The 706 has two methods of automatically transmitting and receiving on different frequencies. "**Split**" **(SPL)** and "**Duplex**" **(DUP)**. "**Split**" is commonly used for operating on HF to work DX pile-ups. "**Duplex**" **(DUP)** is for standard repeater offsets while **SPL** is used for non standard repeater offsets.
The **Initial Set** menu is like settings or preferences on a computer and must be set-up first.

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

Item	Name	Function
12	QUICK SPLIT	Enables / disables the Quick Split function.
13	SPLIT LOCK	When the tuning is locked, allows Tx freq changing when ON .
14	SPL OFFSET	Sets the default QUICK SPLIT offset.
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 "One Touch Repeater" (see below).
20	AUTO RPTR	Enables Automatic Repeater offsets & Tone (PL) for the U.S. band plan.

FIRST – INITIAL SET MENU Set **Initial Set** menu items as follows. **BOLD** are most important.

Hold the **LOCK** button <u>during power-up</u>. Use **MENU**, **M-CH** or ∧ & ∨ buttons to select the menu number, then the main tuning knob to change the setting, then turn off. Page 54 in the manual

12 QUICK SPLIT - turn **ON**   to enable the QUICK SPLIT (see below).

13 SPLIT LOCK - turn ON <u>if you want</u> 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 'down 5' (– 0.005) or 'down 10' (– 0.010). The Split offset includes the plus or minus here. **15 DUP HF** - sets the HF repeater offset amount. This is basically for 10 meters usually 0.100 MHz.

16 DUP 50M - sets the 6 Meter repeater offset amount. Usually 1.700 MHz. The Duplex offset direction is set by repeatedly pushing **(M4 DUP** F-2 **)** later.

17 DUP 144M - sets the 2 Meter repeater offset amount. Usually 0.600 MHz.

18 DUP 430M - sets the UHF repeater offset amount. Usually 5.000 MHz.

19 1 TOUCH RPTR - sets a single offset DIRECTION. Holding the **M4 DUP** F-2 button forces this direction – not normally needed when AUTO RPTR (#20 next) is ON.

20 AUTO RPTR – Set to **ON 2**. Gives you (in #2 below) the initial set repeater offsets (15 thru 18 above) and turns on the sub-audible tone ("PL"). (you must pick the actual PL frequency below in #5).

SECOND – STANDARD US REPEATER OFFSET Use **DUP** for <u>Standard</u> US repeater offsets.

Pg 32 in the manual - Auto Repeater.

1- Select memory **(MEMO)** mode - **(M2 V/M** F-2 **)** <u>then a memory location</u> you want to store in (use **M-CH**).

2- Select the band (∧ & ∨ buttons) and mode (FM).   <u>THEN</u> 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 (CTCSS - PL) push **(M4 TON** F-3 **)**.

5- To select the sub-audible tone <u>frequency</u> – <u>HOLD-IN</u> the **DISPLAY** button for the **Q** Menu. Use **M-CH** or the ∧ & ∨ 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 **)**.

NOTE: You can also select VFO mode first **(M2 V/M** F-2 **),** do steps 2-5 <u>then select a memory location</u> **(**use **M-CH** or the ∧ & ∨ buttons**)** and push **(M2 MW** F-1 **)**. Starting in VFO mode like this, you don't actually go into memory mode until after it has been programmed and you actually want to use the memory.

One Touch HOLD-IN **(M4 DUP** F-2 **)**.   Automatically selects the offset <u>amount</u> put in **Initial Set** 15 thru 18 and the offset <u>direction</u> in **Initial Set** 19. Pg 32 in the manual - One Touch.

SECOND -- NON-STANDARD REPEATER OFFSET Use SPL for non-standard repeater offsets.

VFO A and VFO B are used to <u>initially</u> setup the transmit and receive frequencies.

1- Select VFO mode **(M2 V/M F-3)**.

2- Select **VFO A (M1 A/B F-2)**

3- Set the <u>Receive</u> frequency, mode and if desired, CTCSS **(FM T-SQL   M4 TON F-3)**.

4- Select **VFO B (M1 A/B F-2)** .

5- Set the <u>Transmit</u> frequency, mode and CTCSS **(FM T   M4 TON F-3)** as desired.

6- MOMENTARILY push (do NOT hold) **(M1 SPL F-1)**

7- Select a memory location you want to store in (use **M-CH**).

8- Push **(M2 MW F-1)** to store in the memory location selected in step 7.

Alternately, You can enter split mode earlier (Step 6 can be done after step 3) then, while holding XFC **(M1 XFC F-3)**, you may set the Transmit frequency with main tuning. When holding XFC in FM, the squelch is opened.

SECOND – SPLIT OPERATION

In the Split mode, VFO A and VFO B are used to store receive and transmit frequencies..

1- Select VFO mode **(M2 V/M F-3)**

2- Select **VFO A (M1 A/B F-2)**

2- Select the <u>Receive</u> band, frequency & mode.

A-QUICK SPLIT (In the **Initial Set** menu, enable QUICK SPLIT item 12 and set the offset item 14)

  3a- <u>HOLD</u> SPL in for 2 sec. **(M1 SPL F-1)** Done.

    VFO B is offset according to the parameter set in the initial set menu. (item #14 Quick Split Offset)

  4a- Push **(M2 MW F-1)** to store in the selected memory location.

B-SPLIT (Tx <u>frequency</u> selected at this time)

  3b- Enter the SPL mode - MOMENTARILY push, do not hold **(M1 SPL F-1)**

  4b- Set the Transmit frequency by: 1- holding XFC **(M1 XFC F-3)**.

                    or   2- switching to the other VFO with **(M1 A/B F-2)**.

  Monitor the Transmit freq by holding XFC. (in FM the squelch is opened)

  Swap Tx & Rx frequencies with **(M1 A/B F-2)**. Turn Split off **(M1 SPL F-1)** to jump both Tx & Rx between the two frequencies using **(M1 A/B F-2)**.

  5a- Push **(M2 MW F-1)** to store in a selected memory location. **(M1 XFC F-3)** listens on the Tx freq.

INDEPENDANT SPLIT

The SPL mode simply uses one VFO for transmit and the other for receive. You can directly set the two VFO frequencies, modes, etc. and therefore the transmit and receive frequencies, independently. They can even be on two different bands and modes, though this is not normally legal in the US. This actually is no different from the B-Split above.

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.   VFO A is usually receive, but it doesn't really matter because of step 4. The one set for Rx is also Rx when stored in memory.

3- Turn on split by <u>momentarily</u> 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)**.

5- When **SPL** is on, pushing **(M2 MW F-1)** stores BOTH VFOs into the selected memory. While in memory mode, **(M1 A/B F-2)** flips to reverse and holding **(M1 XFC F-3)** or **(G3 T F-3)** switches to the Tx frequency.

NOTES :

While the above shows VFO A used for receive, split can also begin with VFO B for receive, then VFO A becomes the transmit VFO – QUICK SPLIT stores the transmit freq in the non-selected VFO.

Holding **(G3 T F-3)** or **(M1 XFC F-3)** allow listening on the transmit frequency as well as changing it. When listening in FM, they open the squelch.

History:

Rev 6 – AUTO RPTR (initial set 20) does both Tx offset & tone on.
Rev 5 – Correct the QUICK SPLIT & One Touch Repeater and improve Auto Repeater and other descriptions.
Rev 4 – Improve wording and add non-standard repeater offset using Split mode.
Rev 3 – Corrected 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.