

A TRANSPORTATION STATUS DISPLAY SYSTEM**Field Of Invention**

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The invention generally relates to displays. In particular, the invention relates to display systems for transportation means.

Background

Presently, passengers who wish to hail taxis from a distance and in daylight are not able to tell whether the taxis have been hired or are available for hire until the taxis approach or become closer to the passengers. This situation, however, does not pose a problem for passengers at night since the passengers can determine whether the taxis are available for hire by looking at, for example, the lighted display panels mounted on the rooftops of the taxis. The rooftop lighted display panels are usually visible to the passengers from a distance in the dark, as opposed to being less visible in daylight due to poorer contrast conditions. Moreover, the rooftop lighted display panels are usually changed manually for displaying different signs for reflecting the different hiring status of the taxis. Therefore, taxi drivers are usually required to carry different exchangeable rooftop display panels in the taxis and to stop driving, therefore halting operations, when exchanging the rooftop display panels.

Hence, there is a need for a system for displaying information indicating the hiring status of a taxi, or the status of other similar transportation means, in which such displayed information is visible from a distance both in daylight and in the dark, and variable according to the hiring status of the taxi.

Summary

In accordance with an aspect of the invention, a system for displaying information in relation to the status of transportation means is provided. The system comprises a multi-colored display mountable on a transportation means for displaying multi-colored visual information, and a display controller for controlling the multi-colored display. The system also comprises a logic controller for providing logic control in relation to the display of multi-colored visual information dependent on the information regarding the status of the transportation means.

Preferably, the system further comprises a communication means for communicating information regarding the status of the transportation means between the logic controller and a remote information source.

Also preferably, the system further comprises an internal display disposed within the transportation means for displaying the information regarding the status of the transportation means to a driver thereof.

Also preferably, the system further comprises an input device disposed within the transportation means for receiving input from the driver in relation to the status of the transportation means.

Also preferably, the multi-colored display is an array of multi-colored LEDs, each LED being capable of displaying multi-colors, and the display controller controls the array of multi-colored LEDs in relation to the on-off switching and coloring of each LED therein.

Also preferably, the communication means utilizes GPS technology.

Also preferably, the remote information source is a control center for monitoring and controlling the movement of the transportation means.

Also preferably, the multi-colored display is capable of displaying multi-colored messages dependent on information regarding the status of the transportation means. The multi-colored display is capable of displaying multi-colored messages dependent on information regarding the hiring status of the transportation means. The multi-colored display is also capable of displaying multi-colored messages dependent on information regarding the en route status of the transportation means.

Also preferably, the system further comprises a distress button for providing a distress signal to the logic controller, wherein the distress signal is indicative of an emergency involving the driver of the transportation means.

In accordance with a second aspect of the invention, a method for displaying information in relation to the status of transportation means is provided. The method comprises the steps of displaying multi-colored visual information using a multi-colored display mountable on a transportation means, and controlling the multi-colored display using a display controller. The method also comprises the step of providing logic control, using a logic controller, in relation to the display of multi-colored visual information dependent on the information regarding the status of the transportation means.

Preferably, the method further comprises the step of communicating information regarding the status of the transportation means between the logic controller and a remote information source by using a communication means.

Also preferably, the method further comprises the step of displaying the information regarding the status of the transportation means to a driver thereof using an internal display disposed within the transportation means.

Also preferably, the method further comprises the step of receiving input from the driver in relation to the status of the transportation means using an input device disposed within the transportation.

Also preferably, step of displaying multi-colored visual information using a multi-colored display mountable on the transportation means comprises the step of displaying multi-colored visual information using an array of multi-colored LEDs. The step of controlling the multi-colored display using the display controller comprises the step of controlling the array of multi-colored LEDs in relation to the on-off switching and coloring of each LED therein.

Also preferably, the step of communicating information regarding the status of the transportation means between the logic controller and the remote information source by using the communication means comprises the step of communicating information by using GPS technology.

Also preferably, the step of communicating information regarding the status of the transportation means between the logic controller and the remote information comprises the step of communicating information to the remote information source which is a control center for monitoring and controlling the movement of the transportation means.

