This manual describes how to operate the MB-X84.2 Starfleet standard Manual Transporter System (MTS), the primary method of bringing aboard crewmembers in hostile circumstances when automatic transporters are being jammed.

Figure 1 below shows the MTS interface.

There are four essential steps involved in operating the MTS:

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

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 crewmembers need to be beamed aboard in hazardous situations, one or more of them will use their communicator to send out a signal broadcasting their location. It is necessary to scan for this signal and then lock the MTS onto it.

Several steps are involved in locking onto a signal. The first is to turn on the scanner by clicking the ‘Scanner On’ button, as depicted in Figure 2.

Once the scanner is turned on, activate the scanning system and track the signal. This is done by clicking on the ‘Active Scan’ button. The scanner will then report a number of signals, gradually eliminating false ones until there is only one remaining. Wait for the unique signal to fall inside the phase circle, then press the ‘Lock Signal’ button to lock on. This is illustrated in Figure 3.

It is critical that there be only one active signal in the scanner to prevent anything other than a crewmember from being beamed aboard. It is equally important that the last signal be in-phase, or within the smallest circle, to ensure a reasonable chance of success. Once the signal has been locked in, you must turn off the signal scanner by clicking on the ‘Scanner Off’ button.
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 MTS, ranging from 1-100. Higher frequencies increase the probability of successfully jamming the enemy’s attempts at jamming your own signal. Nonetheless, a higher frequency also lowers the strength of the transporter beam, making it less likely to bring the crew aboard once the beam has been activated. 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’](image)

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.

![Figure 5. ‘Accept Frequency’](image)
**Step 3 (or 2). Synchronizing 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 transporter system must be manually synchronized with the homing signal. This requires that you first connect power to the transporter system, tell the system to allow synchronous tracking by the operator, and then manually track the signal. Turning on the main transporter 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 transporter.

Figure 7. Tracking area and crosshairs
Step 4. Energizing the Transporter

Overview of steps:

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

When the MTS 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 MTS 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).

![Main Control](image-url)
**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.