

## Comparison Between Amicus Professional And Paddle Palace H2W (Y&T V-989H)

*By Larry Thoman*

**Speed:** Probably similar to each other. But be aware that highest speeds also mean no spin as all wheels must rotate forward at the same speed to achieve max ball speed. Amicus may be slightly faster due to having 3 motors instead of 2, and also larger wheels. However, max useful speed will be substantially lower for both robots as no human player can hit the ball even close to the max speed of these robots, and humans almost always apply some topspin to their hardest hit shots.

**Speed Resolution:** H2W has 9 speed increments, Amicus Pro has 25.

**Spin Types:** Both robots can do any type of spin, including no spin, except for screwspins (no robot can produce screwspins). H2W has only one degree of sidespin (45°) when it is combined with topspin or backspin. Amicus offers 6 different degrees of sidespin.

**Spin/Speed Ratio:** H2W will be limited from @ 50/50 speed/spin to 100/0, but it misses the entire lower end from about 10/90 to 50/50 because none of its wheels spin backward. Amicus Pro allows its wheels to spin backward and therefore has the entire speed/spin spectrum from about 10/90 to 100/0. Opposing backward spinning wheels reduce speed and increase spin. Opposing forward spinning wheels increase speed and decrease spin. It is not possible to go down to 0 on the speed as there must be some speed on the ball to make it go forward and cross over the net.

**Spin Resolution:** H2W does this by allowing you to individually control the speed of its 2 wheels. With 10 speeds for each motor, there are 9 increments of spin variation for either topspin or backspin, but in all cases speed will be the same, or more likely, greater than the spin (no heavy spin). Amicus Pro does not allow you to individually control wheel speeds. Instead, it lets you select the spin amount separately from the speed setting. Amicus has 7 increments for amount of topspin and 5 increments for backspin (including heavy spin).

**Spin Indicator:** H2W has a Spin Indicator to reveal the spin type of the forthcoming ball; Amicus Pro does not have this feature.

**Random Features:** H2W does not have any random features. Amicus robots have several—(1) natural scattering of landing spots around a programmed spot, (2) random selection of multiple programmed spots, (3) natural scattering combined with random selection of multiple spots, (4) randomizing the ball types (spin, trajectory, sidespin, speeds) included in one drill, and (5) random selection of ball types and ball placements.

**Frequency:** H2W has a frequency range of 28 to 95 Balls Per Minute (BPM) with 10 increments. Amicus Pro has a range of between 13 to 120 BPM. A rotary knob that has no discernible steps, but does have 12 indicator marks, provides a variable number of increments for Amicus Pro, but for practical purposes, about 24–36 increments.

**Frequency Customization:** H2W has no way to adjust frequency of individual balls within a drill sequence. Amicus Pro allows you to adjust the timing so that individual balls can have more or less time before the next shot than do the rest of the balls in that same drill. This is useful for drills, for instance, that begin with a slow short serve followed by more rapid-fire topspin exchanges.

**Duration of Play:** H2W can stop delivery by press of button, by time, or by count. Amicus Pro can stop by press of button or turning a knob and also can start/stop play using its Cycle function (explained below under *Interval Training*).

**Controller:** H2W has a wired touch screen pad. Amicus Pro has a wired control box of buttons and knobs for all controls and also a small wireless remote with buttons for Start/Stop, Sample, and Frequency Up/Down. H2W lets you select one of 3 languages-- English, Simplified Chinese, or Traditional Chinese. Amicus controllers are in English only.

**Pre-Programmed Drills:** H2W has 30 pre-programmed drills, while Amicus Pro has 20. The H2W allows you to temporarily modify the settings in its pre-programmed drills, but you cannot save those modifications. Whereas, Amicus Pro allows you to both modify and save those modifications to its pre-programmed drills.

**Custom Drills:** H2W offers 9 memory positions for customized drills. Amicus Pro offers 99, including the 20 positions that are allotted for pre-programmed drills, which can be overwritten and used for custom drills. H2W allows up to 9 balls per drill; Amicus Pro , 8.

**Drill Sequencing:** H2W does not allow you to link different drills together into a training routine. Amicus Pro has Cluster Memory that allows you to do this.

**Interval Training:** H2W cannot turn itself back on automatically after its timer stops. Amicus Pro can accommodate interval training by cycling power on and off to create active periods followed by rest periods without need to turn power on/off manually.

**Portability:** H2W is freestanding, so it is not easily portable (bulky and heavy). Amicus Pro weighs only about 18 pounds, folds up compactly, and comes with a padded storage/transport bag.

**Trajectory Resolution:** H2W has 7 levels to choose from, Amicus Pro has 45. Amicus can do serves where ball bounces first on robot's side of table; whereas, H2W cannot do serves.

**Oscillation Resolution:** H2W has 11 landing spots to choose from, Amicus Pro has 17.

**Shooting Head Height:** H2W's head height is not adjustable. Amicus heads have 4 height settings.

**Extras Included:** H2W includes 120 training balls and a robot training DVD. Amicus Pro includes a storage/transport bag and a wireless remote.

**Price:** H2W costs \$1800 and Amicus Pro \$2000.