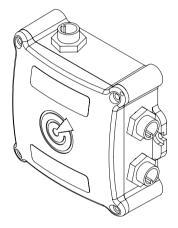


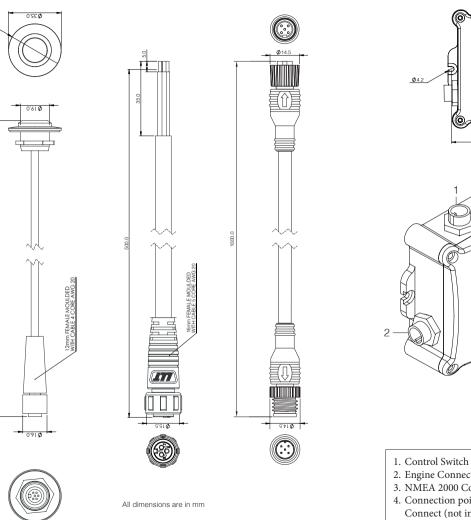
# N2K

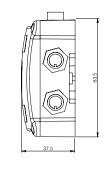


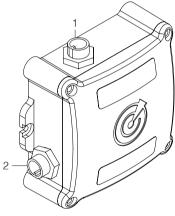


Designed by:



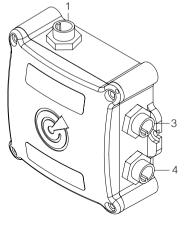






84.0

- 2. Engine Connection Cable
- 3. NMEA 2000 Connection Cable
- 4. Connection point for OLAS Connect (not included)



Ø35.0

## **OLAS TRANSMITTERS**

The OLAS T2, OLAS Tag and OLAS FLOAT-ON are considered OLAS transmitters. They emit a Bluetooth signal which is monitored by the OLAS receivers. The OLAS N2K is supplied with the OLAS T2 transmitter, however any OLAS Tag or OLAS FLOAT-ON can be tracked.

## OLAS RECEIVERS

The OLAS receivers track the OLAS transmitters. OLAS receivers are:

- 1. OLAS N2K
- 2. Guardian
- 3. Core
- 4. OLAS Mobile application
- 5. Extender This operates as a repeater to increase the range of the OLAS N2K, Guardian and Core

## OLAS MOBILE APPLICATION

The OLAS mobile application allows the OLAS transmitters to be used as a MOB/proximity alarm if used solely with OLAS transmitters. When an OLAS transmitter goes out of range an alarm is set off and overboard screens are activated.

When the OLAS mobile application is connected to the OLAS N2K, Guardian or Core it allows greater control over the OLAS transmitters that are being tracked.

For iOS search for 'OLAS: Wireless Marine Safety' on the App Store.

For Android search for 'Exposure OLAS - MOB Alert' on the Google Play Store.

## **IMPORTANT INFORMATION**

The OLAS N2K has been designed for recreational marine use. The design conforms to appropriate Electromagnetic Compatibility (EMC) regulations but for optimal performance correct installation is required. For optimum performance the mobile device and the OLAS N2K should be located at least 0.5 metres from any equipment transmitting radio signals including VHF Radios, antennas and cables.

- 0.75 metre Extension cable is available for the control switch. P/N: EXPOLASSWITCHEXT
- 1 metre extension cable is available for the NMEA 2000 connection. P/N: EXPOLASN2KDCABLE1M

# **OLAS N2K INSTALLATION**

WARNING: Do not attempt to install the OLAS N2K until you know that the power supply is switched OFF.

Where required use the supplied wire connectors which are suitable for connecting wire dimension 20-18AWG. If wire extensions are required use 18AWG or thicker wire.

Ensure all wire connections are waterproof using marine specific connectors, such as heat shrinkable butt splices.

- When selecting a location to mount your OLAS N2K hub check there is an NMEA 2000 backbone within 1 metre. Additional 1 metre drop cables can be purchased if an extension is required P/N:EXPOLASN2KDCABLE 1M.
- The control switch mounting location should be within 0.5 metres of the OLAS N2K hub. A 0.75 metre extension cable can be purchased for the control switch P/N: EXPOLASSWITCHEXT.
- For connection into the engine stop system the OLAS N2K hub will need to be within 0.5 metres of the existing stop switch or associated wires. The wires from the OLAS N2K engine cable can be extended with 18AWG or thicker wire. Ensure a watertight connection by using waterproof connectors.

