

OTHER OPERATIONS

POWER ON MESSAGE

Each time you switch the transceiver ON, "HELLO" (default) appears on the display for approximately 2 seconds. You can program your favorite message in place of the default message.

- 1 Enter Menu mode and access Menu 500.

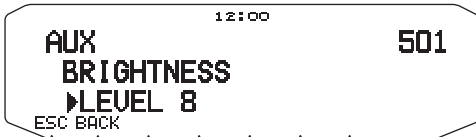


- 2 Enter your desired message.
 - Press [CLR] to clear the entire message, if necessary.

DISPLAY ILLUMINATION

You can manually change the display illumination to suit the lighting conditions where you are operating.

- 1 Enter Menu mode and access Menu 501.



- 2 Set your desired brightness level from 1 to 8, or OFF.

Auto Display Brightness

When Auto Brightness is activated, the display will light up every time a key is pressed.

- 1 Enter Menu mode and access Menu 502.



- 2 Set the Auto Brightness function to ON or OFF.

Backlight Color

You can manually change the display illumination to suit the lighting conditions where you are operating.

- 1 Enter Menu mode and access Menu 503.



- 2 Set the backlight color to AMBER or GREEN.

Display Contrast

The display visibility changes depending on the ambient conditions, for example between daytime and night. When you find the display is not clear, use this function to select the optimum display contrast.

- 1 Enter Menu mode and access Menu 504.



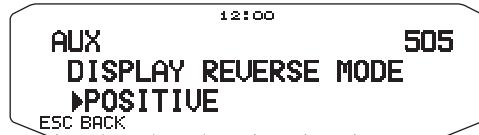
- 2 Set your desired contrast level from 1 to 16.

Note: The display contrast may be affected by a change in temperature. Adjust the contrast as necessary.

Positive/ Negative Reversal

You can change the display status between Negative and Positive (default).

- 1 Enter Menu mode and access Menu 505.



- 2 Set the backlight color to NEGATIVE or POSITIVE.

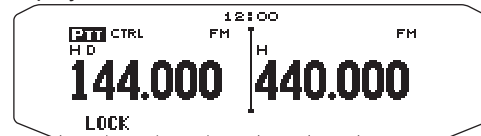
KEY LOCK

The Key Lock function ensures that your transceiver settings will remain unchanged if you accidentally press a key. When activated, the following functions can still be used:

- [P] (PTT)
- [PTT]

To turn Key Lock ON or OFF, press [F] (1s).

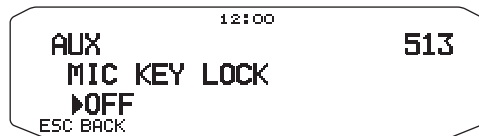
- When Key Lock is activated, the **LOCK** icon will appear on the display.



Microphone Key Lock

The Microphone Key Lock function will lock the microphone PF (Programmable Function) keys.

- 1 Enter Menu mode and access Menu 513.

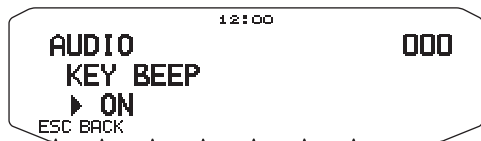


- 2 Turn the Microphone Key Lock function ON or OFF.

KEY BEEP

You can turn the transceiver beep function ON or OFF as desired.

- 1 Enter Menu mode and access Menu 000.



- 2 Turn the beep function ON or OFF.

- Even with the beep function turned OFF, the transceiver will emit a beep tone under the following conditions:
 - 1) When Auto Power Off is activated, the transceiver will beep 1 minute before the power turns off.
 - 2) After transmitting for the maximum time duration according to the Time-out Timer, the transceiver will beep

Beep Volume

Each time you press a key, the beep tone will sound. If you have left the beep function turned ON, you may wish to adjust the volume level of the beep.

- 1 Enter Menu mode and access Menu 001.



- 2 Set the beep volume to a level from 1 to 7.
 - The default is level 5.

EXTERNAL SPEAKER CONFIGURATION

This transceiver has two speaker jacks for external speakers, as well as an internal speaker. You can enjoy a variety of speaker configurations by using one or two external speakers. Received signals on bands A and B are output depending on how you want the internal and/or external speakers to function.

- 1 Enter Menu mode and access Menu 002.



- 2 Set the speaker mode to MODE 1 or MODE 2.
 - Refer to the table below for configurations based on the mode selected.

