

The 706 has the capability of transmitting on a frequency different from receiving. The 706 has two modes – one called **Split** and another called **Duplex**. "**Split**" is used for what is normally called split operation on HF for working DX pile-ups. "**Duplex**" is used for FM repeater operation. The difference is rather subtle.

The more common setup method is to program the receive frequency and the relative offset to the transmit frequency. It is also possible to program the receive and transmit frequencies separately (pg 29 in the 706 manual - See Split). First, do the **Initial Set** then, do the **Duplex** or **Split** set-up as desired.

The **Initial Set** menu is like settings or preferences on a computer and must be set-up first. It is accessed by holding the **LOCK** button during power-up. Use **MENU**, **M-CH** or the \bar{U} and \bar{U} buttons to select the menu items.

Nine items in the **Initial Set** menu relate to Split/Duplex operation.

<u>Item</u>	<u>Name</u>	<u>Function</u>
12	QUICK SPLIT	Enables Split / Duplex operation.
13	SPLIT LOCK	Allows Tx freq changing when ON when the tuning is locked.
14	SPL OFFSET	Sets the default HF SPLIT offset for CW, RTTY, SSB & AM.
15	DUP HF	Sets the HF DUPLEX (repeater) offset.
16	DUP 50M	Sets the 6 Meter DUPLEX (repeater) offset.
17	DUP 144M	Sets the 2 Meter DUPLEX (repeater) offset.
18	DUP 430M	Sets the UHF DUPLEX (repeater) offset.
19	1 TOUCH RPTR	Sets the offset DIRECTION for the "One Touch Repeater" function.
20	AUTO RPTR	Enables the Auto Repeater function and whether the sub-audible tone goes on.

FIRST – Set the **Initial Set** menu items as follows. **BOLD** are important. Page 54 in the manual

- 12 QUICK SPLIT** - turn **ON** to enable both SPLIT and DUPLEX (repeaters).
- 13 SPLIT LOCK - turn **ON** if you want to tune the TX frequency when tuning is locked.
- 14 SPL OFFSET - this is usually 'up 5' (0.005) or 'up 10' (0.010) or 'dn 5' (- 0.005) or 'dn 10' (- 0.010).
The Split offset is set as plus or minus here (unlike the Duplex offset).

Duplex offsets are only set as an amount. The direction (plus or minus) is either automatic (enabled by Initial-set menu item #20-AUTO RPTR) or set in step 2 below.

- 15 DUP HF** - sets the HF repeater offset. This is basically for 10 meters usually 0.100 MHz.
- 16 DUP 50M** - sets the 6 Meter repeater offset. Usually 1.700 MHz.
- 17 DUP 144M** - sets the 2 Meter repeater offset. Usually 0.600 MHz.
- 18 DUP 430M** - sets the UHF DUPLEX offset. Usually 5.000 MHz.
- 19 1 TOUCH RPTR - sets the offset DIRECTION for the "One Touch Repeater" function.

This appears to be overridden when the AUTO RPTR function is ON.

- 20 AUTO RPTR** – Set this to **ON 2**. Gives you the standard repeater offsets defined above (15 thru 18) and turns on the sub-audible tone ("PL"). (you must pick the actual PL frequency below in #3)

SECOND – REPEATER (DUPLEX) - operation (the easiest of several ways)

Pg 32 in the manual - One Touch and Auto Repeater functions.

- 1- Select memory mode (not VFO - **M2 V/M** F-2) and a memory location you want to store in (use **M-CH**).
- 2- Select the band (\bar{U} and \bar{U} buttons) and mode (FM). THEN tune the frequency (main dial). The small **DUP +** or **DUP --** should appear, on the center right (because of Initial Set 20 above), indicating that the standard repeater offset is activated and plus or minus based on the standard repeater band plan.
- 3- You may push (**M4 DUP** F-2) to change the offset to plus, minus or none (Tx on the repeater output)
- 4- To enable the sub-audible tone (PL) push (**M4 TON** F-3).
- 5- To select the sub-audible tone frequency – HOLD-IN the **DISPLAY** button for the **Q** Menu. Use **M-CH** or the \bar{U} and \bar{U} buttons to select **Q6**. Use the main dial to set the frequency. Push **DISPLAY** to exit.
- 6- To store in the memory location push (**M2 MW** F-1).

You can also select VFO mode first (**M2 V/M** F-2), do steps 2-5 then select a memory location (use **M-CH** or the \bar{U} and \bar{U} buttons) and push (**M2 MW** F-1). You don't have to actually go into memory mode.

SECOND – SPLIT & QUICK SPLIT (not for FM– See Duplex)

In the Split mode, VFO A and VFO B are used to store the two different frequencies..

- 1- Select VFO mode (**M2 V/M** F-3) then VFO A (**M1 A/B** F-2)
- 2- Select the desired Receive band, frequency & mode.

===== 3a - Quick Split. 3b - or Split. =====

QUICK SPLIT

- 3a- HOLD SPL in for 2 sec. (**M1 SPL** F-1) VFO B is offset according to the parameter set in the initial set menu. (item #14 Quick Split Offset)

SPLIT

- 3b- MOMENTARILY push (**M1 SPL** F-1)
- 4b- Set the Transmit frequency with main tuning while holding XFC (**M1 XFC** F-3).
Monitor the Transmit freq by holding XFC. (in FM the squelch is opened)
Swap Tx & Rx frequencies with (**M1 A/B** F-2)

INDEPENDANT SPLIT

You can also set the two VFO frequencies, and therefore the transmit and receive frequencies, independently. They can even be on two different bands and modes. (that is, you can transmit on 2 meters FM and receive on 40 meters SSB—though this is not normally legal in the US)

- 1- Select VFO mode (**M2 V/M** F-3)
- 2- Set up VFO A and B (**M1 A/B** F-2) on the desired bands and modes.
- 3- Turn on split by momentarily pushing (**M1 SPL** F-1). (step 3 can be done first or last)
- 4- You can swap Tx and Rx frequencies with (**M1 A/B** F-2).

NOTES :

Menu G3 shows the transmit frequency and pushing (**G3 T** F-3) allows listening on that frequency as well as changing it. When listening in FM, it always opens the squelch.
Turn Split off (**M1 SPL** F-1) and jump (Tx & Rx) between the two VFO frequencies using (**M1 A/B** F-2).

History:

Rev 3 – UHF offset was 0.5Mhz., In repeater section rearranged & added current step 4 . Other misc clarifications in wording.
Rev 2 – Added second page with Split Info & notes.