

KT05 Installation

KT05 is a wall-mounted touchscreen user interface for the Comfort Integrated Intruder Alarm and Automation System which allows it to control the Security System as well as the lights, air-conditioning, and appliances that are connected to the Comfort system.

Specifications

Size	182 mm x 121 mm x 35 mm (15 mm protrusion from wall)
Mounting	Wall Mount with wall box
WallBox	150 mm x 100 mm x 20 mm
Wall Cutout	157 x 121 x 14 mm
Display	7 inch Touchscreen 1024 x 600 dots
Input Power	9 to 36 V 500mA
Connections	12V, COM, KA, KB
Interfaces	USB
Operating System	Android 4.2.2

What is Included

KT05 Tablet with metal wallbox

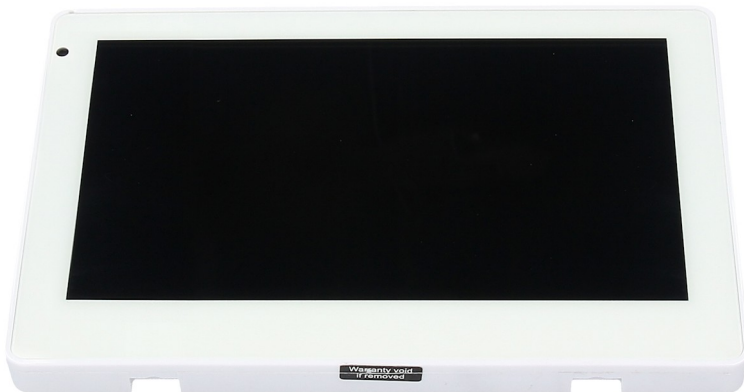


Photo 1: KT05 Tablet



Photo 2A: Power Plug 5.5 mm diameter with 1 meter cable. The wire with Stripe is Negative,



Photo 2B: USB Type A to Type A Cable - 1 meter.



Photo 2C – KT05 Interface Cable Assembly

The KT05 Interface Cable assembly is connected between the Tablet and the KT05 Interface board

Additional Components (Not Included)



Photo 3: XA02-0046 DC to DC Converter

Input Voltage: 9 to 12V DC (RED = IN+, BLACK = IN-)

Output Voltage 18 to 24 V, 1 A DC (YELLOW = OUT+, BLACK = OUT-)

Connect IN+ (RED) to S12V on CM9001

Connect IN- to COM (next to S12V)

Connect OUT+ (YELLOW) to the DC power plug + wire (black)

Connect OUT- (BLACK) to the DC power plug – wire (striped)

Note that the IN – and OUT – are not internally connected. The Input and Output are isolated from each other. Do not connect the black wires together.

The DC to DC convertor increases the voltage to the KT05 so that it is sufficient to power it up over a longer cable distance. KT05 will not work if the Voltage drops below 10V, even momentarily. S12V is used to reset the voltage supply automatically to KT05 if it stops working to low voltage or any reason.

Only 1 XA02-0046 DC to DC Converter connected to S12V/COM is required for a system with up to 3 KT05s

Connections

The back of KT05 is shown with the Metal wallbox

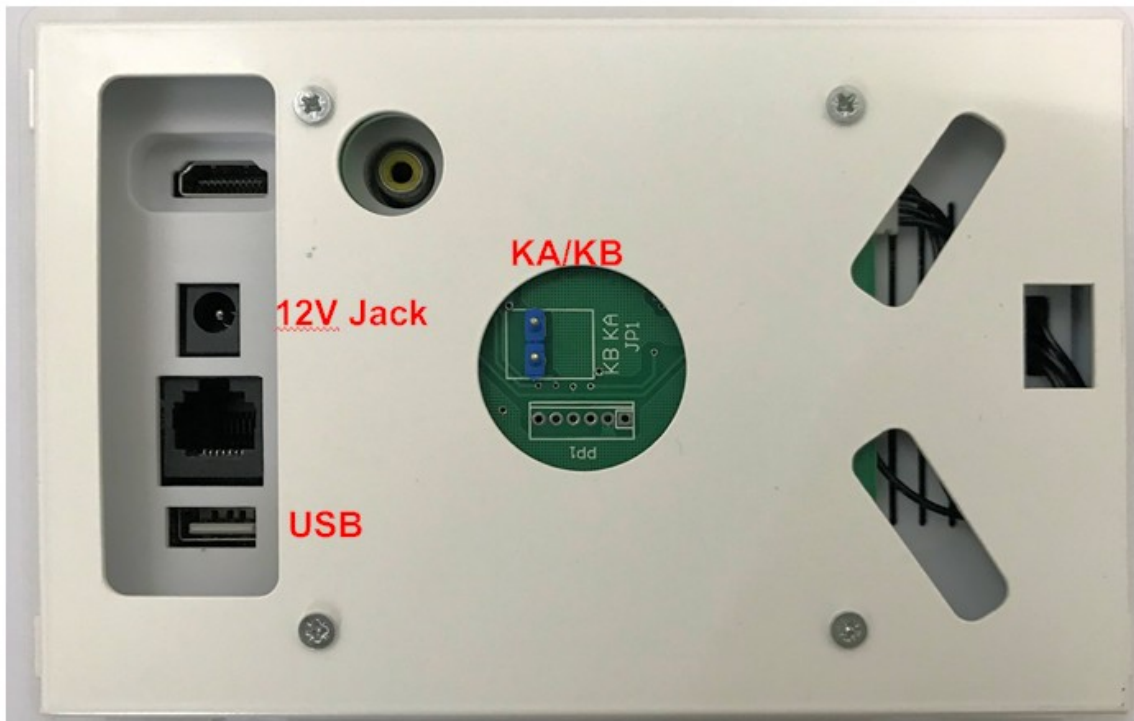


Photo 4: Rear of KT05 in Wallbox. KT05 Interface Cable is within the wallbox.

Connectors

- Power -12V DC Jack
- USB Connector (Type A)
- RS485 KA/KB Terminal Block
- HDMI, LAN, Audio – Not used
- KT05 Interface connector (2 x 4 way socket) connected to Interface Cable Assembly (Photo 2C)

LEDS

- PWR (Green): Means Power is applied to KT05
- D10 (Green): Flashes when receive from RS485 bus.
- D9 (Red): Flashes when KT05 replies to a poll from CM9001, ie ID is correct
- RDY (Green): Should be ON steady at all times
- BUSY1 (Red) Should be OFF after Reset/Power On
- BUSY2 (Red) Should be OFF after Reset/Power On

- ERR (Red) Should be OFF after Reset/Power On

if D10 (Green) is off, that means KA/KB is not connected to CM9001.
If D9 (Red) is Off, it means the KT05 ID is not polled.

