IN-DASH GPS NAVIGATION RECEIVER
INE-W920R

8-INCH IN-DASH GPS NAVIGATION RECEIVER
INE-W928R

QUICK REFERENCE GUIDE
Kurzanleitung
GUIDE DE RéFÉRENCE RAPIDE
GUÍA DE REFERENCIA RÁPIDA
GUIDA RAPIDA
SNABBGUIDE
SNEELSTARTGIDS
КРАТКОЕ СПРАВОЧНОЕ РУКОВОДСТВО
SKRÓCONA INSTRUKCJA DLA UŻYTKOWNIKA
ΟΔΗΓΟΣ ΓΡΗΓΟΡΗΣ ΑΝΑΦΟΡΑΣ

Made for iPod® iPhone®
Bluetooth® TMC
NAVTEQ®
USB DVD DOLBY
DIVX MP3 AAC
Digital®

ALPINE INE-W920R/INE-W928R QRG 68-21057Z30-A (EN)
IMPORTANT
Please record the serial number of your unit in the space provided below and keep it as a permanent record.

SERIAL NUMBER: ____________________________

ISO SERIAL NUMBER: AL

INSTALLATION DATE: ____________________________

INSTALLATION TECHNICIAN: ____________________________

PLACE OF PURCHASE: ____________________________

For details on all functions, refer to the Owner’s Manual stored in the supplied CD-ROM. (As it is data CD, the CD cannot be used for playing back music and images on the player.) If required, an ALPINE dealer will readily provide you with a print out of the Owner’s Manual contained in the CD-ROM.
**WARNING**

This symbol means important instructions. Failure to heed them can result in serious injury or death.

DO NOT OPERATE ANY FUNCTION THAT TAKES YOUR ATTENTION AWAY FROM SAFELY DRIVING YOUR VEHICLE.

Any function that requires your prolonged attention should only be performed after coming to a complete stop. Always stop the vehicle in a safe location before performing these functions. Failure to do so may result in an accident.

KEEP SMALL OBJECTS SUCH AS SCREWS OUT OF THE REACH OF CHILDREN.

Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

KEEP THE VOLUME AT A LEVEL WHERE YOU CAN STILL HEAR OUTSIDE NOISES WHILE DRIVING.

Excessive volume levels that obscure sounds such as emergency vehicle sirens or road warning signals (train crossings, etc.) can be dangerous and may result in an accident. LISTENING AT LOUD VOLUME LEVELS IN A CAR MAY ALSO CAUSE HEARING DAMAGE.

DO NOT DISASSEMBLE OR ALTER.

Doing so may result in an accident, fire or electric shock.

USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.

(Do not use in any other type of vehicle.) Failure to do so may result in fire, etc.

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES.

Failure to do so may result in fire or electric shock.

DO NOT BLOCK VENTS OR RADIATOR PANELS.

Doing so may cause heat to build up inside and may result in fire.

USE THIS PRODUCT FOR MOBILE 12V APPLICATIONS.

Using for other than its designed application may result in fire, electric shock or other injury.

DO NOT PLACE HANDS, FINGERS OR FOREIGN OBJECTS IN INSERTION SLOTS OR GAPS.

Doing so may result in personal injury or damage to the product.

MAKE THE CORRECT CONNECTIONS.

Failure to do so may result in fire or product damage.

BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.

Failure to do so may result in electric shock or injury due to electrical shorts.

DO NOT SPlice INTO ELECTRICAL CABLES.

Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES.

When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.

Bolts or nuts used for the brake or steering systems (or any other safety-related system), or tanks should NEVER be used for installations or ground connections. Using such parts could disable control of the vehicle and cause fire, etc.

**CAUTION**

This symbol means important instructions. Failure to heed them can result in injury or material property damage.

HALT USE IMMEDIATELY IF A PROBLEM APPEARS.

Failure to do so may cause personal injury or damage to the product. Return it to your authorized Alpine dealer or the nearest Alpine Service Center for repairing.

HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.

The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this product to have the work done.

USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.

Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally, or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP METAL EDGE.

Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring. If wiring passes through a hole in metal, use a rubber grommet to prevent the wire's insulation from being cut by the metal edge of the hole.

DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST.

Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may result in product failure.

KEEP FINGERS AWAY WHILE THE MOTORIZED FRONT PANEL OR MOVING MONITOR IS IN MOTION.

Failure to do so may result in personal injury or damage to the product.

DO NOT INSTALL IN LOCATIONS WHICH MIGHT HINDER VEHICLE OPERATION, SUCH AS THE STEERING WHEEL OR GEARSHIFTER.

Doing so may obstruct forward vision or hamper movement etc., and results in serious accident.

DO NOT FOLLOW ROUTE SUGGESTIONS IF THE NAVIGATION SYSTEM INSTRUCTS YOU TO PERFORM AN UNSAFE OR ILLEGAL MANEUVER, OR PLACES YOU IN AN UNSAFE SITUATION OR AREA.

This product is not a substitute for your personal judgment. Any route suggestions by this system should never supersede any local traffic regulations or your personal judgment or knowledge of safe driving practice.
Getting Started

Touch operation

You can operate the system by using the touch panel on the screen.

- **Common onscreen buttons**
  - Returns to the previous screen. Depending on the function, this button may cancel the operations performed on the screen.
  - Closes the window.

Location of Controls

**INE-W920R**

1. **(Release) button (INE-W920R Only)**
   - Use this button to remove the front panel.

2. **Remote Sensor**
   - Point the remote control transmitter towards the remote sensor within a range of 2 meters.

3. ***(My Favorites) button**
   - The My Favorites screen for registered User 1 is displayed.
   - Press and hold this button at least 3 seconds to switch to User 2.

4. **(MAP) button**
   - Recalls the navigation map screen.

5. **(PHONE) button**
   - Recalls the Telephone Menu screen.
   - Press and hold for at least 3 seconds to switch to the call history screen.

6. **(AUDIO) button**
   - Displays the Audio/Visual screen.
   - If the Audio/Visual screen is already displayed, changes the source.
   - INE-W920R: Press and hold AUDIO for at least 3 seconds to activate the "Setting the Balance/Fader/Subwoofer" mode.
   - INE-W928R: Press and hold for at least 3 seconds to turn the power off.

7. **Rotary encoder/MUTE button (INE-W920R Only)**
   - Adjust the volume by turning to the left or right.
   - Press to activate/deactivate the mute mode.
   - Press and hold for at least 3 seconds to turn the power off.

8. **(Eject) button**
   - INE-W920R: Ejects a disc.
   - INE-W928R: The Open/Tilt screen is displayed.

9. **(UP/DOWN) button (INE-W928R Only)**
   - Press to adjust the volume.

10. **MUTE button (INE-W928R Only)**
    - Press to activate/deactivate the mute mode.
    - Press and hold MUTE for at least 3 seconds to activate the "Setting the Balance/Fader/Subwoofer" mode.

11. **RESET switch**
    - The system of this unit is reset.
Turning Power On or Off (INE-W920R Only)

1. Turn the ignition key to the ACC or ON position. The system is turned on.

2. Press and hold the Rotary encoder for at least 3 seconds to turn the power off.

Turning Power On or Off (INE-W928R Only)

1. Turn the ignition key to the ACC or ON position. The system is turned on.

2. Press and hold the \( \) (AUDIO) button for at least 3 seconds to turn the power off.
About Dual Screen

If you want to display the music playback screen while route guidance is displayed, etc., you can display the Navigation and Audio/Visual screens simultaneously.

Navigation Full screen

Touch the Navigation screen portion. or Press the \((\text{MAP})\) button.

Audio/Visual Full screen

Touch \(\text{or}\)

*1 During video playback, [Dual Wide], [Dual Full] and [Full Screen] appear on the screen for selecting the screen size.

Dual Screen Display Position

You can switch the right and left screens using drag & drop. To switch the screens, touch the middle of the screen you want to move and drag it to the desired display position. The screens will switch positions when you remove your finger.
**User Registration**

You can register up to two users. Configure the User 1 and User 2 settings for each user.

1. **Press the ★ (My Favorites) button.**
   The My Favorites screen is displayed.

