# CONNECTED TOYS

## SAFETY SCIENCE FOR INNOVATION

### SAFETY IMPLICATIONS

What are the safety implications of interactive wireless toys?

### BLUETOOTH® INTERACTION

How can **Bluetooth** improve the interaction with my toys?

### US FCC CERTIFICATION

Do I need FCC Certification to sell into the US?

### RF EXPOSURE

How do I limit any RF exposure in my toys?

### LEVERAGE NEW TECHNOLOGIES

What new technologies can be incorporated in my product?

### EUROPEAN DIRECTIVE CHANGES

Do I need to think about the upcoming Directive changes in Europe?

### MPE EVALUATION

What is Maximum Permissible Exposure (MPE) evaluation?

### CERTIFICATION REQUIREMENTS

Have I considered all certification requirements to legally sell a wireless toy?

For information email ToyTeam@ul.com.

# UL IS THE ANSWER

## SAFETY SCIENCE FOR INNOVATION

Demand for intelligent and interactive toys has significantly increased the use of connected toys (electronic and wireless) for learning purposes and gaming. However, the risks related to these products are not fully known, and concern is growing.

UL, a global leader in safety science has comprehensive toy and wireless technology expertise to assist manufacturers in identifying and understanding the measures needed to protect children when using these devices, within a regulatory landscape that has not been fully defined.

UL can help you overcome the challenges of integrating technologies such as WiFi, Bluetooth and other radio technologies in toys, children's, and juvenile products.

## UL PROVIDES SPECIFIC TESTING SERVICES FOR CONNECTED TOYS INCLUDING:

### EMC TESTING



Analyzing the ability of electronic devices to operate as anticipated when in proximity to other electronic devices or in the presence of electromagnetic emissions.

### RADIO TESTING



Testing the real-life performance and functionality of any product that includes wireless technologies such as Bluetooth, WiFi and cellular connectivity – a regulatory requirement for many global markets.

### SAR TESTING



Measuring the electromagnetic energy absorbed by a body using a wireless device. SAR testing is intended to verify that a device does not exceed a country's established RF exposure limits.

### BLUETOOTH CONFORMANCE



Meet mandatory Bluetooth requirements to use the Bluetooth trademark through qualification testing. Interoperability testing makes sure that one device can connect to another and do everything it's supposed to.

### GLOBAL MARKET ACCESS



Each global market has specific and often different requirements and regulations. UL's Global Market Access service can secure the certifications you need – getting you to market on time and to budget.

### OTA TESTING



Over-the-air (OTA) tests are utilized to accurately predict real-world wireless device reliability, safety and performance capabilities. OTA testing of products that incorporate wireless technology is required by many standards organizations, carriers, vendors and regulatory bodies.

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