Keypad Code Puzzle with Audio

ERT Keypad Puzzle Kit includes

Escape Room Techs Bad ASS Audio Controller
FX45 Full I/O Expansion Board
FX18 I/O card for BAC
12-Key, metal keypad, IP65, splash proof
Professional wiring harnesses
       Keypad to FX18
       FX18 to BAC
Keypad Code Puzzle Firmware installed and configured
SD Card with the following installed:

- MP3 Audio files (Laughbad, Magicwand, Wrong, Unlock, Beep)
- Bad ASS Manager for Windows v1.8.1 (64bit)
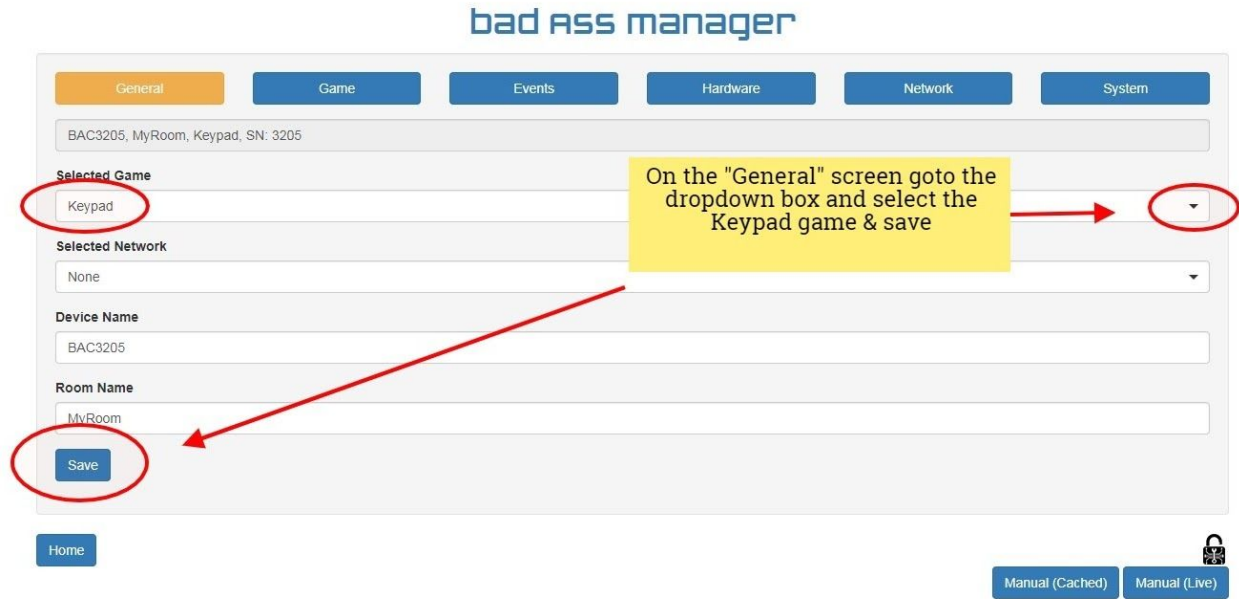- BAC Introduction documents
- Keypad Code Puzzle Doc

