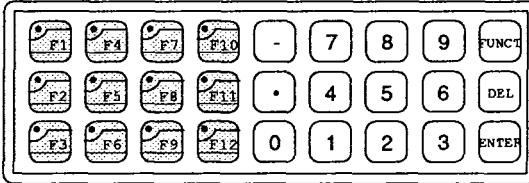


5.5 Requests to access XBT-A8 resources

- Resource addresses

- Bit area



	Number	FUNCTION	XBT ADDRESS		TYPE OF ACCESS	
			Decimal	Hexadecimal	Individually	List of bits
Ctrl of keyboard LEDs	1 to 12	Lighting/ extinguishing keyboard LEDs	01 to 12	H'0000' to H'000C'	Write	Write Object
	(F1) to (F12)	Function keys	101 to 112	H'0065' to H'0070'	Write	Write Object
LOCKING THE KEYBOARD	(0) to (9)	Numeric keys 0 to 9	200 to 209	H'00C8' to H'00D1'	Write	Write Object
	(-)	- Key	210	H'00D2'	Write	
	(FUNCT)	FUNCT key	263	H'0107'	Write	
	(.)	. Key	265	H'0109'	Write	
	(DEL)	DEL key	268	H'010C'	Write	Write Object
	(ENTER)	ENTER key	269	H'010D'	Write	
	(ENTER) + (FUNCT)	Locking the combination (ENTER) + (FUNCT)	900	H'0384'	Write	Write Object
CONTROL OF THE BUZZER		Start / stop buzzer	901	H'0385'	Write	

5 Communication

Requests to access XBT-A8 resources

- Word area

	Number	FUNCTION	XBT ADDRESS		TYPE OF ACCESS	
			Decimal	Hexadecimal	Individual	List
KEYBD. ACCESS	9033	Global locking/unlocking of the keyboard	9033	H'2349'	Write	
STORED MESSAGE ACCESS	401	Display a stored message	401	H'0191'	Write	
DISPLAY BUFFER ADDRESS	2001	Read the display buffer (read the displayed message) Write the display buffer (display a message not stored in the XBT-A8)	2001	H'07D1'		Read or Write

NOTE : ALL RESOURCES ACCESSIBLE BY INDIVIDUAL REQUESTS CAN BE ACCESSED BY OBJECT LIST REQUESTS (BIT OR WORD)

5 Communication

Requests to access XBT-A8 resources

Controlling the keyboard LEDs


The LEDs on the function keys are represented in memory by 12 consecutive bits (addresses 1 to 12 in the bit area).

- On/off

- . The command consists of setting a bit corresponding to the LED to either 0 for off or 1 for on.
- . The command may be for an individual LED or multiple LEDs (consecutive bits).

Individual command : "Write bit" request

Request format :

Designation	Request code	Sender category code	LED number	Confirm 1 or 0
Format	1 byte	1 byte	1 mot	1 byte
Code	H'10'	H'07'	H'000A'	H'01' or H'00'
Comments	Write a bit	-	LED for Function key 	H'01' on H'00' off

Confirmation report format : Positive response

Response code	H'FE'
---------------	-------

Example : Switching on the LED for the  function key.

CLIENT TEXT BLOCK						
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE				
TSX7 MAITRE Type : LOCAL EXCHG TxTi, C = H'0710' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 4 (bytes)	<table border="1"> <tr> <td>H'0A'</td> <td>H'00'</td> </tr> <tr> <td>H'00'</td> <td>H'01'</td> </tr> </table>	H'0A'	H'00'	H'00'	H'01'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'0A'	H'00'					
H'00'	H'01'					

5 Communication

Requests to access XBT-A8 resources

Turning the keyboard LEDs on/off (continued)

Individual or multiple command : "Write object" request

Using this request allows the LEDs to be controlled individually (as in the preceding example) or together.

Request format :

Designation	Request code	Sender category	Segment	Reserved	Object address	Number of bits	Data
Format	1 byte	1 byte	1 byte	1 byte	1 word	1 word	1 word
Code	H'37'	H'07'	H'02'	H'00'	H'0001' to H'000C'	H'01' to H'0C'	H'00' to H'FF'
Comments	Write objects	-	Access bit area	-	Address of 1 st bit (1 st function key)	Number of function keys	Starting with the address of the first bit, set the bits to 1 or 0

Comment :

The data is written in 1 or 2 bytes depending on the number of bits to be written (number of LEDs to be controlled).

