# Maximum Permissible Exposure Evaluation

## FCC ID: 2A3DY-MEGA2024CON

According to KDB447498 D01 General RF Exposure Guidance v06

**EUT Specification**

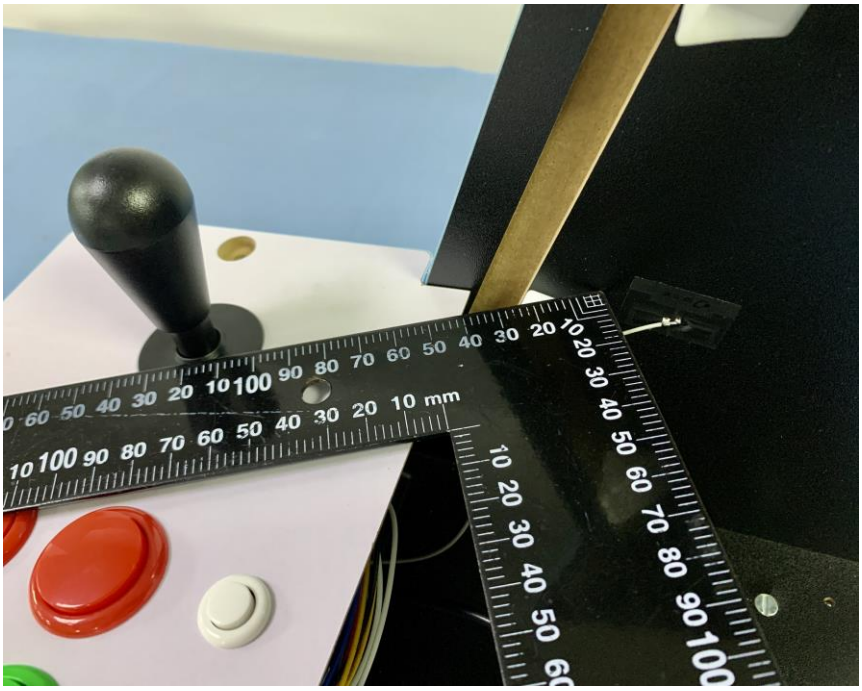
| | |
|---|---|
| Product Name: | Blaze Evercade Arcade Alpha Mega Man Edition - EFIGS/USK |
| Trade Mark: | EVERCADE |
| Model/Type Reference: | FG-MEGA-CON-EFIGS-ARC |
| Listed Model(s): | FG-STRE-CON-EFIGS-ARC, FG-STRE-CON-EFIGS-ARC-DEL, FG-MEGA-CON-EFIGS-ARC-DEL |
| Model Differences: | All these models are identical in the same PCB, layout, electrical circuit and enclosure. The difference is the model name. |
| Frequency Band (Operating) | WIFI: 2412~2462MHz |
| Device Category | ☒Portable (>50mm separation)<br>☐Mobile (>20cm separation)<br>☐Fixed (>20cm separation)<br>☐Others ___ |
| Exposure Classification | ☐Occupational/Controlled exposure (S=5mW/cm$^2$)<br>☒General Population/Uncontrolled exposure (S=1mW/cm$^2$) |
| Antenna Diversity | ☒Single antenna<br>☐Multiple antennas<br>☐TX diversity<br>☐RX diversity<br>☐TX/RX diversity |
| Antenna Gain (Max) | 1.74dBi |
| Evaluation Applied | ☒MPE Evaluation<br>☐SAR Evaluation |

**Limits for Maximum Permissible Exposure (MPE)**
**Limit:**

According to the 4.3 General SAR Test Exclusion Guidelines of KDB 447498 D01
**a)** For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [ √ $f_{(GHz)}$] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR
Where
-$f_{(GHz)}$ 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 values 3.0 and 7.5 are referred to as numeric thresholds in step b) below
The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 4.1 f) is applied to determine SAR test exclusion.

**b)** For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):
1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·($f_{(MHz)}$/150)]} mW, for 100 MHz to 1500 MHz
2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·10]} mW, for > 1500 MHz and ≤ 6 GHz

The following figure shows the shortest distance (50mm) from the antenna to the extremity when the wireless function is on.



**Measurement Result**

| Extremity exposure @ 50mm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Mode | Frequency (MHz) | Maximum Power (dBm) | Target Power (dBm) | Tune Up Tolerance (dB) | Max. Tune up Power (dBm) | Result | Limit (for 1-g SAR) | Verdict |
| 802.11b | 2437 | 18.65 | 18.50 | ±1 | 19.50 | 2.78 | 3.0 | Compiles |

Note:
1. Calculate in the worst-case mode.
2. Max. Tune Up Power is declared by manufacturer, and used to calculate.
3. For a more detailed features description, please refer to the RF Test Report.
4. The extremity is calculated at a distance of 50mm (by the manufacturer).

************************THE END*************************