



DA-G2 MOST150 OPTICAL MERCEDES

— INSTALLATION AND USER GUIDE —

BRIDGING MEDIA, COMMUNICATION & LIFESTYLE WITH YOUR VEHICLE

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DISCLAIMER

mObridge makes every effort to try and keep the support and installation documentation up to date.

We do not reimburse or bear costs arising from installations should installation issues occur. mObridge can be contacted via email and also via its worldwide distribution network. We always recommend contacting the local distributor first, and although we endeavour to answer emails we receive in a timely manner, due to time zone differences we may not be able to respond immediately.

mObridge always recommends professional installation of these products as they are technically complex, involving optical fiber across multiple vehicle configurations and software versions within these vehicles.

In some cases, vehicles may require coding by specialist workshops and diagnostic equipment. mObridge always recommends allocating a number of hours to any installation, just in case any issues should arise.

MOST[®]



AUSTRALIAN
DESIGNED &
ENGINEERED

WELCOME

Congratulations on your purchase of a mObridge MOST150 DA-G2 Optical Preamp. mObridge prides itself on striving to develop and manufacture products to the highest engineering quality standards and seamlessly integrating these products with factory audiovisual systems.

The mObridge MOST150 DA-G2 series are some of the most advanced DSP aftermarket audio integration interfaces available for MOST150 based vehicles and come with an easy to use Windows and macOS Graphical Interface for setting up and tuning the DA-G2 systems. This can be downloaded free from our www.mobridge.us website.

Features, depending on the DA-G2 MOST150 model, include TOSLINK output, channel mapping to 10 RCA output channels, 1024 point parametric graphic equalizer for each channel, as well as a 'master EQ', crossover type and crossover points for each speaker, crossover slope, individual speaker time alignment, phase adjustment, Q factor (both left and right), summing for subwoofers and centre channel upmixing. The user can also use the radio controls to change preset settings in the DA-G2 for different tuning profiles.

We have included a USB port for software updates, allowing for new features to be added as they become available. The DA-G2 MOST150 series can be updated by simply loading the latest software from our website and through the use of the mObridge DSP user interface.

The DA-G2 MOST150 series may also have system function upgrades available for purchase and download from time to time. These will also be available on our website.

We hope you enjoy your new enhanced listening experience!

OVERVIEW

VEHICLE COMPATIBILITY

The mObriidge DA-G2 MOST150 unit is compatible with any Mercedes-Benz vehicles equipped with an NTG5.x head unit. Please check our website for the most up to date compatibility www.mobridge.us/support.

YEAR	MAKE	MODEL	CHASSIS
09/2015->2018	Mercedes	A-Class	W176
11/2014->2018	Mercedes	B-Class	W246
Any 2014->2021	Mercedes	C-Class Sedan	W205
Any 2015->2021	Mercedes	C-Class Coupe	C205
03/2015->2018	Mercedes	CLA	C118
08/2014->2019	Mercedes	CLS Coupe	W218
11/2014-2016	Mercedes	E-Class Sedan	W212
02/2016->2020	Mercedes	E-Class Sedan	W213
06/2015->2016	Mercedes	E-Class Coupe	C207
02/2016->2020	Mercedes	E-Class Coupe	C238
10/2016+	Mercedes	G-Class	W463
09/2016->2019	Mercedes	GL	X166
09/2015->2019	Mercedes	GLA	X156
Any 2016->2020	Mercedes	GLC	X253
Any 2016->2019	Mercedes	GLE	W166
Any 2015+	Mercedes	GT AMG	C190
Any 2016->2020	Mercedes	SLC	R172
Any 2016->2021	Mercedes	SL	R231
Any 2016->2020	Mercedes	CL	W216
Any 2014->2020	Mercedes	S-Class	C217, W222, X222
Any 2014->2020	Mercedes	Vito	W447

