

Troubleshooting Your Touchscreen

- Problem 1** The touchscreen appears to lose calibration if you touch the screen while touching the metal on the cabinet (this particular problem is most likely to affect upright and cabaret games, not countertops).
- Solution** Make sure the controller and/or the cabinet is properly grounded. NOTE: For the 19" upright, you may have to remove the paint from the hinge that the ground braid is attached to in order to get a better connection.
- Problem 2** The touchscreen won't calibrate correctly. This is a vague problem that requires more information to determine the cause. To investigate further, go to the TEST SCREEN mode and slowly pull your finger down the screen in a vertical line.
- A) If the crosshair moves in a wavy line (sine wave) then there is a bad EEPROM in the Microtouch touchscreen cable connector.
- Solution** Replace the touchscreen glass. NOTE: TO PRESERVE THE VALIDITY OF YOUR WARRANTY, CONTACT MERIT TECHNICAL SERVICE (at 1-800-445-9353) BEFORE ATTEMPTING ANY SERVICING.
- B) If the cursor generally follows your finger, except for one particular area on the screen, the EEPROM is not correcting for flaws in the touchscreen glass.
- Solution** Repair or replace the touchscreen glass (or you can try switching touchscreen controllers, if you have another one. This can cause the EEROM to reinitialize itself, leaving you with both controllers working).
- C) If the crosshair moves continually towards one of the corners (the same corner each time), every time you run your finger down the screen, the touchscreen glass has a broken wire.
- Solution** Return the glass to Merit Technical Service to have it fixed.
- D) If the controller works for a while, but stops working (the TTL LED does not respond to a touch), the controller may not be properly grounded.
- Solution** Install the TTL Ground/Static kit (#SA1089-01) and the CRT-266 Electro-Static Discharge Board kit (SA1088-01). On the upright model, you may want to check the gray and green wires from the touchscreen controller cable. They should be attached to the ground on the power supply.

Problem 3 If the glass is totally unresponsive, check the LED on the touchscreen controller (board).

1. If the LED isn't flashing, touch the screen while keeping an eye on the LED. If the LED reacts to your touch (i.e. gets brighter), the problem is with the CRT-260 board.
 - a) The U41, UART chip has been minorly affected by a static hit.

Solution Turn the game off, then power up. If that fixes the problem, call Merit Customer Service for software that can prevent this problem from happening again.

- b) The UART chip or the U39 Maxim chip (on the upright model) has been burnt out by a static hit.

Solution Call Merit Technical Service at 1-800-445-9353. NOTE: Make sure to install, if you haven't already, the SA1089-01 Ground/Static kit to help prevent this from happening again.

If the LED is flashing, refer to the following chart for interpretation of the error and contact Merit Customer Service.

Flashes per 10 Second Interval	Error Detected
1	RAM Error
2	ROM Error
3	A/D Error
4	EEROM Error
5	Analog Error

Advanced Touchscreen Calibration

The following directions will help you calibrate your touchscreen more accurately.

1. Enter calibrate mode. When the first dot appears, intentionally touch the screen about 1" away from the dot, diagonally, towards the center of the screen (repeat this procedure for the second calibration dot; see Figures 1a and 1b). You are now in TEST SCREEN mode. As you test the screen, you should notice that the crosshair is considerably out of calibration. By completing this step, you have shown that the machine is accepting calibration input.

