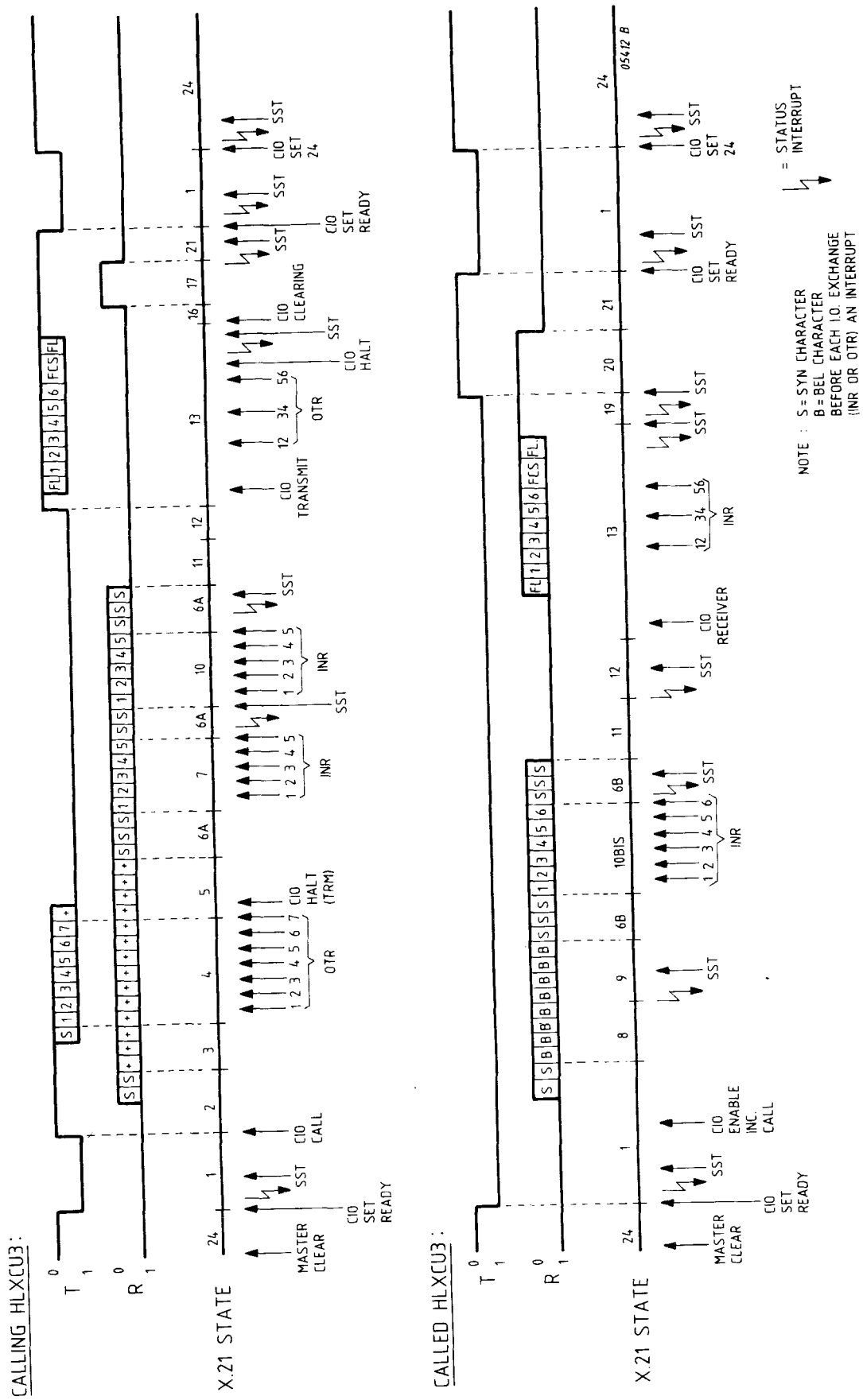


Figure 27.7 COMMAND TIMING

