# SERVO PRINTER DRIVER ROUTINES SERVO 1.1 User's Guide

April 25, 1973

Model Code No. 50122

# DATAPOINT CORPORATION



The Leader in Dispersed Data Processing

### CONFIDENTIAL PROPRIETARY INFORMATION

This item is the property of Datapoint Corporation, San Antonio, Texas, and contains confidential and trade secret information. This item may not be transferred from the custody or control of Datapoint except as authorized by Datapoint and then only by way of loan for limited purposes. It must not be reproduced in whole or in part and must be returned to Datapoint upon request and in all events upon completion of the purpose of the loan.

Neither this item nor the information it contains may be used by or disclosed to persons not having a need for such use or disclosure consistent with the purpose of the loan, without the prior written consent of Datapoint. SERVO
USER'S GUIDE
APRIL 1973

### 1. General Description

SERVO is a set of driver routines for the Servo Printer (2200-250 Series). Since SERVO is made up of a user called background routine and an interrupt driven foreground driver, a Version 2 Datapoint 2200 is needed. The background routine accepts characters like the Local Printer, and enables the foreground when a line is to be printed. The size of the 2200 required is determined by the user's calling program.

### 2. Operating Instructions

To use SERVO, the user need only call the background routine SPRINT with a character to be printed in the B-register. Every ASCII character found on the Datapoint 2200 keyboard is a legal printing character on the Servo Printer. The following control characters have the specified functions.

Character	<u>Function</u>
012	Line Feed
014	Form Feed
015	Carriage Return

The Servo Printer driver foreground is enabled by the printer driver background when a line is ready to be printed, and terminated at the end of the line. The user does not need to enable the foreground. However, the user program must be interruptable. SERVO cannot e used with CTOS 3.2 cassette tape, keyin, or display routines unless the routines have been made interruptable.

The SERVO source file includes parts of the DOS interrupt scheduler. However, the parts included only provide for one foreground process. If DOS is being used by the user program, the DOS interrupt scheduler may be used instead of the scheduler included in SERVO. The user need only include the following EQU definitions in place of the interrupt handler.

TP\$	EQU	01036
CS\$	EQU	01033
SETI\$	EQU	01041

One other change needed in SERVO is the EQU definition for the interrupt number, which is located in the data section.

INTNUM LQU 0

Currently interrupt 0 is used, but with the DOS interrupt scheduler, any high or low priority interrupt number can be used.

SERVO is assembled starting at 01000 octal. When using SERVO with DOS routines, it should be assembled with a different starting location.

The following is a sample print routine using SERVO.

## . PRINTS LINES INPUT FROM THE KEYBOARD

•			
SPRINT KEYIN\$		01320 01157	SERVO BACKGROUND ROUTINE DOS INTERRUPTABLE KEYIN ROUTINE
LINE	SK	70	LINE BUFFER
LINPTR	DC	LINE	LINE BUFFER POINTER
•			•
START	LB	014	FORM FEED
	CALL	SPRINT	
LOOP	$_{ m HL}$	LINE	
	LC	70	
	CALL	•	KEYIN A LINE
	LA	LINE	
		*LINPTR	INITIALIZE LINE BUFFER POINTER
		PRINT\$	PRINT A LINE
	JMP	LOOP	
		4.7.7.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	
PRINT\$	MLA	*LINPTR	
	LBA	•	TEACHTRAINE T THE DEPUTE DATE
	AD	1	INCREMENT LINE BUFFER POINTER
	LMA		INDEX INTO LINE BUFFER
	LAB AD	LINE	INDEX INTO LINE BUFFER
	LLA	TIME	
	LA	0	
	AС	LINE) 8	
	LHA	TIME! 0	•
	LBM		GET THE CHARACTER
	LAB		ODI IIII OMITCIONIN
	ĊP	015	QUIT AT CARRIAGE RETURN
		PRTEND	No. of the Control of
•	CALL		PRINT THE CHARACTER
	JMP		
•	~		
PRTEND	CALL	SPRINT	PRINT THE CARRIAGE RETURN
	LB	012	AND A LINE FEED
	CALL	SPRINT	
	RET		