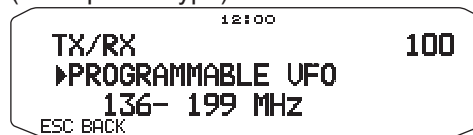
Mode	Speaker Setup	Band Output		
		Internal Speaker	External SP1	External SP2
MODE 1	None	A, B	–	–
	SP1 only	x	A, B	–
	SP2 only	A	–	B
	SP1, SP2	x	A	B
MODE 2	None	A, B	–	–
	SP1 only	x	A, B	–
	SP2 only	B	–	A
	SP1, SP2	x	B	A

PROGRAMMABLE VFO

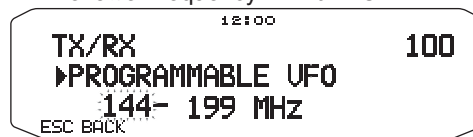
If you always check frequencies within a certain range, you can set upper and lower limits for frequencies that are selectable. For example, if you select 144 MHz for the lower limit and 145 MHz for the upper limit, the tunable range will be from 144.000 MHz to 145.995 MHz.

- 1 Select your desired VFO frequency.
- 2 Enter Menu mode and access Menu 100.

(Example: E type)

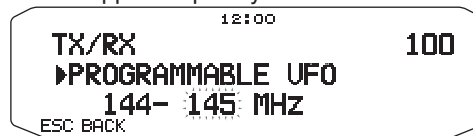


- 3 Press the **Tuning** control.
 - The lower frequency limit blinks.



- 4 Rotate the **Tuning** control to select your desired lower frequency limit, then press the **Tuning** control to set the selected value.

- The upper frequency limit blinks.



- 5 Rotate the **Tuning** control to select your desired upper frequency limit, then press the **Tuning** control to set the selected value.
- 6 Press **[ESC]** to exit Menu mode.

Note: You cannot program the 100 kHz and subsequent digits. The exact 100 kHz and subsequent digits of the upper limit depend on the frequency step size you are using.

CHANGING THE FREQUENCY STEP SIZE

Choosing the correct frequency step size is essential in selecting your exact frequency. The default step size on the 144 MHz band is 5 kHz (K type) or 12.5 kHz (E, M4 types). The default on the 430/440 MHz band is 25 kHz (K, E types) or 10 kHz (M4 type).

- 1 Press the left or right **[BAND SEL]** to select band A or B, then press **[VFO]**.
- 2 Enter Menu mode and access Menu 101.



- 3 Set the step size to 5.0*, 6.25*, or 8.33 kHz (118 MHz band only) or to 10.0, 12.5, 15.0*, 20.0, 25.0, 30.0, 50.0, or 100.0 kHz.

* These step sizes are not available for the 1200 MHz band.

Note: Changing between step sizes may correct the displayed frequency. For example, if 144.995 MHz is displayed with a 5 kHz step size selected, changing to a 12.5 kHz step size corrects the displayed frequency to 144.9875 MHz.

PROGRAMMABLE FUNCTION KEYS

■ Transceiver Front Panel

There are 2 PF (Programmable Function) keys on the transceiver front panel: PF1 and PF2. You can assign your own desired functions to these 2 keys.

- 1 Enter Menu mode and access Menu 507 (PF1) and/or Menu 508 (PF2).

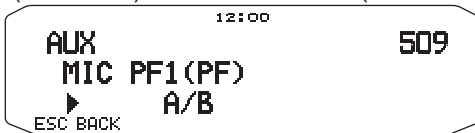


- 2 Set your desired function for the key. Programmable functions available are: WX CH (Weather Channel)/ FRQ.BAND (Frequency bands)/ CTRL (Control)/ MONITOR (Monitor)/ VGS (Voice recorder)/ VOICE (Voice announcement)/ GROUP UP (Memory group up)/ MENU (Menu mode)/ MUTE (Speaker Mute)/ SHIFT (Shift)/ DUAL (Dual Mode)/ M>V (Memory to VFO Copy)/ 1750 (1750 Hz Tone).

■ Microphone Keys

There are 4 microphone PF (Programmable Function) keys: [PF] (PF1), [MR] (PF2), [VFO] (PF3) and [CALL] (PF4). You can assign your own desired functions to these 4 keys.

- 1 Enter Menu mode and access Menu 509 (MIC. PF1) and/or Menu 510 (MIC. PF2) and/or Menu 511 (MIC. PF3) and/or Menu 512 (MIC. PF4).

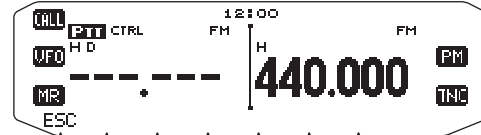


- 2 Set your desired function for the key. Programmable functions available are: WX CH (Weather Channel)/ FRQ.BAND (Frequency bands)/ CTRL (Control)/ MONITOR (Monitor)/ VGS (Voice recorder)/ VOICE (Voice announcement)/ GROUP UP (Memory group up)/ MENU (Menu mode)/ MUTE (Speaker Mute)/ SHIFT (Shift)/ DUAL (Dual Mode)/ M>V (Memory to VFO Copy)/ VFO/ MR/ CALL/ MHz/ TONE/ REV (Reverse)/ LOW/ LOCK/ A/B (Band Select A/ Band Select B)/ ENTER/ 1750 (1750 Hz Tone).

