



# CADI Optimum Sensor

## Product Description

The CADI Optimum sensor is a direct converting X-ray detector, which converts X-ray photons directly into digital image data.

## Intended Use

CADI Optimum sensor is intended to be used for a radiographic examination by a dental professional to assist in the diagnosing of diseases of the teeth, jaw, and oral structures.

The CADI Optimum sensor is a digital sensor that is intended to acquire dental intraoral radiographic images. The CADI Optimum sensor shall be operated by healthcare professionals, who are educated and competent in performing the acquisition of dental intraoral radiographs. The CADI Optimum sensor is used in combination with special positioning devices to facilitate positioning and alignment with the X-ray beam.

CADI Optimum sensor is for use as prescribed by dentists, dental assistants, registered hygienists, or other qualified dental healthcare personnel trained in the use of the system.

CADI Optimum sensor is intended for use by the general population. Suitability of use of the CADI Optimum sensor is restricted by the anatomy and size of the patient's oral cavity. Professional judgement must be used to determine whether the sensor is suitable for use with a particular patient with minimum discomfort based on the anatomy and size of the patient, and the ability to position the sensor in the oral cavity with minimum discomfort.

## Contraindications

This device is not designed, sold, or intended for use except as indicated. The user may not replace or remove any parts of the system.

## Safety Precautions

### **WARNING**

Take the necessary steps to protect yourself from radiation. For proper operator positioning, refer to the 'Instructions for Use' of your intraoral X-ray equipment.

### **WARNING**

Under no circumstances should the dental professional hold the sensor by hand during X-ray exposure.

Changes or modifications not expressly approved by the party

## X-Ray Protection

The rules of dental radiography still apply to digital X-ray systems. Please continue to use protection for your patients. As a clinician, clear the immediate area when exposing the sensor.

## Prevention of Cross-Contamination



To help prevent cross-contamination between patients, place a new hygienic sensor barrier on the sensor for each new patient. The hygienic barrier must cover the sensor.

### **Disposal Protocols**

Dispose of sensor barriers and other consumable products following the normal dental office procedure for biomedical waste.

### **Sensor Inspection**

Always inspect the sensor and positioning devices for physical damage prior to every use. Do not use the sensor if its housing has visible damage in the form of open cracks or punch through dents.

## **CLEANING AND DISINFECTION**

When cleaning the CADI Optimum sensor, follow the cleaning and disinfection protocol described in this section.

### **Cleaning and Disinfection of CADI Optimum Sensor**

Only use the approved disinfectants with CADI Optimum sensors. Using unapproved disinfectants may produce issues with the physical appearance of the product and potentially its operation.

The CADI Optimum sensor should be thoroughly cleaned after each use. The following cleaning and disinfection recommendations are intended to accomplish intermediate-level disinfection and will prepare the product to be safely used and reused during its life.

Disinfect the sensor and the first 10 cm or 4" of the sensor cable. Wipe up the sensor surface with a compress moistened with a disinfecting solution. The sensor head and the cable are watertight, not the connector. Please don't immerse the connector in the disinfectant for cleaning.

### **Approved Disinfectants**

The following surface disinfectants have been found to be effective in achieving an appropriate level of disinfection and are available from dental product dealers:

- Preferred disinfectant liquids:
  - a) ANIOXY TWIN (ANIOS Laboratories)
  - b) PHAGOCID D (PHAGOGENE DEC. Laboratories)
  
- Other authorized disinfectant liquids:
  - a) CIDEX OPA (JOHNSON&JOHNSON)
  - b) DENTASEPT ultra (ANIOS Laboratories)
  - c) RELYON PERASAFE (PHAGOGENE DEC. Laboratories)
  - d) OPTIM 33

• Forbidden products:

- a) Alcohols (Isopropyl Alcohol, Methanol)
- b) SEKUSID--N (ECOLAB PARAGERM Labs)
- c) SEKUSEPT Easy or Aktiv (ECOLAB PARAGERM Labs)
- d) FD333 or FD322 (DÜRR Dental Laboratories)

### Cleaning and Disinfection Protocol



CADI Optimum sensor must be cleaned and disinfected after each patient.



Always follow the instructions of the manufacturer of the cleaning and disinfecting wipe when disinfecting the CADI Optimum sensor.



Do not submerge the CADI Optimum sensor in any liquid at any time. Do not autoclave the CADI Optimum sensor. Autoclave sterilizers will permanently damage the device.

