ICOM INSTRUCTIONS

IP ADVANCED RADIO SYSTEM

IP501M

Thank you for choosing this Icom product.
READ ALL INSTRUCTIONS carefully and completely before using this product.

Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:
- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom transceivers with any equipment that is not manufactured or approved by Icom.

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The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Icom Inc. is under license.
Other trademarks and trade names are those of their respective owners.

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Jul. 2026

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EXPLICIT DEFINITIONS

WORD	DEFINITION
⚠ WARNING!	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	Recommended for optimum use. No risk of personal injury, fire or electric shock.

PRECAUTIONS

⚠ **WARNING! NEVER** connect the transceiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

⚠ **WARNING! NEVER** operate the transceiver during a lightning storm. It may result in an electric shock, cause a fire or damage the transceiver. Always disconnect the power source and antenna before a storm.

⚠ **WARNING! NEVER** place the transceiver where normal operation of the vehicle may be hindered or where it could cause bodily injury.

CAUTION: NEVER connect the transceiver to a power source of more than 29 V DC. This could damage the transceiver.

CAUTION: NEVER cut the DC power cable between the DC plug and fuse holder. If an incorrect connection is made after cutting, the transceiver might be damaged.

CAUTION: Confirm that all connectors and jacks are dry and clean before attachment. Exposing them to dust or water will result in serious damage to the transceiver.

CAUTION: The transceiver will become hot when operating continuously for long periods.

DO NOT place or leave the transceiver in areas with temperatures below –10°C (14°F) or above 60°C (140°F), or in areas subject to direct sunlight, such as the dashboard.

DO NOT operate the transceiver without running the vehicle's engine. The vehicle's battery will quickly run out when the transceiver transmits while the vehicle's engine is OFF.

DO NOT place or leave the transceiver in excessively dusty environments.

DO NOT place the transceiver against walls. Otherwise heat dissipation will be obstructed.

DO NOT use harsh solvents such as Benzine or alcohol when cleaning, as they damage the transceiver's surfaces.

KEEP the transceiver away from the heavy rain, and never immerse it in the water. The transceiver meets IP54* requirements for dust-protection and splash resistance. However, once the transceiver has been dropped, dust protection and splash resistance cannot be guaranteed due to the fact that the transceiver may be cracked, or the waterproof seal damaged, and so on.

*Only when the microphone is attached.

Use the specified microphone only. Other microphones have different pin assignments and may damage the transceiver.

NEVER place the transceiver in an insecure place to avoid inadvertent use by unauthorized persons.

FCC INFORMATION

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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this transceiver, not expressly approved by Icom Inc., could void your authority to operate this transceiver under FCC regulations.

Supplier's Declaration of Conformity
This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

- **Responsible Party**
  Company Name: Icom America Inc.
  Address: 12421 Willows Road NE, Kirkland, WA 98034

- **U.S. Contact Information**
  800-USA-ICOM (800-872-4266)
  Monday – Friday 7 AM to 5 PM PST

FOR CANADA

This transceiver transmitter IC: 202D-382500 has been approved by Industry Canada to operate with the supplied antenna only.

This device contains licence-exempt transmitter/receiver that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS (s).
Operation is subject to the following two conditions:
1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

SAFETY TRAINING INFORMATION

This device was tested and approved with original accessories to ensure FCC Compliance. The use of third-party accessories may not comply with FCC RF exposure compliance requirements, and should be avoided blasting sites.

CAUTION: Keep at a distance of 20 cm (8 inches) or more between the LTE antenna of this device and any persons during operation.

DISPOSAL

The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

ABOUT CE AND DOC

Hereby, Icom Inc. declares that the versions of IP501M which have the "CE" symbol on the product, comply with the essential requirements of the Radio Equipment Directive, 2014/53/EU, and the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:
https://www.icomjapan.com/support/

About E-marking: Detailed installation notes for Icom mobile transceivers to be fitted into vehicles are available. Please contact your Icom dealer or distributor.