Keypad Puzzle Framework Overview

There are anywhere from 1 to 4 configurable independent keypad codes that require the user to duplicate in order to solve successfully. For every successful solution code entered an event can be triggered.
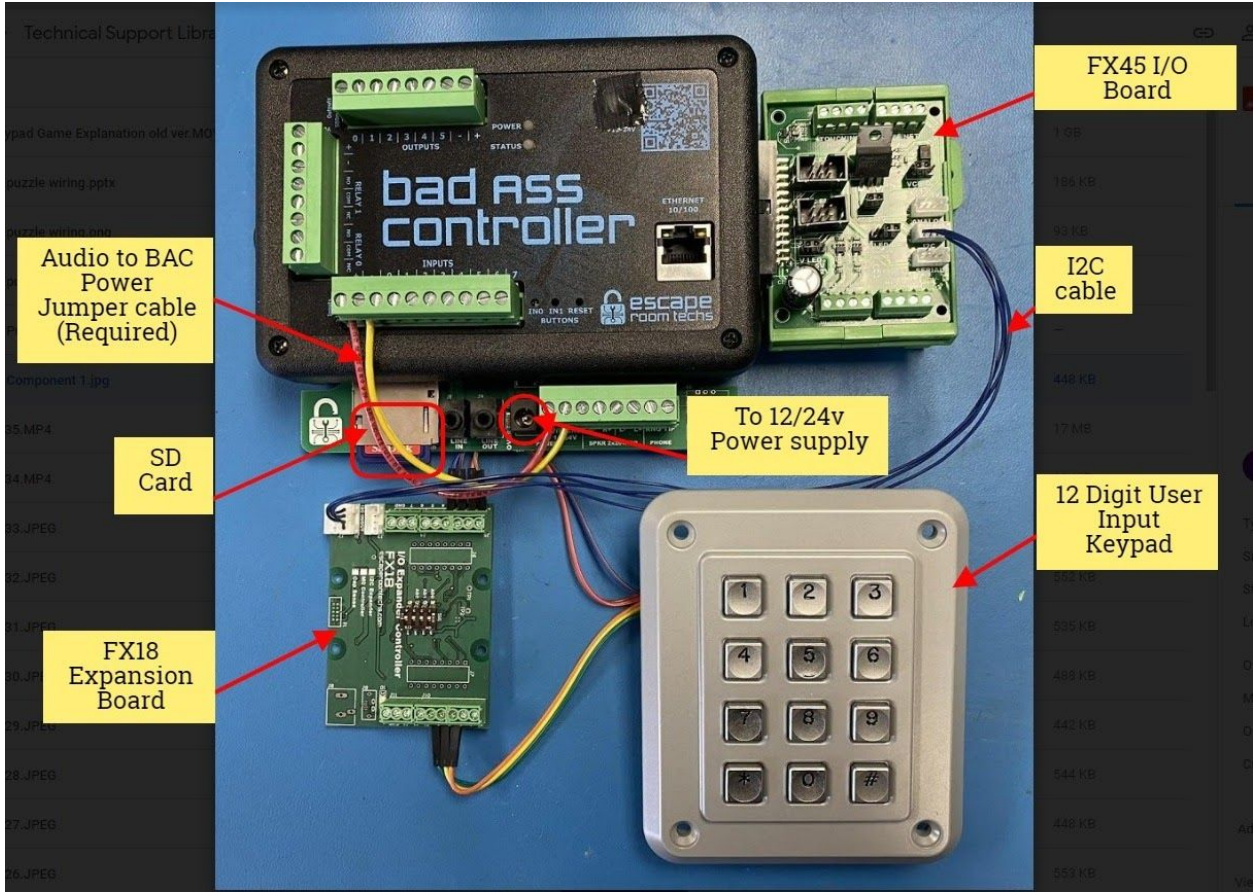
After the Hardware assembly ….Configuring the Basics within the Bad ASS Manager

After installing your hardware, connect the BAC and BAM to your network. Open the BAM and after a few seconds, the BAC will become available for configuration

On the "General" screen goto the dropdown box and select the "Keypad" game. At the bottom of the screen, click on the "save" box to saving your configuration change

bad ass manager

General	Game	Events	Hardware	Network	System

BAC3205, MyRoom, Keypad, SN: 3205

Selected Game

Keypad

On the "General" screen goto the dropdown box and select the Keypad game & save

Selected Network

None

Device Name

BAC3205

Room Name

MyRoom

Save

Home

Manual (Cached)   Manual (Live)

At the top of the page, click on the "Hardware" box and on the hardware screen check the "Enable Audio" box. At the bottom of the screen, save your setting. Insert the SD with the puzzle's sound files into the SD card slot in the BAC's audio board. Do a power off reset to recognize the new hardware.

bad ass manager

| General | Game | Events | Hardware | Network | System |

BAC3205, MyRoom, Keypad, SN: 3205

Detected Hardware

Internal Devices

Onboard I2C EEPROM

Note: the "FX18" Expander board is present

External Devices

FX18 IO Expander A

Hardware Configuration

Check the "Enable Audio" box & go to the bottom of the page and save the setting. Insert the SD card with your sound files into the SD card slot on the audio board. Power off the BAC to reset

Audio

☑ Enable Audio

Audio Pinout (Restart Re...)

Style B (Input 7)

Sprite Player

After your reboot, the Bad ASS Manager will automatically refind your BAC. Return back to the "Hardware" screen taking note of the audio file names available and volume settings. The audio files that are used for the output sounds are mp3 file type. The file name (without spaces) must include the extension when defined (ie Beep1.mp3)

SD Card

Once the "audio" option is enabled with the puzzle's SD sound card inserted, you will see the sounds used throughout the puzzle

