DIGITAL PHOTO DISPLAY

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ABSTRACT

A digital photo display has a display assembly and a frame. The display assembly has a body, a memory card port and a screen. The body has a main control circuit mounted in the body. The memory card port is electrically connected to the main control circuit so a memory card can be inserted into the memory card port. The screen is mounted on body and is electrically connected to the main control circuit in the body to show a digital photo on the screen. The frame is attached to the body of the display assembly and has a window corresponding to the screen. Accordingly, the photo display can store and show digital photos conveniently to make use of the photo display versatile.
DIGITAL PHOTO DISPLAY

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a photo display, and more particularly to a digital photo display having a capability of storing and showing digital photos.

[0003] 2. Description of Related Art

[0004] To display a photo on a table, a wall or the like, a photo frame is always used to hold a photo. However, a conventional photo frame can only hold and show a single photo, and changing the photo in a conventional photo frame is inconvenient. Therefore, the conventional photo frame is not versatile.

[0005] To overcome the shortcomings, the present invention provides a digital photo display to mitigate or obviate the aforementioned problems.

SUMMARY OF THE INVENTION

[0006] The main objective of the invention is to provide a digital photo display that can store and show digital photos conveniently to make the photo display versatile. The digital photo display has a display assembly and a frame. The display assembly has a body, a memory card port and a screen. The body has a main control circuit and a periphery with a top, two sides and a bottom, a front side and a rear side. The main control circuit is mounted in the body. The memory card port is mounted in the periphery of the body and is electrically connected to the main control circuit so a memory card can be inserted into the memory card port. The screen is mounted on the front side of the body and is electrically connected to the main control circuit in the body to show a digital photo on the screen. The frame is attached to the body of the display assembly and has a window corresponding to the screen.

[0007] Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a perspective view of a first embodiment of a digital photo display in accordance with the present invention;

[0009] FIG. 2 is an exploded perspective view of the digital photo display in FIG. 1;

[0010] FIG. 3 is a functional block diagram of the display assembly of the digital photo display in FIG. 1;

[0011] FIG. 4 is an exploded perspective view of a second embodiment of a digital photo display in accordance with the present invention;

[0012] FIG. 5 is an exploded perspective view of a third embodiment of a digital photo display in accordance with the present invention; and

[0013] FIG. 6 is an exploded perspective view of a fourth embodiment of a digital photo display in accordance with the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

[0014] With reference to FIGS. 1 to 3, a first embodiment of a digital photo display in accordance with the present invention comprises a display assembly (20) and a frame (10). The display assembly (20) comprises a body (not numbered), a memory card port (22), a screen (24) and multiple optional buttons (23). The body has a periphery composed of a top, two sides and a bottom, a front, a rear, a main control circuit, an optional stand rod (21) and an optional suspension hole (72). The main control circuit is mounted in the body and has a memory unit for storing digital photos. The memory card port (22) is mounted in the periphery of the body and is electrically connected to the main control circuit, and a memory card (not shown) can be inserted into the memory card port (22). In an optional embodiment, the memory card port (22) is mounted in the top of the body. Accordingly, digital photos stored in a memory card can be transferred to and stored in the memory unit of the main control circuit when the memory card is inserted into the memory card port (22).

[0015] The multiple optional buttons (23) are mounted on the periphery of the body and electrically connected to the main control circuit. With the arrangement of the buttons (23), a user can control and switch functions and modes of the main control circuit, such as turning on/off the photo display, changing the shown photo, reading or deleting the photos and so on. In an alternative embodiment, the main control circuit can be controlled with a remote controller.

[0016] The screen (24) is mounted on the front of the body and is electrically connected to the main control circuit in the body to show a digital photo stored in the main control circuit in the screen (24). The screen may be a liquid crystal display (LCD).

[0017] The main control circuit and the electrical connection between the main control circuit, the memory card port (22), the screen (24) and the buttons (23) are same as that used in a digital camera and is not further described.

