

User Manual

AMP-1 TP FC / MC / HC









AMP - 1 TP

The AMP -1 TP is a High Level protective ballistic helmet, made of high quality durable Aramid.

Protective helmets make up part of the personal protective equipment and are designed to prevent head injuries and to at least mitigate serious head trauma. Please read these instructions carefully so no relevant safety aspects are missed.

The Helmet system AMP-1 TP Full-Cut (FC), AMP-1 TP Mid-Cut (MC) and AMP TP High-Cut (HC) are certified according to:

- DEA / FBI BALLISTIC RESEARCH FACILITY BALLISTIC HELMET TESTING PROTOCOL dated 2018

Important Information:



This helmet should only be used for the purpose intended, which is to provide head protection. Misuse of the helmet through in-appropriate use such as using it as a hammer, throwing device, spade, stool or football can affect the properties of the helmet therefore reducing the level of intended protection.

The AMP-1 TP in its standard format (FC/MC/HC) is designed to offer optimal protection and should not be modified or equipped with foreign components. Additional drilling or any changes to the helmet shell and original accessories may affect the protective capabilities of the helmet and render it unfit for use and further negate the warranty.



Standard Equipment

The AMP-1 TP FC and AMP-1 TP HC standard equipment consists of the helmets ballistic shell, CPP pad system (including hook and pile surfaces and fabric upholstery), a 15 -19 mm harness strap (retention system), combined with a wheel-dial retention system, a rail system, as well as all the bolts and threaded sleeves that anchor the retention and rail system to the helmet.

In addition, each helmet has a set of 2 x 12mm EPP pads for height adjustment.

The helmets standard weight is approximately

AMP-1 TP FC 1650 g - 3.6 lbs, AMP-1 TP MC 1590 g - 3.5 lbs AMP-1 TP HC 1580 g - 3.4 lbs

<u>Optional</u> <u>accessories</u>

The optional accessories for the AMP-1 TP Helmet Series include:

- **NVG interface** for attachment of night vision devices or cameras
- **Velcro Loop patches** for attaching the helmet cover or individual/unit insignia
- **Helmet covers** (Available in black or green)
- **Ballistic visor** & Speed-System Connection (available in all visor styles & protection classes)
- **Counter-Balance** weight attachment system to compensate for frontal imbalance when using Visor/NVGs
- **Tactical goggles** with protective ballistic properties

Other accessories are available on request.



<u>Helmet</u> <u>System</u>

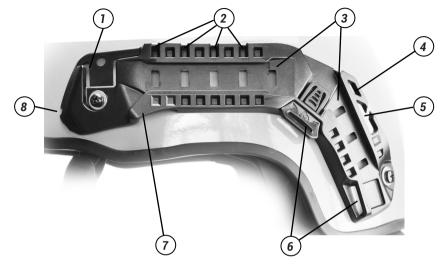




- 1 Helmet Ballistic shell
- ? Rail system
- 3 Rail-clip for attachments (oxygen/gas mask).
- **4** Ballistic fixing bolts
- **5** Wheel-dial retention system
- **6** Retention Harness system
- **7** NVG-interface (optional)
- 8 Shock cord to stabilise/Secure NVG devices (optional)
- **9** Rubber edge
- 10 12 mm Hardfoam pad
- 11 18 mm Hardfoam pad
- 12 24 mm Hardfoam pad
- **13** Large comfort pads (shown with synthetic leather side)
- **14** Small comfort pads (shown with the loop (Velcro) side)



Rail System



- 1 Attachment point for visor (face-shield) using the Speed-System connection
- **2** Attachment points/gaps for shock-cord (Bungees)(for directly over the top)
- **3** Multifunctional Type ARC-Rail
- 4 Attachment points/gaps for shock-cord (Bungees) for the rear end
- **5** Open attachment point for attaching accessories,
 - e.g. Counterbalance kit, tactical goggles (sold separately)
- 6 Rail-Clip Attachment points for masks, goggles, accessories
- 7 Modular attachment point for protective (accessories sold separately)
- **8** Groove for NVG stability shock-cord (Bungee)



Retention and Suspension System

The systems of the AMP-1 TP consists of (1) webbing harness strap (Retention system), the (2) adjustable wheel-dial (Retention system) and (3) comfort protection pad (CPP) system (Suspension system), which collectively make for a comfortable and secure fit. These 3 system components can be individually adapted to the needs of the user. The interior parts are made up of 6 double cushion pads (Soft comfort pads with a hardfoam pad), harness strap and an adjustable wheel-dial retention system.

