GOTHERMAL
INNOVATIVE SENSING SOLUTIONS

Trilobyte Helmet Light Gen2 ™
Programmable Beacon, 4 Output Colors

3.07oz (87.1g) w/ Battery

1.37" (3.5cm)

2.24" (5.7cm)

3.26" (8.3cm)

PRODUCT NUMBER: 02902

NSN: 5855-5200-128379

TECHNICAL SPECIFICATIONS

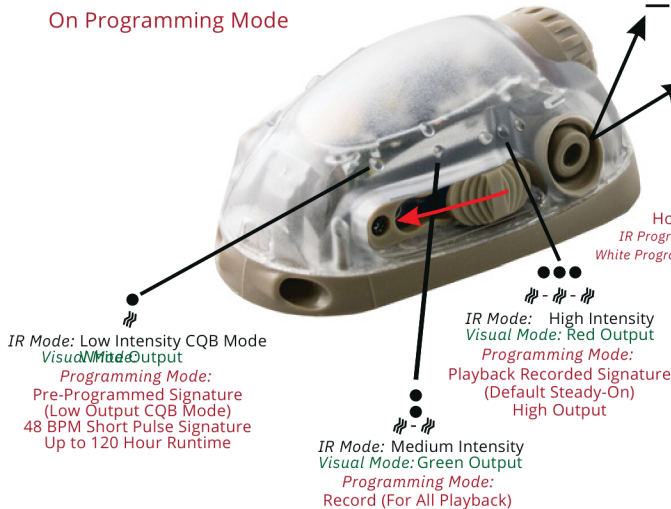|	
BATTERY SOURCE	One (1) AA Lithium (1.65Vdc) or AA Alkaline (1.5Vdc)
ATTACHMENT METHOD	3M Dual Lock (Installed on Base of Unit)
HOUSING COLORS AVAILABLE	Black and Tan
HOUSING MATERIAL	High Impact Lens with Shock Absorbing Polymer Base
HOUSING FINISH	Matte
DOME LENS MATERIAL	High Impact Polycarbonate (Textured)
OPERATING TEMPERATURE	-40 to +60°C with AA Lithium; -20 to +60°C with Alkaline or Rechargeable AA
STORAGE TEMPERATURE	-40 to +60°C with AA Lithium; -20 to +60°C with Alkaline or Rechargeable AA
ENVIRONMENTAL SEAL	Hermetically Sealed Unit with Removable Battery Cap
WATERPROOF RATING	Ip67
VISIBILITY RANGE	Up to 5km on High Intensity (Visual or Near IR) on a clear dark night (with no moon or contrasting backlighting)

Functions Diagram

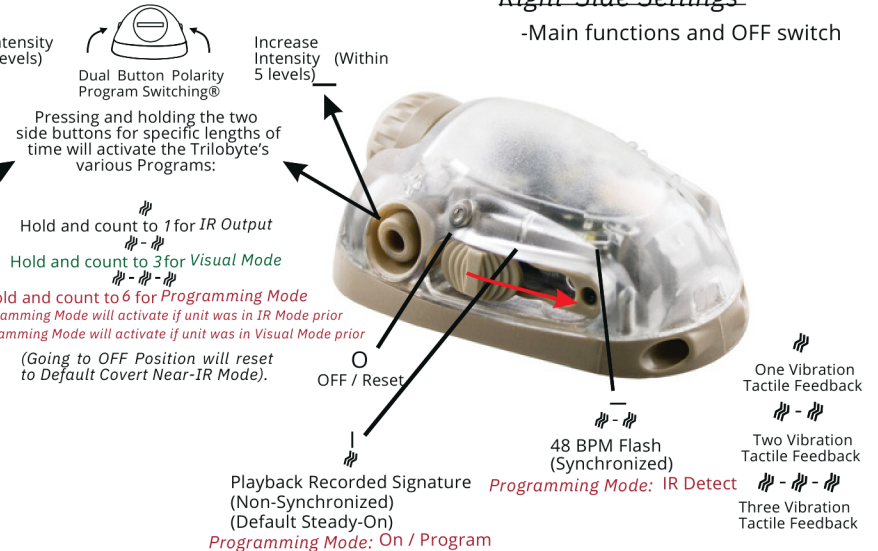### Left-Side Positions

-Intensity & Output controls on IR & Visual Modes -Playback Signature Settings On Programming Mode

