

MOON

Technical Data Sheet + Installation Guide

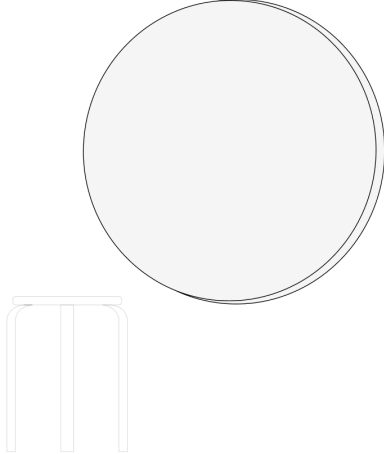
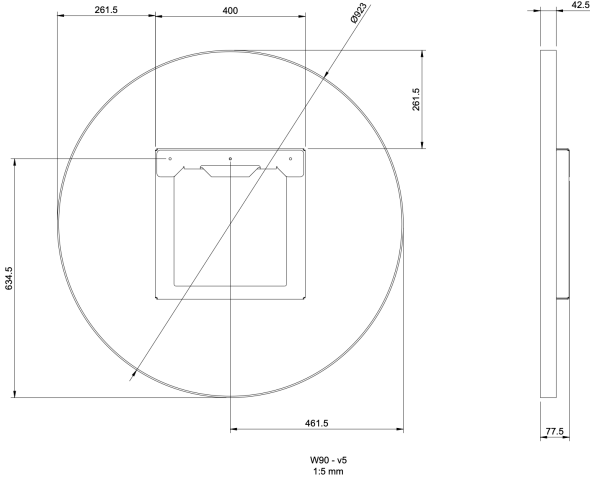
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MOON NINETY

Product name	MOON W-Ninety Alabaster Ø923mm wallmount object
Hero image / line drawing	
Dimensions	
One-line description	Wall mounted design object made from natural Alabaster stone and steel housing including Custom Electronics that guide 2.602 LED's in order to mimic the phases of the moon in real time.
Order code(s)	MOONW90A
Key call-outs	CCT 1800-6500 K • 0-2700 lm dimming • IP20 • remote control

DETAILED SPECIFICATIONS

Category	Metric	MOON90A
Electrical	Mains Input	100 – 240 V AC, 50/60 Hz (wide-range auto-switching)
	Internal Bus	5 V DC
	PSU (installed)	5 V / 40 A (200 W), fanless convection cooled (model: MeanWell UHP-200A-5)
	Max measured draw @firmware cap (33%)	12.7 A $\pm$ 0.5 A $\rightarrow$ ~63.5 W
	Input current (63.5 W, 90% eff)	~0.31 A @ 230 V / ~0.63 A @ 110 V
	Protection	Firmware current limit + PSU OCP/OVP; multiple 5 V injection points
	Typical annual energy & price	~50 kWh/year (~€10/year @ €0.20/kWh) <i>Assumptions: 12 h/day average ON time following the lunar cycle; average 25% user brightness; Phase mix across a lunar month with back-light only at full moon.</i>
	Typical Use (Phases, 25% user brightness)	~0.14 kWh/day (~€0.027/day @ €0.20/kWh).
Optical	Peak Use (Full Moon, 100% user brightness)	~0.51 kWh/day (~€0.10/day).
	LED type	SKC6812-WWA (addressable warm-white / cool-white / amber)
	CCT Range	1800K — 6500K (user-selectable, dual-white blend)
	Luminous Flux	~2,700 lm (pending photometry)
	CRI (Ra)	$\geq$ 80
	Beam Angle	Native LED ~120 ° (diffuse)
Mechanical	Dimming	0-100% per channel (front firmware-limited to 33%; back 0–100%)
	Diameter $\times$ Depth	923 mm $\times$ 75 mm
	Housing / materials	Alabaster front + steel structure; rear PCB assembly
	Diffuser	Diffuse, near-Lambertian (18mm alabaster front)
	LED count	2455 (front) + 147 (back) = 2602