2. **Touch [Start].**
   The user name input screen for the first user is displayed.
   - Touching [Skip] registers the user name as “USER 1” or “USER 2” and no BLUETOOTH device is registered. In this case, the users will not be switched automatically.
   - Touching [Cancel] or pressing the ★ (My Favorites) button returns to the original screen without registering a user.

3. **Input the user name from the keypad and touch [OK].**
   The BLUETOOTH Device Setup screen is displayed.
   - Touch [ ] to edit the name.

4. **Touch [Link], then touch [OK].**
   The BLUETOOTH Device List is displayed.
   - Touching [Do not Link] exits user registration without registering a BLUETOOTH device.

5. **Touch [Search].**
   The system starts searching for BLUETOOTH devices.
   When the search is completed, the BLUETOOTH Device List is displayed.
   - Set the BLUETOOTH setting on the preregistered BLUETOOTH device side to “ON.”

6. **Touch a registered BLUETOOTH device and touch [OK].**
   My Favorites screen for USER1 is displayed.

7. **Press the ★ (My Favorites) button.**
   The My Favorites screen is exited and the display returns to the original screen.

8. **Press and hold the ★ (My Favorites) button for at least 3 seconds.**
   The My Favorites user guide is displayed. Repeat steps 2 through 6 to register USER 2.
## Radio Operation

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreases frequency</td>
<td>Displays the preset stations with a short touch. Touch for at least 2 seconds to memorise the current station as a preset station.</td>
</tr>
<tr>
<td>Preset button</td>
<td>Increases frequency</td>
</tr>
<tr>
<td>Switches band</td>
<td>Changes operation button</td>
</tr>
<tr>
<td>Changes tuning mode</td>
<td>Changes text information</td>
</tr>
<tr>
<td>SEEK mode indicator</td>
<td>RDS indicator</td>
</tr>
<tr>
<td>Traffic Information mode On/Off</td>
<td>Displays Select PTY screen</td>
</tr>
<tr>
<td>Memorises stations automatically</td>
<td>AF mode On/Off</td>
</tr>
<tr>
<td>Changes operation button</td>
<td>PRIORITY NEWS mode On/Off</td>
</tr>
</tbody>
</table>

## MP3/WMA/AAC Operation

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finds the beginning of the current file/Finds a previous file within one second after playback starts/Fast-reverses when touched for at least 2 seconds</td>
<td>Displays Select PTY screen</td>
</tr>
<tr>
<td>Current song no./Total song no.</td>
<td>MP3/WMA/AAC information display</td>
</tr>
<tr>
<td>Displays the search screen</td>
<td>Finds the beginning of the next file/Fast-forwards when touched for at least 2 seconds</td>
</tr>
<tr>
<td>Elapsed time</td>
<td>Random Play</td>
</tr>
<tr>
<td>Pause and Playback</td>
<td>Repeat Playback</td>
</tr>
<tr>
<td>Finds beginning of previous folder</td>
<td>Displays the search screen</td>
</tr>
<tr>
<td>Finds beginning of next folder</td>
<td></td>
</tr>
</tbody>
</table>
When you touch the DVD playback screen, the DVD operation screen is displayed. The following is an example of the DVD-VIDEO operation screen.

Displays numeric keypad input mode screen

Finds the beginning of the current chapter/Finds a previous chapter within one second after playback starts/Fast-reverses when touched for at least 2 seconds

Changes operation button

Switches Angle

Displays Top Menu screen

Displays Menu control screen

Displays Menu screen

Displays DVD information display-2

Displays Menu screen

Search

For exam

1 To

2 To

3 To
iPod/iPhone Operation (Optional)

An iPod/iPhone can be connected to this unit by using the cable (KCU-461iV) (sold separately). You can connect a video-capable iPod to enjoy not only Music but also Video files.

Audio mode

- Artwork display: Finds the beginning of the current file/Finds a previous file within one second after playback starts/Fast-reverses when touched for at least 2 seconds
- Current song no./Total song no.: Displays the search screen
- Pause and Playback: Displays the search screen
- Direct switch mode icon: Finds beginning of previous Playlist/Artist/Album/Podcast/Genre/Composer
- iPod/iPhone information display: Finds beginning of next file/Fast-forwards when touched for at least 2 seconds
- Random Play: Remaining time for playing
- Repeat Playback: Displays the search screen
- Finds beginning of next Playlist/Artist/Album/Podcast/Genre/Composer

Searching for a Music File

For example: Searching by Artist name

2. Touch [Music].
3. Touch [Artists].

4. Touch the selected artist name.

The Albums search screen of the selected artist is displayed. Touching [►] of the desired artist will play back all songs of the selected artist.

