

ALPINE ELECTRONICS, INC.

# Display Unit Owner's Manual

## GABI04

## **Owner's Manual Use Case**

NFC technology will allow customers to pair their mobile devices to the vehicle infotainment system (over Bluetooth) by just holding their device near the Integrated Center Stack Display.

"Mobile device" refers to any device that supports both Bluetooth and the full NFC specification. This means it could include a phone, tablet or NFC tag, e.g. the Nexus 10. Some smart phones (e.g. iPhone 6) will not support the feature because they do not support the full NFC specification.

There is a target with a special NFC logo that directs the customer where to hold the phone/tablet/NFC tag. The mobile device can be up to 4cm away. In practice, this means about an inch away from the Instrument Panel.

NFC capability needs to be enabled on the device. Other than that, it depends on the device, but for devices we are aware of, the device does not need to be on a specific screen or anything to perform the "tap" and start the pairing process, but the device will then pop a message up for the user to confirm in order for the process to be completed.

## **Frequency Band / Maximum transmission output**

- Frequency Band : 13.553-13.567MHz
- The maximum transmission output : 20.37dBuV/m@30 m

**Type Approval**


Country	<div data-bbox="67 257 226 416" data-label="Text"> <p>Russia, Kazakhstan , Belarus, Kyrgyzstan, Armenia</p> </div> <div data-bbox="263 257 430 398" data-label="Image"> </div> <div data-bbox="248 441 1062 631" data-label="Text"> <p>Product name: Display Unit / GABI04          Company name: ALPINE ELECTRONICS, INC.          Made in China, Mexico          Where to call: ALPINE ELECTRONICS, INC.          20-1 Yoshima-Industrial Park, Iwaki, Fukushima 970-1192, Japan          Local Representative:TBD</p> </div> <div data-bbox="248 665 702 696" data-label="Text"> <p>Purpose of use: Display Unit for Car</p> </div> <div data-bbox="248 728 681 759" data-label="Text"> <p>Regulations and safety guidelines:</p> </div> <div data-bbox="248 792 1525 889" data-label="Text"> <p>Changing the frequency without permission (including additional radio frequency amplifier) must not increase transmission output. In addition, attaching an antenna without permission must not change other outgoing antennas.</p> </div> <div data-bbox="248 922 1525 1019" data-label="Text"> <p>During use, for each type of legal wireless communication operation, harmful interference must not be produced. If an interference phenomenon is discovered, cease operation immediately. Continued use will be enabled once interference removal measures are taken.</p> </div> <div data-bbox="248 1052 1525 1113" data-label="Text"> <p>When faint wireless equipment is used, interference of each type of wireless operation or radiation interference of industrial, scientific, or medical applied equipment must be accepted.</p> </div>
United States of America	<div data-bbox="248 1149 443 1180" data-label="Section-Header"> <p><b>FCC CAUTION</b></p> </div> <div data-bbox="248 1180 1525 1243" data-label="Text"> <p>Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.</p> </div> <div data-bbox="248 1276 1525 1402" data-label="Text"> <p>This device complies with part 15 of the FCC 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.</p> </div>
Canada	<div data-bbox="263 1413 1370 1552" data-label="Text"> <p>This device contains licence-exempt transmitter(s)/receiver(s) 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.</p> </div> <div data-bbox="263 1556 1370 1727" data-label="Text"> <p>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.</p> </div>

	<p>Data transmission is always initiated by software, which is then passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.</p> <p>La transmission des données est toujours initiée par le logiciel, puis les données sont transmises par l'intermédiaire du MAC, par la bande de base numérique et analogique et, enfin, à la puce RF. Plusieurs paquets spéciaux sont initiés par le MAC. Ce sont les seuls moyens pour qu'une partie de la bande de base numérique active l'émetteur RF, puis désactive celui-ci à la fin du paquet. En conséquence, l'émetteur reste uniquement activé lors de la transmission d'un des paquets susmentionnés. En d'autres termes, ce dispositif interrompt automatiquement toute transmission en cas d'absence d'information à transmettre ou de défaillance.</p>
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Country	
English	<p>Hereby, ALPINE ELECTRONICS, INC., declares that the radio equipment type GABI04 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Bulgarian	<p>С настоящото ALPINE ELECTRONICS, INC., декларира, че този тип радиосъоръжение GABI04 е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Czech	<p>Tímto ALPINE ELECTRONICS, INC., prohlašuje, že typ rádiového zařízení GABI04 je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Danish	<p>Hermed erklærer ALPINE ELECTRONICS, INC., at radioudstyrstypen GABI04 er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
German	<p>Hiermit erklärt ALPINE ELECTRONICS, INC., dass der Funkanlagentyp GABI04 der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Estonian	<p>Käesolevaga deklareerib ALPINE ELECTRONICS, INC., et käesolev raadioseadme tüüp GABI04 vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Greek	<p>Με την παρούσα ο/η ALPINE ELECTRONICS, INC., δηλώνει ότι ο ραδιοεξοπλισμός GABI04 πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Spanish	<p>Por la presente, ALPINE ELECTRONICS, INC., declara que el tipo de equipo radioeléctrico GABI04</p>

