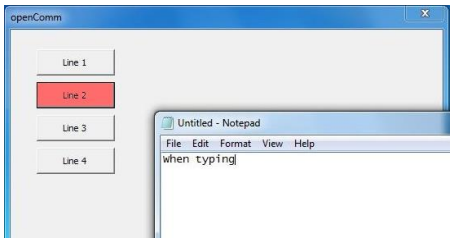
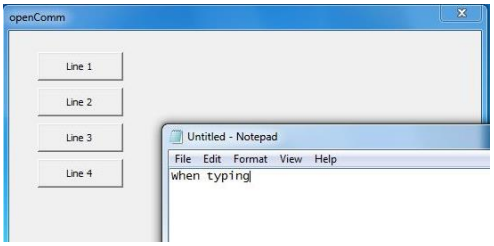
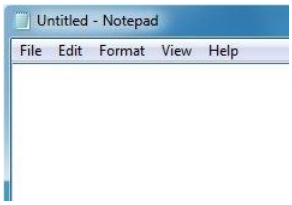
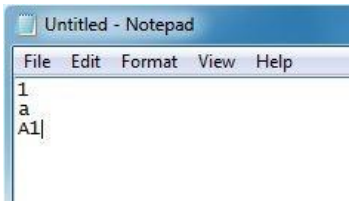
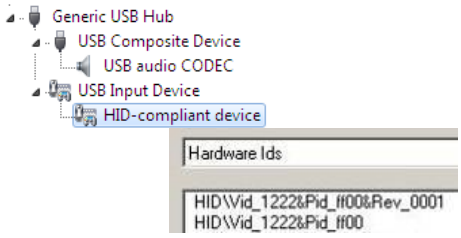
At a Glance

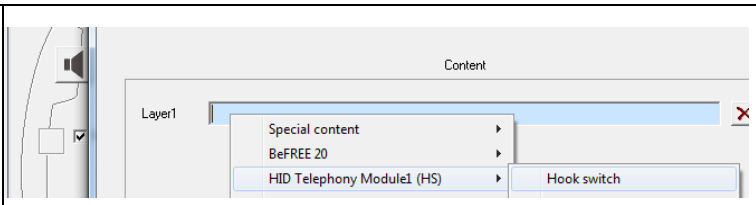
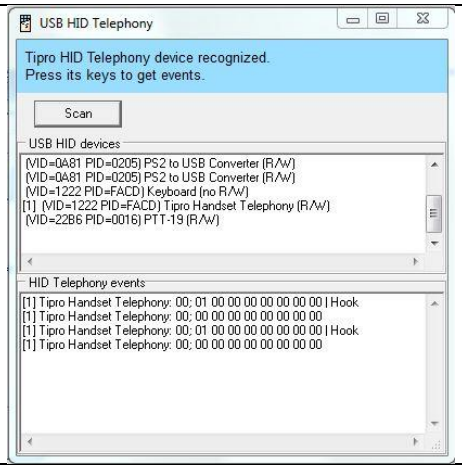
Getting Hook and PTT Status of Tipro Voice Communication modules

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	 Software needs to be adapted to hardware	 Hardware can be adjusted to software
Software application receiving event notifications	 Application connected to HID Telephony device receives notifications, even when not in focus	 Only application in focus receives the notifications
(Status) Reports	as HID Telephony Device (sent only when addressed)	as HID Keyboard Device (automatically sent upon an event)
Reporting Events (status change)	 No keyboard codes	 Standard keyboard codes
Appearance in Device Manager	 HID Compliant Device	 HID Keyboard Device

[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 handsets[2] 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 interface[3]. 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 desired key (e.g. Hook switch) 2. Right-click on the content entry field and 3. choose HID Telephony and the correct event 4. Save and Update the hardware	
To test: 1. In ChangeMe, choose the option HID Telephony from the Menu Tools 2. Scan for available HID Telephony hardware 3. Check if the desired events are 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