Philips PTS 6000 Display units

In a bank terminal system, communication between operators and their system must be two-way. At each terminal, the system gives information to the operator, usually by means of a display device. (Hard copy of the information displayed is provided by a printer).

The amount and type of information required at each location will vary in accordance with the type of work to be done. The Philips system therefore offers a variety of display devices, each providing the functions and capacity required at the location for which it is primarily intended. A teller, for example, will often require only numeric and guidance signals, and these can normally be accommodated on a one line plasma display. Where more is required, he has the choice of the 6 line plasma. In the back-office, the highly-adaptable visual display unit gives up to 20 lines (optionally 24) of 80 characters each. This unit provides for data entry, inquiries, table look up and file handling.

The characters to be displayed can be selected from a variety of standard sets which match national alphabets and codes. The displays are clear and easy-to-read in normal background lighting, and the maximum possible positioning freedom has been designed in.

Any of the display units can be combined with the other Philips PTS 6000 terminal devices to build up the optimum terminal at any working position.

Philips PTS 6386 Plasma Display Unit

INTRODUCTION AND APPLICATIONS

The Philips PTS 6386 Plasma Display Unit is a 240 character alphanumeric output device which is used in combination with numeric and/or alphanumeric keyboards.

Its most usual location will be at the teller's desk, at which it provides:

- operator guidance
- display of keyed-in data
- display of status messages
- enquiries to files

For back office work it may be used for data entry and enquiries to files.

PRODUCT DESCRIPTION

The Philips PTS 6386 PDU is a plasma panel display using gas-discharge elements which give a bright, clear and flicker-free image.

It is designed to allow the creation of a good ergonomic workstation. Its compact design allows it to be placed for best readability and an optional stand will allow its installation in narrow workstation areas. To avoid glares from e.g. lamps the panel is recessed into the unit and a non glare screen is placed in front of the panel. The screen is bent in a curve so that lights falling into the panel are reflected away. Furthermore there is an intensity control which the operator can adjust for suitable display brightness.

A stand can be used which enables tilting of the display up and down in the range ±15°.

The Philips PTS 6386 PDU comprises a display panel and the necessary connecting cables. A separate power supply unit PTS 6431 PSU is used.

System functions

The display is controlled by programs in the terminal computer.

The following commands are given to the display unit by the terminal computer:

- Cursor down or Line feed
- Cursor left
- Cursor right
- Cursor home
- Clear
- Carriage return
- Set cursor address
- Fast output
- Cursor on/off
- Cursor blink/steady
- Random position of cursor

System software

The display is controlled via the system software of the Philips PTS 6000 terminal computer. With I/O requests it is possible to:

- Read (1) a specified number of characters.
- Set the cursor to a specified position.
- Write (2) from the set or current cursor position to the display.

(1) Read is input from keyboard used in connection with the display.

(2) Write is output to the display.

Application software

With the application software it is possible to realize different functions of the display such as:

- Editing
- Form fillout
- Tabulation
- Protected fields

Philips PTS 6386 Plasma Display Unit

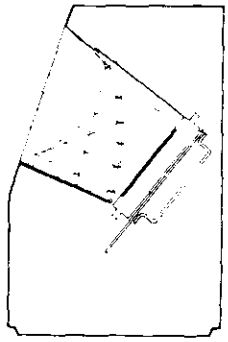
Operator commands

All keys of a keyboard are interpreted by the program, which implies that any control key of the keyboard used together with the display unit can, by program control, cause any function on the screen. Common functions for control keys are:

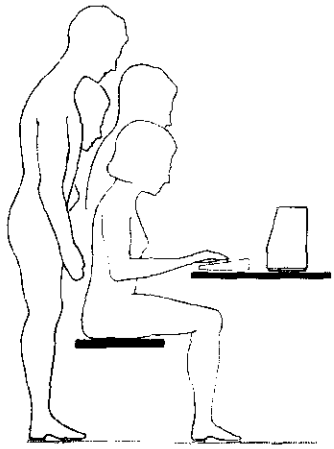
- **Clear**
  Clears the screen and places cursor at home position.
- **LF**
  Causes the cursor to move one line.
- **CR**
  The carriage return key moves the cursor to the beginning of the same line without altering the display content.
- **Home**
  The home key moves the cursor to the home position, i.e. the upper left corner.
- **Space bar**
  Advances the cursor one position to the right and alters the display content into a blank.
- **BSP**
  Non-destructive back space.
- **ETB**
  Generates a code to the computer and is normally used to indicate the end of a segment.
- **Cursor control**
  To move the cursor to any position on the screen by horizontal as well as vertical tabulations, without altering the display content.