ABOUT UKCA DOC

To obtain the UKCA Declaration of Conformity, please search for your product at https://icomuk.co.uk, or alternatively call + 44 (0) 1227 741741 or email info@icomuk.co.uk.

Bluetooth® INTERFERENCE

Bluetooth uses the 2.4 GHz band. When using the transceiver in the 2.4 GHz band near a Bluetooth device, interference may occur. This may cause a decrease in communication speed, and an unstable connection.
In such case, use the transceiver away from the Bluetooth device communication area, or stop using the Bluetooth device.

DÉFINITIONS EXPLICITES

TERME	DEFINITION
⚠ AVERTISSEMENT!	Risque de blessures corporelles, d'incendie ou de choc électrique.
MISE EN GARDE	Risque de dégât matériel.
NOTE	La non prise en compte peut entraîner des désagréments. Absence de risque de blessures corporelles, d'incendie ou de choc électrique.

PRÉCAUTIONS

⚠ **AVERTISSEMENT! NE JAMAIS** connecter l'émetteur-récepteur a une alimentation CA au risque de provoquer un incendie ou un choc electrique.

⚠ **AVERTISSEMENT! NE JAMAIS** utiliser l'émetteur-récepteur durant un orage. Cela risquerait de provoquer un choc électrique, un incendie ou d'endommager l'émetteur-récepteur. Toujours débrancher la source d'alimentation et l'antenne avant une tempête.

⚠ **AVERTISSEMENT! NE JAMAIS** placer l'émetteur-récepteur à un emplacement où il pourrait gêner le fonctionnement normal du navire ou provoquer des blessures corporelles.

MISE EN GARDE: NE JAMAIS brancher l'émetteur-récepteur sur une source d'alimentation de plus de 29 V CC. **NE JAMAIS** émettre lorsque le coupleur est activé (ON), alors qu'aucune antenne n'est raccordée, au risque d'endommager gravement l'émetteur-récepteur.

MISE EN GARDE: NE JAMAIS couper le câble d'alimentation CC entre la prise CC à l'arrière de l'émetteur-récepteur et le porte fusible. L'émetteur-récepteur peut être endommagé par la suite en cas de connexion inappropriée.

MISE EN GARDE: Confirmez que tous les connecteurs et les prises sont secs et propres avant la fixation. Les exposer à la poussière ou l'eau se traduira par de graves dommages à l'émetteur-récepteur.

MISE EN GARDE: L'émetteur-récepteur chauffe en cas d'utilisation continue sur une longue durée.

NE PAS utiliser ou placer l'émetteur-récepteur dans des zones où la temperature est inférieure à –10°C (14°F) ou supérieure à 60°C (140°F) ou dans des zones soumises au rayonnement solaire direct, telles le tableau de bord.

NE PAS utiliser un emetteur-recepteur embarque avec le moteur du vehicule arrete. La batterie du véhicule sera rapidement épuisé lorsque la radio transmet lorsque le moteur du véhicule est éteint.

NE PAS placer l'émetteur-récepteur dans un environnement excessivement poussiereux ou en plein soleil.

NE PAS placer l'émetteur-récepteur contre un mur pour ne pas gêner la dispersion de la chaleur.

NE PAS utiliser de solvants agressifs tels que l'essence ou l'alcool pour nettoyer le l'émetteur-récepteur, en raison des risques d'endommager la surface du l'émetteur-récepteur.

PLACEZ l'émetteur-récepteur loin d'une forte pluie et ne jamais l'immerger dans l'eau. Cet émetteur-récepteur répond aux exigences de la norme IP54* en matière de protection contre la poussière et de résistance aux éclaboussures. Toutefois, si l'émetteur-récepteur tombe par terre, la protection contre la poussière et la résistance aux éclaboussures ne peuvent être garanties, car l'appareil peut être fissuré ou le joint d'étanchéité peut être endommagé, etc.
*Seulement lorsque le microphone est fixé.

