

# **WS-10-01**

## **WIRELESS SLATE**

### **Operation Instructions**

#### **1.0 Operating Requirement**

PC or Mac computer. Operating system - Windows 98, 2000, ME & XP, Vista, Win7 and Mac OSX  
RF Wireless slate (operating frequency range is from 2406.5MHz to 2471.5MHz)  
Cordless pen  
Hub receiver with AC port  
Lithium-ion battery and AAA NiMH battery  
USB cable, type A to mini  
Hub receiver power cable, type A to 3.5mm DC  
AC adaptor, 5V 500mA

#### **2.0 Operation Procedures**

##### **2.1 There are two batteries need to be installed and charged prior to use this device**

- Open the battery cover on the bottom of the wireless slate and install the Li-ion battery.
- Pull the end cap backward to expose the pen battery compartment. Install the NiMH AAA battery into the compartment and place the end cap back.
- Placing the cordless pen into the charging cradle of the slate to charge the NiMH battery.
- Plug in the AC adaptor and charge the batteries 10 hours. The LCD display will indicate the battery status.
- When external power supplier is used, the NiMH battery will be charged first before charging the Li-ion battery. Once battery is full, LCD display indicator symbol will stop blinking.

##### **2.2 Wired Operation**

- Using USB cable connects this product with computer. Mini-B connector is used to connect to this product.
- When the power blue light comes on, it means that product is ready to operate
- Depending the computer's speed, there are few seconds delay to allow the computer to recognize this product
- When USB cable is used, the batteries is also being charged at the same time.
- When operated on USB cable, it will not turn off automatically until press the power On-Off button for 3 seconds. Once the power is turned off, all functions stop.

##### **2.2 Wireless Operation**

- Connect the RF receiver to computer USB port. The LED indicator will turn on
- Either on Li battery or AC adaptor, pressing the power button will turn the blue light on. If the light turns off by itself, this means that the system requires re-synchronization.

- Synchronize the slate and receiver by pressing the receiver sync button and blue light should blink. Power up the wireless slate and pressing the sync button on the
- If the power light turns off, then repeat the above steps.
- Channel is selected automatically by the device. Once communication established, receiver indicator will blink when signal is being received.
- Wireless slate will constantly transmits signal to receiver before entering "Sleep Mode". Slate will enter sleep mode after ten minutes idling and blue LED will start to blink. For 5 more minutes of idling, slate will be turn off to save energy. During this 5 minutes, slate can be waked up by touching the board weiting surface with cordless pen
- When strong external RF interference is encountered, signal transmission could be interrupted briefly. However slate will automatically switch channel and reconnect instantly.
- Wireless operating distance is greater than 10 meters

### 3.0 Battery Charging

Batteries can be charged by either AC adaptor or via USB cable. When charged with AC adaptor, Li-ion (slate) and NiMH (pen) both are charged with pen NiMH battery takes priority. When slate is operated with battery, NiMH battery is charged by Li-ion battery from pen cradle. To protect the Li-ion battery, no power is releases if it is being charged.

PWM protocol is adapted for battery protection. It will automatically inspect battery for voltage, current to insure the battery safety and charging fullness. When the abnormal power supply condition is detected, LCD battery symbol will blink rapidly. When this occurs, inspect the external power sources and the batteries for abnormality.

When batteries are charged normally, the LCD battery symbol will blink at 1 Hz rate. Once charging completed, the indicator will stop blink. Li battery has low voltage protection. When the protection circuit kicks in, Li battery will stop discharging.

When external power supply is not connected, NiH is charged by Li battery and charging indicator will stay on for five minutes after NiH battery is full. When Li battery is re-installed or external power supply is connected, power management module will monitor the power status of the entire product. When external power supply is not used, Chalkboard will switch to sleep mode after 10 minute of idling. Li-ion battery will be check every five minutes. Once low voltage detected, charging indicator will start to blink at 4 Hz rate.

Although multiple protections have been designed into this product, it is a slight possibility that the system may freeze up if abnormal procedures are conducted. If this condition is encountered, remove all power supply including Li-ion battery, wait for 10 seconds before re-install power supply to reboot the system.

This product is designed to switch channels to avoid interference, channel switching will induce a brief latency. Once the source of RFI is avoided, wireless slate can resume normal operation.

If product will not be used for a prolonged period, it is recommended to remove all batteries from the slate and pen to protect the devices and batteries..

If power LED flashing irregularly, remove Li-ion battery and plug in AC adaptor. This will clear the system error. Reinstall Li-ion battery and turn on the power. The blue LED should turn on. If the flashing persist, battery may need to be replaced.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.