

DigiWave® Car Antenna Diagnosis Training Summary

Subject

Retrofitting an existing car
with an antenna to receive
DAB+ DVB-T TETRA 3G/4G GPS

OBJECTIVE

Finding the optimal position for the antenna
so that it captures the best signal possible
from the windscreen, rear window,
wing mirror etc.

Things that matter

Heating filaments (visible and invisible)
Metal frames and covers
Thermal coatings (tinted glass)
Other factors

Car Antenna Diagnosis

Quickly find the best position for the antenna
Professional service
Save time during installation

Easy procedures

Step 1: Take overall measurements
radio attenuation (green, yellow and red)

Step 2: Identify the best position
draw a rectangle on a temporary laser film
at a distance of 2.5 cm around the antenna

Step 3: Final check if OK
the entire bar should be green (*)

(*) sensor must remain parallel to the measurement surface at all times

http://www.wirelesstele.net/de/Car_Diagnosis/DigiWave.html
<https://www.youtube.com/watch?v=NX6btqPTLk>

**Example 1
Audi V8 Rear Window
Antenna-Position - NOT OK**

**Example 2
Audi V8 Rear Window
Antenna Position - OPTIMUM**

**Example 3
Audi V8 Side Mirror
Alternative to Rear Window
Antenna Position - GOOD**

**Example 4
Toyota Lexus
Back-Side Window
Ultra-Thermo-Protection
VERY BAD**

What can DigiWave® do for you?

- > Measures the radio attenuation in dB
- > of materials such as glass, plastic, ceramics...
 - > Influence of paints or coatings
 - > Influence of embedded metals or oxides
 - > Influence of metal frames in the vicinity
 - > Without disassembling the objects
- > Optimized for VHF 100-300 MHz (+/- 1dB*)
- > Estimations in the UHF range up to 3 GHz
- > Sensor auto-calibration at start (for 5sec)

[*] for non-resonant homogenous materials with <10mm thickness

Was kann DigiWave® für Sie tun ?

- > Misst die Funk-Dämpfung in dB
- > von Materialien wie Glas, Kunststoff, Keramik..
 - > Einfluss von Lacken oder Beschichtungen
- > Einfluss von eingebetteten Metallen oder Oxyden
 - > Einfluss von Metallrahmen in der Nähe
 - > Ohne die Objekte zu demontieren
- > Optimierte für VHF 100-300 MHz (+/- 1dB*)
- > Vorabklärungen im UHF-Bereich bis zu 3 GHz
- > Sensor Auto-Kalibrierung beim Start (für 5sec)

[*] für nicht resonante homogene Materialien mit einer Dicke von <10 mm

Que peut faire DigiWave® pour vous ?

- > Mesure l'atténuation radio en dB
- > de matériaux tels que le verre, plastique...
 - > Influence des peintures ou revêtements
 - > Influence des métaux ou oxydes encastrés
- > Influence des charpentes métalliques à proximité
 - > Sans démontage des objets
- > Optimisé pour VHF 100-300 MHz (+/- 1dB*)
- > Estimations dans la gamme UHF jusqu'à 3 GHz
- > Calibration du capteur au démarrage (5sec)

[*] pour les matériaux homogènes non résonnantes de <10mm d'épaisseur

Thank you for your attention !
Danke für Ihre Aufmerksamkeit !
Merci pour votre attention !

**Swiss-Radio-Car-Installation
Trainings-Team**

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