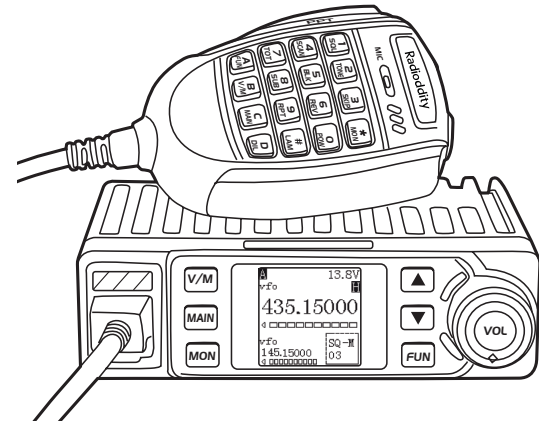


# Radioddity

## DB20-G



GMRS Car Mobile Radio

# Instruction Manual

www. Radioddity.com

## 1. QUICK GUIDING

### 1.1 Prepare work

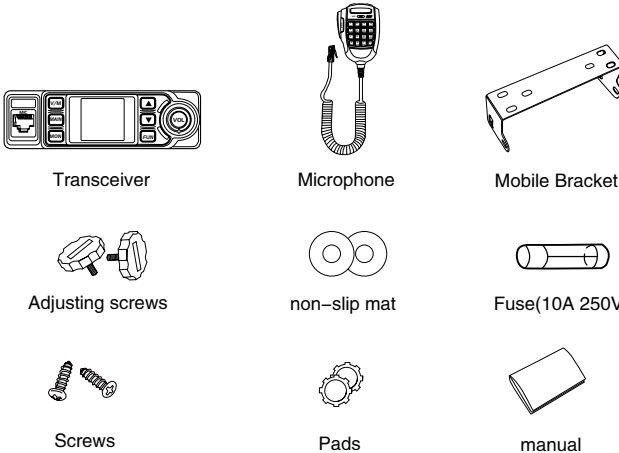
1. DC power supply: 12-14V, ≥ 10A
2. Car antenna: 136-174, 400-490MHz, ≥20w, SL16 connector
3. Magestic sucker

### 1.2 Quick Use

1. Open package , take out DB20-G radio and spares.
2. Connect power supply, microphone and antenna.
3. Turn on power supply, then turn DB20-G volume knob to power on DB20-G.
4. Choose wanted GMRS channel by DB20-G or its microphone to start communication.

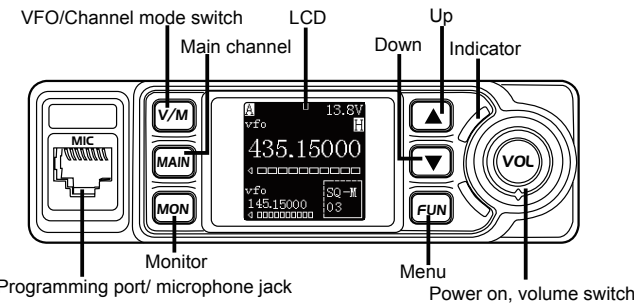
## 2. ACCESSORIES

### 2.1 Standard Accessories

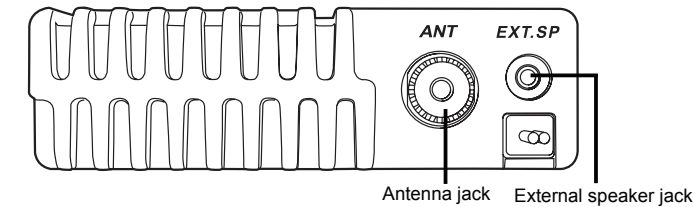


## 3. GETTING ACQUAINTED

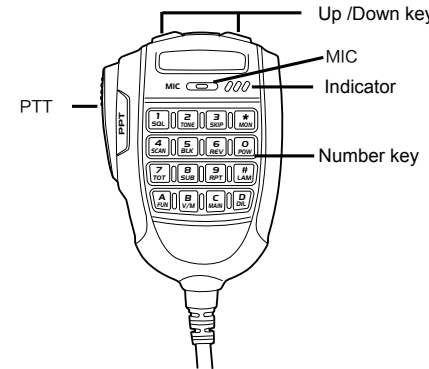
### 3.1 Front panel



### 3.2 Rear panel



### 3.3 Microphone



## 4. BASIC OPERATIONS

### 4.1 Power On/Off

1. Turn the Volume knob clockwise to turn on the radio, the radio LCD will display programmed text and emit a beep sound.
2. Power Off: Turn volume knob anti-clockwise until you hear ""click"" to turn off the radio

### 4.2 Adjusting the Volume

Turn volume knob clockwise to increase the "audio level" and anti-clockwise to reduce it.