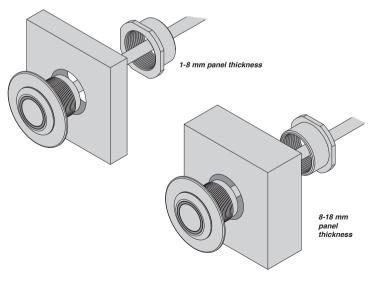
## CONNECTING INTO THE NMEA 2000 BACKBONE

- 1. Split the backbone and add a T-connector. The required NMEA 2000 T-connector can be purchased P/N: EXPOLASN2KTCONN.
- 2. Connect the supplied NMEA 2000 Drop cable into the OLAS N2K hub.
- 3. Connect the OLAS N2K to the NMEA 2000 backbone using the supplied cable.

## CONNECTING THE CONTROL SWITCH

- If connecting the OLAS N2K into the vessel's existing kill switch system, it is advised to mount the control switch near to the existing kill switch.
- Drill a 21mm (0.8") diameter hole.
   Tip: If using a hole saw, placing masking tape over the area to be cut can help produce a smooth edge.
- 3. Use the cutting template provided to help position the hole location prior to drilling.
- Ensure the control switch is mounted securely. If the panel thickness is greater than 18mm a longer nut is provided for panel thickness up to 30mm.
- 5. Connect the control switch to the OLAS N2K hub.

Switch the orientation of the securing nut shown below, dependent on panel thickness:



## CONNECTING THE SIGNAL WIRES ALONGSIDE YOUR EXISTING KILL SWITCH

## **OPEN TO STOP - CONNECT IN SERIES**

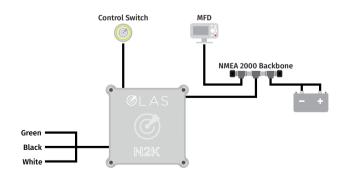
- Check with your engine manufacture if the kill switch is operated by closing the circuit or opening the circuit. Most engines operate by closing the circuit to stop the engine.
   Close to stop systems should connect in parallel to your existing kill switch.
   Open to stop systems should connect in series to your existing kill switch.
- 2. There are 3 signal wires: Black = COMMON Green = CLOSE TO STOP White = OPEN TO STOP
- 3. Connect the black wire to the existing kill switch common wire.
- 4. Connect the green wire to the remaining kill switch wire if your system uses the close to stop system.
- Connect the white wire to the remaining kill switch wire if your system uses the open to stop system. NOTE: ONLY two signal wires should be connected.
- 6. Close off the remaining wire with the supplied end cap.

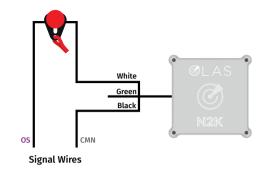
# SECURE THE OLAS N2K HUB

- 1. Find a location where the hub can be securely attached, and the power and switch wires can remain securely attached to the hub.
- The attachment screws provided are self-tapping for plastic / wood so can be screwed directly into the center console. Ensure the attachment point is thicker than the attachment screws to avoid screwing through the panel.
- Secure the hub firmly into the center console.

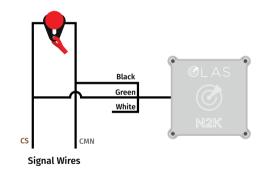
For connection of up to 3 x outboard motors the accessory P/N: EXPOLASMEC can be used.







# **CLOSE TO STOP - CONNECT IN PARALLEL**



#### DIESEL ENGINE CONNECTION

The OLAS N2K can be connected into most diesel engine stop systems however additional wiring harnesses may be required.

The table below allows you to check additional part requirements.

If you are unsure about your system setup, contact your engine manufacturer or a marine electrician.

Visit www.exposuremarine.com



Number of engines	Stop system	Voltage	Solenoid operation	Maximum circuit current	Additional part required	Additional part	Part number
1	Open to stop	12/24	Direct circuit	35A	Yes	35A relay box	EXPOLASN2KRLY
1	Open to stop	12/24	Indirect circuit	2A	No	N/A	N/A
1	Close to stop	12/24	Direct circuit	35A	Yes	35A relay box	EXPOLASN2KRLY
1	Close to stop	12/24	Indirect circuit	2A	No	N/A	N/A
2	Open to stop	12/24	Direct circuit	35A	Yes	Twin 35A relay box	EXPOLASN2KRLY2
2	Open to stop	12/24	Indirect circuit	35A	Yes	Twin 35A relay box	EXPOLASN2KRLY2
2	Close to stop	12/24	Direct circuit	35A	Yes	Twin 35A relay box	EXPOLASN2KRLY2
Up to 3	Close to stop	12/24	Indirect circuit	2A	Yes	Live circuit MEC	EXPOLASDMEC

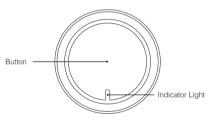
#### OLAS T2

The OLAS T2 is a rechargeable tag which is tracked by the OLAS N2K. It transmits a Bluetooth Low Energy signal which is received by the OLAS N2K. When the OLAS N2K loses the OLAS T2 signal the alarm is activated. Signal will be lost when the OLAS T2 goes out of range of the OLAS N2K due to distance or submersion in water. The OLAS T2 does not transmit GPS location.

