GT King/GT King Pro

There are multiple ways to do this. It is advisable to already be extremely familiar with flashing Android firmwares onto ARM-based TV boxes, as a lot can go wrong and it's very easy to end up with a bricked device. Be weary.

Big alert box to make you aware that there is a very high chance of bricking the device when attempting this. Once done there is no way to go back to how it came from the factory.

Method 1: Flash using the GT King itself booted into CoreElec

The GT King/King Pro comes with an 8GB SD card. It is recommended to throw this out and buy a new SD card that's at least 16GB for use with Batocera, as that satisfies the minimum size requirements if you need to use the card itself for Batocera. It may not be required, depending on your box. It is possible to flash over the firmware from the old card to the new one if desired, but here we will be using CoreElec.

1. Boot into CoreElec and copy the Batocera image over to somewhere easily accessible. The “storage” folder is recommended.
2. Connect to the box via SSH.
3. Run `ls`. This will show the current directory, which can be used to confirm that the Batocera image was copied over correctly. In this example, the image is `batocera-s922x-gtkinpro-33-20220203.img`.
4. Then run `parted -l` to see the partitions of the current drive. Note down which partition
contains the 62.5GB internal storage (its “model” will appear as MMC CJNB4R) and its mounted location. In this example, /dev/mmcblk0.

```
# CoreELEC
# https://coreelec.org

CoreELEC (official): 9.2.8 (Amlogic-ng.arm)
CoreELEC:~ # ls
backup lost+found pictures tvshows
bato.img music screenshots videos
CoreELEC:~ # parted -l
Model: SanDisk SDDR-B531 (scsi)
Disk /dev/sda: 15.9GB
Sector size (logical/physical): 512B/512B
Partition Table: mdrop
Disk Flags:
```

<table>
<thead>
<tr>
<th>Number</th>
<th>Start</th>
<th>End</th>
<th>Size</th>
<th>Type</th>
<th>File system</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4194KB</td>
<td>541MB</td>
<td>537MB</td>
<td>primary</td>
<td>fat16</td>
<td>boot, lba</td>
</tr>
<tr>
<td>2</td>
<td>541MB</td>
<td>15.9GB</td>
<td>15.4GB</td>
<td>primary</td>
<td>ext4</td>
<td></td>
</tr>
</tbody>
</table>

Going beyond this point it is possible to brick the device. Be 100% sure that all the information is correct and that you are aware of the risks.
5. Once you have confirmed that the image is present and the correct internal eMMC block to install into, run the following command:

```
dd if=<path/to/image/file> of=<path/to/internal/emmc> bs=1M && sync
```

- In this example:

```
dd if=batocera-s922x-gtkinpro-33-20220203.img of=/dev/mmcblk0
bs=1M && sync
```

6. Confirm that the Batocera image has been flashed by running parted

```
<path/to/internal/emmc> print:
```

```
CoreELEC: # parted /dev/mmcblk0 print
Model: MMC emmc0 (e5/mmc)
Disk /dev/mmcblk0: 62.65B
Sector size (logical/physical): 512B/512B
Partition Table: msdos
Disk Flags:

emtet  Start  End  Size  Type File system Flags
   1  494MB  322MB  322MB  primary  fat32  boot, lba
   2  322MB  972MB  650MB  primary
```

7. Power down the device and remove the CoreElec SD card.

**Booting into Batocera after using method 1**

You have successfully flashed Batocera onto the internal storage. But now we need to boot it. Depending on the exact box, there could be various additional steps required. Try the following in the order specified:

1. Just boot it up again. If it fails to boot, move onto the next step.
2. While it is disconnected to the power, press the tv box reset button. While keeping it pressed down, connect the power. Once you see the Batocera splash screen, it is okay to release the button. If Batocera still does not boot, move onto the next step.
3. Flash Batocera to the SD card, insert it into the box and repeat step 2.

If it still fails after this... RIP. You were warned.