UNLOCK.MP3 171.32KB

WRONG.MP3 20.21KB

LAUGHBAD.MP3   632.40KB

MAGICW~1.MP3   59.49KB

BEEP5.MP3   6.58KB

BEEP6.MP3   6.58KB

BEEP7.MP3   6.58KB
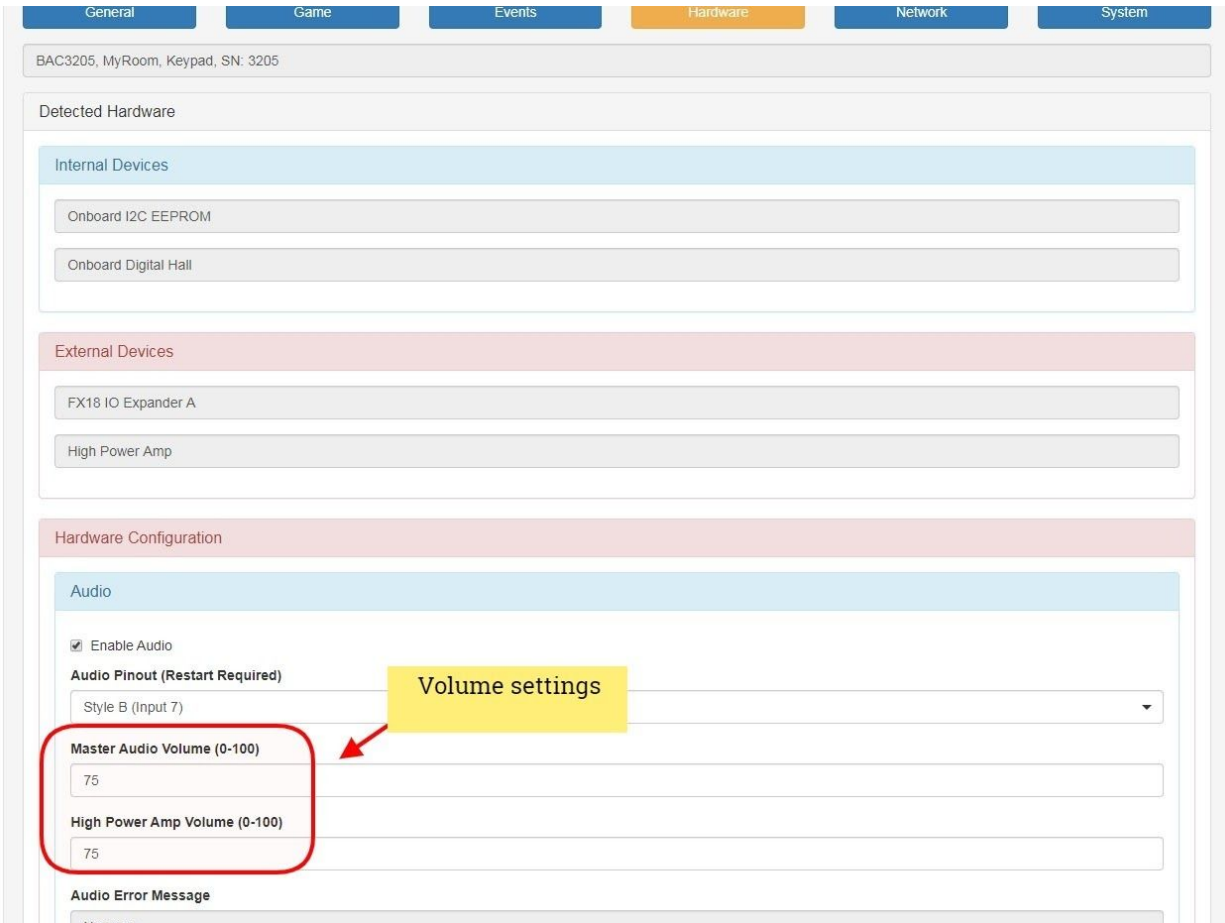
Game Configuration

Goto the "Game" screen and next to "Solution 1 through 4 enter the solve code for each solution required. The amount of allowed digits can be from 1 to 16. See the screenshots below to identify available configuration options

bad ass manager

BAC3205, MyRoom, Keypad, SN: 3205

Keypad Settings

Input

FX18 A

Inactivity Timeout (ms)

5000

If no key is pressed within 5 seconds, the input will timout and the user must re-enter his key press'

☐ Enable Max Length

Max Sequence Length

0

Limits the amount of key presses that can be entered (Max press are 16)

Valid code digits

Solutions (0-9, #, *)

Name	Code	Event
Solution 1	**Up to 16 valid digit solve code**	Solve
Solution 2		No Event
Solution 3		No Event
Solution 4		No Event

There are from 1 - 4 unique keypad solution codes that can be configured each with its own corresponding output event

Okay Button

☐ Use okay button

Okay Key (0-9, *, #)

#

End of sequence key option verifies user input code has completed

Sound

Keypad button press sounds

☑ Use beep sounds

Name beep sounds on SD card beep1.mp3 through beep12.mp3, corresponding to each key

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bad ass manager

BAC3205, MyRoom, Keypad, SN: 3205

Keypad Settings

Input

FX18 A

Inactivity Timeout (ms)

5000

☑ Enable Max Length

user input button presses limited to 8 before solution fails and resets

Max Sequence Length

8

Solutions (0-9, #, *)

Output event options

user solve codes for solution 1 and 2

Name	Code	Event
Solution 1	1234	customEvent0
Solution 2	33333	Solve
Solution 3		No Event
Solution 4		No Event

Defining your output Events

Its within your "Events" screen where output actions are defined. In the example in the screenshot above "Solution1" when solved will execute a custom user definable output event "CustomEvent0" and "Solution2" will execute the "solve"event, the BAM's predefined "puzzle solved" ending output event.

First lets define the custom event, goto the "Events" screen and then into the "Custom" events screen. In the top left box labeled "Custom Event 0", find the "Action 1" dropdown box and scroll down choosing the "Play Sound" option and in the "Options" box, type in the mp3 file name you want to play when "solution1" is solved. In this case, "magicwand.mp3". If there were additional outputs that need to be triggered like a maglock, the same format is repeated (ie in the dropdown in "Action 2" select "Turn on Output" and in the "options" box input the number where

Wiring Diagram