Also preferably, the step of displaying multi-colored visual information using the multi-colored display mountable on the transportation means comprises the step of displaying multi-colored messages dependent on information regarding the status of the transportation means. The step of displaying multi-colored messages comprises the step of displaying multi-colored messages dependent on information regarding the hiring status of the transportation means. The step of displaying multi-colored messages also comprises the

step of displaying multi-colored messages dependent on information regarding the en route status of the transportation means.

Also preferably, the method further comprises the step of providing a distress signal to the logic controller by using a distress button. The step of providing the distress signal to the logic controller by using the distress button comprises the step of providing the distress signal indicative of an emergency involving the driver of the transportation means.

Also preferably, the steps involving the transportation means comprise steps involving a taxi or bus.

In accordance with a third aspect of the invention, there is provided

- a system for displaying information in relation to the status of transportation means, comprising:

- a multi-colored display mountable on a transportation means for displaying multi-colored visual information;

- a display controller for controlling the multi-colored display;

- a logic controller for providing logic control in relation to the display of multi-colored visual information dependent on the information regarding the status of the transportation means;

- a communication means for communicating information regarding the status of the transportation means between the logic controller and a remote information source; wherein the remote information source is a central center for monitoring and controlling the movement of transportation means.

In accordance with a fourth aspect of the invention, there is provided

- a method for displaying information in relation to the status of transportation means, comprising the steps of:

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displaying multi-colored visual information using a multi-colored display mountable on a transportation means;

controlling the multi-colored display using a display controller;

providing logic control, using a logic controller, in relation to the display of multi-colored visual information dependent on the information regarding the status of the transportation means;

communicating information regarding the status of the transportation means between the logic controller and a remote information source by using a communication means; wherein the step of communicating information regarding the status of the transportation means between the logic controller and the remote information comprises the step of communicating information to the remote information source which is a control center for monitoring and controlling the movement of the transportation means.

Brief Description Of Drawings

The embodiments of the invention are described hereinafter with reference to the drawings, in which:

Figure 1 is flow chart of a display process in relation to a taxi hiring status display system for a passenger hailing a taxi and alighting therefrom subsequently, the taxi being installed with the taxi hiring status display system according to an embodiment of the invention;

Figure 2 is a flowchart of a display process in relation to the taxi hiring status display system for a passenger chartering a taxi installed with the taxi hiring status display system;

Figure 3 is a flowchart of a display process in relation to the taxi status display system for a passenger booking a taxi installed with the taxi hiring status display system;

Figure 4 is a flowchart of a display process in relation to the taxi hiring status display system for a passenger booking in advance a taxi installed with the taxi hiring status display system;

Figure 5 is a block diagram depicting the modules of the taxi hiring status display system;

Figures 6a to 6e are left, front, right, plan and back elevations, respectively, of an LED array component in the rooftop display module;

Figures 7a to 7e are left, front, right, plan and back elevations, respectively, of a rooftop display panel on which the rooftop display module is mounted; and

Figure 8 illustrates the communication protocols in the taxi hiring status display system.

Detailed Description

The need for a system for displaying information indicating the hiring status of a taxi or the status of other similar transportation means, in which such displayed information is visible from a distance both in daylight and in the dark, and variable according to the hiring status of the taxi, is addressed by embodiments of the invention described hereinafter. An embodiment of the invention is referred hereinafter generally as a taxi hiring status display system.

In order to overcome inconveniences and frustrations faced by passengers in trying to ascertain the hiring status of taxis from a distance in daylight under poor contrast conditions, the taxi hiring status display system prominently displays information such as messages indicative of the hiring status of the taxis on the rooftop display panels of the taxis. These messages are visible at all times during day and night, and even during inclement weather at a substantially remote distance from the passengers.

A feature of the taxi hiring status display system includes the display of messages that consist of texts, graphics, numbers, symbols, or signals that are prominent or clearly visible in the daylight and at night. Another feature of the taxi hiring status display system includes the display of different colors at different times on the rooftop display panels of the taxis, thereby leading to the display of messages in multi-colors. A further feature of the taxi hiring status display system includes the display of messages unrelated to the hiring status of the taxis, including festive season greetings or short advertisements by toggling or scrolling intermittently such greetings or advertisements with the word "Taxi" when the taxi is available for hire. A still further feature of the taxi hiring status display system includes a built-in memory that allows modifications of displayable messages to be carried out according to user requirements, and provides audit trail and statistical reporting capabilities.