### 4.3 Switch between Main Channel and Sub Channel

In standby status, press the microphone [A] key or front panel [MAIN] key to switch between main channel and sub channel. The top left corner of LCD will display current main channel.

### 4.4 Adjust Channel

1. Press microphone [V/M] key or front panel [V/M] key to switch the radio to channel mode, press microphone [UP] / [DN] key or front panel [▲] / [▼] key to select a channel upward or downward.
2. In channel mode, input three numbers by number key for its direct selection (eg:001 for channel 1).

### 4.5 Store channel

In standby status, press the microphone [A] key, the top left corner will display "Func", then press [UP] KEY, the LCD bottom left corner will display Save to XXX, now press [UP] / [DN] key to select a channel number, hold [MON] key to store the new frequency and return to standby.

▲ » XXX reflects for the channel number, if LCD displays "Null" under "Save TO XXX", means that the current channel is empty.

### 4.6 Channel Delete

1. In channel mode, press microphone [A] key, then press [DN] key, the LCD displays "Delete XXX" and frequency, press [UP] / [DN] key to select the channel to be deleted, then hold [A] key for deleting the current channel.

▲ » "XXX" reflects for the channel number, the LCD displays "Null" after the channel is deleted.

### 4.7 Receiving

Select a receiving channel or frequency for receiving call, if the RX signal is week, hold front panel [MON] key or microphone [MON] key to monitor weak signals.

RX frequency range

1. GMRS channel: GMRS frequency
2. UHF/VHF Full band: 136-174/400-490MHz

3. FM radio 65-108Mhz: available in frequency mode only. user can input frequency by microphone number key like 8,8,,0,0,0,0,0, is 88Mhz.

## 4. BASIC OPERATION

▲ » When the RX icon and field strength flashes, but can not hear the calling, it means current channel receive a matching carrier but unmatched signaling. Refer to CTCSS/DCS CODE or Optional Signaling setup).

### 4.8 Transmitting

Hold [PTT] and speak into microphone. the radio start transmit, the screen shows red TX and field strength. Hold the microphone approximately 2.5-5.0cm from your lips and speak into the microphone at your normal voice level: it will help to transfer best audio signal.

Note:

1. According to FCC Part 95E standard, CH 8- CH14 are for 0.5W FRS channels, DB20-G minimum power 5W, maximum power 20W, so CH8-CH14 not allow transmitting.
2. Follow Part 95E rule, DB20-G only allow transmitting on GMRS frequencies.

### 4.9 Squelch Off

In standby, press microphone [MON] key or front panel [MON] key to turn off squelch, the radio will monitor weak signal.

### 4.10 Emergency Alarm

In standby, hold [MAIN] key, release it until the LCD displays ALARM, the alarm function turns on. Program emergency alarm rule shall be programmed by PC software.

### 4.11 Keypad Lockout

In standby, hold [FUN] key or [A] key, the radio emit Du sound, the LCD displays LOCK. Now release the key, the keypad is locked. To turn off key lock, hold [FUN] key or [A] key until a "Du Du" tone signal is heard, the LOCK icon disappears, now you may release the key.

### 4.12 Transmit Tone Pulse Frequency

Hold PTT and [DN] key will transmit selected Pre-programmed tone pulse frequency.

### 4.13 VFO Scan and Channel Scan

1. VFO scan: In VFO mode, press microphone [A] key or [4] key to start VFO scan. If the radio has program PL1, PH1, ,PL2, PH2,frequency( in the bottom of channel list), VFO scan will between PL1-PH1 and PL2-PH2.

