



**CALEARO®**



**DIGITAL AUDIO**

**DAB+**  
Digital Audio Broadcasting



**ADVANCED ICE**

● INTEGRATION ● COMMUNICATION ● ENTERTAINMENT

## Calearo Antennas

Since 1957 Calearo Group has created advanced technologies for communication. Thanks to its R&D department, the Calearo Group provides cutting edge solutions for transmitting and receiving fixed and mobile transmissions, for original equipment (OE) and aftermarket, automotive and industrial consumer and that of broadcast television.

Calearo Group works closely with the world's most important car manufacturers and operates in the telecommunications field for telematic markets, auto-tainment and info-tainment, entertainment, cloud-computing, broadcasting, TV satellite, SMATV, CATV, wireless city and connectivity. Their mission is to innovate, experiment and deliver technologies which are able to connect the world and improve your driving experience.

### What are the benefits of Digital Radio?

Digital Radio means improved audio quality, noiseless broadcasts and extra features and services. Antennas play a crucial role in ensuring you get the best reception of the DAB signal. You only have to identify which one best fits your installation needs.

The next page shows the solutions we have available for your needs!

### DAB+ Shark Fin Antenna

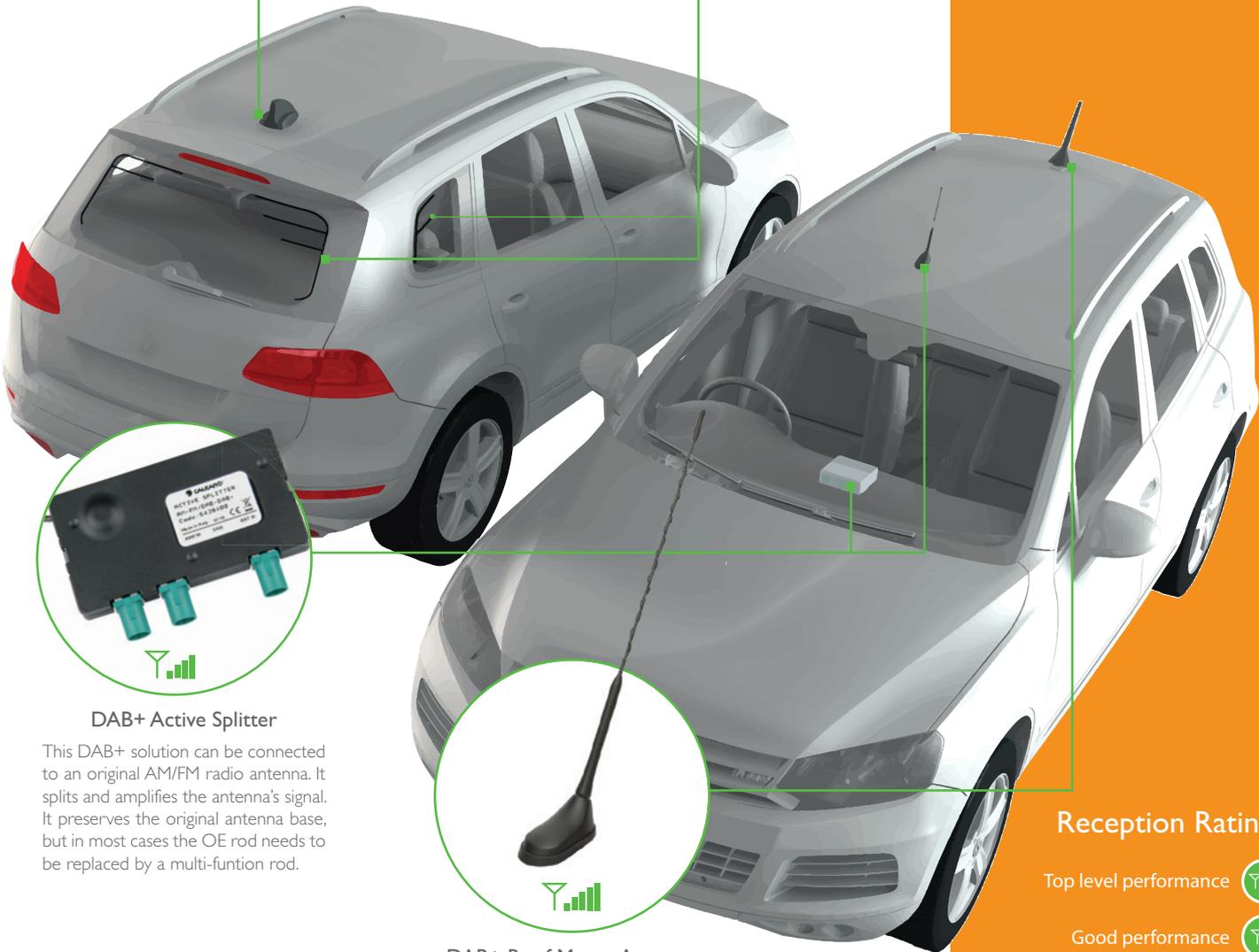
A stylish solution that give you AM, FM & DAB+ functionality. It can be installed as a new feature to your car or to replace an existing antenna.



