

## INSTRUCTIONS FOR MICROFLYTE ATC JOYSTICK FOR THE ATARI ST AND AMIGA

### DESCRIPTION:

The MicroFlyte ATC joystick plugs into the mouse port of your computer and converts your joystick commands into equivalent mouse output signals. The joystick uses an efficient OMOS microprocessor which obtains power from your joystick port. Military versions of this processor have been used in the space program for more than 20 years for solar and battery powered, high reliability systems. The controller program is contained on a OMOS EPROM and provides three modes of operation, 1) a standard curser control with variable speed, 2) a proportional control for Flight Simulator and other applications where this is desirable, and 3) a mode allows you to vary the sensitivity of your stick in proportional control.

### OPERATION:

- 1) Plug the joystick into Port 0 (mouse port) and boot up your software in the usual manner.
- 2) When the program is ready to run, center the vertical and horizontal sensitivity trim tabs at the sides of the joystick; press the RESET button and hold down for 4 or 5 seconds. This initializes the joystick microprocessor and reads the center position of the joystick.
- 3) To access Joystick modes:

Joystick Mode 1 - pointer or cursor control mode:

Note: The top two buttons nearest the power indicator perform exactly as the left and right mouse buttons

- a. Tap the RESET button on the MicroFlyte joystick box once to place the joystick in pointer control mode.
- b. Tap the "Right Button" to toggle the computer to pointer or cursor mode.

Test operation of the joystick to assure that both systems are in the correct mode. The joystick will move the cursor at a variable speed in the direction of the stick. The "Left Button" should now also work the same as the left button on the mouse.

Joystick Mode 2 - proportional control as used with FSII:

- a. Tap RESET on the joystick box twice to place the joystick in proportional control mode. (Note: If the computer is left in pointer mode, you can see the behavior of the proportional control on the pointer.)

b. Tap the "Right Button" to toggle the computer into YOKE mode for Flight Simulator or other programs. The pointer will disappear and the "Mouse" indicator at the lower right corner of the panel will indicate YOKE. Before takeoff kick your tires, check your gas gauges, but especially check your controls to assure proper operation.

c. In Mode 2, the throttle controls may be used to provide the same functions as the mouse in "Drag Left Button Forward or Back." To perform these functions hold one of the throttle buttons down. After a short delay, the Drag Switch feature will activate.

d. The "Right Button" and the switch below it perform the same functions as the mouse of dragging the right button forward or back. This feature is used on certain software but not on FSII. Drag left and right are not provided at this time.

#### Joystick Mode 3 - Sensitivity Adjustment

a. Tap the RESET button 3 times to enter mode 3. Note that moving the joystick now has no effect.

b. Move the sensitivity trim tabs to increase or decrease joystick sensitivity. Move Elevator trim tab forward to increase gain. Move Aileron Trim left to increase Aileron gain.

c. Next, tap "RESET" twice to go back to proportional control and test the joystick sensitivity to see if it is now set as desired.

d. Repeat steps a) through c) until control sensitivity is as desired.

NOTE: Additional sensitivity control is available by calling the "SIM" Menu and then the "Calibration Sensitivity" Menu from the Flight Simulator screen. Note that the default sensitivity is set at 11 inches for ailerons and elevators. Reducing these to 5 inches will approximately double the sensitivity of the stick. Sliding the sensitivity toward 14 will reduce joystick sensitivity. After changing control sensitivity here, you may go back to the Sensitivity mode on the joystick box and readjust for desired operation. Do not set up for excessive gain for if you bang the aileron control against the stops and return the stick to center, the aileron control counter in the program will throw away excess counts, the return count will be too high, and the aileron pointer will go past center.

While in control sensitivity mode, you will note that the "Aileron Null Zone" default is set near "large". You may wish to reduce this setting as a null zone is already provided around the joystick center position. Throttle sensitivity with increased inches tends to give finer (but slower) control. Brakes are not supported from the MicroFlyte ATO box at present and changing this setting does not affect brake control using keypad button "1".

# Joystick Functions

Mouse port

