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MOST



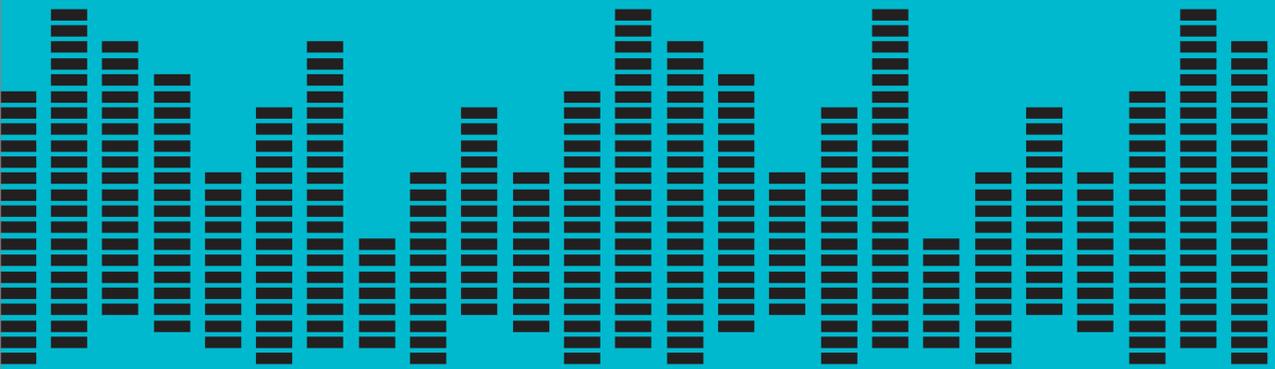
AUSTRALIAN
DESIGNED &
ENGINEERED

User Manual

Digital & Analog Pre-Amplifier | M1000-M-DA1 & M1000-M-DA2



MOST



Warranty

Your mObridge audio interface is warranted against any manufacturing defects for a period of 24 months from purchase. Any part of the mObridge audio interface may be replaced or repaired at the discretion of the manufacturer after such part is deemed to have a manufacturing fault. If you have any questions about your mObridge product, contact your local service agent, as listed on the www.mobridge.us/distributors web page.

Contents

mObridge Features	03
Audio Specification	06
Bypass Switch	06
Channel Mapping	07
Updating the Unit	08



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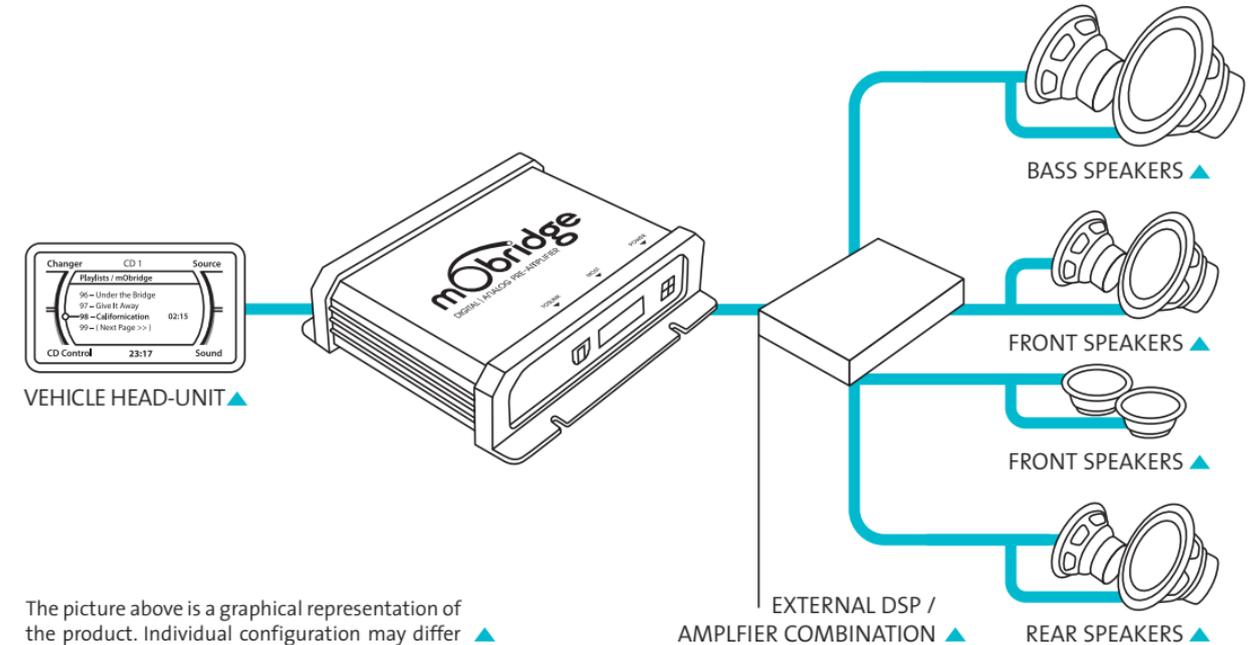
▶▶ Welcome to mObridge Pre-amp Technology

