

DA40-180
Diamond Star



 **Diamond**
AIRCRAFT

1-888-359-3220
www.diamondair.com

The DA40-180 Diamond Star

The state of the art IFR
four place aircraft..

- ☑ Excellent performance
and flying qualities
- ☑ Exciting, yet easy
to fly
- ☑ Certified under
Part 23
- ☑ 2 year spinner to
tail warranty
- ☑ Uncompromising
build quality
- ☑ Advanced avionics
- ☑ Comfortable, premium
interior
- ☑ Affordable
- ☑ Proven reliability
and durability
- ☑ 26G safety cockpit
- ☑ Low noise
- ☑ A sensible blend
of modern and
traditional
technologies

- ☑ 145 kts!
- ☑ 1,070 fpm!
- ☑ 9 gph!

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DA40- Diamond



Cockpit Design

- ergonomic comfort and efficiency
- leading edge avionics
- dual control sticks
- integral instrument lighting
- throttle quadrant
- dual differential brakes
- adjustable rudder pedals
- electric 3-position flaps
- climate controls for pilot comfort
- superior outward visibility
- 3 point automatic harnesses
- lighted switch labels



180 nd Star



Access and visibility

The canopy offers excellent all-around visibility and provides unrestricted cockpit access. Rear seat passengers board through a separate door located on the left side.

Certified Safety Cockpit

Comfortable seats made of composite shells are attached to the airframe with energy absorbing elements.

Composite Airframe

- rugged and extremely strong
- virtually maintenance free
- aerodynamically efficient
- composite airframe components are corrosion proof
- epoxy primer and polyurethane topcoats offer UV protection

Storage

- spacious baggage compartment behind seats
- optional baggage compartment extension

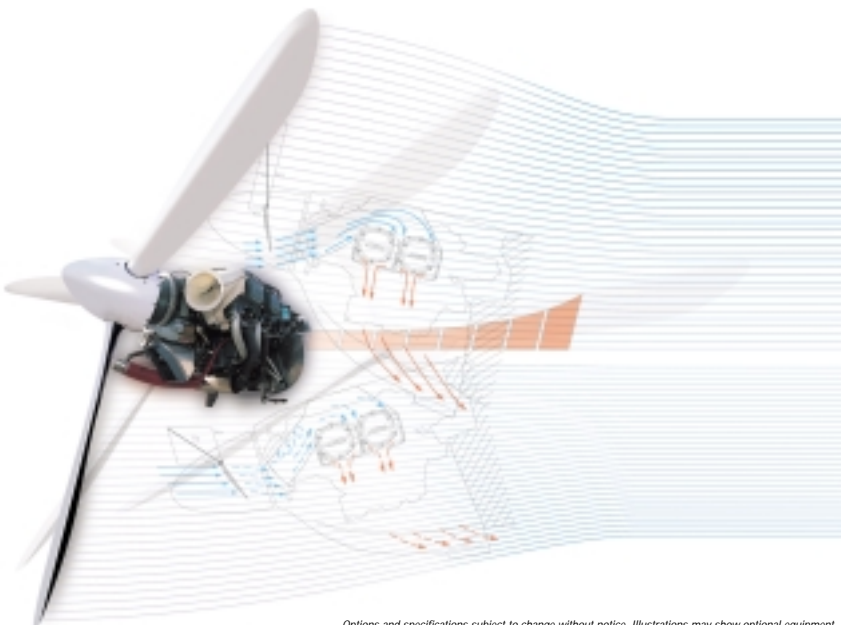




Length	26.3 ft	8.00 m
Height	6.6 ft	2.00 m
Wing span	39.4 ft	12.00 m
Wing area	145 sq ft	13.50 m ²
Seats	4	4
Max. T/O weight	2,535 lbs	1,150 kg
Fuel capacity	41 gal	155 l
Fuel specification	100 LL	
Useable load with full fuel	660 lbs	300 kg

Performance

T/O distance over 50 ft obstacle	1,150 ft	350 m
Rate of climb, sea level	1,070 ft/min	5,46 m/s
Rate of climb, 10,000 ft	550 ft/min	2,81 m/s
Cruise speed, 75% 4000 ft / fuel flow	145 kts / 10.5 gal/hr	270 km/h / 39 l/hr
Economy cruise speed (50%) in 10,000 ft / fuel flow	120 kts / 6.7 gal/hr	217 km/h / 25 l/hr
Stall speed	49 kts	89 km/h
Range (45 min. reserves)	600 nm	1,100 km
Glide ratio	10.3:1 ft	



Options and specifications subject to change without notice. Illustrations may show optional equipment.

