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.

2. A parking display assembly according to claim 1 further including, a licence plate reader (LPR) camera for reading a licence plate of a vehicle located in the parking lot.

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

4. A parking display assembly according to claim 2, wherein the LPR camera is located in a separate camera housing.

5. A parking display assembly according to claim 3 or 4, including a camera processing module built into the housing for processing the visual data provided by the LPR camera.

6. A parking display assembly according to claim 5, the camera processing module including, deep learning module for improving licence plate reading performance.

7. A parking display assembly according to claim 5 or 6, the camera processing module including a checksum filter for comparing multiple LPR images to thereby maximise licence plate reading accuracy.

8. A parking display assembly according to any one of claims 2 to 7, wherein the LPR camera is further adapted to record visual information of a vehicle parked in the parking lot including vehicle colour and brand.

9. A parking display assembly according to any one of claims 2 to 7, further including a second camera for recording visual information of a vehicle parked in the parking lot including vehicle colour and brand.

10. 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.

11. 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.

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

13. 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.

14. 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.

15. 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.

16. An electronic vehicle parking management system for a carpark according to claim 15, each said parking display assembly further including, a licence plate reader (LPR) camera for reading a licence plate of a vehicle located in the parking lot.

17. An electronic vehicle parking management system for a carpark according to claim 16, wherein the LPR camera is located within the housing in each said parking display assembly.

18. An electronic vehicle parking management system for a carpark according to claim 16, wherein the LPR camera is located in a separate camera housing in each said parking display assembly.

19. An electronic vehicle parking management system for a carpark according to claim 17 or 18, each said parking display assembly including a camera processing module built into the housing for processing the visual data provided by the LPR camera.

20. An electronic vehicle parking management system for a carpark according to claim 19, the camera processing module in each said parking display assembly including a deep learning module for improving licence plate reading performance.

21. An electronic vehicle parking management system for a carpark according to claim 19 or 20, the camera processing module in each said parking display assembly

including a checksum filter for comparing multiple LPR images to thereby maximise licence plate reading accuracy.

22. An electronic vehicle parking management system for a carpark according to any one of claims 16 to 21, 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.

23. An electronic vehicle parking management system for a carpark according to any one of claims 19 to 21, 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.

24. An electronic vehicle parking management system for a carpark according to any one of claims 15 to 23, 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.

25. An electronic vehicle parking management system for a carpark according to any one of claims 15 to 24, each parking display assembly including a screen light for illuminating the e-paper screen or each said e-paper screen in low light conditions.

26. An electronic vehicle parking management system for a carpark according to any one of claims 15 to 25, each parking display assembly further including a sound emitting device for providing an audio warning signal.

27. An electronic vehicle parking management system for a carpark according to any one of claims 15 to 26, 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.

28. An electronic vehicle parking management system for a carpark according to any one of claims 15 to 27, 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.