Note: PL and PH is valid when current working frequency is within PL1-PH1 or PL2-PH2

2. Channel Scan: In channel mode press microphone [A] key and then press [4] key to start channel scan. Channel scan setting shall be programmed by PC software.

### 4.14 VOX On/Off control

In standby, hold [V/M] key until LCD displays VOX icon, repeater this step or repower on radio to turn off VOX function.

▲ Note: Before turn on VOX, please set VOX level in 26th menu.

### 4.15 How to Install Driver and Start Programming

1. After install PC software, click "Start "menu in computer, under "ALL PROGRAMS" menu, choose and click "USB To Com port" in DB20-G program, install "USB To Com port" driver by indication.
2. Connect the optional USB Programming cable.
3. Click "DB20-G" programm under "ALL PROGRAMS" menu. click "OK" to start programming software.

## 5. SHORTCUT OPERATION

Press microphone [A] key and then press number key to fast enter following functions, then press [UP] / [DN] key to select the value. press [PTT] key or [A] key for storing.

### Function list

| No. | Function name              | Combination Key |
|-----|----------------------------|-----------------|
| 1   | Squelch level setting      | [A] + [1]       |
| 2   | Optional signaling setting | [A] + [2]       |
| 3   | Scan Skip                  | [A] + [3]       |
| 4   | Scan                       | [A] + [4]       |
| 5   | Busy channel lockout       | [A] + [5]       |
| 6   | Time out timer             | [A] + [7]       |
| 7   | Sub channel on/off switch  | [A] + [8]       |
| 8   | Function Menu              | [A] + [MON]     |
| 9   | Power setting.             | [A] + [O]       |
| 10  | LCD brightless             | [A] + [#]       |
| 11  | DTMF Code check            | [A] + [D]       |

▲ » In DTMF check mode

When check DTMF code, press PTT will send current DTMF code. To revise DTMF code, press [A] key and then press [D] key to enter edit mode. input DTMF code by number keys, then press PTT to transmit the code and store.

6. FUNCTION SETTING

6.1 By Front Panel Key

- 1. Press **[FUN]** key to enter main menu.
- 2. Press **[V/M]** key or **[MAIN]** key to choose function.
- 3. Press **[▲] / [▼]** key to choose value.
- 4. Press **[FUN]** key or **[MON]** key to store and exit.
- ▲ » When setting DCS code, **[MON]** key is for switch between positive and inverse code.

6.2 By Microphone Key

- 1. Press **[A<sub>MON</sub>]** key and then press **[\*<sub>MON</sub>]** key to enter menu.
- 2. Press **[B<sub>V/M</sub>]** key or **[C<sub>MAIN</sub>]** key to choose function.
- 3. Press **[UP] / [DN]**key to choose value.
- 4. Press **[B<sub>ON</sub>]** key to store and exit
- ▲ » When setting DCS code, **[SOL]** key is for switch between Positive and inverse code.
- [SKIP]** key is for choose special DCS.

Function list

| No. | Function name      | Setting value                  |
|-----|--------------------|--------------------------------|
| 1   | TX CTC/DCS         | 67Hz~254.1Hz、000N~777I         |
| 2   | RX CTC/DCS         | 67Hz~254.1Hz、000N~777I         |
| 3   | TX/RX CTC/DCS      | 67Hz~254.1Hz、000N~777I         |
| 4   | Optional signaling | OFF、DTMF、2Tone、5Tone           |
| 5   | Squelch mode       | SQ、CT/DCS、Tone、C&T、C/T         |
| 6   | Step size          | 2.5K~50K                       |
| 7   | Band width         | WIDE ( 25K ) 、NARROW ( 12.5K ) |
| 10  | Busy channel Lock  | OFF、REPEATER、BUSY              |
| 11  | Channel name       | 0~z                            |
| 12  | TX OFF             | ON、OFF                         |
| 15  | Compander          | ON、OFF                         |