ERGONOMICAL ASPECTS

- **Contrast**
  The text panel of the Philips PTS 6386 Plasma Display Unit is surrounded by a large dark area which improves readability considerably at a well lighted work station. Clear characters against a dark background prevent eyestrain.
- **Light intensity**
  A variable control (potentiometer) enables adjustment of screen light intensity to suit the surrounding lighting conditions and personal reuirements.
- **Screening**
  The text panel is relatively deep set in the screen housing which gives a satisfactory protection against unauthorized reading and at the same time eliminates annoying reflections.

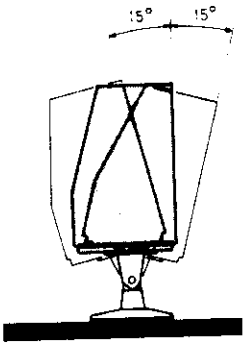


- **Reflection free**
  A deflector is positioned in front of the text panel. It is formed so that all sources of reflection such as overhead lighting, desk lighting, reflective articles etc are reflected towards the bottom of the frame house. The frame house is coated with a low luminans dark coloured paint.



- **Sitting or standing**
  The sitting position is the least tiring and most effective position for a terminal operator. In some cases the operator needs to stand up when dealing with a customer. This puts extra demands on the displays freedom from reflection. The deep inset text panel together with the anti reflex deflector gives large reflection free viewing angles both in the vertical and horizontal planes. Philips PTS 6386 PDU thus gives good readability within a large viewing area.

Philips PTS 6386 Plasma Display Unit



- **Individual position adjustment**
  Further "tailoring" to suit individual requirements is provided by an adjustable guide for vertical positioning of text display.
- **Text size, line spacing**
  Reading distance is dependent on character size and line spacing. Small characters (3-4 mm high) can be read from a distance of 50-70 cm. Philips PTS 6386 PDU has 6.5 mm high characters. This size is suitable for a reading distance of 60-120 cm but can be read without great difficulty from around two meters distance.

OPTIONS/USER ADAPTATIONS

- Ten standard variations in the character sets are available to suit national usage.
- Stand which enables tilting up and down in the range ±15°.

CONNECTIONS

The Philips PTS 6386 Plasma Display Unit is connected to a PTS 6000 system via a cable (standard length 3 m) to a Selector Unit Modular, local or remote (or to other units carrying the selector unit functions).

Power for the display unit is obtained from the separate power module, PTS 6431 Power Supply Unit. The PTS 6386 PDU is connected to the PTS 6431 PSU via a standard 3 m cable.

The power supply unit is connected to a wall socket via a 2.5 m cable with safety earth.

TECHNICAL SUMMARY

Display area	211,6 × 57,4 mm	
Panel capacity	240 characters in 6 lines of 40 characters each	
Character structure	5 × 7 dot matrix	
Dot spacing	horizontal 0,76 mm centre-to-centre vertical 1,02 mm centre-to-centre	
Character size	3,56 × 6,60 mm	
Character repertoire	64 ISO-7 characters, incl. space, with national variations.	
Transfer rate, local operation	approximately 200 char/s	
Transfer rate, remote operation	depending on line speed	
Environmental conditions	in operation	during storage
temperature	+ 15 to + 35°C	− 40 to + 70°C
humidity	20 to 80%	15 to 95%

	PTS 6386 PDU	PTS 6431 PSU
Dimensions		
height	210 mm	110 mm
width	305 mm	120 mm
depth	150 mm	225 mm
weight	5.5 kg	2.3 kg
Power requirements	+ 5V ±5% 1.5A + 24V±15% 1.0A − 12V ±5% 0.14A	200-240V±10%, 50 Hz±3% 100-127V±10%, 60 Hz±3%
		40 W
Heat dissipation	20 W	20 W

Philips PTS 6386 Plasma Display Unit

Character set and code table

	2	3	4	5
0	SP	0	a2	P
1	!	1	A	Q
2	"	2	B	R
3	a1	3	C	S
4	$	4	D	T
5	%	5	E	U
6	&	6	F	V
7	'	7	G	W
8	(	8	H	X
9	)	9	I	Y
A	*	:	J	Z
B	+	;	K	a3
C	,	<	L	a4
D	–	=	M	a5
E	.	>	N	^
F	/	?	O	–

National variations applicable to the countries:	a1 23	a2 40	a3 5B	a4 5C	a5 5D
D/A/L/CH Germany, Austria, Luxemburg, Switzerland	#	§	Ä	Ö	Ü
GB/NL/B Great Britain, Netherlands, Belgium	£	@	[	\	]
F/CH/B/L France, Switzerland, Belgium, Luxemburg	£	à	°	ç	§
E Spain, Argentina, Venezuela	£	@	[	Ñ	]
I/CH Italy, Switzerland	£	§	°	ç	É
S/SF Sweden, Finland	#	É	Ä	Ö	Å
DK/N Denmark, Norway	£	@	Æ	Ø	Å
P Portugal, Brazil	£	@	Ã	ç	Õ
US USA, Canada, Australia	#	@	[	\	]
YU Yugoslavia	£	Ž	Ć	Č	Š

Philips PTS 6346 Video Display Unit

INTRODUCTION AND APPLICATIONS

The Philips PTS 6346 Video Display Unit is an output device, which together with one of the Philips PTS 6000 alphanumeric keyboards forms a display working station.