	Weight	65kg
	Mounting	Wall-mount bracket with load-rated anchors (specify per substrate)
Controls	Updates	OTA firmware updates supported
	Local control	IR/433 MHz remote (on/off, dimming, phases, CCT)
	Mobile app	iOS / Android (Bluetooth/BLE): all functions
	Automation	KNX / DALI compatible (on/off, dimming, CCT)
Environmental & Safety	Operating temp.	-20 °C ... +40 °C
	Ingress	IP20 (indoor use only) —outdoor upon request
	Lifetime (L80B10)	Long-life operation at low drive currents; 50 000 h @ <25 °C; Expected 50 years at daily usage with low brightness.
	Acoustics	Fanless / Low-noise PSU
	Compliance	CE (EMC + LVD), RoHS — pending test report numbers
	Repairability	- Modular: 1 inner + 6 outer segment PCBs. - Rear access; plug-in power/data; segments removable with standard tools. - Spare segment PCBs & PSU available; paid post-warranty repairs offered.
	Warranty	2 years

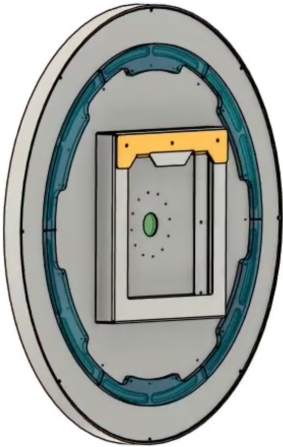
PACKAGING & LOGISTICS

Model	Carton size (L×W×H)	Gross weight	Box	HS code
MOON90	1100x1100x120mm	100 kg	Wooden Crate on a pallet	9405.42