RESET Button

- SW1 – Press to reset KT05. This does not affect any settings.

Power

Connect the 12V Plug of the Power plug (Photo 2A) into the 12V DC jack (Photo 4) of KT05. The ends of the 12V plug wires (Black is positive, Black stripe is Negative) should be connected to the Output wires of the XA02-0046 DC to DC Converter (RED = OUT+, BLACK = OUT-) . This provides 12V to 24V voltage to the KT05. When power is applied, press and release the RESET Button. All 4 LEDs, RDY, BUSY1, BUSY2, ERR willll turn on momentarily and all will turn off except for RDY (Green).

KA/KB (RS485)

Connect the RS485 Bus KA and KB to the blue terminal block marked KA and KB. This allows communications with the tablet with the Comfort controller The ID of the KT05 must be set 1 to 8 so that it does not conflict with another keypad ID in the system. The default ID is 2 To change the ID see instructions below.

USB

The USB conector is used to transfer the converted CCLX file from a computer. It is not required for normal operation.

Changing KT05 ID

The Default KT05 ID on the RS485 bus is 2. To change the KT05 ID, remove the power and RS485 connections and open the back mounting plate by unscrewing the 2 bracket mounting screws at the bottom of the tablet. **DO NOT UNSCREW THE 4 SCREWS AT THE BACK OF THE MOUNTING PLATE AS THESE HOLD THE INTERNAL PCB IN PLACE.**

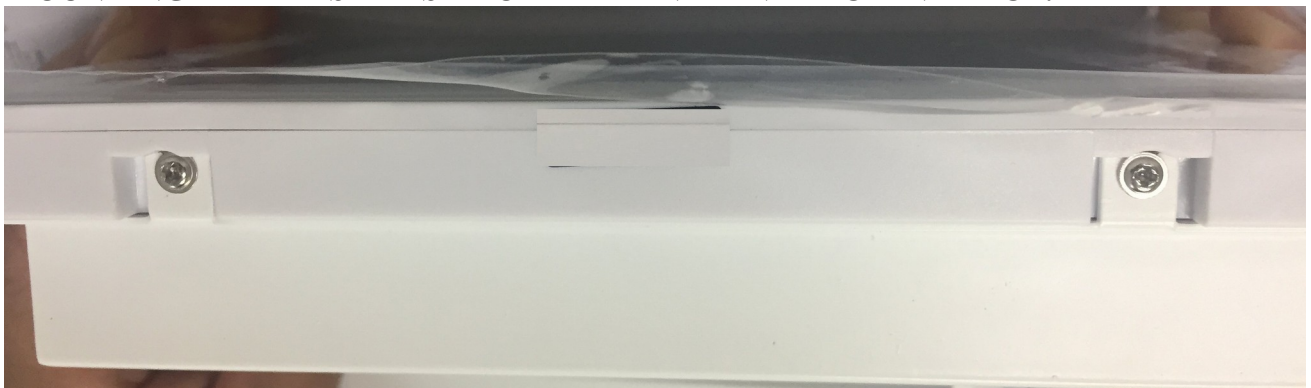


Photo 5: Bottom of KT05 showing screws for Wall box

Lift the bottom of the metal bracket off the back of the tablet as shown below. It is not necessary to disconnect the black cable connecting the PCB to the back of the tablet in the photo below but if the connection is removed make sure it is inserted back with the proper orientation.



Photo 6: Opening Wallbox

The ID on the Comfort Bus is set by the DIP switch marked “RS485 ID”. The default position is switches 2,3,4 in the ON and 1 in Off position ie ID=2. It is not necessary to change the ID if there is only one other keypad in the system at ID=1. It is highly recommended that there should be a normal Keypad KP04A, KP05A, or KP06A in the system at ID=1.



Photo 7: KT05 Interface PCB

DIP Switch	4	3	2	1
ID				
1	On	On	On	On
2	On	On	On	Off
3	On	On	Off	On
4	On	On	Off	Off
5	On	Off	On	On
6	On	Off	On	Off
7	On	Off	Off	On
8	On	Off	Off	Off

Table 1 – KT05 ID Settings

After changing the ID, press the RESET button on KT05 Interface PCB, and reassemble the metal bracket onto the back cover and tighten the 2 screws at the bottom.

File Conversion in Comfigurator

Before using the KT05, it is necessary to convert and transfer the programmed configuration from the computer. In Comfigurator, program the Zones and Control Menu pages. Security > Zones is the configuration of security zones ie doors, windows, motion sensors etc. Control Menu is the automation control and feedback settings. Both Zones and Control Menu will be shown in the Comfort app running on KT05.

When the configuration is complete, save the cclx file. Then select File > Convert cclx file for iOS/Android app.