In its standard form the VDU can display up to 1280 alphanumeric characters on 20 lines of 64 characters. An optional character facility extends this capacity to 1920 characters in 24 lines of 80 characters. All characters and symbols are composed from a 7 x 9 light-point matrix (7 x 12 for lower case).

The display unit has been designed in such a way that it will allow adaptation to various requirements in a working station.

The applications can be grouped as follows:

- Inquiry/response from files
- Data Entry
- File maintenance
- Operator guidance and programmed education

PRODUCT DESCRIPTION

The Philips PTS 6346 Video Display Unit is a work station module designed to be a table top unit in conform with other PTS 6000 work station products and is housed in a metallic cover. It is possible to tilt the VDU to a viewing angel of 15° by an adjustable foot.

As an option PTS 6346 VDU can be mounted on a stand which permits an easy adjustment of the viewing angle, vertically and horizontally. The stand can be mounted in the field by a serviceman.

- Tilt $-10°$ downwards to $+30°$ upwards from horizontal position. The adjustment is easily done by an one hand operation.
- Turn $\pm 90°$. The VDU is kept in position by friction.

All connectors are located on the rear and lower side of the VDU to ease vertical and horizontal adjustment. "Power on" switch, and associated "power on" lamp and manual adjustments are located on the front side easily accessible for the operator.

Non glare screen, with the filter mounted direct to the screen surface is used.

SYSTEM FUNCTIONS

The display is controlled by programs in the terminal computer and the following commands are possible:

- **Bell**
  The audible buzzer in the display is activated (frequency 2500 HZ and a duration of 100 ms). A new output of the BELL-command while the buzzer is still sounding will cause no action.
- **Cursor down or line feed**
  The cursor makes one step downwards. If the cursor is on the last line one line ROLL-UP will occur. The first line is lost.
- **Cursor left**
  Non-destructive control command. When the leftmost position is reached the cursor will remain there.
- **Cursor right**
  Non-destructive control command. When the rightmost position is reached the cursor will remain there.
- **Cursor home**
  The cursor returns to the upper leftmost position.
- **Clear**
  The screen is cleared from information and the cursor returns to the upper leftmost position.
- **Carriage return**
  The cursor returns to the leftmost position of the line.
- **Fast output**
  The command is executed on the line where the cursor is positioned. The command is always followed by two consecutive outputs, first a character which in bi-

Philips PTS 6346 Video Display Unit

nary format defines the number of times (1–80) a second character will be repeated. The second character must be a displayable character (incl space) in the range /20–/5F (/20–/7F for lower case). The outputs start in the cursor position. The cursor remains in that position.

- **Set cursor address**
  The command is always followed by two consecutive outputs in binary format with X-address (00–79) and Y-address (00–23) respective for positioning the cursor.
- **Underline start**
  Output of characters which follow after this command are provided whith underline.
- **Underline stop**
  Output of characters which follow after this command are not provided with underline. This status will also appear after power on and after CLEAR-command.
- **Low intensity start**
  Output of characters which follow after this command are displayed at low intensity.
- **Low intensity stop**
  Output of characters which follow after this command are displayed at high intensity. This command will also appear after power on and after CLEAR-command.

Other ASCII-codes, not defined as command characters and not within the character generator will not influence current terminal status nor change actual displayed characters.
If the X-address or Y-address capacity of the screen is exceeded by an incorrect command (14, 11) the cursor will not wrap around but remain in the last position or last line.

OPTIONS/USER ADAPTIONS

- Screen character cpacity
  Standard: 1280 characters, 20 lines x 64 char
  Option: 1920 characters,24 lines x 80 char
- Mains connection
  Two versions:
  - European, adjusted to 220 V (200–240 V), 2,5 m power cable with Europlug
  - UL/CSA, adjusted to 120 V (100–130 V), 2,5 m power cable with US-plug
- Connection cable
- Character repertoire
  Upper and lower case in 10 national versions of the 96 ISO character repertoire
- Stand

CONFIGURATION

The Philips PTS 6346 Video Display Unit is a work station module which is cable connected to a work station main module. The main module carries the communication functions for the connected modules. The connection is via an SDI/V24, V28 interface (SDI = Short Distance Interface). The standard cable length is 3 meters. With a special cable the length can be up to 10 meters.

