F28-SC V2

product manual

V1.1

steering wheel for racing simulators

Ascher Racing GmbH

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1. safety notice

Please read the manual carefully before installing and using the product.

The product is not waterproof and designed for indoor use as simulator equipment.

It’s in conformity with the essential requirements and other relevant requirements of the Radio Equipment Directive (RED) (2014/53/EU).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

• This device may not cause harmful interference, and

• This device must accept any interference received, including interference that may cause undesirable operation.

Any changes or modifications not expressly approved by KW automotive GmbH could void the user’s authority to operate the equipment.

2. general information

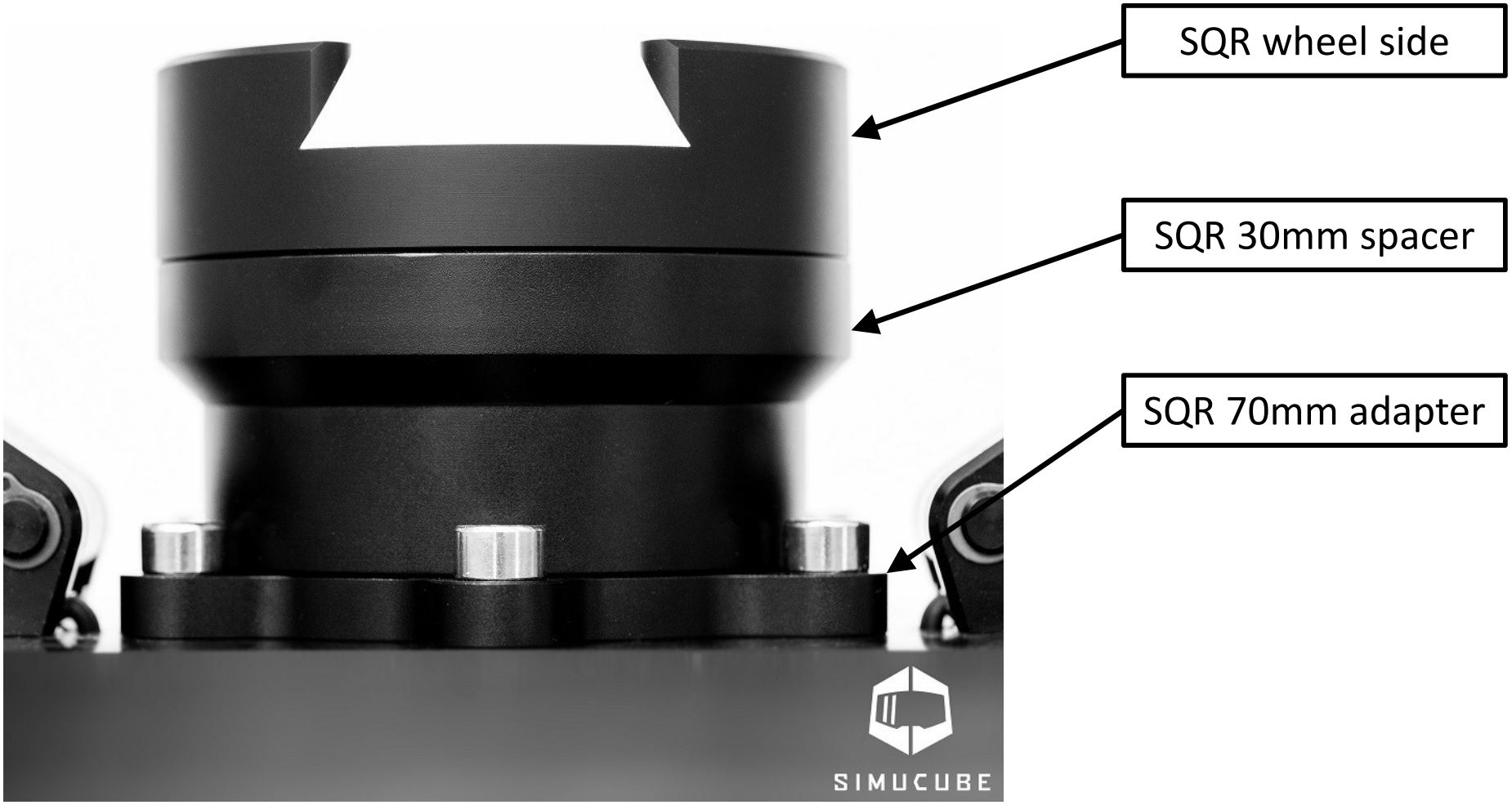
- wireless formula steering wheel for Simucube 1 & 2
- 285mm diameter
- mass: 1000 g
- 3,6 V lithium battery (ER 14250)
- standard 6 x 70mm bolt pattern (M5 threaded) to mount quick release
- 28 inputs in total
- grips covered in genuine leather
- do not apply excessive force on the antenna; handle with care (e.g. laying wheel on a table)