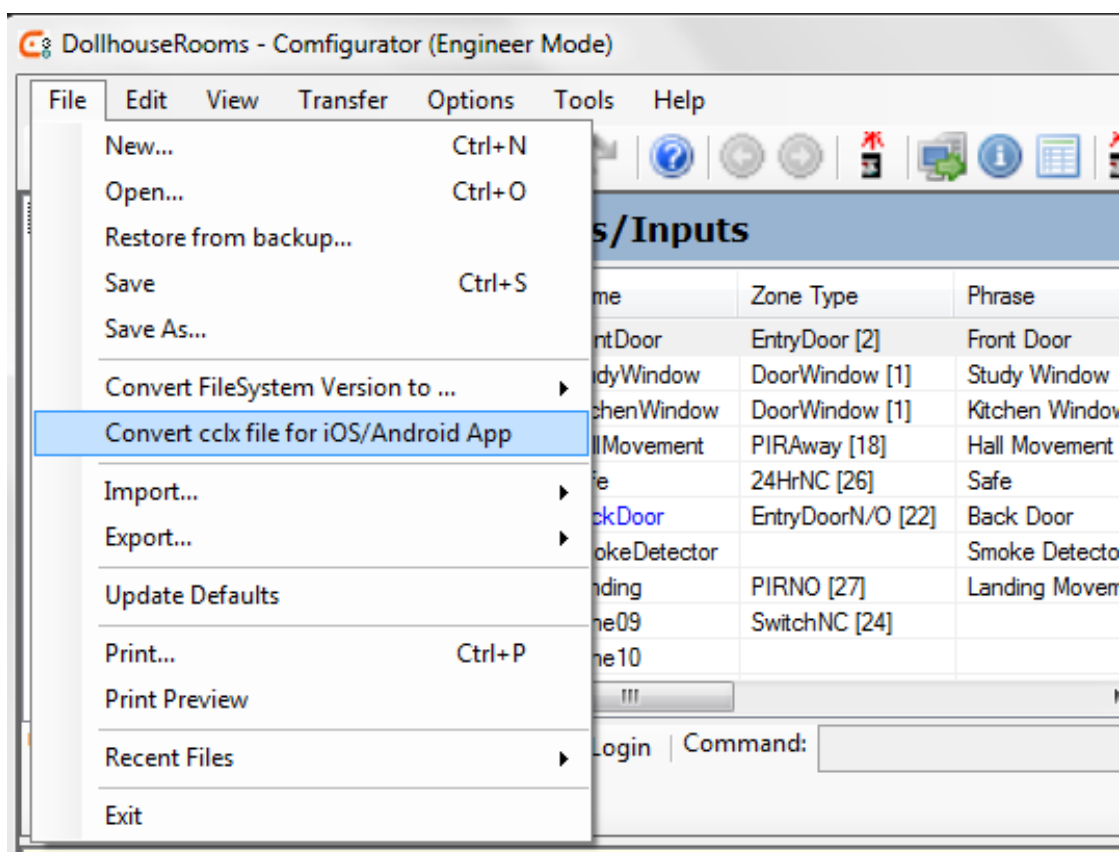


Photo 8: File Conversion for Comfort App
The screen below appears

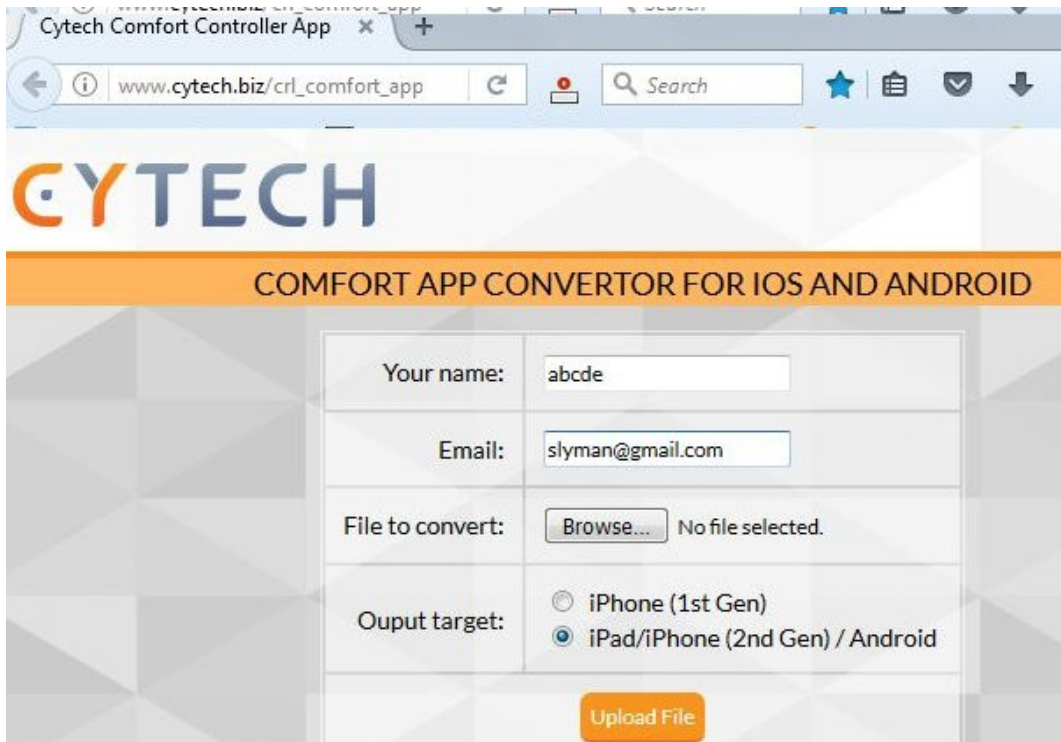


Photo 9: File Convertor

Your Name: Enter your name

Email: Enter your email address

Browse to select the saved cclx filename

Click “Upload File”

The screen below should appear;

```
Found config info
10.0.0.47
1001
cytech.dyndns.org
1001
closing config info
```

Comfort file conversion complete

The converted file has been sent to abcde at slyman@gmail.com .

Once you receive the email, tap the attachment and open it in the Comfort App.

Android Tablet and iPad users can also load the file directly. Check the forums for details

This shows the file has been converted and sent to the email address.

Connecting KT05 to a PC

1. A laptop PC with Windows 7 and above is needed which can be brought next to the KT05 **if it is already mounted to the wall.**
2. It is not necessary to exit from the Comfort app
3. Unscrew the 2 holding screws from the base of the KT05 (see Photo 5) if KT05 is mounted to the wall.
4. Unhook the Tablet from the wall mount box by lifting it slightly, and move the top part

- forward away from the wall mount box (see Photo 6) if KT05 is mounted to the wall
5. Do not disconnect any connectors or power off the KT05.
6. Connect the supplied USB cable (Photo 2B) between a Windows PC and the KT05 USB port .
7. The screen below should appear after the driver has been automatically installed on the computer. Tap on “Turn on USB Storage”.

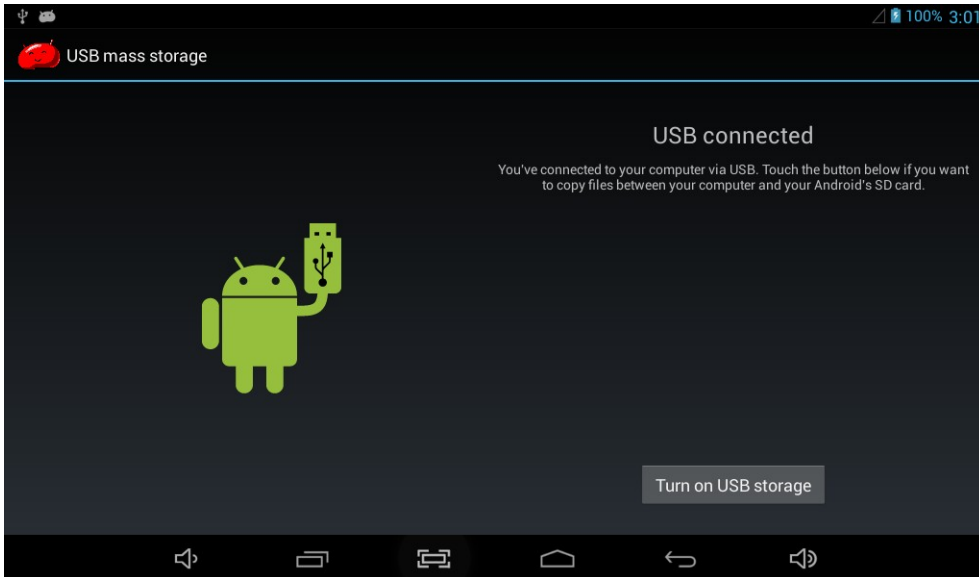


Photo 10A: USB Connected to PC

There may be a message on the computer

“There is no disk in the drive. Please insert a disk into drive”.