Confirmation report format : Positive response

Response code	H'FE'
---------------	-------

Example : Switching on the LEDs for the (F1) (F7) (F12) function keys.

CLIENT TEXT BLOCK										
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE								
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 8 (bytes)	<table border="1"> <tr> <td>H'00'</td> <td>H'02'</td> </tr> <tr> <td>H'00'</td> <td>H'04'</td> </tr> <tr> <td>H'00'</td> <td>H'0C'</td> </tr> <tr> <td>H'08'</td> <td>H'41'</td> </tr> </table>	H'00'	H'02'	H'00'	H'04'	H'00'	H'0C'	H'08'	H'41'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'00'	H'02'									
H'00'	H'04'									
H'00'	H'0C'									
H'08'	H'41'									

5 Communication

Requests to access XBT-A8 resources

• Locking/unlocking the keyboard

- The keyboard keys are represented in memory by image bits. The bit addresses are not consecutive so use the "Write object" request when addressing.
- The command to lock or unlock is carried out by setting the image bit corresponding to the key to 1 or 0.
 - . Logic state 0 : key does not function
 - . Logic state 1 : key functions

Individual command : "Write bit" request

Request format :

Designation	Request code	Sender category code	Key number	Confirm 1 or 0
Format	1 byte	1 byte	1 word	1 byte
Code	H'10'	H'07'	H'0067'	H'00' or H'01'
Comments	Write a bit	-	Address of key image bit E.g. (F3)	H'00' locking H'01' unlocking

Confirmation report format : Positive response

Response code	H'FE'
---------------	-------

Example : Locking the (F3) function key.

CLIENT TEXT BLOCK						
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE				
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0710' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 4 (bytes)	<table border="1"> <tr> <td>H'00'</td> <td>H'67</td> </tr> <tr> <td>H'00'</td> <td>H'00'</td> </tr> </table>	H'00'	H'67	H'00'	H'00'	TxTi, R = H'FE' (TSX 17) or TxTi, V = H'00FE' Positive response : the (F3) key is locked
H'00'	H'67					
H'00'	H'00'					

5 Communication

Requests to access XBT-A8 resources

Locking/unlocking the keyboard (continued)

Individual or multiple command : "Write object" request.

Request format :

Designation	Request code	Sender category	Segment	Reserved	Object address	Number of bits	Data
Format	1 byte	1 byte	1 byte	1 byte	1 word	1 word	1 word
Code	H'37'	H'07'	H'02'	H'00'	H'0065' to H'0384'	H'0001' to H'000C'	
Comments	Write objects	-	Access bit area	-	Address of 1 st bit	Number of consecutive bits in data field	Starting with the address of the first bit, set the bits to 1 or 0

Comment :

The data field is coded in 1 or 2 bytes depending on the number of keys to be controlled.

Note : The number of bits depends on the address of the 1st bit and the maximum number for the corresponding field (see bit area address table).

If there is an overflow into a non-existent field, the terminal sends a negative response : H'FD'.

Confirmation report format : Positive response

Response code	H'FE'

Example : Locking the numeric keypad (keys  to  and ).

CLIENT TEXT BLOCK										
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE								
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 14 (bytes)	<table border="1"> <tr><td>H'00</td><td>H'02'</td></tr> <tr><td>H'00</td><td>H'C8'</td></tr> <tr><td>H'00</td><td>H'0B'</td></tr> <tr><td>H'00</td><td>H'00'</td></tr> </table>	H'00	H'02'	H'00	H'C8'	H'00	H'0B'	H'00	H'00'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'00	H'02'									
H'00	H'C8'									
H'00	H'0B'									
H'00	H'00'									

5 Communication

Requests to access XBT-A8 resources

• Global control of the keyboard

Locking or unlocking all the keys, except for the **(ENTER)** + **(FUNCT)** combination, (used to access to CONFIGURATION mode) is carried out by writing the value field to address 9033 decimal (H'2349'). This address is accessed in the XBT word area by the "Write word" request.

