

MasterCraft 2008 PerfectPass Integrated System With Digital Video Display

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Attention former PerfectPass Customers: On this new integrated MasterCraft system, the “**Select**” key will move the cursor around the PerfectPass screen. (On other PerfectPass systems, the **Menu** key controls this function).

The UP Key is used to enter a value once highlighted.



Section 1 USING WAKEBOARDPRO

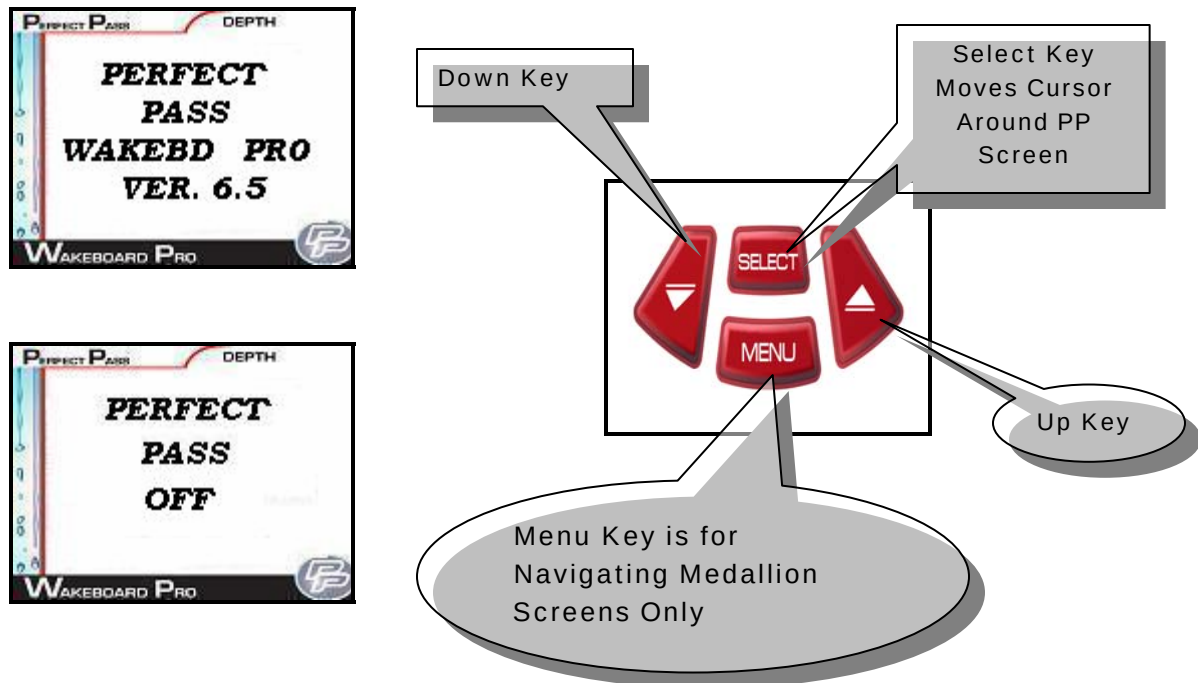
For 2008, the PerfectPass WakeboardPro is integrated in the new Medallion Gauge System. The PerfectPass Display is viewed on the large LCD Screen.

The **Grey Button** on the dash panel will quickly activate the PerfectPass system and take you to the main OFF screen. Press the Grey Button again and system will turn ON.

The “**Select**” Key is used to move the cursor around the PerfectPass screen, the Up Key is pressed to enter that highlighted function or to change speeds, etc.

You can also use the Medallion “Menu” key to access the PerfectPass screen, the **Grey PerfectPass Button** will turn system ON.

