

PM3551A

LOGIC ANALYZER CONTROL COMMANDS

4822 871 80301

850715

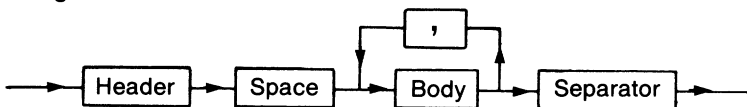
The interface option PM 8551/40 features IEEE488/IEC625 bus control of the PM3551A Logic Analyzer.

1. INTERFACE FUNCTIONS

Interface function	Ident.	Description
Source handshake	SH1	Complete capability
Acceptor handshake	AH1	Complete capability
Talker function	T6	Basic talker, serial poll, unaddress if MLA
Listener function	L4	Basic listener, unaddress if MTA
Service request	SR1	Complete capability
Remote/Local	RL1	Complete capability
Parallel poll	PP0	No capability
Device clear	DC1	Complete capability
Device trigger	DT1	Complete capability
Controller	C0	No capability

2. COMMAND FORMAT

Syntax Diagram

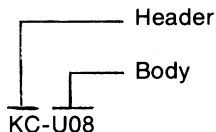


* Separator must include EOI.



PHILIPS

Example:



More bodies, separated by a ',' may be included after one header.

K = Keypad
C = Cursor
U08 = Up, 8 times
- = Space (20H)

3. PROGRAMMING COMMANDS

KEY LEVEL

Front panel key commands

Softkeys	KS-d	d = Keynumber 1--8 (from left to right)
Cursor up	KC-U[d]	d = Number of steps
Cursor down	KC-D[d]	
Cursor left	KC-L[d]	
Cursor right	KC-R[d]	
Hex keys	KP-d	d = 0--F (key pad)
'X' key	KP-DNC	Don't care
'+' key	KP-POS	Positive
'-' key	KP-NEG	Negative
'' key	KP-OUT	Decimal sign
DELETE key	KP-DEL	
Cursor in Heading	CP-H	
Cursor in Data	CP-D	
Start Single acquisition	AC-S	
Start Auto acquisition	AC-A	
Stop acquisition	AC-H	Halt

Configuration menu	MN-S	Menu display selections
Trigger menu	MN-T	
Data menu	MN-D	
Compare menu	MN-C	
Options menu	MN-E	
Full menu	MN-F	
List display	DD-L	Data display selections.
Graph display	DD-G	
Timing display	DD-T	
Display actual memory	DD-A	
Display reference memory	DD-R	
Display compare	DD-C	
Store setting	ST-S	Save instrument-setting in N-V memory
Store data	ST-D	Copy actual data into reference memory
Store triggerword	ST-T	Copy a triggerword
I/O CONTROL		Data as selected in the Options menu
Peripheral Control Load	PC-L	PM 4202 load
Peripheral Control Dump	PC-D	PM 4202 dump
Peripheral Control Print	PC-P	Print
DATA TRANSFER		Transfer data to the controller
Configuration menu	TR-F	Setting data (LF = file header)
State trigger menu	TR-S	(LS)
Timing trigger menu	TR-T	(LT)
Data menu	TR-D	(LD)
Compare menu	TR-E	(LE)
P.A. menu	TR-P	Performance Analysis (LP)
Options menu	TR-O	(LO)
Instrument setting	TR-I	All menu setting data (LI)
Instrument and P.A. setting	TR-A	(LA)
State- and Timing ref. menu	TR-R	(LR)
P.A. data	TR-B	(LB)

Data- and video transfer blocks are preceded with a file header such as LF, LS, etc. This header is automatically inserted by the Logic Analyzer.

VIDEO TRANSFER

Transfer data to the controller

One text line
Video screen

TR-Ld
TR-V

d = line number
Full screen strings)

4. INTERFACE CONTROL MESSAGES

Go to local
Reset

GTL
SDC

Local control
Reset analyzer to 'power-on'
setting

Start data acquisition

GET

Single start

SERVICE-REQUEST CONTROL

Normal service requests can be
enabled or disabled.
Default is disabled.

Enable request 1 and 2
Enable request 1 only
Enable request 2 only
Disable request 1 and 2
Disable request 1 only
Disable request 2

SR-0
SR-1
SR-2
SR-5
SR-6
SR-7

5. INTERFACE SETTINGS

Selectable analyzer settings:

- Device address between 00 and 30 incl.

Selectable by a switch on the option unit, or in the options menu.

Default setting at delivery: 26

- Record separator

Selectable in the options menu: NL, CR, ETB, ETX or CR/LF.

Together with this separator the EOI-line must be "1".

With the CR/LF separator, the EOI-line must be "1" during LF.

6. STATUS BYTE

Event	DIO					Dec. value
	8 EXT	7 RQS	6 AB	5 BS	4—1 EF3—0	

Normal

Trigger found	0	1	0	0	0001	1
Compare condition found	0	1	0	0	0010	2

Abnormal

Checksum error (data transfer)	0	1	1	x	0111	7
IEEE-488 control menu change, or fault menu requested	0	1	1	x	1000	8
Separator missing or incorrect	0	1	1	x	1011	11
Command-length error max.	0	1	1	x	1101	13
Command-length error minus	0	1	1	x	1110	14
Command-syntax error	0	1	1	x	1111	15

7. DATA FORMAT

Statusbyte and screen text are transferred in 7-bit ASCII code, without lengthbytes, checksum or header.

Characters in inversed video are transferred with the 8th bit being a '1'.

1. Screen text

- Single text line : One string of 64 characters.
- Full screen : One string consisting of number of textlines of 64 characters each.
Full menu: 24 textlines.
Condensed menu with state- or disa list:
23 textlines.

2. Memory data, or analyzer-setting dump, or —load.

Block data structure with header etc.