A portion of the taxi hiring status display system is installed or mounted on the rooftop display panels of a taxi for enabling passengers to visibly determine the hiring status of the taxi. The taxi hiring status display system also enables the intermittent display of other unrelated messages such as advertisements.

The taxi hiring status display system includes components such as a rooftop display module, which preferably includes an array of light-emitting diodes (LEDs) arranged and mounted on a printed circuit board (PCB), and a display and logic controller with a built-in memory also mounted on a PCB. Each LED in the LED array is capable of displaying multiple or a variety of colors, and the display and logic controller is for controlling the on-off switching and coloring of the LED array at different times under different conditions and for providing the control logic for the display processes described hereinafter. The display and logic controller PCB preferably piggybacks on the LED array PCB, which is in turn preferably mounted on the rooftop display panels of the taxi.

An intelligent processing unit or processor located in a remote call control center send messages that are displayable on the rooftop display module of the taxi, such as signals, symbols, texts, numbers, or graphics, to the taxi hiring status display system. Such messages can be sent via conventional radio equipment or global positioning systems (GPS). The messages displayable on the rooftop display module can also be controlled and inputted manually by a taxi driver via a taximeter under certain circumstances. A mobile communication/display device installed in the taxi enables the taxi driver to receive information, such as passenger bookings, from the remote call control center via radio equipment or GPS, to view what is being displayed on the rooftop display module, or to manually manipulate the messages whenever required or necessary. Through the taxi hiring status display system, the taxi driver is also made aware of the working conditions of the rooftop display module by monitoring the mobile communication/display device.

Predetermined or standard bitmap logos and texts displayable on the rooftop display module are stored in the built-in memory. Some examples of the standard bitmap logos and texts are "TAXI", "OFF-DUTY", "CHANGE SHIFT", "CHARTERED", festive season greeting texts, or names of all popular passenger destinations. The registration number of the taxi is also stored in the built-in memory.

In addition to the fixed bitmap logos and texts that are stored in the built-in memory, the built-in memory also stores data that is captured when each display mode is enabled or each message is displayed on the rooftop display module. Data such as "Start Date", "Start Time", "End Date" and "End Time", and the respective display mode information are captured and stored in the built-in memory.

The taxi driver starts the taximeter when a passenger is picked up for a trip, and the Start Date, Start Time and the respective display mode information are captured and stored in the built-in memory. At the end of the trip, the End Date and End Time are again captured and stored in the built-in memory when the taxi driver stops the taximeter. For any trip,

data is captured and stored in the built-in memory as a record of that trip in relation to only the start and stop information. The taxi hiring status display system, however, also allows user determination of further types of data relating to a trip for capture and storage in the built-in memory.

Data sent from the remote call control center and received by the mobile communication/display device, for example representing free or non-standard bitmap logos or texts for display on the rooftop display module, is also stored in the built-in memory.

The built-in memory is preferably a flash memory device that can be programmed via the taxi hiring status display system so that there is minimal physical handling of the memory device. As such, the taxi hiring status display system, namely the display and logic controller component, includes an interface for communicating with a computer such as a personal computer (PC) or Laptop for uploading into the built-in memory the non-standard bitmap logos and texts, or changing or modifying the standard bitmap logos and texts. An end user application executable on the computer for uploading or modifying data in the flash memory device is therefore also provided.

Via the interface, the trip records containing data stored in the built-in memory can also be downloaded to the computer for audit trail purposes. From the downloaded data, trip records relating to the operation of the taxi can be traced for statistical purposes or for investigation into any complaints made by passengers. Information containing dates and times relating to the messages and various taximeter modes can provide insights into customer complaint situations. Examples of such information include: the frequency with which the taxi driver changes shift; information relating to "TAXI" and "CHARTERED" messages; duration of each trip; the taxi driver's off-duty duration information; and the number of successful "ON CALL" advance bookings and current bookings. For example, information relating to the dates and time the "TAXI" message is displayed is useful for

providing an insight into a passenger's complaint regarding fare refusal in which a "TAXI" message is shown on the rooftop display module, which is seen by the passenger concerned but is refused a fare. With such information, the taxi driver involved cannot argue that a "NOT FOR HIRE" message was displayed if the "TAXI" message was indeed displayed according to the trip records.