The display unit has a built-in power supply and the mains cable is 2.5 m long.

TECHNICAL SUMMARY

Screen size	12 inch diagonal
Screen character capacity	
Standard	1280 characters; 64 characters per line by 20 lines
Optional	1920 characters; 80 characters per line by 24 lines
Character structure	7x9 dot matrix (7x12 dots for lower case)
Character size	3.5x2.1 mm
Distance between characters	1.2 mm for 64 character version 0.6 mm for 80 character version
Distance between the rows	3.5 mm for 64 character version 2.3 mm for 80 character version
Underline	Yes
Character repertoire	96 ISO-characters incl. space, upper and lower case with national variations
Data transmission rate	9600 bps
Parity check	No
Mode of operation	Receive only
Cursor function	Filled-in character 9x15 in inverse video
Phosphor	P4
Display control	Contrast for intensity control, power on-off
Dimensions	Width 335 mm Height 280 mm without stand (incl. feet) 405 mm incl. stand Dept 418 mm Weight 17 kg
Power requirements	100–130 V, 200–240 V ± 10 % 50 or 60 Hz ± 2 %
Heat dissipation	max 100 W
Power consumption	120 W

Philips PTS 6346 Video Display Unit

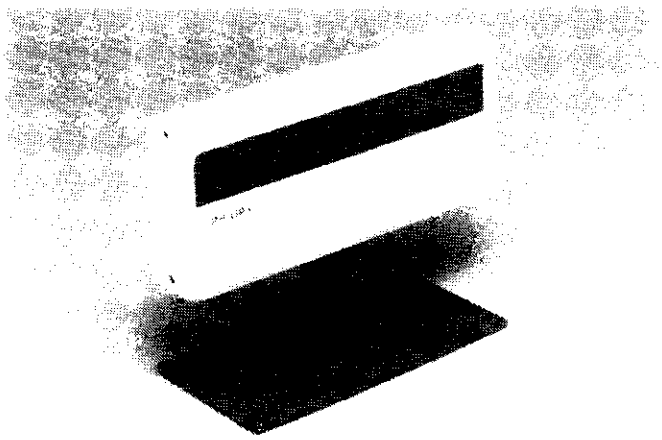
Character sets for the PTS 6346 display

	2	3	4	5	6	7
0	SP	0	a2	P	a6	p
1	!	1	A	Q	a	q
2	"	2	B	R	b	r
3	a1	3	C	S	c	s
4	$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	'	7	G	W	g	w
8	(	8	H	X	h	x
9	)	9	I	Y	i	y
A	*	:	J	Z	j	z
B	+	;	K	a3	k	a7
C	,	<	L	a4	l	a8
D	–	=	M	a5	m	a9
E	.	>	N	^	n	a10
F	/	?	O	_	o	DEL

Output of 7F (DEL) means "no action".

National variations applicable to the countries:	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10
	23	40	5B	5C	5D	60	7B	7C	7D	7E
Germany, Austria, Luxemburg, Switzerland	#	§	Ä	Ö	Ü	`	ä	ö	ü	ß
Great Britain, Netherlands, Belgium	£	@	[	\	]	^	¦	|	¦	~
France, Switzerland, Belgium Luxemburg	£	à	°	ç	§	^	é	ù	è	¨
Spain, Argentina, Venezuela	£	@	[	Ñ	]	^	¦	ñ	¦	~
Italy, Switzerland	£	§	°	ç	é	ù	à	ò	è	ì
Sweden, Finland	#	É	Ä	Ö	Å	é	ä	ö	å	~
Denmark, Norway	£	@	Æ	Ø	Å	^	æ	ø	å	~
Portugal, Brazil	£	@	Ã	Ç	Õ	^	ã	ç	õ	~
USA, Canada, Australia	#	@	[	\	]	^	¦	|	¦	~
Yugoslavia	£	Ž	Ć	Č	Š	ž	ć	č	š	~

Philips PTS 6385 Alphanumeric Display Unit



INTRODUCTION AND APPLICATION

The Philips PTS 6385 Alphanumeric Display Unit is a 40 character alphanumeric output device which is used in combination with numeric and/or alphanumeric keyboards.

Its most usual location will be at the teller's desk, where it can be used

- for operator guidance
- to display keyed-in data
- to display status messages
- for enquiry response messages

PRODUCT DESCRIPTION

The Philips PTS 6385 ADU is a LED type display to be used for alphanumeric presentation, upper case only, and the character capacity is 1 (one) line of 40 characters. The selection between the ten possible national versions is made in software.