The DA Series allows full control of aftermarket amplifiers from the factory MOST Bus head unit, making a convenient and error-free connection with no cutting-and-splicing of the fibre optic cable. Vehicle owners can then add aftermarket components from a multi-channel high power amplifier and audio system. The unit also supplies an output to turn-on aftermarket audio components with a delay. The DA Series purpose is to ensure the integrity of each system while making the resources available on one side (OEM system) to the devices on the others side (Aftermarket system).

The DA Series extracts 20 Hz to 20 kHz of audio output via either 2 channel TOSLINK Digital output (DA1) or 8 channels of analogue audio output at 4V RMS (DA2), and allows full control from the factory radio of the aftermarket car audio system including volume, fader, balance, bass, treble and graphic equalizer where supported (e.g. BMW).

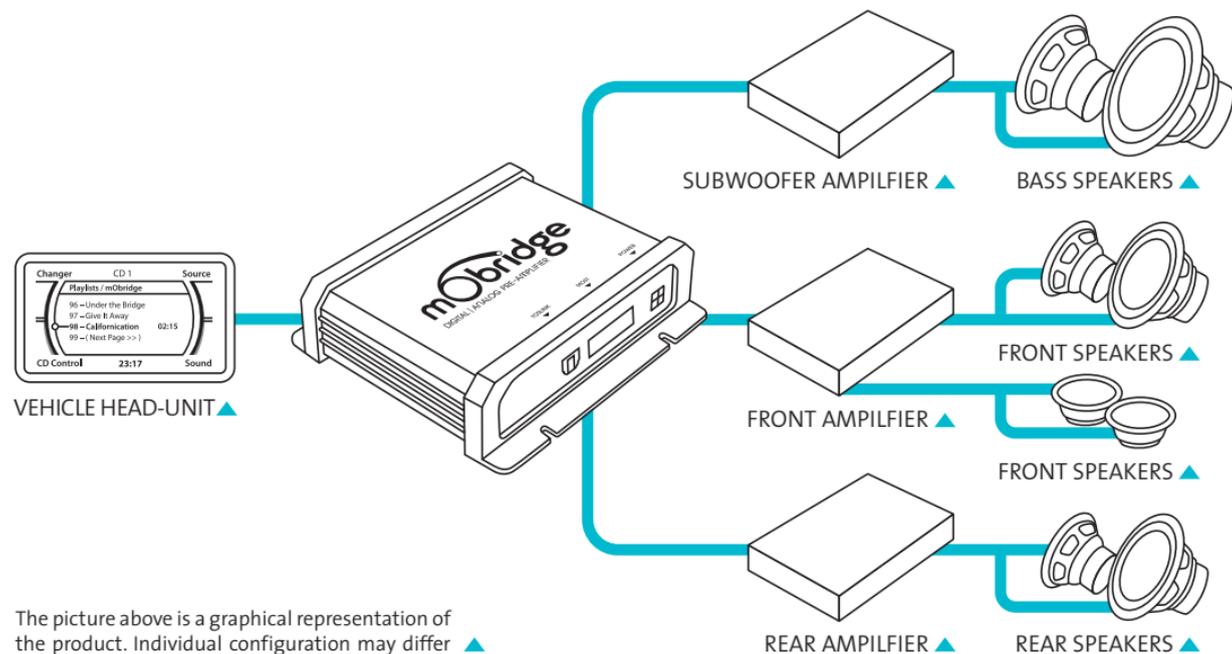
The preamp stage of the DA2 is driven by Burr Brown DAC converter that give to the customer an audiophile quality without any compromise. Moreover the Blackfin Processor gives to DA Series capability to introduce powerful Audio processing features.)