Examples of messages displayable on the rooftop display module include in green the word "TAXI", which indicates a taxi is available for hire, and in green unrelated messages such as greetings or advertisements, which indicate that the taxi is available for hire. The greetings or advertisements are displayed only when the taxi is available for hire and such messages alternate with the word "TAXI". Other displayable messages include in red the texts "ON CALL -" followed by the taxi's registration or license number, whereby such a message is displayed when bookings have been made by passengers regardless of whether the booking is a current booking or an advance booking, and in red the word "BUSY", which indicates that the taxi is not available for hire because the taxi is currently ferrying a passenger. Further displayable messages include in amber the texts "CHANGE SHIFT -" followed by the location at which the taxi driver is changing shift. The message indicates that the taxi driver is changing shift at such a location and can pick up passengers who wish to be taken to destinations en route to the location. A list of such locations can be programmed in the taximeter for enabling the taxi driver to select the appropriate option. Even further displayable messages include in red the message "NOT FOR HIRE", which indicates that the taxi driver chooses not to pick up any passenger, the message "CHARTERED", which indicates that the taxi is chartered by passengers and is not available for hire, and the message "SOS", which indicates that the taxi driver is in distress and is in dire need of help or assistance. The taxi driver in emergency situations can actuate or trigger the "SOS" message by pressing a button placed in the taxi near or in close proximity with the taxi driver's seat.

As shown in the display process flowchart in Figure 1, a passenger hails a taxi along the road in a step 102. Upon boarding the taxi, the taxi driver turns on the taximeter that in turn sends a signal to the rooftop display module to display the "BUSY" message in a step 104. The mobile communication/display device in the taximeter does not accept any passenger bookings from the remote call control center during this period. The taxi driver selects a "STOP" mode on the taximeter when the passenger's destination is reached in a step 106. When the passenger alights from the taxi, the taxi driver turns off the taximeter and the message on the rooftop display module is changed to "TAXI" again in a step 108.

As shown in the display process flowchart in Figure 2, a passenger charts a taxi in a step 202. Upon boarding the taxi, the taxi driver turns on the taximeter that in turn sends a signal to the rooftop display module to display the "CHARTERED" message in a step 204. The mobile communication/display device in the taximeter does not accept any passenger bookings from the remote call control center during this period in a step 206. The taxi driver selects a "STOP" mode on the taximeter when the passenger's final destination is reached in a step 208. When the passenger alights from the taxi, the taxi driver turns off the taximeter and the message on the rooftop display module is changed to "TAXI" again in a step 210.

Figure 3 depicts a display process in which the taxi driver is assigned a current booking and accepts the same in a step 302. The mobile communications/display device sends a signal to the rooftop display module for displaying the message "ON CALL -" followed by the taxi registration or license number in a step 304. The taximeter in this instance is in a "NOT FOR HIRE" mode. This message is controlled by the mobile communication/display device and cannot be manually manipulated by the taxi driver. Meanwhile, a current booking surcharge amount is displayed on the taximeter in a step 306. The taxi driver is not informed of any bookings other than advance bookings during this period in a step 308. When the passenger boards the taxi at a pick-up location in a step 310, the taxi driver activates the taximeter that then sends a signal to the rooftop display module for displaying

the "BUSY" message in a step 312. When the passenger alights at the destination, the taximeter is turned off and the message "TAXI" appears on the rooftop display module in a step 314. In a situation where the passenger does not show up at the pick-up location in a step 316, the taxi driver presses a "No Show" button on the mobile communication/display device in a step 318 for informing the remote call control center of the situation. The mobile communication/display device sends a signal to the rooftop display module to change the display message back to "TAXI" in a step 320.

Once a current booking is assigned to the taxi driver from the remote call control center, the information is stored in the mobile communication/display device, which also holds the booking amount. The booking amount can vary according to the booking amount the remote call control center sends over. At the same time, the message "ON-CALL" is displayed on the rooftop display module. Once the taxi driver starts the taximeter, the booking fare held in the mobile communication/display device is automatically sent to the display on the taximeter.

