

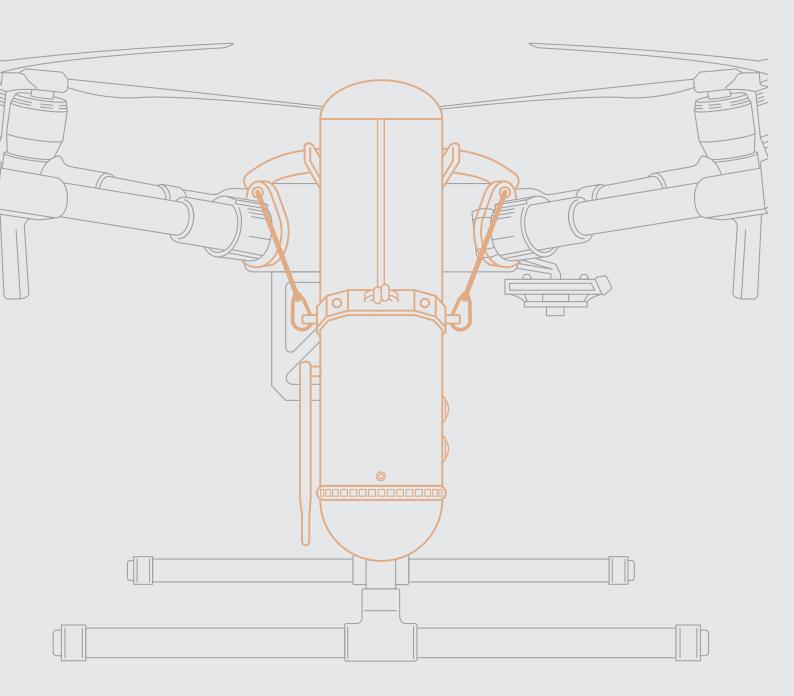


IN-DEM-NIS; Noun from Latin: Indemnitasm Indemni(s) uninjured; suffering no damage or loss; suffering no loss of wealth or property



# OPERATOR MUST FULLY READ MANUAL TO ENSURE PROPER OPERATION

Failure to do so could result in equipment failure or malfunction, serious injury, or death.



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The Indemnis Nexus M200 Parachute Recovery System (Nexus M200 PRS) for the DJI Matrice 200 Series is an advanced ballistic safety system designed to protect life and property on the ground and enable advanced flight operations by reducing the drones level of kinetic energy in the event of a failure. This manual explains installation instructions and how the Nexus M200 PRS works and how to properly operate the system both on the ground and in the air. The Nexus M200 PRS should only be used by trained pilots with authorization to fly near or over people.

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# SAFETY PRECAUTIONS

# PAY ATTENTION



Using the Nexus M200 PRS does not eliminate all risk associated with operating a drone near or over people. Pilots should ensure they are operating in accordance with the rules and regulations of the Civil Aviation Authority (CAA) of the operating location.

The Nexus M200 PRS is designed to deploy in less than 14 milliseconds by releasing compressed gas into a tube and launching a parachute ballistically at over 140 MPH. WARNING: Do not lean against, press, drop, or stand directly in front of the red cap of the system, or point the system in any direction that may cause harm, injury, or damage to life or property in the event of a ground deployment.\*\* Operators shall disarm and turn the system off immediately after landing BEFORE handling the aircraft.

\*\*While the Nexus M200 PRS has multiple electronic and software-based safeguards to prevent the possibility of an accidental or inadvertent deployment on the ground, it should be noted that the Nexus M200 PRS deploys from the top of the aircraft where the RED CAP is located. It is recommended that the operator maintains a clear area of 8 meters from the Nexus PRS when the system is powered on.

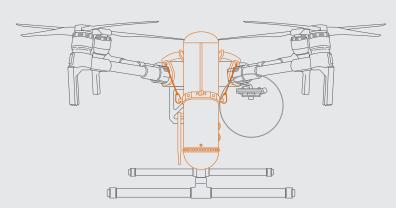


# **Operational Considerations**

- a) At maximum takeoff weight with the Nexus M200 PRS installed, the average measured parachuting descent rate of the Matrice 200 Series is 3.23 meters per second (7.25 MPH).
- b) Minimum Operating Altitude with zero wind 36 meters (118 FT)

### **Environmental Considerations**

- a) Temperature -4°to 104°F (-20°to 40°C)
- b) Max Wind Speed Resistance 19.4 Kt (22.3 MPH) Note For the purpose of operating over people, Max Wind Speed Resistance shall not exceed 16.3 Kt (18.75 MPH)
- c) The Nexus M200 PRS may be operated in light rain or snow

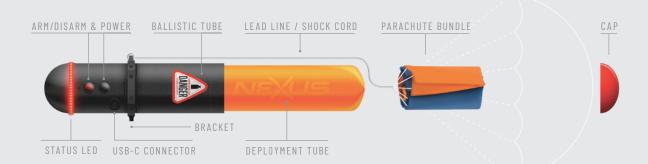


APPROVED

The Nexus M200 PRS is approved to operate any DJI developed or approved gimbal system and camera steup as of 9/1/2020.