Utiliser exclusivement un microphone Icom (fourni d'origine ou en option). La repartition des broches des microphones des autres fabricants est différente et leur connexion à l'IP501M peut endommager l'émetteur-récepteur.

Placer l'émetteur-récepteur hors de portée des enfants pour éviter toute utilisation inopinée.

INFORMATION FCC

Cet équipement a été testé et reconnu conforme aux limites fixées pour un appareil numérique de classe B, conformément au point 15 de la réglementation FCC. Ces limites ont été fixées afin d'assurer une protection raisonnable contre les interférences nocives dans une installation résidentielle.Cet équipement génère, utilise et peut émettre un rayonnement de fréquence radio. S'il n'a pas été installé conformément aux instructions, il peut par ailleurs créer des interférences perturbant les communications radio. Toutefois, il n'y a aucune garantie que les interférences ne se produiront pas dans une installation particulière. Si cet équipement crée des interférences perturbant la réception de la radio ou de la télévision, comme cela peut être déterminé en éteignant et en allumant l'équipement, l'utilisateur est invité à essayer de corriger l'interférence en prenant une ou plusieurs des mesures ci-après:
- Réorienter ou changer de place l'antenne de réception.
- Éloi gner l'équipement et le récepteur.
- Connecter l'équipement sur une prise sur un autre circuit que celui sur lequel le récepteur est connecté.
- Faire appel au revendeur ou à un technicien radio/TV expérimenté.

MISE EN GARDE: Tout changement ou modification, non expressément approuvé par Icom Inc., peut annuler l'autorisation de l'utilisateur à utiliser cet appareil conformément à la réglementation FCC.

Déclaration de conformité de la FCC
Cet appareil respecte les conditions établies au paragraphe 15 des règles de la FCC. Son utilisation est assujettie à la condition de ne pas provoquer des interférences nuisibles.

- **Partie responsable**
  Nom de la société : Icom America Inc.
  Adresse : 12421 Willows Road NE, Kirkland, WA 98034

- **Coordonnées pour les États-Unis**
  800-USA-ICOM (800-872-4266)
  Du lundi au vendredi, de 7 h à 17 h, heure du Pacifique

INFORMATION SUR LA FORMATION À LA SÉCURITÉ

Cet appareil a été testé et homologué avec ses accessoires d'origine en vue de la conformité FCC. L'utilisation d'accessoires tiers peut ne pas être conforme aux exigences imposées par la FCC pour la conformité à l'exposition aux fréquences radio et doit être évitée.

POUR LE CANADA

Cet émetteur radio IC: 202D-382500 a été approuvé par Industrie Canada pour fonctionner avec l'antenne fournie uniquement.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

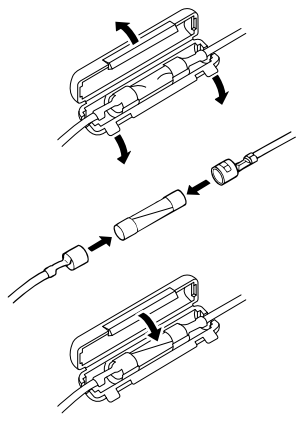
INTERFÉRENCE Bluetooth®

Bluetooth utilise la bande de 2,4 GHz. Lorsque vous utilisez l'émetteur-récepteur dans la bande de 2,4 GHz à proximité d'un appareil Bluetooth, ceci peut provoquer des interférences.
Ceci peut réduire le débit de communication et rendre la connexion instable.
Dans ce cas, utilisez l'émetteur-récepteur à distance suffisante de la zone de communication de l'appareil Bluetooth ou cessez d'utiliser l'appareil Bluetooth.

