

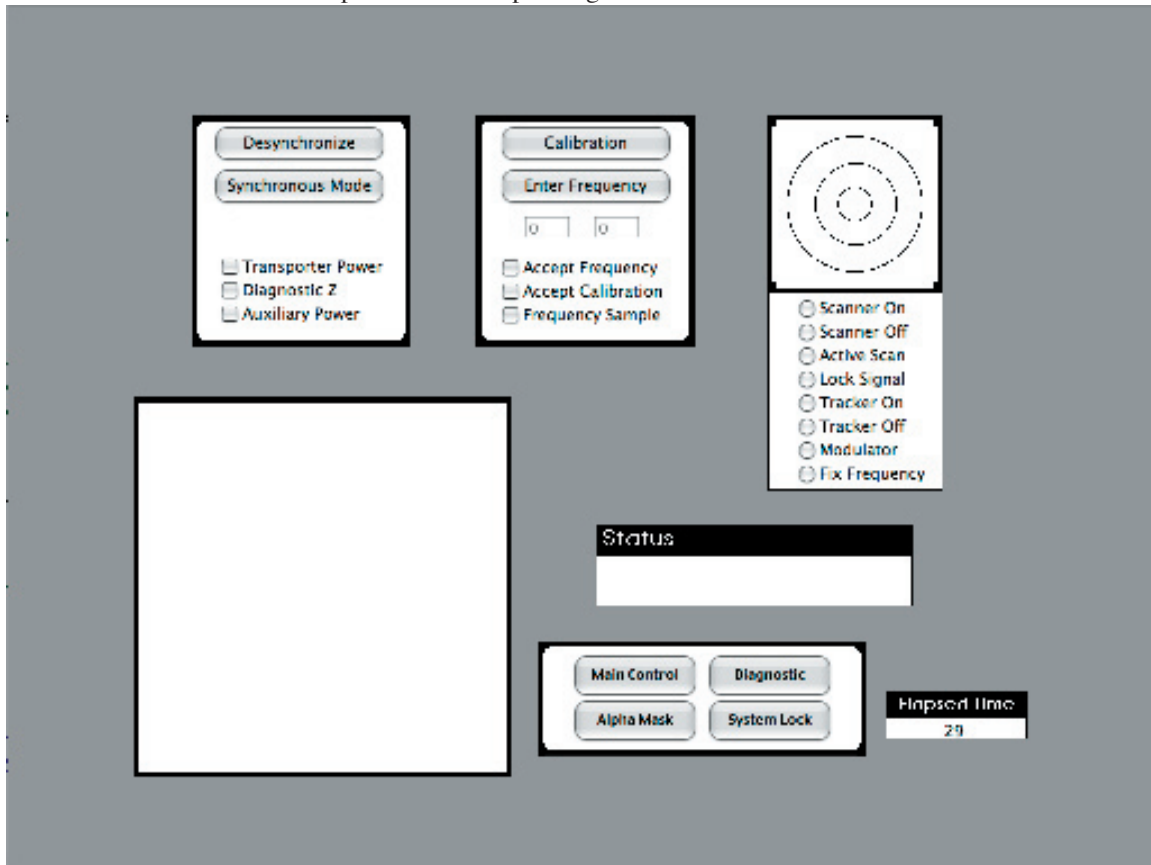
# Starfleet Operations Manual

## Model MB-X84.2 Manual Jammer System (MJS)

This manual describes how to operate the MB-X84.2 Starfleet standard Manual Jammer Subsystem (MJS), the primary method of jamming enemy transporters during hostile circumstances.

Figure 1 below shows the MJS interface.

There are four essential steps involved in operating the MJS:



1. Locking onto the homing signal.
2. Setting the jamming frequency.
3. Synchronizing the jammer and enemy homing signal.
4. Energizing the jammer.

Each step will be further described in the following pages of the manual. During training you must perform the frequency and power steps in the order assigned for each trial, either primary (frequency-first) or secondary (power-first). This is to ensure that Starfleet crewmembers are expert enough to adapt their training as circumstances require. During the testing session you will be free to perform those steps in either order as you see fit.



# Step 1. Locking onto Homing Signal

Overview of steps:

1. Click 'Scanner On'
2. Click 'Active Scan'
3. Wait until scanner homes in on a valid signal
4. Click 'Lock Signal'
5. Click 'Scanner Off'

When hostile ships operate their transporters, they emit a jamming frequency to counter jamming attempts from other ships. It is necessary to track this jamming frequency, and then fix the MJS onto it.