Height adjustment

The AMP-1 TP has an innovative padding system (CPP) which allows for height adjustment within the helmet. The CPP system with its double cushioning system consists of 2 double hard foam pads and a large 4 point comfort pad, mounted centrally, enable the user to adjust the height by changing the hard foam pad. For height adjustment the 2 hard foam pads, below the 4 point comfort pad, when removed, can be replaced with either a 12 mm or 18 mm hard foam pads. The thickness of the hard foam pads is internally marked on the pads with the numbers 12 or 18 – so please pay attention. For increased comfort the large 4 point comfort pad can be separated from the 2 double hard foam pads and replaced with a thinner or thicker 4 point comfort pad. To ensure correct placement, once the pads are in place the gap in the centre of the 4 point comfort pads should allow for the numbers which are displayed on the hard foam pads to be read through the gaps. The Busch logo stamped on the bottom of the helmet, should also be visible from the central hole.





Size adjustment

Pads

The AMP-1 TP fulfils the impact standards for DIN EN 397, therefore it is imperative that the 18mm pads are in place within the helmet on the uppermost part!

The AMP-1 TP helmet can be individually adjusted to the head size of the user. This can be done by removing the 2 point comfort pad, and then by removing the hard foam pads located underneath the comfort pads, at the front, back and either sides of the helmet. The 2 point comfort pads for the front and rear (Dual soft comfort pad) come in a thin and thick version for individual preference & comfort. The soft comfort pads for the lateral aspects (either sides) of the helmet come in one size thickness only.

The AMP-1 TP has an innovative padding system (CPP) which allows for size adjustment within the helmet. The CPP system with its double cushioning system, consisting of a 2 point soft comfort pad and double hard foam pad, located at the sides, front and back of the helmet can be adjusted. To enable the user to adjust the sizes the 2 point soft comfort pad must be separated from the double hard foam pads. Thereafter the current hard foam pad can be replaced with a thinner or thicker version. For size adjustment the hard foam pads come in 12 mm or 18 mm variants. The thickness of the hard foam pads is internally marked on the pads with the numbers 12 or 18 – so please pay attention. To ensure correct placement, once the pads are in place the gap in the centre of the 4 point comfort pads should allow for the numbers to be read on the hard foam pads. The Busch logo printed on the bottom of the helmet, should also be visible from the central hole.

For head sizes below <52 cm the option of installing 18 mm and 24 mm hard foam double pads is available.

Points to note:

To further improve the comfort, the position of the double cushion pads can also be varied. This makes it more comfortable when using other accessories such as respirators/ gas masks. For this, the double pad/comfort pad can be raised slightly higher to accommodate the rubber seal of the respirator. This will ensure it is sealed correctly and not impact on the helmet edge.

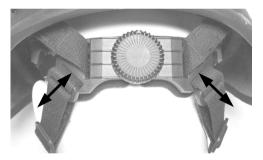


Size adjustment

Wheel dial

The circular wheel-dial knob located at the back of the helmet enables the user to further finely adjust the AMP-1 TP helmet size. This feature, located at the back of the helmet towards the neck region can be rotated using the finger and thumb. By rotating the knob clockwise the inner part of the helmet size is decreased, by rotating it anti-clockwise the helmet size is increased.

The wheel-dial of the AMP - 1 TP provides for a firm and secure fit. To further improve comfort the wheel-dial housing seated around the neck/back of head, can be raised or lowered depending on individual preference. Situated on either side of the wheel dial housing are two straps that can be slid up or down, which enable the wheel-dial housing to be seated either lower or higher at the back of the neck.



Points to note:

By rotating the wheel-dial and ensuring the helmet is tightly secure around the head, the helmet will provide for a firm fit and minimize any tilting of the helmet when using accessories such as visors or NVG devices or during target acquisition.



Size adjustment

Retention Harness

By adjusting the retention harness system in the correct manner the stability of the helmet will be further improved. The harness helmet straps are strategically located to ensure any tilting (Forwards/backwards) of the helmet is minimised and comfort and stability optimised. The harness chin strap of the AMP-1 TP has 4 adjustment points which help to centralise the forces and balance the helmet. The harness chin strap when ideally fitted, should be adjusted so that the chin-cup is centrally placed on the chin, with all four points of attachment being taught and firm, but equally comfortable. To easily adjust the harness chin straps, the four cam buckles can be opened and can be slid up or down. After adjusting the chin straps the fitting length the backles can be closed.



Points to note:

The CRS-2 harness system can be detached from the helmet shell without the use of any tools. In order to detach the harness for exchange or cleaning please unhook the harness. Make sure when attaching the harness that all four hooks with the openings are facing the rear wheeldial.





Cleaning and Care

The helmet shell, removable soft comfort pads, including the retention system (Wheel-dial and harness strap webbing) can be cleaned with lukewarm water and a mild soap detergent. The removable soft comfort pads can be washed in a commercial washing machine in a wash bag at 40°C, without a spin wash. The interior of the helmet can be treated with disinfectant spray (e.g. Heliosept Medical Spray). After washing the items should be carefully re-shaped and left to dry naturally so they can resume their original shape.



