

At a Glance Getting Hook and PTT Status of Tipro Voice Communication modules

USB HID Device Class	HID Telephony	HID Keyboard
Supported Hardware	All BeFREEs, Speakerboxes FxT and Handsets HTx ¹	All Tipro devices with USB controller
Integration of software and hardware	#undet TRIS_FILE #tender TRIS_FILE[] =FILE_; #endif #endif #cnif	ChangeMe utility File Destrop Device Tools Options Security Window Help MI: Key A1 & MI: Key B1 See Function Interface Scanine Contact Type Expload corrient Version 100 44 are Version 100 45 are Perss Hardware can be adjusted to software
Software application receiving event notifications	Line 1 Line 2 Line 3 Line 4 Line 4	Line 1 Line 2 Line 3 Line 4 Line 5 Line 6 Line 6 Line 7 Line 6 Line 7 Line 8 Line 8 Line 8 Line 9 Li
	Application connected to HID Telephony device receives notifications, even when not in focus	Only application in focus receives the notifications
(Status)	as HID Telephony Device	as HID Keyboard Device
Reports	(sent only when addressed)	(automatically sent upon an event)
Reporting Events	Untitled - Notepad	Untitled - Notepad
(status change)	File Edit Format View Help	File Edit Format View Help 1 a A1
•	No keyboard codes	File Edit Format View Help 1 a
•		File Edit Format View Help 1 a A1

¹ Not supported are: TM-FxU and TM-HUx



In Detail

The current status of the Hook switch (inside the cradle) and PushToTalk/PushToMute (PTT) key/button in all Tipro USB handsets² are normally reported to the host computer as a programmable sequence of keystrokes generated by a standard USB keyboard. Respective details are presented in the previous issue ("Hook and PTT in Software") of this paper.

Since nearly all operating systems are capable of accepting standard USB keyboard input and nearly every application software expect the operator to use it, this concept typically enables Tipro Modular Dispatcher Terminals to be integrated into the existing software environment without any intervention in the code.

However, certain software applications are designed to enquire on the Hook and PTT status rather than capturing the respective keyboard events.

For such cases Tipro devices with HID Telephony Interface can be configured in ChangeMe to send events over HID Telephony interface³. HID Telephony devices send status reports only when specifically addressed to (different to HID Keyboard devices that report automatically to the respective driver whenever a change in status occurs).

The software application needs to connect specifically to a HID Telephony device to receive its status updates (i.e. Hook, PTT events). This can be tested with ChangeMe

To configure: 1. In ChangeMe, click on the Content desired key (e.g. Hook switch) Layer1 Special content 2. Right-click on the content entry field and HID Telephony Module1 (HS) Hook switch 3. choose HID Telephony and the correct event 4. Save and Update the hardware - D X To test: USB HID Telephony Tipro HID Telephony device recognized Press its keys to get events. 1. In ChangeMe, choose the option HID Telephony from the Menu Scan Tools USB HID devices USB FILD deVices (WD-0.081 PID-0.205) PS2 to USB Converter (R./W) (VID-0.881 PID-0.205) PS2 to USB Converter (R./W) (VID-1.222 PID-FACD) (Keyboard (no R./W) 1] (MD-1.222 PID-FACD) (To Handset Telephory (R./W) (VID-2.286 PID-0.016) PTT-19 (R./W) 2. Scan for available HID Telephony hardware 3. Check if the desired events are HID Telephony events [1] Tipro Handset Telephony; 00; 01 00 00 00 00 00 00 00 Hook [1] Tipro Handset Telephony; 00; 00 00 00 00 00 00 00 00 [1] Tipro Handset Telephony; 00; 00 00 00 00 00 00 00 00 Hook [1] Tipro Handset Telephony; 00; 00 00 00 00 00 00 00 00 Hook reported (e.g. when lifting handset)

For further details please contact Tipro technical support team at support@tipro.si

² The same is applicable to six mechanical keys integrated in USB Speakerbox modules and the PTT key on BeFREE 10 and BeFREE 20

³ In fact, both HID Keyboard and HID Telephony interface could be used concurrently