# **OLAS T2 SPECIFICATION**

Runtime: 7 Days.
Charge Time: 2 Hours
Input supply: 5V - 0.5A

#### **OLAS T2 SETUP GUIDE**



## Switching ON the OLAS T2 - Press the button two times:

The OLAS T2 will vibrate twice and the LED illuminates blue for 3 seconds.

#### Check OLAS T2 Status - Press the button once:

- No LED light or vibration means that the OLAS T2 is OFF.
- A blue LED for 2 seconds and 2 vibrations means the OLAS T2 is transmitting, and the battery is between 50-100%.
- A red LED for 2 seconds and 1 vibration means the OLAS T2 is transmitting, and the battery is below 50%.

#### Automatic Low Battery Alert when below 20%.

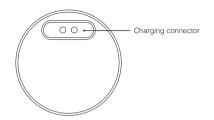
- The OLAS T2 will vibrate for 1 second every 60 seconds.
- The LED will flash three times every 15 seconds.

It is strongly advised to charge your OLAS T2 at the next available opportunity when below 50% battery level. When the OLAS T2 is below 20% there is a risk of false alert and immediate charging is required.

#### Switching OFF the OLAS T2 - Press the button three times:

The OLAS T2 will vibrate three times and the LED illuminate red for 3 seconds.

NOTE: The OLAS T2 tag can be adjusted within the OLAS mobile app to either trigger or not trigger the overboard alert when it is switched off.



During charging the OLAS T2 will switch off and stop transmitting. The LED will illuminate green to indicate a good charge connection. When the green light is turned OFF the OLAS T2 is no longer charging either because it is fully charged or there is no power to the charge cable.

The charge cable can use any 5V USB port with an output supply of 5V - 0.5A.

# OLAS N2K QUICK START GUIDE

- 1. Check the OLAS T2 is switched OFF.
- 2. Ensure the OLAS N2K is connected to the control switch and the NMEA 2000 network.
- 3. Switch the vessel's batteries ON, powering the NMEA 2000 network.
- 4. The OLAS N2K will beep once to indicate switching ON.
- If there are no OLAS transmitters in range the OLAS N2K hub will beep every minute and the control switch will flash red/green. Note: if the control switch illuminates green and the OLAS N2K hub beeps once it means the OLAS

T2 tag is still switched ON and has been automatically tracked, skip to point 8.

- Switch OLAS T2 ON by pressing its button twice. Hold the OLAS T2 close to the OLAS N2K. The OLAS N2K will beep twice and the control switch will flash red twice to indicate the tag has been tracked. If you do not hear the double beep move the OLAS T2 closer to the OLAS N2K.
- After the double beep on the OLAS N2K the control switch will illuminate green. The system is now
  operational and the OLAS T2 is being tracked.

## OLAS MOBILE APP SETUP





Apple App Store

Google Play Store

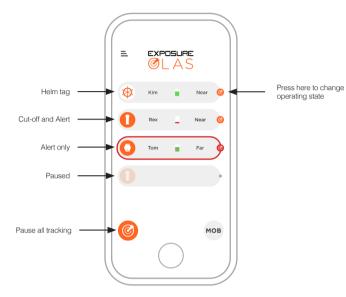
- 8. Download the Exposure OLAS mobile app from the Apple App Store or Google Play.
- 9. Open the App and move to device selection page.
- 10. Click on the bottom OLAS N2K icon.



- 11. Follow the instruction pages and move to the home screen.
- 12. You are now connected to the OLAS N2K and the home screen is displaying the OLAS T2 information.

## OLAS TRANSMITTER OPERATING STATES

There are 3 operating states which can be applied to the OLAS T2 (and any other tracked OLAS Transmitters) using the OLAS mobile app. The operating state will be stored on the OLAS N2K until it is changed using the OLAS mobile application.



#### 1. Helm tag

Helm Tag Mode: Designed for sub-35ft motor vessels, this kill cord mode stops the vessel if the tag exceeds a set distance from the hub. It allows leaving and returning without triggering the MOB alarm. It does not activate MOB alerts and is not intended as a MOB alarm system.

#### 2. Cut-off and Alert (DEFAULT)

When an OLAS transmitter goes out of range, within 2 seconds the Guardian will cut-off the engine (if connected), sound its internal allert and trigger the MOB alert on the OLAS app. After 7 seconds the engine can be restarted by anyone remaining on the vessel.

