

LDR4K32-octal.PRN

```

0000          org      0
;
; SIO Loader for 4K BASIC Version 3.2
;
;   ** Set all sense switches OFF **
;
; H = msb of load address
; L = lsb of load address = length of loader = leader byte

0000 21AE0F          lxi      h,00faeh          ;4K BASIC V3.2
0003 311200      loop    lxi      sp,stack          ;init SP so a RET jumps to loop
0006 DB00          in       00h                ;get sio status
0008 0F           rrc          ;new byte available?
0009 D8           rc          ;no (jumps back to loop)
000A DB01          in       01h                ;get the byte
000C BD           cmp       l                ;new byte = leader byte?
000D C8           rz          ;yes (jumps back to loop)
000E 2D           dcr       l                ;not leader, decrement address
000F 77           mov       m,a              ;store the byte (reverse order)
0010 C0           rnz          ;loop until L = 0
0011 E9           pchl         ;jump to code just downloaded

0012 0300          stack    dw       loop
0014              end

```

Here is the program in octal for easier entry into the Altair:

```

0: 041 256 017 061 022 000 333 000
10: 017 330 333 001 275 310 055 167
20: 300 351 003 000

```