

Kinect_Amx Project Deployment Manual

- The deployment process consists of 3 steps: installing the necessary components; preparing the “.axs” file, and loading it to the Amx system; and choosing IP address you want to be connected to and copying the .exe file.

1. Installing the necessary components

- Download and Install the Kinect SDK by clicking this link; [Latest Kinect SDK](#)
- This project has voice features, where you will be hearing certain voice feedbacks depending on which command you execute. For this to happen, you need to install the “*MSSpeech_TTS_en-US_ZiraPro.msi*” executable that is inside the additional components folder.
- To edit the “.axs” file, you will need to use [NetLinx Studio](#), if you do not already have it installed, you can easily do that by executing the “*NetLinxStudioSetup_4_3_1519.exe*” in the “*Additional_components*” folder.

2. Preparing the .axs file

- For the amx system be able to communicate with the Kinect, we need to add two pieces of code that make it possible.
- Open Netlinx studio.
- Open the “*Amx_Sample (WSU SAC ClassRm 041).axs*” file inside the “*additional_components*” folder.
- Open the “.axs” file of the room you are going to be deploying this project in.

2.1 Adding 1st part (virtual device)

- Copy line 79 from the “Amx_Sample (WSU SAC ClassRm 041).axs” file and paste it in the corresponding place in the new .axs file. This place should be located among the first 100 lines of code, within the section **DEFINE_DEVICE**, under the subsection “// Virtual Devices”, and before the next Section starts, preceded by a list of devices. You will place your copied line last in this list. And it should look like this:

```
// Relays
dvRelay          = 5001:8:0

// IR
dvDvd             .9:0          // PANASONIC DMR-EZ37 DVD/VCR COMBO

// Virtual device
vdvCodecTP        = 33001:1:0    // VIRTUAL TOUCH PANEL Port Polycom
vdvTP             = 33001:2:0
vdvDVDTTP         = 33001:3:0    // VIRTUAL TOUCH PANEL DVD Port
vdvVolTP          = 33001:4:0    // VIRTUAL TOUCH PANEL Volume Control Port Port
vdvDSP            = 33001:5:0    // Virtual device for Audio DSP control tracking
vdvCLActions      = 33012:1:0
vdvCodecTPRemote  = 33021:1:98
vdvTPRemote       = 33022:1:98
vdvDVDTTPRemote   = 33023:1:98
vdvVolTPRemote    = 33024:1:98

vdvKinect         = 33025:1:0    // virtual device to receive kinect inputs

DEFINE_COMBINE
(vdvCodecTP, dvCodecTP, vdvCodecTPRemote)
(vdvTP, dvTP, vdvTPRemote)
```

After this

Before next Section (next section could have a different name).

2.2 Adding 2nd part

- In the “Amx_Sample (WSU SAC ClassRm 041) .axs”, copy lines 832 - 970. You MUST include the beginning characters “(...)” when you copy it and place it under DATA_EVENT section on the new file. You can easily find this section on Netlinx Studio by clicking edit>go to section>DATA_EVENT, you can paste right under it.

```
817  (*
818  DEFINE_MODULE 'Polycom_Vortex_EF2241_Comm' COMM1(vdvDSP, dvDSP, nVortexDevId)*)
819  (*****
820  (* THE EVENTS GOES BELOW *)
821  (*****
822  - DEFINE_EVENT
823
824  - DATA_EVENT[dvMaster]
825  {
826  - ONLINE:
827  {
828
829  }
830  }
831
832  (*****
833  *****KINECT INTERACTIONS*****
834  *****
835
836  - DATA_EVENT[vdvKinect] // system on/off
837  {
838  - command: {
839  |     send_string 0, "'Command: ', DATA.TEXT";
840  |
841  |     // if the string is found
```



- Click save to save the file in which you just pasted the texts. Compile as Nextlinx and load it to the Amx system.

3. Copying .exe and handling IP

- Copy the .exe file, included in the additional components folder, to the PC where this project will be running. Open it, type your IP address, and click *save*.
 - **NOTE 1:** the program will use this IP address until you type a new one. Even after closing and opening the program. If you wish to use a new IP Address, simply press the reset button to clear the text window, type your new IP address and click save again.
 - **NOTE 2:** It is very important you type the IP Address only. No characters before or after.
- ➔ The project is now ready.