Features of Your DA1 mObridge Unit



The picture above is a graphical representation of the product. Individual configuration may differ ▲

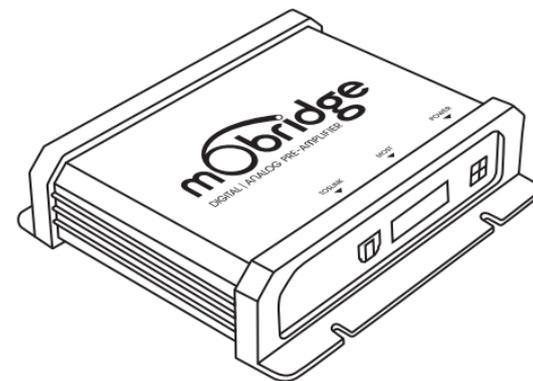
Features of Your DA2 mObridge Unit



The picture above is a graphical representation of the product. Individual configuration may differ ▲

mObridge Pre-Amplifier Features

DA Series connection to aftermarket amplifier via either TOSLINK Digital (DA1), or 8 channel RCA analogue (DA2) connection.



- ▶ 8-channel 192-kHz Sampling 24-Bit audio digital-to-analog converter (DAC) for the DA2
- ▶ DA1 has Audio output via digital TOSLINK.
- ▶ All output channels are full range 20Hz to 20KHz
- ▶ Audio output is via digital Toslink or 8 channels of RCA analog signal
- ▶ 8 output channels full range
- ▶ Allows for the full retention of factory controls including: Volume, Balance, Fader, and factory multiband Equalizer (where applicable)
- ▶ No need for external mounted controller or volume knob
- ▶ Eliminates the need to cut factory amplifier wiring
- ▶ Creates a 12 volt amplifier turn on and turn off signal
- ▶ Replaces the factory amplifier eliminating all unwanted digital signal processing

Audio Specification

Fade & Balance

The DA Series balance is accessed through the factory controls.

Due to the stereo nature of the TOSLINK (DA1) connection, fade is not possible to the rear although the user will observe that the front is faded out.

DA2 utilises fade more to those channels that the user designates as rear audio channels. The same is also true for the balance for those channels that a user designates as right and left channels.

Equalization

Some vehicle allow for a basic graphical equalization interface on the factory radio. The DA2 takes advantage of this and allows the user to adjust the DA2 graphical equalization. The DA1 does not have this ability due to the fact that the DA1 requires an external processor. The external processor has it's own equalization and therefore the DA1 does not contain the ability for the user to adjust the eq via the factory controls.

Bass & Treble

The DA Series utilises the factory controls, giving the user the ability to adjust +/- 12dB on Bass & Treble.

Bypass Switch

The bypass switch is provided to allow for the mObridge unit to become 'invisible' on the MOST vehicle bus system. The main use of this function is to facilitate dealer services when the diagnostic computer is in use and to ensure the mObridge unit does not interfere with the vehicle diagnostics.

The function can be enabled by toggling this switch 5 times. Once the bypass feature has been activated, the MOST bus will be broken for 2 seconds and the feature cannot be activated again for a further 10 seconds.

