

With this program, it is possible to enter and store ASCII characters and commands. These and most registers can then be sent to a printer or computer.

Up to 100 steps (characters, commands and registers) may be stored.

It is also possible to store 25 text strings with up to 20 steps. One of these can be added to the output at will.

The characters are stored in the battery backed up RAM. The indicator may be left without power for some months, without loss of information. When the indicator is on again, the battery is charged.

This program is chosen with calibration step Cs11:=3. It does not work with special programs except in counting mode.

In the following {} denotes a key push.

INPUT SEQUENCE.

The text input sequence mode is entered by {F} {9} {9} {ENTER}. Then _0090 is displayed. The input mode is left by {C}.

{T} shifts one step forward in the input sequence (0 to 599). {S} shifts one step backward.

NNXX is displayed. The two first digits NN shows the two last digits of the sequence number (step).

The 3 last XXX are the extended (8bit) decimal ASCII value or codes, which are entered.

Steps 100 - 199 are indicated by GROSS on.

Steps 200 - 299 are indicated by NET on.

Steps 300 - 399 are indicated by NET and GROSS on.

Steps 400 - 499 are indicated by TARE on.

Steps 500 - 599 are indicated by TARE and GROSS on

{TEST/PRINT} shifts up to 20 steps forward and {F} 20 steps backward to multiple values of 20.

{NET/GROSS} moves to step 200.

{TARE} moves to step 400.

{ZERO} returns to _0090.

{ZERO} {N} {N} {N} {T} moves to step NNN.

The 25 text strings (each with 20 characters) start at step 100 and end at 599.

(If the continuous programmable serial output (B00920) has been chosen, string 25 is memory for it and cannot be used in this program.)

The output stops at the first entered ASCII code = 000 in the main sequence 0 to 99, and the following characters are consequently ignored.

RESET TO ZERO.

{ZERO} & {TEST/PRINT} simultaneously at power on resets all stored codes XXX to 000.

PRINTING.

In weighing and counting mode, this serial output chosen by {N}+{F} ($1 \leq N \leq 25$), where N is the wanted string.

When no string is entered, any N can and must be used, to get the output.

Return to normal printing is performed by {0} {F}.

During motion, the output is delayed until the weight is stable.

ASCII codes 000, 176-178, 180-185, 189-195, 197-199, 202-204 and 206-218 are reserved for this program and sent out only when preceded by 217.

Check with your printer manual for printer commands and special signs.

REGISTERS.

Most registers are presented with sign and decimal point. This means 7 positions for 5 digit registers and 12 positions for 10 digit registers etc.

Register numbers are presented with 2 digits.

Index and number registers are presented with 5 digits.

"Wait for" in the codes table means, that the printing stops, and a new number in the specified register may be entered from the keyboard. The number must be followed by {ENTER}. With only {ENTER}, the old stored number is used. After this the printing goes on. The printing of the register number is performed, where the register code is placed.

The following codes are used to get registers etc:

- 000 Last character in the string. 000 and following characters are not sent.
- 176 Gross weight.
- 177 Net weight.
- 178 Displayed value, net or gross.
- 180 Tare register. Default value.
- 181 Tare register number 0 - 99T. Default value.
- 182 Sum register. Default value.
- 183 Sum register number 0 - 49S. Default value.
- 184 Sum number register 100 - 149. Default value.
- 185 Register 59S. Print incrementing (index) value.
- 189 Limit register. Default value.
- 190 Limit register number 0 - 15L. Default value.
- 191 6 digit number in 16L.
- 192 6 digit number with decimals in 17L. Register for weight/unit in g.
- 193 6 digit number in 18L.
- 194 6 digit number in 19L.
- 195 6 digit number with 4 decimals in 20L.
- 197 6 digit number with 2 decimals in 21L.
- 198 6 digit number with 2 decimals in 22L.
- 199 6 digit number (before {PRINT}) in 24L.
- 200 6 digit time in 25L. Format:hhmmss. Only U1275/6. Works only with power on.
- 201 6 digit date in 26L. Format:yymmdd. Only U1275/6. Works only with power on.
- 202 Wait for 6 digits to be entered in 19L.
- 203 Wait for 6 digits with 4 decimals to be entered in 20L.
- 204 Wait for 6 digits with 2 decimals to be entered in 21L.
- 206 Wait for 6 digits to be entered in 24L.
- 207 All S registers not equal to zero.
- 208 All T registers not equal to zero.
- 209 All L registers not equal to zero.
- 210 Units. Net weight/weight/unit. Only in counting mode.
- 211 Sum of units. Only in counting mode.
- 212 Index of adding of units. Only in counting mode.
- 213 Text strings 1 to 25.
- 214 Not used.
- 215 Motionfree weight from Denver scale (Cs31:+1). Timeout.
- 216 Not used.
- 217 The following ASCII character is sent out e.g. 000 and 217.
- 218 Displayed value without sign and decimal point, only 5 digits.