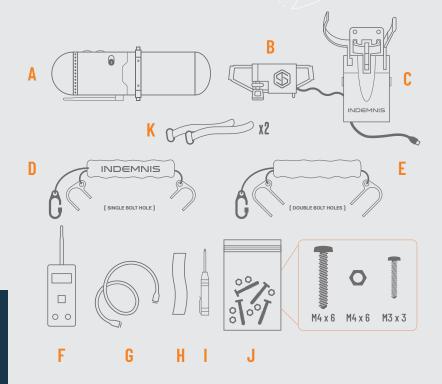
# SYSTEM COMPONENTS

# WHAT'S IN THE CASE



- A: Nexus System with Nexus Securing Pin
- B: Flight Termination System (FTS)
- C: Automatic Triggering System (ATS) Housing and Leg Bracket Assembly
- D: Front Arm Harness
- E: Rear Arm Harness
- F: Manual Triggering Device (MTD)
- G: Charging Cable
- H: Mounting Tape
- I: Indemnis Screwdriver
- J: Hardware Bag
- K: Velcro security straps

**Note:** The antenna on the Nexus M200 PRS housing is glued in place and user will adjust up and down for storage and operation.



# HOW TO CHARGE YOUR NEXUS CHARGING

# Charging your Nexus M200 PRS

The Nexus M200 PRS must be charged before use. It uses a USB-C cable to charge the unit and can be charged with any standard USB charger. The battery charge status can be indicated by pressing the power button once. A fully charged battery is indicated by a fully lit green LED ring.

The battery percentage can also be viewed on the Nexus MTD, the Nexus M200 PRS will not allow for operation below 33% battery life.



1) Always be sure to handle the Nexus PRS safely with the red cap (hot end) pointed away from you and any other persons. The USB-C charging port is located on the LED ring end near the arm and power buttons.



2) Insert the USB-C charging cable into the port to charge and be sure that the other end is securely plugged into any usb charging block and a standard AC wall outlet.



# INSTALLATION HARNESS AND ARM BRACKETS

# Attaching the Nexus M200 Parachute Harness and Arm Brackets (ONE-TIME INSTALL):

There are two parachute harness and arm bracket assemblies. The arm brackets are designed to strengthen the M200 articulating arm joints during a deployment and to attach the parachute to the M200 for a level landing orientation. The parachute harness that has a single bolt hole in each arm bracket goes on the front of the aircraft, while the parachute harness that has two bolt holes on each arm bracket goes on the back of the aircraft. Each harness has an extended line section outside of the black sleeve cover that has a quick link on it. This side of each harness will be oriented to the right side of the aircraft as viewed from the back.

# To install the FRONT PARACHUTE HARNESS assembly:

- 1) Place the DJI M200 in front of you so that you are looking at the front of the aircraft, with the back end furthest away from you.
- 2) Unlock and loosen the DJI M200 twist arm lock (2A) on the front two arms so that the arms remain in the ready-to-fly position but are not secure (2B). With a 7mm socket and wrench, remove the arm pivot bolt from each of the front arms (2C).
- 3) Take the Nexus front parachute harness (with only one bolt hole in each arm bracket) and place the arm bracket WITHOUT the line extension on the left front arm of the aircraft which will be on your right side. The arm bracket is designed to slip over the M200 arm joint so that the bolt holes line up.









# HARNESS AND ARM BRACKETS

- 4) The other front arm bracket can now be slipped over the right arm joint of the aircraft, on your left side, with the line extension and quick link hanging down by the right landing leg of the aircraft
- 5) Install the provided M4 arm bolts (5A) once the bolt holes on both brackets are aligned with their respective arm joints on the M200. Secure each bracket bolt with the provided M4 nuts and tighten (5B) to a secure fit so that the nut face is flush with the Nexus arm bracket.
- 6) The M200 twist arm locks on the front arms can now be secured for flight or stowed for travel like normal.
- 7) Using the provided mounting tape, place it along the M200 body just under the area where the INDEMNIS logo cable wrap sits securing it first to the surface, then peeling the backer off and pressing the cable wrap firmly onto the tape.











# INSTALLATION HARNESS AND ARM BRACKETS

# To install the BACK PARACHUTE HARNESS assembly:

- 1) Place the DJI M200 in front of you so that you are looking at the back of the aircraft, with the front end furthest away from you.
- 2) Unlock and loosen the DJI M200 twist arm lock on the back two arms so that the arms remain in the ready-to-fly position but are not secure. With a 7mm socket and wrench, remove the arm pivot bolt from each of the back arms.
- 3) Take the Nexus back parachute harness (with two bolt holes in each arm bracket) and place the arm bracket WITHOUT the line extension on the left back arm of the aircraft which will be on your left side. The arm bracket is designed to slip over the M200 arm joint and the bracket should be slid over the arm joint as far as possible so that the inner most bolt hole lines up with the arm joint.
- 4) The other back arm bracket can now be slipped over the right arm joint of the aircraft, on your right side, with the line extension and quick link hanging down by the right landing leg of the aircraft.