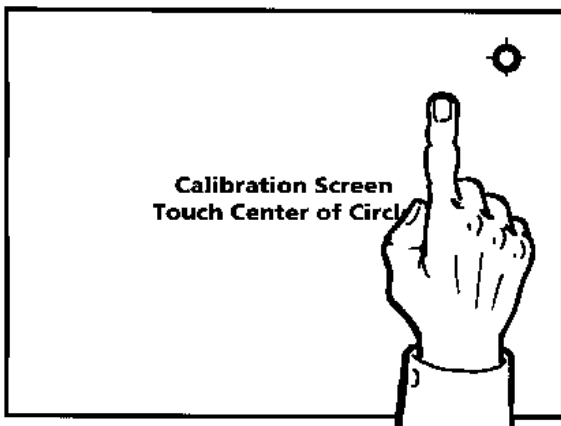


Figure 1a

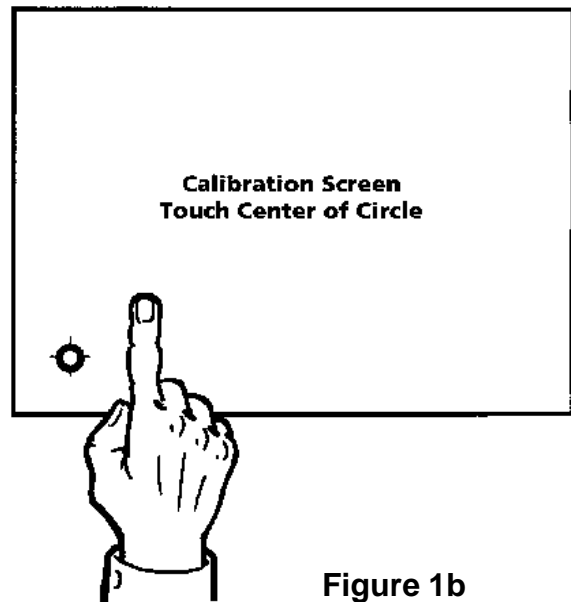


Figure 1b

- Go back to calibrate mode, but this time touch exactly on the center of the calibration dots, to more accurately calibrate the screen (see Figures 2a and 2b). You are now back in TEST SCREEN mode. **Touch the approximate location where the first dot appeared.** If the crosshair is not centered on your finger, note the direction and approximate distance which it is off center. Repeat this procedure **at the approximate location of the second calibration dot** (see Figures 2c and 2d). (If the crosshair is centered on your finger, the screen is calibrated accurately.)