6. FUNCTION SETTING

| No. | Function name        | Value                        |
|-----|----------------------|------------------------------|
| 16  | NC(Noise reduction)  | ON、OFF                       |
| 17  | 5Tone                | 1~100、 Press PTT to transmit |
| 18  | 2Tone                | 1~32、 Press PTT to transmit  |
| 19  | Sub channel display  | FREQ、VOLT、OFF                |
| 20  | Key beep             | ON、OFF                       |
| 21  | Time out timer       | 1~30Min、OFF                  |
| 22  | DMTF transmit time   | 50ms~500ms                   |
| 23  | Squelch level        | OFF、1~9                      |
| 24  | Scan pause time      | 5ST、10ST、15ST、2SP            |
| 25  | LCD brightness       | 1~5                          |
| 26  | VOX level            | OFF、1~9                      |
| 27  | VOX delay            | 0.5~5 Second                 |
| 28  | Tone burst frequency | 1750Hz、2100Hz、1000Hz、1450Hz  |
| 29  | Channel display      | FREQ、CH、NAME                 |
| 30  | Reset                | FACTORY? INITIALIZE?         |

6.3 Reset Factory Default

- If your radio seems to be malfunctioning because of wrong operation or setup, this function will resume all setup and channels to factory default.
- 1. Press front panel **[MAIN]** key to enter main MENU list.
  - 2. Press **[V/M]** or **[MAIN]** key to chooe 30th function, the LCD display reset options.
  - 3. Press **[▲] / [▼]** key to chooe “FACTORY?” 。
  - 4. Hold **[FUN]** key, until the radio re-power on.
- After reset, all channel and fuction setting will resume default value.
- ▲ » If choose “INITIALIZE?” , only function setting value will resume to default setting.

7. SPECIFICAITONS

| GENERAL                      |                                                                                                      |                     |
|------------------------------|------------------------------------------------------------------------------------------------------|---------------------|
| Frequency Range              | TX1: 462.5625-462.7125MHz (5W)<br>TX2: 462.550-467.725MHz<br>RX: 136~174MHz, 400~480MHz<br>65~108MHz |                     |
| Channel Spacing              | 12.5K/25K                                                                                            |                     |
| Channel Number               | 500 channels                                                                                         |                     |
| Operating Voltage            | DC 13.8V±15%                                                                                         |                     |
| Squelch                      | Carrier/ CTCSS/DCS/5Tone/2Tone/DTMF                                                                  |                     |
| Frequency Stability          | ±2.5ppm                                                                                              |                     |
| Operating Temperature        | -20℃ ~ +60℃                                                                                          |                     |
| Dimensions(mm)               | 124x101x36mm                                                                                         |                     |
| Weight                       | 0.45kg (main unit)                                                                                   |                     |
| RECEIVER                     |                                                                                                      |                     |
|                              | Wide band                                                                                            | Narrow band         |
| Sensitivity (12dB Sinad)     | ≤ 0.25μV                                                                                             | ≤ 0.35μV            |
| Adjacent Channel Selectivity | ≥ 70dB                                                                                               | ≥ 60dB              |
| Audio Response               | +1~3dB(0.3~3KHz)                                                                                     | +1~3dB(0.3~2.55KHz) |
| Hum & Noise                  | ≥ 45dB                                                                                               | ≥ 40dB              |
| Audio distortion             | <3%                                                                                                  |                     |
| Audio power output           | >2W@10%                                                                                              |                     |
| TRANSMITTER                  |                                                                                                      |                     |
|                              | Wide band                                                                                            | Narrow band         |
| Power - USA version          | 462.5625-462.7125MHz (5W)<br>462.550-467.725MHz (18W)                                                |                     |
| Modulation                   | 16KΦF3E                                                                                              | 11KΦF3E             |
| Adjacent Channel Powe        | ≥ 70dB                                                                                               | ≥ 60dB              |
| Hum & Noise                  | ≥ 40dB                                                                                               | ≥ 36dB              |
| Spurious Emission            | ≥ 60dB                                                                                               | ≥ 60dB              |
| Audio Response               | +1~3dB(0.3~3KHz)                                                                                     | +1~3dB(0.3~2.55KHz) |
| Audio Distortion             | ≤ 5%                                                                                                 |                     |

