SHARP

POCKET COMPUTER

MODEL PC-1211

INSTRUCTION MANUAL

SHARP CORPORATION

OSAKA, JAPAN

Printed in Japan
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TRS-80 Pocket Computer
QUICK REFERENCE CARD

Instruction	Abbreviation	Usability in RUN and DEF modes	Programmability	Example	Note
=		Yes	Yes	A=10	
+		Yes	Yes	A=B+C	
−		Yes	Yes	A=B−C	
*		Yes	Yes	A=B*C	
/		Yes	Yes	A=B/C	
∧		Yes	Yes	A=B∧C	
( )		Yes	Yes	A=(B+C)/D	
=		Yes	Yes	IF A=B	
>		Yes	Yes	IF A>B	
>=		Yes	Yes	IF A>=B	
<		Yes	Yes	IF A<B	
<=		Yes	Yes	IF A<=B	
<>		Yes	Yes	IF A<>B	≠(Not equal)
SIN	SI.	Yes	Yes	A=SIN B	
COS		Yes	Yes	A=COS B	
TAN	TA.	Yes	Yes	A=TAN B	
ASN	AS.	Yes	Yes	A=ASN B	
ACS	AC.	Yes	Yes	A=ACS B	
ATN	AT.	Yes	Yes	A=ATN B	
LOG	LO.	Yes	Yes	A=LOG B	Common logarithm
LN		Yes	Yes	A=LN B	Natural logarithm
EXP	EX.	Yes	Yes	A=EXP B	$A=e^B$
√		Yes	Yes	A=√	
DMS	DM.	Yes	Yes	A=DMS B	Conversion to sexagesimal notation
DEG		Yes	Yes	A=DEG B	Conversion to decimal notation
INT		Yes	Yes	A=INT B	Obtains integer within a range does not exceed integer portion of B.
ABS	AB.	Yes	Yes	A=ABS B	Obtains the absolute value A = |B|.
SGN	SG.	Yes	Yes	A=SGN B	If B>0, A=1 B=0, A=0 B<0, A=1
AREAD	A.	No	Yes	AREAD A	Display (shown before execution) is read into A Only when used in the first line of the executing program in the DEF mode).
BEEP	B.	No	Yes	BEEP A	Sound buzzer as many times as A.
CLEAR	CL.	Yes	Yes	CLEAR	Clears all data variables.
DEGREE	DEG.	Yes	Yes	DEGREE	Sets the angle mode to DEG (decimal notation).
END	E.	No	Yes	END	Terminates the program execution.
FOR	F.	No	Yes	10 FOR A=0 TO 10 STEP 2 100 NEXT A	Increments by 2 from A=0 to A=10, during which time program lines up to NEXT A are repeated. Repeats the lines 10 through 100 for 6 times as A=0 advances to 2, 4, ···, 10.
GOTO	G.	No	Yes	10 GOTO 100	Jumps to line number 100.
GOSUB	GOS.	No	Yes	10 GOSUB 100	Jumps to subroutine in line number 100.
GRAD		Yes	Yes	GRAD	Sets the angle mode to GRAD.
IF		No	Yes	10 IF A=B	Decision instruction, successive statement is executed when the IF statement is satisfied, or executes the next line when the IF statement is not satisfied.
INPUT	I.	No	Yes	INPUT A	Data input through the keyboard
LET	LE.	No	Yes	LET A=10 LET A$="TRS-80"	Substitute instruction (can be omitted except immediately after the IF statement).
NEXT	N.	No	Yes	NEXT A	Used with FOR (see FOR).
PAUSE	PA.	No	Yes	PAUSE A	Holds the display for a period of 0.85 second.
PRINT	P.	No	Yes	PRINT A PRINT A, B PRINT A, B, C	Display A. Displays A and B at left and right Displays A, B and C in succession from the left.
RADIAN	RA.	Yes	Yes	RADIAN	Set the angle mode to RAD (radian).
REM		No	Yes	REM "INTEREST"	A comment statement (is not executed)
RETURN	RE.	No	Yes	RETURN	End of subroutine. The program execution returns to execute the statement next to the GOSUB instruction
STEP	STE.	No	Yes		See FOR.
STOP	S.	No	Yes	STOP	Suspends program execution.
THEN	T.	No.	Yes	IF ··· THEN 60	Written after the IF instruction to indicate jump line number.
USING	U.	No	Yes	PRINT USING "###.##"; A	Designates the format in relation with PRINT instruction. In this example, A is designated with 3 digits of integer and 2 digits after the decimal point.
CONT	C.	Yes	No	CONT	Use to continue execution after a STOP instruction, BREAK key, or in debug mode.
DEBUG	D.	Yes	No	DEBUG	Direct the program execution under the Debug mode.
LIST	L.	Only applicable for PRO mode.		LIST LIST 100	Displays the contents of the program from line number 100.
MEM	M.	Yes	No		Unused por-