#### 3. Alert only

When an OLAS transmitter goes out of range, within 2 seconds the Guardian will sound its internal alert and trigger the MOB alert on the OLAS mobile app. The engine will NOT cut-off and a rescue can be performed immediately. This mode should only be used for passengers.

#### Paused

Pause state should be used when the user knows an OLAS transmitter will go out of range and they do not want the Guardian to react i.e. leaving the boat for an extended period or swimming. If using an OLAS T2 it can be switched OFF. This will remove it from the home screen without activating the alarm.

## **OPERATION MANUAL**

## Index

- 1. Start up or returning to the vessel
- 2. No OLAS transmitter Warning
- 3. Setting up a helm tag
- 4. Tracking a new OLAS transmitter
- 5. Tracking a previously tracked OLAS transmitter
- 6. Tracking an OLAS transmitter using the OLAS mobile app
- 7. Checking logged OLAS transmitters (without the OLAS mobile app)
- 8. Checking logged OLAS transmitters (with the OLAS mobile app)
- 9. OLAS Mobile app features (basic)
- 10. Pause Tracking
- 11. Switching OFF the OLAS N2K
- 12. Stop tracking an OLAS transmitter (without the OLAS mobile app)
- 13. Stop tracking an OLAS transmitter (with the OLAS mobile app)
- 14. Low battery alert
- 15. Default recovery mode
- 16. Operating without an OLAS transmitter
- 17. OLAS Mobile app features (advanced)
  - a. Detection Time
  - b. Alert Delay
  - c. Solo Mode
  - d. Overboard recovery aids
- 18. OLAS Smart Lock
- 19. NMEA 2000 integration
- 20. OLAS CONNECT Integration
- 21. Limitations

## 1. START UP OR RETURNING TO THE VESSEL

- Switch the vessel's batteries ON, powering the NMEA 2000 network or if the NMEA 2000 network is already powered press the OLAS N2K control switch once.
- The OLAS N2K will beep once to indicate switching ON.

# 2. NO OLAS TRANSMITTER WARNING

- If there are no OLAS transmitters in range the OLAS N2K hub will beep every minute and the control switch will flash red/green.
- After the first minute it will beep eight times. Thereafter every minute the number of beeps will increase by two until the OLAS N2K is beeping continuously.
- To move to tracking state an OLAS transmitter needs to be switched on and moved into range.
- If an OLAS transmitter is not present the warning beeps can be silenced by pressing the control switch for two seconds. The OLAS N2K will still alert if a MOB alert is manually activated either via NMEA 2000 or the OLAS CONNECT MOB button. If connected, the OLAS mobile app will also alert.
- The OLAS N2K control switch will continue to flash red and green to indicate that it is not tracking an OLAS transmitter.

## 3. SETTING UP A HELM TAG

Using the OLAS mobile application,

- Select the icon on the left hand side of the tag you want to become the helm tag.
- Select 'Add helm tag'.
- Follow the setup instructions on the mobile app.
- In Alert settings you can adjust the sensitivity.
- Low sensitivity allows the tag to move far from the hub before the engine is stopped.
- Very high sensitivity means the engine will stop without moving the transmitter far from the hub.
- Always test the setup before leaving the Dock.

## 4. TRACKING A NEW OLAS TRANSMITTER

- To track a new OLAS transmitter it needs to be switched on and brought into 'Close' range of the OLAS N2K hub. This is around 0.5 metres. If it is not automatically tracked move it closer to the OLAS N2K hub.
- Once the OLAS transmitter is automatically tracked the OLAS N2K hub will beep twice.

# 5. TRACKING A PREVIOUSLY TRACKED OLAS TRANSMITTER

- To track a previously tracked OLAS transmitter it needs to be switched on and brought into 'Near'
  proximity which is around 3 metres away. If it is not automatically tracked move it closer to the OLAS
  N2K hub.
- When the OLAS transmitter is automatically tracked the OLAS N2K hub will beep twice.

# 6. TRACKING AN OLAS TRANSMITTER USING THE OLAS MOBILE APP

- Connect the OLAS mobile app to the OLAS N2K.
- Navigate to the home screen.
- Any non-tracked OLAS transmitters within range of the OLAS N2K will appear on the home screen greyed out.
- Click on the right-hand side of the tag and select track.
- The OLAS N2K hub will beep twice to indicate a tag has been tracked.

# 7. CHECKING LOGGED OLAS TRANSMITTERS (without the OLAS mobile app)

- Press the control switch once.
- The number of tracked OLAS transmitters is indicated with a single beep sound signal and one green flash per transmitter. Up to 25 transmitters can be tracked.