KIT CONTENTS

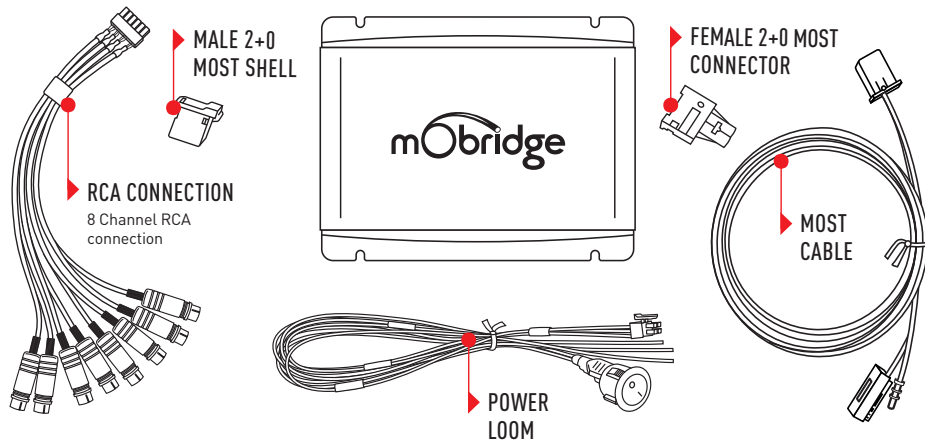
DA-G2.Entry MOST150 Kit

The mObridge DA-G2.Entry MOST150 kit contains the following items:

- / DA-G2 MOST150 unit
- / Power, Ground & Remote wiring harness
- / MOST 'T' piece harness
- / Male 2+0 shell for harness extension
- / Female 2+0 MOST connector for harness extension
- / Free software download from mObridge DSP PC Application on our website www.mobridge.us (This is not provided in the package contents)

DA-G2.Standard MOST150 and DA-G2.Pro MOST150 Kits

The DA-G2.Standard MOST150 and DA-G2.Pro MOST150 kits include everything that is in the DA-G2.Entry MOST150 Kit but adds an 8x RCA output cable for Analog Outputs.

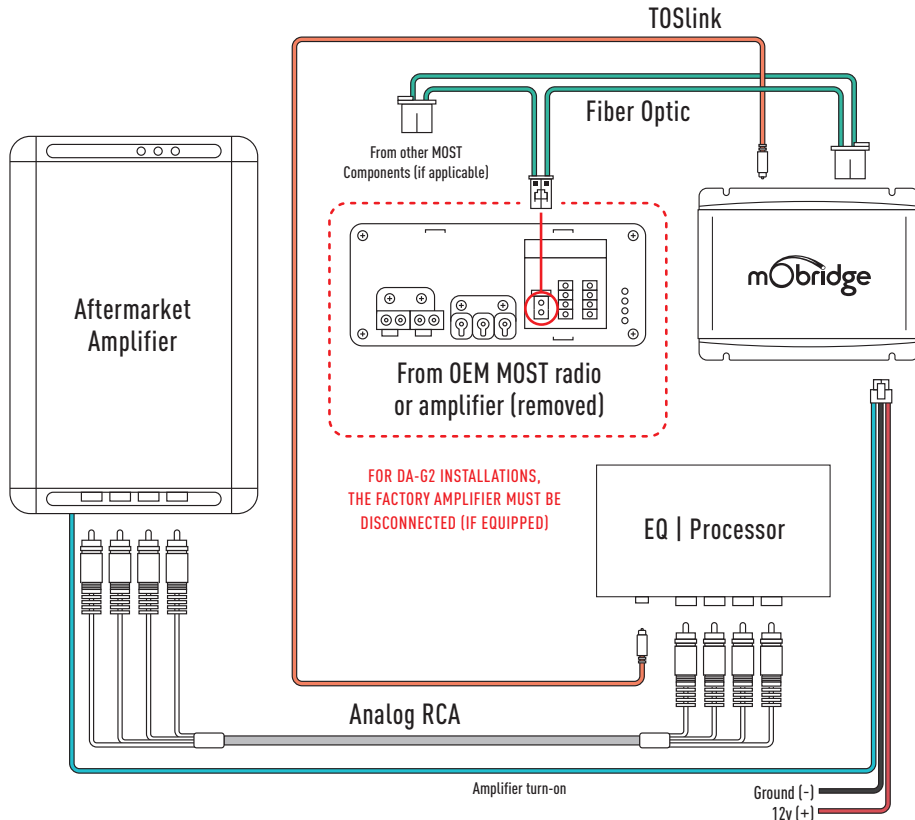


TECHNICAL SPECIFICATIONS

INPUT	
Digital Input	MOST150 Optical
OUTPUT	
Digital Outputs	TOSLINK (24bit 48kHz)
Frequency Response (Digital)	20Hz - 24KHz
Analog Outputs	10 Channels (RCA)
Output Voltage (Peak)	7.2V
Output Voltage (RMS)	3.6V
Analog Output Type	Single-Ended
Signal-to-noise Ratio (Analog)	112dB
Frequency Response (Analog)	20Hz - 24KHz
THD+N @ -1dBFS	-107dbFS
Digital-Analog Converter	32bit 48kHz
Digital Signal Processor	32bit Blackfin Processor
POWER SUPPLY	
Current Consumption (Stand-by)	<3mA
Current Consumption (Operational)	300mA
Operational Voltage	8-22 Volts
Remote Turn on Output	Automatic
Remote Turn on Voltage	12V
Remote Turn on Current	500mA
OTHER	
Dimension	110mm x 80mm x 30mm
Weight	200g
Country of Origin	Australia