8. ATTACHED CHART

51 groups CTCSS Tone Frequency(Hz)

| No. | Freq.(Hz) | No. | Freq.(Hz) | No. | Freq. (Hz) | No. | Freq. (Hz) | No. | Freq. (Hz) |
|-----|-----------|-----|-----------|-----|------------|-----|------------|-----|------------|
| 1   | 62.5      | 12  | 94.8      | 23  | 136.5      | 34  | 177.3      | 45  | 218.1      |
| 2   | 67.0      | 13  | 97.4      | 24  | 141.3      | 35  | 179.9      | 46  | 225.7      |
| 3   | 69.3      | 14  | 100.0     | 25  | 146.2      | 36  | 183.5      | 47  | 229.1      |
| 4   | 71.9      | 15  | 103.5     | 26  | 151.4      | 37  | 196.2      | 48  | 233.6      |
| 5   | 74.4      | 16  | 107.2     | 27  | 156.7      | 38  | 189.9      | 49  | 241.8      |
| 6   | 77.0      | 17  | 110.9     | 28  | 159.8      | 39  | 192.8      | 50  | 250.3      |
| 7   | 79.7      | 18  | 114.8     | 29  | 162.2      | 40  | 196.6      | 51  | 254.1      |
| 8   | 82.5      | 19  | 118.8     | 30  | 165.5      | 41  | 199.5      |     |            |
| 9   | 85.4      | 20  | 123.0     | 31  | 167.9      | 42  | 203.5      |     |            |
| 10  | 88.5      | 21  | 127.3     | 32  | 171.3      | 43  | 206.5      |     |            |
| 11  | 91.5      | 22  | 131.8     | 33  | 173.8      | 44  | 210.7      |     |            |

1024 groups DCS Code

| Code No. | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) | Code No. | DSC (Octal) |
|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|
| 1.       | 000         | 2.       | 001         | 3.       | 002         | 4.       | 003         | 5.       | 004         | 6.       | 005         | 7.       | 006         |
| 8.       | 007         | 9.       | 010         | 10.      | 011         | 11.      | 012         | 12.      | 013         | 13.      | 014         | 14.      | 015         |
| 15.      | 016         | 16.      | 017         | 17.      | 020         | 18.      | 021         | 19.      | 022         | 20.      | 023         | 21.      | 024         |
| 22.      | 025         | 23.      | 026         | 24.      | 027         | 25.      | 030         | 26.      | 031         | 27.      | 032         | 28.      | 033         |
| 29.      | 034         | 30.      | 035         | 31.      | 036         | 32.      | 037         | 33.      | 040         | 34.      | 041         | 35.      | 042         |
| 36.      | 043         | 37.      | 044         | 38.      | 045         | 39.      | 046         | 40.      | 047         | 41.      | 050         | 42.      | 051         |
| 43.      | 052         | 44.      | 053         | 45.      | 054         | 46.      | 055         | 47.      | 056         | 48.      | 057         | 49.      | 060         |
| 50.      | 061         | 51.      | 062         | 52.      | 063         | 53.      | 064         | 54.      | 065         | 55.      | 066         | 56.      | 067         |
| 57.      | 070         | 58.      | 071         | 59.      | 072         | 60.      | 073         | 61.      | 074         | 62.      | 075         | 63.      | 076         |
| 64.      | 077         | 65.      | 100         | 66.      | 101         | 67.      | 102         | 68.      | 103         | 69.      | 104         | 70.      | 105         |
| 71.      | 106         | 72.      | 107         | 73.      | 110         | 74.      | 111         | 75.      | 112         | 76.      | 113         | 77.      | 114         |
| 78.      | 115         | 79.      | 116         | 80.      | 117         | 81.      | 120         | 82.      | 121         | 83.      | 122         | 84.      | 123         |
| 85.      | 124         | 86.      | 125         | 87.      | 126         | 88.      | 127         | 89.      | 130         | 90.      | 131         | 91.      | 132         |
| 92.      | 133         | 93.      | 134         | 94.      | 135         | 95.      | 136         | 96.      | 137         | 97.      | 140         | 98.      | 141         |
| 99.      | 142         | 100.     | 143         | 101.     | 144         | 102.     | 145         | 103.     | 146         | 104.     | 147         | 105.     | 150         |
| 106.     | 151         | 107.     | 152         | 108.     | 153         | 109.     | 154         | 110.     | 155         | 111.     | 156         | 112.     | 157         |
| 113.     | 160         | 114.     | 161         | 115.     | 162         | 116.     | 163         | 117.     | 164         | 118.     | 165         | 119.     | 166         |
| 120.     | 167         | 121.     | 170         | 122.     | 171         | 123.     | 172         | 124.     | 173         | 125.     | 174         | 126.     | 175         |
| 127.     | 176         | 128.     | 177         |          |             |          |             |          |             |          |             |          |             |