FUSE REPLACEMENT

Fuses are installed in the supplied DC power cable. If a fuse blows, track down the source of the problem, repair it, and then replace the damaged fuse with a new rated one.
ⓘ Fuse rating: 125 V, 5 A

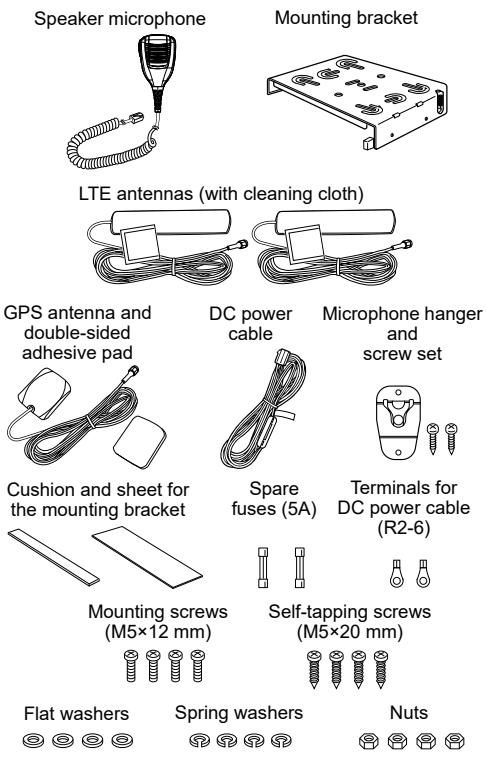
NOTE: Use only 125 V, 5 A fuses.



Fuse rating explanation

Fuse coding: FUSE 125 V 5 A
Fuse voltage rating: 125 Volts
Fuse current rating: 5 Amperes

SUPPLIED ACCESSORIES



NOTE: Some accessories are not supplied, or the shape is different, depending on the transceiver version.

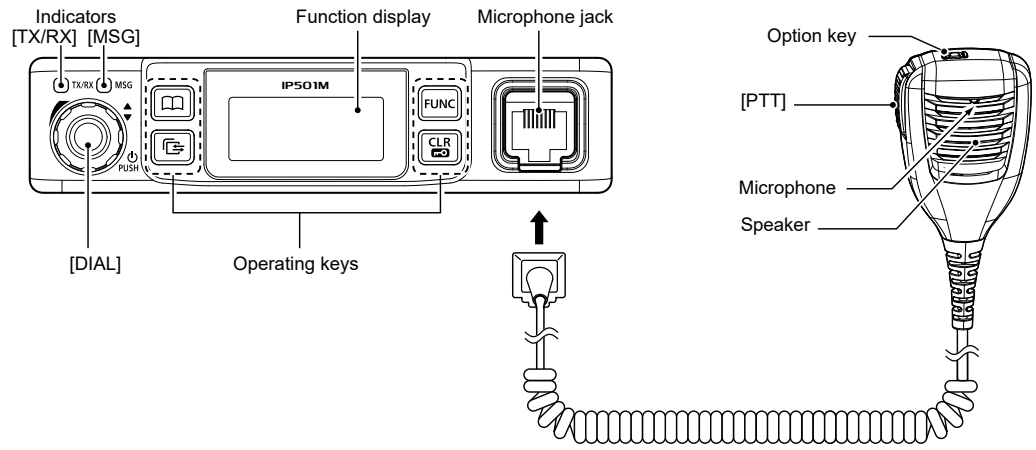
OPTIONS

- **HM-230HB** COMMAND MICROPHONE
- **HM-241** SPEAKER MICROPHONE
- **SM-28** DESKTOP MICROPHONE
- **HM-249** HANDSFREE MICROPHONE
- **VS-3** Bluetooth® HEADSET
  (For only the built-in Bluetooth versions)
- **SP-30, SP-35** EXTERNAL SPEAKERS
  Input impedance: 4 Ω
  SP-30: Rated input = 20 W
  Maximum input = 30 W
  SP-35: Rated input = 5 W
  Maximum input = 7 W
- **OPC-2355** MIC EXTENSION CABLE
  Length: 2.5 m (8.2 ft)
- **OPC-2344-1** PROGRAMMING CABLE
- **OPC-2407** ACC CABLE (D-sub 25-pin type)
  Enables you to connect to an external terminal.

