



2026 EDITION · X-MIND OPTIMA 3D

PRE-INSTALLATION PACK

Everything your builder, IT person and *RPA* need to know.

A practical, room-by-room checklist for installing the Acteon X-Mind Optima 3D — covering electrics, network, radiation protection and training prep. Print it, tick it, hand it to your contractor.



QUESTIONS ON THE INSTALL?

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info@360v.co.uk · 360v.co.uk

SCAN

*Optima 3D product
specifications*

360v.co.uk/
acteon-optima-3d



02 · READ ME FIRST

How to *use* this pack.

We've installed CBCT systems across hundreds of UK practices. The biggest cause of delay is always the same: a missed detail in the room prep. This pack is the cure.

1

Print & tick. Hand pages 5–7 to your builder. They've seen it before.

2

Send pages 8–9 to your IT. Computer and network spec, in plain English.

3

We do the RPA bit. Page 10 explains. We draw the plans for you.

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01 · FOR YOUR ARCHITECT OR BUILDER

Room *dimensions.*

Wall-mounted unit. Two configurations — with and without the cephalometric arm. Patient stands during the scan, facing forward, which keeps claustrophobic patients calm.

OPTIMA 3D · WITHOUT CEPH



Width	1018 mm
Depth	1107 mm
Height	2188 mm
Weight (per fixing point)	85 kg × 4 × M8
Min room (W × D)	1.5 × 1.2 m

