

# BOX860 Toy Assembly Application Note

## 1 Scope

This application note outlines how the BOX860 can be implemented inside a plush toy animal.

## 2 Parts

The BOX860 has 5 parts that are connected together with electrical wires, as can be seen in Figure 1.

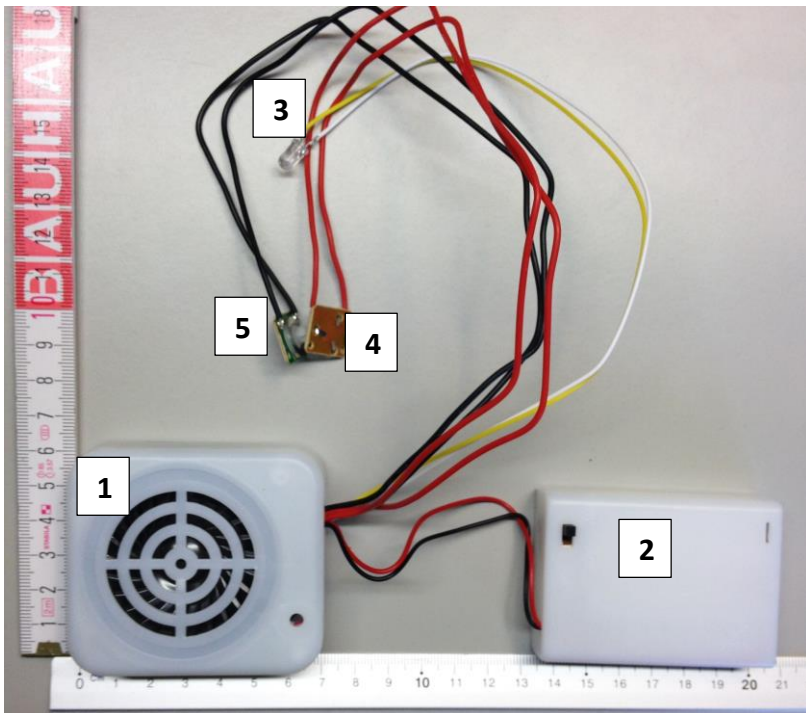


Figure 1: BOX860 parts

The parts are:

1. Main box with electronics including speaker and microphone.
2. Battery box
3. Indicator LED (red)
4. REC button
5. PLAY button

### 3 BOX860 Placement

The BOX860 is FCC certified with a Single Modular Approval as a portable device with respect to RF exposure compliance and when the BOX860 is installed in its final casing the BOX860 has to be placed so that the distance between the antenna and any body part of the end user is always greater than 27mm.

The distance from the antenna to the box edge is 7mm.

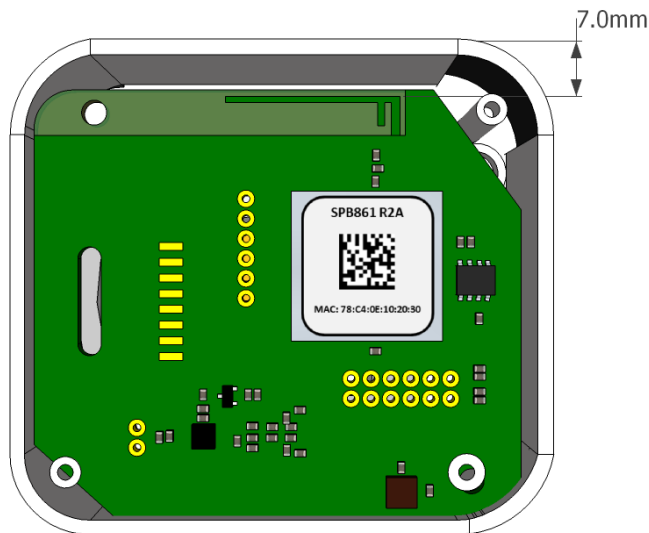


Figure 2: Antenna to box edge minimum distance.

This implies that when the BOX860 is placed inside the toy, preferably sawn into its own pocket, it shall be placed so that there is always 20mm between the box edge and any body part of the user. This condition also applies when the toy is compressed.

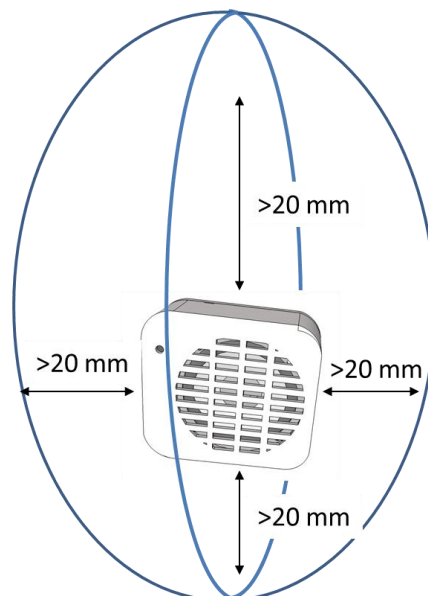


Figure 3: BOX860 placement in toy.

Placing the BOX860 within its own pocket inside the toy is also beneficial for the sound quality as it helps keeping the microphone and speaker from being obstructed.

## 4 Battery Box

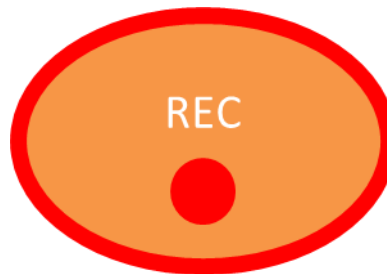
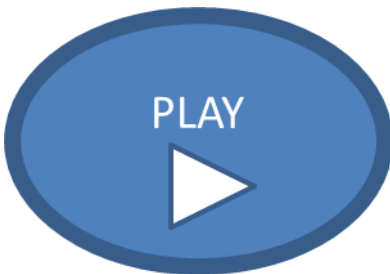
Place the battery box so that it is accessible for the end user in its own compartment closed by a zipper.



Figure 4: Battery box accesible via zipper.

## 5 Play and Record Button

Place the play and record buttons where they can be easily accessed by the end user in the toys paws, ears or similar. It is recommended to mark the location and function with a colored patch on the toy, as in the example below:



## 6 LED

Place the indication led so that it is clearly visible for the end user.

## 7 Labelling

The toy needs to be labelled with the BOX860 FCC ID. The label shall contain the information in the example below:

**Contains FCCID: X02BOX860**

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i) this device may not cause harmful interference and (ii) this device must accept any interference received, including interference that may cause undesired operation.