If the passenger does not show up, a No-Show situation, the taxi driver by pressing a button on the mobile communication/display device sends a signal back to the remote call control center. This action automatically clears the booking fee that is stored in the mobile communication device/display device and the rooftop display module displays the word "TAXI".

Figure 4 depicts a display process in which a passenger makes a booking in advance. Upon successful assignment and acceptance of the job in a step 402, the advance booking information is stored in an intelligent processing unit in the taximeter. At a predetermined time prior to the actual time of hire, the intelligent processing unit in the taximeter sends a reminder to the taxi driver in a step 404. The taxi driver then in a step 406 retrieves the advance booking information from the mobile communication/display device. The mobile communication/display device in turn in a step 408 sends a signal to the rooftop display

module for displaying the message "ON CALL - " followed by the taxi's registration or license number. In this instance, the taximeter is in the "Not For Hire" mode. This message is controlled by the mobile communication/display device and cannot be manually manipulated by the taxi driver. Meanwhile, a current booking surcharge amount is displayed on the taximeter in a step 410. The taxi driver is also not informed of any bookings other than advance bookings during this period in a step 412. When the passenger boards the taxi at a pick-up location in a step 414, the taxi driver activates the taximeter that then sends a signal to the rooftop display module for displaying the "BUSY" message in a step 416. When the passenger alights at the destination, the taximeter is turned off and the message "TAXI" appears on the rooftop display module in a step 418. In a situation where the passenger does not show up at the pick-up location in a step 420, the taxi driver presses a "No Show" button on the mobile communication/display device in a step 422 for informing the remote call control center of the situation. The mobile communication/display device sends a signal to the rooftop display module to change the display message back to "TAXI" in a step 424.

For an advance booking, the taxi driver receives a reminder from the remote call control center before the advance booking pick up time, for example half an hour prior to the pick up time. The taxi driver then needs to estimate the traveling time required to reach the passenger pick-up location and sends an acknowledgement to the remote call control center via the mobile communication device/display device. Once this signal is sent to the remote call control center, the advance booking information is stored in the mobile communication/display device, which also holds the booking amount. The booking amount can vary according to the booking amount the remote call control center sends over. At the same time, the message "ON-CALL" is displayed on the rooftop display module. Once the taxi driver starts the taximeter, the booking fare held in the mobile communication/display device is automatically sent to the display on the taximeter.

If the passenger does not show up, a No-Show situation, the taxi driver by pressing a button on the mobile communication/display device sends a signal back to the remote call control center. This action automatically clears the booking fee that is stored in the mobile communication device/display device and the rooftop display module displays the word "TAXI".

Figure 5 is a block diagram of the taxi hiring status display system, which includes the display and logic controller as an integral component within the rooftop display module. The display and logic controller 502 is connected to the taximeter 504, to which the mobile communication/display device 506 is in turn connected. The mobile communication/display device 506 is linked to the remote call control center 508 via radio or GPS communications for receiving any display messages or booking information from the remote call control center 508. A distress button 510 is connected directly to the display and logic controller 502 for providing a distress signal for displaying the message "SOS" on the rooftop display module. At the same time, the distress signal is also fed to the mobile communication/display device 506 for onward transmission to the remote call control center 508 for notifying the remote call control center 508 of the emergency situation. A computer 512 such as a personal computer (PC) or Laptop is also connected directly to the display and logic controller 502 for uploading into the built-in memory the non-standard bitmap logos and texts, or changing or modifying the standard bitmap logos and texts.

Preferably, the connections between the display and logic controller 502 and the taximeter 504, the distress button 10, and the computer 512 are bunched together and laid from the rooftop display module to the console of the taxi as a single cable, and then split into three further wires and laid to the respective modules. The wire connections between the mobile communication/display device 506 and the taximeter 504 and the distress button 510 are laid separately, so that in the event the taximeter 504 does not function or the wire connection between the taximeter 504 and the mobile communication/display device 506 is

broken, the distress button 510 is still able to function and feed the distress signal to the remote call control center and independently cause the "SOS" message to be displayed. Also preferably, the display and logic controller is connected to the LED array via a flat flexible cable 514.