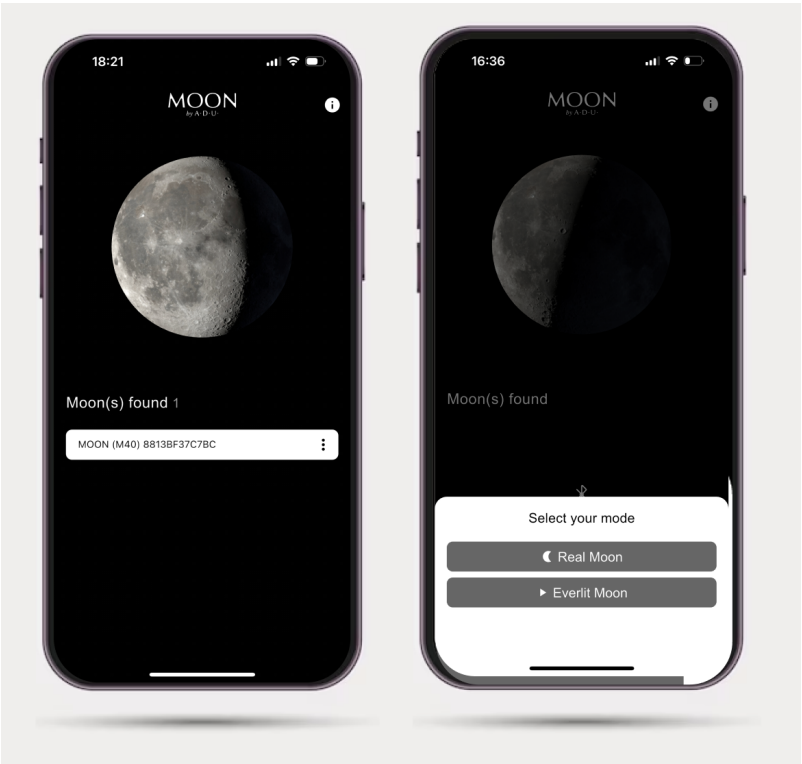
MOON NINETY INSTALLATION GUIDE

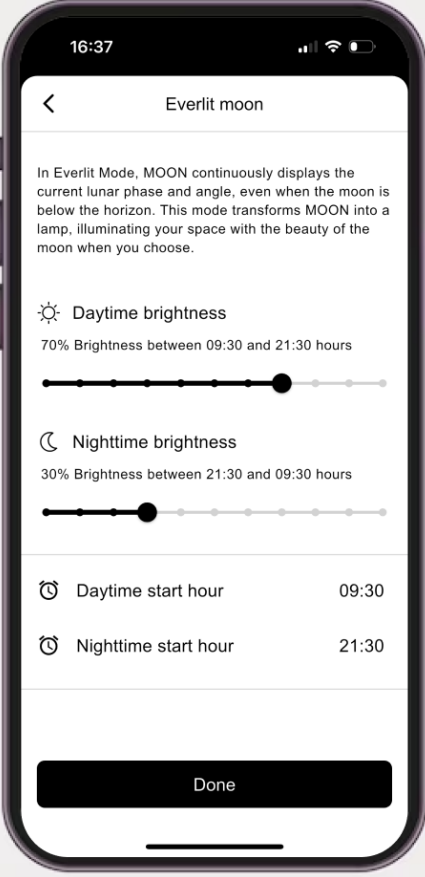
(ask professional assistance, 2-3 people)

Power	- Supply: 100–240 V AC, 50/60 Hz. - Max input current (PSU nameplate, worst case): ~1.8 A @ 100 V, ~0.8 A @ 230 V (Assumes 150 W PSU, ~85–90% efficiency. This is the safe number for electricians/fusing.) - Typical draw in use: ~0.31 A @ 230 V (~63.5 W at the wall) — informative only. - Connection: plug into a wall outlet (no external dimmer), or have a qualified electrician hard-wire to a switched spur. - Safety: Isolate mains before mounting or servicing. Class I appliance — protective earth required. IP20 indoor use.
Mounting	1) A cleat/wall bracket (yellow in image) is attached to the wall first, level.  2) Weight $\approx$ 65 kg. The wall/anchors must support $\geq 2\times$ load ($\geq$ 120 kg safety margin). 3) Wall bracket fixing (3$\times$): • Screws: M5–M6, length $\geq$ 50 mm, class 8.8 (steel) or A2-70 (stainless).. • Anchors: $\varnothing$8–10 mm metal expansion anchors for masonry; toggle anchors for drywall (Gyproc) rated $\geq$ 400 N each.

	relief and then lift the piece with 2–3 people, seating it onto the cleat.
Setup & Usage	1) Download the free mobile application (“Moon Design Object”) in your mobile app store 2) Automatically detect your MOON in the mobile app (For pairing, ensure only one phone is connected.) 3) Follow instructions in Mobile App Section to - Change the Mode: Real or Everlit - Change the Brightness: 0 (off) to 100% - Change the Colour Temperature (CCT) of your MOON90 (available via app when released) - Set a Timer for different Brightness at different hours - Update the MOON firmware through mobile application 4) Optional remote to control on/off, brightness, modes.
Maintenance	- IP20; indoor, dry environments (RH < 80% non-condensing). - Clean with dry, soft cloth only; no solvents/water on alabaster or electronics. - Ambient 0–40 °C; avoid prolonged direct sun/heat. - Do not use with wall dimmers or non-approved control gear.

MOBILE APPLICATION

Connect & Setup	 - Download mobile app “MOON DESIGN OBJECT” on iPhone or Android app market. - Open the app and make sure no other mobile app is connected to your MOON - Find your MOON and choose the mode you prefer
Real vs Everlit Modes	- REAL: The original, most fascinating functionality of MOON. In the Real mode, the object follows the exact phase of the moon — it shows the illuminated percentage and the angle of the illuminated percentage in real time. But that's not all, it also lights up autonomously when the moon rises and dims when the moon sets, every day. Since the moon rises each day 50 minutes later on average — this means you will learn to live with the cycles of the moon and its surprising effects.