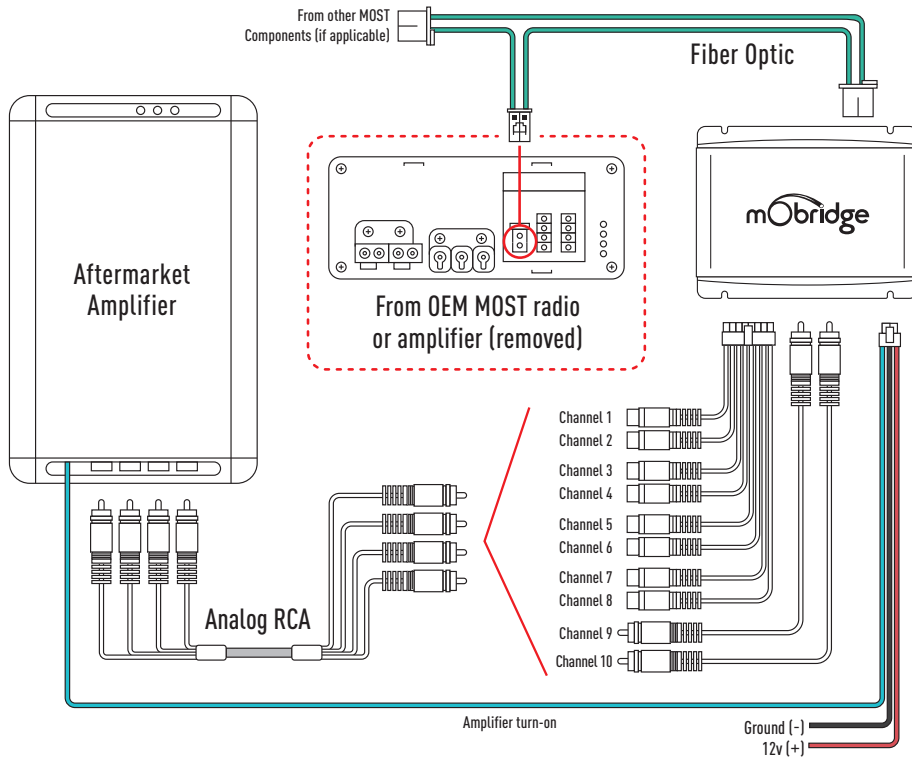
HARDWARE INSTALLATION

SYSTEM LAYOUT | DA-G2.ENTRY MOST150



SYSTEM LAYOUT | DA-G2.STANDARD MOST150 & DA-G2.PRO MOST150

FOR DA-G2 INSTALLATIONS, THE FACTORY AMPLIFIER
MUST BE DISCONNECTED (IF EQUIPPED)



INSTALLATION GUIDE

WIRING HARNESS

- 01** For MOST150 DA-G2 installations, the installation process changes depending on whether the vehicle has an amplifier, and also if it has MOST fiber optic presently installed.
- a** For vehicles with a fiber amplifier, the factory amplifier must be removed and the DA-G2 unit can be installed in its place. Connect the OEM fiber previously connected to the amp, directly into the DA-G2 MOST150 unit.
- b** For vehicles without an OEM amplifier or MOST fiber, use the supplied optic extension and connect from the fiber port behind the radio to the MOST fiber port on the DA-G2.
- c** For vehicles without an OEM amplifier but still equipped with MOST fiber, disconnect the fiber from the radio and connect it to the supplied 'T' piece harness. Connect one side of the 'T' piece harness to the DA-G2 MOST150 and then connect the remaining plug back to the radio unit to add the DA-G2 MOST150 to the MOST loop.

*** NOTE:** with options (b) and (c), you must reprogram the system to use the external amplifier for the DA-G2 MOST150 to operate properly. Use the mObridge MOST150 OBD programmer to reprogram the system.