Press the Cancel button. After the USB Storage is turned on, the KT05 folders can be seen in My Computer. If the folders cannot be seen, remove the USB from the PC and re-insert it.

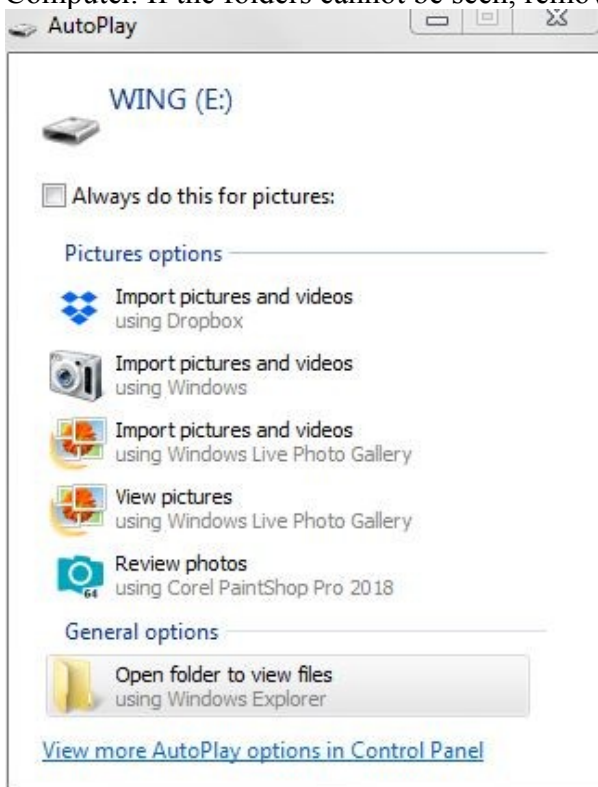


Photo 10B – Folder View in My Computer (on PC)

Open Folder to View Files and navigate to the Download folder in the tablet.

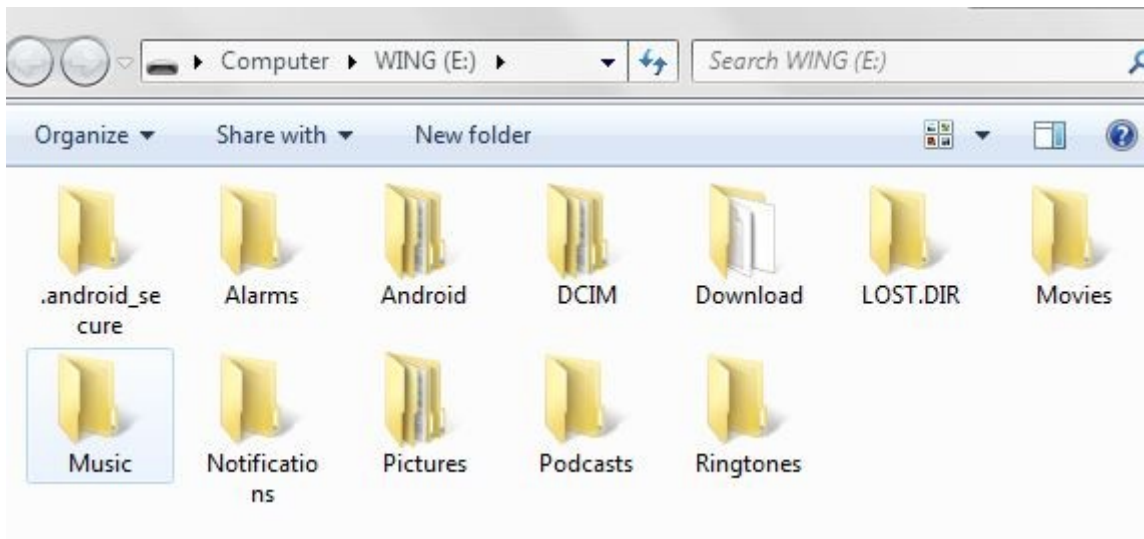


Photo 10C – Folders on KT05 Tabler

Copy the file with the .jrlccip extension to the Download folder in KT05. Use the KT05 apps Import feature to import this as a profile as described below. It is not necessary to turn off the USB Storage after you finish setting up.

Import into KT05

The Initial screen is shown below after boot up.

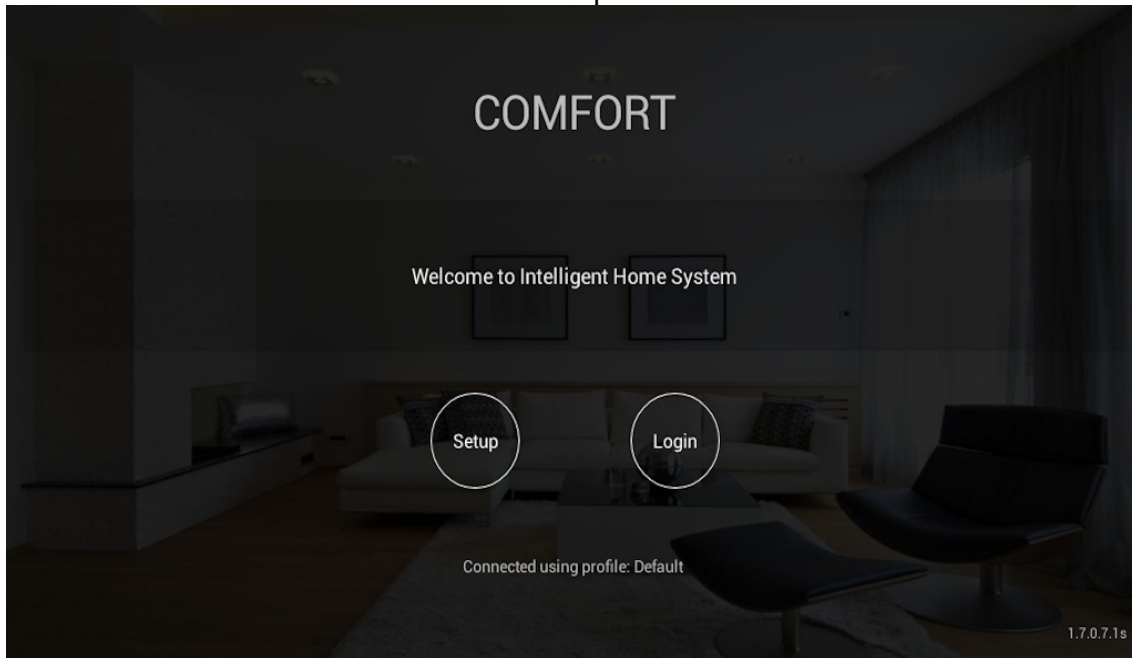


Photo 11: Landing page

Press Setup.