# HARNESS AND ARM BRACKETS



- 5) Install the provided M4 arm bolts once the inner most bolt holes on both brackets are aligned with their respective arm joints on the M200. Secure each bracket bolt with the provided M4 nuts and tighten to a secure fit so that the nut face is flush with the Nexus arm bracket.
- 6) The M200 twist arm locks on the back arms can now be secured for flight or stowed for travel like normal.







# INSTALLATION | FLIGHT TERMINATION SYSTEM (FTS)

# Attaching the Nexus M200 Flight **Termination System** (ONE-TIME INSTALL):

The Nexus FTS is designed to attach to the back arm parachute harness arm brackets at the remaining two bolt holes. The Nexus FTS will extend into the cavity above the battery release mechanism on the aircraft. There is a manual release lever on the Nexus FTS as well as a battery catch that prevents the batteries from leaving the airframe in the event of a Nexus FTS activation. The battery catch lever can be depressed in conjunction with the battery release lever to guick swap M200 aircraft batteries. The Nexus FTS is a one-time install and is attached via wiring harness to the ATS Housing.

### To install the Nexus M200 FTS:

- 1) Slide the Nexus FTS into the Nexus parachute harness arm brackets at the back of the aircraft such that the Nexus FTS mechanism is extended into the cavity above the aircraft battery release mechanism. The wiring harness should fit and be routed between the FTS structure and aircraft body.
- 2) Line up the bolt holes of the Nexus FTS structure and the Nexus parachute harness arm brackets.
- 3) Insert and secure the provided M4 bolts through the arm brackets and Nexus FTS structure and secure with the provided M4 nuts. Tighten the M4 nuts to a secure fit so that the nut face is flush with the Nexus arm bracket.

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# AUTO TRIGGERING SYSTEM [ATS] | | NSTALLATION

# Attaching the Nexus M200 Leg Bracket and **Automatic Termination System**

(ONE-TIME INSTALL):

The Indemnis M200 Nexus PRS ATS is attached to a leg bracket that will remain rigid on the aircraft in the event of a deployment. The leg bracket will be placed onto the right side of the aircraft. This will be a one-time install. The FTS is attached to the ATS via a wiring harness.

### To install the Nexus M200 ATS:

- 1) With the provided 2mm hex driver, remove the right DJI M200 leg bracket by unscrewing the three M3 screws. Save the M3 screws in a safe place in the event that you remove the Indemnis M200 Nexus PRS system from the aircraft.
- 2) Take the DJI leg bracket and place it into the Indemnis leg bracket and ATS assembly.
- 3) Install the Indemnis leg bracket and ATS assembly onto the aircraft with the provided M3 screws and DJI leg bracket. The screws should be tightened to a snug fit such that the Indemnis leg bracket sits flush on the body of the aircraft.
- 4) The DJI leg may now be installed and removed normally. The Indemnis ATS housing will fly with the aircraft in the event that the Nexus tube is not attached.













# M210 V1 RTK MOUNT (OPTIONAL)

# INSTALLATION

# Attaching the Nexus V1 RTK MOUNT to the Nexus M200 Leg Bracket: (EASILY REMOVED FOR STORAGE)

The Nexus M200 kit comes with an optional M210 V1 RTK relocating mount that attaches to the Nexus M200 Leg Bracket. This option does not work with the M210 V2 RTK Antenna. This mount is attached with an M3 Thumb Screw for easy on/off installation.

### To Install the Nexus M210 V1 RTK Mount:

- With the Nexus M200 Leg Bracket already installed, place the provided mount in place on the leg bracket and secure with the provided M3 thumb screw as shown.
- 2) Using the four (four) M3 screws that came with your DJI V1 RTK Mount, align the DJI V1 RTK Antenna with the 4 (four) screw holes on the Nexus V1 RTK Mount and secure firmly. Do not overtighten.
- 3) Ensure that the antenna cable is aligned with the mount such that the cable can be secured to the mount with the provided cable ties. The cable should not be loose, and care should be taken so that the cable does not fall into the path of the Nexus PRS Tube.













# M200 GPS EXPANSION (OPTIONAL)

# INSTALLATION

The carbon fiber "X" plate from the DJI GPS Expansion Kit for the M200 can be repurposed to fit on the Nexus V1 RTK Mount for users that are utilizing the DJI Expansion Kit.

