

AA2LS

Motorola 900 MHz GTX
HAM MOD NOTES

SOFTWARE HACK

The GTX radio is not as popular or easy to find as the MaxTrac, but it is well built (MIL SPEC) and easy to modify for limited 900 MHz band coverage. The factory MaxTrac receiver is almost deaf below 928, making the hardware hack necessary. In terms of programming, the MaxTrac can go from 800 to 999 and can be hardware modified almost the same. The factory GTX will receive down to around 925 with a simple software hack. If you're looking to work only repeaters, then this is the 900 radio for you. This is also true for the GTX 900 Handheld.

The hack, which comes from Cesare Mancini (KB2NOW), requires editing the MDF file [RSS Ver. R04.00.00b (RVN-4150)]

GTX 900 HAM MOD

EDIT

Address: 0296 h = 3A h
0297 h = 25 h
0298 h = 88 h
0299 h = 22 h

TO PROGRAM THE GTX MOBILE RADIO
RX = 884* to 941 / TX = 896 to 953 MHz
*SAVES FROM 894.4 to 953.0 MHz
2288 h = 8840 d 253A h = 9530 d
CHECKSUM = 109 h

00000200	20	20	20	20	E4	05	54	06	E
00000210	00	00	94	11	5C	12	94	11	5
00000220	50	05	54	06	50	05	54	06	5
00000230	CC	06	B4	05	CC	06	B4	05	C
00000240	BE	0F	CC	10	BE	0F	CC	10	0
00000250	5C	12	94	11	5C	12	94	11	5
00000260	50	05	54	06	50	05	54	06	5
00000270	50	14	07	00	00	00	00	00	00
00000280	08	00	7C	1F	D4	21	7C	1F	12
00000290	00	23	C2	24	00	23	3C	23	86
000002A0	74	0E	E4	0C	74	0E	E4	0C	74
000002B0	20	0D	60	0E	20	0D	60	0E	20
000002C0	6E	0F	60	0E	6E	0F	60	0E	6E

CHECKSUM = 109 h

3A 25 88 22

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The frequency limits are in 100's of kHz, converted to HEX and reverse order. There are three groups of data from locations 0290 hex through 029B hex and each frequency datum is 2 bytes. The original value of "3C \ 23" equates to 902 MHz for the TX upper limit (0296 & 0297 hex) and "86 \ 24" equates to 935 MHz for the RX lower limit (0298 & 0299 hex). For the simple Ham hack, you only need to raise the TX upper limit and lower the RX lower limit. The checksum must be maintained, so high & low limits have to be expanded by the same amount. 953 MHz = 9530-100's kHz = 253A hex, reverse = 3A & 25 in locations 0296h & 0297h. 884 MHz = 8840-100's kHz = 2288 hex, reverse = 88 & 22 in locations 0298h & 0299h. These values go up and down respectively by the same amount (51 MHz), so the checksum remains the same.