5. Touch the desired album's name.

All songs of the selected album are displayed. Touching [►] of the desired album will play back all songs of the selected album.

6. Touch the desired song's name.

The selected song is played back.
- Touching [►] of “ALL” will play back all songs in the list.
USB Memory Operation (Optional)

You can play back music files (MP3/WMA/AAC) and video files (DivX®) stored in a USB memory device on the internal player of this system. Refer to the "MP3/WMA/AAC Operation" (page 7) for information on music.

**Video mode**

- **Finds the beginning of the current file/Finds a previous file within one second after playback starts/Fast-reverses when touched for at least 2 seconds**
- **DivX® information display**
- **Displays the search screen**
- **Pause and Playback**
- **Stop Playback**
- **Finds beginning of previous folder**
- **Finds beginning of next folder**
- **Changes operation button**
- **Current file no./Total file no.**
- **Finds the beginning of next file/Fast-forwards when touched for at least 2 seconds**
- **Elapsed time**
- **Repeat Playback**
- **Displays operation button**
- **Switches Audio Tracks**
- **Switches Subtitles**

1. To
2. To
3. To
4. To
5. To
6. To
7. To
Hands-Free Phone Control

Hands-free calls are possible when using an HFP (Hands-Free Profile) compatible mobile phone with the INE-W920R/INE-W928R.

How to connect to a BLUETOOTH compatible device (Pairing)

1. Touch [Setup] icon of Top banner.

2. Touch [BLUETOOTH].

3. Touch [BLUETOOTH].

4. Touch [◄] or [►] of “BLUETOOTH” to set to “On.”

5. Touch [X].

6. Touch [Set BLUETOOTH Device].

7. Touch [Search] of “No Device.”

8. Touch [Audio] or [Hands-free] of the device you want to connect from the list.

9. When the device registration is complete, a message appears and the device returns to normal mode.

- The BLUETOOTH registration process differs depending on the device version and SSP (Simple Secure Pairing). If a 4 or 6 character Passcode appears on this device, enter the Passcode using the BLUETOOTH compatible device. If a 6 character Passkey appears on this device, make sure the same passkey is displayed on the BLUETOOTH compatible device and touch “Yes.”

Answering a Call

1. An incoming call triggers the ringtone and an incoming call display.

2. Touch [📞] or press [PHONE] button.

The call starts.

Hanging up the Telephone

1. Touch [.disconnect].

The call finishes.
## Installation

### INE-W928R users
To install the INE-W928R, refer to the manual in the separately purchased installation kit for each car type.

- When making connections to the vehicle's electrical system, be aware of the factory installed components (e.g., on-board computer). Do not tap into these leads to provide power for this unit. When connecting the INE-W920R/INE-W928R to the fuse box, make sure the fuse for the intended circuit of the INE-W920R/INE-W928R has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle. When in doubt, consult your Alpine dealer.
- The Display must be completely retracted in the casing when installing. If it is not, problems may occur.

### 1. Before installing, make sure that the opening and closing of the display will not interfere with operation of the gear shift.

#### Movable Display

### 2. Install at an angle between horizontal and 30°. Note that installing at an angle outside of this range will result in a loss of performance and possibly damage.

### 3. Mounting the Microphone.
For safe use, make sure of the following:
- location is stable and firm.
- driver's view and operations are not obstructed.
- microphone is located where the driver's voice can be easily picked up (on the sun visor, etc).

When you speak into the microphone, you should not have to change your driving posture. This may cause a distraction, taking your attention away from safely driving your vehicle. Carefully consider direction and distance while mounting the microphone. Confirm that the driver's voice can be easily picked up at the selected location.

![Microphone](image)

### 4. Remove the mounting sleeve from the main unit.

![Bracket keys](image)

Slide the unit into the mounting sleeve and secure it.

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*1 If the dash remex
*2 The...
This unit should be considered permanent. This may not be possible in some vehicles and consider the vehicle's owner manual when installing.