# 8. CHECKING LOGGED OLAS TRANSMITTERS (with the OLAS mobile app)

- Open the OLAS mobile app.
- Select the OLAS N2K from the device selection page.
- All OLAS transmitters that are being tracked will be indicated on the home page.
- Use the homepage to check the battery life of the OLAS transmitters.

# 9. OLAS MOBILE APP FEATURES (basic)

- Customise the OLAS transmitters name.
- Check OLAS tags battery status.
- Enable/disable cut-off switch for individual OLAS transmitters.
- Pause OLAS transmitters.
- Pause all tracking.

## **10. PAUSE TRACKING**

- 1. Press the control switch for 2 seconds, release the control switch after a single beep.
- When in Paused state the control switch will flash green for 3 seconds ON/ 3 seconds OFF followed by a single beep sound signal.
- 3. Press the control switch once to restart tracking.

NOTE: if you have removed an OLAS transmitter whilst the OLAS N2K is in paused state it will beep 3 times and remain in the Paused state.

# 11. SWITCHING OFF THE OLAS N2K

- The OLAS N2K can be switched off at any point by pressing the control switch for 4 seconds.
- The control switch will illuminate red with a long beep before switching off.

## 12. STOP TRACKING AN OLAS TRANSMITTER (without the OLAS mobile app)

 The OLAS T2 can be adjusted using the OLAS mobile app so that it either cuts the engine and triggers the alarm when it is switched off (default) or it disconnects silently.

NOTE: if the OLAS T2 is allocated as a Smart Key it will cut the engine and activate Smart Lock.

- To remove any OLAS transmitter without using the OLAS app the OLAS N2K will need to be switched off.
- Once the OLAS N2K is switched off, switch off the transmitters you wish to stop tracking. The OLAS N2K will 'forget' these devices.
- Switch the OLAS N2K back on and it will track those OLAS transmitters that are still switched on and within range.

# 13. STOP TRACKING OLAS TRANSMITTER (with the OLAS mobile app)

- Open the OLAS mobile app.
- Select the OLAS N2K from the device selection page.
- All OLAS transmitters that are being tracked will be indicated on the home page.
- Click on the right hand of the OLAS transmitter box to cycle it though the different operating states.
   Once it is in Paused state and it appears greyed out then the OLAS transmitter can be switched off and it will be removed from Tracking without activating an alert.

## 14. LOW BATTERY ALERT

- A low battery alert will be initiated by the OLAS N2K when an OLAS tag's battery level goes below 20%.
- The alert is indicated by a red flash every 10 seconds on the control switch and the OLAS N2K Hub.
- The alert will remain until the battery is charged (OLAS T2) or changed (OLAS Tag).
- You can check which OLAS tag has low battery using the OLAS app.
- Once you have located the tag you can:
  - a. Pause the OLAS N2K, charge or change the battery and restart tracking.
  - b. Switch off the OLAS N2K, switch off the OLAS tag and then restart the OLAS N2K.
  - c. Pause the OLAS tag in the OLAS mobile app and then switch off the OLAS tag.

## 15. DEFAULT RECOVERY MODE

- When an OLAS transmitter goes out of range an alert will sound on the OLAS N2K hub and any connected MOB alert devices.
- The OLAS N2K control switch will go red and if connected to the vessel's stop system the stop switch will be activated for 7 seconds. This is normally sufficient time for the engine to stop.
- After 7 seconds the stop switch is deactivated, and the engine can be started again allowing a
  rescue to be performed.
- Press the control switch once to acknowledge the alarm and the OLAS N2K hub will revert to Paused state. Tracking is now paused until the OLAS transmitter is recovered.
- Once the OLAS transmitter is back on the vessel and within 1 metre of the OLAS N2K tracking will
  automatically start again.
- Alternatively, to manually activate tracking again press the control switch once and tracking will start
  again, if the OLAS transmitter is within 1 metre of the OLAS N2K hub.

NOTE: Pause will remain active if the OLAS transmitter that was lost is not back within 1 metre of the OLAS N2K hub.

# 16. OPERATING WITHOUT AN OLAS TRANSMITTER

The OLAS N2K can continue to be used as an MOB alarm system when an OLAS transmitter is not being used.

Whilst the OLAS N2K is connected to a NMEA 2000 network if any other devices on the same network transmit an MOB alert message, the OLAS N2K will react. The OLAS N2K hub will alert, the OLAS mobile app will alert and the OLAS CONNECT devices (if attached) will alert.

- If no OLAS transmitters are in range the OLAS N2K will beep multiple times every minute and the control switch will flash red and green.
- To silence the beeping press the control switch for 2 seconds.
- The control switch will continue to flash red and green. The OLAS N2K is still operating and looking for OLAS transmitters.
- If an OLAS transmitter is moved into range the OLAS N2K will double beep and start normal tracking.
- If a MOB alert is triggered on the NMEA 2000 network or via the OLAS CONNECT all OLAS N2K MOB alerts will be activated.

