DA-G2 MOST150 VAG PROCESSOR

MOBRIDGE.US

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MOST®

AUSTRALIAN DESIGNED & ENGINEERED

AUDIO REIMAGINED | mObridge

DA-G2 MOST150 VAG

VW | AUDI | PORSCHE | BENTLEY

CONTENTS

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.

WELCOME

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

The mObridge OA-G2 MOST150 VAG processor seamlessly converts late model Audi, Volkswagen, Porsche and Bentley factory MOST-150 audio bus to 12-channel analog RCA and Toslink output. Adding aftermarket amplifiers to the OE MIB, MIB2. MIB2.5, MIB3 or PCM4. PCM4.1. PCM5.0 and PCM6 system is now possible.

This kit integrates with the OEM MOST® bus to retain volume control. full fade (analog only) and balance, treble. mid-range, basic control, and Bluetooth voice calls.

NOTE: OEM radio systems not equipped with an amplifier or fiber must be flashed with the VAG-COM. Vehicles equipped with an OEM amplifier do not need to be programmed. Cars with the MIB3 system require our OBD programmer regardless of whether there is an amplifier present or not.

We hope you enjoy your new enhanced listening experience!

OVERVIEW

VEHICLE COMPATIBILITY

The mObridge DA-G2 MOST150 VAG processor is compatible with specific late model Audi, Volkswagen, Porsche and Bentley vehicles. Please refer to the table below for the complete compatibility list.
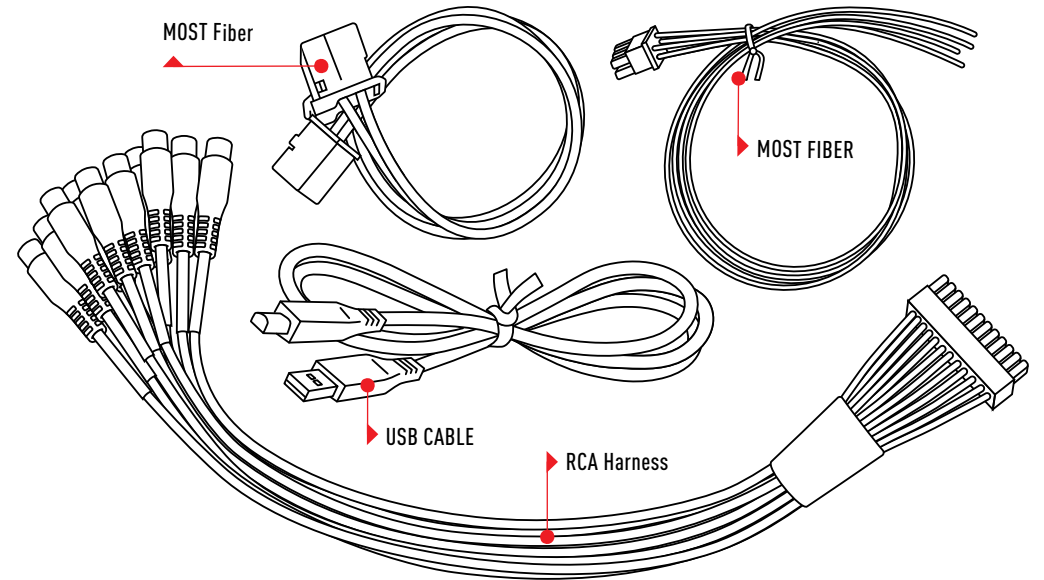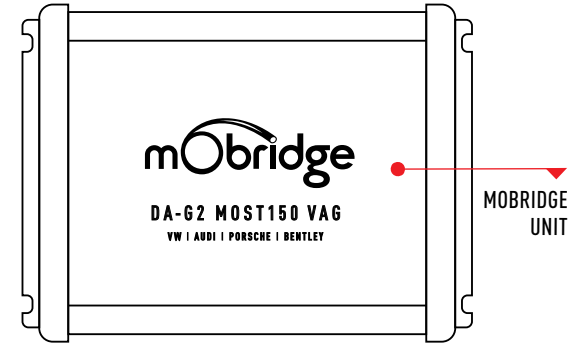
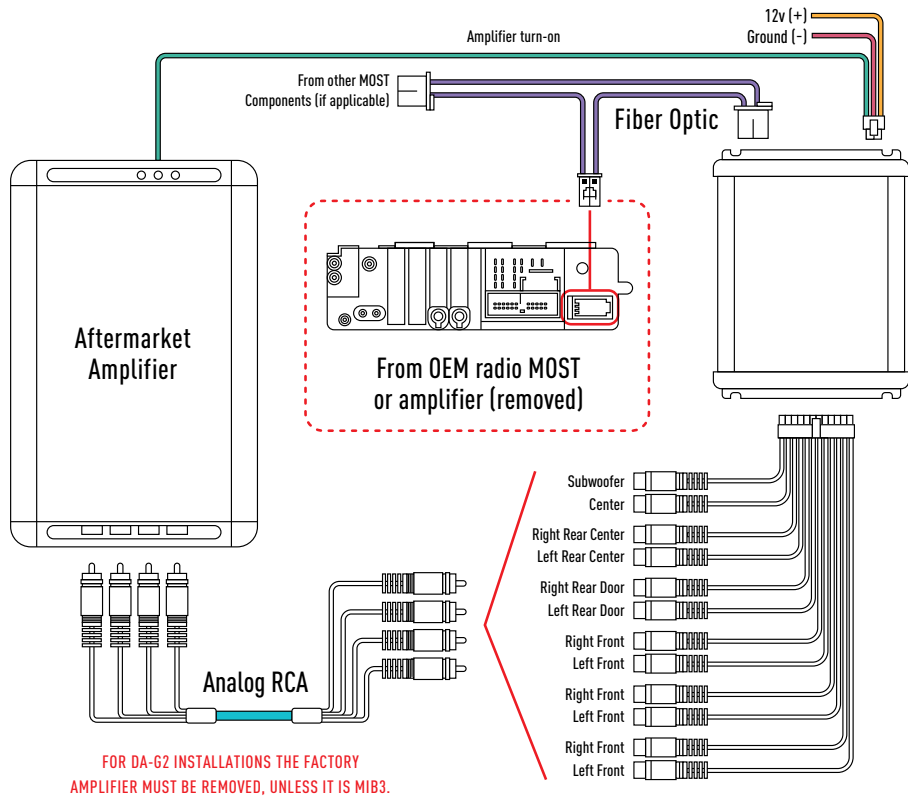| YEAR	MAKE	MODEL
2015+	AUDI	Any model with confirmed MIB, MIB2, MIB3 or MIB HS (A3, TT, etc.)
2017+	AUDI	A3, A4, A5, A6, A7, A8, Q5, Q7, S3, S4, S5, S6, S7, S8, SQ5, TT , e-tron
2017+	Porsche	911, Boxster, Cayenne, Cayman, Macan, Panamera
2017+	Bentley	Bentayga
2016+	VW	ANY model with MIB, MIB2, MIB3 or MIB-HS