These codes xxx may also be used in normal printing mode to print the registers by {F}{x}{x}{x}{ENTER}.

As new characters can only replace earlier ones, it is wise to add a few spaces (ASCII=32) at the end of each line (or other character, which does not influence on the print). Else all following characters must be moved to get place for a forgotten one.

EXAMPLE.

The following codes must be entered to get: Net "Net weight" kg

Display:	Comments:
00 078	N (All mode indicators must be off in order to have step 000.)
01 101	e
02 116	t
03 032	Space
04 177	Net weight
05 032	Space
06 107	k
07 103	g
08 013	CR Carriage Return
09 010	LF Line Feed (Normally not necessary as the printer makes a LF on CR.)
10 000	Stops

PRINTING OF INPUT SEQUENCE.

{L} in the input mode gives a printing of all nonzero character codes.

IBM ASCII CHARACTERS.

Table of all ASCII and extended 8 bit IBM PC signs and functions.

* means reserved or used for command codes in this program.

CC Communication Control, FE Format Effector, IS Information Separator.

006	ACK	Acknowledge (CC)	012	FF	Form feed (FE)
007	BEL	Bell	028	FS	File separator (IS)
008	BS	Backspace (FE)	029	GS	Group separator (IS)
024	CAN	Cancel	009	HT	Horizontal tab (FE)
013	CR	Carriage return (FE)	010	LF	Line feed (FE)
017	DC1	Device control 1	021	NAC	Negative acknowledge (CC)
018	DC2	Device control 2	000*	NUL	Null
019	DC3	Device control 3	030	RS	Record separator (IS)
020	DC4	Device control 4	015	SI	Shift in
127	DEL	Delete	014	SO	Shift out
016	DLE	Data link escape (CC)	001	SOH	Start of heading (CC)
025	EM	End of medium	032	SP	Space
005	ENQ	Enquiry (CC)	002	STX	Start text (CC)
004	EOT	End of transmission (CC)	026	SUB	Substitute
027	ESC	Escape	022	SYN	Synchronous idle (CC)
023	ETB	End transmission block (CC)	031	US	Unit separator (IS)
003	ETX	End text (CC)	011	VT	Vertical tab (FE)

033	!	Exclamation point	060	<	Less than
034	"	Quotation mark (Diaeresis)	061	=	Equals
035	#	Number sign	062	>	Greater than
036	\$	Dollar sign	063	?	Question mark
037	%	Percent sign	064	@	Commercial At
038	&	Ampersand	091	[Opening bracket
039	'	Apostrophe	092	\	Reverse slant
040	(Opening parenthesis	093]	Closing bracket
041)	Closing parenthesis	094	^	Circumflex
042	*	Asterisk	095	_	Underline
043	+	Plus	096	`	Grave accent
044	,	Comma (Cedilla)	123	{	Opening brace
045	-	Hyphen (Minus)	124		Vertical line
046	.	Period (Decimal point)	125	}	Closing brace
047	/	Slant	126	~	Tilde
058	:	Colon	127		
059	;	Semicolon			

048	0	049	1	050	2	051	3	052	4
053	5	054	6	055	7	056	8	057	9

065	A	097	a	072	H	104	h	079	O	111	o	086	V	118	v
066	B	098	b	073	I	105	i	080	P	112	p	087	W	119	w
067	C	099	c	074	J	106	j	081	Q	113	q	088	X	120	x
068	D	100	d	075	K	107	k	082	R	114	r	089	Y	121	y
069	E	101	e	076	L	108	l	083	S	115	s	090	Z	122	z
070	F	102	f	077	M	109	m	084	T	116	t				
071	G	103	g	078	N	110	n	085	U	117	u				

IBM character set for values > 127. Available signs in PostScript Helvetica printed.

