

— EXOCAD DIGITAL LIBRARY

Installation and User Guide

Installing the Powerbone digital library in exocad DentalCAD,
implant-level planning workflows and modelcreator
analog options.

OLD TYPE

SMARTINDEX



GUIDE CONTENTS

Contents

01	Library Installation RAR extraction, target directory and file replacement steps	03
02	Digital Analog Adaptation Modelcreator horizontal distance calibration	04
03	Scan Abutment Options Short / Long length and SmartIndex — Old Type body distinction	05
04	Library Selection Dialog exocad drop-down lists — what to select where	06
05	Type and Subtype Lists On-screen view of the second and third lists	07
06	Complete Selection List All type and subtype combinations	08
07	Ti-Base Planning Short (9 mm) and Long (13 mm) workflows, Hex / Non-Hex selection	09
08	Multi-Unit Planning Screw-retained and Ti-Face interface workflows	10
09	Custom / Pre-Mill Planning Patient-specific titanium abutments and blank dimensions	11
10	Digital Analog Options Scan and multi-unit analog references	12

SCOPE

implant · modelcreator ·
production folders

SOFTWARE

exocad DentalCAD 3.1 and later

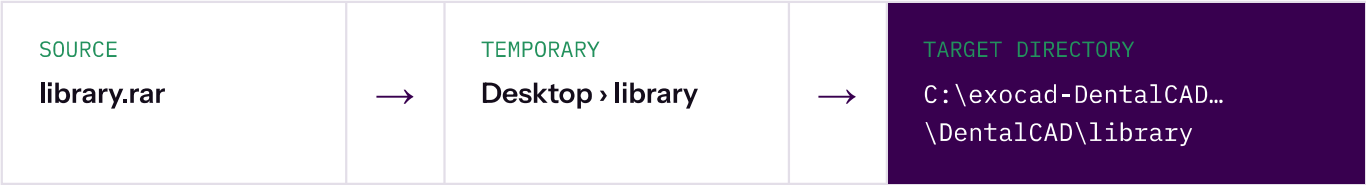
PLATFORM

Conical connection · hex index · M1.8
prosthetic screw

SECTION 01

Library Installation

Adding the downloaded library files to the exocad DentalCAD directory is completed in eight steps.



- 01

library

Right-click the RAR file and choose “Extract Files...” .
- 02

Extract the contents to the desktop; a folder named **library** is created.
- 03

The folder contains the **implant**, **modelcreator** ve **production** folders.
- 04

Go to the exocad installation directory, e.g. **C:\exocad-DentalCAD3.1**.
- 05

DentalCAD

folder, then open the **library** folder inside it.
- 06

Drag the three folders from the desktop into this **library** folder.
- 07

In the “Replace files in destination” prompt, confirm **Replace** .
- 08

Restart exocad. The copy on the desktop can be deleted.

NOTE If folders with the same name already exist, **replacing** the files updates the library; existing case files are not affected.

SECTION 02

Digital Analog Adaptation

If the digital analog does not seat comfortably in the printed model, increase the **horizontal distance** value in the modelcreator presets step by step. Rebuild the model after each change and assess the fit.



SCAN ANALOG

0,00 Starting value — try seating the analog in the model.	→	+0,01 If it does not seat, increase the horizontal distance by 0.01 mm.	→	+0,02 Continue in 0.02·0.03 mm steps if required.	→	OPTIMAL VALUE Once the analog seats comfortably, record the value; it becomes a reference for similar cases.
--	---	---	---	---	---	--

CHECKLIST

- Rebuild the model after every setting change.
- Verify the analog is fully seated with no gap.
- Note the value found for your printer and resin combination.

CAUTION

Specific steps and terms may vary with your software and digital workflow. An analog that seats correctly in the model is critical for the accuracy of the following restorative stages.

SECTION 03

Scan Abutment Options

The **length** of the part used for scanning determines the Short / Long type in the library, and its **body geometry** determines the SmartIndex / Old Type choice.

	Short length Ø4,0 — 9 mm → Short planning Power-A00001-29
	Long length Ø4,0 — 13 mm → Long planning Power-A00001-30

Before scanning, confirm the part is fully seated on the implant. Recommended torque **15–25 Ncm**.