# To Install the DJI M200 Expansion Kit on the Nexus V1 RTK Mount:

- With the Nexus M200 Leg Bracket already installed, place the provided mount in place on the leg bracket and secure with the provided M3 Thumb Screw as shown..
- 2) Remove the "X" shaped carbon fiber plate from the DJI GPS Expansion Kit by unscrewing the four M3 screws. Place the "X" shaped carbon fiber plate on the Nexus V1 RTK Mount and secure with the four M3 screws. Ensure that the cable clamp of the "X" shaped plate faces towards the front of the drone.
- **3)** Peel the cover on the circular adhesive of the "X" shaped plate and securely place the GPS Antenna on the plate. The GPS antenna "front" indicator arrow should face the front of the drone.
- 4) Ensure that the antenna cable is aligned with the mount such that the cable can be secured to the mount with the provided cable ties. The cable should not be loose, and care should be taken so that the cable does not fall into the path of the Nexus PRS Tube











# THE NEXUS TUBE | INSTALLATION

# Attaching the Nexus M200 PRS Tube System

The Nexus tube houses the parachute and energetic device that launches the parachute. This device is easily attached and detached from the aircraft such that it can be stored safely in the Indemnis M200 Nexus Case and so that the DJI M200 with the ATS, FTS, and parachute harnesses can still fit into the DJI provided M200 travel case. It may not fit into custom cases.

### To install the Nexus M200 Tube:

- 1) Position the DJI M200 aircraft in front of you so that you are looking at the right side of the aircraft. The front of the aircraft should be pointing to your right, and the batteries should be on your left.
- 2) Remove the Nexus tube from its case and hold vertically in front of you such that the red cap is pointing upwards in a safe direction. The bracket attached to the tube should be facing away from you.
- 3) Hold the tube at the same level as the landing leg feet and click the Nexus tube bracket onto the landing leg.
- 4) Slide the Nexus tube on the landing leg up the leg until the hole on the top portion of the Nexus tube bracket is aligned with the hole on the Leg/ATS bracket.







- **5)** Once the holes are aligned and the DJI leg bracket is fully clamped down, the Nexus Securing Pin can be inserted through the Leg/ATS bracket, DJI leg clamp, and Nexus Tube bracket. The Nexus Securing Pin should be pushed all the way in such that it engages the far side of the Leg/ATS bracket and cannot be pulled out without pushing the release button.
- 6) Install the two parachute harness quick links onto the Nexus bracket ring, ensuring to secure and close the guick links.
- 7) Take the USB-C end of the cable that comes out of the bottom of the ATS and plug it into the USB port of the Nexus tube near the buttons.









# BATTERY OPERATION | INSTALLING THE BATTERY

- 1) The aircraft should be upright with the rear facing towards you. Have both batteries available and fully charged.
- 2) Press down on the silver lever to allow the battery release to swing freely.
- 3) Slide the left battery in as normal, then the right battery.
- 4) Using your thumbs, push both batteries in firmly until they click. This lets you know both batteries are secure for operation.







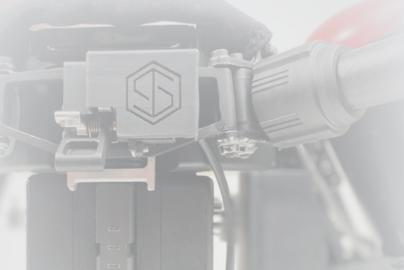
# REMOVING THE BATTERY | BATTERY OPERATION

- 1) Place your forefinger under the black release tab and your thumb on the silver battery release tab.
- 2) Pull the black battery release up while pressing the silver battery mechanism down at the same time to unlock the batteries.
- 3) When the batteries pop partially out you can slide them out to remove with ease.











# SECURE THE PARACHUTE HARNESSES WHEN OPERATING THE AIRCRAFT WITHOUT THE NEXUS PRS TUBE IN PLACE

Failure to do so could result in equipment failure or malfunction, serious injury, or death.



# SECURE PARACHUTE HARNESSES

WHEN OPERATING YOUR DJI M200 WITHOUT THE NEXUS PRS TUBE IN PLACE.

- 1) Close the carabiner.
- **2)** Run the Indemnis velcro strap through the carabiner.
- carabiner across to the opposite arm and wrap the velcro strap so that the logo faces upward and the connection surface is on the outside around the DJI M200 arm lock.
- **4)** Pulling the carabiner firmly under the arm lock, run the velcro strap end through the ring.
- **5)** Pull it back on itself to firmly secure it down while pulling the cable tight ensuring the carabiner sits under the arm lock.
- **6)** Check the tension to be sure the cable cannot interfere with the rotors.















7) Repeat these steps on the other harness and make sure they are both secure and cable tension is firm.

BE SURE TO ALWAYS SECURE THE HARNESS CABLES WHEN FLYING WITHOUT THE NEXUS IN PLACE TO AVOID DAMAGE OR INJURY.