[0018] The optional stand rod (21) is mounted on the rear of the body to hold stably the photo display upright on a table or the like.

[0019] The frame (10) is attached to the front of the body of the display assembly (20). The frame (10) has a front (13), a rear (11), an optional flange (not numbered), a window (12) and an outer edge (not numbered). The optional flange is formed on and extends around the rear side (11) at the outer edge of the frame (10). The window (12) is defined through the frame (10) from the front side (13) to the rear side (11) and corresponds to the screen (24) on the display assembly (20) to make the screen (24) visible through the window (12). In the first embodiment, the frame (10) is securely attached to the front of the body of the display assembly (20) with a compression fit or an adhesive. In addition, decorative elements can be selectively applied to the front (11) of the frame (10) to improve the appearance of the photo display.

[0020] The digital photo display can show digital photos stored in the main control circuit, and a person can easily change the photo displayed on the screen by pressing the
buttons (23) on the body. The user can import additional photos into the photo display through the memory card port (22) to show different photos. Therefore, the use of the photo display is convenient and versatile.

[0021] With reference to FIG. 4, a second embodiment of a digital photo display in accordance with the present invention is the same as the first embodiment except for the attachment of the frame (30) to the display assembly (40). In the second embodiment, the body of the display assembly (40) has multiple through holes (41) defined through the body from the front to the rear. The frame (30) has multiple stubs (32) formed on the rear (11) and corresponding respectively to the through holes (41) in the body. Each stub (32) has a threaded hole (321) aligning with the corresponding through hole (41) in the body. Multiple screws (411) extend respectively through the through holes (411) in the body and are screwed respectively into the threaded holes (321) in the stubs (32) on the frame (30) to securely attach the frame (30) to the front of the body.

[0022] With reference to FIG. 5, a third embodiment of a digital photo display in accordance with the present invention is the same as the first embodiment except for the attachment of the frame (50) to the display assembly (60). In the third embodiment, the frame (50) has multiple L-shaped engaging arms (53) laterally extending from the flange of the frame (50) to hold the body. A notch (52) is defined in the flange on the frame (50) to make a passage to allow the body to pass through the passage and be engaged between the arms (53). With the engaging arms (53), the display assembly (60) is detachably mounted with the frame (50).

[0023] With reference to FIG. 6, the optional suspension hole (72) is defined in the rear of the body and may be defined in a block formed on the rear side of the body. With the arrangement of the suspension hole (72), the digital photo display can be hung on a wall or the like.

[0024] Even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

What is claimed is:
1. A digital photo display comprising:
   a display assembly having
   a body having a periphery with a top, two sides, a bottom, a front, a rear and a main control circuit with
   a memory unit mounted in the body for storing
   digital photos;
   a memory card port mounted in the periphery of the
   body and electrically connected to the main control
   circuit so a memory card can be inserted into the
   memory card port; and
   a screen mounted on the front of the body and electrically
   connected to the main control circuit in the
   body to show a digital photo on the screen; and
   a frame attached to the front of the body of the display
   assembly and having a front, a rear and a window
   corresponding to the screen.
2. The photo display as claimed in claim 1 further
   comprising a stand rod attached to the rear of the body.
3. The photo display as claimed in claim 1 further
   comprising a suspension hole defined in the rear of the body.
4. The photo display as claimed in claim 1, wherein the
   body has multiple through holes defined through the body
   from the front to the rear;
   the frame has multiple stubs corresponding respectively to
   the through holes in the body and each stub having a
   threaded hole; and
   multiple screws extending respectively through the
   through holes in the body and screwing respectively
   into the threaded holes in the stubs on the frame to
   securely attach the frame to the front of the body.
5. The photo display as claimed in claim 1, wherein the
   frame has a flange formed on and extending around the rear
   side;
   multiple L-shaped engaging arms laterally extending
   from the flange to hold the body; and
   a notch defined in the flange on the frame to make a
   passage to allow the body to pass through the passage
   and be engaged between the engaging arms.

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