OLD TYPE

The body is flat with no additional sockets; select the **unlabelled standard** types in the library.

SMARTINDEX

The upper part of the Ti-Base body carries **female sockets** which increase the retention surface. Select the types labelled **SmartIndex** in the library.

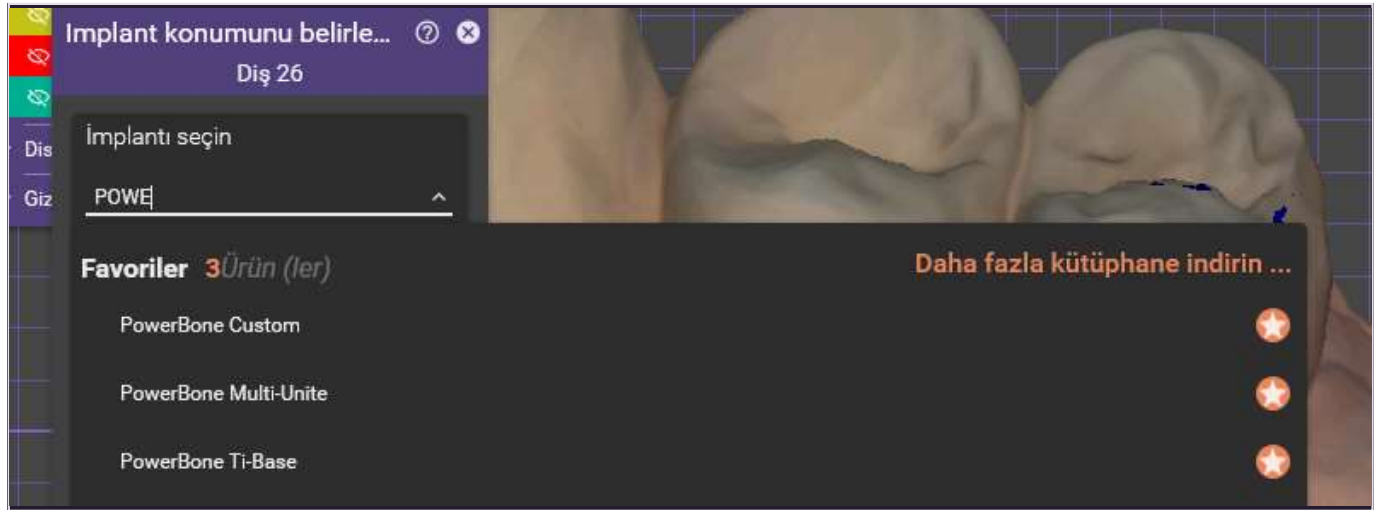
IMPORTANT Selecting the wrong body type causes rotational deviation at the implant connection. The part used for scanning and the library type must always match.

SECTION 04

Library Selection Dialog

When a case is opened, exocad displays the **Define implant position** window. The three drop-down lists in it work in sequence.

1 · PRODUCT FAMILY Ti-Base · Multi-Unite · Custom	→	2 · TYPE Length · rotation · body type	→	3 · SUBTYPE GH / hex
--	---	---	---	-------------------------



01 SELECT IMPLANT

Type **POWE** in the search field; the installed libraries are listed under **Favourites** as three products: **PowerBone Custom**, **Multi-Unite**, **Ti-Base**. If the list is empty the library is not installed — return to Section 01.

LIST 1 · PRODUCT

Ti-Base is the titanium base under the crown, Multi-Unite sits on the MUA, Custom is for the pre-mill blank workflow.

LIST 2 · TYPE

Length (Short 9 mm / Long 13 mm), rotation (Lock / NoLock) and body type (SmartIndex / old type) are selected together.

LIST 3 · SUBTYPE

For Ti-Base the gingival height GH 0.6 · 1.5 · 3.0 mm; for Multi-Unite and Custom, Hex / NoHex.