Request format :

Designation	Request code	Sender category	XBT word address	Value
Format	1 byte	1 byte	1 word	1 word
Code	H'14'	H'07'	H'2349'	H'00 00' or H'FF FF'
Comments	Write a word	-	XBT-A8 keyboard access	H'0000' lock H'FFFF' unlock

Confirmation report format : Positive response

Response code	H'FE'
---------------	-------

Example : Command to unlock all the keys of the XBT-A8 keyboard

CLIENT TEXT BLOCK						
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE				
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0714' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 4 (bytes)	<table border="1"> <tr> <td>H'23</td> <td>H'49'</td> </tr> <tr> <td>H'FF</td> <td>H'FF'</td> </tr> </table>	H'23	H'49'	H'FF	H'FF'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response All the keyboard keys are unlocked (except the combination (ENTER) + (FUNCT))
H'23	H'49'					
H'FF	H'FF'					

5 Communication

Requests to access XBT-A8 resources

• Controlling the buzzer

The buzzer is controlled by setting the image bit at address 901 (H'0385') in the bit area to 1 or 0.

Use the "Write bit" request command.

Request format :

Designation	Request code	Sender category	Number of buzzer image bit	Bit state
Format	1 byte	1 byte	1 word	1 byte
Code	H'10'	H'07'	H'0385'	H'00' or H'01'
Comments	Write a bit	-	Address of bit in XBT-A8 bit area (901 in decimal)	H'00' = stop H'01' = start

Confirmation report format : Positive response

Response code	H'FE'
---------------	-------

Example : Command to switch on the buzzer.

CLIENT TEXT BLOCK						
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE				
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0710' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 3 (bytes)	<table border="1"> <tr> <td>H'03</td> <td>H'85'</td> </tr> <tr> <td>H'00'</td> <td>H'01'</td> </tr> </table>	H'03	H'85'	H'00'	H'01'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'03	H'85'					
H'00'	H'01'					

5 Communication

Requests to access XBT-A8 resources

The XBT-A8 may also be controlled by using a "Write object" request.

Request format :

Designation	Request code	Sender category	Segment	Reserved	Object address	Number of bits	1 byte data
Format	1 byte	1 byte	1 byte	1 byte	1 word	1 word	1 word
Code	H'37'	H'07'	H'02'	H'00'	H'0385'	H'0001'	H'00' or H'01'
Comments	Write list of objects	-	Access bit area	-	Address of buzzer image bit in bit area	1 bit data field	H'00' = stop H'01' = start

Confirmation report format : Positive response

Response code	H'FE'
----------------------	-------

Example : Command to switch off the buzzer.

CLIENT TEXT BLOCK										
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE								
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737 TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 8 (bytes)	<table border="1"> <tr> <td>H'00'</td> <td>H'02'</td> </tr> <tr> <td>H'03'</td> <td>H'85'</td> </tr> <tr> <td>H'00'</td> <td>H'01'</td> </tr> <tr> <td>H'00'</td> <td>H'00'</td> </tr> </table>	H'00'	H'02'	H'03'	H'85'	H'00'	H'01'	H'00'	H'00'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'00'	H'02'									
H'03'	H'85'									
H'00'	H'01'									
H'00'	H'00'									

Requests to access XBT-A8 resources

• Displaying a message already stored in the XBT-A8

Displaying a message already stored in the XBT-A8 is carried out by sending a "Write word" request.

Request format :

Designation	Request code	Sender category	Word address	Word value
Format	1 byte	1 byte	1 word	1 word
Code	H'14'	H'07'	H'01 91'	H'0000' to H'0064'
Comments	Write word	-	Address in word space (display address : 401 decimal)	Number of message to display from 000 to 100

Confirmation report format :

There is a negative response if :

- question syntax is incorrect,
- there is no message stored in the XBT-A8 at the number requested,
- the message is type F with associated bit variable.

	Positive	Negative
Response code	H'FE'	H'FD'

Example : Request to display message number 043 stored in the XBT-A8.

CLIENT TEXT BLOCK						
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE				
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0714' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 4 (bytes)	<table border="1"> <tr> <td>H'01</td> <td>H'91'</td> </tr> <tr> <td>H'00</td> <td>H'2B'</td> </tr> </table>	H'01	H'91'	H'00	H'2B'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'01	H'91'					
H'00	H'2B'					

Comments :

On receipt of this request :

- If a TSX7 variable is associated with the message, the XBT-A8 will read it and the value will be written in the numeric field of the message. If the parameter (A) "update the variable" is $\neq 2$, the XBT-A8 will read the variable at set intervals.
- If there is no associated variable, only the text is displayed.

