# **FULL CONTACT 4**



**USER MANUAL** 



Last revision: 18.1.2013

# **1** CONTENTS

1	CONTENTS	2
2	INTRODUCTION	3
3	USE AND COMMUNICATION	4
4	SIZES	6
5	TECHNICAL PARAMETERS AND DESCRIPTION	7
6	FUNCTION	9
7	CONNECTING THE CABLES	11
8	TRANSPORT AND STORAGE	12
9	EQUIPMENT AND ACCESSORIES	13
10	WARRANTY CARD	14



# **2** INTRODUCTION

Thank you for purchasing the FULL CONTACT 4 helmet. The FULL CONTACT 4 helmet was developed specially for powered paragliding. Thanks to the materials used (particularly carbon), it is the lightest helmet in its category without this being detrimental to safety. The helmet has no built-in any communication device, however, it is equipped with headphones and microphone and the helmet can be connected to a range of various devices using a cable or Bluetooth through the intelligently designed connectors. There is also a new range of fully compatible protective Plexiglas face shields, which can be fitted to the helmet.

The main advantages of the FULL CONTACT 4 helmet:

- Light, strong, hand laminated carbon-Kevlar sandwich shell provides full head protection including back of head.
- Removable lining in various sizes (S, M, L)
- Adjustable built-in headphones (noise protection)
- Optional cable connection to an external radio device
- Optional connection to a telephone or other devices using Bluetooth
- Optional interconnection of multiple helmets using Bluetooth (intercom)
- Light weight (790 g) incl. basic equipment
- Microphone filter protected by an industrial patent
- Wide range of interchangeable protective Plexiglas shields

We hope you enjoy plenty of wonderful flying experience enhanced by potential of the FULL CONTACT 4 helmet.

## NIRVANA TEAM



# **3 USE AND COMMUNICATION**

Thanks to its design, noise suppression and diversity microphone system, the helmet is suitable for powered gliding, particularly using open sports gliding equipment (SGE). It can also be used with free-flying gliders, however, the helmet's noise suppression insulates the pilot from external noise and this helmet is consequently not as suitable for free gliding. The helmet must not be used for skiing, water sports, on motorcycles and bicycles.

Do not use the radio near fuel stations, in explosive environments and in all areas, where use of this equipment if forbidden.

The following external devices can be connected to the helmet by two methods:

- Using a cable
- Using Bluetooth



## The most frequently used communication devices:

#### • Radios working at 446 MHz (PMR)

On the basis of a general license by the Czech Telecommunication Authority and European Regulations for radio stations PMR, these radios can be freely operated and are not subject to any fees or registration.

#### • Radio stations working at the flight frequencies (118 to 138 MHz)

Only qualified persons with a radio operator certificate may use such radios during flight. Operation of such radios is subject to a fee.

#### • Telephone

A telephone can be connected using Bluetooth. The telephone can be used in adherence to the rules set out by its manufacturer and the telephone network operator.

#### • Other devices

- Music players (walkman, discman, mp3...)
- Acoustic flight instruments, instruments signalling that limit values have been exceeded (engine temperature, fuel level...)

The pilot is fully responsible throughout the duration of the flight. No other activity or communication can have priority over controlling the SGE.



# 4 SIZES

A helmet of the correctly chose size will sit securely on the user's head without causing excessive pressure. It will allow the user to turn his/her neck freely and also tilt his/her head back and will not restrict visibility in any direction. The headphone pressure should be sufficient for noise suppression.

Size	S	Μ	L
Head circumference (cm)	56 – 57	58 – 59	60 - 62
Head circumference (in)	22	22 <sup>3</sup> / <sub>4</sub>	23 <sup>5</sup> / <sub>8</sub>
Hat	7	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>2</sub>



# 5 TECHNICAL PARAMETERS AND DESCRIPTION

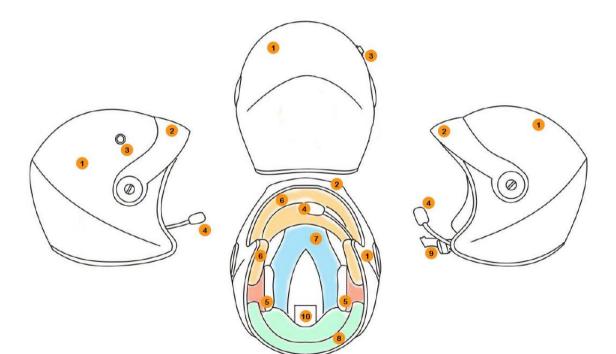
## **Technical parameters**

Weight790 gDimensions (L x W x H)280 x 250 x 250 mmShellSandwich structure made from Kevlar, carbon and glass fibre, reinforced with aramid

## **Technical description**

- **1** Protective shell
- 2 Sun shade (interchangeable)
- **3** PTT button
- 4 Microphone
- 5 Headphones with loudspeakers
- **6** Forehead padding (removable)
- 7 Crown padding (removable)
- 8 Posterior padding
- 9 Strap (adjustable)
- 10 Connectors for headphones and external devices





# **6** FUNCTION

## Putting on the helmet

Take hold of the helmet shell (1) by its cheek guards, pull them slightly apart and place the helmet over your ears onto your head.

#### Sun shade

The sun shade prevents the pilot from being dazzled. The positioning range is given by the mechanical stops. Do not position the sun shade outside its given range. During launch fold the shade right up (skyward visibility is not restricted). Only lower the shade to prevent dazzling when flying.