For INE-W920R

- Mounting Sleeve (Included)
- Dashboard
- Rubber Cap (Included)
- Bracket
- Pressure Plates*1
- Hex Bolt (Included)
- Face Plate*2 (Included)

*1 If the installed mounting sleeve is loose in the dashboard, the pressure plates may be bent slightly to remedy the problem.

*2 The supplied face plate may be mounted.

5 When your vehicle has the Bracket, mount the long hex bolt onto the rear panel of the INE-W920R and put the Rubber Cap on the hex bolt. If your vehicle does not have the Mounting Support, reinforce the head unit with the metal mounting strap (not supplied). Secure the ground lead of the unit to a clean metal spot using a screw (*1) already attached to the vehicle’s chassis.

6 Slide the INE-W920R into the dashboard until it clicks. This ensures that the unit is properly locked and will not accidentally come out from the dashboard.

Connection Diagram of SPST Switch (sold separately)

(If the ACC power supply is not available)

- For the screw marked “*2,” use an appropriate screw for the chosen mounting location.

- If the installed mounting sleeve is loose in the dashboard, the pressure plates may be bent slightly to remedy the problem.

- The supplied face plate may be mounted.

- When your vehicle has the Bracket, mount the long hex bolt onto the rear panel of the INE-W920R and put the Rubber Cap on the hex bolt. If your vehicle does not have the Mounting Support, reinforce the head unit with the metal mounting strap (not supplied). Secure the ground lead of the unit to a clean metal spot using a screw (*1) already attached to the vehicle’s chassis.

- Slide the INE-W920R into the dashboard until it clicks. This ensures that the unit is properly locked and will not accidentally come out from the dashboard.

Connection Diagram of SPST Switch (sold separately)

(If the ACC power supply is not available)

- If your vehicle has no ACC power supply, add an SPST (Single-Pole, Single-Throw) switch (sold separately) and fuse (sold separately).

- The diagram and the fuse amperage shown above are in the case when INE-W920R/INE-W928R is used individually.

- If the switched power (ignition) lead of the INE-W920R/INE-W928R is connected directly to the positive (+) post of the vehicle’s battery, the INE-W920R/INE-W928R draws some current (several hundred milliamperes) even when its switch is placed in the OFF position, and the battery may be discharged.
Connections

Connections 1/2

- iPod/iPhone (Sold separately)
- Connection kit KCU-461iV (Sold separately)
- USB Memory (Sold separately)
- ISO Antenna Plug
- GPS Antenna (Included)
- iPod/Phone ( Sold separately)
- iPod/VIDEO AV extension cable (Included with KCU-461iV)
- iPod/Phone connection kit KCU-230NK (Sold separately)
- Connection kit KCU-461iV (Sold separately)
- To power antenna
- Ignition key
- Battery
- Rear left
- Front left
- Front right
- Rear right
- Speakers
- To plus side of the back lamp signal lead of the car
- To the parking brake signal lead
- Remote turn-on (Blue/White)
- Reverse (Orange/White)
- Parking brake (Yellow/Blue)
- Ignition (Red)
- GND (Black)
- Power Ant (Blue)
- Battery (Yellow)
- Rear left
- Front left
- Front right
- Rear right
- Speakers
- To plus side of the back lamp signal lead of the car
- To the parking brake signal lead
- Remote turn-on (Blue/White)
- Reverse (Orange/White)
- Parking brake (Yellow/Blue)
- Ignition (Red)
- GND (Black)
- Power Ant (Blue)
- Battery (Yellow)
Connections 2/2

Connect this to the optional Vehicle Display Interface box

Connect this to the steering remote control interface box (INE-W928R Only)

To steering remote control interface box (INE-W928R Only)

To Video Output terminal
To Video Input terminal
To Audio Output terminals (R, L)
To Audio Input terminals (R, L)

Amplifier
Rear Left
Rear Right
Front Left
Front Right
Subwoofers

Microphone (Included)

To remote input lead
To remote output lead
To the vehicle speed pause line
To Front/Rear camera
To Rear/Other camera
Not used
To steering remote control interface box (INE-W928R Only)
# Specifications