# **Understanding the LED light ring**

The Nexus M200 PRS uses a LED light ring at the front of the system to indicate the system status to the user. The included Nexus MTD also provides users with Nexus M200 PRS systems status via both LCD screen display and audible indication.

# **IMPORTANT NOTE:**

Any system error will be indicated by a purple color on the LED ring. If an error is present, please refer to the troubleshooting section of this guide and contact: <code>support@indemnis.com</code>. Few errors are user correctable. UNDER NO CIRCUMSTANCES IF AN ERROR IS PRESENT, SHOULD YOU ATTEMPT FLY WITH THE NEXUS M200 PRS.

# LED Light Ring Colors and System Status State:

### GREEN BUTTERFLY = SAFE AND CANNOT DEPLOY

System battery is charging. The LED ring will grow with solid green lights on each side from the bottom of the ring to the top, once the green lights meet at the top, the system is charged.

### GREEN SOLID = SAFE AND CANNOT DEPLOY

Nexus M200 PRS is fully charged and beginning startup sequence.

## GREEN ROTATING + AUDIBLE TONE $\,=\,$ SAFE AND CANNOT DEPLOY

System is disarmed.

### **BLUE ROTATING + AUDIBLE TONE**

The system is charged, passed its internal checks, established communication, and is calibrated and in a Standby Mode, Ready for Pre-Arm.

### YELLOW ROTATING + AUDIBLE TONE

The Nexus M200 PRS is in its Pre-Armed Mode and ready for takeoff. The LED ring will change to rotating red once the arming altitude above ground has been reached.

### RED ROTATING + AUDIBLE TONE

The Nexus M200 PRS is armed and can now automatically deploy or be manually deployed.

### **RED FLASHING + AUDIBLE TONE** | DEPLOYED!



# IT IS HIGHLY RECOMMENDED TO USE THE NEXUS MTD

In absence of the Nexus MTD the LED light ring and audible tones indicate system Mode.

# CHECKLIST

Aircraft Inspection Checklist:
Propellers installed and checked for cracks
Batteries are charged and firmly in place
DJI remote batteries are charged
Nexus battery charged
Nexus MTD remote charged
Nexus FTS installed in battery ejection port
FTS cable connected to ATS
Nexus Installation:
TOXAGO IIIOTAIIATIOIII
"Hot Zone" cleared before removing Nexus from its case
"Hot Zone" cleared before removing
"Hot Zone" cleared before removing Nexus from its case  Nexus is attached to aircraft and the red cap is
"Hot Zone" cleared before removing Nexus from its case  Nexus is attached to aircraft and the red cap is pointed towards the sky
<ul> <li>"Hot Zone" cleared before removing         Nexus from its case</li> <li>Nexus is attached to aircraft and the red cap is         pointed towards the sky</li> <li>Nexus securing pin is locked in place</li> </ul>
<ul> <li>"Hot Zone" cleared before removing         Nexus from its case</li> <li>Nexus is attached to aircraft and the red cap is         pointed towards the sky</li> <li>Nexus securing pin is locked in place</li> <li>USB-C cable plugged into Nexus tube</li> </ul>
<ul> <li>"Hot Zone" cleared before removing         Nexus from its case</li> <li>Nexus is attached to aircraft and the red cap is         pointed towards the sky</li> <li>Nexus securing pin is locked in place</li> <li>USB-C cable plugged into Nexus tube</li> </ul>

# **Pre-flight Checklist:** T/0 | LZ clear and safe from other individuals Power on Aircraft Power on Nexus MTD Power on Nexus PRS Wait for boot up tones and LED indication MTD reads "Ready for Pre-Arm"/LED indicates rotating blue Pre-Arm Nexus (Rotating yellow/MTD indicates "Pre-Arm") RPIC clear of the T/O | LZ Flight Checklist: No errors present All individuals clear the T/O | LZ Airspace/Mission Route Clear for T/O **Post-flight Checklist:** Land aircraft Stop aircraft propellers The Nexus LED indication is rotating yellow and MTD shows "System Pre-Armed" Disarm Nexus via MTD, LED should turn rotating green and MTD should read "Disarmed" Enter LZ, power off aircraft Power off Nexus Power off MTD Unplug USB-C cable

Remove aircraft from LZ while keeping Nexus PRS pointed in safe

direction, place the Nexus PRS in its case.

# GROUND OPERATION | PROCEDURES

# Operating the Nexus M200 PRS on the ground:

1) TURNING ON THE NEXUS M200 PRS / READY FOR PRE-ARM **MODE** To turn on the Nexus M200 PRS press the power button once and then press once again and hold until the lights turn blue. The system will turn on and you will hear a series of tones. The LED light ring will be solid green and then turn to a slow rotating blue. The rotation speed of the blue LED ring will increase for several seconds as the ATS calibrates and will stabilize at a constant speed, making audible tones to indicate the system is in Ready for Pre-Arm Mode.