Electrical / Avionics System

- 28V electrical system with 70 ampere alternator
- high quality Garmin or King avionics
- professional, computerized bench tested instrument panel and harness assemblies
- logical circuit layout and protection
- high quality components

Simple Control System

- pitch, roll and flap controls are push-pull tubes with maintenance free, adjustable rod end bearings
- simple control surface rigging

Modular Design

- individual and easily replaceable bolt-on wings, stabilizer, control surfaces, tail skid, landing gear and canopy
- removable instrument panel assembly
- easily replaceable engine assembly
- modular powerplant and secondary control quadrant

Reliable Powerplant

- conventional air-cooled Lycoming IO360-M1A engine
- simple and easily serviced Fuel Injection System
- convenient access to starter, magnetos, oil filter, spark plugs and other engine components and accessories
- SAI (self adapting inlets) engine cooling system assures optimum operating temperature in climb, cruise and descent (shown above)
- conventional stainless steel exhaust system
- up to 2200 hour TBO
- 3-blade constant speed propeller

Owner support:

The joy of owning your own aircraft should last long after you take delivery. That's why we consider after-sales support an integral part of our commitment to you.

Diamond Aircraft offers:

- ☑ 24 hour telephone customer support 365 days a year
- ☑ Dedicated tech reps
- ☑ Free maintenance training seminars
- ☑ Two year warranty
- ☑ Support from your local Diamond distributor
- ☑ All parts in stock for immediate AOG service
- ☑ Comprehensive manuals and technical publications



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What our customers are saying:

"This has the best visibility of any airplane I've ever flown. The only way that you're going to be more at one with the sky is in a sailplane. Once the rear seat passengers are in place, they have an awesome amount of space and plenty of legroom. Like the front seats, the rear seats are equipped with car-style 3-point inertia-reel seatbelts. The view from the rear seat is an amazing 180-degree panorama out the teardrop. This would be the ultimate sightseeing tour plane for groups of 3 plus one pilot. The DA40 is the ultimate four-seat airplane for a flying club or flight school. The DA40 is about the same price as a C172 and is a vastly nicer and safer aircraft. **Philip Greenspun**

I took delivery about 7 weeks ago and have been pleased with the aircraft. I have the IFR/autopilot equipped version. The aircraft handles extremely well, and is pretty simple in terms of stick and rudder. Performance is pretty much what Diamond claims. Today I got 132 KCAS which converted to 147 KTAS @ 5500 ft. I had a nice tailwind and the GPS was giving a ground speed of 178 KTS. Fuel flow was 10.4 gph. Initial climb @ 2272 pounds gross wt (263 under max gross) was over 1200 FPM (field elevation of 1250 MSL). The airplane certainly has "ramp appeal". Everywhere I fly, it attracts a lot of attention. **Steve Chalfin**

What the press is saying:

"I loved the Diamond Star. It was easy to fly, a solid IFR platform and well mannered in crosswinds."

"The visibility was the best of any aircraft I have flown. I felt I was on the bridge of the Starship Enterprise - only the "on screen" view wraps around the pilot for more than 180 degrees, an unobstructed picture window on the world."

"The aircraft was loaded without a pound to spare. Yet we leapt off the ground and climbed out at more than 1,000 fpm."

"Cabin room was excellent. The noise level was low. All attempts to make the Star do something scary failed. Landings were as easy as those in the simplest trainer. Short-field takeoffs used an estimated takeoff roll of 250 feet and a landing to a full stop soaked up only 300 feet."

"Winds were reported as 18 gusting to 21 at 90-degrees to the runway. Approaching touchdown I was ready for a fight, but the Diamond Star barely seemed to notice the crosswind."



"The Star flies faster, farther, on less fuel and carrying more payload than its nearest competitors. The Star delivers distinctively solid performance, comfort and a level of efficiency uncommon for even a composite light aircraft."

"Space is not a problem: the front cabin measures a whopping 1.14m across. All in all, the package came across as comparable to the interior of a new sports car of the Lexus or Infiniti class."

"Diamond has a winning aircraft on its hands, suitable for every level of pilot, from raw primary student to seasoned veteran. The harmony between the centre sticks and rudder pedals makes for an easy adaptation for a pilot in transition to a larger aircraft."

"Diamond offers an aircraft distinctively better than anything in its class and distinctively different than almost anything you'll find parked next to it on a ramp."

"The DA40 is intended for all those things you climb into a four seater to do: fly cross-country, go IFR, carry your family around or train for advanced ratings."

"Control sticks free up space on the panel and give the DA40 a sporty feel."

"There's reason to believe that with its good speed, roomy interior, easy flying manners and attractive styling, the DA40 could be a contender for the hearts and wallets of North America's pilots."



Diamond Aircraft is a world leading general aviation manufacturer of single engine type-certified aircraft, with factories located in London, Ontario, Canada and Wiener Neustadt, Austria.



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Ask about the complete line of fine Diamond products:



DA20-C1 ECLIPSE

- 140 kts, 5 gph
- luxurious interior
- Garmin avionics • Auto pilot optional
- fuel injected Continental IO-240B



HK36TTC MOTORGLIDER

- 28:1 glide ratio / 119 kts
- tows 1,156 lb
- the best of both worlds
- Rotax 914 Turbo



DA20-C1 EVOLUTION

- 135 kts, 5 gph
- the choice for flight training
- fuel injected Continental IO-240B

Your local Diamond Regional Distribution Center:

The world-wide network of Diamond Regional Distribution Centers and Authorized Diamond Service Centers provide professional, knowledgeable sales, service, parts and customer support for Diamond products.