128	Ç	148	ö	168	¿	188	ƒ	208*	℥	228	Σ	248	°
129	ü	149	ò	169	¬	189*	ƒ	209*	℥	229	σ	249	·
130	é	150	ù	170	¬	190*	ƒ	210*	℥	230	μ	250	·
131	â	151	û	171	½	191*	ƒ	211*	℥	231	τ	251	√
132	ä	152	ü	172	¼	192*	ƒ	212*	℥	232	Φ	252	n
133	à	153	Ö	173	ı	193*	ƒ	213*	℥	233	Θ	253	2
134	â	154	Ü	174	«	194*	ƒ	214*	℥	234	Ω	254	■
135	ç	155	ç	175	»	195*	ƒ	215*	℥	235	δ	255	
136	ê	156	£	176*		196	—	216*	℥	236	∞		
137	ë	157	¥	177*		197*	+	217*	℥	237	φ		
138	è	158	₤	178*		198*	+	218*	℥	238	ε		
139	ï	159	f	179	—	199*	+	219	■	239	∩		
140	î	160	á	180*	—	200	—	220	■	240	≡		
141	ì	161	í	181*	—	201	—	221	■	241	±		
142	Ä	162	ó	182*	—	202*	—	222	■	242	≥		
143	Å	163	ú	183*	—	203*	—	223	■	243	≤		
144	É	164	ñ	184*	—	204*	—	224	α	244	∫		
145	æ	165	Ñ	185*	—	205	—	225	β	245	∫		
146	Æ	166	ª	186	—	206*	—	226	Γ	246	÷		
147	ô	167	º	187	—	207*	—	227	π	247	≈		

Continuous programmable serial output for U127 series.

It is possible to enter and store a string of any ASCII characters, and the displayed value.

This string is sent out once every measurement cycle. This is very useful for e.g. remote displays.

Up to 16 characters and commands for registers can be entered.

This calibration is stored in the battery backed up RAM (in positions corresponding to text string 25 in B00900).

Calibration step Cs13:2 or Cs6:2 must be chosen.

In the following {} denotes key push.

The input sequence mode is entered by {F} {9} {8} {ENTER}. Then 00XXX is displayed.

The two first digits are the sequence number (0 - 15), and the 3 last (XXX) are the decimal value or code for the ASCII character entered (0 - 255).

Codes 200 - 215 are reserved for commands in this program and are not sent out.

{T} shifts forward and {S} shifts backward in the sequence.

{L} gives a printing of all codes in the sequence. Codes after ASCII code = 000 are omitted.

This input mode is left by {C}

Codes for registers etc:

200	Digit 4, most significant.
201	Digit 3.
202	Digit 2.
203	Digit 1.
204	Digit 0, least significant.
205	Sign, -/+ (ASCII 45/43).
206	Sign, -/space (ASCII 45/32).
207	Gross = 1 (ASCII 49), net = 2 (ASCII 50).
208	M/space (ASCII 77/32) for motion/no motion.
209	N/G (ASCII 78/71) for net/gross.
210	T/space (ASCII 84/32) for tare/no tare.
211	Z/space (ASCII 90/32) for zero/outside zero.
212	0/1 (ASCII 48/49) for transducer 1/2. Only U1272.

Example of codes:

Display:	Comments:
00 002	STX Start text.
01 207	Gross = 1 (ASCII 49), net = 2 (ASCII 50).
02 206	Sign, - or space (ASCII 32).
03 200	Digit 4, most significant.
04 201	Digit 3.
05 202	Digit 2.
06 203	Digit 1.
07 204	Digit 0, least significant.
08 003	ETX End text.
09 000	Stop.