

COMPACT DMPO + HEX I/O

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The following program description and listing was submitted by Mr. Rich in hopes that it may be of interest to other members.

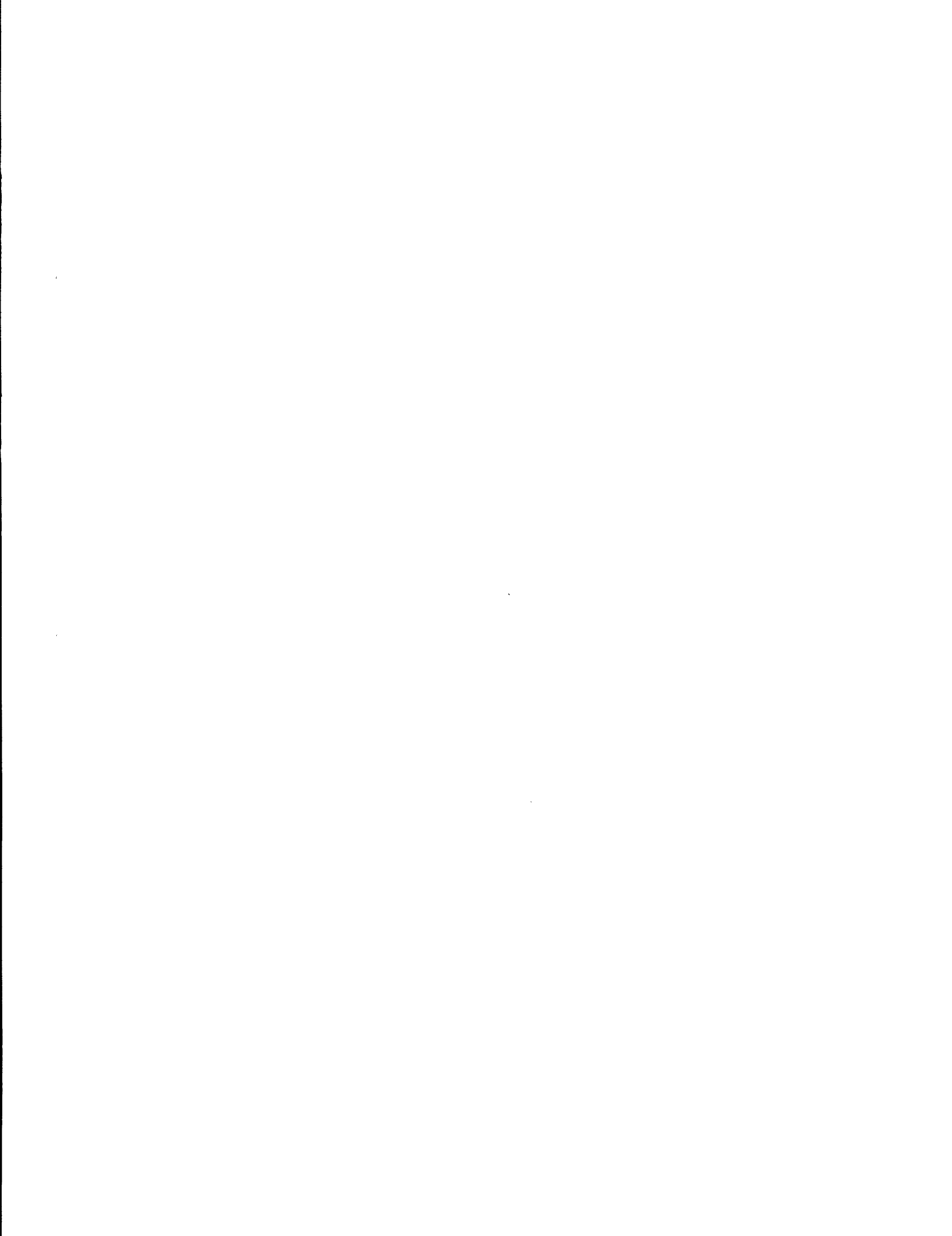
The first track outputs carriage return, Ø TTSS12345678' per line plus incrementing. The last half track may be used separately and will reload PIR or hex programs. It binarizes addresses for various purposes which may be selected, after programmed stops, by manipulating the transfer switch.

The first track may be used alone and can be stored in 6300 without being damaged by PIR 10.4. After loading XT6301 at 0007, one may use PIR code "-000 Li" to transfer to the routine. Output tapes, of course, will be compatible for input since the DMPO portions of words will be ignored. If the first hex word to be loaded contains eight characters, the instruction in Lo + 0125 may be changed to U0102 and other stop-and-transfer instructions substituted in Lo + 0119-0122.