The PTS 6385 ADU is designed to allow the creation of a good ergonomic workstation. Its compact design allows it to be placed for best readability and the placing on the stand which is a standard part of the display will allow its installation in narrow workstation areas. The stand enables tilting of the display up and down in the range of ± 15° which makes it possible to use the display for either sitting or standing tellers at system generation or in the application. Furthermore there is an intensity control on the rear right side which the operator can adjust for suitable display brightness.

FUNCTIONAL DESCRIPTION

The display is completely controlled by programs in the terminal computer. The following control commands can be given to the display by the terminal computer:

- Cursor left
- Cursor right
- Cursor home
- Clear
- Carriage return
- Test
- Set cursor address
- Fast output
- Turn on cursor
- Turn off cursor
- Blinc cursor
- Steady cursor

After power on, controlled from the interfacing unit, the cursor stands in home position. After each output the cursor will automatically step to the next write position. The cursor will stop in the leftmost and rightmost position. In the rightmost position of the line the last written character is displayed.

OPTIONS/USER ADAPTATIONS

- connection cable (see "connections")

CONNECTIONS

The Philips PTS 6385 Alplhanumeric Display Unit is a terminal module which with a cable is connected to its interfacing unit (main unit, which carries the communications- and power distribution functions for connected terminal modules). Connection to the PTS 6000 system is via PTS 6000 Standard Device Interface. PTS 6385 ADU is also power supplied from the standard interface. The standard cable length is 3 m. With a special cable the length can be up to 10 meters.

Philips PTS 6385 Alphanumeric Display Unit

TECHNICAL SUMMARY

Display area	202 x 4 mm
Panel capacity	40 characters in 1 line
Charater structure	16 segments font plus centered decimal point and colon
Character size	2,8 x 3,6 mm
Character spacing	5,0 mm (center-to-center)
Character repertoire	64 ISO characters incl. space. Ten national variations

Dimensions	
Height without stand	120 mm
Height with stand	200 mm
Width	266 mm
Depth	43 mm
Stand plate	120 x 220 mm
Weight	2 kg incl. stand and cable

Power requirement	+ 5 V average 0,4 A (max 0,8 A) distributed through the signal cable

Environmental conditions	in operation	during storage
Temperature	+ 15 to + 35°C	—40 to + 70°C
Humidity	20 to 80%	15 to 95%
Heat dissipation	Average 2 W	

Philips PTS 6385 Alphanumeric Display Unit

Character set and code table

	2	3	4	5
0	SP	0	a2	P
1	!	1	A	Q
2	"	2	B	R
3	a1	3	C	S
4	$	4	D	T
5	%	5	E	U
6	&	6	F	V
7	'	7	G	W
8	(	8	H	X
9	)	9	I	Y
A	*	:	J	Z
B	+	;	K	a3
C	,	<	L	a4
D	–	=	M	a5
E	.	>	N	^
F	/	?	O	–

National variations applicable to the countries:	a1 23	a2 40	a3 5B	a4 5C	a5 5D
D/A/L/CH Germany, Austria, Luxemburg, Switzerland	#	§	Ä	Ö	Ü
GB/NL/B Great Britain, Netherlands, Belgium	£	@	[	\	]
F/CH/B/L France, Switzerland, Belgium, Luxemburg	£	à	°	ç	§
E Spain, Argentina, Venezuela	£	@	[	Ñ	]
I/CH Italy, Switzerland	£	§	°	ç	É
S/SF Sweden, Finland	#	É	Ä	Ö	Å
DK/N Denmark, Norway	£	@	Æ	Ø	Å
P Portugal, Brazil	£	@	Ã	ç	Õ
US USA, Canada, Australia	#	@	[	\	]
YU Yugoslavia	£	Ž	Ć	Č	Š

Philips PTS 6347 Video Display Unit

INTRODUCTION AND APPLICATIONS

The Philips PTS 6347 Video Display Unit is an output device, which together with one of the Philips PTS 6000 alphanumeric keyboards forms a display working station.

In its standard form the VDU can display up to 1280 alphanumeric characters on 20 lines of 64 characters. An optional character facility extends this capacity to 1920 characters in 24 lines of 80 characters. All characters and symbols are composed from a 7 x 9 light-point matrix (7 x 12 for lower case).

The display unit has been designed in such a way that it will allow adaptation to various requirements in a working station.

The applications can be grouped as follows:

- Inquiry/response from files
- Data Entry
- File maintenance
- Operator guidance and programmed education

PRODUCT DESCRIPTION

The Philips PTS 6347 Video Display Unit is a main module in a Philips PTS 6000 working station. This means that besides being a display it is the communication device to which other work station modules are connected. It is designed to be a table top unit in conform with other PTS 6000 work station products and is housed in a metallic cover. It is possible to tilt the VDU to a viewing angel of 15° by an adjustable foot.