ⓘ Some options may not be available in some countries.Ask your dealer for details.

PANEL DESCRIPTION

◇ Front Panel



◇ DIAL

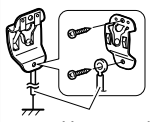
Hold down for 1 second to turn the transceiver ON or OFF.
- On standby screen: Rotate to adjust the audio volume.
- Others: Rotate to select an item.

◇ Indicators

[TX/RX] Lights red: Transmitting
Lights green: Receiving
Lights orange: Receiving and transmitting

[MSG] Reserved for a future function.

MICROPHONE HANGER



Connect the microphone hanger to the vehicle's ground for microphone ON/OFF hook functions when the HM-241/HM-230HB microphone is used.

User supplied

◇ Operating keys

Assigned key functions may differ, depending on the presetting.

[Address] key
- Selects a preset address.
- Push to toggle the address book between the call types.
  ⓘ You can also toggle the address by rotate [DIAL].

All → Group (Talkgroup) → Individual

[Call History] key
- Push to display the call history.
- Push this key several times to toggle between the Call his types, Transmitted call, Received call, Sent message, and Received message.
- Hold down until "Emergency" is displayed to send an Emergency call.

[FUNC] key
- Push to select a Message, Status, Talkgroup, Bluetooth Pairing, UTC Offset function, Bluetooth One Touch PTT function, or Network Operator.
- Hold down for 3 seconds to enter the Set Mode function.

[CLR/Lock] key
- Push to return to the standby screen.
- Hold down for 1 second to turn the Key Lock function ON or OFF.

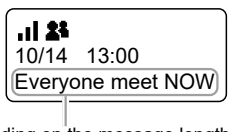
ⓘ [PTT] and [DIAL] are usable even while the Key Lock function is ON.

◇ Function Display

Standby screen



Example: When receiving a custom message



Scrolls, depending on the message length

: Signal strength
The signal strength is represented by 3 bars.
ⓘ When the transceiver location is out of the service area, or cannot receive the control signal, the (out-of-area) icon blinks.
ⓘ If the IP501M has not been authenticated, is displayed.

: Call types
Shows the call type.
Blinks when a call or message is received.
- : All/Group Call
- : Talkgroup Call*
- : Individual Call
- : Phone Call*

*May be usable, depending on a presetting.

: Bluetooth
(For only the built-in Bluetooth versions)
Displayed when the transceiver is connected to Bluetooth device.

: Pocket beep
- Displayed when the Pocket Beep function is ON.
- Blinks when a call is received. This icon blinks until the transceiver return to the standby mode after a received signal disappears.

: P-Bell
Displayed when the P-Bell function is used.

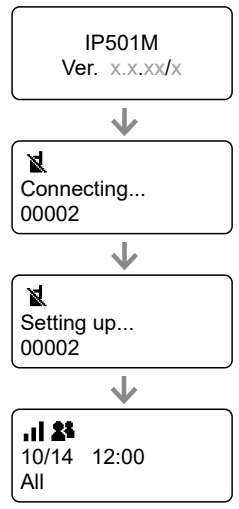
: Key Lock
Displayed when Key Lock function is ON.

: GPS
- Displayed when valid position data is received.
- Blinks when searching for satellites or calculating position data.

BASIC OPERATION

◇ Turning the transceiver ON or OFF

Turning ON:
Hold down [DIAL] for 1 second to turn ON the transceiver.
- The standby screen is displayed as follows:



ⓘ It may take a few minutes to boot up the transceiver for the first time.

Turning OFF:
Hold down [DIAL] for 1 second to turn OFF the transceiver.
ⓘ The transceiver may not turn OFF depending on the setting.

