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Quick Start

1. Install the MXT500 PC software and the GD VirtualComDriver.
2. Use a USB C cable to connect the radio to a USB port on your PC.
3. Turn the radio on.
4. Turn the USB function On in the radio menu. Your PC should find the new virtual com port and finish installing the hardware. Note the com port number for the virtual com port.
5. Open the MXT500 PC software.
6. Select Set COM from the PC software Set menu. Select the communication port from drop list.
7. Select Read from Radio from the PC software Program menu.
8. Once the program is read, edit the program as needed.
9. Once the program is edited as needed, Select Write to Radio from the PC software Program menu.

ℹ️ *The USB programming function must be enabled in the radio menu each time the radio is connected to the PC. The USB programming function can interfere with certain USB C charging protocols and therefore defaults to OFF each time the radio power is cycled.*

CH Screen

CH.	RX Frequency	TX Frequency	CH Name	Step	Channel Spacing	TX Power	CTCSS/DCS Decode	CTCSS/DCS Encode	
1	462.56250	462.56250		12.5K	12.5K	Low	None	None	CH 01 – CH 07
2	462.58750	462.58750		12.5K	12.5K	Low	None	None	
3	462.61250	462.61250		12.5K	12.5K	Low	None	None	
4	462.63750	462.63750		12.5K	12.5K	Low	None	None	
5	462.66250	462.66250		12.5K	12.5K	Low	None	None	
6	462.68750	462.68750		12.5K	12.5K	Low	None	None	
7	462.71250	462.71250		12.5K	12.5K	Low	None	None	
8									Unused
9									
10									
11									
12									
13									
14									
15	462.55000	462.55000		12.5K	12.5K	High	None	None	CH 15 – CH 22
16	462.57500	462.57500		12.5K	12.5K	High	None	None	
17	462.60000	462.60000		12.5K	12.5K	High	None	None	
18	462.62500	462.62500		12.5K	12.5K	High	None	None	
19	462.65000	462.65000		12.5K	12.5K	High	None	None	
20	462.67500	462.67500		12.5K	12.5K	High	None	None	
21	462.70000	462.70000		12.5K	12.5K	High	None	None	
22	462.72500	462.72500		12.5K	12.5K	High	None	None	
23	462.55000	467.55000		12.5K	25K	High	None	None	RP 15 – RP 22
24	462.57500	467.57500		12.5K	25K	High	None	None	
25	462.60000	467.60000		12.5K	25K	High	None	None	
26	462.62500	467.62500		12.5K	25K	High	None	None	
27	462.65000	467.65000		12.5K	25K	High	None	None	
28	462.67500	467.67500		12.5K	25K	High	None	None	
29	462.70000	467.70000		12.5K	25K	High	None	None	
30	462.72500	467.72500		12.5K	25K	High	None	None	

The CH screen is shown above. CH 1-7 and CH 15-22 directly correspond to those default channels on the MXT500. CH 8-14 are unused with the default MXT500 channel configuration, but may be used for additional channels as needed. CH 23-30 correspond to RP 15-22 on the MXT500. The repeater channels are only displayed on the radio when they are enabled. The repeater channels can be enabled from the radio menu or using the Repeater Channel Display selection on the Function Setup screen. To edit channel information, double click anywhere on the desired channel row, to bring up the Channel Edit screen. Or place the cursor on the desired row and select CH Edit from the Edit menu.

Channel Edit Screen

The Channel Edit screen allows per channel options configuration. To open the Channel Edit screen, double click anywhere on the desired channel row of the CH screen. Or place the cursor on the desired row and select CH Edit from the Edit menu.

RX Frequency
The default receive frequency is displayed for the channel. Channels 8-14 and 31-60 will allow any valid receive frequency within the MXT500 UHF receiver's bandwidth to be entered.

TX Frequency
The default transmit frequency is displayed for the channel. Channels 8-14 and 31-60 will allow transmit frequency selection from the 16 predefined GMRS main frequencies.

CH Name
A seven character alpha-numeric channel name may be entered, that will show on the MXT500 display in place of the normal channel number. The characters display as all caps, but are best entered without using the shift key on the keyboard.

Step
Unused in the MXT500 application, selection can be left at 12.5 kHz.

Channel Spacing
Selecting 12.5 kHz will set the radio for maximum ±2.5 kHz deviation, or narrow band mode. Same function as selecting NB-ON in the radio menu. Selecting 25 kHz will set the radio for maximum ±5 kHz deviation, or wide band mode. Same function as selecting NB-OFF in the radio menu.

TX Power
Allows selection of the channel's transmit power. Same function as the PWR selection in the radio menu. CH 1-7 are fixed at low power, 5W, to comply with FCC rules.

CTCSS/DCS Decode

Allows selection of the receive privacy tone or code. May also be referred to as the repeater output tone or code. Same function as the RCP selection in the radio's PRIVACY menu.

CTCSS/DCS Encode

Allows selection of the transmit privacy tone or code. May also be referred to as the repeater input tone or code. Same function as the TRP selection in the radio's PRIVACY menu.

Scrambler Switch

Unused in the MXT500 application.

Busy Channel Lockout

Allows selection of the conditions when PTT is inhibited.

Off – PTT allowed

Repeater – PTT not allowed when the channel is busy and the programmed CTCSS/DCS decode conditions are not met.

Busy – PTT not allowed when the channel is busy

TX Off

The transmitter is disabled on the channel when checked.

Compander

The compander circuit is used on the channel when checked. Same function as the COMP selection in the radio menu.

Scan Skip

The channel is not scanned when checked. This function can also be toggled by long pressing the scan button on the MXT500 front panel.