As an option PTS 6347 VDU can be mounted on a stand which permits an easy adjustment of the viewing angle, vertically and horizontally. The stand can be mounted in the field by a serviceman.

- Tilt -10° downwards to $+30^{\circ}$ upwards from horizontal position. The adjustment is easily done by an one hand operation.
- Turn $\pm 90^{\circ}$. The VDU is kept in position by friction.

All connectors are located on the rear and lower side of the VDU to ease vertical and horizontal adjustment. "Power on" switch, and associated "power on" lamp and manual adjustments are located on the front side easily accessible for the operator.

Non glare screen, with the filter mounted direct to the screen surface is used.

SYSTEM FUNCTIONS

The display is controlled by programs in the terminal computer and the following commands are possible:

- **Bell**
  The audible buzzer in the display is activated (frequency 2500 HZ and a duration of 100 ms). A new output of the BELL-command while the buzzer is still sounding will cause no action.
- **Cursor down or line feed**
  The cursor makes one step downwards. If the cursor is on the last line one line ROLL-UP will occur. The first line is lost.
- **Cursor left**
  Non-destructive control command. When the leftmost position is reached the cursor will remain there.
- **Cursor right**
  Non-destructive control command. When the rightmost position is reached the cursor will remain there.
- **Cursor home**
  The cursor returns to the upper leftmost position.
- **Clear**
  The screen is cleared from information and the cursor returns to the upper leftmost position.
- **Carriage return**
  The cursor returns to the leftmost position of the line.

Philips PTS 6347 Video Display Unit

- **Fast output**
  The command is executed on the line where the cursor is positioned. The command is always followed by two consecutive outputs, first a character which in binary format defines the number of times (1–80) a second character will be repeated. The second character must be a displayable character (incl space) in the range /20–/5F (/20–/7F for lower case). The outputs start in the cursor position. The cursor remains in that position.
- **Set cursor address**
  The command is always followed by two consecutive outputs in binary format with X-address (00–79) and Y-address (00–23) respective for positioning the cursor.
- **Underline start**
  Output of characters which follow after this command are provided whith underline.
- **Underline stop**
  Output of characters which follow after this command are not provided with underline. This status will also appear after power on and after CLEAR-command.
- **Low intensity start**
  Output of characters which follow after this command are displayed at low intensity.
- **Low intensity stop**
  Output of characters which follow after this command are displayed at high intensity. This command will also appear after power on and after CLEAR-command.

Other ASCII-codes, not defined as command characters and not within the character generator will not influence current terminal status nor change actual displayed characters.
If the X-address or Y-address capacity of the screen is exceeded by an incorrect command (/14, /11) the cursor will not wrap around but remain in the last position or last line.

OPTIONS/USER ADAPTIONS

- Screen character cpacity
  Standard: 1280 characters, 20 lines x 64 char
  Option: 1920 characters,24 lines x 80 char
- Mains connection
  Two versions:
  - European, adjusted to 220 V (200–240 V), 2,5 m power cable with Europlug
  - UL/CSA, adjusted to 120 V (100–130 V), 2,5 m power cable with US-plug
- Character repertoire
  Upper and lower case in 10 national versions of the 96 ISO character repertoire.

CONFIGURATION

The Philips PTS 6347 Video Display Unit is a work station main module, which includes communication functions for connection of two work station modules – a keyboard and a hard copy printer. The module interface is the PTS 6000 Short Distance Interface (SDI) for the keyboard and a PTS special connection for the hard copy printer.

The PTS 6347 VDU is provided with a communication interface for local connection to a PTS 6000 computer or a controller in a multi-point connection system. The local line to which the computer/controller and the work stations are connected can be up to 850 meters.

The cable length between the display and the connected modules is as standard 3 meters but up to 10 meters length is possible.

The PTS 6347 VDU has built-in power supply and the mains cable is 2.5 m long.

TECHNICAL SUMMARY

Screen size	12 inch diagonal
Screen character capacity	
Standard	1280 characters; 64 characters per line by 20 lines
Optional	1920 characters; 80 characters per line by 24 lines
Character structure	7x9 dot matrix (7x12 dots for lower case)
Character size	3.5x2.1 mm
Distance between characters	1.2 mm for 64 character version 0.6 mm for 80 character version
Distance between the rows	3.5 mm for 64 character version 2.3 mm for 80 character version
Underline	Yes
Character repertoire	96 ISO-characters incl. space, upper and lower case with national variations
Data transmission rate	9600 bps
Parity check	No
Mode of operation	Receive only
Cursor function	Filled-in character 9x15 in inverse video
Phosphor	P4
Display control	Contrast for intensity control, power on/off
Dimensions	Width 335 mm Height 280 mm without stand (incl. feet) 405 mm incl. stand Dept 418 mm Weight 17 kg
Power requirements	100–130 V, 200–240 V ± 10 % 50 or 60 Hz ± 2 %
Heat dissipation	max 100 W
Power consumption	120 W