◇ Receiving and Transmitting

Receiving:
When a Call is received, the [TX/RX] indicator lights green.
Rotate [DIAL] to adjust the audio output level to a comfortable listening level.
ⓘ When the volume is "0," key beeps and ringer tones do not sound.

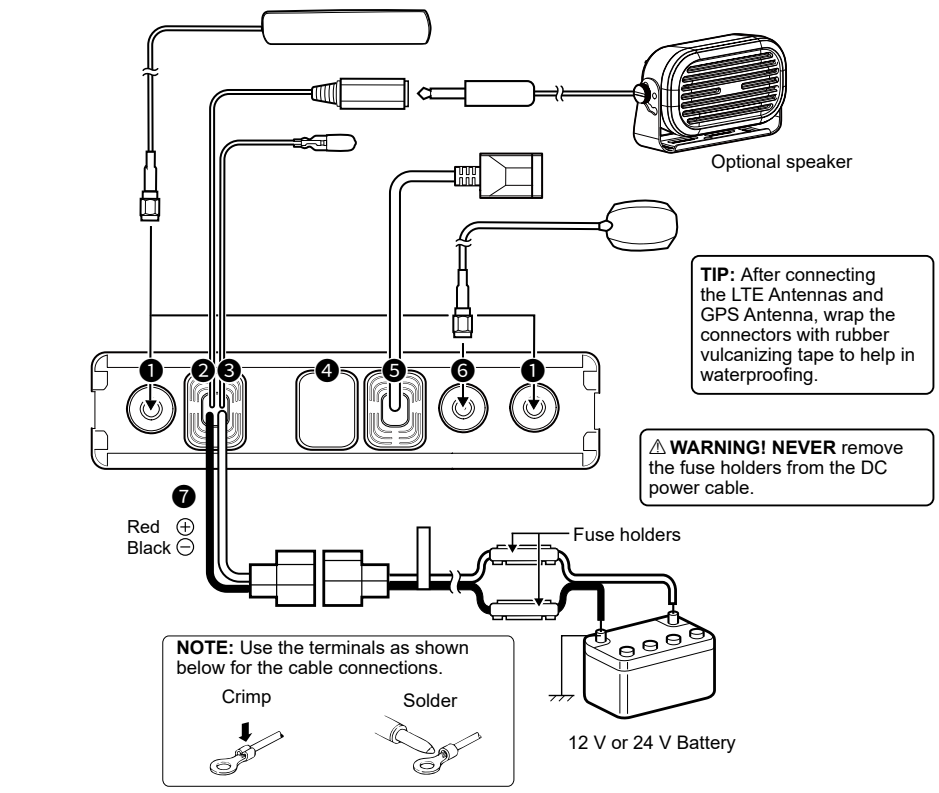
Transmitting:
While holding down [PTT], speak at your normal voice level.
- The [TX/RX] indicator lights red while [PTT] is pushed.

Talk while receiving a call:
While receiving a call, push [PTT] to talk in the Full-Duplex mode* like a telephone call.
- In the Full-Duplex mode, the [TX/RX] indicator lights orange.

ⓘ Rotate [DIAL] to adjust the audio output level.
DO NOT cover the speaker or microphone.
* Depends on a presetting. Ask your dealer for details.

IMPORTANT:
To maximize the readability of your signal:
1. After pushing [PTT], pause briefly before you start speaking.
2. Hold the microphone 5 ~ 10 cm (2 ~ 4 inches) from your mouth, then speak at your normal voice level.

REAR PANEL CONNECTION



❶ LTE ANTENNA CONNECTORS
Connect to the supplied LTE antenna.
Contact your dealer about antenna placement.

NOTE:
- Keep at a distance of 30 cm (12 inches) or more between the LTE antennas during operation.
- Be sure the LTE antennas are positioned where they have a clear view to receive signal, and fixed using the adhesive pad.

❷ EXTERNAL SPEAKER JACK
Connect a 4 ~ 8 Ω external speaker.

❸ IGNITION LEAD
Connect to an ignition line.