## MONITOR SECTION
- **Screen Size**: 6.1” (INE-W920R) / 8.0” (INE-W928R)
- **LCD Type**: Transparent type TN LCD
- **Operation System**: TFT active matrix
- **Number of Picture Elements**: 1,152,000 pcs. (800 × 3 × 480)
- **Effective Number of Picture Elements**: 99% or more
- **Illumination System**: LED

## FM TUNER SECTION
- **Tuning Range**: 87.5 – 108.0 MHz
- **Mono Usable Sensitivity**: 8.1 dBf (0.7 μV/75 ohms)
- **50 dB Quieting Sensitivity**: 12 dBf (1.1 μV/75 ohms)
- **Alternate Channel Selectivity**: 80 dB
- **Signal-to-Noise Ratio**: 65 dB
- **Stereo Separation**: 35 dB
- **Capture Ratio**: 2.0 dB

## MW TUNER SECTION
- **Tuning Range**: 531 – 1,602 kHz
- **Usable Sensitivity**: 25.1 μV/28 dBf

## LW TUNER SECTION
- **Tuning Range**: 153 – 281 kHz
- **Sensitivity (IEC Standard)**: 31.6 μV/30 dBf

## USB SECTION
- **USB requirements**: USB 1.1/2.0
- **Max. Power Consumption**: 1,000 mA
- **USB Class**: USB (Play From Device)/USB (Mass Storage Class)
- **File System**: FAT12/16/32
- **MP3 Decoding**: MPEG-1/2 AUDIO Layer-3
- **WMA Decoding**: Windows Media™ Audio
- **AAC Decoding**: AAC-LC format “.m4a” file
- **Number of Channels**: 2-Channel (Stereo)
- **Frequency Response**: 5~20,000 Hz (±1 dB)
- **Total Harmonic Distortion**: 0.008% (at 1 kHz)
- **Dynamic Range**: 95 dB (at 1 kHz)
- **Signal-to-Noise Ratio**: 100 dB
- **Channel Separation**: 85 dB (at 1 kHz)

## CD/DVD SECTION
- **Frequency Response**: 5~20,000 Hz (±1 dB)
- **Total Harmonic Distortion**: Below measurable limits
- **Dynamic Range**: 95 dB (at 1 kHz)
- **Channel Separation**: 85 dB (at 1 kHz)
- **Signal system**: NTSC/PAL
- **Horizontal resolution**: 500 lines or greater
- **Video output level (INE-W920R/INE-W928R)**: 1Vp-p (75 ohms)
- **Video S/N ratio (INE-W920R/INE-W928R)**: DVD: 60 dB / Audio: 100 dB
- **Wave length (INE-W920R/INE-W928R)**: DVD: 666 nm / CD: 785 nm

## GPS SECTION
- **GPS Reception frequency**: 1575.42 ±1 MHz
- **GPS Reception sensitivity**: -130 dB max.

## BLUETOOTH SECTION
- **BLUETOOTH Specification**: Bluetooth V2.1+EDR
- **Output Power**: +4 dBm Max. (Power class 2)
- **Profile**: HFP (Hands-Free Profile) / OPP (Object Push Profile) / PBAP (Phone Book Access Profile) / A2DP (Advanced Audio Distribution Profile) / AVRCP (Audio/Video Remote Control Profile)

## GENERAL
- **Power Requirement**: 14.4 V DC (11–16 V allowable)
- **Operating temperature**: -4°F to +140°F (-20°C to + 60°C)
- **Maximum Power Output**: 50 W × 4
- **Output Voltage**: 2,000 mV/10k ohms (INE-W920R) / 4,000 mV/10k ohms (INE-W928R)

## CHASSIS SIZE (INE-W920R/INE-W928R)
- **Width**: 178 mm / 178 mm
- **Height**: 100 mm / 100 mm
- **Depth**: 164.4 mm / 152.2 mm

## NOSE SIZE (INE-W920R/INE-W928R)
- **Width**: 170 mm / 197 mm
- **Height**: 95 mm / 124.4 mm
- **Depth**: 18.5 mm / 30.2 mm

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- This item that is proper engine
- Manuf. Dolby Dolby
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- iPhone iTunes U.S. an
- “Made electric specifi has be perform operat and re this ac perform
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