## 17. OLAS MOBILE APP FEATURES (advanced)

- a. Detection Time (seconds) adjusting the detection time allows a period of time where an OLAS transmitter can reconnect silently, preventing any alert from occurring. This may be preferable on larger vessels with multiple cabins where there is an increased chance of signal being blocked.
- b. Alert Delay (seconds) adjusting the alert delay time changes the amount of time the operator has before the MOB alert and relay is activated. This may be preferable on larger vessels where there is increased chance of signal being blocked. During the 'Alert Delay' period an alert will sound to indicate signal has been lost. During this period if the control switch is pressed it manually overrides the cut-off for 30 seconds allowing the OLAS transmitter to be brought back into range.
  - i. Select the menu tab in the top left-hand corner of the home screen (3 lines).
  - ii. Select 'Alert Settings'.
  - iii. Use the slider to select the 'Detection Time' or 'Alert Delay' period.
- c. Solo Mode (minimum 2G connection required) designed for boaters operating on inshore waters or on connected vessels. The OLAS mobile app inputs the vessel information manually entered during setup and sends a distress SMS with the vessel name, time, location, and contact number.
  - i. Select the menu tab in the top left-hand corner of the home screen (3 lines).
  - ii. Select 'Solo Mode'.
  - iii. Enter in 'Your Number', this will be sent to your emergency contact so that they can try to make contact after receiving an alert.
  - iv. Enter in your 'Emergency Number', this number will receive your MOB alert and location. You must use your country code prefix e.g. UK(+44) US(+1).
  - Select your 'Message Delay' period, this is the amount of time before the MOB alert SMS is sent. A longer period allows more time for self-rescue. A minimum of 1 minute is advised.
  - vi. If a MOB alert message has been sent and the alarm is then manually cancelled an alert cancellation message will be sent.
- d. Overboard recovery aids The GPS location was stored on the OLAS mobile app when the MOB alert occurred.
  - i. Once the vessel is 20 metres away from the MOB alert location an arrow directs back.
  - The second screen shows easy to read GPS coordinates for the alert location and the vessel's current location. This information is requested by the emergency services if a Mayday call is made.
  - On the third screen selecting the phone icon directs the user to call their previously input emergency services number.
  - iv. On the third screen selecting the VHF icon displays the VHF script for a MOB Mayday call with the custom vessel information and alert location automatically input.

# 18. OLAS SMART LOCK

## DO NOT USE ON DIESEL ENGINES

OLAS Smart Lock is a theft deterrent and secondary locking system.

When OLAS Smart Lock is enabled, if the OLAS N2K is switched off and back on it will lock the vessel's emergency stop system, preventing the engine from being started.

OLAS Smart Lock can be unlocked using the OLAS mobile app or an allocated Smart Key.

OLAS Smart Lock is to be used in conjunction with the engine connection cable and can only be used if the OLAS N2K has been wired into the vessel's engine stop system.

OLAS Smart Lock is designed for use on Outboard engines only.

Do not use OLAS Smart Lock with inboard diesel engines or Volvo Penta engines.

Ultimate Sports Engineering Ltd and affiliated resellers cannot be held responsible if a theft occurs whilst OLAS Smart Lock is being used.

#### OLAS Smart Lock Setup.

- 1. Connect the OLAS mobile app to the OLAS N2K as normal.
- Enable OLAS Smart Lock this means the vessel's emergency stop system will activate automatically when the OLAS N2K is switched OFF and ON.
  - i. Select the menu tab in the top left-hand corner of the home screen (3 lines).
  - ii. Select 'Smart Lock'.
  - iii. Select 'Enable Smart Lock'.
  - iv. Set your new PIN Code.
  - v. Confirm your PIN Code.
  - vi. Email your PIN code so that it can be found later if the code is forgotten.
  - vii. Press the back arrow at the top left of the screen to return to the home page.
  - viii. You will see an unlocked gold padlock in the top right corner. This indicates that Smart Lock is enabled but unlocked.
- 3. Manually activating OLAS Smart Lock with the OLAS mobile app.
  - i. Click on the unlocked gold padlock.
  - ii. Input your PIN Code.
  - iii. The OLAS N2K will lock. If the engine is running it will be stopped.
  - iv. The OLAS mobile app will disconnect from the OLAS N2K.
- 4. Manually unlock OLAS Smart Lock with the OLAS mobile app.
  - i. Reconnect the OLAS mobile app to the OLAS N2K.
  - ii. Enter your PIN Code.
  - iii. OLAS Smart Lock will unlock and the engine can be started.
- Smart Key allocation allocating a Smart Key means that if the OLAS Smart Lock is locked and a Smart Key is brought within 2 metres it will automatically unlock.
  - i. Connect the OLAS mobile app to the OLAS N2K.
  - ii. When on the home screen click the icon on the left-hand side of the tag ID box.
  - iii. Confirm Smart Key allocation.
  - iv. A gold key icon will appear to indicate the OLAS transmitter has been allocated as a Smart Key.
  - v. To unallocate the Smart Key click the key icon.
- OLAS T2 Smart Lock control if an OLAS T2 tag is allocated as a Smart Key it can be used to lock and unlock OLAS Smart Lock remotely.
  - i. Allocate an OLAS T2 tag as a Smart Key.
  - Triple click the OLAS T2 tag to switch it off. This will lock OLAS Smart Lock, stopping the engine if it is running.
  - To unlock Smart Lock double press the OLAS T2 and bring it within 2 metres of the OLAS N2K hub and it will automatically unlock.