CAUTION: DO NOT put pressure on this lead. Binding to the DC power cable is recommended.

❹ D-Sub 25-pin
Remove the cover and connect the optional OPC-2407 ACC CABLE.

❺ LAN CABLE
Connect the network devices such as a switch.

CAUTION: DO NOT connect other than network devices, such as microphone. This could damage the transceiver.

❻ GPS ANTENNA CONNECTOR
Connect the supplied GPS antenna.

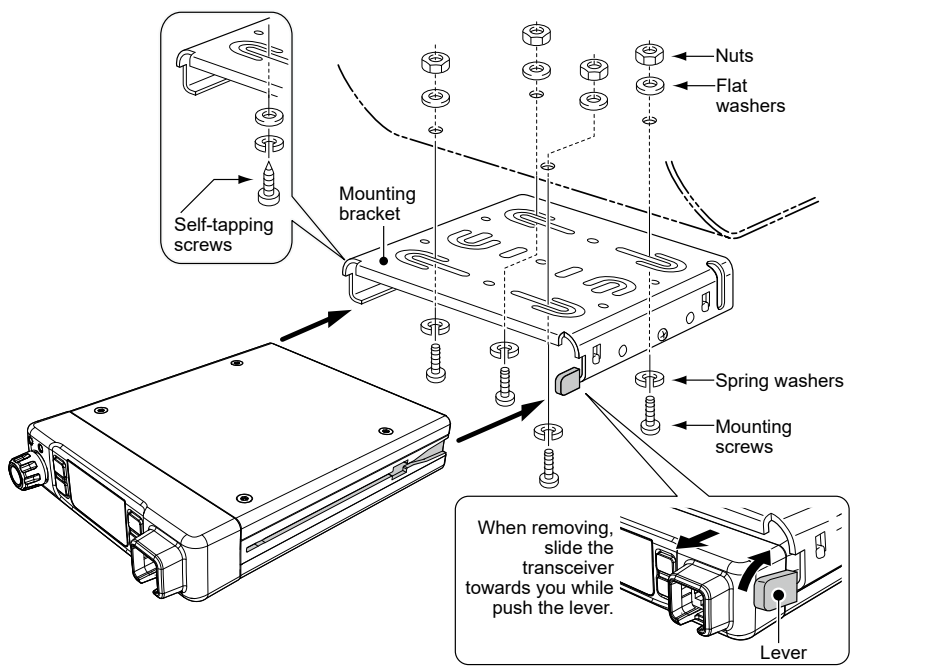
NOTE: Be sure the GPS antenna is positioned where the GPS antenna has a clear view to receive signal from satellites, and fixed using the supplied double-sided adhesive pad.

❼ DC POWER CONNECTOR
Connect to a 12 V/24 V DC battery.
Pay attention to polarities. Red line: +, Black line: –

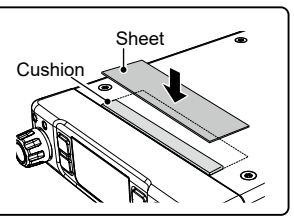
CAUTION: DO NOT reverse the DC power cable polarity when connecting to a power source. This could damage the transceiver.

MOUNTING THE TRANSCEIVER

The universal mounting bracket supplied with your transceiver enables various mounting positions.
- Mount the transceiver securely with the 4 supplied screws to a thick surface which can support more than 1.5 kg (3.3 lb).



To reduce vibration, place the cushion on the transceiver and put the sheet on it.
ⓘ When mounting the bracket on the bottom side, attach a cushion and a sheet to the bottom of the transceiver.



ANTENNA

A key element in the performance of any communication systems is the antenna. Contact your dealer for information regarding antennas and how to install them.

CLEANING

If the transceiver becomes dusty or dirty, wipe it clean with a soft, dry cloth.



DO NOT use harsh solvents such as Benzine or alcohol when cleaning, as they damage the transceiver's surfaces.