Decrease Intensity (Within 5 levels)

Dual Button Polarity Program Switching®

Increase Intensity (Within 5 levels)

Pressing and holding the two side buttons for specific lengths of time will activate the Trilobyte's various Programs:

Hold and count to 1 for IR Output
Hold and count to 3 for Visual Mode
Hold and count to 6 for Programming Mode
IR Programming Mode will activate if unit was in IR Mode prior
White Programming Mode will activate if unit was in Visual Mode prior

(Going to OFF Position will reset to Default Covert Near-IR Mode).

Right-Side Settings

O I —

-Main functions and OFF switch

IR Mode: Low Intensity CQB Mode
Visual Mode: White Output
Programming Mode:
Pre-Programmed Signature
(Low Output CQB Mode)
48 BPM Short Pulse Signature
Up to 120 Hour Runtime

IR Mode: High Intensity
Visual Mode: Red Output
Programming Mode:
Playback Recorded Signature
(Default Steady-On)
High Output

IR Mode: Medium Intensity
Visual Mode: Green Output
Programming Mode:
Record (For All Playback)

O
OFF / Reset

I
Playback Recorded Signature
(Non-Synchronized)
(Default Steady-On)
Programming Mode: On / Program

—
48 BPM Flash
(Synchronized)
Programming Mode: IR Detect

One Vibration Tactile Feedback

Two Vibration Tactile Feedback

Three Vibration Tactile Feedback

IR Detect Function: Product will vibrate 5 times and flash for 5 seconds when exposed to a Near-IR Wavelength

Technology

Dual Button Polarity Program Switching®

Separates groups of functions that can be switched between by holding down the two side buttons for specified periods of time.

Mockingbird® Technology

Allows users to record and playback their own unique flashing signatures with any external light source containing a near-IR wavelength, including sunlight.
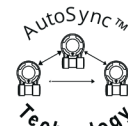
MultiVibe™ with Positive Tactile Feedback

Product has raised position indicators for easy tactile feedback with fingers in gloves. Product also has vibrating feedback for each position (vibrates once for position 1, twice for position 2, etc.)
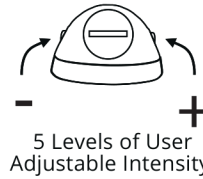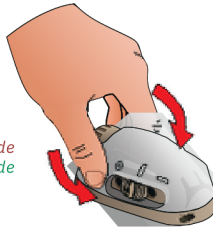
AutoSync™ Synchronized Flashing Patterns

Any beacon of the same model will flash in unison when set to specific synchronized flashing functions (Position II on the Right Side Controls, in this model).

Specifications subject to change without prior notice

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Distributed by:
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Functions Table

CHANGING MODES

Hold and count to *3* then release for *Near-IR*

Hold and count to *3 then release* for *Mode Visual*

Hold and count to *6* then release for *Programming Mode*

Near-IR Programming Mode will activate if unit was in Near-IR Mode prior Visual Programming Mode will activate if unit was in Visual Mode prior
(Going to OFF Setting will reset to Default to Near-IR Mode).

{DEFAULT MODE ON START UP}

5 Levels of User Adjustable Intensity

Pressing and holding the two side buttons for specific lengths of time will activate the Trilobyte's various modes.

Each Mode contains its own set of functions that are toggled through the dual left-side and right-side control switches.

When individually pressed, they allow the user 5 levels of intensity control.