Once the bypass switch has been activated, it will remain activated across power cycles until the bypass is de-activated by toggling the switch again 5 times within a 5 sec time frame.

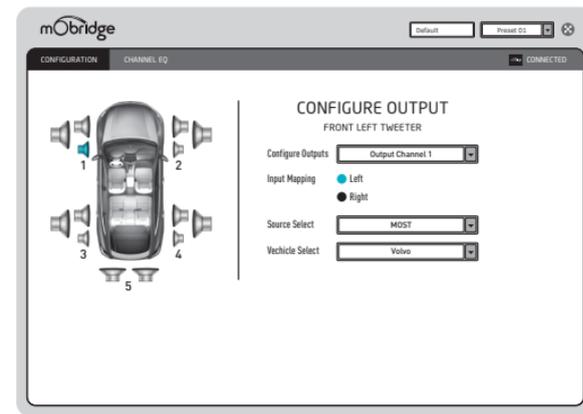
DA2 Channel Mapping

The Graphical User Interface can be downloaded from our website. In order to 'Map the Channels' you will need to be connected to the DA2 with power connected too.

Once downloaded, we recommend you open the application and connect to your DA unit via a USB cable (not provided). If power is connected to the DA and turned on, you will see the screen shown in FIG 01 on the following page.

The first thing you will need to do is to select the vehicle the DA is being installed to from the drop down menu in the middle of the screen. Then configure the channels for the correct mapping of your particular system. First select a speaker from the image of the vehicle then from the drop down menu in the middle of the screen, 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. When connecting a Mono Subwoofer or centre channel speaker, simply select the speaker image and click the 'Left' & 'Right' buttons

for the input mapping in order for the DA2 to know that this is a 'summed' channel output, providing information from both the left and right hand sides."



DA2 Channel Mapping FIG 01

Updating the DA Unit

Updating via the DSP Graphical Interface

The mObridge DA product can be software updated via its USB connection and use of the mObridge DSP software interface that runs on Windows and Mac PC's.

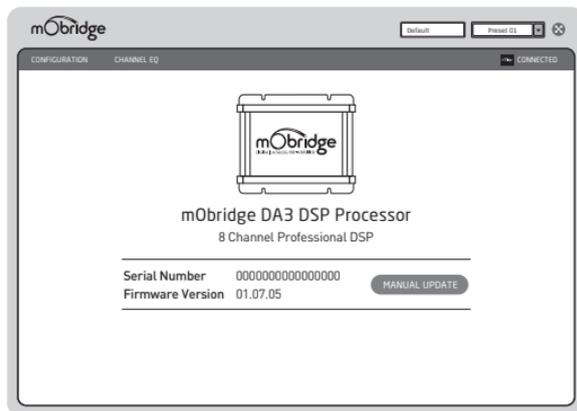
Once the GUI has been opened, the latest DA software can be applied. The latest software can be found on the mObridge website. www.mobridge.us/support

The mObridge DA unit will need to be connected in the car and powered up for the unit to be updated. Once it is connected to the DSP GUI the user will be presented with the following screen, FIG 02.

Click on the 'Manual Update' button and select the new DA firmware file (downloaded from the website and saved to your computer) and the update procedure will begin automatically.

▶ FIND THE LATEST SOFTWARE HERE

[DA1 mobridge.us/products/most-digital-toslink-pre-amp](http://mObridge.us/products/most-digital-toslink-pre-amp) | [DA2 mobridge.us/products/most-analog-pre-amp](http://mObridge.us/products/most-analog-pre-amp)



Manually updating your DA unit **FIG 02**

▶ DA1



▶ DA2



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

1) 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

2) Vehicle Coding Some vehicles may require coding. Fiberdyne Systems Pty Ltd endeavors 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.

3) Vehicle features Whilst Fiberdyne Systems Pty Ltd endeavors 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 Fiberdyne Systems Pty Ltd 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 manufacturers factory.