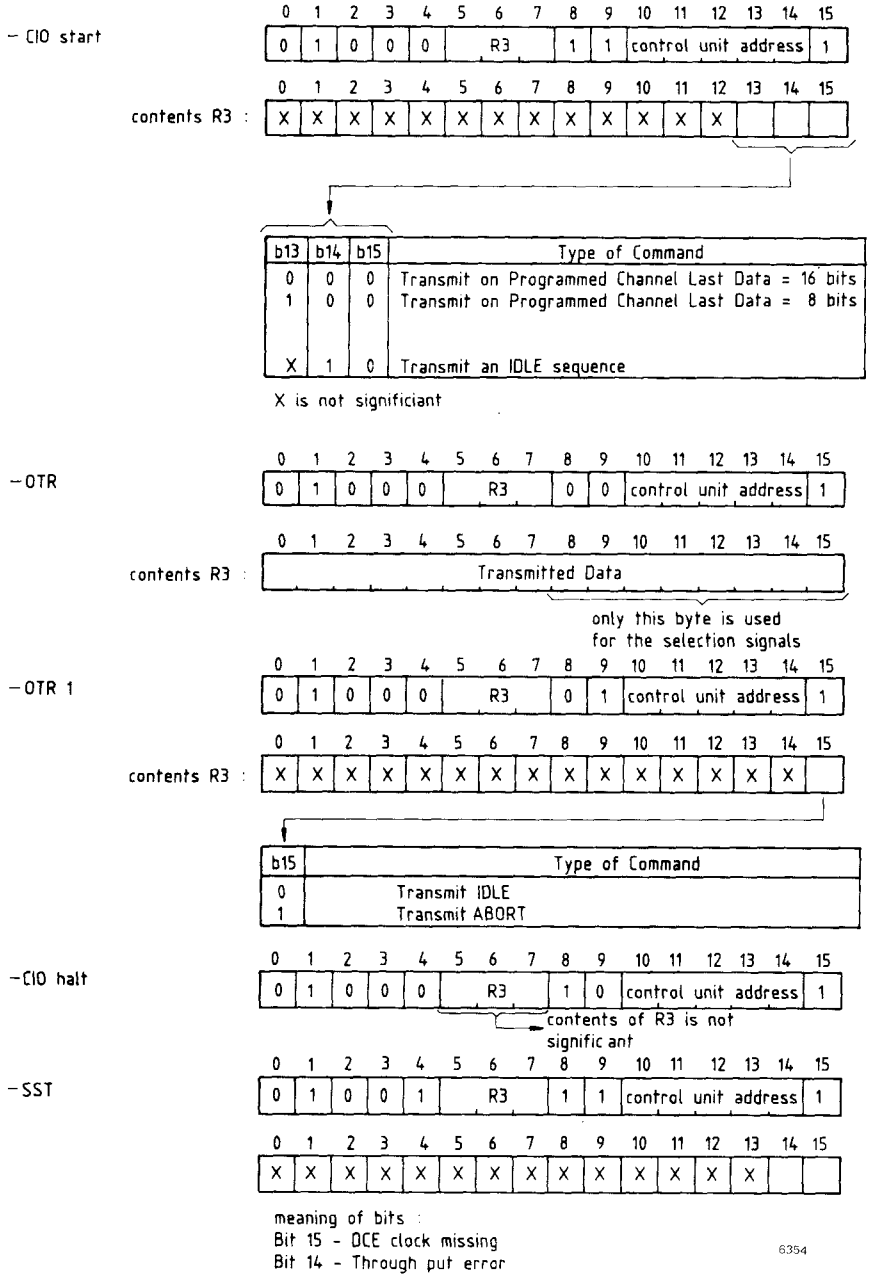


Figure 27.8 TRANSMITTER COMMANDS SUMMARIZED

Receiver Commands