The following procedure is recommended before using the sensor for the first time and after each patient:

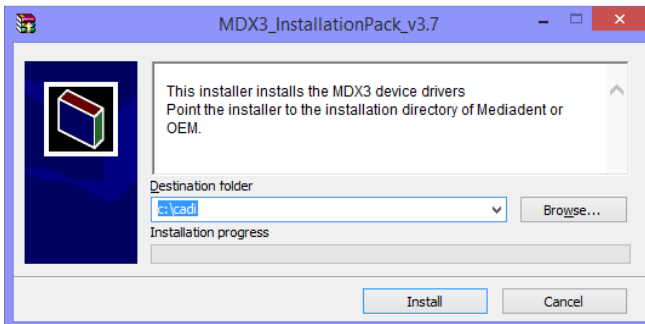
1. Remove and discard all protective hygienic barriers and/or sheaths from the sensor prior to removing disposable gloves.
2. Place the sensor on a tray covered by a disposable liner, or in a receptacle that can be thoroughly disinfected.
3. Remove and discard gloves.
4. Wash hands and put on a new pair of disposable gloves.
5. If the sensor is visibly soiled (e.g., with blood or saliva), clean the sensor with a soapy cloth or paper towel or using a recommended disinfectant wipe and dry it with a clean lint-free cloth or paper towel.
6. Thoroughly wipe the sensor (min. 30 seconds) with one of the disinfecting products recommended above. Make sure that all impurities are removed, and the sensor is thoroughly disinfected. Use multiple wipes, if needed.
7. Repeat step 6.
8. Store the sensor in a clean environment for the next use.

### ***Sensor Barriers and Sleeves***

Sensor barriers and sleeves (sensor covers) are disposable, and they must not be reused in any circumstances. Remove and dispose of the cover after each patient.

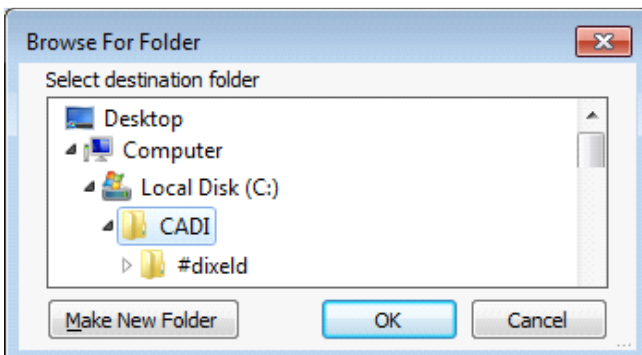
## Installation of Optimum Sensor 2019

Make sure that CADI is installed and ready to use. Find the file "MDX3\_InstallationPack\_v3.7 - Cadi.exe" and double-click on it.  
(Images size has been modified for space purpose)



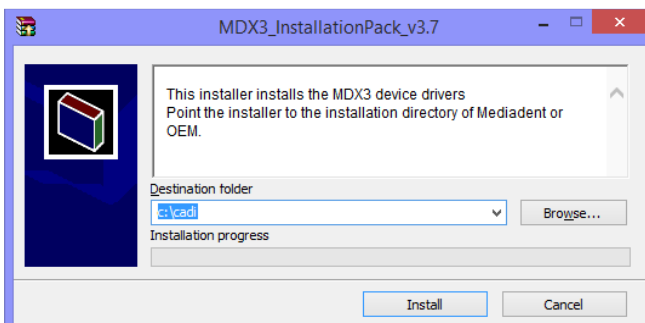
This is the first screen you will see. You need to point to your CADI folder on the local disk.

Click on "**Browse**"



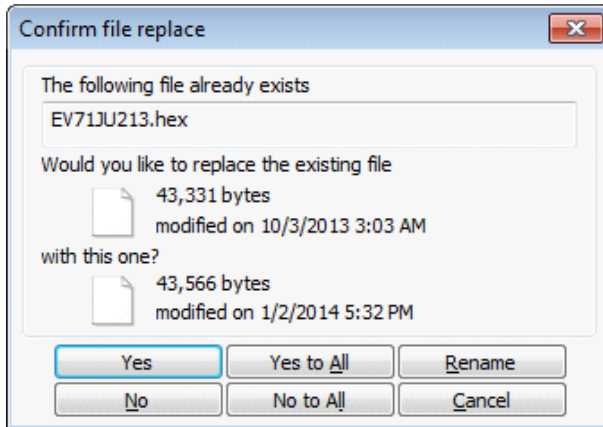
In that window, locate your CADI installation on the local disk and highlight it by selecting the folder.

