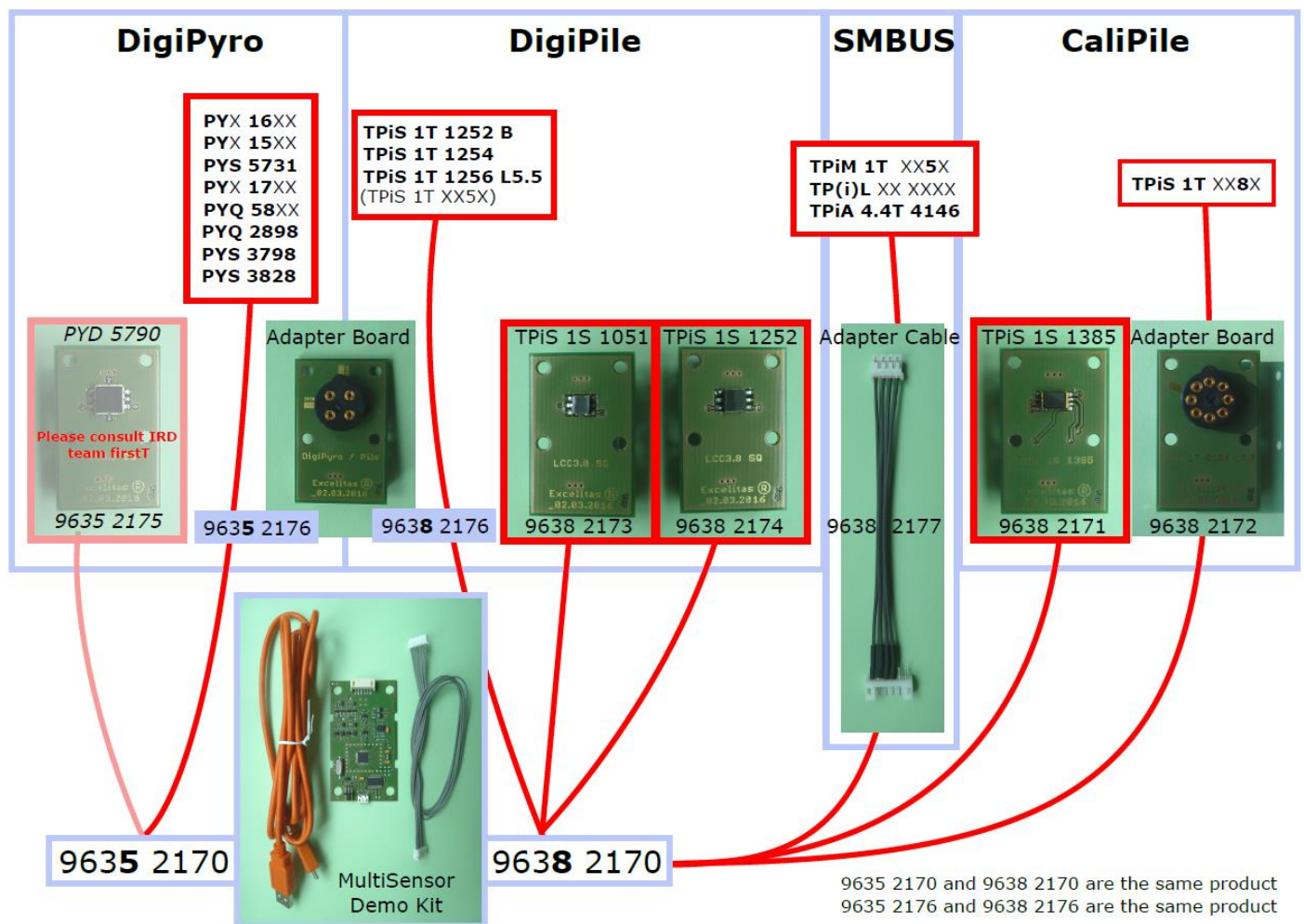


## Excelitas Demo Kit

Excelitas Technologies has to offer a broad digital sensor portfolio. To evaluate those sensors a demonstration kit can be ordered. The core of the demonstration kit is a USB-to-sensor converter providing a serial interface to a PC. Each sensor can be evaluated with dedicated Windows software giving access to the basic sensor parameters. The serial interface protocol is provided on request.