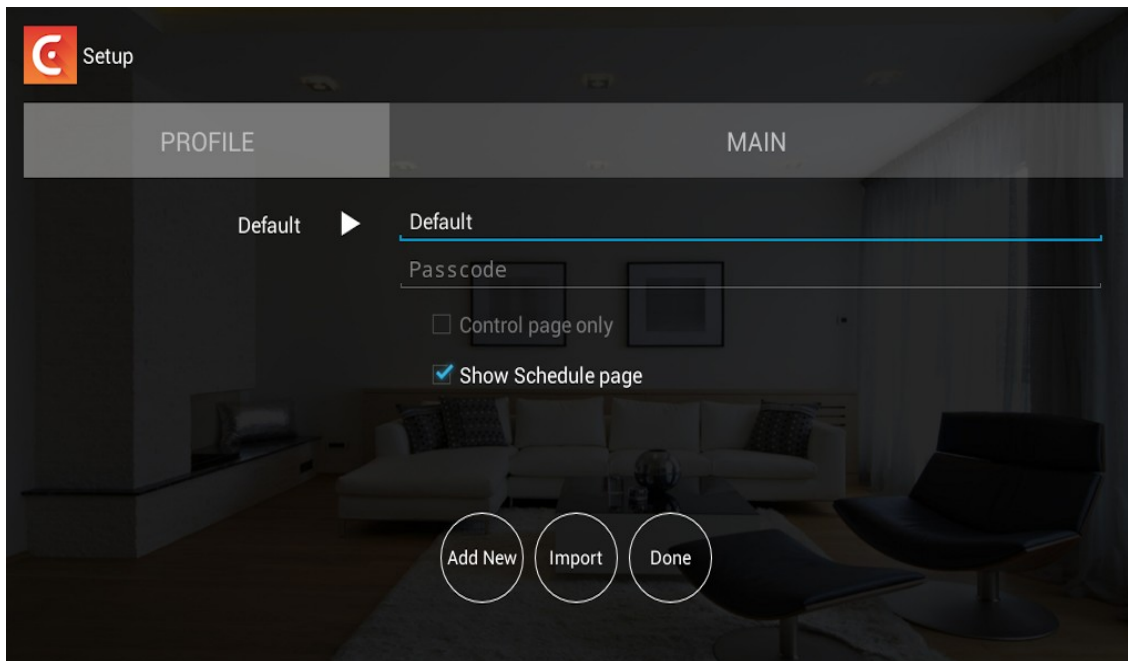


Photo 12: Setup Page

“Default” is the default name of the profile. More than 1 profile can be added for control of different areas, eg “Main Building”, “Annexe”, “Store”. If the user code is entered in the passcode field, then the saved user code will be entered automatically to log in. However the user code must always be entered to disarm the Security system .

“Control Only” If this is checked the Dashboard and Schedule screens are not shown. This is suitable for an automation-only system (without Alarm).

“Show Schedule Page” determines if the Schedule Page is shown. Uncheck if the user does not need to change the Schedules (Time Programs)

Import

Select “Import” to import the configuration file .jrlccip created by Comfigurator . Select the jrlccip file in the sdcard/mnt/Download folder

Login

In the Setup/Login Screen press Login. Enter the user code (default 1234). This should go to the Dashboard screen. If Log in does not work this may be because of the RS485 connection to Comfort (KA/KB) or because the KT05 ID was not set up correctly.