- package contents:
  - F28-SC steering wheel
  - alternative magnets to adjust paddle shifter force (**see foam insert**)
  - bolts and washers to mount standard Quick Release (such as Q1R)
  - button labels sheets (black and white)

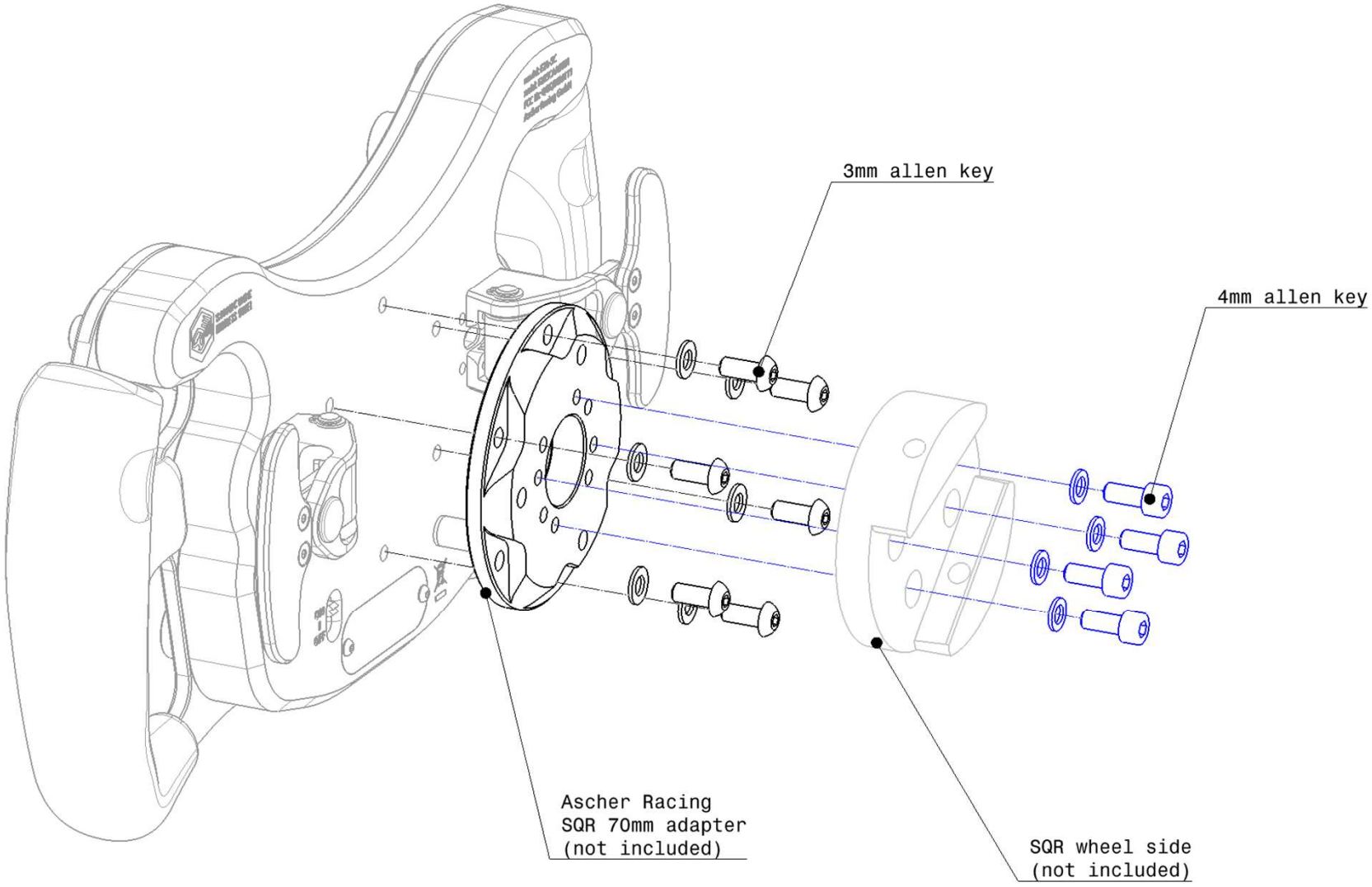