The sun shade is interchangeable and we offer several types. The shade can be changed by carefully loosening the two screws on each side, changing the shade for a different one and tightening both screws again. Tighten the screws carefully!

## Transmission and reception

Radio transmission can be initiated by pressing and holding the PTT button (3). Releasing the button initiates reception. The button's position in the right upper area of the helmet does not hamper the pilot when controlling the paraglider. The PTT button does not have to be pressed for communication using a telephone or other devices connected using Bluetooth.

## Connection of external devices using a cable

The cable of external devices should be connected to the headphone and external devices connector and laid under the removable padding.

For details see chapter 7 Connection of cables.



## **Connection of external devices using Bluetooth**

Connect the Bluetooth device to the helmet connector using a cable and attach the cable using the Velcro strip in the right front area of the helmet. Use the Bluetooth device according to instructions in the manual supplied together with the device.

## **Diversity microphone**

The diversity microphone system actively suppresses noise generated by the engine. The microphone (4) is located at the front of the flexible extension, which serves to adjust the microphone to the correct position. During flight the microphone should be at a distance of approximately 1cm from your mouth.

You do not have to shout into the microphone; microphone damping and the active electronic filter eliminate all other undesirable noises.

Do not lift or hold the helmet by the flexible microphone extension; it is not removable and its range of movement is fairly limited. The microphone's position on its flexible extension is fixed, do not try to rotate it.

## Adjustment of headphones

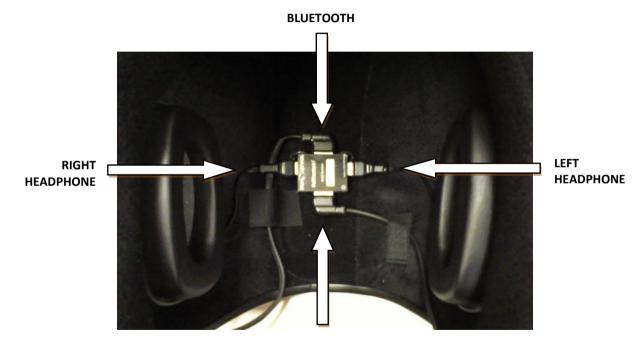
The headphones (5) are removable and adjustable depending on the position of the user's ears. In their correct position the headphones do not pinch and provide good damping. In order to find the best position the narrower part of the headphone can be turned downward or the headphones can be swapped (in the second case the connectors on the box must be reconnected correctly, see 10).

## Padding

The padding consists of three parts (6 to 8), and it is removable to make maintenance easier.



# 7 CONNECTING THE CABLES



RADIO



# **REPAIRS AND MAINTENANCE**

- Only use original accessories.
- Do not leave the helmet in direct sunlight or in a damp and dusty environment.
- Do not try to disassemble or repair the helmet or its accessories. Any potential repairs should be carried out by the manufacturer or an authorised seller.
- The shell and shield should be cleaned using water and mild detergent.
- The removable padding can be hand-washed in lukewarm water. All the parts must then be left to dry fully.
- The headphones must not come into contact with water! Use a cloth to clean them.

# 8 TRANSPORT AND STORAGE

- Transport the helmet in the light packing supplied by the manufacturer to prevent the helmet from being scratched or dirt from the surrounding environment getting into it.
- A fabric holder from the range offered by the manufacturer may also be used for transport and storage.
- Do not place any heavy objects on the helmet during transport and storage. Store it in a dry, dust-free and clean environment at a stable temperature.



# 9 EQUIPMENT AND ACCESSORIES

#### **Basic equipment**

The FULL CONTACT 4 helmet's basic equipment includes:

- Protective shell
- Sun shade without the protective Plexiglas
- PTT button
- Microphone
- Headphones with loudspeakers
- Padding
- Strap (adjustable)
- Headphone and external device connectors

## Helmet accessories (optional)

- Full transparent or smoke coloured Plexiglas shield
- Partial transparent or smoke coloured Plexiglas shield
- Radio cable (must be ordered depending on radio type)
- Bluetooth communicator
- Radio
- Helmet holder
- Seatbelt attachment for radio







# **10 WARRANTY CARD**

Serial no.:

The warranty covers defects in workmanship and material on all parts of the helmet for a period of 12 months.

The warranty is provided under the condition that the purchaser (user) observes the principles of correct use specified in the manual attached to the product.

Size:

Any claim shall be accompanied by a valid warranty card with the purchase date entered and bearing the signatures of the seller and purchaser.

The manufacturer's servicing technician will assess whether the claim is justifiable.

The warranty does not cover:

- damages caused by external events,
- mechanical damage,
- damages caused by unqualified intervention,
- damages caused by improper use of the product,
- damages caused by use of non-original parts or accessories,
- the manufacturer is entitled to charge the costs related to an unjustified claim to the user.

Date	
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Dealer .....

The buyer confirms that he/she been informed on proper use of the product by his/her signature.

Buyer .....

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Last revision: 18.1.2013



NIRVANA SYSTEMS s.r.o., Jateční 523, 760 01 Zlín, Czech Republic tel.: +420 577 226 616, fax: +420 577 019 117, sms: +420 775 917 001 e-mail: info@nirvana.cz, http://www.nirvana.cz

E-Shop: www.paramotors-shop.cz Facebook: www.facebook.com/nirvanaparamotors



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