

Bandsplit changefor the Conventional (US) Waris radios

Example codeplug H25KDN9DU8 VHF 136-174MHz
(converted Lab Flashtool Codeplug)

0280 1F00 F03F 003F 103F 1000 1500 7B00 E501 3601
FD80 6201 015F 5F5F 5F5F 5F5F 03F3 2924 2321 1C1A
181D 1D1F 1F1F 1D1D 4840 4246 4848 4A55 5555 5555
5555 2F2F 2F00 0000 2F2F 2F07 041B 0600 FF24 3954
7CA6 C3E1 3737 3737 3737 372C 2C2C 2C2C 2A2A
2A2A 2A2A 2A00 3568 8132 3C01 C824 2E39 424E 5F00
0032 6280 2203 5426 E000 14CF E000 14CF FDFD 01F2
01E4 041D 6F00 5100 555F 5F02 6646 70A3 243F BCD0
5423 9430 CFCC 9430 CFCC FFFF 04D2 85E4 0416 0004
5100 555F 5F05 6646 6D32 103F BCD0 5423 9A00 CCCC
9A00 CCCC FF00 07C2 87E4 0417 0000 5100 555F 5F07
6646 6032 103F BCD0 7380 4D01 0614 0085 0229 44B6
0C82 8016 C35F 3D00 FDFE FF3F 0008 1090 0000 0000
1BFF 2040 1D46 38F6 6100 4201 0008 9001 0000 0000
1BFF 3140 2940 0500 0000 0001 0000 6895 8E30 1F94
6870 040C 7804 0000 004F 80C3 0119 CD1E 7D23 2D28
7D2D 5532 0537 5519 CD1E 7D23 2D28 7D2D 5532 0537
5507 0C2E 18FF FF04 087A FDF8 0306 0000 2020 4100
102A 0601 3030 2222 0010 1113 F704 0710 4605 007B
0005 7369 0000 00FF FF14 0024 7F00 009B 0BDB 0418
001E 0026 0CFF 0080 0492 8E95 084A 0003 B604 4C06
4000 5014 6406 E16D 4602 0807 2304 0206 2008 0331
07A0 0788 0859 0001 0305 0709 02FF FFFF FF07 19CD
19CD 1EB9 1EB9 23A5 23A5 2891 2891 2D7D 2D7D 3269
3269 3755 3755 0046 0096 0000 0103 0000 0000 0070
10CC 7010 FC70 10FD 0180 2101 F0FF 000E 313E 6370
93AA BAD7 F0FF 000E 313E 6370 93AA BAD7 ADA3 B4A8
BAAB BDB7 4BCE 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0000 0000 0000 0000 0000 0080
0080*8052 0130 3132 3334 3536 3738 3900 0048 3235
4B44 4E39 4455 3820 2020 2020 2000 0003 0600 2003
1028 0000 0110 1819 C837 7835 3152 3037 3034 3041
3031 5230 3130 343F 0050 4D55 4431 3731 3741 2000
0000 0000 0000 FFF6*8009 01A0 7F32 A177 CF7D A000
7B00 0000 0000 0000 0000 0000 0000 0000 0000 0000
0000 0000 0000 0026 0400 0773 09EE 09F8 8009 0103
0600 2003 1028 0000 6C80 3A01 1B14 4CF6 181E 2845
2D2D 008C 02F6 402A 0A00 501E 0014 0078 1414 0810
1113 1100 0000 FF00 1100 0000 0000 0000 00FF 0000
0000 0102 0304 0300 0000 AE80 0A01 0000 19C8 3778
0078 0000 C784 0002 0002 0102 0001 0100 CD84 1002
0001 1054 5255 4E4B 205A 4F4E 4520 3100 0000 0043
0000 008F 800E 011C 4F4E 5620 5A4F 4E45 2031 0000
0000 0040 0000 0000 0000 0000 006F 8408 1A02 0410
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
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FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
FFFF FFFF FFFF FFFF 6E84 101A 0001 1000 0000 0000

Basebandvalues for each bandsplit:

<u>Bandsplit</u>	<u>Baseband(X)</u>	<u>Hex</u>	<u>Decimal</u>
LB	20MHz	0320	800
VHF	103MHz	1018	4120
220MHz	103MHz	1018	4120
300-350MHz	285MHz	2C88	11400
330-400MHz	325MHz	32C8	13000
UHF	375MHz	3A98	15000

Formula to calculate the new bandlimits:

$$(Bg-X)*1000:5=Z$$

Bg=Desired new bandlimit in MHz

X=Basebandfrequency of the radio bandsplit in MHz

Z=Decimalvalue of the new bandlimit(this value must be calculated into Raw Hex)

Example for the original upper bandlimit:

$$136\text{MHz}-103\text{MHz}*1000:5=6600 \text{ (= 19C8 Raw Hex)}$$

Formula to calculate the new baseband frequency:

$$Y*25:1000=X$$

Y=Basebandvalue, this value must be converted from Raw Hex into decimal.

X=Basebandfrequency of the radio bandsplit in MHz

Basebandvalue:here 1018(Raw Hex)/4120(Dec.),do not change!

Lower bandlimit value:here 19C8(Raw Hex)/Z=6600(Dec.)

Upper bandlimit value:here 3778(Raw Hex)/Z=14200(Dec.)

Block for correcting the checksum

* - start /end codeplugblock

Before you edit the codeplug,you must convert it from s-records into binary format!

After the edit you must convert the codeplug back to s-records format!

Before you start editing the codeplug, calculate the checksum (8 Bit).After the codeplug edit, go to address 727(Dec.)and edit the value, so the checksum is the old value again.The checksum of the codeplugblock must always have a decimal value of 90!