KIT CONTENTS

DA-G2 MOST150 VAG processor

The mObridge DA-G2 MOST150 VAG processor kit contains the following items:

/ DA-G2 MOST150 VAG processor unit

/ MOST Fiber extension

/ Power Harness

/ RCA Harness

/ USB Cable

MOBRIDGE UNIT

MOST Fiber
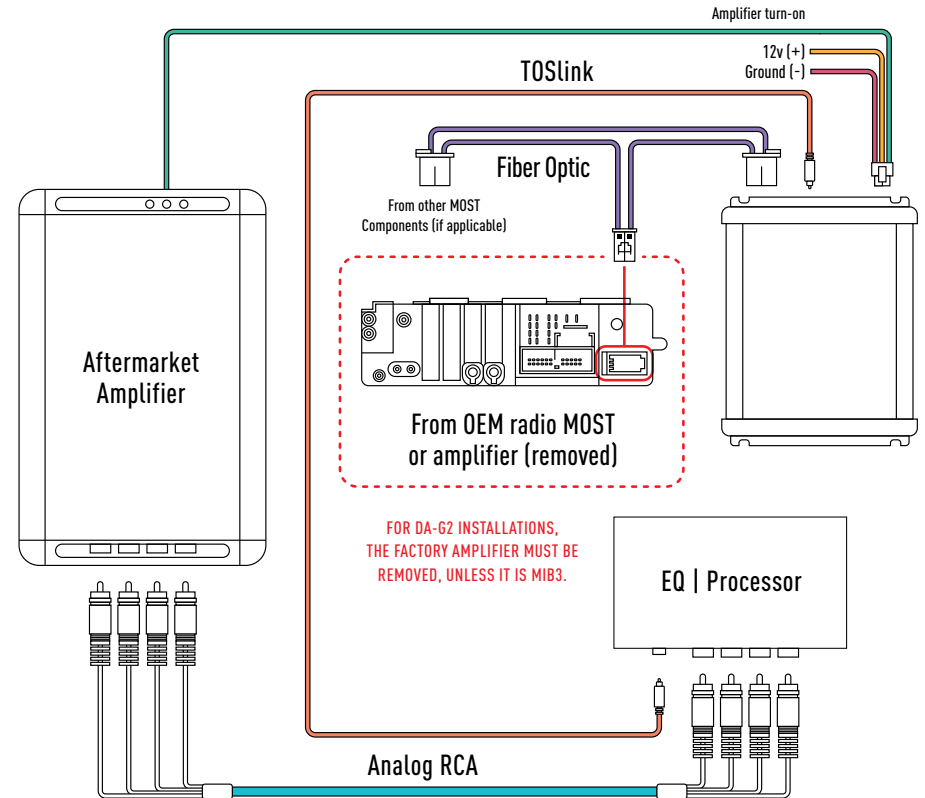
MOST FIBER

USB CABLE

RCA Harness

HARDWARE INSTALLATION

SYSTEM LAYOUT | DA-G2 MOST150 VAG (ANALOG)

Amplifier turn-on

12v (+)
Ground (−)

From other MOST
Components (if applicable)

Fiber Optic

Aftermarket
Amplifier

From OEM radio MOST
or amplifier (removed)

Subwoofer
Center
Right Rear Center
Left Rear Center
Right Rear Door
Left Rear Door
Right Front
Left Front
Right Front
Left Front
Right Front
Left Front

Analog RCA

FOR DA-G2 INSTALLATIONS THE FACTORY
AMPLIFIER MUST BE REMOVED, UNLESS IT IS MIB3.

HARDWARE INSTALLATION

SYSTEM LAYOUT | DA-G2 MOST150 VAG (DIGITAL TOSLINK)

Amplifier turn-on

TOSlink

12v (+)
Ground (−)

Fiber Optic

From other MOST
Components (if applicable)

Aftermarket
Amplifier

From OEM radio MOST
or amplifier (removed)

FOR DA-G2 INSTALLATIONS,
THE FACTORY AMPLIFIER MUST BE
REMOVED, UNLESS IT IS MIB3.

EQ | Processor

Analog RCA

UNIT CONNECTIONS

USB (UPDATE)

TOSLINK OUTPUT

WARNING
Do not connect any RCA cables to the mObridge interface or additional processors prior to properly grounding aftermarket amplifier(s).

POWER CONNECTOR

Status LED

MOST 150 FIBER INPUT

FUTURE USE

DIP SWITCHES

FUTURE USE

ANALOG RCA OUTPUTS
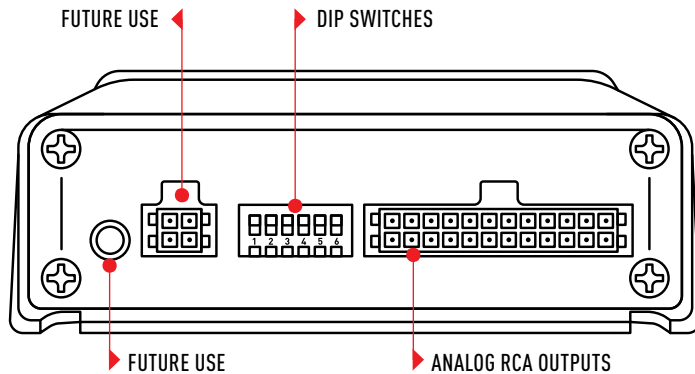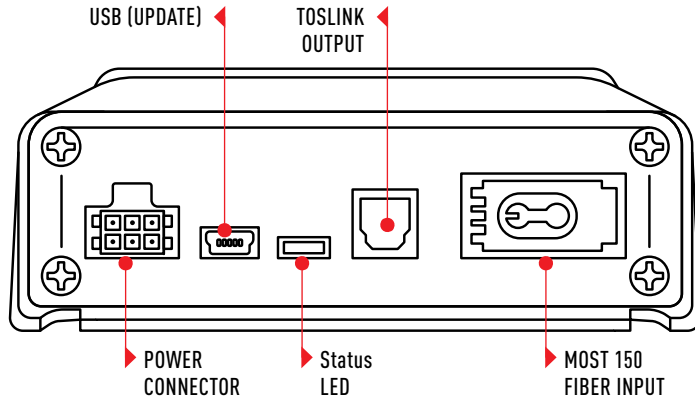
INSTALLATION GUIDE

