At a Glance

HANDSET MODULE
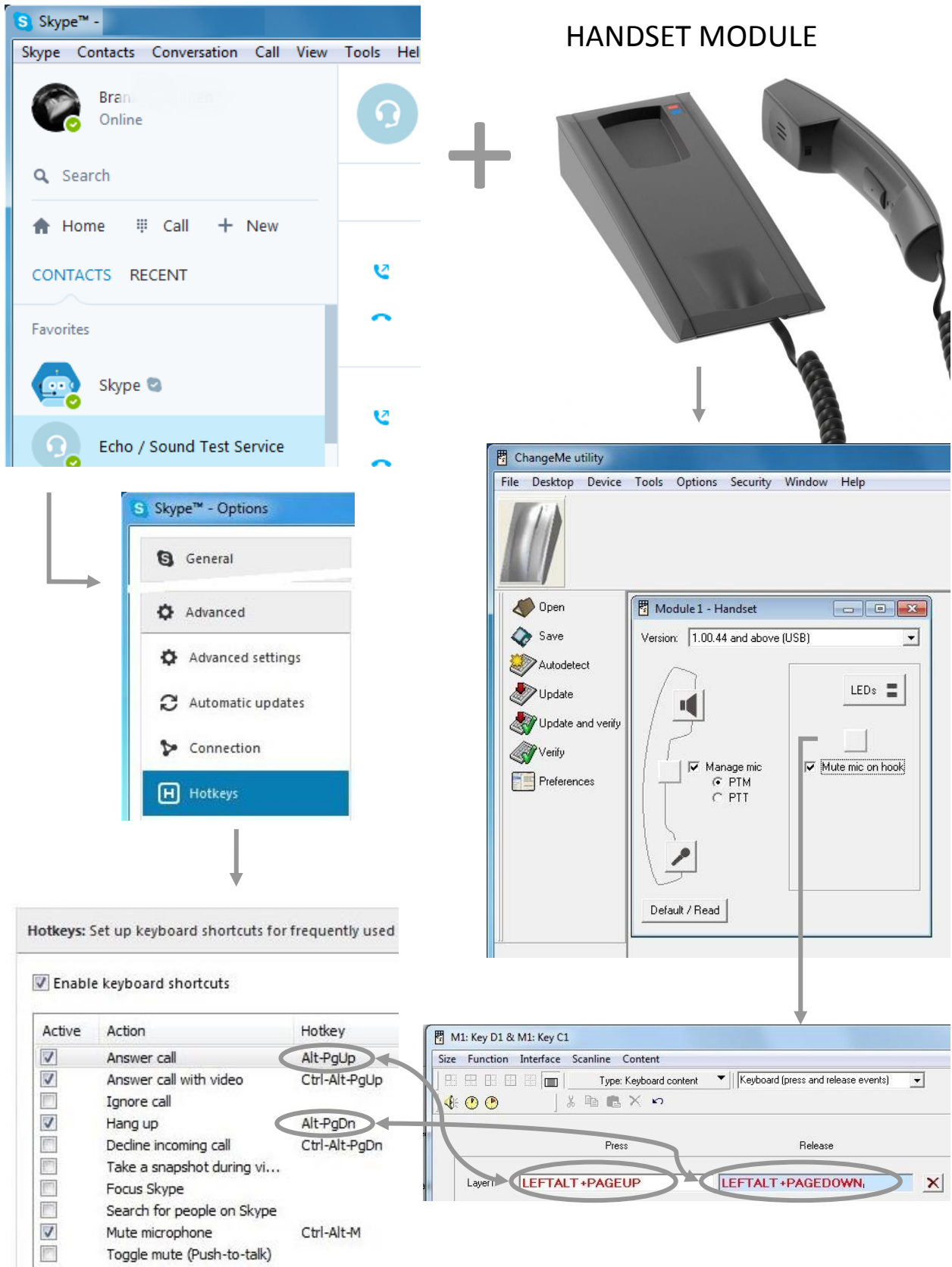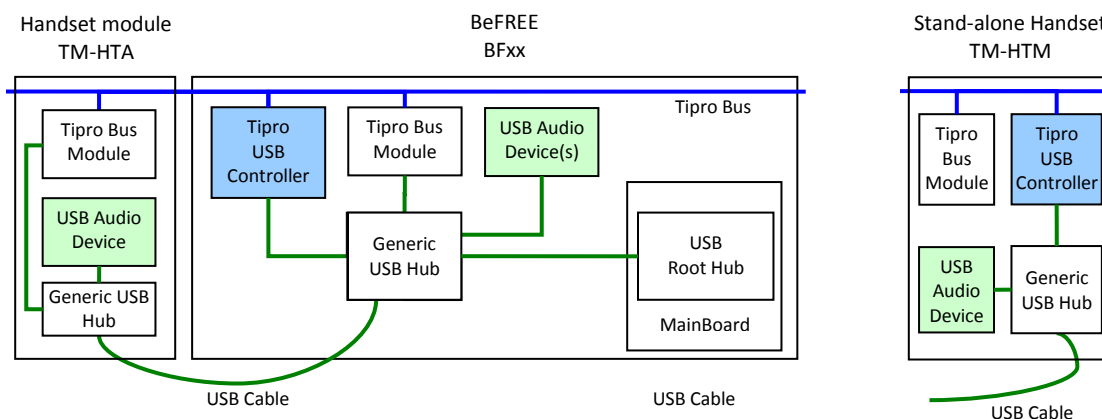
In Detail

All Tipro Handset Modules, besides respective audio components, incorporate a Hook switch (inside the cradle) and a PushToTalk/PushToMute (PTT) key/button (inside the handset). The current status of the Hook (i.e. on-hook/off-hook) and the PTT (i.e. pressed/released) are scanned by the Internal Tipro bus module. Every change of the status is detected and reported to the Tipro USB Controller as an event. The Controller can be integrated inside the handset or some other module, typically BeFREE Touchcomputer, within the modular terminal. The first case (see **Figure 1** – diagram on the right hand side) is about so-called "Stand-Alone" version TM-HTM of the handset. The second one (see **Figure 1** – diagram on the left hand side) is about so-called "Add-On Module" version TM-HTA of the handset.

Figure 1 – Schematic of a terminal with handset module and of stand-alone handset

The Controller is connected to the host computer via USB, acting as a standard HID Keyboard Device. This way the controller translates each Hook and PTT event into the respective sequence/combination of keys typed on a standard USB keyboard. These sequences/combinations need to be programmed using Tipro's ChangeMe software utility in order to match what is expected by the application software as so-called "Hotkeys" or "Keyboard Shortcuts".

ChangeMe allows any key, key sequence (several keys pressed and released one after another, e.g. "A2#b$1") or key combination (several keys being pressed simultaneously, e.g. "Ctrl+Alt+F1") that can be generated with a standard keyboard to be programmed as a key event. Once programmed, these settings remain permanently stored within the controller's non-volatile memory until next (re)programming if/when required.

Afterwards, in a normal operation, no Tipro specific software is needed since operating systems include their own generic drivers for the standard USB keyboard input.

The example on the first page shows the popular communication software "Skype".
1. In the menu Tools > Options > Advanced > Hotkeys, the use of keyboard shortcuts can be enabled (and fine-tuned, if necessary).
2. Start ChangeMe and click on the handset to configure it. Enter the key sequences/combinations shown in 1. into the corresponding Handset events, simply by clicking in the entry box and pressing the key combination on the keyboard. Click OK to confirm.
3. Program the controller with the new hardware settings by pressing Update.