Serial cabling saves cables and space.

The electronic screens are placed on the risers -2010- of the stairway, leaving the treads -2020- free. In the example shown, the electronic screens -1100- are positioned beneath an existing projecting ledge -2030- on the tread -2020- of each step.

Each electronic screen -1110- is made up of a transparent element -1140-, for example a methacrylate board, which is secured at a specific distance from the riser -2010-, for example using threaded studs -1150- drilled into the stairway. The space between the transparent element -1140- and the riser -2010- is occupied by an emitting element -1130-, for example an LED screen. The space that is left free may be occupied by a filler element 1160, for example resin or silicon.

The electronic screen unit -1110- is sealed to protect the electronic elements from water.

In the embodiment shown in Fig. 1 to 3, each emitting element -1130- has its own electronics, independent of the rest of the emitting elements.

The transparent element -1140- may have UV protection and/or a light-diffusing finish. This is advantageous not only because it protects the life of the emitting element -1130-, but because it diffuses the specific light-emitting points (LEDs) improving perception of the logo emitted.

Although not shown in the figures, the transparent element may be embossed with an advertising motif. This motif can only be detected by audience members who are close to the screen, and not by those farther away, who can only see the advertising motif emitted by the electronic screens -1110-.

In the figures, the controller, for example a control computer which may for example be positioned remotely from the rest of the device, connected by cables or wirelessly, has not been shown. The controller can synchronise the various devices -1100- with one another, synchronise the motif emitted with the television broadcast, be updated via the internet, etc.

In Fig. 3 the device -1100- of Fig. 1 and 2 has been shown applied to the stairways of a stand -1000- in a sports venue. The set of screens -1110- are emitting an advertising motif -900- (in this case a letter K), which may if required be anamorphically deformed to be seen from a particular viewpoint, such as a master transmission camera, for example, or other type of camera. It can be seen in the figure that the screens -1110- may also be used to show information relating to the stands and to the entry and exit flows, such as a row number, as well as safety information, for example arrows indicating the route to follow if the venue has to be evacuated.

Fig. 4 to 9 show another embodiment of a device according to the present invention positioned on a stand or stairway -1001-. The device comprises a series of electronic screens -201- (in this case, an LED screen) which in this case are not connected to one another directly. Each screen has lugs 206 with openings for receiving studs for securing to a stairway.

CLAIMS

1. Device for displaying images for stands or stairways in a public venue ~~characterised in that it comprises~~the device comprising a controller, a set of electronic screens connected to one another and means for securing said electronic screens to the risers of an existing stairway or stand, the controller having means for displaying an advertising motif distributed between all of said electronic screens~~.~~.

~~2. Device according to claim 1,~~ wherein ~~the~~ signal processing and data elements and ~~the~~ power supply elements of at least one of said electronic screens intended to be arranged on the risers are placed in a box separate from the screen intended to be installed separately.

~~3~~2. Device according to claim ~~2~~1, ~~characterised in that it comprises~~further comprising respectively a separate box for each screen.

~~4. Device according to any one of claims 1 to 3, wherein the screens are positioned secured to the risers of the stand or stairway.~~

~~5~~3. Device according to any one of the preceding claim~~s 4~~, wherein the device leaves the treads of the stand or stairway free.

~~6~~4. Device according to any one of the preceding claims, wherein the controller is positioned separate from the screen.

~~7~~5. Device according to any one of the preceding claims, wherein each screen comprises a transparent element connected to the stand or stairway and a light-emitting electronic element which is positioned between the stand or stairway and the transparent element, the unit being sealed.

~~8~~6. Device according to ~~any of~~ claim~~s 4 to 7~~5, wherein the transparent element is screwed to the stairway or stand.

~~9~~7. Device according to any one of the preceding claims, wherein the controller comprises instructions for displaying information on each screen on the status of nearby seats and/or entry/exit instructions to/from said seats or other safety information.

~~10~~8. Device according to the preceding claim, ~~characterised in that it comprises~~further comprising a communications post for receiving an alarm signal which causes the device to change to showing evacuation signals on the screens.

~~11~~9. Device according to any one of the preceding claims, ~~characterised in that~~wherein said separate box is positioned beneath seats attached to the stand or stairway, or hidden behind the stairway.

~~12~~10. Device according to any one of the preceding claims, ~~characterised in that~~wherein the thickness of the screens is less than 50 mm.

~~13~~11. Device according to any one of the preceding claims, ~~characterised in that~~wherein the upper portion of the screen is flush with the adjacent tread, forming an extension thereof.

~~14~~12. Device according to the preceding claim, ~~characterised in that~~wherein the upper surface of the upper portion of the screen has a non-slip finish.

~~15~~13. Device according to ~~any one of claims 2 to 14~~claim 2, ~~characterised in that~~wherein each separate box has two power sources or voltage transformers arranged redundantly.