3. Quick Release mounting

1. SQR wheel side via standard SC2 adapters
2. SQR wheel side via *Ascher Racing SQR 70mm Adapter*
3. Q1R 70mm wheel side
4. M5 threaded QRs

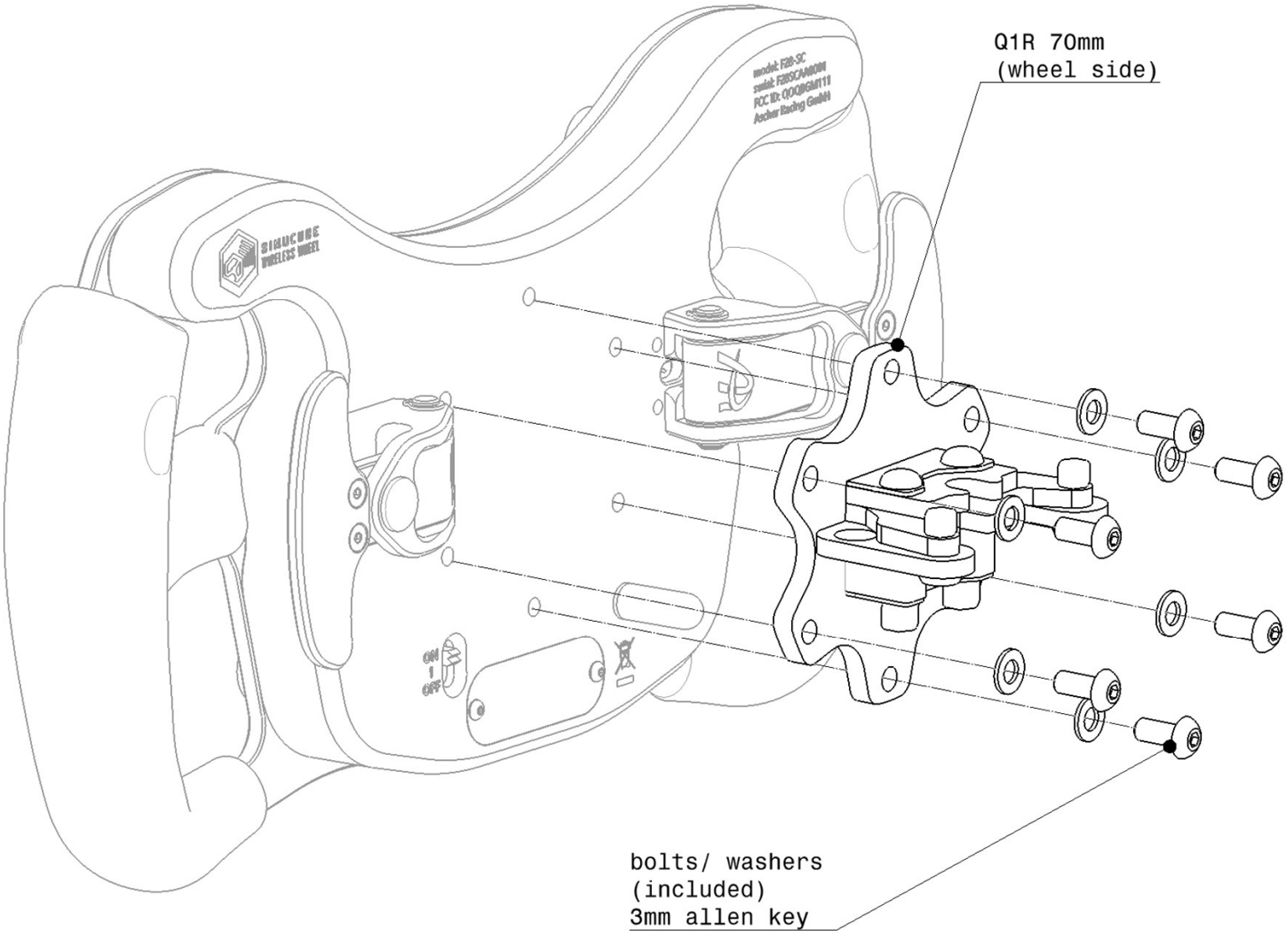
3.1 SQR wheel side via standard SC2 adapters