OPTIMA 3D · WITH CEPH ARM

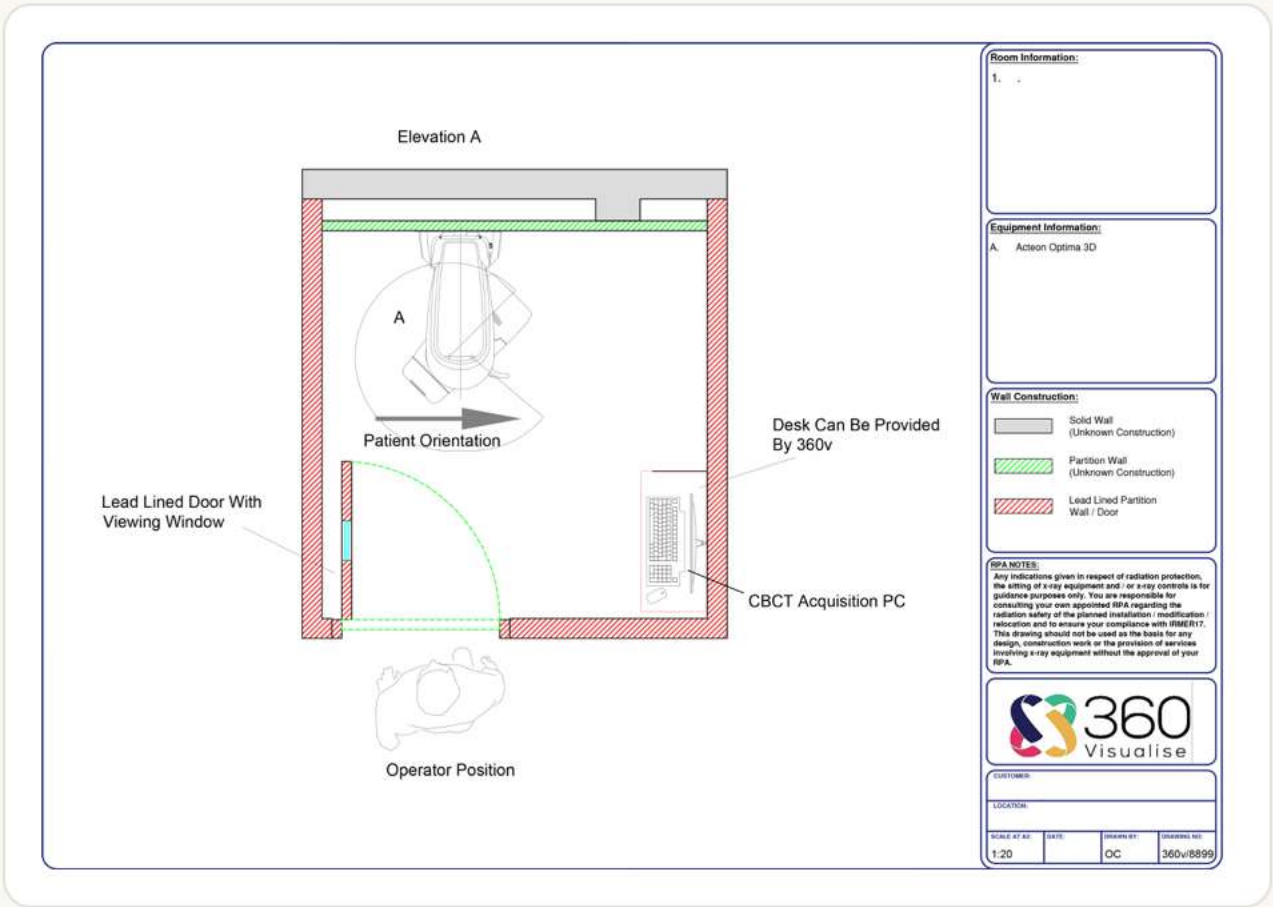


Width (with ceph)	≈ 1830 mm
Depth	1107 mm
Height	2188 mm
Weight (per fixing point)	85 kg × 4 × M8
Min room (W × D)	2.5 × 1.5 m

02 · A FLOORPLAN THAT WORKS

Example *layout.*

The smallest comfortable room. Patient enters, faces the operator's window, scans, leaves. Nothing fancy — just enough room for chair, machine and one operator.



A

Forward-facing patient.
Door visible from chair — reduces claustrophobia.

B

Lead-lining advice on request. Share your room and its adjacencies — we will outline what is likely required.

C

Save 30% on RRP of custom-made leaded doors with 360v. Order doors with the machine — doors.360v.co.uk.

Indicative only — your actual room plan is drawn by us and signed off by your RPA before any work begins.

03 · HAND THIS PAGE TO YOUR ELECTRICIAN

Electrical *checklist.*

Four items. The Optima 3D runs from a domestic-rated 240 V supply — much simpler than a chair-mounted unit. Get these right and the install is half-done before we arrive.

1

240 V AC, 6 A supply — switch outside the room

A 240 V AC, 6 A supply terminating at a switch **outside the room**. This is an Acteon requirement — it lets you power the unit down without entering the controlled area. A dedicated circuit is preferred but not mandatory.

240 V AC · 6 A

SWITCH OUTSIDE ROOM

DEDICATED PREFERRED

☐

2

Cabling at the machine position

Acteon supply the network cables and the remote exposure switch — you only need to pull the extension wire if the PC is more than 5 m from the unit.

Network	2 × Cat-6 Ethernet, 5 m — supplied by Acteon (unit to PC)
Network port	1 × RJ45 at PC position, into your practice switch
Mains sockets	2 × 13 A plug sockets at PC position
Exposure-switch extension	2-core cable <i>only if</i> the remote switch needs to reach further than the supplied coiled cable

☐

3

Remote exposure switch

Acteon supplies the remote exposure switch with a coiled cable — no electrician work needed unless the operator position is further away than the coil allows, in which case run a 2-core extension to a back-box outside the room. Aim for a clear sightline to the patient through the screen or viewing window.

☐

4

External warning light — only if your RPA specifies

If your RPA requires an x-ray warning light outside the door, the Optima 3D needs a relay between the unit and the lamp. Easier: use the Acteon **warning-light connector board, part 5.15.00132** — drops in without a separate relay. We can supply.

☐

04 · TALK TO YOUR RPA FIRST

Warning *lights.*

Older guidance treated warning lights as mandatory. In practice, they're often *not* required on a modern Optima 3D install — though some RPAs still recommend one. Your RPA's risk assessment is the deciding voice; we'll fit lights if asked.



Stage 1 — Ready

Lit whenever mains power is on. Tells anyone approaching that the controlled area exists.



Stage 2 — Emitting

Active only during the few seconds of exposure. Auto-triggered by the unit.

Trefoil + legend

Each lamp must:

- ☐ Carry the radiation trefoil symbol ☸
- ☐ Show the legend "X-RAY ON – DO NOT ENTER" (or equivalent)
- ☐ Comply with the H&S (Safety Signs & Signals) Regs 1996
- ☐ Operate **automatically** – no manual switch



Where the original guidance came from: HPA-CRCE-010 (2010) recommended two-stage warning lights for dental CBCT. Modern interpretations vary — today's RPAs typically weigh scatter dose, room geometry and footfall before requiring one. Ask your RPA: *"do you actually want a lamp on this room?"*

Wiring overview IF SPECIFIED



05 · FOR YOUR IT & NETWORK TEAM

Computer *spec.*

Acteon ship the Optima 3D with a pre-configured acquisition PC and two 5 m Cat-6 cables. Your job is simpler: get a network point and two mains sockets to the PC position. Surgery PCs (for image review) are far less demanding.