5 Communication

Requests to access XBT-A8 resources

Displaying a message already stored in the XBT-A8 (continued)

Use of the "Write object" request.

(The operation is the same for using the "Write word" request.)

Request format :

Designation	Request code	Sender category	Segment	Reserved	Object address	Number of bytes to write	Data
Format	1 byte	1 byte	1 byte	1 byte	1word	1 word	1word
Code	H'37'	H'07'	H'01'	H'00'	H'0191'	H'0001'	H'00 00' to H'00 64'
Comments	Write objects	-	Access word area (physical address of words)	-	Address in word area (address of display : 401decimal)	1 word only to write	Number of message to display : from 000 to 100

Confirmation report format : Positive response

Response code	H'FE'
---------------	-------

Example : Request to display message number 028 stored in the XBT-A8.

CLIENT TEXT BLOCK										
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE								
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 8 (bytes)	<table border="1"> <tr> <td>H'00'</td> <td>H'01'</td> </tr> <tr> <td>H'01'</td> <td>H'91'</td> </tr> <tr> <td>H'00'</td> <td>H'01'</td> </tr> <tr> <td>H'00'</td> <td>H'1C'</td> </tr> </table>	H'00'	H'01'	H'01'	H'91'	H'00'	H'01'	H'00'	H'1C'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response
H'00'	H'01'									
H'01'	H'91'									
H'00'	H'01'									
H'00'	H'1C'									

5 Communication

Requests to access XBT-A8 resources

• Displaying a message not stored in the XBT-A8

A message which is not stored in the XBT-A8 memory may be displayed if it is transferred into the terminal display buffer.

The UNI-TE request used is the "Write object" request, which allows a string of bytes to be written into the XBT-A8 display buffer.

Request format :

Designation	Request code	Sender category	Segment	Reserved	Object address	Number of objects to write	Data
Format	1 byte	1 byte	1 byte	1 byte	1 word	1 word	64 bytes max
Code	H'37'	H'07'	H'01'	H'00'	H'07D1'	H'0001' to H'0020'	H'xx'....H'xx'
Comments	Write objects.	-	Access word area (physical address of words)	-	Address of XBT-A8 display buffer (in word area) : 2001 (decimal)	Number of words to write to display buffer 1 to 32 words of 32 characters max + 32 dec. points	Text to display 64 characters max (64 bytes) (32 characters + 32 decimal points)

There must always be an even number of data.

Confirmation report format : Positive response

Response code
H'FE'

Example : Request to display the message

 STOP PUMP 15

CLIENT TEXT BLOCK																						
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE																				
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 20 (bytes)	<table border="1"> <tr><td>H'00'</td><td>H'01'</td></tr> <tr><td>H'07'</td><td>H'D1'</td></tr> <tr><td>H'00'</td><td>H'08'</td></tr> <tr><td>H'53'</td><td>H'20'</td></tr> <tr><td>H'4F'</td><td>H'54'</td></tr> <tr><td>H'20'</td><td>H'50'</td></tr> <tr><td>H'55'</td><td>H'50'</td></tr> <tr><td>H'50'</td><td>H'4D'</td></tr> <tr><td>H'31'</td><td>H'20'</td></tr> <tr><td>H'20'</td><td>H'35'</td></tr> </table> Object addr. segment 7 words to write (Number of objects) Message text	H'00'	H'01'	H'07'	H'D1'	H'00'	H'08'	H'53'	H'20'	H'4F'	H'54'	H'20'	H'50'	H'55'	H'50'	H'50'	H'4D'	H'31'	H'20'	H'20'	H'35'	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' Positive response : the message " <u> </u> STOP PUMP 15 <u> </u> " is displayed
H'00'	H'01'																					
H'07'	H'D1'																					
H'00'	H'08'																					
H'53'	H'20'																					
H'4F'	H'54'																					
H'20'	H'50'																					
H'55'	H'50'																					
H'50'	H'4D'																					
H'31'	H'20'																					
H'20'	H'35'																					

Requests to access XBT-A8 resources

Rules for writing :

- Characters which can be displayed on the XBT-A8 :
All characters from H'20' to H'5F' inclusive. The XBT-A8x1019 can also display cyrillic characters (codes H'60' to H'7E') (see Appendices : Table of characters which can be displayed).