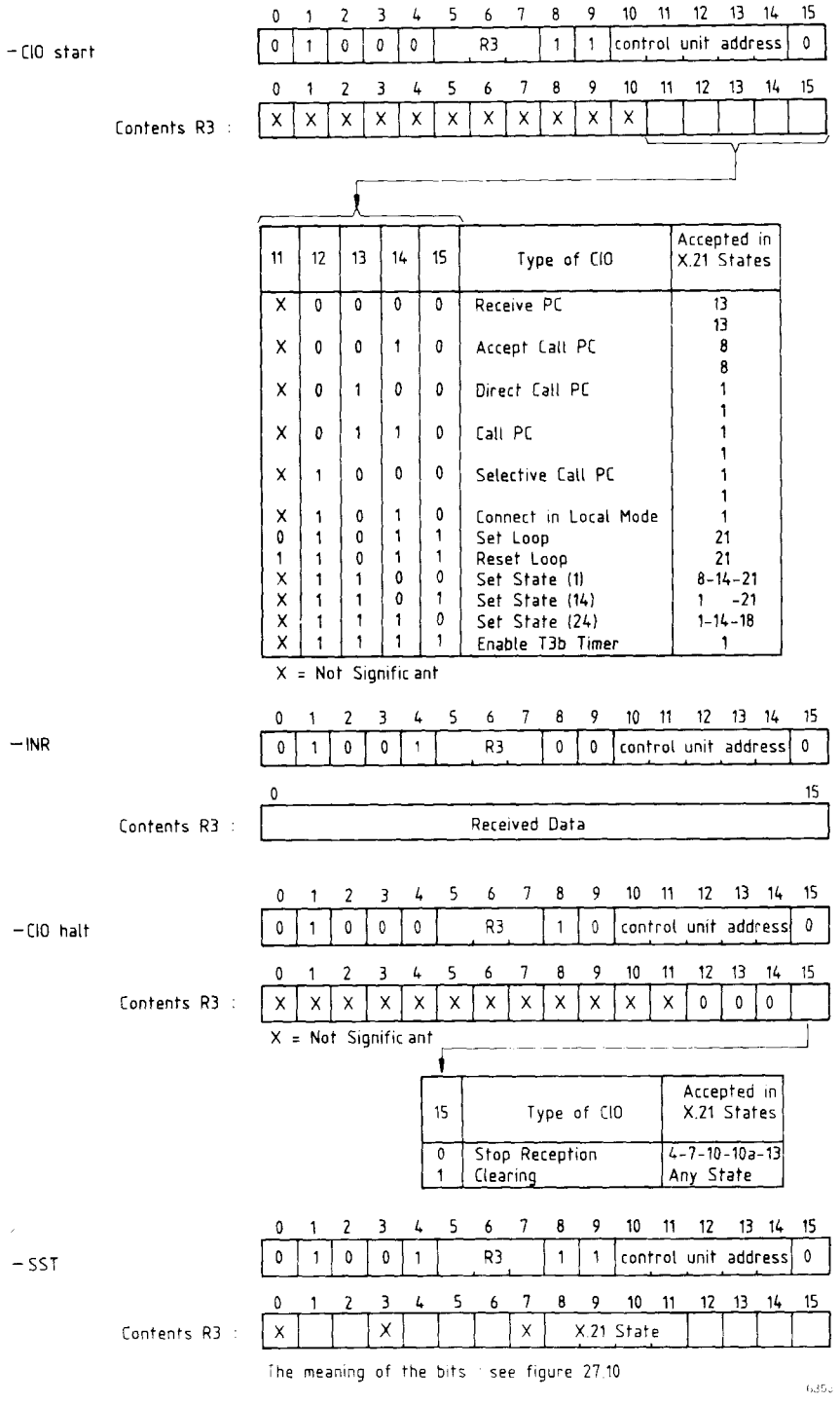
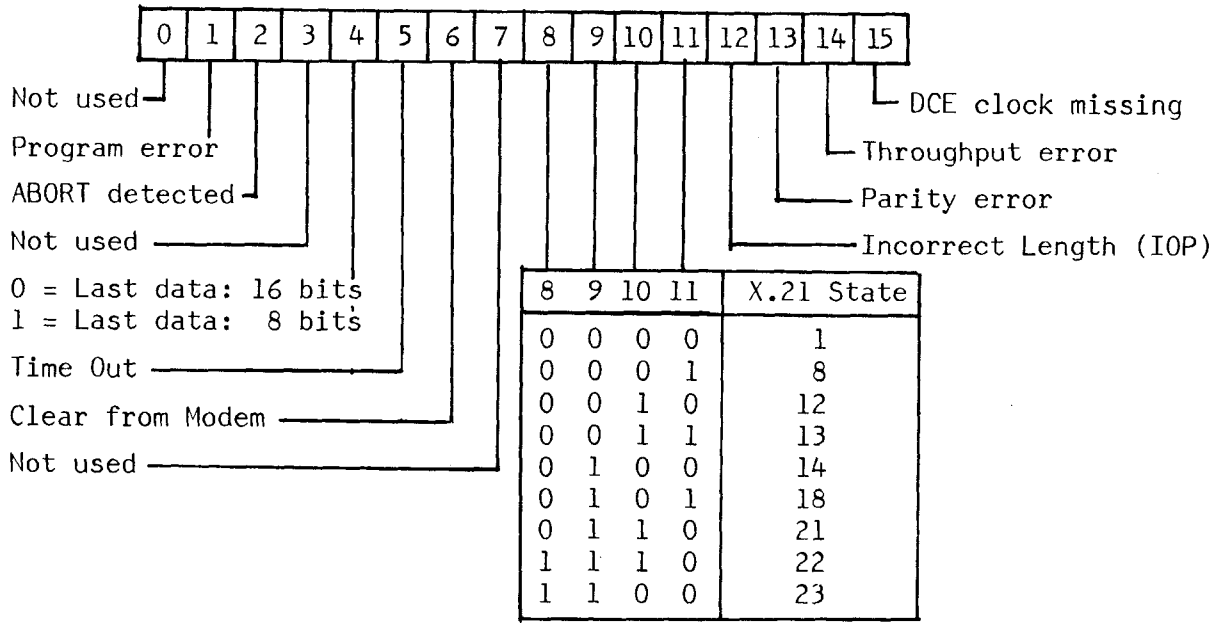