01 If this vehicle has a factory amplifier, it must be removed and the mObridge can be installed into its place. **If this is an MIB3 system, then the mObridge is installed at the MMI module and the amp remains connected.**

If this vehicle is not amplified from factory, install the mObridge behind the radio.

**02** Connect the following wires from the provided **power harness:**

| 6 | 5 | 4 |
| 3 | 2 | 1 |
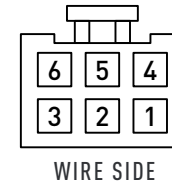
WIRE SIDE

PIN	COLOUR	TO VEHICLE
1	Yellow	12v (+) Constant
3	Violet	Reserved, NOT USED
4	Black	Ground (-)
6	Blue	12v (+) remote output*

*This remote wire must be used for aftermarket amplifier remote for proper functionality. **A relay should be used for reliable turn-on (500mA max).**

03 Before connecting power to the mObridge, adjust dip-switch settings for the desired options:

	TIME ALIGNMENT	ATTENUATION	TOSLINK DOWNMIX	LOUDNESS	VEHICLE SETTINGS	
POSITION	DIP 1	DIP 2	DIP 3	DIP 4*	DIP 5	DIP 6
UP (off)	Front Row	Full Scale output (0 dB)	DownMix ON	Loudness OFF	See Below	
DOWN (on)	Driver Focused	-12 dB output	DownMix OFF	Loudness ON		

VEHICLE SETTINGS
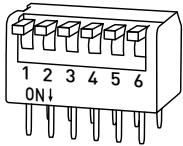
	AUDI		PORSCHE OR AUDI MIB3		BENTLEY BENTAYGA		VOLKSWAGEN	
	DIP 5	DIP 6	DIP 5	DIP 6	DIP 5	DIP 6	DIP 5	DIP 6
	X	X		X	X			
			X			X	X	X

04 If using analog RCAs for signal to the amplifier, connect according to the reference chart below

WARNING: Do not connect RCA cables to this interface until all amplifiers/external processors are properly grounded. Failure to do this may cause damage to the interface and VOID the warranty!

01	02	03	04	05	06	07	08	09	10	11	12
Left Front	Right Front	Left Front	Right Front	Left Front	Right Front	Left Rear Door	Right Rear Door	Left Rear Center	Right Rear Center	Center	Sub

05 If using TOSLink for signal to the amplifier, connect the cable to the TOSLink port shown on page 2. NOTE: both Analog and Digital output sound simultaneously, regardless of which type is used.

06 Connect the provided **MOST Fiber Cable** from the (previously removed) amplifier, or from the radio/MMI's fiber port to the MOST port on the mObridge.
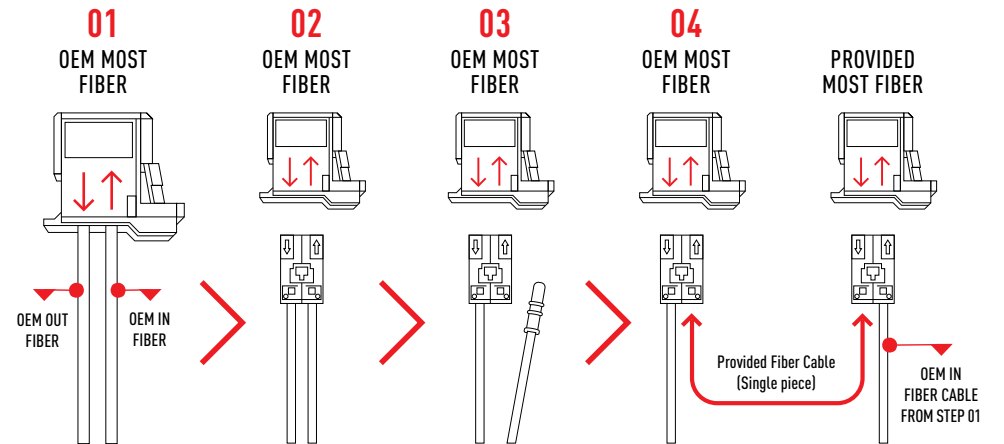
INSTALLATION NOTES