## 19. NMEA 2000 integration

- 1. OLAS N2K NMEA 2000 MOB alert.
  - MOB pgn the Man Overboard (PGN 127233) is issued into the NMEA 2000 network. Any connected MOB device programmed to react to the MOB pgn will be triggered.
  - ii. AIS Safety Broadcast (PGN 129802) this alert emulates the message that would be received from an EPIRB or SART devices with AIS VHF support. The message is internal only and will not be transmitted off the vessel. The message includes the GPS location of the vessel at the time when the alert was triggered. The chart plotter can then set the MOB mark.
- MFD MOB alert issued- some navigation hardware devices will issue their own MOB alert onto the NMEA 2000 network. The OLAS N2K will be monitoring for this alert and if it is detected the MOB alerts from the OLAS N2K will be triggered.

NOTE: On some multi function displays a second MOB alert may not be issued via the OLAS N2K if the plotter is tracking to an MOB waypoint.

## 20. OLAS CONNECT INTEGRATION

- The OLAS CONNECT is an accessory for the OLAS N2K. It enables 3 additional MOB alert features. These features are,
  - 1. Manual MOB button connection
  - 2. MOB alert light connection
  - 3. MOB audio alert connection

For further information on functions and how to connect visit www.exposureolas.com

The connection signal can be blocked by carbon and metal. Operation on carbon or metal boats will require the OLAS N2K hub to be mounted externally.

# SOUND AND LIGHT INDICATIONS

OPERATION	ACTION / REACTION		
	Control switch: Green		
Turning ON	Hub: Low red		
	Buzzer: ON		
No OLAS transmitters in range	Control switch: Green / Red alternating		
NO OLAS transmitters in range	Buzzer: 8+ beeps incremental every minute up to 30 minutes		
New transmitter tracked	Control switch: Red double flash		
New transmitter tracked	Buzzer: Double Beep		
Checking logged OLAS transmitters	Control switch: Red flash per tracked tag		
Checking logged OEAS transmitters	Buzzer: Single beep per tracked tag		
Alert delay warning	Control switch: Green		
Alert delay warning	Buzzer: Rapid beep		
	Control switch: Red constant		
MOB Alert	Hub: High red constant		
	Buzzer: Beep every second		
System paused	Control switch: Red 3 seconds, off 3 seconds continuous		
System pauseu	Buzzer: Beep every 6 seconds (if not muted)		
Low battery alert <20%	Control switch: Red flash every 10 seconds		
Low ballery dien <20%	Hub: Red flash every 10 seconds		

## SPECIFICATION

Power/Current excluding external accessories	10-32V/13~17mA	
Recommended maximum vessel length	50ft	
Tracked Transmitters	up to 25	
Weight	TBC	
Size	92 x 90 x 38 mm	
LED output	55lm	
Buzzer output	85db	

#### RoHS2 DIRETIVE 2001/65/EU

FCC/CFR 47:Part 15B 15.109 and 15.107 ICES 003:Issue 7 EN 60945:2002 (Fourth edition – 2002) ETSI EN 300 328:v2.2.2† EN 60945:2002 IEC 60945:2002 (Fourth edition – 2002) EN 301 489-1:v2.2.3 EN 301 489-17:v3.2.4

Compass safe distance EN 60945:2002

Contains Transmitter module FCC ID: 2AC7Z-ESPPICOMINI

# CERTIFICATIONS AND DECLARATIONS (OLAS T2)

RoHS2 DIRECTIVE 2011/65/EU compliant (RED) (2014/53/EU) The full text of the EU declaration of conformity is available at the following internet address: www.exposuremarine.com

## WARNING & WARRANTY

Any change or modification to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio Communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment deer scause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and relocate the module.