|      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| 129. | 200 | 130. | 201 | 131. | 202 | 132. | 203 | 133. | 204 | 134. | 205 | 135. | 206 | 136. | 207 |
| 137. | 210 | 138. | 211 | 139. | 212 | 140. | 213 | 141. | 214 | 142. | 215 | 143. | 216 | 144. | 217 |
| 145. | 220 | 146. | 221 | 147. | 222 | 148. | 223 | 149. | 224 | 150. | 225 | 151. | 226 | 152. | 227 |
| 153. | 230 | 154. | 231 | 155. | 232 | 156. | 233 | 157. | 234 | 158. | 235 | 159. | 236 | 160. | 237 |
| 161. | 240 | 162. | 241 | 163. | 242 | 164. | 243 | 165. | 244 | 166. | 245 | 167. | 246 | 168. | 247 |
| 169. | 250 | 170. | 251 | 171. | 252 | 172. | 253 | 173. | 254 | 174. | 255 | 175. | 256 | 176. | 257 |
| 177. | 260 | 178. | 261 | 179. | 262 | 180. | 263 | 181. | 264 | 182. | 265 | 183. | 266 | 184. | 267 |
| 185. | 270 | 186. | 271 | 187. | 272 | 188. | 273 | 189. | 274 | 190. | 275 | 191. | 276 | 192. | 277 |
| 193. | 300 | 194. | 301 | 195. | 302 | 196. | 303 | 197. | 304 | 198. | 305 | 199. | 306 | 200. | 307 |
| 201. | 310 | 202. | 311 | 203. | 312 | 204. | 313 | 205. | 314 | 206. | 315 | 207. | 316 | 208. | 317 |
| 209. | 320 | 210. | 321 | 211. | 322 | 212. | 323 | 213. | 324 | 214. | 325 | 215. | 326 | 216. | 327 |
| 217. | 330 | 218. | 331 | 219. | 332 | 220. | 333 | 221. | 334 | 222. | 335 | 223. | 336 | 224. | 337 |
| 225. | 340 | 226. | 341 | 227. | 342 | 228. | 343 | 229. | 344 | 230. | 345 | 231. | 346 | 232. | 347 |
| 233. | 350 | 234. | 351 | 235. | 352 | 236. | 353 | 237. | 354 | 238. | 355 | 239. | 356 | 240. | 357 |
| 241. | 360 | 242. | 361 | 243. | 362 | 244. | 363 | 245. | 364 | 246. | 365 | 247. | 366 | 248. | 367 |
| 249. | 370 | 250. | 371 | 251. | 372 | 252. | 373 | 253. | 374 | 254. | 375 | 255. | 376 | 256. | 377 |
| 257. | 400 | 258. | 401 | 259. | 402 | 260. | 403 | 261. | 404 | 262. | 405 | 263. | 406 | 264. | 407 |
| 265. | 410 | 266. | 411 | 267. | 412 | 268. | 413 | 269. | 414 | 270. | 415 | 271. | 416 | 272. | 417 |
| 273. | 420 | 274. | 421 | 275. | 422 | 276. | 423 | 277. | 424 | 278. | 425 | 279. | 426 | 280. | 427 |
| 281. | 430 | 282. | 431 | 283. | 432 | 284. | 433 | 285. | 434 | 286. | 435 | 287. | 436 | 288. | 437 |
| 289. | 440 | 290. | 441 | 291. | 442 | 292. | 443 | 293. | 444 | 294. | 445 | 295. | 446 | 296. | 447 |
| 297. | 450 | 298. | 451 | 299. | 452 | 300. | 453 | 301. | 454 | 302. | 455 | 303. | 456 | 304. | 457 |
| 305. | 460 | 306. | 461 | 307. | 462 | 308. | 463 | 309. | 464 | 310. | 465 | 311. | 466 | 312. | 467 |
| 313. | 470 | 314. | 471 | 315. | 472 | 316. | 473 | 317. | 474 | 318. | 475 | 319. | 476 | 320. | 477 |
