PROGRAM TITLE:

PROGRAM CLASSIFICATION:
AUTHOR:

PURPOSE:

DATE:

AGC-209 Baudot to Decimal Conversion (Floating or Fixed Point)

Subroutines
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A 5 binary bit baudot code at a scale of 38 is converted to a fixed point number, also at a scale of 38 , or to a floating point number.

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| TITLE: | AGC-209 Baudot to Decimal Conversion Subroutine (Floating or Fixed Point) |
| :---: | :---: |
| LOCATIONS USED: | 7000-7075 |
| INTRODUCTION: | Have the 5 binary bit baudot code at a scale of 38 in the A register. The sign of the A register and its remaining contents are immaterial. Transfer to the proper location for the decimal format desired. If floating point format is required, the results will be in the A and R registers. If fixed point format is required, the results will be in the A register. There is no error return. In case some character other than a number were tested, the result would still be a number, as only 3 or 4 of the 5 bits are tested. |
| METHOD: | Up to 4 bits are tested. The corresponding unnormalized floating point number is brought into the $A$ and $R$ registers. If fixed point format is requested, the A register contains the number at binary 38. If floating point format is requested, the number is normalized. |
| USAGE: | Calling sequence: |
|  | Floating Sequence Fixed Point |
|  | SLL or SLR SLL or SLR <br> CLA Baudot © 38 CLA Baudot @ 38 <br> TRA 70000 TFA 70030 <br> CET Decimal in A \& R PET Decimal in A © 38 |



| 170000 | $C+1570420+0170430$ | $+4270071+0070440$ | $+4270061+5770041$ | $+1570420+0170430$ |
| :---: | :---: | :---: | :---: | :---: |
| 170040 | $c+4270061+6470100$ | $+6670200+5777600$ | $+4000000+5700000$ | $+4500000+5700000$ |
| 470100 | $C+0 C 70420+33$ | $+5077701+0070420$ | $+3370460+5077661$ | $+0070420+3370470$ |
| L70140 | $c+5070320+0070420$ | $+3370510+5070370$ | $+5770310+0070420$ | +3370510+5070330 |
| 170200 | $c+5770360+0070420$ | $+3370460+5077760$ | $+0070420+3370500$ | $+5077740+5770340$ |
| 470240 | $c+0070420+3370510$ | $+5070400+5770300$ | $+0070420+3370500$ | $+5070350+5770410$ |
| L70300 | $C+3070520+5770$ | $+3070540+5770061$ | $+3070560+5770061$ | $+3070600+5770061$ |
| L70340 | $c+3070620+5770061$ | $+3070640+5770061$ | $+3070660+5770061$ | $+3070700+5770061$ |
| 470400 | $c+3070720+5770061$ | $+3070740+5770061$ | +0000006-0000000 | $+0000000-000000$ |
| 470440 | $\mathrm{c}+0000000-007007$ | +COOCCOO-COOCO10 | +0000000-0000020 | $+0600000-0000$ |
| 470500 | C+0000000-0600100 | +0000000-0000200 | +00000 O0-c000000 | +0cococo-0c00230 |
| 470540 | C+0000000-0000010 | $+000000-\operatorname{cocc} 230$ | +6000col-0cceoz | +000cćoo-000c230 |
| 170600 | $C+0000000-0000030$ | +ccococo-coclez3 | +60l00cc-0000C40 | +060000C-CCOO2 |
| L70540 | C+6000000-0000050 | +000cooc-colez | $+\operatorname{coceoc}-\operatorname{cocco60}$ | +0y,00000-0000230 |
| 170700 | $\mathrm{C}+0000000-0000070$ | +60COLCO-0000230 | +000000-Cllctoo | +0000000-0000230 |
| 170740 | $\mathrm{C}+0000000-0000110$ | $+000000-0000230$ | H |  |