This interface can be installed in vehicles with or without an amplifier & with or without MOST fiber optic presently installed.

01 Vehicles with fiber amplifier: the amplifier must be removed (unless it is MIB3.) Connect the OEM fiber previously connected to the amp, directly into the mObridge.

02 Vehicles without OEM amplifier or MOST fiber: Use the supplied fiber optic extension and connect from the fiber port behind the radio/MMI to the MOST fiber port on the mObridge.

NOTE: If the vehicle does not possess an OEM amplifier, you must program the system for external amplifier for the mObridge to operate properly. Use a VAG-COM or mObridge programmer (sold separately). For an MIB3 System, only the MIB Programmer must be used.

03 Vehicles with MIB3 or without an amplifier but still equipped with fiber: Disconnect the fiber from the radio, disassemble the fiber coupler and route the provided MOST extension into the factory MOST loop as shown below (to continue proper MOST data flow):

*NOTE: in this scenario, the vehicle still must be programmed for external amp (see red note above).

01 OEM MOST FIBER

02 OEM MOST FIBER

03 OEM MOST FIBER

04 OEM MOST FIBER

PROVIDED MOST FIBER

OEM OUT FIBER

OEM IN FIBER

Provided Fiber Cable (Single piece)

OEM IN FIBER CABLE FROM STEP 01

TUNING TIPS

01 Before beginning tuning process (especially with external EQ/Processors), set Bass & Treble on the head unit for each source to flat (0).

02 Begin with amplifier/EQ gains all the way **down**.

03 With dynamic music playing, adjust the radio volume to maximum.

04 Adjust the amplifier/EQ gains to desired maximum level.

From the factory, some vehicles' audio will attenuate when in reverse. Simply set the 'reverse volume' to desired level while in reverse to adjust this. The mObridge will retain this method. The same is true for NAV guidance audio and BT voice calls.

# MULTI-COLOR LED STATUS INDICATION
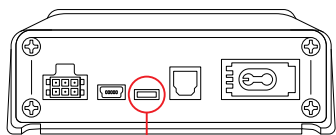
Status LED

LED STATUS	INDICATION
Solid Red	MOST Active
Violet	MOST traffic commands
Blinking Red	Peaking (maximum digital signal level achieved)
Blinking Blue	PC Link with app (future use)

DOWN MIX SCENARIO EXAMPLES

SOURCE SIGNAL	DOWN MIX	TOSLINK OUTPUT	ANALOG FRONT OUT	ANALOG SIDE OUT (7,8)	ANALOG REAR OUT (9,10)	CENTER CHANNEL OUT	SUB OUT
2 Channel (Music)	ON	Stereo	Stereo Front	Stereo Rear	Stereo Rear	Muted	Mono (L+R)
2 Channel (Music)	OFF	Stereo Front	Stereo Front	Stereo Rear	Stereo Rear	Center	Mono (L+R)
5.1 Surround	ON	Mixed Stereo*	Front + Center	Rear + Center	Rear + Center	Muted	Mono (L+R)
5.1 Surround	OFF	Stereo Front	Stereo Front	Rear Back Surround	Rear Back Surround	Center	LFE**
7.1 Surround	ON	Mixed Stereo*	Front + Center	Rear + Center	Rear + Center	Muted	Mono (L+R)
7.1 Surround	OFF	Stereo Front	Stereo Front	Side Surround	Rear Back Surround	Center	LFE**

*Mixed Stereo: (Left = LeftFront + Center + LeftSurround + LFE), (Right = RightFront + Center + RightSurround + LFE)
**LFE: Low Frequency Effects: Surround subwoofer output.

