



DECUS

PROGRAM LIBRARY

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| DECUS NO. | 12-37 |
| TITLE | ODCAD (OCTAL TO DECIMAL CONVERSION AND DISPLAY) |
| AUTHOR | Jud Gilbert |
| COMPANY | University of Florida Tallahassee, Florida |
| DATE | August 9, 1971 |
| SOURCE LANGUAGE | DIA. |

ODCAD (OCTAL TO DECIMAL CONVERSION AND DISPLAY

DECUS Program Library Write-up

DECUS NO. 12-37

ABSTRACT

The purpose of this program is to convert 11 bit signed (octal) numbers to decimal numbers and display them on the VR12 scope suppressing leading zeros, with or without decimal point.

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0000      *20
0001      / OCTAL TO DECIMAL CONVERSION AND
0002      / DISPLAY (ODCAD)
0003      /
0004      / FOR SIGNED 11 BIT NUMBERS
0005      /
0006      /
0007      / FOR THE PURPOSE OF DISPLAYING NUMBERS
0010      / ON THE VR-12 THE SCREEN HAS BEEN
0011      / DIVIDED INTO A 16X16 MATRIX (DECIMAL)
0012      /
0013      / TO USE THIS FEATURE A SINGLE 12 BIT
0014      / NUMBER IS EMPLOYED. THIS NUMBER IS
0015      / MADE UP OF TWO FOUR BIT NUMBERS WHICH
0016      / ARE STORED, RIGHT JUSTIFIED, AS HALF
0017      / WORDS. THE RANGE OF EACH OF THESE
0020      / FOUR BIT WORDS IS 0-17 (OCTAL). THE
0021      / LEFT HALF WORD ESTABLISHES THE
0022      / VERTICAL POSITION ON THE SCREEN AND
0023      / THE RIGHT HALF THE HORIZONTAL.
0024      /
0025      / EXAMPLE:
0026      /
0027      / 000 000 000 000 = UPPER LEFT
0030      / 000 000 001 111 = UPPER RIGHT
0031      / 001 111 000 000 = LOWER LEFT
0032      / 001 111 001 111 = LOWER RIGHT
0033      / 001 000 001 000 = APPROX CENTER
0034      /
0035      /
0036      / TO USE THE PROGRAM:
0037      /
0040      /
0041      / PUT LOCATION IN "POZZY"
0042      / PUT NUMBER IN AC
0043      / ISSUE "DISPNO" COMMAND
0044      /
0045      /
0046      / THE FOLLOWING EXAMPLE WILL DISPLAY
0047      / THE VALUE OF THE LEFT SWITCHES ( IN
```

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ØØ71
ØØ72
ØØ73
ØØ74
ØØ75

ØØ2Ø Ø516
ØØ21 4Ø35
ØØ22 Ø517
ØØ23 6Ø25
ØØ24 6Ø2Ø

/ DECIMAL) ON THE VR-12 AT COORDINATES
/ TAKEN FROM THE RIGHT SWITCHES.
/
/
LOOP, RSW
STC POZZY
LSW
DISPNO
JMP LOOP
/
/ THE DECIMAL POINT ROUTINE MAY BE USED
/ TO INSERT A DOT BETWEEN ANY TWO
/ DIGITS ON THE SCREEN.
/
/ THE FOLLOWING EXAMPLE WILL CAUSE A
/ DECIMAL POINT TO APPEAR AFTER THE
/ THIRD DIGIT. (BEFORE CALLING ROUTINE)
/
/
LDA
POINT
STC DECML3
/

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