FREQUENCY DIRECT ENTRY

If the desired operating frequency is far from the current frequency, using the microphone keypad is the quickest way to change the frequency. One of the microphone PF keys must first be programmed as **[ENTER]**,

- 1 Press the left or right **[BAND SEL]** to select band A or B, then press **[VFO]** or **[CALL]**.
- 2 Press the key programmed as **[ENTER]**.
 - The Direct Frequency Entry display appears.



- 3 Press the microphone keys ([0] ~ [9]) to enter your desired frequency.
- 4 To set the entered frequency, press **[ENTER]** or **[VFO]**.
 - Pressing **[ENTER]** before entering all of the digits will set the remaining digits to 0.
 - Pressing **[VFO]** before entering all of the digits will leave the remaining digits at their previous values.
 - Entering all digits for a frequency will automatically set the frequency without pressing **[ENTER]** or **[VFO]**.
 - If you need to only change the MHz digit, press the **Tuning** control, then enter the new value.

AUTOMATIC POWER OFF (APO)

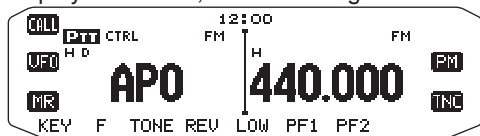
Automatic Power Off is a background function that monitors whether or not any operations have been performed (keys pressed, **Tuning** control turned, etc.), and turns the transceiver power OFF if it has not been in use.

- 1 Enter Menu mode and access Menu 516 (APO).



- 2 Set the APO time limit to 30, 60, 90, 120, 180 minutes, or OFF.

- After the time limit passes with no operations (default is OFF), APO turns the transceiver power OFF. However, 1 minute before the power turns OFF, "APO" appears on the display and blinks, and a warning tone sounds.

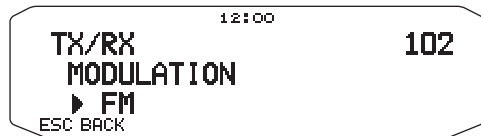


Note: If any settings are changed during while APO is ON, the timer resets. When you stop changing the settings, the timer begins counting again from 0.

SWITCHING FM/AM MODE

This transceiver is also capable of receiving (not transmitting) in AM on band A. The default mode on the 118 MHz band is AM while the default on the 144, 220, 300, or 430/440 MHz band is FM.

- 1 Enter Menu mode and access Menu 102.



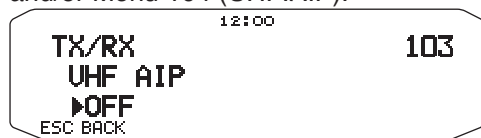
- 2 Set the mode to AM, FM, or NFM.

Note: You cannot switch between FM and AM to receive on band B.

ADVANCED INTERCEPT POINT (AIP)

The VHF/UHF band is often crowded in urban areas. AIP helps eliminate interference and reduce audio distortion caused by inter modulation. You can use this function only while operating on the VHF/UHF band.

- 1 Enter Menu mode and access Menu 103 (VHF.AIP) and/or Menu 104 (UHF.AIP).

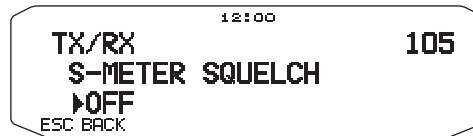


- 2 Set the AIP to ON or OFF.

S-METER SQUELCH

S-meter Squelch causes the squelch to open only when a signal with the same or greater strength than the S-meter setting is received. This function relieves you from constantly resetting the squelch when receiving weak stations that you have no interest in.

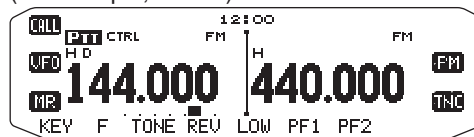
- 1 Enter Menu mode and access Menu 105.



- 2 Set the S-Meter squelch to ON or OFF.

- 3 To select the desired S-meter setting, rotate the left (band A) or right (band B) SQL control depending on which band you have selected.

- The squelch will open only at the level you have selected (for example, level 9).



■ Squelch Hang-up Time

When using S-meter Squelch, you may want to adjust the time interval between when the received signals drop and when the squelch closes.

- 1 Enter Menu mode and access Menu 106.



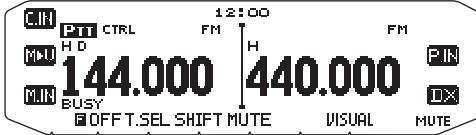
- 2 Set the hang-up time to 125, 250 or 500 ms, or OFF.

