

as needed since the video player is primarily used in conjunction with a full screen viewing mode.

[0079] **FIG. 13** is a diagram of a GUI **210** that is used in a game player mode. As shown, the GUI **210** is divided into a standard region **152** and two control regions **154A** and **154B** on the sides of the standard region **152**. The left side control region **154A** includes a navigation or directional pad **212**, and the right side control region includes four virtual buttons **214** (or vice versa depending on the users particular needs, left or right handed).

[0080] **FIG. 14** is a diagram of a GUI **220** that is used in a camera mode. As shown, the GUI **220** is divided into a standard region **152** and a control region **154**. The standard region **152** may represent the view finder. Located inside the control region **154** are various buttons **222** including for example picture click, zoom, flash, etc. A navigation pad **224** may also be included so that the pictures can be scrolled through or for menu navigation.

[0081] **FIG. 15** is a diagram of a GUI **230** that is used in a GPS receiver mode. As shown, the GUI **230** is divided into a standard region **152** and a control region **154**. Located inside the control region **154** are various buttons **222** including for example zoom, pan, etc. A navigation pad **224** may also be included.

[0082] **FIG. 16** is a diagram of a GUI **240** that is used in a hand top mode. As shown, the GUI **240** is divided into a standard region **152** and a control region **154**. Located inside the control region **154** is a virtual keyboard **242**.

[0083] **FIG. 17** is a diagram of a GUI **250** that is used in a remote control mode. As shown, the GUI **250** is divided into a standard region **152** and a control region **154**. Located inside the control region **154** are various keys and buttons **252** associated with controlling a remote device such as a TV, DVD player, A/V amplifier, VHS, CD player, etc.

B. Switching Between Devices (GUI)

[0084] Before a particular device functionality can be used, it typically must be selected for use. The selection can come in a variety of forms. For example, the selection may be made via a main menu that includes soft buttons or icons that, when selected, activate the device functionality associated with the soft button. During activation, the GUI for that particular device is brought into view on the display (see **FIGS. 9-17**) and the software associated with the device is installed, loaded or activated. From that point on, the multi-functional device operates like the selected device.

[0085] **FIG. 18** illustrated an exemplary main menu GUI **260** of a multi-functional device. As shown, the GUI **260** includes icons/buttons **262** for launching each of the various device functionalities. In this particular example, the main menu page **260** includes a PDA button **262A**, a cell phone button **262B**, a music player button **262C**, a game player button **262D**, a video player button **262E**, a GPS button **262F**, a remote control button **262G**, a camera button **262H** and a handtop button **262I**. The various buttons **262** are virtual buttons. When a button is pressed, the main page for the selected functionally (e.g., as shown in **FIGS. 9-17**) is brought into view on the display. To select another device, the user simply selects a soft home button **264** located in the GUI of each device to return to the main menu page **260**, and thereafter selects the desired functionality in the main menu page **260**.

[0086] The selection of alternative functionalities may also be accomplished by flipping (or scrolling) through the various GUIs until the desired GUI is found. For example, the different GUIs may be incrementally brought into view page after page (or frame after frame) when a next (flip) command signal is generated (e.g., slide show effect). The transition between pages may be widely varied. The transition may be from side to side, top to bottom or center to center. The transition may also include fading in and out, popping in and out, or enlarging and reducing. The command signal may be generated by a physical or virtual button or wheel. Using a button, each press may cause a new page to be displayed. Using a wheel, a predetermined amount of rotation may cause a new page to be displayed.

[0087] The command signal may also be generated in a variety of other ways. For example, the command signal may also be generated by gestures initiated on the touch screen. For example, sliding a finger (or stylus) across the display may cause a new page to be displayed. If slid to the right, the next page may be displayed. If slid to the left, the previous page may be displayed. The command signal may also be generated by 3D device gestures created when the entire hand-held device is moved spatially. By way of example, shaking the device may cause a new page to be displayed.

[0088] The command signal may also be generated by forces that are applied to the device. By way of example, squeezing the device may cause a new page to be displayed. The command signal may also be generated by sensing the orientation of the device either relative to the ground, as sensed by accelerometers, or relative to a compass direction indicated by an internal compass. For example, if the device is at 0 degrees, a first page is displayed, at 90 degrees a second page is displayed, at 180 degrees a third page is displayed and at 270 degrees a fourth page is displayed.

[0089] The command signal may also be generated by monitoring a user's voice (i.e., voice recognition). If the user calls out "PHONE," the page associated with the phone is displayed, if the user calls out "PDA," the page associated with the PDA is displayed.

[0090] The command signal may also be generated by monitoring incoming signals from other systems (whether transmitted wirelessly or via a cable). For example, if a call is received, the device may automatically configure the system as a phone. Alternatively, it may only present a control panel for taking or passing on the call.

[0091] As an alternative to integrating functionalities, the device may be configured to keep the various modes separate. That is, the device does not merge the functionality together (integrated layers and GUIs), but instead keeps them distinct from one another. In some cases, by keeping different functionalities distinct, user confusion may be reduced.

C. Operating at Least Two Functionalities Simultaneously

[0092] Preferably, the user may be able to activate two or more device functionalities simultaneously. In such a case, the software for the multiple functionalities is activated simultaneously and the display operates in a split screen mode where the screen is parsed into different sections, each section including a particular device GUI. Generally this would require the GUI for each functionality to fit on the