Instruction	Abbreviation	Usability in RUN and DEF modes	Programmability	Example	Note
		(Executable also in PRO mode.)			tion of the flexible memory displayed (number of steps and data memories).
NEW		Yes (Executable also in PRO mode.)	No	NEW	Clears the program and data memories.
RUN	R.	Yes	No	RUN	Starts program execution
				RUN 100	Starts program execution from line number 100.
CSAVE	CS.	Yes (Executable also in PRO mode.)	No	CSAVE "File name"	Stores computer program on tape with its file name.
CLOAD	CLO.	Yes (Executable also in PRO mode.)	No	CLOAD "File name"	Program recorded on tape with the file name is transferred to the Computer.
CLOAD?	CLO.?	Yes (Executable also in PRO mode.)	No	CLOAD? "File name"	Verifies program on tape with the program in the Computer (with same file name).
CHAIN	CH.	No	Yes	CHAIN "File name" CHAIN "File name" 10	The program on tape specified by the file name is transferred to the Computer and executed. In 2nd exemple program is transferred after line number 10 and executed.
PRINT#	P. #	Yes	Yes	PRINT # "File name" PRINT # "File name", C	The contents of the data memory (after C) is recorded on the tape with its file name.
INPUT#	I. #	Yes	Yes	INPUT # "File name" INPUT # "File name", C	The data stored on tape corresponding to the file name is transferred to the data memory area in the Computer (after C).

Control Keys

- [►] ● moves cursor right.
  - ● executes playback instruction.
  - ● recalls cursor, when program is displayed in PRO or RESERVE mode.
- [◄] ● moves cursor left.
  - ● executes playback instruction.
  - ● recalls cursor, when program is displayed in PRO or RESERVE mode.
- [SHIFT] [INS] ● inserts space (⎵ symbol) between the address (N) indicated by cursor and the preceding address (N-1).
- [SHIFT] [DEL] ● deletes character indicated by cursor.
- [↑] ● displays the preceding program line in PRO mode.
- [↓] ● displays the next program line in PRO mode.
- [ON] ● turns power on.
  - ● breaks (temporarily interrupts) program being executed.
  - ● clears the Computer completely (resets after error message).
- [MODE] ● changes the mode (DEF, RUN, PRO, RESERVE).
- [SPC] ● space key.

Error Messages

Error code	Kinds of error	Description
1	● Syntax error ● Arithmetic operation error ● Memory designation error	● When the absolute value of the result exceeds 1 x 10^{100} or when the divisor is 0. ● When the numerical value has been defined in the memory designated as a character variable, and vice versa.
2	Line error	● When the line or label specified by GOTO, GOSUB, RUN, DEBUG, or LIST statement does not exist.
3	Level error	● When level exceeds 4 in a GOSUB or FOR/NEXT statement. ● RETURN instruction without GOSUB statement. ● NEXT ststement without FOR.
4	Out-of-memory	● Entering a program longer than available memory space. ● When a non-existing dimensioned memory location is designated.
5	Magnetic tape control error	When an error is generated during the execution of the magnetic tape control instruction (such as verify error, check-sum error).
6	Format error	When data can not be displayed with the given format by the PRINT or PAUSE statement during execution of the program.

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