

Operating the Colorado Swim 4000 with Touchpads as the Primary Finish

Equipment Setup:

1. Set up all cables and electrical connections according to the attached diagram. Do not turn on any power until all connections are made.
2. Check the microphone by turning on the electricity at the power strip and the black box. Test by pressing in the side switch on the microphone. Adjust volume on the green box, if necessary.
3. Turn on the Swim 4000 (switch is on the back left side of the machine). Make sure to turn off the Swim 4000 at the end of each day, otherwise the machine will operate on battery power until the batteries die. Since the batteries are for emergency backup power, you need them to be charged.
- 4.** Check the battery charge by pressing the **Battery Check** key on the upper right hand side of the front panel. Replace the 8 'D' batteries if not at least half charged.

Check Computer Setup:

Press the '**Set Ups**' key (to the right of the screen). This will allow you to customize your pool to the Swim 4000. Starting at the top of the selections:

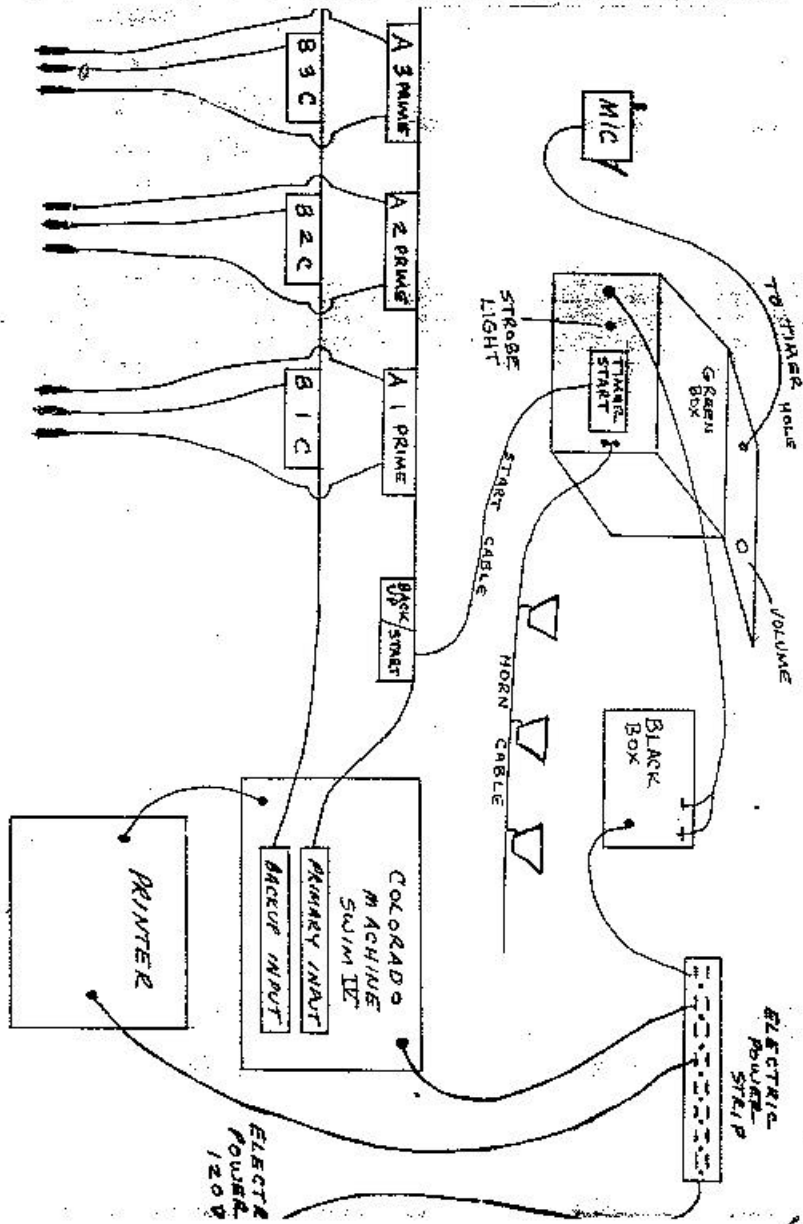
1. Start by having the arrow point to the **Start** set up on the left side of the screen. Use up and down keys to move the arrow to the different selections. For Start, choose Automatic for the best accuracy.
2. Press the down softkey so the arrow is pointing to **Finish/Buttons**. With touchpads, the choice is #1--Pad Prime Finish, #7--3 Button Backup, #8--Compare Button Early and #9--Compare Pad (Relays only). If less than 3 buttons used as backup, using the 3 button backup setting will still register a valid backup time.
3. Press the down button again so the arrow is pointing to **Hardware Setup**. Your options are to adjust speaker volume only. (To change speaker volume: Press keypad #1--change #, then press Enter.) Speaker volume should be at '3'. This is the 'beep' you hear when anything on the Swim 4000 is pressed. The Low Swimming Voltage applies when pads are connected to the Swim 4000, but no races are going on (ie the break between Trials/Finals).