The DMPO and hex punchout may be entered by way of the routine in this last half track. Before transferring, depress the transfer switch. On call for input, type decimal address Li, and start, twice. Start once and lift the transfer switch before restarting to load hex tapes at Li. To load PIR, set up the input tape, lift the transfer switch and manually transfer to Lo + 0100.

The routine will punch most of itself out, for self-checking, if one uses PIR code .000LO + 03. With PIR 10.4 altered as previously described, a -000LO will start self-punchout at the beginning.

Writing of this program was prompted when a borrowed program was found to use $62\frac{1}{2}$ tracks including PIR 10.4.



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JOB NO.	PROGRAM NO.	PROGRAM PREPARED BY ALAN RICH	PROGRAM CHECKED BY:	DATE	
PROBLEM: COMPACT DMPO + HEX OUTPUT/INPUT				TRACK	

PROGRAM INPUT CODES	STOP	LOCATION	INSTRUCTION		STOP	CONTENTS OF ADDRESS	NOTES
			OPERATION	ADDRESS			
i		Lo					
/		Lo					
		0 0	[]		
		0 1	XR	0063			← FROM "-Li" CODE
		0 2	XU	0050			10.4 BINARYZE
		0 3	XP	1646			"Lo+3" SELF-CHECK
		0 4	Y	0005			
		0 5	B[]	Lo	
		0 6	H	0058			
		0 7	M	0056		1@6	
		0 8	E	0060		X#6000	
		0 9	A	0051		X#20100	
		1 0	Y	0012			
		1 1	B	0058			
		1 2	P[]		COMMAND
,00000001		1 3		9WJ			
		1 4	R	0053			
		1 5	U	0040			TRACK
,00000001		1 6		F7Q			
		1 7	N	0039		1@25	
		1 8	R	0053			
		1 9	U	0040			SECTOR
		2 0	U	0054			
		2 1	C	00100		CYR.	
		2 2	B	0058			
		2 3	M	0059		1@18	
		2 4	E	0060		X#6000	
		2 5	A	0061		X#0206	
		2 6	Y	0027			
		2 7	P[]		8 HEX CHAR.
		2 8	B	0058			
		2 9	N	0063		1@27	
		3 0	C	0058			
		3 1	B	0000			

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PROGRAM INPUT CODES	STOP	LOCATION	INSTRUCTION		STOP	CONTENTS OF ADDRESS	NOTES
			OPERATION	ADDRESS			
	/						
	/	3 2		A0037	'	1@29	
		3 3		T0021	'		
		3 4		KP3200	'		COND. STOP
		3 5		B0005	'		
		3 6		A0037	'	1@29	
		3 7		X20001	'		
		3 8		U0003	'		
		3 9		X20016	'		
		4 0		E0062	'	X26300	
		4 1		S0013	'	9WJ	
		4 2		T0044	'		
		4 3		U0041	'		
		4 4		A0016	'	F7Q	
		4 5		N0037	'	1@29	
		4 6		Y0052	'		
		4 7		N0039	'	1@25	
		4 8		Y0049	'		
		4 9		P[]	'		
		5 0		B0058	'		
		5 1		X20100	'		
		5 2		P[]	'		
		5 3		U[]	'		
		5 4		B0057	'	-8@29	
		5 5		U0021	'		
0000003	'	5 6		2000000	'		
		5 7		wwwwwwQ0	'		
		5 8		[]	'	WORD	
		5 9		X23200	'		
		6 0		X26000	'		
		6 1		X20206	'		
		6 2		X26300	'		
		6 3		X20004	'		

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PROGRAM INPUT CODES	STOP	LOCATION	INSTRUCTION		STOP	CONTENTS OF ADDRESS	NOTES
			OPERATION	ADDRESS			
		0100	B	0129			← ENTER
		001	C	0106			
		002	x	P0045			
		003	x	I0000			
		004	T	0106			
		005	B	00T0110			T.C. → BINARY ADDR.
		006	[
		007	B	0106			
		008	A	0123			1@29
		009	U	0101			
		100	N	0123			1@29
		101	H	0126			
		102	E	0127			
		103	H	0128			
		104	A	0126			
		105	H	0126			
		106	E	0131			
		107	M	0130			
		108	B	0126			
		109	U	0123			
		200	Y	0106			
		201	C	0126			
		202	U	0102			
		203	x	20001			STOP
		204	B	00T0003			T.C. → DMPO + HEX OUT
		205	U	0102			→ HEX INP
20000006		206	[
		207	S	J3J3J0			
		208	K	0000000			
		209	K	0000			(x0000)
		300	F	0000000			
		301	N	W W W W W W			

☒ CARRIAGE RETURN

! = CONDITIONAL STOP CODE