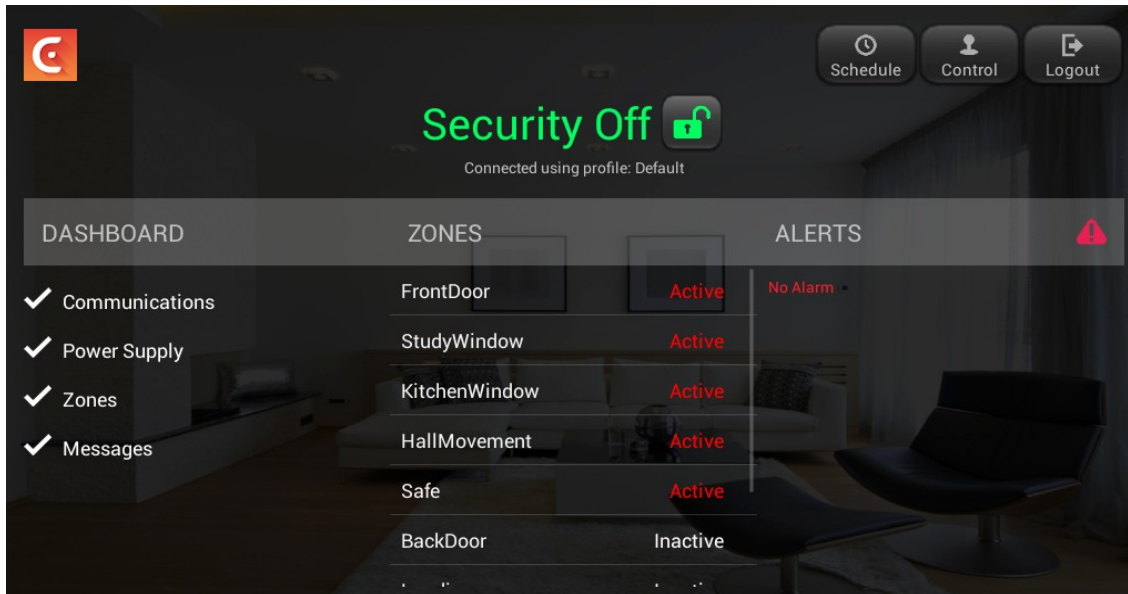


Photo 13: Dashboard

Screensaver

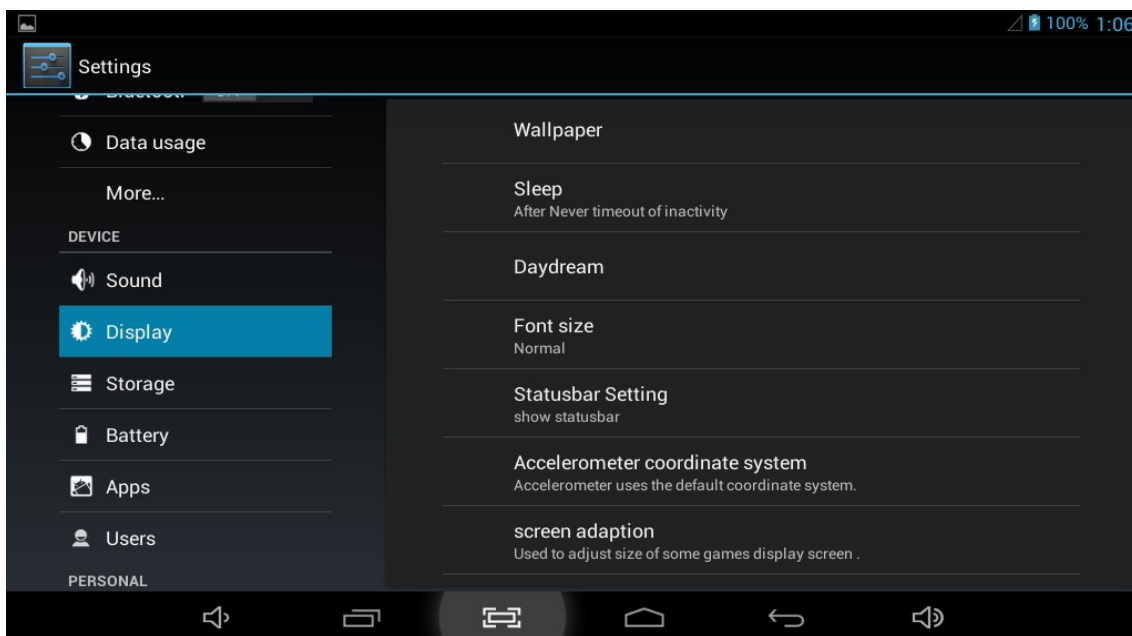


Photo 14A: Settings > Display

The default screen saver is a black screen which appears after 1 minute of inactivity. To change the screensaver settings to display your own screensaver, go to Settings > Display.

The Sleep setting allows you to select a time for the screensaver to turn on. To change the display in screen saver mode, go to Display > Daydream and select Photo Frame. Copy the image file in .png or .jpg format with size 1024 x 600 dot into the Download folder of the tablet.

Click the icon on the right of Photo Frame to select a Folder where the screensave image file is located. Note that you can select the Folder only. The default file is "black.png" saved in the

Download Folder (which is a black screen)

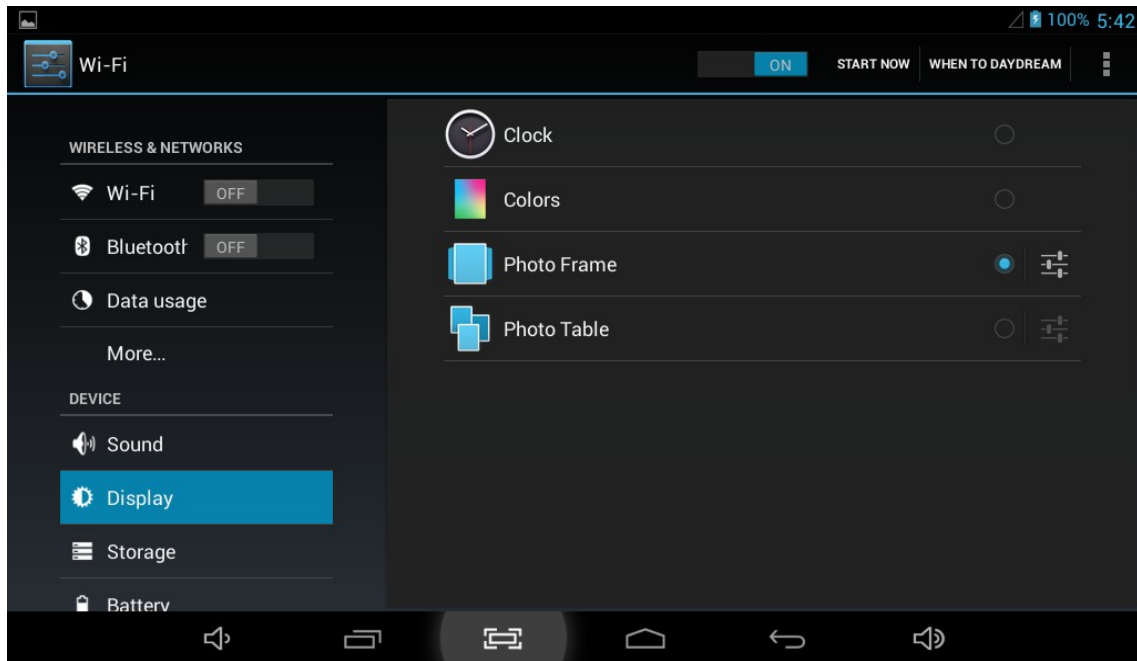


Photo 14B Display > Daydream

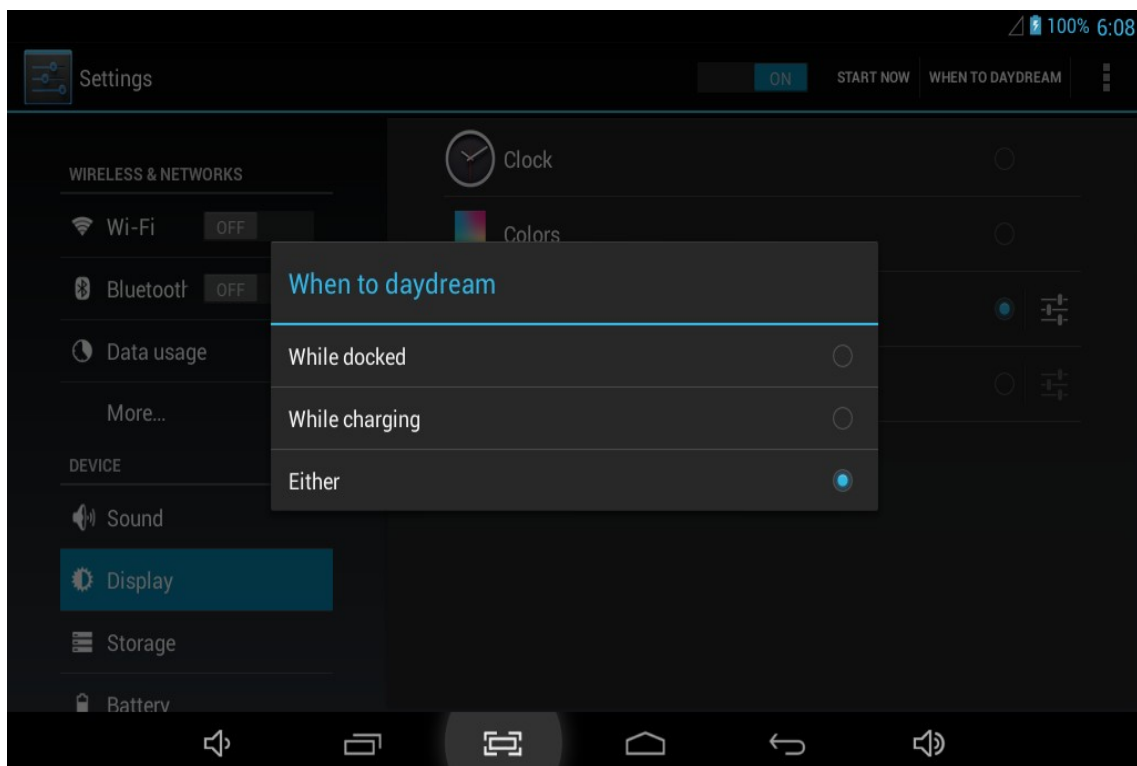


Photo 14C – Daydream Setting

Also in “When to Daydream” select “Either”