### DAB+ for VW & Skoda

This solution utilises the existing factory windscreen antennas (if installed) giving you DAB+ while maintaining the factory look.

Please note: Only available for Volkswagen & Skoda vehicles



### DAB+ Active Splitter

This DAB+ solution can be connected to an original AM/FM radio antenna. It splits and amplifies the antenna's signal. It preserves the original antenna base, but in most cases the OE rod needs to be replaced by a multi-function rod.



### DAB+ Roof Mount Antenna

The antenna mounts on the rear of your roof and comes with a 40cm or 20cm rod. It can be installed as a new feature to your car or to replace an existing antenna.

## A variety of solutions to fit your needs!

Calearo Antennas offer a wide range of DAB+ antenna solutions. Depending on installation, car make and model and desired reception, you can choose the most suitable DAB+ antenna for you:

- Roof Mount Antennas, single or multifunction, also available in the shark fin design
- Splitter solutions, in conjunction with a AM/FM/DAB+ ready rod, split and amplify the original antenna's signal
- Volkswagen & Skoda specific solution that utilises the existing factory windscreen antenna

### Reception Rating

- Top level performance 
- Good performance 
- Medium performance 
- Basic performance 

## AI-DAB-004: DAB+

### Shark Fin Antenna

DAB Cable:	L = 5m / Z = 50 Ohm / C = 101 pF/m
DAB Connector:	SMB Female
DAB Power:	12V (dedicated mode)
DAB Frequency Band:	III band 174-240 Mhz
DAB Gain (dB):	III band 16 dB
DAB Consumption:	85 mA typ
Overall Dimensions (LxWxH):	6cm x 4.5cm x 5cm
Roof Mounting:	Rear Roof Hole - Square 15mm or Round 19mm



## AI-DAB-005: AM/FM DAB+

### Shark Fin Antenna

DAB Cable:	L = 5m / Z = 50 Ohm / C = 101 pF/m
DAB Connector:	SMB Female
AM/FM Connector:	HC97 Female
DAB & AM/FM Power:	12V (dedicated mode)
DAB Frequency Band:	III band 174-240 Mhz
AM/FM Frequency Band:	AM band 0.52 - 1.71 MHz / FM 88-108 MHz
DAB Gain (dB):	III band 16 dB
AM/FM Gain (dB):	AM 28 dB / FM 8 dB
AM/FM & DAB Consumption:	85 mA typ
Overall Dimensions (LxWxH):	6cm x 4.5cm x 5cm
Roof Mounting:	Rear Roof Hole - Square 15mm or Round 19mm



## AI-DAB-006: AM/FM DAB+ GPS

### Shark Fin Antenna

DAB Cable:	L = 5m / Z = 50 Ohm / C = 101 pF/m
GPS Cable:	L = 5m / Z = 50 Ohm / C = 101 pF/m
DAB Connector:	SMB Female
AM/FM Connector:	HC97 Female
GPS Connector:	SMB Female
DAB & AM/FM Power:	12V (dedicated mode)
GPS Power:	3V-5V (phantom mode)
DAB Frequency Band:	III band 174-240 Mhz
AM/FM Frequency Band:	AM band 0.52 - 1.71 MHz / FM 88-108 MHz
GPS Frequency Band:	1575.42 ± 1.023 Mhz
DAB Gain (dB):	III band 16 dB
AM/FM Gain (dB):	AM 28 dB / FM 8 dB
GPS Gain (dB):	>24 dBi
AM/FM & DAB Consumption:	85 mA typ
GPS Consumption:	24 mA typ
Overall Dimensions (LxWxH):	6cm x 4.5cm x 5cm
Roof Mounting:	Rear Roof Hole - Square 15mm or Round 19mm