Several steps are involved in fixing onto a frequency. The first is to click the 'Scanner On' button, as depicted in Figure 2.

Once the jammer is turned on, it is possible to activate the jamming system, which varies the frequencies that the MJS attempts to match onto the enemy frequency. This is done by clicking on the 'Active Scan' button. The tracker will then report a number of frequencies, gradually eliminating false ones until there is only one remaining. Wait for the unique frequency point to fall inside the phase circle, then press the 'Lock Signal' button to fix on. This is illustrated in Figures 3 and 4.

It is critical that there be only one active frequency in the tracker to prevent jamming friendly ship signals. It is equally important that the last frequency be in-phase, or within the smallest circle, to ensure reasonable matching accuracy. Once the signal has been fixed on, you must turn off the frequency tracker by clicking on the 'Scanner Off' button.

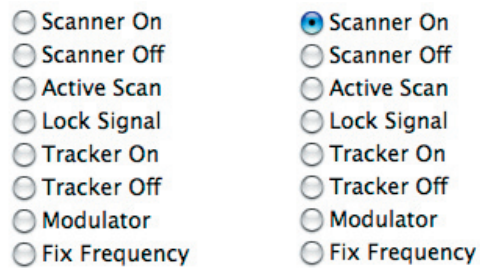


Figure 2. 'Scanner On' button

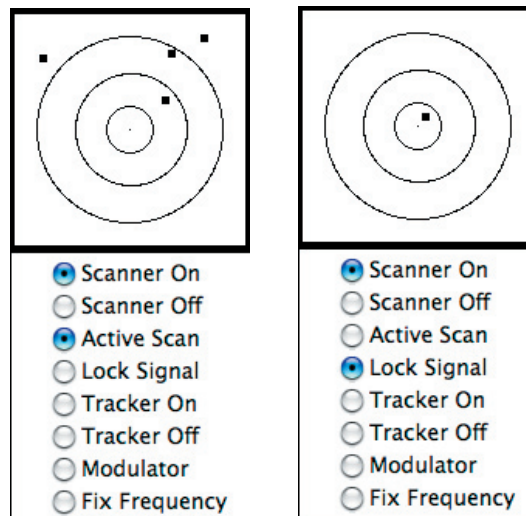


Figure 3. 'Active Scan' and 'Lock Signal'



## Step 2 (or 3). Setting the Jamming Frequency

Overview of steps:

1. Click 'Enter Frequency'
2. Type in the desired scanner frequency
3. Click 'Accept Frequency'

You must next enter a jamming frequency into the MJS, ranging from 1-100. Higher settings increase the strength of the jamming beam and the probability of successfully jamming the enemy's transport signal. Nonetheless, a higher setting also lowers the error tolerance of the beam, making it less likely to jam the enemy ship's signal if the frequency fix was imperfect. It is your responsibility as the operator to decide on the best tradeoff.

The first step in setting the jamming frequency is enabling keyboard entry of a signal value by clicking the 'Enter Frequency' button. Clicking this button will cause a border to appear around the left-side text field, as shown in Figure 4.

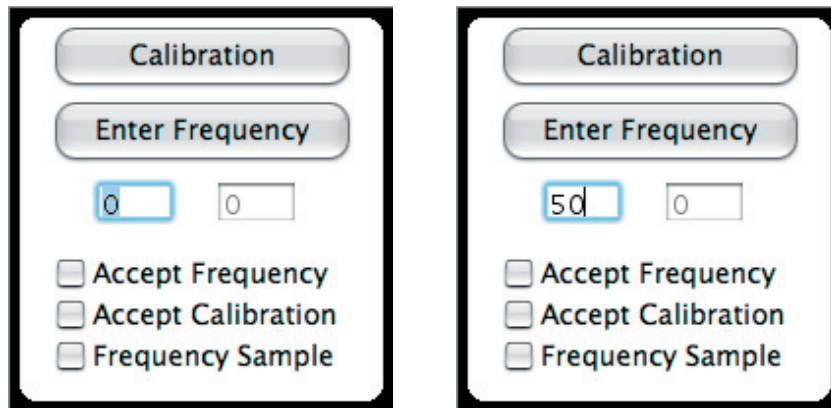


Figure 4. 'Enter Frequency'