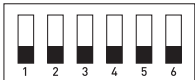
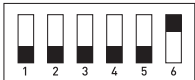
- 02** Connect the wiring harness to the POWER socket on the DA-G2.
- 03** Connect the desired audio output(s) to the DA-G2: (Note: both Analog and Digital outputs can be used simultaneously)
- a** If using analog RCAs for the signal to the amplifier, connect the provided RCA output harness to the ANALOG OUT port on the DA-G2.
- a** If using the digital TOSLINK for the signal to the amplifier, connect a TOSLINK cable to the TOSLINK OUT port on the DA-G2.

REMOTE WAKEUP

The MOST150 DA-G2 kits come with remote wake-up functionality. The remote wake-up wire (Blue) is used to power on the amplifier with the vehicle's accessory power at the same time as the rest of the audio system. We recommend this be installed by a professional installation technician.

DIP SWITCHES

There are 6 dip switches on the MOST150 DA-G2 unit. If the vehicle has a Burmester amplifier, then the DA-G2 MOST150 requires the dip switches to be changed to the Burmester setting to be compatible on MOST150 as shown in the table below.

SWITCH SETTINGS	VEHICLE	RADIO
	Mercedes	NTG5.x
	Mercedes	NTG5.x Burmester

LED STATUS

LED	LED STATUS	INDICATION
A (Leftmost)	Flashing	Audio Processing
B	Solid	MOST150 Link
C (Rightmost)	Solid	Master Sync

GRAPHICAL INTERFACE OPERATION

The mObriidge Graphical user interface (GUI) can be downloaded from www.mobridge.us and can be used in both online and offline mode. However, in order to 'Map the channels,' you will need to be connected to the DA-G2 MOST150 with power connected too. Offline mode allows you to configure Graphic EQ settings and store them for later fine-tuning in the car if desired. We recommend all tuning be done with a 'Live' system because this way you can hear all changes being made in real-time.

SOFTWARE UPDATE

The mObridge DA-G2 MOST150 series can be software updated via its USB connection and use of mObridge DSP software interface that runs on Windows and macOS. The mObridge DSP can be downloaded from support on our website www.mobridge.us/support

Once the GUI has been installed, the latest DA-G2 MOST150 software can be applied. mObridge DSP

can perform software updates either using the online updater, or you can download the latest software for an offline update at www.mobridge.us/support

The mObridge DA-G2 MOST150 unit will need to be connected in the car and powered up for the unit to be updated. Once it has connected to mObridge DSP the user will be presented with the following screen (FIG 01).

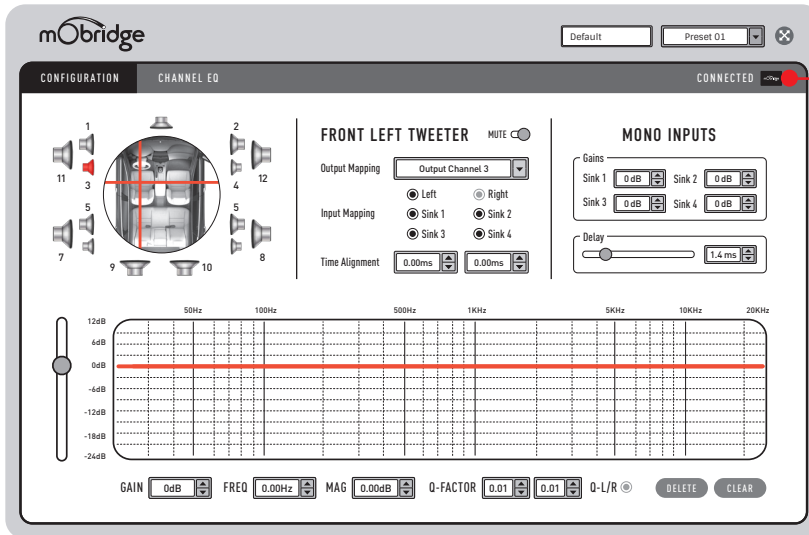


FIG 01

DA-G2 MOST150 is connected to the mObridge DSP

Once the DA-G2 MOST150 is connected via the GUI we can just click on the 'Connected' in the top right-hand corner and this will bring us to the update page as seen below (FIG 02).