| 321. | 500 | 322. | 501 | 323. | 502 | 324. | 503 | 325. | 504 | 326. | 505 | 327. | 506 | 328. | 507 |
| 329. | 510 | 330. | 511 | 331. | 512 | 332. | 513 | 333. | 514 | 334. | 515 | 335. | 516 | 336. | 517 |
| 337. | 520 | 338. | 521 | 339. | 522 | 340. | 523 | 341. | 524 | 342. | 525 | 343. | 526 | 344. | 527 |
| 345. | 530 | 346. | 531 | 347. | 532 | 348. | 533 | 349. | 534 | 350. | 535 | 351. | 536 | 352. | 537 |
| 353. | 540 | 354. | 541 | 355. | 542 | 356. | 543 | 357. | 544 | 358. | 545 | 359. | 546 | 360. | 547 |
| 361. | 550 | 362. | 551 | 363. | 552 | 364. | 553 | 365. | 554 | 366. | 555 | 367. | 556 | 368. | 557 |
| 369. | 560 | 370. | 561 | 371. | 562 | 372. | 563 | 373. | 564 | 374. | 565 | 375. | 566 | 376. | 567 |
| 377. | 570 | 378. | 571 | 379. | 572 | 380. | 573 | 381. | 574 | 382. | 575 | 383. | 576 | 384. | 577 |
| 385. | 600 | 386. | 601 | 387. | 602 | 388. | 603 | 389. | 604 | 390. | 605 | 391. | 606 | 392. | 607 |
| 393. | 610 | 394. | 611 | 395. | 612 | 396. | 613 | 397. | 614 | 398. | 615 | 399. | 616 | 400. | 617 |
| 401. | 620 | 402. | 621 | 403. | 622 | 404. | 623 | 405. | 624 | 406. | 625 | 407. | 626 | 408. | 627 |
| 409. | 630 | 410. | 631 | 411. | 632 | 412. | 633 | 413. | 634 | 414. | 635 | 415. | 636 | 416. | 637 |
| 417. | 640 | 418. | 641 | 419. | 642 | 420. | 643 | 421. | 644 | 422. | 645 | 423. | 646 | 424. | 647 |
| 425. | 650 | 426. | 651 | 427. | 652 | 428. | 653 | 429. | 654 | 430. | 655 | 431. | 656 | 432. | 657 |
| 433. | 660 | 434. | 661 | 435. | 662 | 436. | 663 | 437. | 664 | 438. | 665 | 439. | 666 | 440. | 667 |
| 441. | 670 | 442. | 671 | 443. | 672 | 444. | 673 | 445. | 674 | 446. | 675 | 447. | 676 | 448. | 677 |
| 449. | 700 | 450. | 701 | 451. | 702 | 452. | 703 | 453. | 704 | 454. | 705 | 455. | 706 | 456. | 707 |
| 457. | 710 | 458. | 711 | 459. | 712 | 460. | 713 | 461. | 714 | 462. | 715 | 463. | 716 | 464. | 717 |
| 465. | 720 | 466. | 721 | 467. | 722 | 468. | 723 | 469. | 724 | 470. | 725 | 471. | 726 | 472. | 727 |
| 473. | 730 | 474. | 731 | 475. | 732 | 476. | 733 | 477. | 734 | 478. | 735 | 479. | 736 | 480. | 737 |
| 481. | 740 | 482. | 741 | 483. | 742 | 484. | 743 | 485. | 744 | 486. | 745 | 487. | 746 | 488. | 747 |
| 489. | 750 | 490. | 751 | 491. | 752 | 492. | 753 | 493. | 754 | 494. | 755 | 495. | 756 | 496. | 757 |
| 497. | 760 | 498. | 761 | 499. | 762 | 500. | 763 | 501. | 764 | 502. | 765 | 503. | 766 | 504. | 767 |
| 505. | 770 | 506. | 771 | 507. | 772 | 508. | 773 | 509. | 774 | 510. | 775 | 511. | 776 | 512. | 777 |