Figures 6a to 6e are left, front, right, plan and back elevations, respectively, of the LED array component 602 in the rooftop display module. The LED array 602 is preferably a 40 X 7 LED array arranged and mounted on the LED array PCB 604 which is rectangular and placed in a substantially upright position. The display and logic controller PCB 606 is connected to the LED array PCB 604 via the flat flexible cable 608 for controlling the switching and coloring of the LED array 602. The display and logic controller PCB 606 and the LED array PCB 604 are mounted on the opposing faces of a flat rectangular supporting bracket 610 using spacers 612. The display and logic controller PCB 606 also provides the control logic for the taxi hiring status display system in relation to the display processes depicted in Figures 1 to 4, and provides interfaces and connections for the taximeter, the computer, and the distress button described with reference to Figure 5.

Figures 7a to 7e are left, front, right, plan and back elevations, respectively, of a rooftop display panel 702 on which the rooftop display module is mounted. The rooftop display panel 702 has a pitch-roof structure that includes a window 704 through which a view of the LED array PCB is provided. The rooftop display panel 702 covers the rooftop display module and affords protection thereto, while allowing the LED array PCB to display messages viewable through the window 704 according to the hiring status of the taxi to which the rooftop display panel is mounted

Communications protocols are implemented for enabling the taximeter to communicate and interact with the display and logic controller and the mobile communication/display device for providing the features of the taxi hiring status display system. As shown in Figure 8, communication protocols enable the taximeter to provide selected bitmap logos

and texts 802 to the display and logic controller for display on the rooftop display module when the taxi driver scrolls through the display options available on the taximeter and makes the respective selection. The communication protocols also enable the taximeter to correspondingly send a signal, and date and time information 804 to the mobile communication/display device for informing the remote call control center of the hiring status of the taxi every time a message is selected for displayed.

The communication protocols also enable the taximeter to receive information from the remote call control center through the mobile communication/display device, for example bitmap logos and texts 806 for display of "ON-CALL" messages, during which the taximeter recognizes such information and passes this through or retransmits the same to the display and logic controller.

The communication protocols between the taximeter and the display and logic controller include transmit (Tx) protocols for transmitting or retransmitting bitmap logos and texts from the taximeter to the display and logic controller. The communication protocols between the taximeter and the mobile communication/display device include a transmit (Tx) protocol for transmitting the signal, date and time information from the taximeter to the mobile communication/display device, and a receive (Rx) protocol for the taximeter to receive information from the mobile communication/display device. Such information includes booking information or non-standard bitmap logos and texts.

Other embodiments of the invention can also be used on other transportation means including public, private or chartered buses. A bus status display system, for example, can display the bus service number in bright yellow. The bus status display system can also be used to display travel information relating to the bus route. For example, the bus service number of a bus traveling from a bus interchange A to a bus interchange B is displayed in red while the bus service number of a bus traveling back from bus interchange B to bus interchange A is displayed in green.

Bus companies that are currently using GPS technology to locate the positions of the bus companies' fleets, together with speed tracking systems, are able to monitor the speed of the buses in the fleets, and hence can compute the estimated travel times between stops. The bus status display system can therefore be used for displaying in orange the estimated travel times, for example, for the buses to reach end- and mid-points of the buses' routes from the buses' current locations. This can help commuters who are waiting at bus stops to estimate the traveling times to the commuters' respective destinations.

The bus status display system can also be used for displaying information inside the buses for informing the commuters on the estimated traveling time to reach various destinations.

The bus status display system can also be used for displaying different bus services. For example, messages include information relating to direct non-stop services, night services, chartered services, buses heading for depot, or bus drivers under training, etc.

Further embodiments of the invention can be used in any other transportation means plying on the road, such as trains, as well other transportation means like boats and ferries.

In the foregoing manner, a display system for displaying information indicating the hiring status of a taxi, or other transportation means, such displayed information being visible from a distance both in daylight and in the dark and variable according to the hiring status of the taxi is described according to embodiments of the invention. Although only a number of embodiments are disclosed, it will be apparent to one skilled in the art in view of this disclosure that numerous changes and/or modifications can be made without departing from the scope and spirit of the invention.