Reverse

The programmed transmit and receive frequencies and privacy codes are reversed when checked.

Talk Around

The programmed receive frequency and privacy code is used for transmitting when checked. This allows for direct radio to radio communication on a channel normally programmed to operate through a repeater. Same function as the TALK selection in the radio menu.

Function Setup Screen

The Function Setup screen allows radio wide options configuration. To open the Function Setup screen, click Function Setup on the tree view or select Function Setup from the Edit menu.

Starting Display

A seven character alpha-numeric name can be entered to display in place of "WELCOME" when the radio is turned on. The characters display as all caps, but are best entered without using the shift key on the keyboard.

Display Mode

If the display mode is selected as Channel, the MXT500 will display the CH Name when one is entered; otherwise, it displays the channel number.

If the display mode is selected as Frequency, the MXT500 will display the CH Name when one is entered; otherwise, it displays the channel frequency.

MR Channel

This is the channel currently selected when the radio was read, and the channel selected after the radio is programmed.

Squelch Level

Selects the relative noise squelch threshold level. Same function as SQL in the radio menu.

Backlight Brightness

Selects the backlight brightness level. Same function as LAMP in the radio menu.

TBST Frequency

Selects the burst tone frequency that might be used to open a repeater. The burst tone is sent by pressing the microphone channel DN button while PTT is pressed.

Time Out Timer

Selects the maximum time for continuous transmission. Same function as TOT in the radio menu.

Auto Power Off

Selects the idle time before the radio will turn off. Same function as APO in the radio menu.

Mute

Selecting On disables the keypad tones. Same function as MUTE in the radio menu.

CSQ Tail Eliminator

Selects the frequency used for squelch tail elimination on carrier squelch channels. 55 Hz matches other Midland FRS and GMRS radios.

Weather Channel Number

Selects a default weather channel.

Call Tone

Selects a call tone sequence. The call tone is sent by pressing the microphone channel UP button while PTT is pressed.

Repeater Channel Display

Selecting On enables the repeater channels in the radio's channel list. Same function as REP in the radio menu.

Color

Selects the backlight color. Same function as COL in the radio menu.

Rb Tone

Selecting On will transmit a short beep at the end of each transmission to alert listeners that the channel is available. Same function as RB in the radio menu.

N/R

Selects the level of noise reduction applied to the transmit and receive audio. This function is only effective when the ANC hardware is installed in the MXT500. Level 1 selects a minimal amount of noise reduction and level 5 selects the maximum amount of noise reduction. Higher amounts of noise reduction can reduce the audio level and affect overall intelligibility. Same function as ANC in the radio menu.

Tail Eliminator Type

Selects the type of squelch tail elimination used on CTCSS channels. 55 Hz matches other Midland FRS and GMRS radios.

Choose TX Power

Selects the maximum transmit power output.

Inhibit Initialize Operation
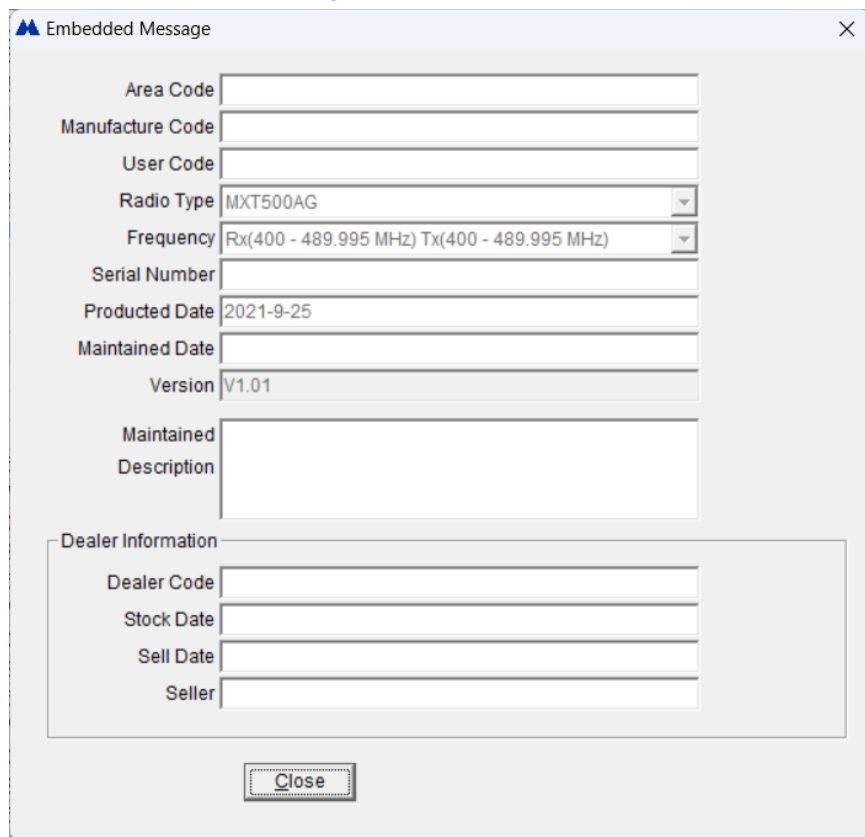
Check to disable the Factory Restore menu function.

Mic Audio

Check to enable microphone audio to the transmitter from the rear panel intercom jack.

External Audio

Check to enable receive audio out from the rear panel intercom jack.

Embedded Message Screen

The Embedded Message screen shows factory configured parameters. To open the Embedded Message screen, click Embedded Message on the tree view or select Embedded Message from the Edit menu.