LEFT BACK SURROUND   LEFT SIDE   LEFT FRONT

CENTER CHANNEL

SUBWOOFER

RIGHT BACK SURROUND   RIGHT SIDE   RIGHT FRONT
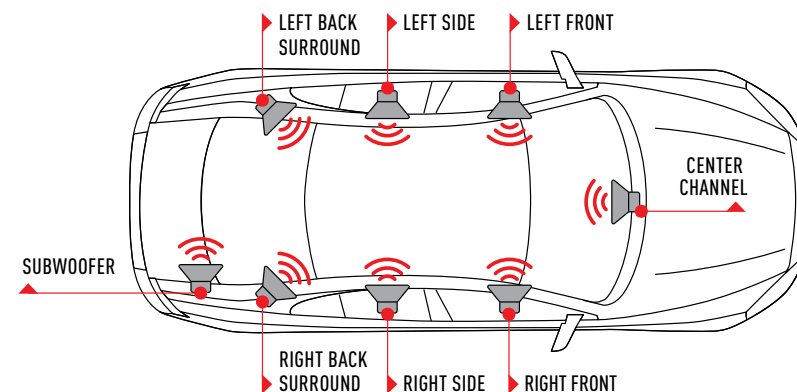
TECHNICAL SPECIFICATIONS

HARDWARE & SOFTWARE VERSION	
Current Hardware Version	--1r0--
Current Software Version	mObridge 1.6.26-3-19-19
Current Software Version	Windows 7 (64 bit), 8, 10

INPUT	
Digital Input	MOST 150 Fiber Optic

OUTPUT	
Digital Outputs	TOSLink
Digital Outputs supported	24bit/48kHz
Frequency Response (digital)	18Hz – 24kHz
Analog Outputs	12 channels (RCA)
Output Voltage Peak	6v
Output Voltage RMS	2.1v
Analog Output Type	Single-Ended
S/N Ratio (analog)	123dB
Frequency Response (analog)	18Hz – 24kHz
THD+N @-1dBFS	-94dB
DAC	48kHz 32bit
DSP	32bit Floating Point
Delay (Time Alignment)	Selectable

POWER SUPPLY	
Current Consumption (Stand-by)	< 1mA
Current Consumption (Operational Idle)	350 mA MAX
Operational Voltage	7V – 20V DC
Amp Turn-On Output	Automatic
Amp Turn-On Voltage	V-batt
Amp Turn-On Current Limitation	500mA

OTHER	
Dimension	4"x 5"x 1 3/8"
Weight	10oz
Country of Origin	USA

ADDED CONTROLS AND OPTIONS

When flashing the vehicle for fiber (if not factory fiber or amp-equipped), you will gain extra audio controls not available previously. See below for each vehicle radio type for what gets added.

AUDI A3 | MIB

For AUDI A3, Surround is added, and is used for direct Subwoofer control from the mObridge (RCA #12) **(figure 01)**.
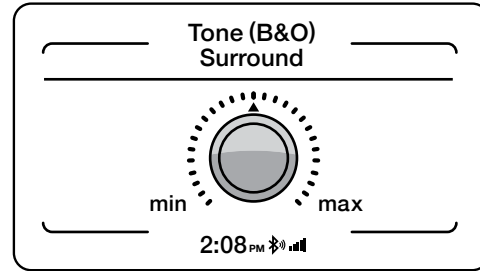
FIG 01   AUDI A3

AUDI | MIB-HS

For AUDI vehicles with MIB HS or MIB 2 (new high-res GUI), Subwoofer, Bass, Mid-range and Treble are now individually controllable from the radio screen, direct to the mObridge. **(figure 02)**.
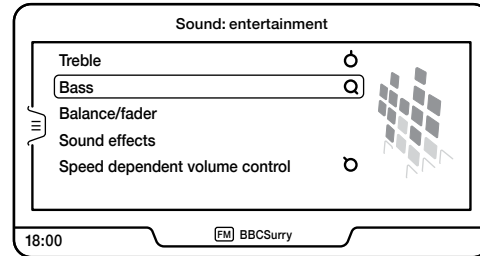
FIG 02   AUDI MIB-HS