When PerfectPass is first activated, the following screen will appear as follows, followed by the Main OFF Screen:



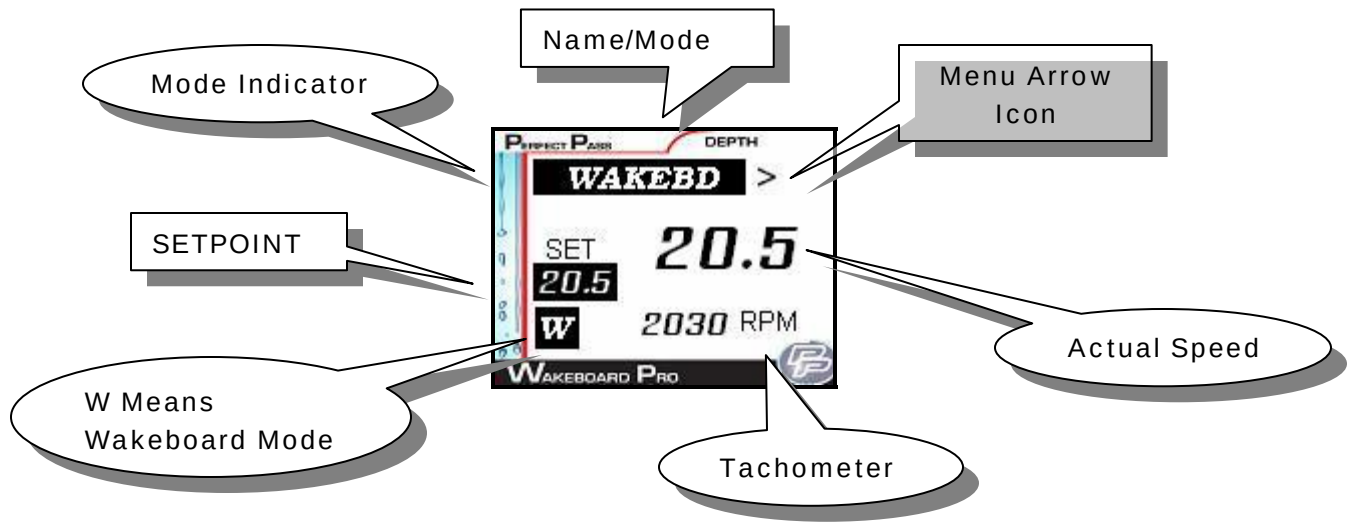
If you then press the **Grey PerfectPass Button**, the system will return to the last operating mode and will appear as follows. (If you were in Wakeboard mode).



TURN OFF – Press the Grey Button and screen will move to the OFF Mode.

Wakeboard Mode (Speed Based)

Figure 1



When system is ON, the screen will appear as above with set point speed at left. By using **SELECT** Key, you can move around the screen and highlight set point to make speed changes.

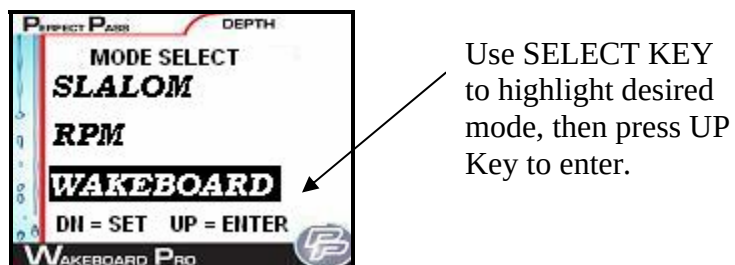
Once desired speed has been set, you can simply throttle up smoothly and when the set point has been reached the system will engage and take over automatically. (You will note that the “WAKEBD” heading will become highlighted to confirm engagement).

To disengage system, pull back on the throttle.

If the rider falls, pull throttle back and system will disengage. Return slowly to rider. PerfectPass will once again engage automatically when set speed is reached.

Menu Arrow ”>” – To move to a different mode (ie. RPM), use **SELECT** Key to highlight the “>” in upper right hand corner, and press up key to confirm. The following screen will appear with the other operating modes you can select from.

Figure 2



BACKGROUND SETTINGS

ADJUSTABLE PULL CHARACTERISTICS

KDW, NN – These background adjustable settings allow you to tailor the pull characteristics of WakeboardPro. To access from normal wakeboard screen, highlight “>” in upper right hand corner, then press UP Key. Wakeboard will now be highlighted as show in Figure 2, press DOWN Key for settings and KDW will appear as shown in Figure 3.



Figure 2

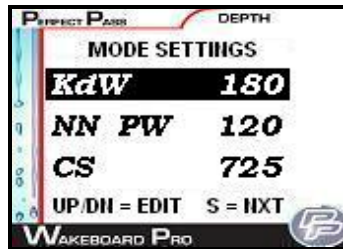


Figure 3

Use UP or DOWN Keys to change value. Select Key will move cursor to NN.