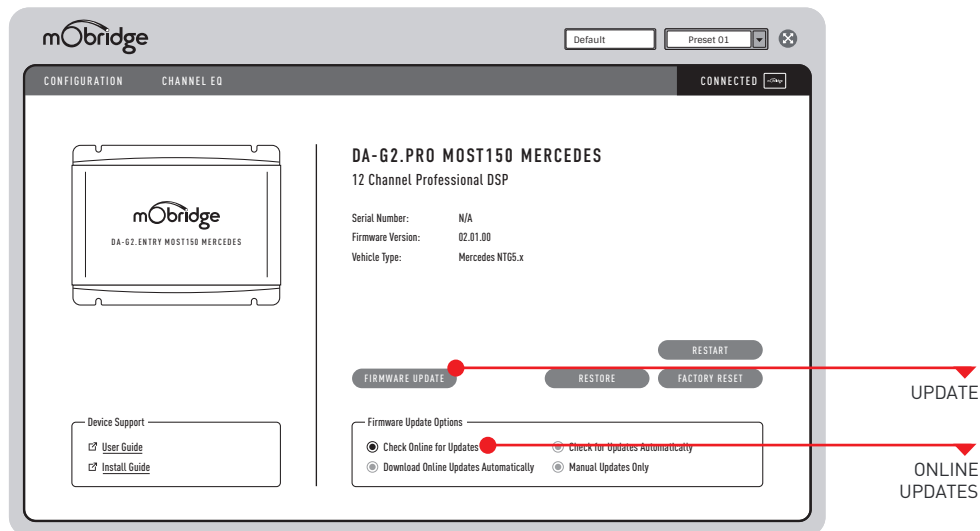


FIG 02 Update Page

If performing an online update, make sure the 'Check Online for Updates' option is ticked and then press the 'Firmware Update' button. This will automatically check for the latest software update for the connected device and begin the upgrade process.

If performing an offline update, make sure the 'Check Online for Updates' option is unticked and then press the 'Firmware Update' button.

This will open a window where you can select the new DA-G2 MOST150 firmware file to update to and the update procedure will begin.

Once the update has completed, the DA-G2 MOST150 unit will reboot and start the system again. Sometimes it is a good idea to let the car sleep after the firmware upgrade as some MOST systems do not like ECU's resetting on the MOST bus.

SPEAKER MAPPING

Once the DA-G2 MOST150 unit is connected to the mObridge DSP application, you will see the below screen (FIG 03).

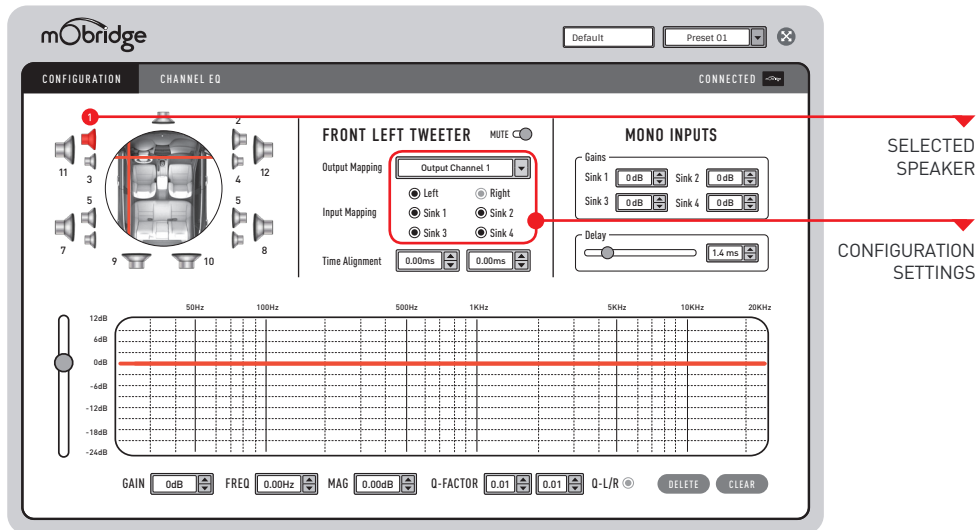


FIG 03 Configuration Page

This configuration screen will allow you to configure the channels for the correct mapping of your particular system.

First select a speaker from the image of the vehicle in the top left corner, then select an output mapping from the drop-down menu in the middle of the screen to select the channel output you have connected for that particular speaker.

Repeat this for each speaker and its corresponding output channel.

When running a component speaker system with a passive crossover, only select one of the speakers in the cluster. It is not important which speaker is chosen, as this is only the mapping stage. Crossover settings will allow for correct settings for this type of speaker system.

Next, you will need to allocate the appropriate input mappings to each speaker. For each speaker, simply select the speaker image in the top left corner, and then click the appropriate 'Input

Mapping' options for each speaker. If multiple input mappings are selected, these sources will be combined and summed.

