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FIRMWARE INFORMATION RELEASE

Product:	MX800, TRB Series, MXD1500, S Series. **BASE STATION/REPEATERS**			
New Version:	3.5.3	Build 0x02	Previous version:	3.5.1
Release Date:	04/12/2006 12:29		EPROM size:	63198 bytes
Released By:	Anthony Chadd		Checksum:	B5F4
			File Name	MX803503.Bin

Summary of Software Change(s) in this Release

New Features

- **Voting Heartbeat Plus**
  The voting heartbeat feature requires MXTOOLS versions >3.1.7585. This option can be set in MXTools Configuration screen under Software Settings tab. There are four user settings to control the voting heartbeat. They are the enable bit and the intervals, plus two extra controls mentioned below. The interval used here is similar to the one used in morse (1, 2, 5, 10, 15, 30, 60 and 90 minutes.). The count down timer to generate the heartbeat PTT is reset every time MX800 is transmitting; hence the operation is very similar to morse on inactivity. However note that TX hang time is not considered as radio activity, for example if PTT has 20 seconds TX hang time, the count down timer until the next heartbeat PTT starts from the end of external/Mic PTT input, ignoring the tail of transmission.
  The two new additional controls in MXTOOLS to program this feature are:
    o Duration of Voting Heartbeat, which is now programmable with a range from 100ms up to 20 seconds (100 ms step from 100 to 900 ms and 1 second step from 1 to 20 seconds).
    o Without CTCSS/DCS option, which enables the radio to transmit heartbeat PTT with subtone that is programmed in Channel screen when this option is disabled OR without subtone when this option is enabled. Note that this operation is very similar in operation as Morse with or without CTCSS/DCS.

There is no hang time applicable for heartbeat PTT. In addition, during heartbeat PTT transmission the M lead output pin is also enabled.

This feature is used in conjunction with a mobile voting system. This function is only required to be enabled on one of the base units (Master) in the system. This then allows all the connected bases to be keyed simultaneously via the M lead when the timer has expired in the master unit.

Firmware required >3.5.3
MXTOOLS required >3.1.7585

Summary of Bug fix ups in 3.5.3
✓ Fix for coax Relay and VCO latch up on short external PTT input pulse