\*\*The Nexus M200 PRS should not be moved during this boot-up process and the aircraft should be on a level surface. This process takes about 30 seconds. If the LED light ring is incomplete and not rotating blue, it means that the backup battery is not fully charged. It is advised to ensure that the Nexus M200 PRS is fully charged before heading to the field.

- 2) Wait for the system to connect to Nexus MTD. LCD screen will display "Ready for Pre-Arm".
- 3) PRE-ARM MODE ON THE NEXUS M200 PRS To Pre-Arm the system, press and hold the arm/disarm button once and wait for your Nexus MTD to display "System Pre-Armed". The light ring changes from rotating blue to rotating yellow. The Nexus M200 PRS is now in a Pre-Armed Mode. The Nexus M200 PRS will remain in this state until the

system takes-off and reaches the arming altitude or you disarm the unit.

**NOTE:** The Nexus M200 PRS will not go into an Armed Mode or allow for manual deployment when on the ground. The Nexus M200 PRS arms when it reaches about 15.24m (50 Ft) and the Nexus M200 PRS will automatically re-enter it's Pre-Armed Mode when the aircraft descends below about 7.62 m (25 Ft).

### WHEN ARMING / DISARMING WITHOUT THE MTD:

The LED ring will light up blue twice and then proceed to yellow, making an audible chirp to confirm.

4) RE-ENTERING READY FOR PRE-ARM MODE on the Nexus M200 PRS - As a secondary means to exit Pre-Arm Mode and re-enter Ready for Pre-Arm Mode without the Nexus MTD, press once and hold the arming button on the Nexus M200 PRS until the rotating yellow LED ring changes to rotating green. The system is now disarmed and can be powered off, or can be returned to Ready for Pre-Arm Mode by again pressing and holding the arming button once..

WARNING: DO NOT PICK UP OR MOVE THE AIRCRAFT UNTIL THE Nexus M200 PRS IS IN READY FOR PRE-ARM MODE AND POWERED OFF.

5) Powering down the Nexus M200 PRS - The system can be powered down on the ground at any time. To power down the Nexus M200 PRS, Press the power button once and then press again and hold.

# PROCEDURES | FLIGHT OPERATION

# Takeoff and landing:

- 1) Takeoff Make sure the Nexus M200 PRS LED light ring is rotating yellow prior to takeoff.
- 2) Arming the Nexus M200 PRS: The Nexus M200 PRS will not go into an Armed Mode or allow for manual deployment when on the ground or near the ground. After takeoff, once the Nexus M200 PRS reaches about 15.24m (50 Ft), the Nexus M200 PRS will enter its Armed Mode and the LED light ring will change in color to rotating red. The Nexus MTD will give an audible tone that arming altitude has been reached and the MTD will display "Armed". The Nexus M200 PRS system can now deploy manually or automatically.
- **3)** Automatic Disarming of the Nexus M200 PRS: The Nexus M200 PRS will automatically re-enter it's Pre-Armed Mode when the aircraft descends below about 7.62 m (25 Ft), this will be noted by a yellow rotating LED light ring. The Nexus MTD will give an audible tone stating that disarming altitude has been reached. The display on the Nexus MTD will read "System Pre-Armed".
- 4) Landing The RPIC can land the UAV once the Nexus M200 PRS LED light ring is rotating yellow and the Nexus MTD indicates that the system has returned to "System Pre-Armed" mode.
- WARNING The disarming altitude is based on the altitude recorded at the takeoff location. The system may not automatically disarm if a pilot lands at a higher elevation than

- that of the original takeoff location. If the Nexus M200 PRS has not automatically disarmed then it should be kept level until it is manually disarmed with the Nexus MTD or by the Arm/Disarm button on the Nexus M200 ATS. Tilting an armed Nexus M200 PRS can cause the system to deploy. A red rotating LED light ring always means that the system is armed and care should be taken.
- **5) Manually Disarming** To manually disarm the Nexus M200 PRS, press once and hold the arming button for 3 seconds on the Nexus M200 ATS or press once and hold the disarming button for 3 seconds on the Nexus MTD. Verify that the LED light ring has changed to rotating yellow to disarm the system. The manual disarm function works at any altitude and returns the system to "System Pre-Armed" mode. To fully disarm the system, press and hold the disarming button for 3 seconds until the LED light ring changes to rotating green. The MTD will display "Disarmed".
- \* The unit can return to "Ready for Pre-Arm" without a power cycle by pressing and holding the arm/disarm button until the LED light ring rotates blue and the Nexus MTD LCD screen displays "Ready for Pre-Arm".
- **6)** The aircraft MUST be shut off before unplugging and disconnecting the Nexus M200 PRS.

### 7) POWERING OFF

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Press the power button once and then press again and hold until you hear an audible tone.