 **The acquisition PC is supplied with the unit.** Acteon configure it before shipping, with both 5 m Cat-6 cables included. We install and commission it on site. You only need a network port + two 13 A sockets at the PC position, within 5 m of the unit.

Acquisition PC — minimum specification

COMPONENT	SPEC (SUPPLIED BY ACTEON AS STANDARD)
Operating system	Windows 11 Pro 64-bit
Processor	Intel Core i5 / i7 — Acteon current build
Memory	16 GB RAM
Storage	512 GB NVMe SSD + 1 TB HDD for image archive
Graphics	NVIDIA GeForce — Acteon-validated card
Network	2 × 1 GbE on-board (one to the unit, one to your practice network)
Cables in the box	2 × 5 m Cat-6 Ethernet — supplied with the unit

Monitors

25"+ HDMI minimum. Image review benefits from a **medical-grade** panel:

Medical-grade (DICOM-cal.)	~ £4,000
Philips near-medical-grade	~ £900
Standard 25" 4K HDMI	£250-£400

Surgery / review PCs

Lower spec is fine — the heavy lifting happens once at acquisition. Any modern i3/Ryzen 5, 8 GB RAM, integrated graphics, HD display.

06 · THE LEGAL BIT, MADE PAINLESS

RPA, CEAT & QA.

Three things you legally need: a signed-off room plan, a critical exam, and ongoing testing. We do the heavy lifting on all of them.

A

Your RPA — sign-off before any work

Your Radiation Protection Adviser must approve the room plan **before** any building work starts. We draw the plans for you and submit on your behalf — most RPAs we've worked with sign off within 5 working days.

B

Critical Examination & Acceptance Test (CEAT)

Acteon's installation guidance is explicit: the Critical Examination is the responsibility of the dealer, in liaison with your RPA. As your dealer, we carry it out at install — dose, scatter and beam-quality tests, all certified. The unit cannot be used on patients until this is completed and signed off.

C

Annual service & ongoing testing

Required to stay CQC and IRR17-compliant. Do your monthly QA and the Critical Exam drops to once every three years.

Annual electro-mechanical service	£495–£595 + VAT — incl. firmware & software updates
Critical Exam (dose / scatter)	£680 + VAT — once every 3 years <i>if monthly QA is logged</i>
Monthly QA testing	Free — we supply the tool. Anyone can do it (no radiography training needed)

Three-year Critical Exam interval. Provided monthly QA is logged consistently, the Critical Exam extends to once every three years. We schedule it alongside your annual service.

07 · THE TRAINING DAY

Training *agenda.*

Training is the make-or-break stage of every install. Spend the prep time and your team will be confident scanning by lunch on day one.

Before training day — please prepare

- ☐ **Block out the diary**
A full half-day for the trainer + one nominated lead clinician + lead nurse.
- ☐ **Book a variety of patients**
2× OPG, 2× small-FOV CBCT, 2× full-FOV CBCT — across the day. Real patients rather than staff.
- ☐ **Identify your "champion"**
One person who'll own the machine for the first 3 months. Usually a senior nurse.
- ☐ **Install the viewer on review PCs**
We send the installer 2 weeks ahead — your IT can roll it out before training day.

By end of training day, your team will...

*i***Operate the machine**

Confident on positioning, FOV selection, exposure protocols.

*ii***Position any patient**

Including paediatric, edentulous, and wheelchair patients.

*iii***Use the 3D viewer**

Slice navigation, implant planning, nerve canal mapping.

*iv***Hold a certificate**

Every attendee receives a 360visualise training certificate for their CPD record.

08 · A NATURAL NEXT STEP

Now *report it.*

You have the scanner. The next step is reading the volumes confidently and writing GDC-defensible reports — for every patient, every time.

CBCT LEVEL 2 · REPORTING COURSE

Expert-led.
Hands-on. *Practice-ready.*

Led by **Dr Ed Walker** — Consultant Dental & Maxillofacial Radiologist.