3.2 SQR wheel side via *Ascher Racing SQR 70mm Adapter*



3.3 Q1R 70mm wheel side



3.4 M5 threaded QRs

- not as straight forward as previous QRs due to both parts being M5 threaded
- M5 threads of one part need to be bypassed using captive screws

- through hole M5 threaded QRs (e.g. HRS Xero Play QR) → bypass the QR part

- blind hole M5 threaded QRs (e.g. NRG) → use captive screws from inside the wheel casing
  1. open wheel rim by removing 7 x front plate bolts (2.5mm allen key)
  2. screw in 5 x captive screws completely until threads do not intersect anymore
  3. attach QR by turning each bolt ¼ turn in a circular pattern
  4. attach front plate – make sure not to squeeze shifter cables

4. initial operation

- open *True Drive/ Simucube Configuration Tool* → go to *Simucube Wireless Wheels* tab
- set checkmark: *Connect automatically to paired devices*
- switch on steering wheel (ON-OFF switch on the rear side)
- double click *Ascher Racing F28*
- wheel is now paired, connected and shows up in the *Overview* tab
- check connection signal quality (*Overview* tab) for a full rotation of the steering wheel
- signal quality must be above 20% at all times for perfect operation

5. general operation

- when switched ON, the wheel will go into discovery mode for 30s (blinking LED)
- if Simucube is switched on, it connects automatically and shows up in the *Overview* tab
- LED will indicate successful connection by blinking three times
- SC2 will indicate connection/ disconnection by an audible beep (if checked in the *Hardware Settings* tab)

- alternative connection:
  - pull both paddle shifters simultaneously to connect immediately
  - pull both paddle shifters simultaneously for 5s to disconnect

- **after driving** session, it is recommended to **switch-off/ disconnect the wheel** to avoid constant battery drain in specific circumstances when a connection to SC is active
- the steering wheel will disconnect after 1h of inactivity to optimize battery life (activity is monitored through turning 10 degrees or more; the disconnect is not allowed to happen if there are FFB effects in use)
- expected battery life of 2 - 3 years on heavy daily usage
- low battery voltage: *True Drive* will show a warning message, SC2 will play an audible beep
- remaining energy will still last for many days to have time for replacing the battery
- to swap batteries, open access window on the rear side (1.5mm allen key required)

