Claims:

.1. A parking display assembly for use in a carpark including;
a housing including at least one display panel; and
at least one e-paper screen mounted on a said display panel, the e-paper screen displaying parking information provided by an electronic vehicle parking management system of the carpark;
wherein the display assembly is mountable at or adjacent a parking lot of the carpark with the at least one display panel facing a driveway of the carpark, such that the parking information displayed by the display panel is visible from the driveway; and
wherein the e-paper screen is adapted to continuously display parking information relevant to a reserved status of the parking lot, and
wherein the display assembly further includes a licence plate reader (LPR) camera for reading a licence plate of a vehicle located in the parking lot, and a camera processing module for processing the visual data provided by the LPR camera, the camera processing module including a checksum filter for comparing multiple LPR images to thereby maximise licence plate reading accuracy.

2. A parking display assembly according to claim 1, wherein the LPR camera is located within the housing.

3. A parking display assembly according to claim 1, wherein the LPR camera is located in a separate camera housing.

4. A parking display assembly according to claim 2 or 3, wherein the camera processing module is built into the housing.

5. A parking display assembly according to any one of the preceding claims, the camera processing module including, a deep learning module for improving licence plate reading performance.

6. A parking display assembly according to any one of the preceding claims, wherein the LPR camera is further adapted to record visual information of a vehicle parked in the parking lot including vehicle colour and brand.

7. A parking display assembly according to any one of claims 1 to 5, further including a second camera for recording visual information of a vehicle parked in the parking lot including vehicle colour and brand.

8. A parking display assembly according to any one of the preceding claims, including a front said display panel facing a driveway of the carpark, and a rear said display panel facing the parking lot when the display assembly is mounted within the carpark, wherein a front and rear said e-paper screen is respectively mounted on the front and rear display panels.

9. A parking display assembly according to any one of the preceding claims, including a screen light for illuminating the e-paper screen or each said e-paper screen in low light conditions.

10. A parking display assembly according to any one of the preceding claims, further including a sound emitting device for providing an audio warning signal.

11. A parking display assembly according to any one of the preceding claims, further including an LED indicator mounted on the housing for providing additional parking information relating to the parking lot.

12. A parking display assembly according to any one of the preceding claims, wherein the e-paper screen is controlled by an electronic control system, and the electronic control system is located within the housing.

13. An electronic vehicle parking management system for a carpark having a plurality of parking lots, and including a plurality of parking display assemblies including a housing including at least one display panel; and at least one e-paper screen mounted on a said display panel, the e-paper screen displaying parking

information provided by an electronic vehicle parking management system of the carpark;
wherein the display assembly is mountable at or adjacent a parking lot of the carpark with the at least one display panel facing a driveway of the carpark, such that the parking information displayed by the display panel is visible from the driveway, and
wherein the e-paper screen is adapted to continuously display parking information relevant to a reserved status of the parking lot, and
wherein the display assembly further includes a licence plate reader (LPR) camera for reading a licence plate of a vehicle located in the parking lot, and a camera processing module for processing the visual data provided by the LPR camera, the camera processing module including a checksum filter for comparing multiple LPR images to thereby maximise licence plate reading accuracy.

14. An electronic vehicle parking management system for a carpark according to claim 13, wherein the LPR camera is located within the housing in each said parking display assembly.

15. An electronic vehicle parking management system for a carpark according to claim 13, wherein the LPR camera is located in a separate camera housing in each said parking display assembly.

16. An electronic vehicle parking management system for a carpark according to claim 14 or 15, wherein the camera processing module is built into the housing.

17. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 16, the camera processing module in each said parking display assembly including a deep learning module for improving licence plate reading performance.

18. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 17, wherein the LPR camera is further adapted to record visual information of a vehicle parked in the parking lot including vehicle colour and brand in each said parking display assembly.

19. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 17, each said parking display assembly further including a second camera for recording visual information of a vehicle parked in the parking lot including vehicle colour and brand.

20. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 19, including a front said display panel facing a driveway of the carpark, and a rear said display panel facing the parking lot when the display assembly is mounted within the carpark, wherein a front and rear said e-paper screen is respectively mounted on the front and rear display panels.

21. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 20, each parking display assembly including a screen light for illuminating the e-paper screen or each said e-paper screen in low light conditions.

22. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 21, each parking display assembly further including a sound emitting device for providing an audio warning signal.

23. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 22, further including an LED indicator mounted on the housing of each said parking display assembly for providing additional parking information relating to the parking lot.

24. An electronic vehicle parking management system for a carpark according to any one of claims 13 to 23, wherein the e-paper screen is controlled by an electronic control system, and the electronic control system is located within the housing of each said parking display assembly.