Show or Hide Statusbar

The Status Bar at the bottom of the screen allows the user to go to the Android Home screen and run other apps. This can be disabled so that the user cannot exit from the Comfort app.. Go to Settings > Display and Select StatusBar Setting

Select Hide Status Bar. To reveal the Status bar, select Show Status bar

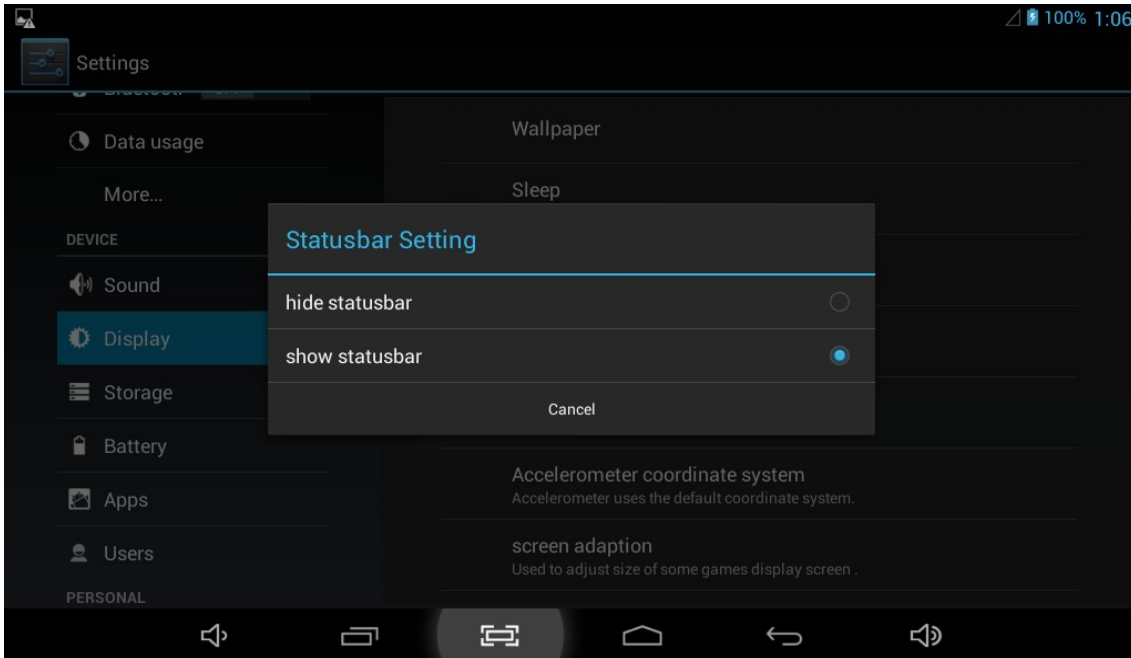


Photo 15: StatusBar

After Hide Status Bar has been selected, and the Comfort app is run, the bottom Android status bar at the bottom will not be seen and the Comfort app will be full screen. This prevents the user from exiting and accessing other functions on the tablet.

In order to load a new jrlccip file or a new apk file into the tablet, or to turn on the Status bar, it is necessary to exit from the app.

In order to exit from the app, follow the following steps;

1. If logged in, log out and return to the Landing Page, see Photo 11 with Setup and Login Buttons
2. Press and hold the text “Welcome to Intelligent Home System until the Login Button text changes to “Exit” for a few seconds . Press Exit. Note that the active area of the text to touch is very narrow (to avoid inadvertent activation by end-users)
3. A window opens to enter Engineer Code. Note that the Engineer Code (Default 6789) must be entered, not the user code.
4. The Comfort app exits.
5. To enable the Status Bar, go to Settings > Display > StatusBar and select “Show Status Bar”

“Error” Messages

The following messages may appear after log in to the app under certain conditions

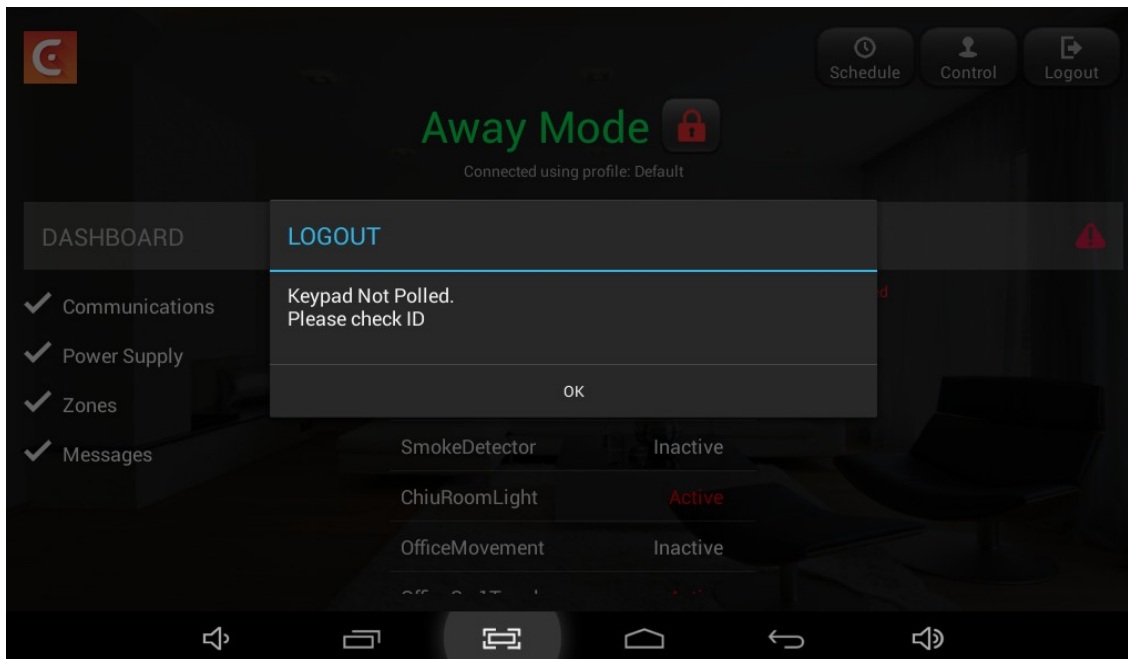


Photo 16 – Keypad Not Polled

“Keypad Not Polled” means the KT05 is not being polled by CM9001. This could be because the ID of the KT05 is not set correctly, or the CM9001 is not configured to poll the KT05. Check the KT05 ID and do Scan for All Modules in Configurator.