Then click on "**OK**"



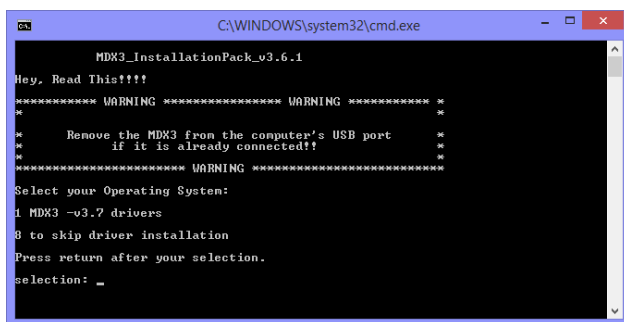
Back to the installation window, the path you have just chosen must be written in the field "**Destination folder**".

When the path is correct, click on the "**Install**" button.



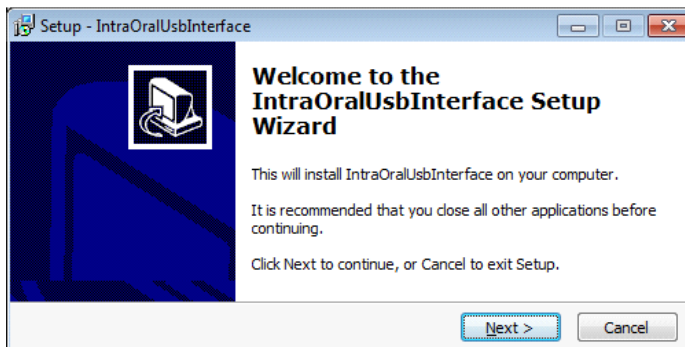
You might get a window like this one if some files are already loaded on the PC.

Simply click on "**Yes to All**".



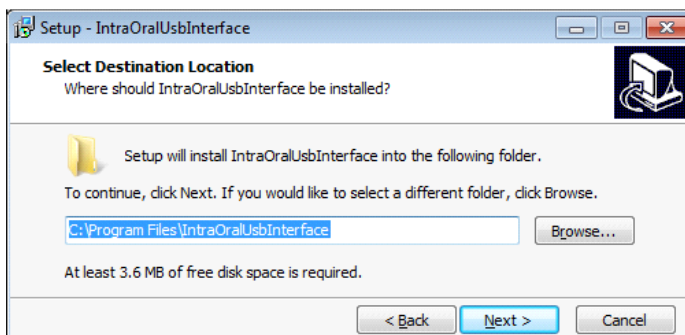
You will see a "**DOS**" window, like the one on the left.

You can read what it says or just press "**1**" on the keyboard and then press the "**Enter**" key.

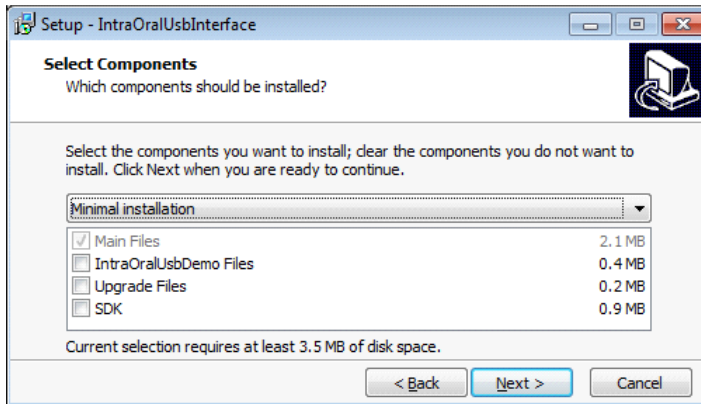


The installation window will appear. (The "**DOS**" window will stay in the back, **DO NOT** close that window.)