Philips PTS 6347 Video Display Unit

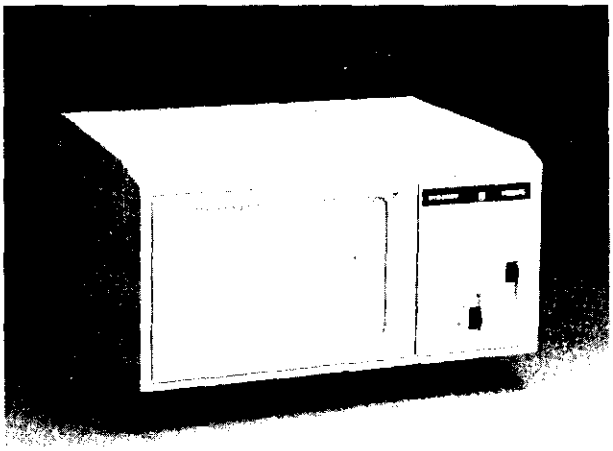
Character sets for the PTS 6347 display

	2	3	4	5	6	7
0	SP	0	a2	P	a6	p
1	!	1	A	Q	a	q
2	"	2	B	R	b	r
3	a1	3	C	S	c	s
4	$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	'	7	G	W	g	w
8	(	8	H	X	h	x
9	)	9	I	Y	i	y
A	*	:	J	Z	j	z
B	+	;	K	a3	k	a7
C	,	<	L	a4	l	a8
D	–	=	M	a5	m	a9
E	.	>	N	^	n	a10
F	/	?	O	_	o	DEL

Output of 7F (DEL) means "no action".

National variations applicable to the countries:	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10
	23	40	5B	5C	5D	60	7B	7C	7D	7E
Germany, Austria, Luxemburg, Switzerland	#	§	Ä	Ö	Ü	`	ä	ö	ü	β
Great Britain, Netherlands, Belgium	£	@	[	\	]	^	{	|	}	~
France, Switzerland, Belgium Luxemburg	£	à	°	ç	§	^	é	ù	è	¨
Spain, Argentina, Venezuela	£	@	[	Ñ	]	`	{	ñ	}	~
Italy, Switzerland	£	§	°	ç	é	ù	à	ò	è	ì
Sweden, Finland	#	É	Ä	Ö	Å	é	ä	ö	å	~
Denmark, Norway	£	@	Æ	Ø	Å	^	æ	ø	å	~
Portugal, Brazil	£	@	Â	Ç	Õ	^	ã	ç	õ	~
USA, Canada, Australia	#	@	[	\	]	^	{	|	}	~
Yugoslavia	£	Ž	Ć	Č	Š	ž	ć	č	š	~

Philips PTS 6387 Video Display Unit



The Philips PTS 6387 Video Display Unit is a 480 character alphanumeric output device to be used as supporting display in printer oriented workstations.

Its most usual location will be at the teller's desk, where it can be used

- for operator guidance
- to display keyed-in data
- to display status messages
- for enquiry response messages.

In back office work it may be used for data entry and file enquiries.

VDU DESCRIPTION

The PTS 6387 VDU is a 6 inch CRT display. 70 Hz refresh rate ensures flicker-free presentation of black characters on white background.

Screen capacity is 12 lines of 40 characters. Magnified text can be selected by software. Screen capacity is then 12 lines of 20 elongated characters.

The PTS 6387 VDU is designed for good workstation ergonomics. Small dimensions allow it to be placed so that reading is easy. A folding out foot makes it possible to tilt the VDU to a viewing angle of 18°.

An accesory stand, permitting further adjustment of viewing angle, is also available. The stand can be mounted in the field by a serviceman.

System Functions
The display is controlled by programs in the terminal computer/workstation controller. The following commands are possible to be executed by the VDU.

- Cursor down or line feed
  The cursor makes one step downwards. If the cursor is on the last line one line ROLL-UP will occur. The first line is lost.
- Cursor left
  Non-destructive control command. When the leftmost position is reached the cursor will remain there.
- Cursor right
  Non-destructive control command. When the rightmost position is reached the cursor will remain there.
- Cursor home
  The cursor returns to the upper leftmost position.
- Carriage return
  The cursor is moved to the first position of the current line.
- Cursor off
  The cursor is extinguished.
- Cursor on
  The cursor is displayed in selected mode, blinking or steady.
- Cursor blinking
  The cursor is blinking (2.2 cycles/second).
- Cursor steady
  The cursor is displayed continuously.
- Set cursor address
  The cursor is moved to the specified address.
- Clear
  The screen is cleared from information and the cursor returns to the upper leftmost position. The visual attributes will be reset.
- Fast output
  The character following this command is displayed a specified number of times in fast output mode. The command is executed on the line where the cursor is positioned and the output starts from the cursor position. The cursor remains in that position.