# FLIGHT OPERATION | PROCEDURES

# Removing the Nexus M200 PRS:

Make sure aircraft and Nexus M200 PRS power is turned off before removing the Nexus M200 PRS. To remove the Nexus M200 PRS, unhook the body harness, unplug the USB-C from the Nexus tube, remove the Nexus securing pin, slide the Nexus housing down the leg until the housing base is near the base of the aircraft landing leg. Gently pull system away from the landing leg.

# System Operation Notes During Flight:

- 1) The Nexus M200 PRS can be used in any of the aircraft's flight modes such as GPS or Sport Mode.
- 2) The aircraft with Nexus M200 PRS needs to be at a minimum altitude of 35.97 m (118 Ft) to have a successful deployment and recovery in any failure scenario. At altitudes below 35.97 m (118 Ft) a 100% successful deployment is not quaranteed - operators should take this in to account when planning their operations.
- 3) The Nexus M200 PRS should be completely powered down and rebooted upon every landing.
- 4) The Nexus M200 PRS will continue to function and maintain the ability to deploy both automatically and manually in the event of loss of power in the aircraft. In the event of loss of power to the Nexus M200 PRS the operator will be notified via audible tones from the Nexus MTD that there is a power fault. The operator should approach and land immediately at the nearest safe landing zone designated in their CONOPS to troubleshoot the system.

# REMOTE

# NEXUS MANUAL TRIGGERING DEVICE (MTD)

The Nexus manual triggering device (MTD) is included in your Nexus M200 PRS purchase – The Nexus MTD is the same for all Indemnis systems and should be labeled if you own multiple systems, as it is paired with the specific unit it is supplied with.



- 1) The Nexus MTD is designed to be hung around the pilot's neck using the included neck lanyard, mounted to a tripod using a standard 1/4-20 screw, or attached to the pilot via included and pre-installed belt clip..
- 2) The Nexus MTD has three (3) buttons:
  - A) ARM / DISARM B) POWER C) DEPLOY
- **3)** The Nexus MTD provides users with Nexus M200 PRS systems status via both visual and audible system status indication, as well as Nexus MTD battery life and error messages, if applicable.
- 4) Manual deployment is only available once the aircraft with the Nexus M200 PRS has reached its arming altitude.
  NOTE: If the Nexus M200 PRS is armed and the Nexus M200 PRS goes into an error Mode, manual deployment will be available regardless of aircraft altitude.
- **5)** The Nexus MTD has an internal battery that is rated to last 12 hours and is charged via USB-C.
- 6) The Nexus MTD will indicate lost link status. It has a rated usable range of 1km (0.62 miles). If the aircraft is out of range of the Nexus MTD, you will be notified via the Nexus MTD that it has entered the lost link status in this state, the automatic triggering system will still be active. The Nexus MTD will automatically reconnect to the Nexus M200 PRS when possible and takes 3 seconds to calibrate before the Nexus MTD option is available.

# OPERATING THE NEXUS MTD



### **NEXUS MTD REMOTE OPERATION:**

- 1) To turn on the MTD Press once and press once, again and hold the power button on the controller for 3 seconds until the LED lights cycle and the LCD screen populates with information. The Nexus MTD will need to be worn by the RPIC or placed near them on a tripod stand so that the manual deploy button can be easily reached if needed.
- 2) Remote Arming Press and hold the Nexus MTD Arm/Disarm button for 3 seconds. The LED lights will flash and then return to solid to indicate that it is Pre-Armed. The LCD screen will read "System Pre-Armed". If you are Pre-Arming in flight and have already reached the arming minimum altitude, the LCD screen will read "System Armed".
- **3) Remote Disarming** Press and hold the Nexus MTD Arm/Disarm button for 4 seconds. The LED lights will flash and then return to rotating green to indicate that it is disarmed. The LCD screen will read "Disarmed", indicating that the Nexus is disarmed and you can visually observe that the rotating red LED ring on the Nexus M200 PRS has changed to rotating green, indicating it is Disarmed. The Nexus MTD will also make a series of audible tones indicating a change in mode. This is the preferred and primary method of disarming the Nexus M200 PRS because it places a safe distance between the operator and the aircraft.

### IF THE SYSTEM IS ARMED OR DISARMED IT WILL BEEP 3 TIMES:

- 4) Manual Deployment is initiated by pressing the DEPLOY button three (3) times within one (1) second.
  NOTE Manual deployment should always be used as a last option in cases such as imminent unavoidable collisions or fly-aways.
  In the event of a manual deployment the user should continuously and rapidly press the DEPLOY button until the MTD indicates visually and audibly that the system has deployed.
- \* The Nexus MTD operates at 915 Mhz. Please check your country's local laws and regulations in regards to compliance before using this frequency. In absence of the Nexus MTD the LED light ring and audible tones indicate system mode.