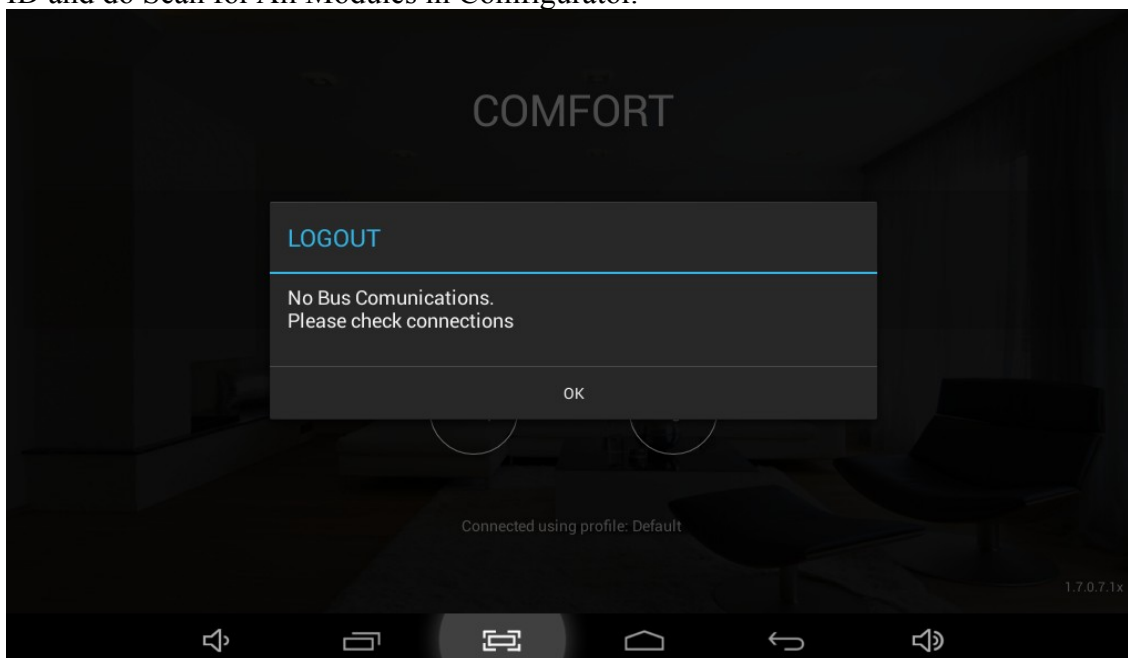


Photo 17 – No Bus Communications

“No Bus Communications” means the RS485 bus communications has not been detected on KA/KB. This could mean that the Bus is not connected or connected wrongly. Check the connections between KA/KB and the same KA/KB terminals in CM9001. KA should be connected to KA and KB to KB from KT05 to CM9001.

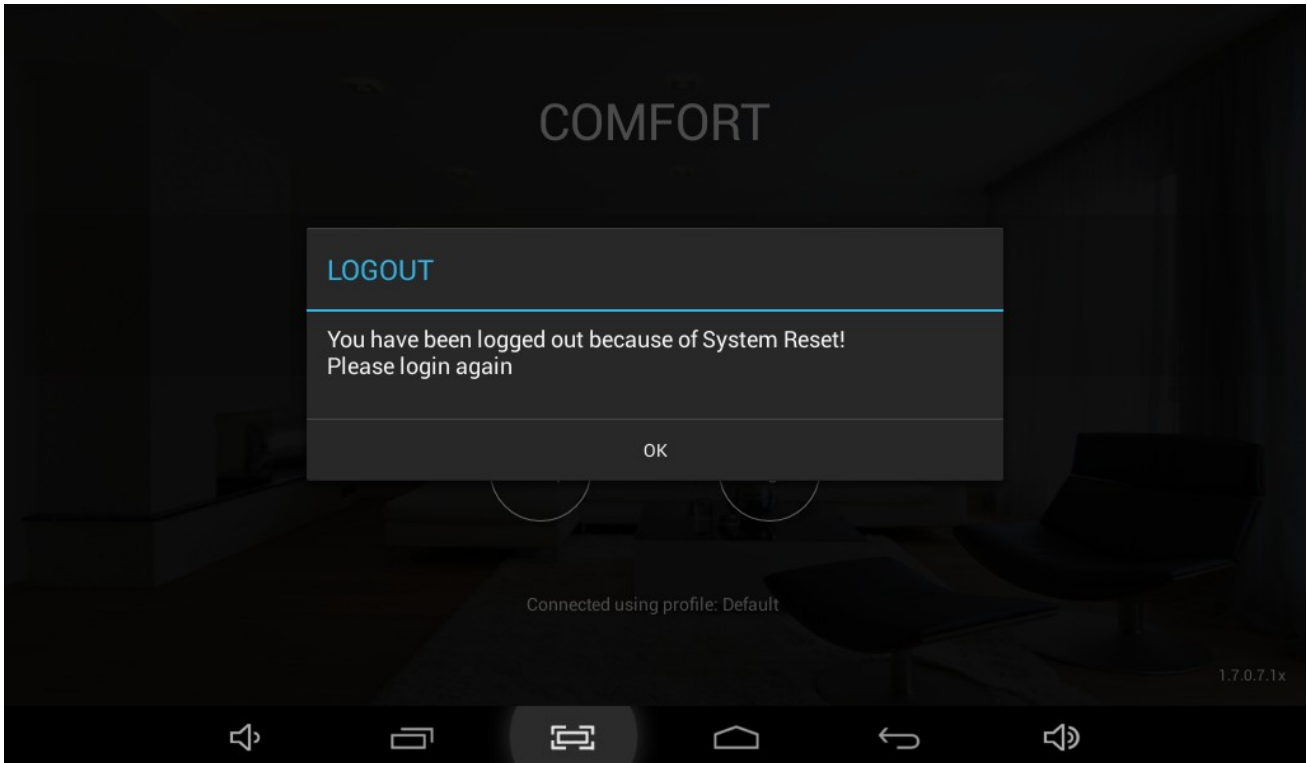


Photo 18 – System Reset

If CM9001 is reset, KT05 is logged out. Login is needed to go back to the app.

The latest manual can be downloaded from http://www.cytech.biz/kt05_touchscreen_keypad.html

Document History

20 Sept 2018 – Initial Release

26 Sept 2018 – Added Daydream settings in Photos 14A, B, C