Philips PTS 6387 Video Display Unit

- Underline start
  Characters which follow after this command are provided with underline.
- Underline stop
  Characters which follow after this command are not provided with underline.
- Low intensity start
  Output of characters which follow after this command are displayed at low intensity.
- Low intensity stop
  Output of characters which follow after this command are displayed at normal intensity.
- Set white background
  The entire screen will be displayed with positive contrast (black characters on white background).
- Set black background
  The entire screen will be displayed with negative contrast (white characters on black background).
- Set screen capacity 12×40
  The screen is formatted as 12 rows of 40 characters. The command also results in a clear action.
- Set screen capacity 12×20
  The screen is formatted as 12 rows of 20 elongated characters. The screen is cleared after execution of this command.
- Set screen low intensity
  All white parts of the screen will be reduced to low intensity.
- Set screen normal intensity
  The half intensity/full intensity situation, previous to the command *set screen low intensity*, is restored.
- Set national version
  One of the 12 national character sets is selected

ACCESSORY

Stand

CONFIGURATION

The PTS 6387 VDU is connected to a workstation main module via its standard module interface SDI/SUM. Standard cable length is 3 m. Up to 10 m is possible with special cable.

Data subject to change without notice

TECHNICAL SUMMARY

Screen size	6 inch diagonal
Refresh rate	70 Hz
Phosphor	P4
Screen character capacity	24 lines x 80 characters (normal) or 12 lines x 20 characters (magnified) (software selectable)
Character structure	7 x 9 dot matrix (capital (letters)
Character size	2.1×3.3 mm (normal) 4.2×3.3 mm (magnified)
Cursor	Block cursor On/off Steady/blink
Visual attributes	Character: Underline Low intensity Screen: Inverse video
Character repertoire	96 ISO-characters incl space, upper and lower case with 12 national variations
Interface	SDI/SUM
Data transmission rate	9600 bps
Display control	Brightness control Power on/off
Mains requirements	100–130 V ±10% 200–240 V ±10% 50 or 60 Hz ±2%
Environmental conditions	Temperature In operation −10 to +35°C During Storage −40 to +70°C Humidity In operation 20 to 80% RH During storage 20 to 95% RH
Heat dissipation	35 W
Power consumption	35 W
Dimensions	Width 240 mm Depth 240 mm Height 145 mm excl stand 190 mm incl stand
Weight	3.5 kg

Philips PTS 6387 Video Display Unit

Character set

	2	3	4	5	6	7
0	SP	0	a2	P	a6/a2	p/P
1	!	1	A	Q	a/A	q/Q
2	"	2	B	R	b/B	r/R
3	a1	3	C	S	c/C	s/S
4	$	4	D	T	d/D	t/T
5	%	5	E	U	e/E	u/U
6	&	6	F	V	f/F	v/V
7	'	7	G	W	g/G	w/W
8	(	8	H	X	h/H	x/X
9	)	9	I	Y	i/I	y/Y
A	*	:	J	Z	j/J	z/Z
B	+	;	K	a3	k/K	a7/a3
C	,	<	L	a4	l/L	a8/a4
D	–	=	M	a5	m/M	a9/a5
E	.	>	N	^	n/N	a10
F	/	?	O	_	o/O	

National variations applicable to the countries:	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10
	23	40	5B	5C	5D	60	7B	7C	7D	7E
Great Britain, Netherlands, Belgium	£	@	[	\	]	`	{	|	}	~
USA, Canada, Australia	#	@	[	\	]	`	{	|	}	~
France, Switzerland, Belgium Luxemburg I	£	à	°	ç	§	`	é	ù	è	¨
France, Switzerland, Belgium Luxemburg II	â	à	ê	ç	î	ô	é	ù	è	û
Italy, Switzerland	£	§	°	ç	é	ù	à	ò	è	ì
Sweden, Finland	#	É	Ä	Ö	Å	é	ä	ö	å	~
Denmark, Norway I	#	É	Æ	Ø	Å	é	æ	ø	å	~
Denmark, Norway II	£	@	Æ	Ø	Å	`	æ	ø	å	~
Germany, Austria, Luxemburg, Switzerland	#	§	Ä	Ö	Ü	`	ä	ö	ü	β
Spain, Argentina, Venezuela	£	@	[	Ñ	]	`	{	ñ	}	~
Portugal, Brazil	£	@	Ã	Ç	Õ	`	ã	ç	õ	~
Yugoslavia	£	Ž	Ć	Č	Š	ž	ć	č	š	~

Data subject to change without notice