In the setup window, click on "**Next >**"

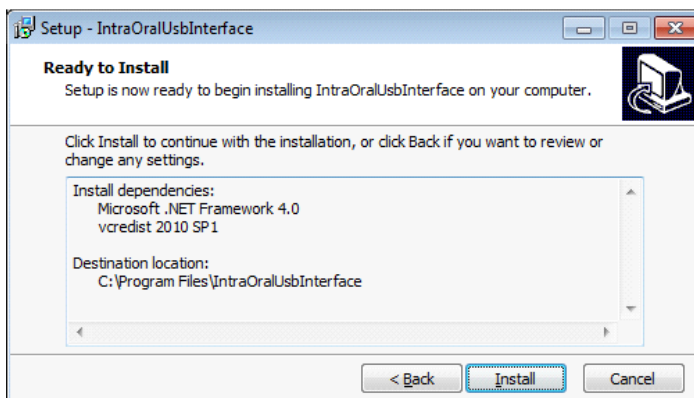


Don't change anything, just click on the "**Next >**" button.

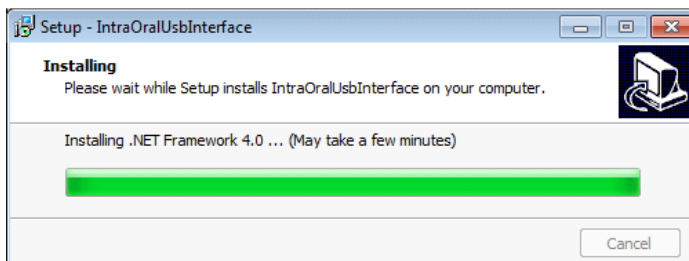


On this window, choose the “**Minimal installation**” from the drop down arrow list. The only selection in the rectangle should be “**Main Files**”.

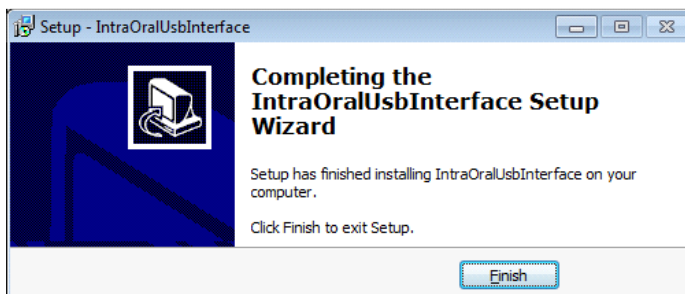
When ready click on “**Next >**”.



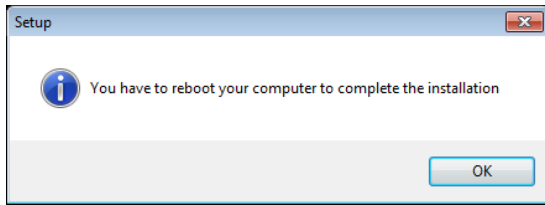
Click on “**Install**”.



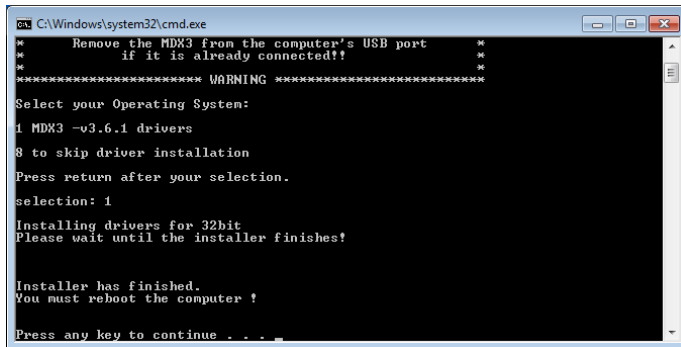
Just let this go.



Click on “**Finish**”



Click on **“OK”**.



For this window, simply press any key on the keyboard to close it.

After installing CADI you must do a simple operation to calibrate the Optimum Sensor in CADI.

Insert the Calibration CD into your CD ROM/DVD ROM Drive.

Simply copy the content of the CD (1 or 3 files) and paste it/them on the CADI folder (C:\CADI).

Now **RESTART YOUR PC**.

## Configuration of CADI Optimum within CADI



- In CADI, on the top menu, click **"Options"** then **"Setup"**
- In the modules list on the left, click the **"X-Ray MDX"** module
- Click the tab **"EV71 (CMOS)"**
- The **"Timeout (s)"** should already be on 120s.
- **"Filter script"**: should be set to **"2"** already.
- There should be a check mark in the choice **"Auto Select Sensor"**
- Click the **"Save Changes"** button and **"Exit"**
- You are ready to use the CADI Optimum sensor.

For assistance or information call CADI support.