Near-IR Mode Functions
(Hold down side buttons (+) and (-), count to 1 then release.)
{Default on Start Up}

Default:
NIR, *[Steady On]*
----- OR -----

Default:
NIR, *[Steady On]*
----- OR -----

Default:
NIR, *[Steady On]*
----- OR -----

Recorded Signature:
NIR, *[Playback Recorded Signature]*
(Intensity High)
(▶)

Recorded Signature:
NIR, *[Playback Recorded Signature]*
(Intensity Medium)
(▶)

Recorded Signature:
NIR, *[Playback Recorded Signature]*
(Intensity Low)
(▶)

Default:
NIR, *[48 BPM Flash]*
(Intensity Adjustable)

Default:
NIR, *[48 BPM Flash]*
(Intensity Adjustable)

Default:
NIR, *[48 BPM Flash]*
(Intensity Adjustable)

NIR Programming Mode Functions
(From IR Mode, Hold down side buttons (+) and (-), count to 6 then release)

P — NIR, *[Playback Recorded Signature]*
(Default: *[Steady-On]*)
(Intensity Adjustable)
(▶)

R — NIR, *[Record]*
(Saved for all Playback)
2 Flashes - START OF RECORDING
1 Flash - END OF RECORDING
(◉)

S — NIR, *[Preprogrammed Signature]*
(Default: *[48 BPM Flash]*)
Low Intensity, 120 Hour+ Runtime
(NOT SYNCHRONIZED)

D — NIR, IR Detect
[5 Vibrations then 5 Flashes When Exposed to NIR Output]
(Intensity Adjustable, Default: High)

D — NIR, IR Detect
[5 Vibrations then 5 Flashes When Exposed to NIR Output]
(Intensity Adjustable, Default: Mid)

D — NIR, IR Detect
[5 Vibrations then 5 Flashes When Exposed to NIR Output]
(Intensity Adjustable, Default: Low)

Visual Mode Functions
(Hold down side buttons (+) and (-), count to 1 or 3 then release)

Default:
Red, *[Steady-On]*
----- OR -----

Default:
Green, *[Steady-On]*
----- OR -----

Default:
White, *[Steady-On]*
----- OR -----

Recorded Signature:
Red, *[Playback Recorded Signature]*
(Intensity Adjustable)
(▶)

Recorded Signature:
Green, *[Playback Recorded Signature]*
(Intensity Adjustable)
(▶)

Recorded Signature:
White, *[Playback Recorded Signature]*
(Intensity Adjustable)
(▶)

Default:
Red, *[48 BPM Flash]*
(Intensity Adjustable)

Default:
Green, *[48 BPM Flash]*
(Intensity Adjustable)

Default:
White, *[48 BPM Flash]*
(Intensity Adjustable)
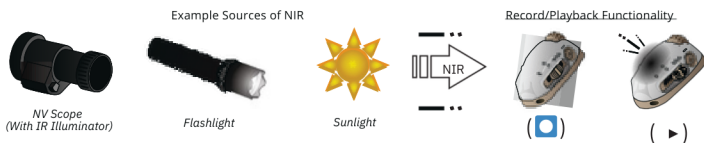
Visual Programming Mode Functions
(From Visual Mode, hold down side buttons (+) and (-), count to 6 then release)

P — White, *[Playback Recorded Signature]*
(Default *[Steady-On]*)
(Intensity Adjustable)
(▶)

R — White, *[Record]*
(Saved for all Playback)
2 Flashes - START OF RECORDING
1 Flash - END OF RECORDING
(◉)

S — White, *[Preprogrammed Signature]*
(Default: *[48 BPM Flash]*)
Low Intensity, 120 Hour+ Runtime
(NOT SYNCHRONIZED)

D — Red, IR Detect
[5 Vibrations then 5 Flashes When Exposed to NIR Output]
(Intensity Adjustable)

D — Green, IR Detect
[5 Vibrations then 5 Flashes When Exposed to NIR Output]
(Intensity Adjustable)

D — White, IR Detect
[5 Vibrations then 5 Flashes When Exposed to NIR Output]
(Intensity Adjustable)

Example Sources of NIR

NV Scope
(With IR Illuminator)

Flashlight

Sunlight

NIR

Record/Playback Functionality
(◉)   (▶)

You may record in <u>either</u> IR or Visual Programming modes. Both will record (◉) for all (Visual and NIR) playback modes. (▶)

Wait for 2 flashes, then use any source of NIR to program the signature you require.
Stop then wait for the confirmation of 1 flash - it is now recorded and saved.
(To reset to default, record 5 seconds of Steady-On NIR.)

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