INVESTMENT
£595 + VAT

CPD
6+ hours

COHORT
Max 15



SCAN TO BOOK

- Small group for special
- Teaching
- At the e
 - Cons
 - Conf
 - Know



SMALL GROUP
Max 15 delegates



INSIDE
Octagon House



THE VENUE
BD20 5LY · West Yorkshire

Programme

Day 1 · in person	Octagon House, West Yorkshire BD20 5LY · 9:00–17:00
Day 2 · Zoom follow-up	Cohort case-review session approx. 4 weeks later
Format	Lecture, hands-on dataset interpretation, structured-report writing workshops
GDC outcomes	A · C · D — counts toward your annual CPD return

09 · FROM SCAN TO SURGERY

Plan it. Print it. *Place it.*

Two days at our Yorkshire HQ. Plan a real case in SMOP, print your own surgical guide overnight, and place an implant on a model you will take home with you.

THE 360 IMPLANT ACADEMY · 2-DAY MASTERCLASS

A small-cohort programme for confident clinicians.

Hands-on, low-volume, every delegate plans & places. Led by three of the UK's most experienced clinicians in guided implantology (see overleaf below).



Scan to book

INVESTMENT

£495 + VAT

CPD

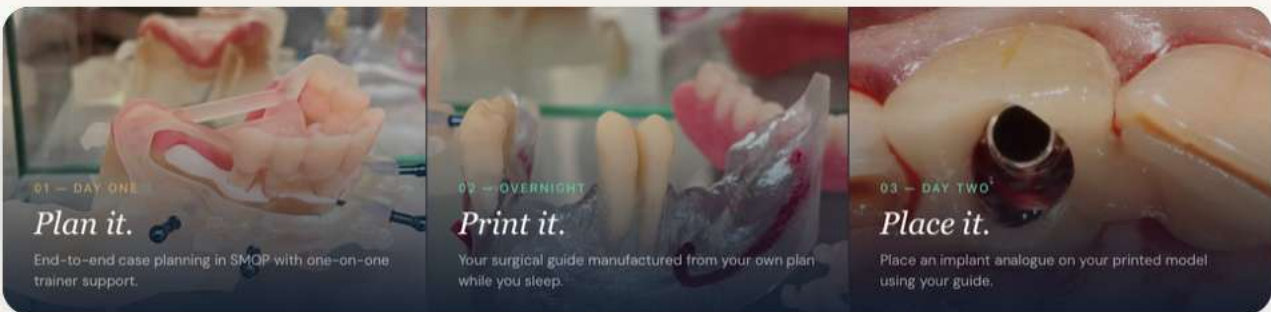
12+ hours

COHORT

Max 16

INCLUDES

SMOP licence
worth £250



Meet your trainers



SURGICAL LEAD
Ollie Ambridge
Guided implant placement



RESTORATIVE
Cameron Kelly
Ambridge Ceramics



PLANNING LEAD
Emma Downing
Swissmeda · SMOP

What you take home

SMOP planning licence	12-month seat – worth £250, included in the course fee
Your printed surgical guide	From your own planned case – keep for clinical reference
Jaw model with placed implant	Sectional model showing your placed fixture – useful for patient consultations

10 · HAND TO YOUR PROJECT LEAD

Master *checklist.*

One page. Ticking these means your install will go on the day — not three weeks later.

4 weeks before

- ☐ Room plan signed off by RPA
- ☐ Lead lining ordered (if required)
- ☐ Acquisition PC ordered or confirmed
- ☐ Builder + electrician booked for the right week

Install week

- ☐ Room cleared & access route confirmed
- ☐ Acquisition PC built & on the network
- ☐ Patients booked for training day
- ☐ Champion + nurse blocked out

2 weeks before

- ☐ 16 A circuit run & isolator fitted
- ☐ Cat5e + bell wire pulled to base
- ☐ Warning lamps fitted outside doors
- ☐ Viewer software pushed to surgery PCs

Day of install

- ☐ CEAT carried out & certified ✓
- ☐ Hand-over walkthrough complete
- ☐ QA tool issued, monthly process agreed
- ☐ Training day booked in the diary

READY TO TALK SPECIFICS?

We'll come and look at your room. Free, no commitment.

A 90-minute site survey saves three weeks of building rework.

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