	<p>es conforme con la Directiva 2014/53/UE.  El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
French	<p>Le soussigné, ALPINE ELECTRONICS, INC., déclare que l'équipement radioélectrique du type GABI04 est conforme à la directive 2014/53/UE.  Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Italian	<p>Il fabbricante, ALPINE ELECTRONICS, INC., dichiara che il tipo di apparecchiatura radio GABI04 è conforme alla direttiva 2014/53/UE.  Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Latvian	<p>Ar šo ALPINE ELECTRONICS, INC., deklarē, ka radioiekārta GABI04 atbilst Direktīvai 2014/53/ES.  Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Lithuanian	<p>Aš, ALPINE ELECTRONICS, INC., patvirtinu, kad radijo įrenginių tipas GABI04 atitinka Direktyvą 2014/53/ES.  Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Croatian	<p>ALPINE ELECTRONICS, INC., ovime izjavljuje da je radijska oprema tipa GABI04 u skladu s Direktivom 2014/53/EU.  Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Hungarian	<p>ALPINE ELECTRONICS, INC., igazolja, hogy a GABI04 típusú rádióberendezés megfelel a 2014/53/EU irányelvnek.  Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Maltese	<p>B'dan, ALPINE ELECTRONICS, INC., niddikjara li dan it-tip ta' tagħmir tar-radju GABI04 huwa konformi mad-Direttiva 2014/53/UE.  It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Dutch	<p>Hierbij verklaar ik, ALPINE ELECTRONICS, INC., dat het type radioapparatuur GABI04 conform is met Richtlijn 2014/53/EU.  De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Polish	<p>ALPINE ELECTRONICS, INC., niniejszym oświadczam, że typ urządzenia radiowego GABI04 jest zgodny z dyrektywą 2014/53/UE.  Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Portuguese	<p>O(a) abaixo assinado(a) ALPINE ELECTRONICS, INC., declara que o presente tipo de equipamento de rádio GABI04 está em conformidade com a Diretiva 2014/53/UE.  O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>

Romanian	<p>Prin prezenta, ALPINE ELECTRONICS, INC., declară că tipul de echipamente radio GABI04 este în conformitate cu Directiva 2014/53/UE.</p> <p>Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Slovak	<p>ALPINE ELECTRONICS, INC., týmto vyhlasuje, že rádiové zariadenie typu GABI04 je v súlade so smernicou 2014/53/EÚ.</p> <p>Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Slovenian	<p>ALPINE ELECTRONICS, INC., potrjuje, da je tip radijske opreme GABI04 skladen z Direktivo 2014/53/EU.</p> <p>Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Finish	<p>ALPINE ELECTRONICS, INC., vakuuttaa, että radiolaitetyyppi GABI04 on direktiivin 2014/53/EU mukainen.</p> <p>EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Swedish	<p>Härmed försäkras ALPINE ELECTRONICS, INC., att denna typ av radioutrustning GABI04 överensstämmer med direktiv 2014/53/EU.</p> <p>Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Icelandic	<p>Hér, ALPINE ELECTRONICS, INC., lýsir yfir að radióbúnaður tegund GABI04 er í samræmi við tilskipun 2014/53/ESB.</p> <p>The fullur texti af ESB-samræmisýfirlýsing er í boði á eftirfarandi veffangi:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Norwegian	<p>Herved ALPINE ELECTRONICS, INC., erklærer at radioutstyr type GABI04 er i samsvar med direktiv 2014/53/EU.</p> <p>Den fullstendige teksten i EU-erklæring er tilgjengelig på følgende internettadresse:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Irish	<p>Dearbhaíonn ALPINE ELECTRONICS, INC.. leis seo go bhfuil an cineál trealaimh raidió GABI04 in oiriúint le Treoir 2014/53/AE.</p> <p>Tá téacs iomlán an Dearbhaithe Comhréireachta AE le fáil ag an seoladh Idirlín seo a leanas:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>
Luxembourgish	<p>Heimatter deklaréiert ALPINE ELECTRONICS, INC., datt d'Funkanlage vum Typ GABI04 konform mat der Direktiv 2014/53/EU sinn.</p> <p>Den integralen Text vun der EU-Konformitéitserklärung ass op folgender Internetadress ze fannen:  <a href="http://www.alpine.com/e/research/">http://www.alpine.com/e/research/</a></p>

Country	
UAE	 <p>The diagram shows a rounded rectangular label with the following text:      TRA      REGISTERED No:      nnnnnnnn ← 認可番号を記載      DEALER No:      xxxxxxx ← Dealer registration number を記載   </p>
Samoa	TBD
Jamaica	This product contains a Type Approved Module by Jamaica : “SMA – GABI04”
Taiwan	<p>第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。</p> <p>第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。 前項合法通信，指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。</p>
China	<ol style="list-style-type: none"> <li>1.       <ul style="list-style-type: none"> <li>■ 使用频率：13.553-13.567MHz</li> <li>■ 所发射的磁场强度在距设备 10 米处不得超过 42dBμA/m(采用准峰值检波)；</li> <li>■ 频率容限：≤100×10<sup>-6</sup></li> <li>■ 杂散辐射：对于 13.553-13.567MHz 频段设备，频段两端偏移 140kHz 频率范围的限值为 9dBμA/m（10 米处，准峰值）</li> </ul> </li> <li>2. 不得擅自更改发射频率、加大发射功率(包括额外加装射频功率放大器)，不得擅自外接天线或改用其它发射天线；</li> <li>3. 使用时不得对各种合法的无线电通信业务产生有害干扰；一旦发现有干扰现象时，应立即停止使用，并采取消除措施后方可继续使用；</li> <li>4. 使用微功率无线电设备，必须忍受各种无线电业务的干扰或工业、科学及医疗应用设备的辐射干扰；</li> <li>5. 不得在飞机和机场附近使用。</li> </ol>