WARNING : AN XBT-A8x1019 CANNOT DISPLAY CYRILLIC CHARACTERS UNLESS IT IS CONFIGURED IN RUSSIAN (See section 4.2 : Configuring the languages)

- Decimal points (character H'2E') are displayed in the same position as the digit which precedes them. This has to be taken into account when composing the messages for display.

- **Use of the NUL control character (H'00')**

NUL CANNOT BE DISPLAYED. IT IS USED ONLY AS A CURSOR CONTROL CHARACTER

Example : After an unexpected stoppage, a plant may not be started up again in a normal cycle until it has been checked and initialized by going through an "adjustment cycle".

When selecting the "adjustment cycle", the control system sends a "Write object" request to the XBT-A8. This causes the following text, which is not stored in the XBT, to be displayed, starting at the first position at the left of the display unit : "ADJUST".

CLIENT TEXT BLOCK															
CONFIGURATION	TRANSMISSION TABLE		RECEPTION TABLE												
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' E.g. station 5 XBT-A8 SERVER TxTi, L = 12 (bytes)	<table border="1"> <tr> <td>H'00'</td> <td>H'01'</td> </tr> <tr> <td>H'07</td> <td>H'D1'</td> </tr> <tr> <td>H'00</td> <td>H'03'</td> </tr> <tr> <td>H'44'(D)</td> <td>H'41'(A)</td> </tr> <tr> <td>H'55'(U)</td> <td>H'4A'(J)</td> </tr> <tr> <td>H'54'(T)</td> <td>H'53'(S)</td> </tr> </table>	H'00'	H'01'	H'07	H'D1'	H'00	H'03'	H'44'(D)	H'41'(A)	H'55'(U)	H'4A'(J)	H'54'(T)	H'53'(S)	Segment (word area) Display buffer address No. of objects (3 words) to write Text to display	TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' The XBT-A8 displays <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">ADJUST</div>
H'00'	H'01'														
H'07	H'D1'														
H'00	H'03'														
H'44'(D)	H'41'(A)														
H'55'(U)	H'4A'(J)														
H'54'(T)	H'53'(S)														

Requests to access XBT-A8 resources

• **Use of the NUL control character H'00' (continued)**

At the start of the cycle, the control system sends a new "Write object" request allowing the preceding display to be augmented (without erasing it). The message should be preceded by 6 NULs (H'00') so that the beginning of the message is in the 7th position.

CLIENT TEXT BLOCK			
CONFIGURATION	TRANSMISSION TABLE		RECEPTION TABLE
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' E.G. station 5 XBT-A8 SERVER TxTi, L = 22 (bytes)	H'00'	H'01'	Segment (word space) Display buffer address Number of objects (8 words) to write TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' The XBT-A8 displays ADJUST COMPLETE
	H'07	H'D1'	
	H'00	H'08'	
	H'00'NUL	H'00'NUL	
	H'00'NUL	H'00'NUL	
	H'00'NUL	H'00'NUL	
	H'43'(C)	H'20'(SP)	
	H'4D'(M)	H'4F'(O)	
	H'4C'(L)	H'50'(P)	
	H'54'(T)	H'45'(E)	
	H'00'NUL	H'45'(E)	

The last NUL (H'00') in the most significant byte simply completes the transmission table (there must always be an even number of bytes in the data field).

At the end of the cycle, the control system sends a new "Write object" request which allows the display to be altered. The message should be preceded by 6 NULs (H'00') to preserve the starting position for display.

CLIENT TEXT BLOCK			
CONFIGURATION	TRANSMISSION TABLE		RECEPTION TABLE
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0737' TxTi, M = H'0069' E.G. station 5 XBT-A8 SERVER TxTi, L = 22 (bytes)	H'00'	H'01'	Segment (word space) Display buffer address Number of objects (8 words) to write TxTi, R = H'FE' (TSX17) or TxTi, V = H'00FE' The XBT-A8 displays ADJUST COMPLETE
	H'07	H'D1'	
	H'00	H'08'	
	H'00'NUL	H'00'NUL	
	H'00'NUL	H'00'NUL	
	H'00'NUL	H'00'NUL	
	H'43'(C)	H'20'(SP)	
	H'4D'(M)	H'4F'(O)	
	H'4C'(L)	H'50'(P)	
	H'54'(T)	H'45'(E)	
	H'00'NUL	H'45'(E)	

5 Communication

Requests to access XBT-A8 resources

• Reading the message displayed on the XBT-A8

The message is read from the XBT-A8 display by reading the contents of the display buffer (address H'07D1' or 2001 in decimal). The request used by UNI-TE is "Read object".