Claims

1. A system for displaying information in relation to the status of transportation means, comprising:
 - a multi-colored display mountable on a transportation means for displaying multi-colored visual information;
 - a display controller for controlling the multi-colored display;
 - a logic controller for providing logic control in relation to the display of multi-colored visual information dependent on the information regarding the status of the transportation means;
 - a communication means for communicating information regarding the status of the transportation means between the logic controller and a remote information source; wherein the remote information source is a central center for monitoring and controlling the movement of transportation means.
2. The system as in claim 1, further comprising an input device disposed within the transportation means for receiving input from the driver in relation to the status of the transportation means.
3. The system as in any one of the preceding claims, wherein the multi-colored display is an array of multi-colored LEDs, each LED being capable of displaying multi-colors.
4. The system as in claim 3, wherein the display controller controls the array of multi-colored LEDs in relation to the on-off switching and coloring of each LED therein.
5. The system as in any one of the preceding claims, wherein the communication means utilizes GPS technology.

6. The system as in any one of the preceding claims, further comprising an internal display disposed within the transportation means for displaying the information regarding the status of the transportation means to a driver thereof.

7. The system as in any one of the preceding claims, wherein the multi-colored display is capable of displaying multi-colored messages dependent on information regarding the status of the transportation means.

8. The system as in claim 7, wherein the multi-colored display is capable of displaying multi-colored messages dependent on information regarding the hiring status of the transportation means.

9. The system as in claim 8, wherein the multi-colored display is capable of displaying multi-colored messages dependent on information regarding the en route status of the transportation means.

10. The system as in any one of the preceding claims, further comprising a distress button for providing a distress signal to the logic controller.

11. The system as in claim 10, wherein the distress signal is indicative of an emergency involving the driver of the transportation means.

12. The system as in any one of the preceding claims, wherein the transportation means is a taxi or bus.

13. A method for displaying information in relation to the status of transportation means, comprising the steps of:

displaying multi-colored visual information using a multi-colored display mountable on a transportation means;

controlling the multi-colored display using a display controller;

providing logic control, using a logic controller, in relation to the display of multi-colored visual information dependent on the information regarding the status of the transportation means;

communicating information regarding the status of the transportation means between the logic controller and a remote information source by using a communication means; wherein the step of communicating information regarding the status of the transportation means between the logic controller and the remote information comprises the step of communicating information to the remote information source which is a control center for monitoring and controlling the movement of the transportation means.

14. The method as in claim 13, further comprising the step of receiving input from the driver in relation to the status of the transportation means using an input device disposed within the transportation.

15. The method as in any one of claims 13 or 14, wherein the step of displaying multi-colored visual information using a multi-colored display mountable on the transportation means comprises the step of displaying multi-colored visual information using an array of multi-colored LEDs.

16. The method as in claim 15, wherein the step of controlling the multi-colored display using the display controller comprises the step of controlling the array of multi-colored LEDs in relation to the on-off switching and coloring of each LED therein.

17. The method as in any one of claims 13 to 16, wherein the step of communicating information regarding the status of the transportation means between the logic controller and the remote information source by using the communication means comprises the step of communicating information by using GPS technology.

18. The method as in any one of claims 13 to 17, further comprising the step of displaying the information regarding the status of the transportation means to a driver thereof using an internal display disposed within the transportation means.
19. The method as in any one of claims 13 to 18, wherein the step of displaying multi-colored visual information using the multi-colored display mountable on the transportation means comprises the step of displaying multi-colored messages dependent on information regarding the status of the transportation means.
20. The method as in claim 19, wherein the step of displaying multi-colored messages comprises the step of displaying multi-colored messages dependent on information regarding the hiring status of the transportation means.
21. The method as in claim 19, wherein the step of displaying multi-colored messages comprises the step of displaying multi-colored messages dependent on information regarding the en route status of the transportation means.
22. The method as in any one of claims 13 to 21, further comprising the step of providing a distress signal to the logic controller by using a distress button.
23. The method as in claim 22, wherein the step of providing the distress signal to the logic controller by using the distress button comprises the step of providing the distress signal indicative of an emergency involving the driver of the transportation means.
24. The method as in any one of claims 13 to 23, wherein the steps involving the transportation means comprise steps involving a taxi or bus.