## Excelitas Demo Kit selection scheme



The MultiSensor Demo Kit is the basis of the demonstration kit. Depending on the choice of technology (thermopile or pyroelectric sensor) two different so-called Excelitas-BAU (9635 2170 or 9638 2170) numbers were issued but the product is the same and works with both technologies.

Sensors in a TO-can require Adapter Boards to be evaluated. Sensors and Adapter Boards need to be ordered separately. SMD sensors are shipped soldered to the PCB adapter board for your convenience. Please notice that the BAU numbers for unsoldered sensors are different from those which come with the adapter board.

**Pyroelectric sensors require a lens for proper operation. The lens design depends on the requirements and is crucial for the overall performance.** For a first evaluation our PF17 lens may be used for dual sensors (PYD for horizontal/wall mounting) or the D37 lens for quad sensors in ceiling mounting applications. Please note that those

lenses were optimized for a compact design and not for the maximal distance. Please contact us for further assistance.

Sensor Modules are PCB Sensor assemblies, which are interfaced with the SMBUS Adapter Cable.

## Excelitas Demo Kit hardware setup instructions

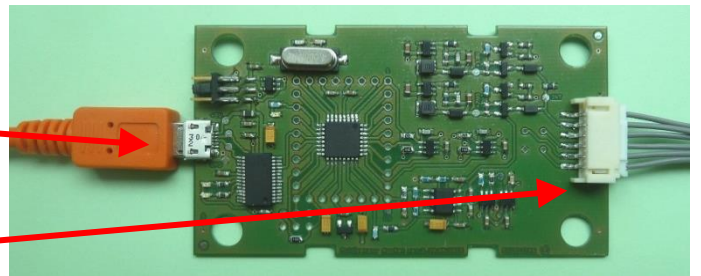
### 1 Unpacking

The Excelitas Demo-Kit comes in an antistatic packaging in order to protect the device during shipment. During unboxing and handling please make sure to follow the common ESD guidelines to prevent electrostatic discharge on the device.

Do not plug the electronic interface to your PC before having the corresponding software installed.

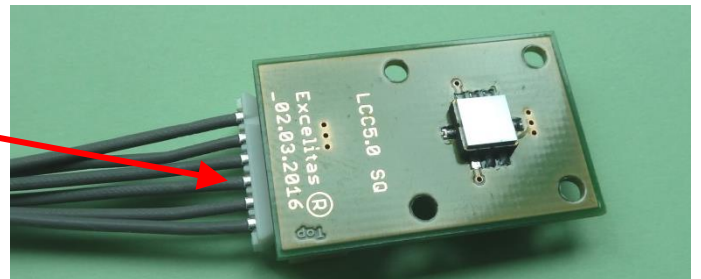
### 2 Connect Demo Kit and Adapter Boards

At first after unboxing the Demo Kit, plug the micro-usb connector to the female jack on the pcb.



Plug the white 6way JST-connector to the female jack on the pcb.

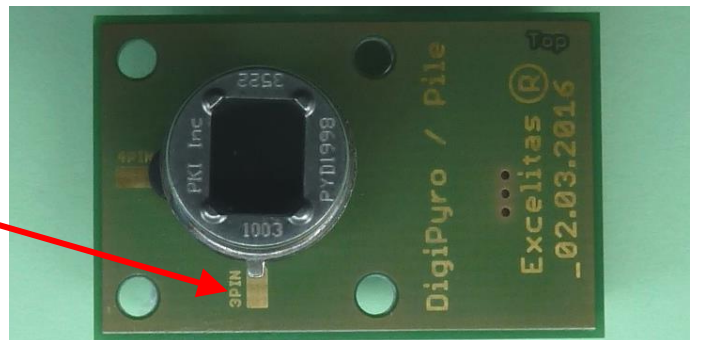
Connect the second white JST-connector to the adapter board.