This device complies with part 15 of the FOC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ensure your phone or tablet has maximum volume, charged battery, GPS ON and Bluetooth ON.

## WE DESIGN THEM. WE MAKE THEM. WE ARE HERE TO HELP.

If you are experiencing any problems with your OLAS product or accessories, please contact us directly at:

Service: +44 (0)1798 839300 | service@use.group | olas@use.group

Alternatively contact your Exposure OLAS dealer or distributor. Check web for details www.exposuremarine.com

Exposure Lights / Ultimate Sports Engineering Ltd. accept no liability for any injuries or other damages arising from the use of their product in any circumstances.

## **TERMS & CONDITIONS**

The OLAS systems are products from Ultimate Sports Engineering Ltd.

OLAS wireless systems utilise OLAS transmitters (OT) and OLAS receivers (OR).

OLAS transmitters consist of EXPOLASTAG, EXPOLASFLOATON and EXPOLAST2.

OLAS receivers include the EXPOLASN2K, EXPOLASGUARDIAN, EXPOLASCORE, EXPOLASEXTENDER and the OLAS mobile application (OLAS app). Before using any OLAS wireless system it is imperative that you read the DISCLAIMER and the LIMITATION OF LIABILITY which follows. There is legal presumption that by using OLAS wireless systems you have read, understood and accepted the DISCLAIMER and the LIMITATION OF LIABILITY statement.

#### Setup

Start and setup all OLAS systems before you leave the dock and ensure all OTs are connected. Connecting the OLAS app allows visual indication of connected OTs. Check the battery level of OLAS tags using the OLAS app. Check the battery level of OLAS Float-On's using the inbuilt colour coded battery indicator.

#### The OLAS App

Ensure GPS is running in the background on your mobile device. Keep your mobile device plugged in to a charger as GPS drains the battery. It is advised that the app is running in the foreground to enable maximum response time. It can take up to 30 seconds for the system to respond if the phone is in locked mode.

#### Test the connection whilst in dock

Test the connection between the OR and the OT by leaving the OR in its planned location and walk the OT to the furthest point on the vessel. Check that all OTs being used are working correctly by submersing them in more than 4 inches of open water which will activate the alarm on the receiver.

#### Advice

As soon as a MOB situation occurs ensure a crew member keeps visual contact and points at the MOB. Contact the emergency services and give them the co-ordinates from your vessel's GPS navigation system and the time since the MOB occurred. Use OLAS Systems frequently as a practice aid for a MOB situation.

# Disclaimer

OLAS wireless systems are an aid only and should be used alongside existing safety products and procedures. They should not be used for navigation or lifesaving procedures. The OLAS app GPS coordinates cannot be relied upon to be accurate. Whilst accuracy of between 10-30 metres can be achieved, many factors can cause larger variations. The OLAS app cannot and does not take the external environment into consideration. Wind, tide, current and other factors will affect the position of the MOB.

The OLAS app can only assist you in getting back to the position that the automatic alert was issued. The OLAS app is not warranted to be accurate. GPS reception is variable and cannot be relied on. The phone can take up to 40 seconds to get a good GPS lock even when GPS connectivity is available.

The OLAS app will be more accurate if already running for 1 minute before obtaining the GPS location. It is advised that the app is running in the foreground to enable maximum response time. It can take up to 30 seconds for the system to respond if the phone is in locked mode. The OLAS App should only be used to complement other MOB methods and procedures.

#### Limitation of Liability:

In no event shall Ultimate Sports Engineering Ltd or its members, representatives or suppliers be liable for any damages whatsoever (including, without limitation, loss of property, personal injury, lost revenue, lost profits, loss of goodwill, business interruption) arising from or related to the use or inability to use or relance on any OLAS wireless system, even if Ultimate Sports Engineering Ltd or its representatives or agents have been advised of the possibility of such damages. Some jurisdictions prohibit the exclusion or limitation of liability for implied warranties or consequential damages or incidental damages, so the above limitation may not apply to you. You may have other legal rights that vary from jurisdiction to jurisdiction. To the extent any liability is found, in no event will the liability of Ultimate Sports Engineering Ltd, its members, representatives or suppliers exceed the amount paid for the OLAS wireless system inclusive of the OLAS transmitters and receivers.

## Patent Notice:

The OLAS wireless systems and associated products may be covered by patents or patent pending applications.

Credits Product: Ultimate Sports Engineering Ltd

## **Contact Address**

Ultimate Sports Engineering Ltd Unit 4 Bury Mill Farm Bury West Sussex RH20 1NN United Kingdom



