

HUTRR40 Radio HID Usages Proposal .txt

Request #: HUTRR40
Title: All-Wireless Radio controls
Spec Release: 1.12
Received: 26 Jan 2012
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CurrentStatus: Approved

Summary:

New HID usages are being proposed for the 'All-Wireless Radio' controls switch/button.

Background:

'All-wireless Radio on/off' controls can be implemented over HID. Standardization of these HID usages will enable a uniform implementation and experience across a broad range of devices and provide the industry with implementation guidance.

Proposal:

All additions are localized to Section 4 Generic Desktop Page (0x01) in the HID Usage Tables document v1.12

New usages to be added to Section 4, Table 6: Generic Desktop Page

Usage ID	Usage Name	Usage Type
0x0C	Wireless Radio Controls	CA
0xC6	Wireless Radio Button	OOC
0xC7	Wireless Radio LED	OOC
0xC8	Wireless Radio Slider Switch	OOC

Change the following in Section 4, table 6: Generic Desktop Page

From:

Usage ID	Usage Name
0C-2F	Reserved
C6-FFFF	Reserved

To:

Usage ID	Usage Name
0D-2F	Reserved
C9-FFFF	Reserved

New section to be added for the following text, Section 4.11

Wireless Radio Controls CA A collection of buttons or switches that enable all-wireless radio communication to be turned on/off

Wireless Radio Button OOC Indicates the current state of a wireless on/off momentary push button. State must be reported once for every button press.

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Wireless Radio LED 00C Indicates the current state of wireless communication to the user. This will reflect the state of the overall system radio state.

Wireless Radio Slider Switch 00C Indicates the absolute value for the state of radio communications. State must be reported when it goes from 0 to 1 as well as 1 to 0.

Sample Report Descriptors:

1. Button (without LED)

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USAGE_PAGE (Generic Desktop)          05 01
USAGE (Wireless Radio Controls)       09 0C
COLLECTION (Application)              A1 01
  LOGICAL_MINIMUM (0)                  15 00
  LOGICAL_MAXIMUM (1)                  25 01
  USAGE (Wireless Radio Button)       09 C6
  REPORT_COUNT (1)                     95 01
  REPORT_SIZE (1)                       75 01
  INPUT (Data, Var, Rel)                81 06
  REPORT_SIZE (7)                       75 07
  INPUT (Cnst, Var, Abs)                81 03
END_COLLECTION                          C6

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2. Button with LED

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USAGE_PAGE (Generic Desktop)          05 01
USAGE (Wireless Radio Controls)       09 0C
COLLECTION (Application)              A1 01
  LOGICAL_MINIMUM (0)                  15 00
  LOGICAL_MAXIMUM (1)                  25 01
  USAGE (Wireless Radio Button)       09 C6
  REPORT_COUNT (1)                     95 01
  REPORT_SIZE (1)                       75 01
  INPUT (Data, Var, Rel)                81 06
  REPORT_SIZE (7)                       75 07
  INPUT (Cnst, Var, Abs)                81 03
  USAGE (Wireless Radio LED)          09 C7
  REPORT_SIZE (1)                       75 01
  OUTPUT (Data, Var, Rel)              91 02
  REPORT_SIZE (7)                       75 07
  OUTPUT (Cnst, Var, Abs)              91 03
END_COLLECTION                          C6

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3. Slider Switch

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USAGE_PAGE (Generic Desktop)          05 01
USAGE (Wireless Radio Controls)       09 0C
COLLECTION (Application)              A1 01
  LOGICAL_MINIMUM (0)                  15 00
  LOGICAL_MAXIMUM (1)                  25 01
  USAGE (Wireless Radio Slider Switch) 09 C8
  REPORT_COUNT (1)                     95 01
  REPORT_SIZE (1)                       75 01
  INPUT (Data, Var, Abs)                81 02
  REPORT_SIZE (7)                       75 07

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INPUT (Cnst, Var, Abs) 81 03
END_COLLECTION C6

Response:

<Added by HID Chair upon closing the Request>

Notes on Approval Procedure:

HID WG On Line Voting Procedures

1. Votes are on a per company basis.
2. Each Review Request shall have attached a Required Voter List that is the result of recruiting by the HID Chair and submitter of members of the USB IF. Required Voter List must include the HID Chair plus 2 companies (other than the submitter) plus any others designated by the HID Chair at the Chair's discretion. The Required Voter List ensures that a quorum is available to approve the Request.
3. Impose a 7-calendar-day posting time limit for new Review Requests. HID Chair or designate must post the RR within 7 calendar days. HID Chair or designate must work with the submitter to make sure the request is valid prior to posting. Valid review request must include all fields marked as required in the template. A new template will be adopted that requires at least the following fields: Change Text, Required Voter List, Review Period End Date and Voting End Date, Submittal Date, Submitter, Review Request Title and RR Number.
4. If a RR approval process stalls, the HID Chair may call a face-to-face meeting or conference call to decide the issue. Submitter may request that this take place.
5. Impose a minimum 15-calendar-day review period on a posted RR prior to the voting period. At HID Chair discretion, changes to the RR may require this review period to restart.
6. The Chair will accept votes via documentable means such as mail or e-mail during the 7 calendar days after the close of the review period. If a Required Voter does not vote during the period, then there is no quorum and the Chair may pursue the absent required voter and extend the voting period. The Chair may designate a substitute for the absent voter and extend the voting period if necessary.