### 3 Connect 3pin sensors

If you are using a 3pin DigiPile sensor or a 3pin DigiPyro sensor, plug the sensor in the right way into the socket on the board.

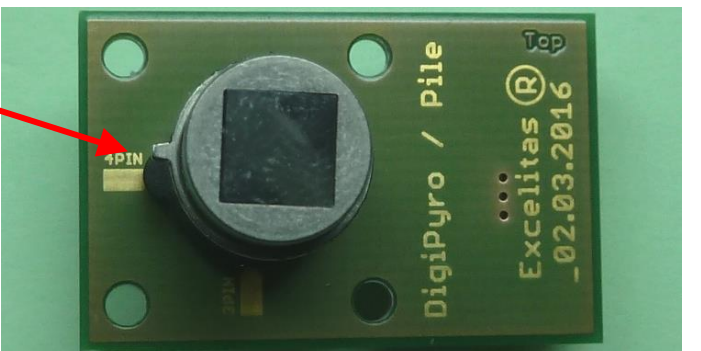
The nose on sensor housing has to correspond with the 3PIN marks on the Adapter Board.



### 4 Connect 4pin sensors

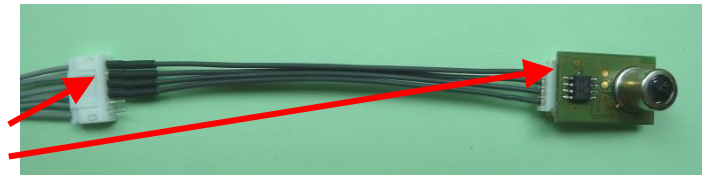
If you are using a 4pin DigiPyro sensor, plug the sensor in the right way into the socket on the board.

The nose on sensor housing has to correspond with the 4PIN marks on the Adapter Board.



## 5 Connect modules

If you are using a Module with SMBUS interface use the additional Adapter Cable to connect the module to the Demo Kit.



Plug the second white 6way JST-connector into the female jack on the Adapter Cable.

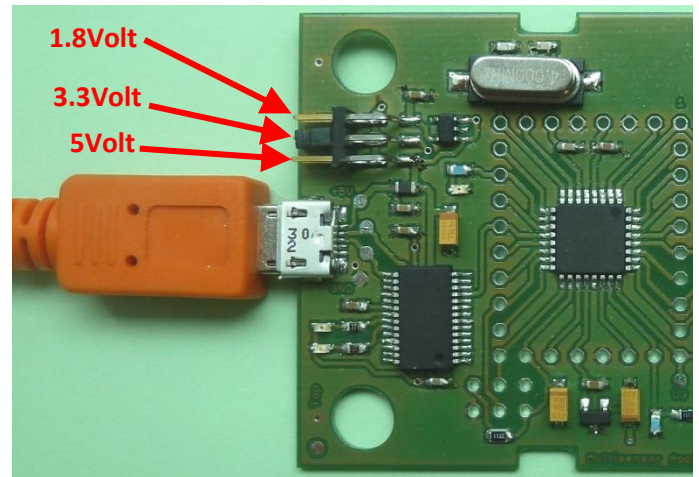
Plug the white 4way JST connector on to the Module

## 6 Check power supply

If you are using sensors or modules with 3.3Volt power supply, you can use the default setting (middle position) of the power jumper.

If you are using a 5Volt module you have to switch the power jumper to the 5Volt position.

Further the 1.8Volt position is for sensors and modules with 1.8Volt power requirements.



After you have made all the connections as described before, plug the USB connector into the USB port on your computer and follow the software setup instructions.

# Excelitas Demo Kit software setup instructions

## 1 Unpacking

The Excelitas Demo-Kit is provided by an antistatic packaging in order to protect the device during shipment. During unboxing and handling please make sure to follow the common ESD guidelines to prevent electrostatic discharge on the device.

Do not plug the electronic interface to your PC before having the corresponding software installed. (see chapter “software download”)

## 2 Environmental Notice

The USB Interface electronic is shipped without the corresponding software package. Please follow the instructions below to obtain the latest software version. Moreover the necessity for a software medium becomes obsolete what helps us to reduce environmental pollution. Thank you for your cooperation.