SAVING SETUPS & PRESETS

The DA-G2 MOST150 will automatically save setups upon shutdown of the MOST system. This needs to happen 'gracefully', meaning the car needs to go to sleep on its own, power cannot be pulled from the unit.

The DA-G2 MOST150 has four different presets and these can be tuned individually. The channel mapping will remain across all four presets and will also apply default filter setups to the speakers to avoid speaker damage. These can be selected with the drop-down menu in the top right corner as below (FIG 04).

File Options Tools Help

New
Save
Save As
Open
Fullscreen On
Exit

CHANNEL EQ CONNECTED

Default Preset 01

PRESET NUMBER

SAVE SETTINGS

1 2
11 3 4 12
5 5
7 9 10 8

FRONT LEFT TWEETER MUTE

Output Mapping: Output Channel 1

Input Mapping: Left Right Sink 1 Sink 2 Sink 3 Sink 4

Time Alignment: 0.00ms 0.00ms

MONO INPUTS

Gains: Sink 1 0dB Sink 2 0dB Sink 3 0dB Sink 4 0dB

Delay: 1.4 ms

12dB 6dB 0dB -6dB -12dB -18dB -24dB

50Hz 100Hz 500Hz 1KHz 5KHz 10KHz 20KHz

GAIN 0dB FREQ 0.00Hz MAG 0.00dB Q-FACTOR 0.01 0.01 Q-L/R DELETE CLEAR

FIG 04

Saving tuned settings

You can save a backup of all of your presets by simply clicking the 'File Button' on the top menu bar and then 'Save As' as shown in the screen on the previous page (FIG 04). This will save a backup of your setup across all four presets and this file can be used to load in saved settings.

It is also possible to pull these presets up by using the Logic7 mode in the Mercedes-Benz vehicles. You can select on or off to change presets, as shown in the screens below (FIG 05).

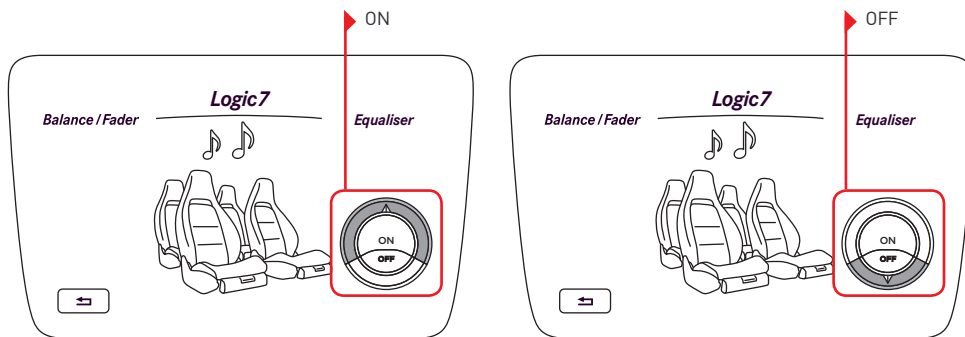


FIG 05 Logic 7 mode | Changing presets

FCC INFORMATION (FOR US CUSTOMERS ONLY)

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 in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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 interface 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.

Warning: Any changes or modifications not expressly approved by mObridge, Inc. could void the user's authority to operate this equipment.

DISCLAIMERS

01 Dolby Digital, DTS and other proprietary digital formats are not supported by the DA series of products. These features require licensing from Dolby, DTS and other manufacturers to support these features.

02 Vehicle Coding

Some vehicles may require coding. mObridge endeavours to be aware of which vehicles and procedures are required for this by producing vehicle manufacturer installation notes. However, we will not be responsible should third party diagnostics tools be required and nor will we be responsible for the costs involved in this coding or any monetary costs incurred either from third party diagnostics specialists/dealers or directly from consumers or installation specialists.

03 Vehicle Features

Whilst mObridge endeavours to develop products that seamlessly integrate to the existing vehicle infrastructure, we will not be held legally responsible should some OEM vehicle features not operate as intended. Please be aware that mObridge does not have access to OEM vehicle data bases. When fitting a DA product to the vehicle some features such as Bluetooth echo, volumes on specific sources such as Nav, Voice and Reverse Park distance may differ from the factory amplifier and this is due to end of line vehicle configuration at the manufacturer's factory.



MOBRIDGE.US

CONTACT US

PHONE +61 3 9465 5997 / INQUIRIES sales@mobridge.com.au

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