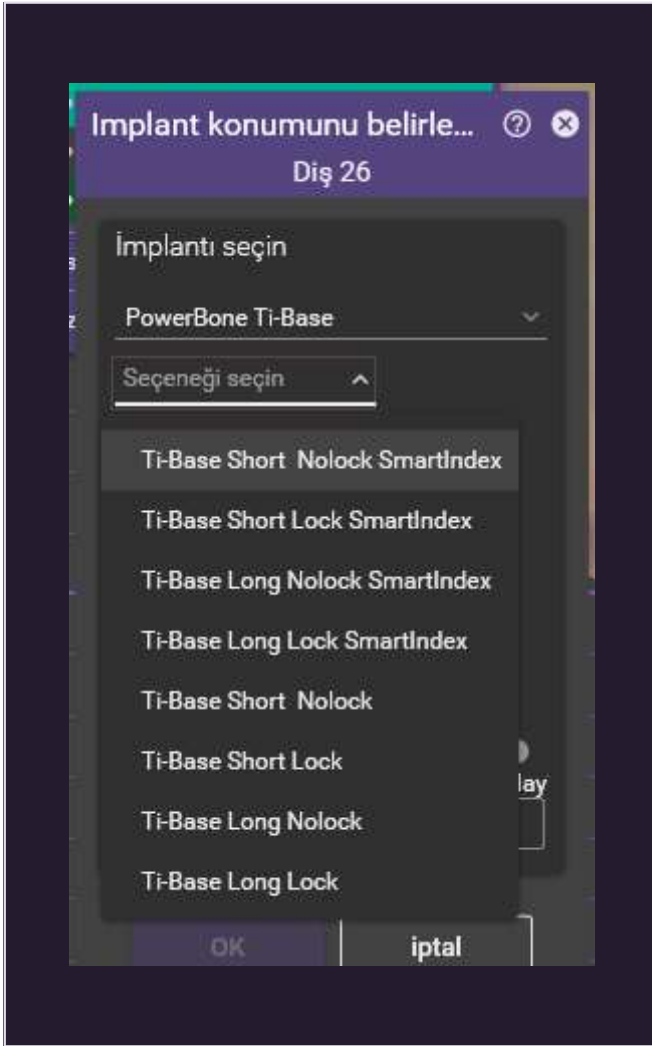
IMPORTANT Always select from top to bottom: changing an upper list resets the selections below it. The contents of the second and third lists are shown on the next page.

SECTION 05

Type and Subtype Lists

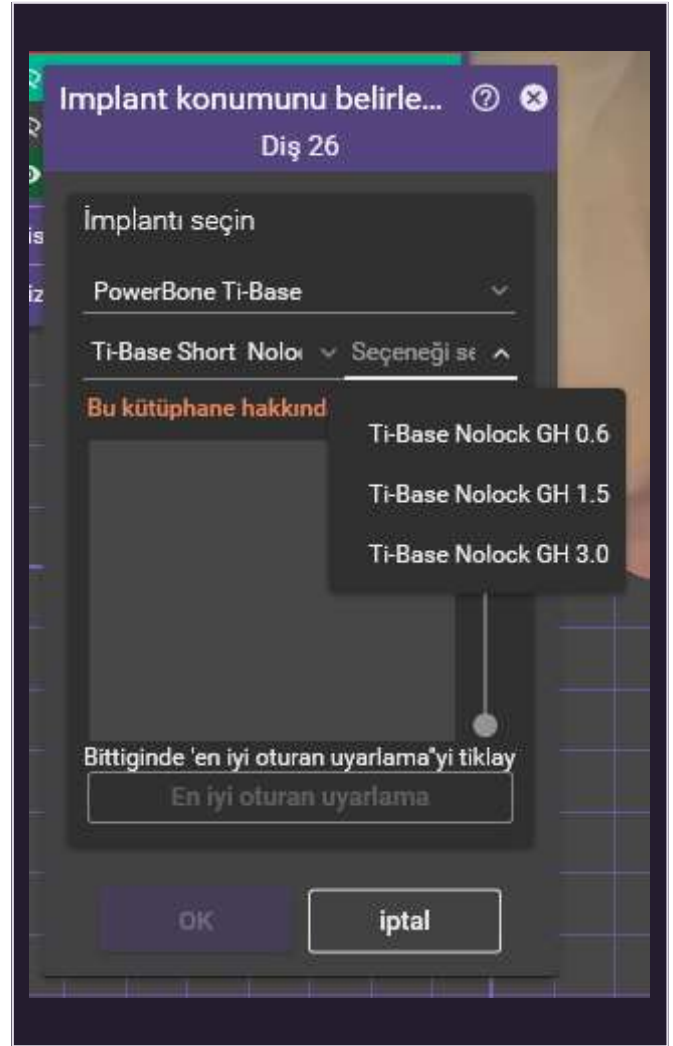
How the second and third drop-down lists appear on screen — example: **PowerBone Ti-Base**.

