

# **Accessibility**

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## Accessibility

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# 1 Accessibility

## 1.1 Introduction

This module is designed to help users who have difficulty hearing audible cues, or who have difficulty using a keyboard.

The module is divided into five tabs: **Bell**, **Modifier keys**, **Keyboard Filters**, **Activation Gestures** and **Screen Reader**.

### 1.1.1 Bell

This panel is divided into an **Audible Bell** section and a **Visible Bell** section.

The top check box labeled **Use System Bell**, determines whether the normal System bell rings. If this option is disabled, the System bell will be silenced.

The next check box down can be used to play a different sound whenever the system bell is triggered. To activate, place a mark in the check box labeled **Use customized bell**, and enter the complete pathname to the sound file in the text box labeled **Sound to play**. If you want, you can select the **Browse** button to navigate through your filesystem to find the exact file.

For those users who have difficulty hearing the System bell, or those users who have a silent computer, KDE offers the *visible bell*. This provides a visual signal (inverting the screen or flashing a color across it) when the system bell would normally sound.

To use the visible bell, first place a mark in the check box labeled **Use visible bell**.

You can then select between **Invert screen**, or **Flash screen**. If you select **Invert screen**, all colors on the screen will be reversed. If you choose **Flash screen**, you can choose the color by clicking the button to the right of the **Flash screen** selection.

The spin box can be used to adjust the duration of the visible bell. The default value is 500 msec, or half a second.

### 1.1.2 Modifier keys

There are the two sections **Sticky Keys** and **Locking Keys** to this panel.

#### Use Sticky Keys

If this option is enabled, you can press and release the **Shift**, **Alt** or **Ctrl** keys, and then press another key to get a key combo (example: **Ctrl+Alt+Del** could be done with **Ctrl** then **Alt** then **Del**).

Also in this section is a check box labeled **Lock Sticky Keys**. If this check box is enabled, the **Alt**, **Ctrl** and **Shift** keys stay 'selected' until you 'de-selected' them.

As an example:

#### With Lock Sticky Keys disabled:

If you press the **Shift** key then press the **F** key, the computer interprets this as **Shift+F**. Now if you type a **P**, the computer interprets this as the letter p (no shift).

#### With Lock Sticky Keys enabled:

If you press the **Shift** key *twice* then press the **F** key, the computer interprets this as **Shift+F**. Now if you type a **P**, the computer interprets this as the letter P (**Shift+P**). To de-select the **Shift** key, press it again.

### 1.1.3 Keyboard Filters

There are two sections to this panel.

#### Use slow keys

If this option is enabled, you must hold the key down for a specified length of time (adjustable with the spin box) before the keystroke will be accepted. This helps prevent accidental key strokes.

#### Use bounce keys

If this option is enabled, you must wait for a specified length of time (configurable with the spin box) before the next key press can be accepted. This prevents accidental multiple key strokes.

### 1.1.4 Activation Gestures

There are two sections to this panel.

#### Activation Gestures with these options:

##### Use gestures for activating sticky keys and slow keys

Here you can activate keyboard gestures that turn on the following features:

Mouse Keys: Press **Shift**+NumLock

Sticky keys: Press **Shift** key 5 consecutive times

Slow keys: Hold down **Shift** for 8 seconds

##### Turn sticky keys and slow keys off after a certain period of inactivity

#### Notification with these options:

**Use the system bell whenever a gesture is used to turn an accessibility feature on or off**

**Show a confirmation dialog whenever a keyboard accessibility feature is turned on or off**

If this option is checked, KDE will show a confirmation dialog whenever a keyboard accessibility feature is turned on or off.

Ensure you know what you are doing if you uncheck it, as the keyboard accessibility settings will then always be applied without confirmation.

**Use KDE's system notification mechanism whenever a keyboard accessibility feature is turned on or off**

Click the **Configure Notifications** button to open a dialog which allows you to edit the notifications for status changes of all keys.

### 1.1.5 Screen Reader

Install a screen reader application like [Orca](#) together with speech-dispatcher.

Test that sound from speech dispatcher works using the command **spd-say hello** in a terminal.

In addition you need a text to speech synthesizer like e.g. [espeak](#).

Enable the screen reader in the checkbox, logout and restart your desktop session.

For Plasma itself, make sure to use the traditional **Application Menu**, and check that this menu has a keyboard shortcut associated (**Alt+F1**). When pressing this shortcut, the menu should open and be read when navigating the menu with the arrow keys.