Please do not wipe the helmet down with any solvents or thinners or other similar materials.

Storage and Transport

The helmet should be kept in a dry and sheltered place. The storage temperature should be between $20^{\circ}\text{C} \pm 15^{\circ}\text{C}$ ($68\pm59^{\circ}\text{F}$) and should not exceed or fall below these recommendations. During storage the helmets should be placed out of range of direct sunlight avoiding any prolonged UV exposure. While in use the maxium temperatures of the helmet should not exceed -51" to 60°C (- 60° to 140°F).

Optimally the helmets are best stored in the helmets bags supplied.



Do not store in close proximity to aggressive substances such as solvents and fuels.

As long as the helmet is stored and packed with original packaging to prevent damage, it can be easily transported within cardboard container box.



Maintenance Checks

Periodical maintenance checks should be carried out on the shell (Interior and exterior), and all accessories. If the helmet is exposed to an excessive force or other trauma, such as being struck by a very heavy object the helmet should not be worn. A damaged helmet should not be used.

If in doubt, please contact the company **Busch PROtective Germany GmbH & Co. KG** through your local agent.

For replacement of damaged equipment, such as the rail system or the NVG-interface there is no requirement for any special tools

Replacement of damaged accessories Rail System

Ensure that whilst dismantling the rail system you are aware that the whole retention system (wheel-dial and harness) are interlinked and anchored to the helmet via the ballistic bolts and threaded sleeve nuts. To dismantle the parts the 4 Phillips screws and 4 threaded sleeve nuts, which connect the retention (Wheel-dial & harness system) system parts to the helmet shell, must be loosened with a Phillips screwdriver. The threaded sleeve nuts can be removed from the helmet shell. This is not necessary when the threaded sleeve nuts are to be re-used. For the subsequent installation of the rail system and the retention system, make sure that the short bolts are used for the helmets rear drilled holes and follow steps:

- 1. Thread the rear harness strap (both) ends on to the threaded sleeve nut and then insert the threaded sleeve nut into the drilled rear holes of the helmet shell.
- 2. Hold the rail system from the outside of the helmet shell and screw the rear threaded sleeves. Initially these shorter bolts (M6 x 12mm) should be lightly screwed in to be able to place the rails in the correct position.
- 3. Now thread the front harness strap ends with the pre drilled holes onto the threaded sleeve nut. Then slide the plastic arm of the wheel dial also onto the threaded sleeve. The harness strap (pre-drilled) must not be anchored between the helmet shell and plastic arm of the wheel-dial system!

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- 4. Now insert the threaded sleeve nut intended for the front drilled hole of the helmet shell and screw the rail system attached with the longer bolts. Ensure that the inner ring arms of the wheel dial are aligned parallel to the edge of the helmet and the harness strap (fixed to the bolt) is at an angle of 90° to the angle of the inner ring arms of the wheel-dial system.
- **5.** Check the position of the rail system and now ensure the rear bolts are screwed tight.

Points to note:

To simplify the assembly and attachment start with one side (for example, left) until complete and then commence with the other side repeating steps 1 – 5 again.

Replacement of damaged accessories

NVG Interface

To replace the NVG interface please proceed as follows:

- 1. Firstly, remove the front pad and find below two Velcro (Loop) circle patches remove these.
- 2. Now unscrew from outside the 3 x Phillips screws with a Phillips screwdriver. If required use a finger to hold the threaded sleeves on the inside.
- 3. Remove the NVG interface and insert the new interface in line with the 3 frontal holes.
- **4.** Screw the 3 x Phillips screws to the threaded sleeves again and ensure the device is seated correctly before tightening the screws. This device should be centrally aligned and be positioned parallel to the helmets rubber edge.
- **5.** Place two new adhesive Velcro circle patches over the threaded sleeve nut and now affix the front pad on the inside.

Points to note:

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If it is not necessary to replace the bolts/threaded sleeves, leave the existing threaded sleeves in place in the pre-drilled holes to make the process easier.



Spare Parts List

Harness system with inner ring and wheel dial, inclusive bolts and threaded sleeves

(EPP Pads, soft comfort pads are not included)

• Spare Soft Comfort Pads

(includes 6 soft comfort pads for a complete exchange)

• Spare EPP Impact Management Pads

(includes 6 EPP pads for a complete exchange)

- Spare NVG Interface, Includes attachment bolts and threaded sleeves
- Spare Rail System, includes bolts, threaded sleeves and rail accessory attachment clips
- Spare Velcro Patches

(Includes 6 adhesive rectangular patches)

- Transport Bag
- Helmet Cover, includes Velcro patch attachment points

Should you require any spares/ accessories please contact us.

Notes:



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