02 — SELECT OPTION • TYPE



Eight types: Short / Long length, Lock / Nolock rotation and the SmartIndex label. Must match the scanned part.

03 — SELECT OPTION • SUBTYPE



Gingival height GH 0.6·1.5·3.0 mm. Lock types read *Ti-Base Lock GH...*, Nolock types read *Ti-Base Nolock GH...*.

ORDER The **OK** button stays disabled until all three selections are made. After selecting, verify the position with **Best-fit alignment** and confirm.

SECTION 06

Complete Selection List

All combinations in the installed library. Headings correspond to **list 1**, bold rows to **list 2**, and monospaced options to **list 3**.

PowerBone Ti-Base

8 types × 3 subtypes

Ti-Base Short Nolock SmartIndex

NoLock GH 0.6 · 1.5 · 3.0
SmartIndex body · 9 mm · bridge

Ti-Base Long Nolock SmartIndex

NoLock GH 0.6 · 1.5 · 3.0
SmartIndex body · 13 mm · bridge

Ti-Base Short Nolock

NoLock GH 0.6 · 1.5 · 3.0
old type body · 9 mm · bridge

Ti-Base Long Nolock

NoLock GH 0.6 · 1.5 · 3.0
old type body · 13 mm · bridge

Ti-Base Short Lock SmartIndex

Lock GH 0.6 · 1.5 · 3.0
SmartIndex body · 9 mm · single crown

Ti-Base Long Lock SmartIndex

Lock GH 0.6 · 1.5 · 3.0
SmartIndex body · 13 mm · single crown

Ti-Base Short Lock

Lock GH 0.6 · 1.5 · 3.0
old type body · 9 mm · single crown

Ti-Base Long Lock

Lock GH 0.6 · 1.5 · 3.0
old type body · 13 mm · single crown

PowerBone Multi-Unite

4 types × 2 subtypes

PowerBone Coping ZR Short

Coping Hex · Coping NoHex

PowerBone Coping ZR Long

Coping Hex · Coping NoHex

PowerBone Direct MUA Short

Direct Hex · Direct NoHex

PowerBone Direct MUA Long

Direct Hex · Direct NoHex

PowerBone Custom

2 types × 2 subtypes

Custom Short Direct

Direct Hex · Direct NoHex
9 mm scan part

Custom Long Direct

Direct Hex · Direct NoHex
13 mm scan part

For patient-specific abutments milled from a pre-mill blank.

PowerBone Abutment straight

stock abutment · 2 × 5

Abutment straight Ø 4

C10 · C20 · C30 · C40 · C50

Abutment straight Ø 5

C10 · C20 · C30 · C40 · C50

This library does not appear in the implant list; it is listed at the stock abutment selection step. The C value gives the abutment height.

SELECTION RULE For single crowns and cases needing rotational locking select **Lock / Hex**; for bridges and full-arch solutions select **NoLock / NoHex** is selected.

SECTION 07

Ti-Base Planning

The implant is selected as **PowerBone Ti-Base**. The Short or Long type is matched to the length of the scan part; then the connection and gingival height are selected.