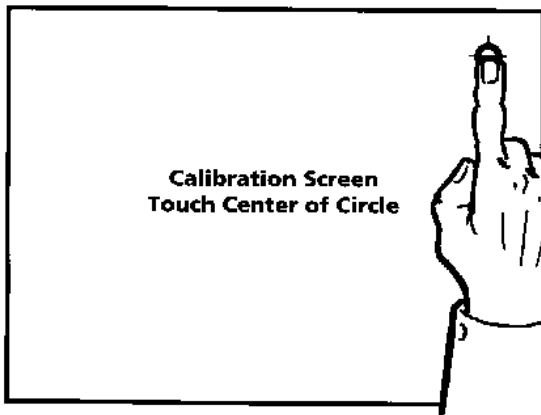


Figure 2a

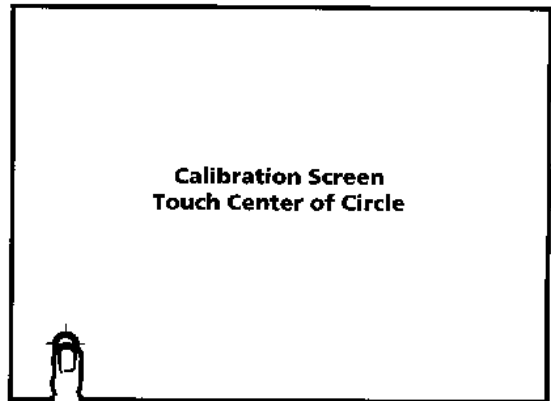


Figure 2b

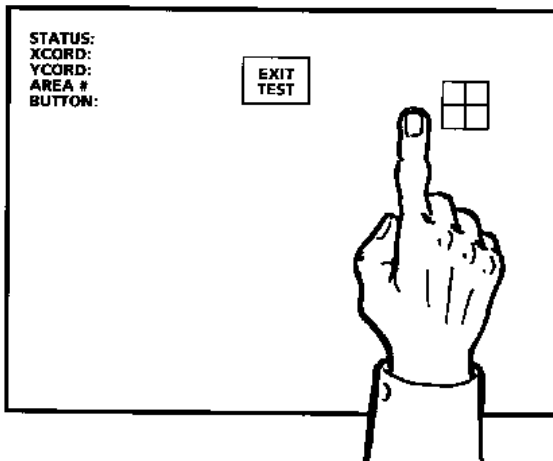


Figure 2c

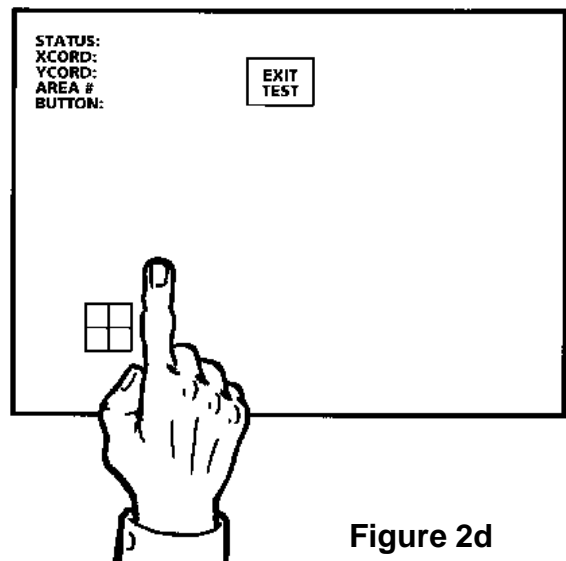


Figure 2d

3. To compensate if the screen is not calibrated accurately, return to the calibration screen. Recalibrate the way you normally would, but don't touch exactly on the center of the dots. This time, touch slightly away from the dot, ***in the SAME direction and approximate distance*** which the dot was off center (see Figures 3a and 3b). For example, if the crosshair comes up slightly below where you touched, when you recalibrate, touch slightly below the calibration dot, if the crosshair appears slightly above and to the right of where you touched, when you recalibrate, touch slightly above and to the right of the dot. This should compensate for the individuality of the touchscreen glass and the way it was mounted on the CRT.

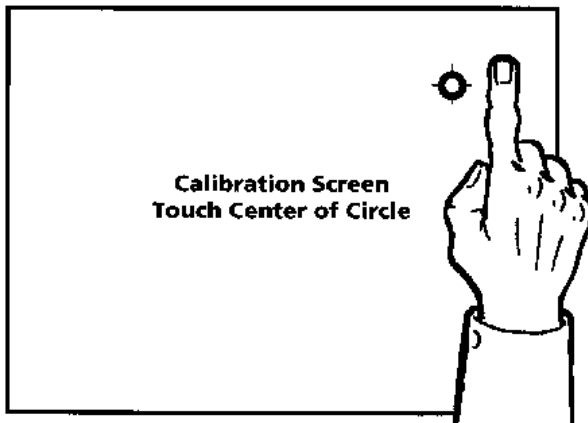


Figure 3a

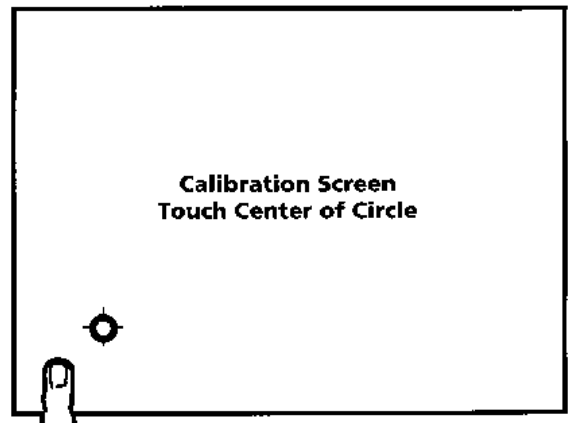


Figure 3b

It may take several attempts to get the screen calibrated exactly.