## AI-DAB-003: AM/FM DAB+

DAB Cable:	L = 5m / Z = 50 Ohm / C = 101 pF/m
AM/FM Cable:	L = 5.6m / Z = 50 Ohm / C = 67 pF/m
DAB Connector:	FME Female
AM/FM Connector:	ISO
Fiberglass Rod Length:	20cm
Rod Inclination:	60 degrees
DAB Frequency Band:	III band 174-240 Mhz / L band 1452-1492 Mhz
AM/FM Frequency Band:	AM 0.52 - 1.71 MHz / FM 76 - 108 MHz
DAB Gain (dB):	III band 14 dB / L band 11 dB
AM/FM & DAB Consumption:	50 mA typ
Overall Dimensions (L x W):	6cm x 4.3cm
Roof Mounting:	Original or 19 mm Drilling
VSWR:	III band < 10 / L band < 2



## AI-DAB-002: AM/FM DAB+ GPS

DAB Cable:	L = 5m / Z = 50 Ohm / C = 100 pF/m
GPS Cable:	L = 5m / Z = 50 Ohm / C = 100 pF/m
DAB Connector:	SMB Female
AM/FM Connector:	HC97 Female
GPS Connector:	SMB Female
Fiberglass Rod Length:	41cm
Rod Inclination:	60 degrees
DAB Frequency Band:	III band 174-240 Mhz / L band 1452-1492 Mhz
AM/FM Frequency Band:	AM 0.52 - 1.71 MHz / FM 76 - 108 MHz
GPS Frequency Band:	1575.42 ± 1.023 Mhz
DAB Gain (dB):	III band 14±2 dB / L band 11 ± 1 dB
AM/FM Gain (dB):	data not currently available
GPS Gain (dB):	27 dBi
AM/FM & DAB Consumption:	50 mA typ / GPS = 30 mA max
GPS Consumption:	30 mA max
Overall Dimensions (L x W):	9.8cm x 5cm
Roof Mounting:	Original or 19 mm Drilling
VSWR:	GPS - 2.1



## AI-DAB-007: AM/FM DAB+

DAB Cable:	L = 5m / Z = 50 Ohm / C = 101 pF/m
AM/FM Cable:	L = 5.6m / Z = 50 Ohm / C = 67 pF/m
DAB Connector:	FME Female
AM/FM Connector:	ISO
Fiberglass Rod Length:	41cm
Rod Inclination:	60 degrees
DAB Frequency Band:	III band 174-240 Mhz / L band 1452-1492 Mhz
AM/FM Frequency Band:	AM 0.52 - 1.71 MHz / FM 76 - 108 MHz
DAB Gain (dB):	III band 14 dB / L band 11 dB
AM/FM & DAB Consumption:	50 mA typ
Overall Dimensions (L x W):	6cm x 4.3cm
Roof Mounting:	Original or 19 mm Drilling
VSWR:	III band < 10 / L band < 2



## AI-DAB-001: AM/FM DAB+

AM/FM Active Splitter - Universal Kit for DAB

Connector: FAKRA M  
 Power Supply: DAB = 12V  
 Frequency: AM = 0.15-1.71 MHz FM = 87.5-108 MHz III Band = 174-240 MHz  
 Gain: III Band = 20 + 2 dB  
 Consumption: AM/FM = 50mA max DAB = 50 mA max  
 L x B x H (cm): 7 x 3,8 x 1,2  
 Adapter Cables: L = 50cm DIN F/FAKRA F DIN M/FAKRA F SMB F 90 / FAKRA F