1 · IMPLANT		2 · TYPE		3 · SUBTYPE
PowerBone Ti-Base	→	Short / Long · Lock / Nolock	→	GH 0.6 · 1.5 · 3.0



TI-BASE Ø4.0

Short — short scan abutment 9 mm

HEX — SINGLE CROWN

Ti-Base Short Lock SmartIndex

with indexed scan abutment

Ti-Base Short Lock

with old type (flat) scan abutment

NON-HEX — BRIDGE

Ti-Base Short Nolock SmartIndex

with indexed scan abutment

Ti-Base Short Nolock

with old type (flat) scan abutment

Long — long scan abutment 13 mm

HEX — SINGLE CROWN

Ti-Base Long Lock SmartIndex

with indexed scan abutment

Ti-Base Long Lock

with old type (flat) scan abutment

NON-HEX — BRIDGE

Ti-Base Long Nolock SmartIndex

with indexed scan abutment

Ti-Base Long Nolock

with old type (flat) scan abutment

BODY EQUIVALENT

GH 0,6 → P 6,0

GH 1,5 / 3,0 → P 4,5

ROTATION

Lock types are locked by the hex;

Nolock types seat freely.

TORQUE

Ti-Base abutment screw: **15–25 Ncm**

SECTION 08

Multi-Unit Planning

For restorations on multi-unit abutments the implant is selected as **PowerBone Multi-Unite**. The production method determines whether the type is screw-retained or uses an interface.

1 · IMPLANT		2 · TYPE		3 · SUBTYPE
PowerBone Multi-Unite	→	Direct MUA / Coping ZR	→	Hex / NoHex



DIRECT — METAL / TITANIUM BAR

Direct MUA Short
with short scan part

Direct MUA Long
with long scan part

For metal / titanium bars and screw-retained production select the **Direct** type; the crown or bridge is screwed directly onto the multi-unit, with no interface.

COPING — ZIRCONIA / PEEK / TRILOR

PowerBone Coping ZR Short
with short scan part

PowerBone Coping ZR Long
with long scan part

For zirconia, PEEK or Trilor superstructures select the **Coping** type; the superstructure is cemented onto the titanium interface (Titanium Face for MUA).



TITANIUM FACE FOR MUA

Titanium interface used in the Coping ZR workflow. Ø5.0 platform, hex and non-hex options.

REFERENCE	PROSTHETIC SCREW TORQUE
Power-A00037-07	10-20 Ncm

SELECTION RULE The type follows the superstructure material: after choosing the scan part length (Short / Long) in the library, select **Coping** for zirconia, PEEK and Trilor, and **Direct** for metal / titanium bars. In the subtype, use **Hex** for single crowns and **NoHex** for bridges and full arches.

SECTION 09

Custom / Pre-Mill Planning

For one-piece patient-specific titanium abutments the implant is selected as **PowerBone Custom**; the design is milled from a pre-mill blank.



TYPE SELECTION

Custom Short Direct

cases scanned with a 9 mm scan abutment

Custom Long Direct

cases scanned with a 13 mm scan abutment

For rotational locking on single crowns select **Direct Hex**, for abutments used as bridge supports select **Direct NoHex** is selected.

PRE-MILL BLANK DIMENSIONS

Ø10,0 × H 20,0 mm

Power-A00004-53

Ø12,0 × H 20,0 mm

Power-A00004-54

The blank is used with the compatible holder of the milling unit; the implant connection geometry comes pre-machined. Recommended torque **15–25 Ncm**.

PRODUCTION NOTE Before milling, check the minimum wall thickness of the design and its position within the blank; the connection geometry must not be machined.

SECTION 10

Digital Analog Options

The analogs in the modelcreator library are selected according to model type and restoration level.



IMPLANT LEVEL**Scan Analog**

Ø4.0 · H=9 mm — printed (3D) model

Power-A00002-44



MULTI-UNIT LEVEL**Multi-Unit Analog**

Ø4.8 — model work on MUA

Power-A00037-15

RELATED SECTION Horizontal distance calibration for seating the digital analog in the printed model is described in **Section 02 — Digital Analog Adaptation**.

Solutions advanced by science, used with confidence in the clinic.

MANUFACTURER

Powerbone Dental Implant is manufactured by
Metrosan in ISO 13485 certified facilities.



Metrosan End. ve Elk. Mak. Cihazlar ve Tıbbi Malz. San. Tic. Ltd. Şti.

SUPPORT AND UPDATES

For library updates and technical support:

powerbonedentalimplant.com

This document is for information purposes. Digital library data is provided “as is”; verify the current version before use. Product dimensions, reference codes and indications are subject to change. In clinical use the current instructions for use (IFU) prevail.