VW VEHICLES | MIB 2STD

For VW vehicles, an extra sound control menu is added. Subwoofer, Bass and Treble are now individually controllable from the radio screen, direct to the mObridge. **(figure 03)**.
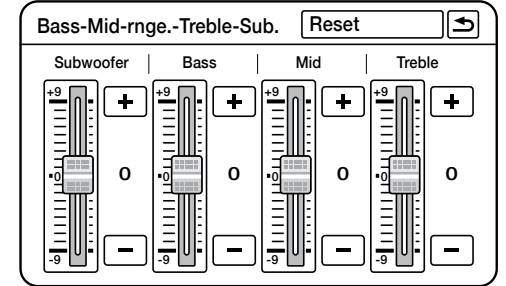
FIG 03   VW vehicles MIB 2 STD

CONTROLS & AUDIO OPTIONS INFO | AUDI: MIB2.5

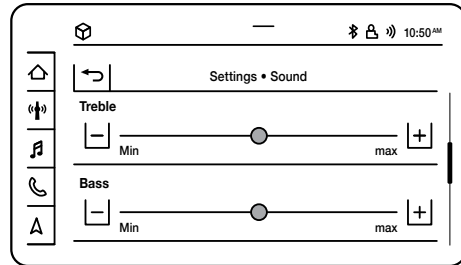**TREBLE Control**: Retained
BASS Control: Retained

FIG 04

BALANCE Control: Retained
FADER Control: Retained (Analog only)
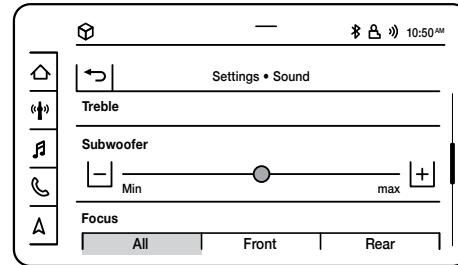
FIG 05

FOCUS Control: Retained
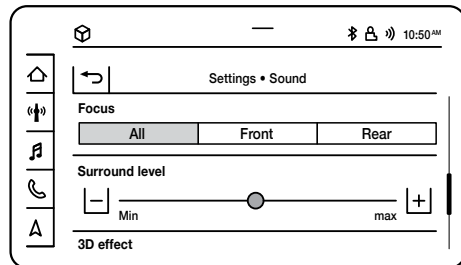**Surround Level Control:** NOT Retained

FIG 06

3D Effect: NOT Retained
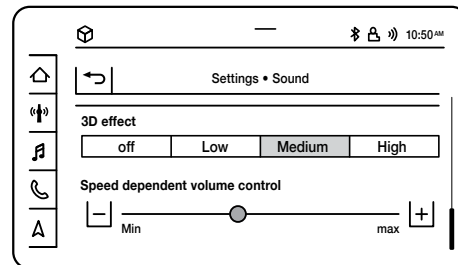**Speed dependent volume control:** NOT Retained

FIG 07

FAQ

/ For installations with this mObridge processor, make certain that any added amplifier's ground resistance (reference vehicle battery ground) **does not exceed 1 ohm.**

/ If you've installed a third-party DSP (receiving signal from the mObridge, before the amplifier) and you're having issues with audio bleeding from one channel to another, echoing Bluetooth phone calls or any other signal processing issues, **rule out the mObridge first**

by temporarily bypassing the third-party DSP and running signal directly from the mObridge to the amplifier(s) and verify the problem still exists before calling technical support.

/ **VW installs:** if the midranges are overwhelming, sound stage is narrow and there is equalization difference between front and rear channels, set the following bytes in long coding of MIB (using VAG-COM): 4,5,6,7 set to '00'. For more information on this, contact mObridge.

MIB3 PROGRAMMING

01 Start the vehicle and allow the MMI to fully boot and verify audio is playing.

02 Insert the MIB3 programmer into the vehicle's OBD port and wait approximately 30 second to 1 minute.

03 The LED on the Programmer should illuminate and the radio will turn off, and restart.

04 Once the radio begins the restart procedure, remove the Programmer from the OBD port.

05 After the radio restarts, if the mObridge is not currently connected, there will be no audio.

OBD2 PROGRAMMER

PC   LED

VAR1
VAR2
VAR3
VAR4

mobridge.com

NOTES

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