## 3 Software Download

To download the necessary software package for the Demo-Kit please go to: <ftp://ftp.excelitas.com/> and enter the following account information:

username : ftpIRDPub  
password(case sensitive) : Ftp@irdpub

navigate to the folder : <ftp://ftp.excelitas.com/Multisensor Demo Kit/>

to download the universal demonstration software

and/or to : [ftp://ftp.excelitas.com/Calipile\\_Demo\\_Kit/](ftp://ftp.excelitas.com/Calipile_Demo_Kit/)

to download a simplified software for the CaliPile. **In case you are evaluating the CaliPile only it is sufficient to download only the Calipile Demo Kit software.** Please proceed to the corresponding subsection.

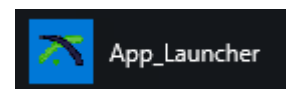
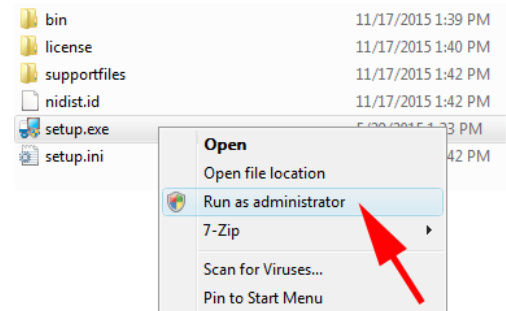
If you are using the Internet Explorer and you can't see those folders press F5 on your keyboard and insert the account information again. We recommend using dedicated ftp software or the Windows-explorer (file explorer) for the ftp connection.

### Multisensor Demo Kit

Download and extract the containing "Multisensor\_Demo\_Kit.zip". Then start the containing "setup.exe" as administrator to install all necessary software components. The actual documentation on how to use the graphical user interface, troubleshooting and some additional information can be found in the folder `../Multisensor_Demo_Kit/documentation/`. Once installation is completed, you can connect the Demo-Kit to your PC. Once your system has found the new hardware it will be visualized in the device manager as "USB serial port (COMxx)". If the device is not recognized by the PC, the USB driver can be found in `../Multisensor_Demo_Kit/Driver/` for manual installation.

The folder `../Multisensor_Demo_Kit/additional_software/` contains additional software packages for manual installation of the necessary runtimes in case something went wrong during the automatic installation.

Finally you will find an entry called "App Launcher" in your "all programs/ all apps" menu which will allow you to select between the different software packages for the different Excelitas products.



### Simplified CaliPile Demo Kit

In case you omit the installation of the universal Multisensor Demo Kit software, you must install the drivers for the Kit separately. A copy of the driver is contained in the CaliPile Demo Kit software package but in case you need an up-to-date copy please download the software drivers for the FTDI hardware from the following website:

<http://www.ftdichip.com/Drivers/VCP.htm>

The complete CaliPile software file (driver + executable + documentation) is found on the ftp server in `Calipile_Demo_Kit/Calipile_App_v.51.zip (or newer)`. Unzip it to a folder of your choice and start the contained "Calipile\_App.exe".

## 4 Verification of the correct hardware installation

After driver installation (automatically in case of the Multisensor Demo or manually in case of the Simplified CaliPile Demo) you can connect the application set to the PC and the virtual COM port should be recognized by your system. You may check it in the device manager by pressing the `WindowsKey+R` and launching it via `dvmgmt.msc`:



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## 8 Liability policy

Excelitas endeavours to provide a quality product and takes full responsibility for the correct function of the application kit with its own sensors. Excelitas is not responsible for any misuse of the application kit, or for the performance with any sensor other than with Excelitas sensors. Excelitas also takes no responsibility for any hardware or software failures caused by installing and using this software on a third-party computer system. The software is solely intended to operate the *Excelitas demo kit* for product evaluation purposes. Excelitas is not liable for property damage, physical injury, or data corruption.

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