

## Virtual Keyboard

Virtual Keyboard is designed to appear as below when a text input element is focused. Developers can easily use virtual keyboard by including virtual keyboard library.

USB keyboard input and Voice Recognition are supported since NetCast 3.0(2012).

To download the Virtual Keyboard Library, go to **[Resource Center > Smart TV > SDK & Tools > Sample Codes]** menu in LG Developer (<http://developer.lge.com>) website.



### Using Virtual Keyboard Library

To use the virtual keyboard, add the following script in the head of html file. In order to use virtual keyboard in iframes, it should be added in the html file connected to the iframe.  
(Relative path of the jsLgVKeyboard folder should be modified according to the real path.)

In a normal or parent page

```
<link type="text/css" rel="Stylesheet" href="../../jsLgVKeyboard/LgVKeyboard.css" />
<script id="mainVKScript" type="text/javascript"
src="../../jsLgVKeyboard/LgVKeyboard.js"></script>
```

In iframe pages

```
<script type="text/javascript"
src="../../jsLgVKeyboard/LgVKeyboardIframe.js"></script>
```

As Virtual Keyboard uses keydown and keyup events, use the lgKb.onKeyDown and lgKb.onKeyUp methods as below to use keydown event in the application instead of setting handler of window.onkeydown event.

```
<script>
function onKeyDown(event) {
    var keyCode = event.keyCode;
    switch(keyCode) {
        case VK_LEFT :
            ...
            break;
        case VK_RIGHT :
            ...
            break;
        ...
    }
}

function onKeyUp(event) {
    var keyCode = event.keyCode;
    switch(keyCode) {
        case VK_LEFT :
            ...
            break;
        case VK_RIGHT :
            ...
    }
}
```

```
        break;
        ...
    }
}

lgKb.onKeyDown = onKeyDown;
lgKb.onKeyUp = onKeyUp;

</script>
```

Virtual Keyboard library calls lgKb.onKeyboardShow or lgKb.onKeyboardHide methods after Virtual Keyboard appear or disappear. Override the lgKb.onKeyboardShow and lgKb.onKeyboardHide methods as below for additional task.

```
<script>
    function onKeyboardShow(event)    {
        ...
    }

    function onKeyboardHide(event)    {
        ...
    }

    lgKb.onKeyboardShow = onKeyboardShow;
    lgKb.onKeyboardHide = onKeyboardHide;

</script>
```

- Do not modify the folder structure and file name of jsLgVKeyboard.
- The script must include the following declaration: **id = "mainVKScript"**
- A web page should be set character set as UTF-8 to use virtual keyboard as following:

```
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
```

- Virtual keyboard is enabled in the following tag/types:

Tag	Type
INPUT	TEXT
INPUT	PASSWORD
TEXTAREA	

- Beware of cross-domain problem when using iframe. If an application uses multiple html files those are loaded from different domains, cross-domain problem occurs and virtual keyboard cannot be used in iframe.

### Supported Language

Virtual keyboard supports 42 languages, and 16 languages are supported for voice recognition of them. Refer to **Developing > API > Voice Recognition Plugin and API** section in this Library for detailed information.