6. button label application

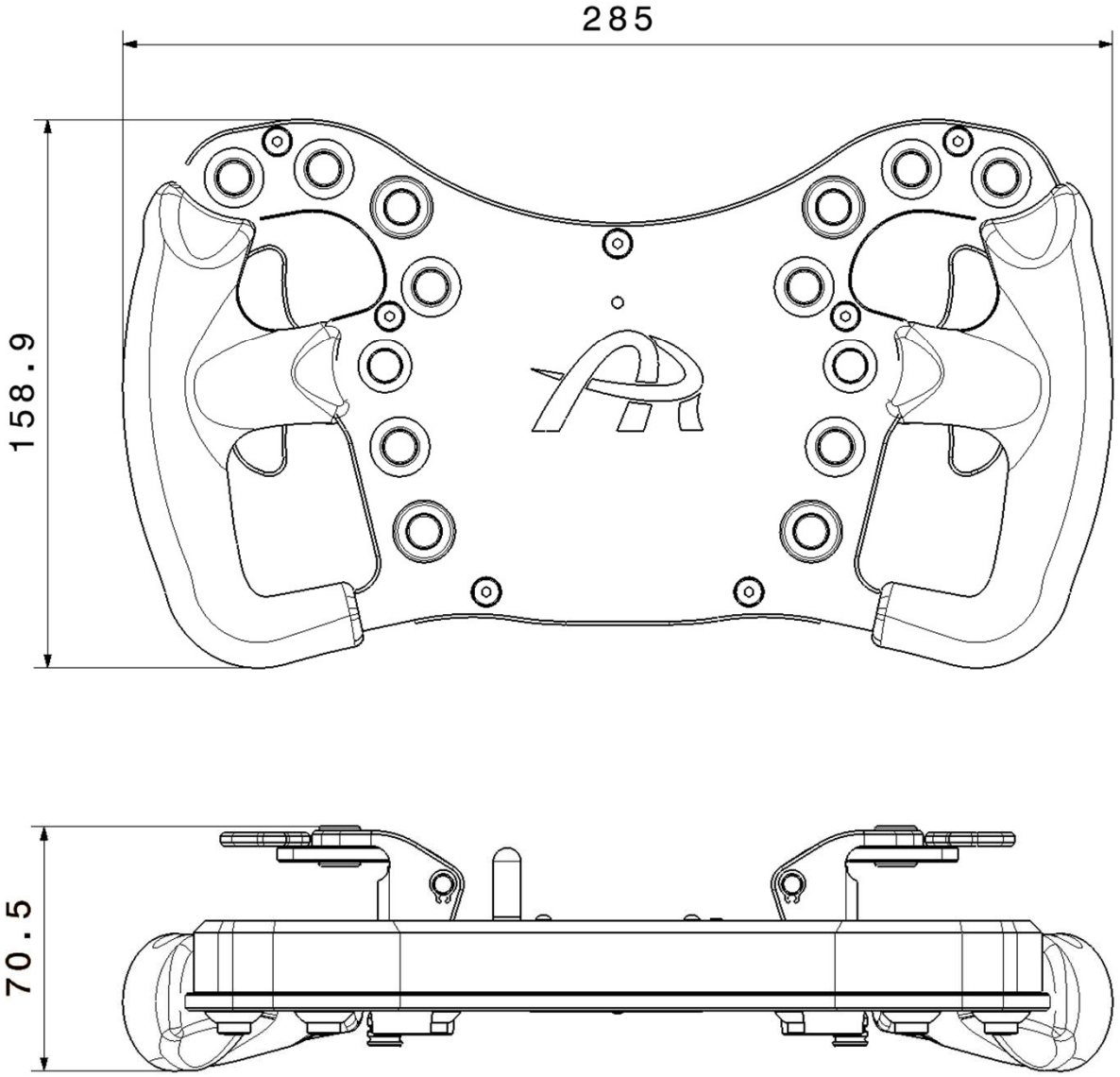
- to apply button labels the easiest way use a tool such as a knife
- put the label on the very tip of the knife
- position label centered and horizontal
- press the label on the surface

7. paddle shifter force setting

- paddle shifter snap action force is set by the combination of magnets and spacers
- do not let magnets smash into each other – magnets are very brittle and can break
- to pull out installed magnets, put additional magnets carefully on top
- press the paddle shifter to separate installed magnets
- pull out top and bottom magnet
- magnets can be separated the best by shearing them off

- 4 pcs 3mm **magnets & spacers** can be found in the **packaging foam insert**
- approx. actuation force depending on magnet height and spacers:
    1. 800g = 5mm + 5mm (factory default)
    2. 570g = 5mm + 5mm + 1 spacer
    3. 480g = 3mm + 3mm
    4. 440g = 5mm + 5mm + 2 spacers
    5. 340g = 3mm + 3mm + 1 spacer
    6. 260g = 3mm + 3mm + 2 spacers

8. dimensions



9. wiring schematic