## AI-DAB-009: AM/FM DAB+

Universal Heavy Duty

Cable: L = 2.5m / Z = 50 Ohm / C = 100 pF/m  
 DAB Connector: SMB Female  
 Power: 12V  
 Frequency Band: III band 174-240 Mhz  
 Gain (dB): III band 14 dBi - L Band 1452-1492MHz  
 Overall Dimensions (LxWxH): 25cm x 4.2cm x 3.7cm  
 Mounting: Front roof or pillar



## AI-DAB-011: AM/FM DAB+

Heavy duty with flexible whip - Universal Heavy Duty

Cable: L = 2.5m / Z = 50 Ohm  
 Connector: Din Male  
 Power: 12V  
 Frequency Band: AM band 0.52-1.71 MHz - FM Band 87-108 MHz  
 Overall Dimensions (L x W x H): 25cm x 4.2cm x 3.7cm  
 Mounting: Front roof or pillar



## AI-DAB-VW: FM DAB+

Adds DAB+ from Factory Antenna for Volkswagen

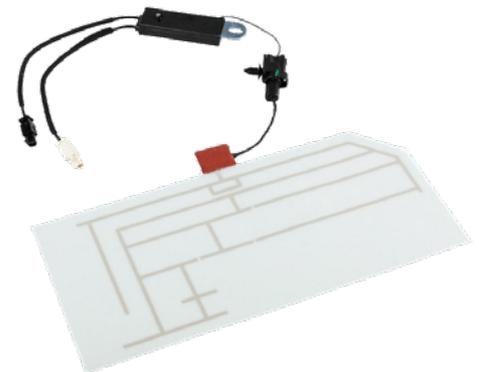
DAB Cable: L = 6.5m / Z = 50 Ohm / C = 101 pF/m  
 DAB Connector: Double Fakra Female "Z"  
 FM Connector: Fakra Male "A"  
 DAB & FM Power: 8.5V - 12V (phantom)  
 DAB Frequency Band: III band 174-240 Mhz  
 FM Frequency Band: FM band 88-108 Mhz  
 DAB Gain (dB): III band 21 dB  
 FM Gain (dB): FM 5 dB  
 DAB & FM Consumption: 90 mA max  
 Overall Dimensions (LxWxH): 11.5cm x 1.9cm x 1.4cm  
 Mounting: Rear position



## AI-DAB-012: AM/FM DAB+ GPS

AM/FM Active Splitter - Universal Kit for DAB

AM/FM connector: FAKRA male WHITE  
 DAB/DAB+ connector: FAKRA male BLACK  
 AM/FM extension cable: not included in the package  
 DAB/DAB+ extension cable: not included in the package  
 Power supply: +12 volt Phantom via AM/FM cable  
 AM/FM frequency: 0,15-1,71 MHz / 87,5-108 MHZ  
 DAB/DAB+ frequency: 174-240 MHz (III band)  
 DAB/DAB+ gain: 10 dBi  
 Consumption: 60 mA max  
 Mounting antenna: Internal on bumper and plastic or fiberglass parts  
 Mounting amplifier: Fixing by screw



### AI-DAB-012 Extension Cable Kits

#### AI-EXT-7M:

7M Extension Cable Kit



#### AI-EXT-9M:

9M Extension Cable Kit



#### AI-EXT-12M:

12M Extension Cable Kit



# Adapter Cables

7181113

Pioneer

Connection: SMB Male to GT16  
Compatibility: Pioneer  
Cable Length: 12cm



7581077

Alpine, Clarion, Blaupunkt and Kenwood

Connection: SMB Male to GT5 F  
Compatibility: Alpine, Blaupunkt, Clarion and Kenwood  
Cable Length: 12cm



7581123

Universal

Connection: SMB Male to Fakra Femal (Code C)  
Compatibility: Universal  
Cable Length: 12cm



# Specialty Products

AI-ANT-VW

Phase Diversity Antenna Splitter

Splitter: AM-FM/FM  
Frequencies: AM 0.15-1.71 / 88-108 MHz – FM 88 – 108 MHz  
Gain: AM/FM – 0 dBi  
Power supply: AM/FM 12V  
Power consumption: AM/FM 15mA  
Connector: ANT=FAKRA M AM/FM=FAKRA F90° FM=FAKRA F90°

