

# RF EXPOSURE REPORT

|           |                                                                           |
|-----------|---------------------------------------------------------------------------|
| Applicant | DOUBLEEAGLE INDUSTRY (CHINA)LIMITED                                       |
| Address   | XINGDA INDUSTRIAL PARK, CHENGHAI, SHANTOU CITY, GUANGDONG PROVINCE, CHINA |

|                                     |                                                                           |
|-------------------------------------|---------------------------------------------------------------------------|
| Manufacturer or Supplier            | DOUBLEEAGLE INDUSTRY (CHINA)LIMITED                                       |
| Address                             | XINGDA INDUSTRIAL PARK, CHENGHAI, SHANTOU CITY, GUANGDONG PROVINCE, CHINA |
| Product                             | REMOTE CONTROL CAR SERIES                                                 |
| Brand Name                          | N/A                                                                       |
| Model                               | E525-003                                                                  |
| Additional Model & Model Difference | E117-003, E118-003, E119-003, etc.; see item 1                            |
| Date of tests                       | Apr. 03, 2024 ~ Apr. 16, 2024                                             |

☒ FCC Part 2 (Section 2.1093)

☒ KDB 447498 D01 V06

☒ IEEE C95.1

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

|                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Tested by Loren Luo<br>Project Engineer / EMC Department                            | Approved by Glyn He<br>Assistant Manager / EMC Department                            |
|  |  |

Date: Apr. 30, 2024

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Test Report No.: FM2403WDG0305

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## RELEASE CONTROL RECORD

| ISSUE NO.     | REASON FOR CHANGE | DATE ISSUED   |
|---------------|-------------------|---------------|
| FM2403WDG0305 | Original release  | Apr. 30, 2024 |

## 1. CERTIFICATION

|                        |                                                                                                                                                                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FCC ID:</b>         | 2AAFASY-E525-003-07                                                                                                                                                                                                                                                                                                            |
| <b>PRODUCT:</b>        | REMOTE CONTROL CAR SERIES                                                                                                                                                                                                                                                                                                      |
| <b>BRAND NAME:</b>     | N/A                                                                                                                                                                                                                                                                                                                            |
| <b>MODEL NO.:</b>      | E525-003                                                                                                                                                                                                                                                                                                                       |
| <b>ADDITIONAL NO.:</b> | E117-003, E118-003, E119-003, E120-003, E194-003, E195-003, E196-003, E197-003, E205-003, E206-003, E208-003, E220-003, E221-003, E222-003, E223-003, E226-003, E227-003, E228-003, E229-003, E230-003, E672-003, E673-003, E674-003, E676-003, E677-003, E681-003, E682-003, E683-003, E684-003, E691-003, E709-003, E569-003 |
| <b>APPLICANT:</b>      | DOUBLEEAGLE INDUSTRY (CHINA)LIMITED                                                                                                                                                                                                                                                                                            |
| <b>STANDARDS:</b>      | FCC Part 2 (Section 2.1093)                                                                                                                                                                                                                                                                                                    |
|                        | KDB 447498 D01 V06                                                                                                                                                                                                                                                                                                             |
|                        | IEEE C95.1                                                                                                                                                                                                                                                                                                                     |

Note: Additional models (see above table) are identical with the test model E525-003 except the color of the appearance and model number for trading purpose.

## 2. RF EXPOSURE DEFINE

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, 16 where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances  $> 50$  mm, the SAR test exclusion threshold is determined according to the following:
- a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at  $> 1500$  MHz and  $\leq 6$  GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
- a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by  $[1 + \log(100/f(\text{MHz}))]$  for test separation distances  $> 50$  mm and  $< 200$  mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq 50$  mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

## 3. CLASSIFICATION

The antenna of this product, under normal use condition, is at less than 20cm away from the body of the user. So, this device is classified as **Portable Device**.

## 4. SAR TEST EXCLUSION THRESHOLDS

The tuned conducted Average Power (declared by client)

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| TX   | 2405-2474       | -39                | +2              | -41                   | -37                   |

The measured conducted Average Power

| Mode | Frequency (MHz) | Averaged Power (dBuV/m) | Averaged Power (dBm) |
|------|-----------------|-------------------------|----------------------|
| TX   | 2440            | 46.78                   | -38.54               |

Note:

$$E = \frac{\sqrt{30 PG}}{d}$$

E = Electric field strength in V/m

$$V/m = 10^{(dBuV/m - 120)/20}$$

P = Power in Watts

G = Antenna gain in dBi

d = Measurement distance in metres

Power  $\approx 0.000014$  (mW)

$$dBm = 10 \cdot \log_{10}(0.000014) \approx -38.54 \text{ (dBm)}$$

### SAR Test Exclusion Thresholds

| Frequency (MHz) | Maximum source-based time averaged conducted output power (dBm) | Minimum separation distance (mm) | Result of Eq. 1 | Limit for 1-g SAR | Limit for 10-g extremity SAR | Verdict         |
|-----------------|-----------------------------------------------------------------|----------------------------------|-----------------|-------------------|------------------------------|-----------------|
| 2405-2474       | -37                                                             | 5                                | 0.000062        | 3.0               | 7.5                          | Exempt from SAR |

### Conclusion

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.