# NSPECTION PROCEDURES

- 1) The system should be checked **AFTER EACH USE** for any noticeable damag. Take note that the system should never be pointed at the inspector or any bystander during the inspection. Any damage noted shall be reason for grounding the system and contacting support.
- 2) The Nexus M200 PRS is a ballistic parachute launcher and the system should always be STORED IN ITS APPROVED CASE WHEN NOT IN USE.



# AND SERVICING INSTRUCTIONS



### POST DEPLOYMENT PROCEDURE:

Like an airbag in your car, the Nexus M200 PRS is a certified safety system. It is not user re-packable or user serviceable after the Nexus M200 PRS has been deployed.

### SERVICING:

The Nexus M200 PRS can only be serviced by Indemnis and service providers that have been authorized by Indemnis.

For more information on customer support and servicing, please contact

support@indemnis.com

or call **1-84-INDEMNIS** (1-844-633-6647).



# **REMINDER**

Always turn off the aircraft before powering down or unplugging the Nexus M200 PRS

# TROUBLESHOOTING

# UNDERSTANDING THE WARNINGS AND ICONS



### ON GROUND WARNING

**CAUSE** This error indicates that the Nexus M200 PRS has lost contact with the ATS. **SOLUTION** Generally this is due to a loose connection in the USB harness. Check USB-C and USB-A connections are secure, power cycle the unit. If error persists, contact Indemnis. 1-84-INDEMNIS

# MID FLIGHT WARNING

**CAUSE** This error indicates the Nexus M200 PRS has lost contact with the ATS. If this happens mid-flight, this represents a serious error that requires landing. \*If the unit has ascended above the altitude lockout, manual deployment is enabled until the Nexus unit is disarmed.

SOLUTION Land immediately and handle with caution and disarm unit either manually or from the Nexus MTD.



### **CDS FAILURE WARNING**

**CAUSE** This is an internal error of the Nexus M200 PRS, and indicates the unit needs to be serviced. **SOLUTION** Do not operate further, keep unit in it's case and in a safe location. Contact Indemnis

1-84-INDEMNIS to send in for service.



### LOW BATTERY WARNING

**CAUSE** The independent battery on the Nexus M200 PRS is depleted and needs charging. **SOLUTION** Land the UAV, power off the Nexus M200 PRS, and charge with USB-C charger.



# **NEXUS REBOOTING**

Reboot is in progress. Please wait a moment to allow completion. Do not touch the UAV or Nexus system during reboot.



### LAND & REBOOT

Internal error, requires you to land the UAV and power cycle the unit.



## **REBOOT SYSTEM**

Power cycle the Nexus M200 PRS.



## CONNECTING

MTD is connecting to the Nexus M200 PRS, please wait a moment to complete.



### **GENERAL WARNING**

Land the UAV and troubleshoot.



# **READY FOR PRE-ARM**

The Nexus M200 PRS is calibrated / charged and ready to be Pre-Armed.



### SYSTEM PRE-ARMED

Nexus M200 PRS and UAV are ready for flight. The system will arm once it reaches the arming altitude.



### **ARMED**

Nexus M200 PRS is armed and ready to manually or automatically deploy.



### DISARMING

The system is disarming, do not touch the UAV or Nexus M200 PRS until the screen says "Disarmed".



# **DISARMED**

The Nexus M200 PRS is disarmed. It is now safe to power off or return to "Ready for Pre-Arm" Mode.



## SYSTEM READY TO DEPLOY

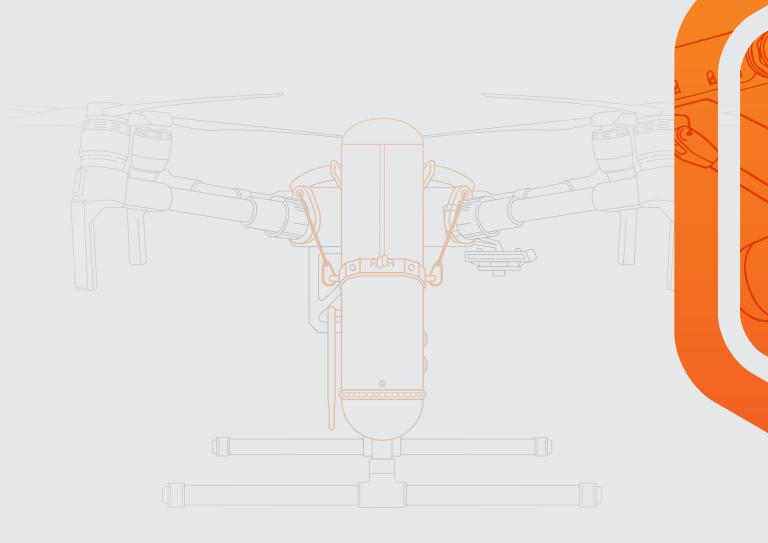
System is working properly and is ready to be deployed automatically or manually via MTD.



# SYSTEM WILL NOT DEPLOY

System is not ready to be deployed..

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