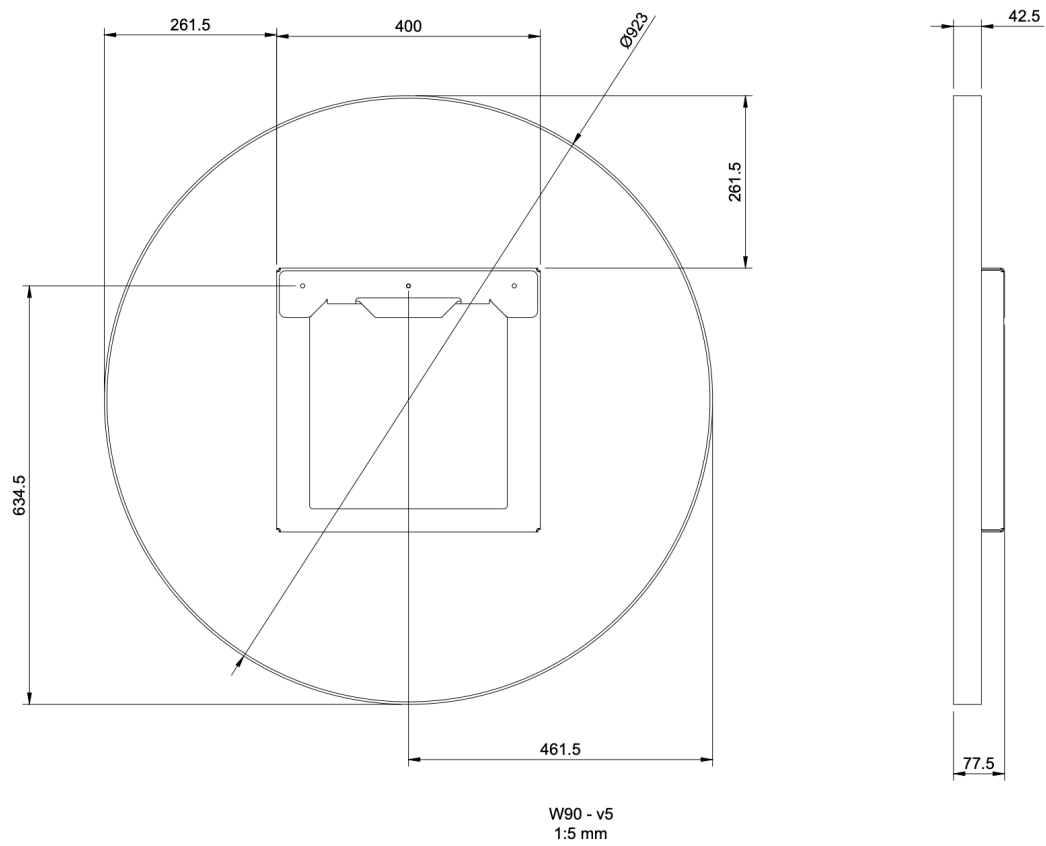
	- EVERLIT: The phase in Everlit mode will always be shown, even if the moon is below the horizon in your location. It makes for a more functional light-object that can be turned on/off at will. The piece still shows the exact moon phase in real time — its illuminated fraction and the angle of that moon phase depending on your location and time — and you will still need patience to see the full moon light up the entire piece. Remember: there will still be no light when it's the new moon.
Settings	 - Select Brightness level during the day - Select Brightness level during the night - Select time the day starts - Select time the night starts

	- ! Set brightness to zero to turn off the MOON during that timespan - Set light warmth - Set backlight options: always-on, only full moon, full moon and new moon + brightness strength.
Read More	- https://adu-studios.com/user-manual

CONTACT

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3d Files for rendering [here](#).