SPEAKER MUTE

While receiving or transmitting on the TX band, you may not want to hear audio received on the other band. Use this function to mute the speaker allocated to that band (not the TX band).

While receiving, press [F], [MUTE] to switch the mute function ON or OFF.

- The MUTE icon appears on the display when the function is ON.



Mute Hang-up Time

When using Speaker Mute, you may want to adjust the time interval between when you receive a signal and when the speaker is muted.

- Enter Menu mode and access Menu 107.



- Set the hang-up time to 125, 250, 500, 750, or 1000 ms.

BEAT SHIFT

Since the transceiver uses a microprocessor to control various transceiver functions, the CPU clock oscillator's harmonics or image may appear on some spots of the reception frequencies. In this case, we recommend you turn the Beat Shift function ON.

- Enter Menu mode and access Menu 108.



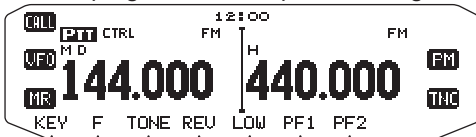
- Set the Beat Shift to ON or OFF.

SELECTING AN OUTPUT POWER

It is a good idea to select lower transmit power if communications is still reliable. This lowers the risk of interfering with others on the band. When operating from battery power, you will enjoy more operating time before a recharge is necessary.

Press [LOW] to select high (H) (K, E types only), medium (M), or low (L) power.

- You can program different power settings for bands A and B.



Note: When the transceiver overheats because of ambient high temperature or continuous transmission, the protective circuit may function to lower transmit output power.

TIME-OUT TIMER (TOT)

It is sometimes necessary or desirable to restrict a single transmission to a specific maximum time. You may use this function to prevent repeater time-outs when accessing repeaters, or to conserve battery power.

When TOT times out (default is 10 minutes), the transceiver generates beeps and automatically returns to receive mode. To resume transmitting, release and then press the microphone [PTT] again.

- Enter Menu mode and access Menu 109.



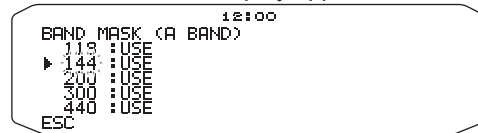
- Set the timer to 3, 5, or 10 minutes.

MASKING A BAND

If you have no plans to use band A or B, you can hide the frequency display on the unused band. This saves power consumption and makes it simpler to read the information you need.

- Turn the transceiver power OFF.
- Press the left or right [BAND SEL] + Power ON.

- The band mask display appears.

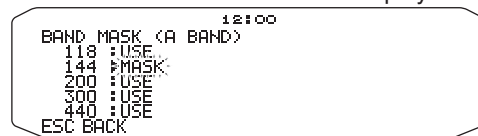


- Rotate the **Tuning** control to select the band you want to hide (or return to normal).

- Press the **Tuning** control to set the selected band.

- Rotate the **Tuning** control to set the band to select USE or MASK.

- USE allows you to see and use the band as normal. MASK hides the band on the display.



- Press the **Tuning** control to set the selection.

- Press the [ESC] to exit.

Note: You cannot operate the masked band nor use it to receive or transmit.

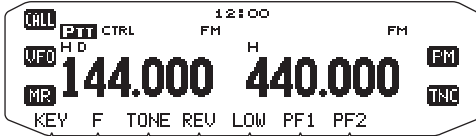
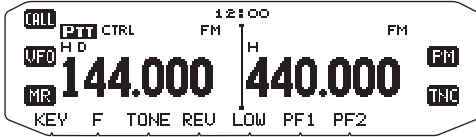
DISPLAY PARTITION BAR

The partition bar that appears between bands A and B can be removed if desired.

- 1 Enter Menu mode and access Menu 527.



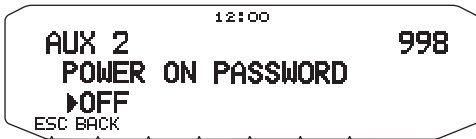
- 2 Set the partition bar display to ON or OFF.



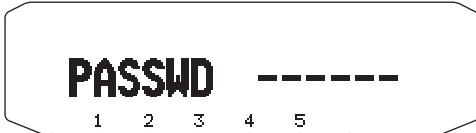
POWER ON PASSWORD

If power on password is activated, you cannot operate the transceiver without first entering your password, after turning the transceiver power ON. Your password can be changed using the MCP-2A software, and can contain up to 6 digits.

- 1 Enter Menu mode and access Menu 998.



- 2 Set the power on password to ON or OFF.
 - When set to ON, "PASSWD" appears on the display.



- 3 Enter your password.



- 4 After entering up to 6 digits, press the **Tuning** control to set the password.

Note: Even with Menu 998 turned ON, the power on password function will not be activated unless you first program a password using the MCP-2A software.