KDW (Throttle Pull Rate) – KDW can be changed using up or down keys. The higher the value, the more aggressive the control. Heavy boats may need higher values. Factory setting is about 180. Normal range is 120 – 200.

NN (Paddle Wheel Filter Factor) – NN should be set at 50. The higher the value the more filtering is done. If you feel you boat is surging a little, raise value by 20 or 30. (Normal range is 50 – 100).

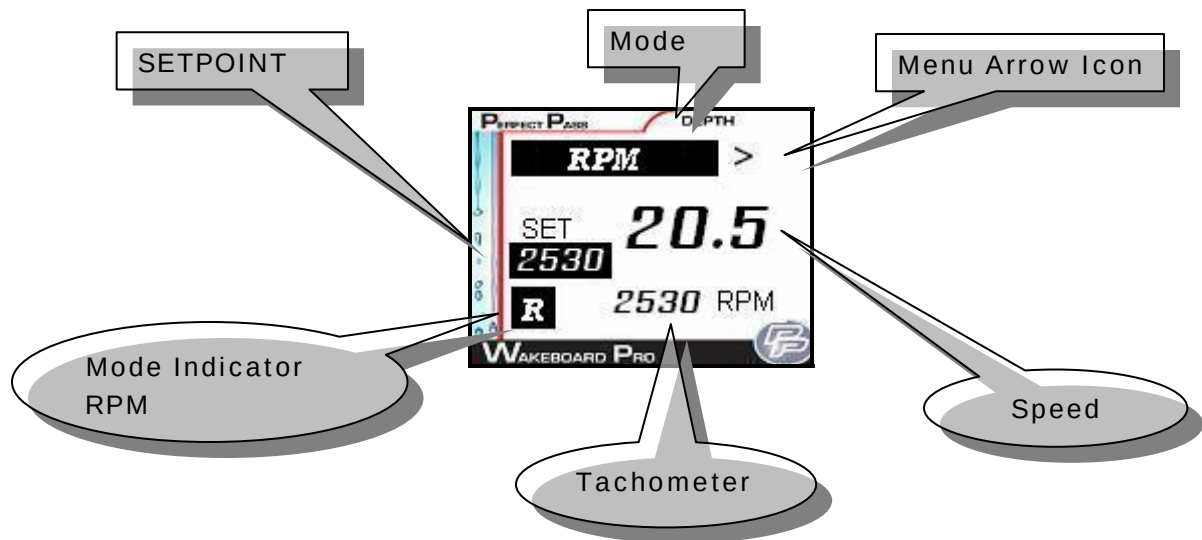
CS (Control Setting) – There is an adjustable control setting (CS), which primarily affects engagement in Wakeboard Mode. **750 is recommended**, however, if you feel your boat “overshoots” the target speed too much, you can lower the value a little. Adjustments of 20 at a time is recommended. (Range is 650 - 750).

SECTION 2

RPM MODE

USING RPM MODE

In this mode, the screen will appear as follows:



Operating in this mode is very similar to using the Wakeboard mode, except the system is now controlling to an RPM **SETPOINT**.

RPM DRIVING

Prior to towing the rider / skier, select the RPM **SETPOINT** by using the **UP** or **DOWN** keys with the SETPOINT highlighted on the screen. Pull the rider up smoothly and continue to accelerate up to or beyond the RPM **SETPOINT** so the system can engage and take control. The digital tachometer should match the RPM set point.

Changes can be made to the RPM SETPOINT while the system is engaged (“on the fly”) to fine-tune the RPM you desire.



SECTION 3

SLALOM MODE

SIMPLE SLALOM (Requires Calibration)

This Simple mode is for recreational skiing and will provide an excellent, tournament quality pull, however, it is not designed to be as accurate as the tournament class Slalom modes.



This mode allows you to set speeds in 2 mph increments ranging from 24 – 36 mph. It is designed for those wishing to use the system for open water skiing.