4. Press the down button again and the arrow will point to **Splits**. With pads, our choice is #1 and #2.
5. Press the down button again and the arrow will point to **Timing**. Our choices are #1--Print to hundredths of a second, #5--Print warning messages and #3--18 second delay. For Long Course Relay events, #3 should be set to 30 seconds (to help avoid extra touches being registered by swimmers exiting the pool late).
6. Press the down button again and the arrow will point to **Pool**. The choices will depend upon where the Colorado 4000 is located (closest to lane 1 or lane 10), the number of lanes in the pool (odd numbers will not work), short course or long course, and yards or meters. If Far End splits will be used, then set #4--Far End Splits.
7. Press the down button again and the arrow will point to **Scoreboard**. Our choices are #1, #9 and #7--3 seconds.
8. Press the down button again and the arrow will point to **Printer**. Our choices are #8, #9 and #0. This will allow the print to be condensed at 8/lines per inch and always print when you press the Store/Print key. Selection #3 should be set to 'Race Summary, Form Feed, Split/Summary, Form Feed'. This will print each heat's results on 2 pages.
9. Press the down button again and the arrow will point to **Event Sequence**. With pads, you should predefine all of the events for the meet. This is accomplished by selecting #7 and #8. Using #8, you will enter the length, type and sex of each event. The value for 'Len' is the number of lengths of the pool swum, NOT the number of pad touches. For example: a 50 meter Long Course event is one length; a 100 yard Short Course event is 4 lengths. Also, program an extra, non-used event to be used for pre-meet time tests. The 'event' should be one length. (See **Edit-Event/Heat** below.)
10. Press the down button again and the arrow will point to **Time/Date**. The time and date are stored in permanent memory, so it is not necessary to change this choice unless you are going from one time zone to another or changing from/to daylight savings time.
11. If you want these setup changes to be permanent, press **Record Setups** (under the up and down keys). You will be asked if you want to record setups, answer 'yes'. This will allow you to keep all setups in memory so you won't have to redo the setups again each day of your meet.
12. Press the **Quit** key until you have the original softkey menu back on the screen (RESET appears in the upper left hand corner of the screen). Press **Display** to see if all of the buttons are being pressed by the timers and working correctly.

13. Press **Mode** key. Select 'Title' mode. If not set to Title, then the preprogrammed distances will not appear on the screen (or printed output).
14. Press the **Edit-Event/Heat** key. This key allows you to enter the actual event# and heat# of the race to be run. For the pre-meet time tests, select the event# preprogrammed earlier for time tests (see **Event Sequence** above). This key is used to set the first event and heat of each day, but is also used when heats are split to reset the heat# after running the 'split' heat. NOTE- the Swim 4000 will not allow the same event#/heat# to be used more than once, therefore, don't use a valid event#/heat# during pre-meet time tests.
15. Turn on the printer (switch is on the right front side of the printer). Load paper and then press Function key once. Press Row once. Press Column 3 times. Press Set once. Lastly, press Function once. Printer should be set properly. If not, repeat these steps.

Situations:

- After pressing Store/Print at the end of a race, if a timing discrepancy appears on the screen; press Reset (so the next race can start), then resolve the discrepancy **BEFORE** pressing Next Heat or Next Event keys. If the Next Heat or Next Event keys are pressed before resolving the discrepancy, then the new event/heat will appear on the corrected printouts and be used as the results for the next race.
- If the pads record a touch during the 'delay period' of time without anyone touching the pad; then the pad needs venting. Replace the pad with a spare and vent the pad out of the water (make sure no water gets into the pad during the venting process, otherwise the pad will be damaged).
- If an event is programmed for a shorter distance than actually being swam, press the Finish Arm key on each lane when the swimmer is on their last leg. Even though times have been recorded for each lane as they 'finish' the programmed distance, hitting Finish Arm reactivates the clock for the lane (up until Store/Print is pressed). Once the race completes, then you can reprogram the correct distance from the Events keyboard.
- If reprogram the distance through Setups, the length doesn't take affect until you edit the event and the next race is being swam (doesn't take affect immediately if a race is in process).
- Check the Situations section of these instructions with 3 button prime finish for other situations that can occur.



**DON'T TURN SYSTEM ON UNTIL
EVERYTHING IS CONNECTED**