Figure 27.9 RECEIVER COMMANDS SUMMARIZED

Status word from Receiver part:



8	9	10	11	X.21 State
0	0	0	0	1
0	0	0	1	8
0	0	1	0	12
0	0	1	1	13
0	1	0	0	14
0	1	0	1	18
0	1	1	0	21
1	1	1	0	22
1	1	0	0	23

Status word from Transmitter part:

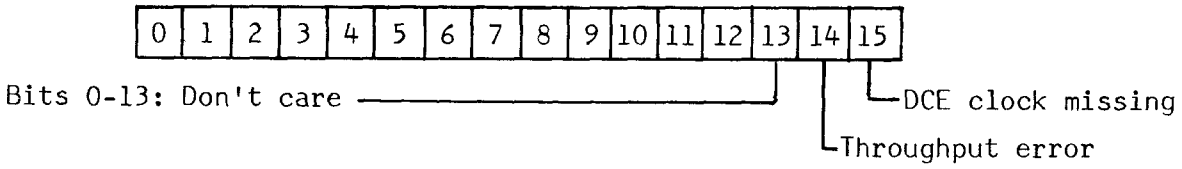


Figure 27.10 STATUS INFORMATION RECEIVER AND TRANSMITTER

27.5 TEST PROGRAMS

Not available (May 1985)