Although you have selected a speed setting such as 34 MPH, the system is actually running an RPM value. You must calibrate this RPM “Baseline” value for your boat at each speed you intend to use. After calibration, the new RPM “Baseline” values will be retained in memory.

Step 1 Calibrate RPM Baseline – Initial calibration of baselines should be done with 2 – 3 people in boat and without a skier. If you set the speed at 34.0 mph, but your digital speed readout shows something different such as 33, simply press the **SELECT** key until the “>” is highlighted, then press the **DOWN** key to access Baseline Calibration screen (See screen below). This can be done on the fly. Press the **UP** key several times and the rpm baseline will increase 25 rpm per press. This will increase the rpm of the boat which will increase the actual speed. Adjust the rpm until the actual speed matches the **SETPPOINT**. Press the **SELECT** key to highlight the “>” then press the **UP** key to return to the main Simple Slalom screen.



If you are towing skiers, you can change the **SETPPOINT** on the fly (i.e. 30 to 32), or you can raise the rpm baseline setting on the fly by going into the BasCal Screen as described above. For example, you have 32 mph set, but because you have five people in the boat, the speed may be running a little slow due to the extra weight. You can adjust the speed by entering the BseCal Screen and raising the rpm baseline until the digital speedometer matches the desired speed.

SECTION 4

USING NAME LIST

Highlight
Wakeboard
heading and press
UP Key



NAME LIST

This version of PerfectPass allows you to store up to eight names and their preferred speed. The Name List (Quick List) can be accessed by pressing the **UP** key when the NAME/MODE section is highlighted. Once in the Name List press the **SELECT** key to move through the list. With the desired name highlighted, press the **UP** key to select the name from the list to load their settings or press the **DOWN** key to edit the name.



Creating Names – First enter the Quick List. Press the **SELECT** key until [NEW ENTRY] is highlighted. Then press the **UP** key to enter a new name. The following screen will then appear:



Scroll through the alphabet using **UP** & **DOWN** keys, and then press **SELECT** to move to next position. Press the **SELECT** key to move through the settings. You can even enter a rider's preferred KDW value.

Editing Names – As you scroll through list of names, instead of pressing **UP** key to select that name, press the **DOWN** key to edit.

Note: Names can be changed by “Editing Names” but can only be deleted by performing a “PerfectPass Factory Reset”. A Reset will clear all names.

Section 5

OTHER FEATURES

More Throttle



Denotes More
Throttle Required

If you see the “T” replace the “>” in the upper right hand corner of screen, this indicates the boat throttle handle is not advanced far enough and PerfectPass is running out of control room. If you see the “T” appear, gently advance the handle a little and the “T” will disappear.

Throttle Override

Once engaged and controlling, the driver can override the system temporarily for a few seconds. If you are in a turn or “double-up” maneuver and require extra power, advance the throttle handle and additional rpm will be applied. After a few seconds, PerfectPass will retake control and settle back to set point.

Section 6

TROUBLESHOOTING

Problem – PerfectPass does not engage well or overshoots speed too much before engaging.

Check – *The CS value affects engagement. Normal factory setting is 750. If the boat overshoots the target speed too much, you may need a slightly lower CS value.*

Problem – PerfectPass seems to engage too soon, prior to reaching set point.

Check – *Try raising the CS value (example: 725), which will allow the boat speed to surpass set point a little before engaging.*

Problem – The rider would like the pull to be firmer, more responsive.

Check – *Heavily loaded boats may require a higher KDW, which firms the control. 150 is normal, try 180 or 200.*

Problem – In slalom mode, the set speed and actual speed do not match. (ie: Set for 32 mph but digital speed shows 31 mph)

Check – *Each individual slalom speed needs to be quickly calibrated for your boat. On the fly, highlight the Menu Arrow icon > in upper right hand corner & press down key to access Calibrate screen. You can now raise the rpm baseline value which will increase the speed of the boat. When the digital speedometer matches set point you are finished. See manual Page 5 for details.*

Problem – You want to reset the system to original factory values.

Check – *Perform a PerfectPass Factory Reset. Use the MENU Key which will list PerfectPass Factory Reset on main menu list. (This is located at bottom of list under English/Metric).*

Problem – You want to clear the Name List and start over.

Check – *Perform a PerfectPass Factory Reset.*