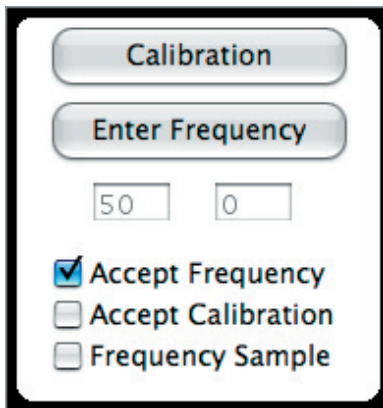


Figure 5. 'Accept Frequency'

After text entry is enabled, the frequency value between 1 and 100 should be entered on the keyboard. With experience you may adjust the value as you see fit. Once entered (Figure 4, right), it is necessary to tell the system to commit to that frequency. You may do this by clicking on the 'Accept Frequency' button, as shown in Figure 5.



## Step 3 (or 2). Desynchronizing Enemy Transporter and Signal

Overview of steps:

1. Click 'Transporter Power'
2. Click 'Synchronous Mode'
3. Use the mouse to track the homing signal

The X84 class jammer system must be manually synchronized with the homing signal. This requires that you first connect power to the jammer subsystem of the transporter, tell the system to enter synchronous mode, and then manually track the signal. Turning on the main jammer power is done by clicking on the 'Transporter Power' button, as shown in Figure 6.

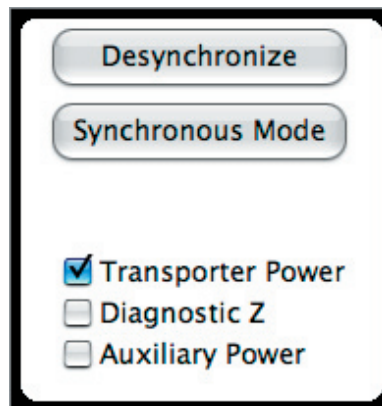


Figure 6. 'Transporter Power' engaged

Second, it is necessary to switch the system into synchronous tracking mode. This is done by clicking on the 'Synchronous Mode' button, which is also displayed in Figure 6. When this button is clicked, the cursor will turn into a targeting circle with crosshairs, and the square target signal will appear in the tracking area of the screen (Figure 7). The target will be in constant motion, reflecting the instability of the homing signal. Move the mouse as close to the target as possible before energizing the jammer.

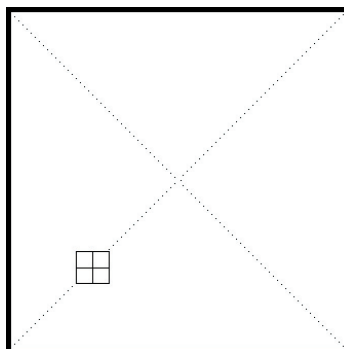


Figure 7. Tracking area and crosshairs



## Step 4. Energizing the Jammer

Overview of steps:

1. Click the mouse button
2. Click 'Synchronous Mode'
3. Determine if the beam was successful

When the MJS is in synchronous mode, the transporter will energize when the mouse button is clicked. This should be done as soon as the targeting crosshairs are close to the target. Energizing the transporter will bring the MJS display to rest. Next, switch out of the synchronous mode by again clicking 'Synchronous Mode' to determine the outcome of the beam. The status box and audio feedback should indicate if the transportation was successful or not.

If it was unsuccessful, return to Step 1 (Lock onto the homing signal) and try again. If the beam is successful, you may return to the main control screen by clicking on the 'Main Control' button at the bottom of the screen (Figure 8).



Figure 8. 'Main Control'



# Review. Summary of Steps

Overview of steps:

## Step 1. Lock onto the Homing Signal

1. Click 'Scanner On'
2. Click 'Active Scan'
3. Wait until scanner homes in on a valid signal
4. Click 'Lock Signal'
5. Click 'Scanner Off'

## Step 2 (or 3). Setting the Jamming Frequency

1. Click 'Enter Frequency'
2. Type in the desired scanner frequency
3. Click 'Accept Frequency'

## Step 3 (or 2). Synchronize the Transporter and Homing Signal

1. Click 'Transporter Power'
2. Click 'Synchronous Mode'
3. Use the mouse to track the homing signal

## Step 4. Energizing the Transporter

1. Click the mouse button
2. Click 'Synchronous Mode'
3. Determine if the beam has been successful
4. If not, return to Step 1

Return to Main Control.