Reading is always carried out by starting at the first position on the unit, however many characters are displayed.

Comment : The decimal points, displayed in the same position as a digit, are sent separately. This has to be taken into account when composing the request (reception table length).

Request format :

Designation	Request code	Sender category	Segment	Reserved	Object address	Number of objects to read
Format	1 byte	1 byte	1 byte	1 byte	1 word	1 word
Code	H'36'	H'07'	H'01'	H'00'	H'07D1'	H'01 à H'20'
Comments	Read objects	-	Access word space (physical address of words)	-	XBT-A8 display buffer address (in word space) : 2001 in decimal	Number of words to read : 32 words max => 64 characters max

Confirmation report format : Positive response

Designation	Response code	Reserved	Data
Format	1 byte	1 byte	64 bytes max
Code	H'66'	H'00'	H'..'H'..'.....
Comments	-	-	Message shown on display

Requests to access XBT-A8 resources

Example : XBT-A8 response following the request to "read the message currently displayed".

CLIENT TEXT BLOCK																								
CONFIGURATION	TABLE EMISSION	TABLE RECEPTION																						
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0736' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 6 (bytes)	<table border="1"> <tr> <td>H'00'</td> <td>H'01'</td> </tr> <tr> <td>H'07'</td> <td>H'D1'</td> </tr> <tr> <td>H'00'</td> <td>H'08'</td> </tr> </table> Disp. buff. add. 7 words to read	H'00'	H'01'	H'07'	H'D1'	H'00'	H'08'	TxTi, V = H'0066' or TxTi, R = H'66' (TSX17) <table border="1"> <tr> <td>H'53'</td> <td>H'00'</td> </tr> <tr> <td>H'45'</td> <td>H'50'</td> </tr> <tr> <td>H'44'</td> <td>H'45'</td> </tr> <tr> <td>H'32'</td> <td>H'3D'</td> </tr> <tr> <td>H'32'</td> <td>H'3D'</td> </tr> <tr> <td>H'35'</td> <td>H'34'</td> </tr> <tr> <td>H'54'</td> <td>H'30'</td> </tr> <tr> <td>H'2E'</td> <td>H'4D'</td> </tr> </table> Message displayed SPEED = 2450TM.	H'53'	H'00'	H'45'	H'50'	H'44'	H'45'	H'32'	H'3D'	H'32'	H'3D'	H'35'	H'34'	H'54'	H'30'	H'2E'	H'4D'
H'00'	H'01'																							
H'07'	H'D1'																							
H'00'	H'08'																							
H'53'	H'00'																							
H'45'	H'50'																							
H'44'	H'45'																							
H'32'	H'3D'																							
H'32'	H'3D'																							
H'35'	H'34'																							
H'54'	H'30'																							
H'2E'	H'4D'																							

5 Communication

Requests to access XBT-A8 resources

• Cancelling a current operation

- INIT request

This request initializes the XBT-A8. The periodic updating of the variable associated with any message being displayed is interrupted and the XBT-A8 displays

* RUNNING *

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Request :

Designation	Request code	Sender category
Format	1 byte	1 byte
Code	H'33'	H'07'
Comments	Terminal initialization	-

Confirmation report format : Positive response

Designation	Response code	Confirm. report
Format	H'63'	1 byte
Code	H'63'	H'00'
Comments	-	INIT OK

Format for a negative response :

Response code	H'FD'
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Reasons for a negative response :

- request syntax incorrect,
- terminal reserved by another caller (see "Reservation" request),
- terminal message zone undergoing uploading or downloading sequence (see section 5.8 "Remote uploading and downloading of the memory area").

Example :

CLIENT TEXT BLOCK				
CONFIGURATION	TRANSMISSION TABLE	RECEPTION TABLE		
TSX7 MASTER Type : LOCAL EXCHG TxTi, C = H'0733' TxTi, M = H'0069' (E.g. station 5) XBT-A8 SERVER TxTi, L = 0 (bytes)	/	TxTi, V = H'0063' or TxTi, R = H'63' (TSX17) <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">H'00'</td> <td style="padding-left: 10px;">INIT. OK.</td> </tr> </table>	H'00'	INIT. OK.
H'00'	INIT. OK.			

INIT. OK. : The XBT-A8 displays :

* RUNNING *
