

TECHNICAL NOTE

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SD5 & SD5CS CONSOLE **INSTALLATION OF WAVES ® OPTION**

Important Note: These instructions are a guide to fitting the Waves option to an SD5. This option is normally supplied factory fitted and is not considered a user installed option. This note is for the use of factory approved technicians only.

Read the instructions carefully before starting, and leave yourself plenty of time to perform the upgrade

You will need to have the following tools to hand:

Pozi-screwdriver no1 stubby (less that 40mm)

Pozi-screwdriver no2

2.0 and 5.0 mm Hexagonal drivers (Allen Key)

Wooden or other prop to hold worksurface open

Before proceeding, first check the version of software and processor hardware in use.

Confirm the version of software presently running on the mixer. See master screen when the mixer is running.

If the existing mixer system is V760 (or below) and it is not intended to purchase Core 2 be aware V760 does not support current versions of Waves and the option should NOT be fitted. Contact local support for advice.

Current mixer versions support Waves only on a separate external control computer. Legacy internal Waves operation using versions up to V929 only is no longer supported by either Digico or Waves.

Refer to the pictures on page 4. Is the engine PCB a P16001 or PA16200?

If fitted with a P16200, the engine does not require the Waves connector interface PCB to be fitted, refer to notes on page 4.

If you are unsure about any part of the upgrade procedure, seek advice before proceeding.

You should also have available:

- 1) Authorisations for Waves Multirack, Superack, Waves Studio or a PC driver for recording at least, as obtained from Waves (<http://www.waveslive.com/html/soundgrid-for-digico.aspx>) This will be required to use the installation.
- 2) To fully test Waves functionality, you will also require a compatible PC to run the Waves software required, also usually a Soundgrid Server, a Waves approved 1GB Network switch and 3 CAT5e/CAT6 network cables. Details of approved switches and appropriate Cables can be found at <http://www.waveslive.com/html/soundgrid-switches.aspx>

Ensure you have taken appropriate anti-static precautions

The kit includes a disposable wrist strap and heel strap. Ensure you wear both. The wrist strap should be connected to the chassis of the engine whilst you work on it, in or out of the mixer. The heel strap ensures the skin of your leg is connected to the floor and not isolated by a rubber soled shoe.

Avoid working in areas with synthetic floor coverings or carpet, especially polypropylene material, as opposed to natural materials such as solid wood or wool. Ideally work at a proper workbench with ESD safe features, such as a metal frame. Before work, try to discharge yourself into a mains earth fitting, water pipe etc.

This is important as parts of this kit are static sensitive and even if any damage is not immediately obvious, so called "latent damage" can occur, where a device may be partially degraded yet continue to perform its intended function. However, the operating life of the device may be reduced dramatically, leading to premature failure.

If you are unsure about any part of the upgrade procedure, seek advice before proceeding.

Before you start:

Shut the SD5 down, switch off, and remove power leads.

Remove all connections [MADI, MIDI, Audio, Keyboard and Mouse, VGA etc]

Unscrew the 4 thumb screws on the engine.

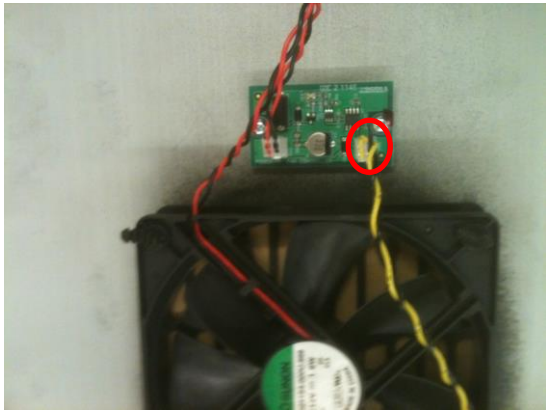


Slide out the engine. The engine rear ribbon cables can be disconnected and the engine removed to a separate bench if required.

Remove the 12 screws on the engine lid.



Carefully lift the lid and disconnect the two way IDC connector that is connected to the fan. Then remove the lid.



The Waves blank panel needs to be removed.
To remove this, unscrew the two hex screws inside the engine.



Fit the twist and flat cable to the Waves Soundgrid Card PA16062 Prior to fitting to the engine.



Fit the Waves soundgrid card to the engine using the 4 M3 screws supplied.

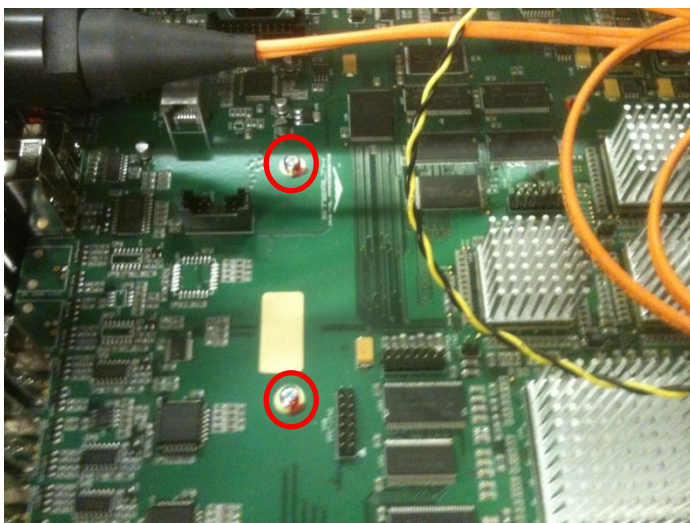


Note: The Waves interface connector is not required for (and cannot be fitted to) mixers shipped after November 2017. These have a P16200 processor PCB with the waves interface connector built in.

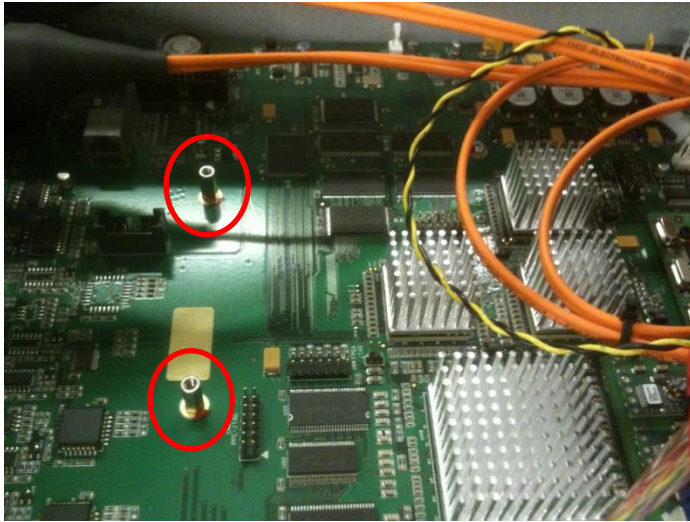


For earlier mixers refer to notes following about moving the engine tray and fitting the Waves connector PCB.

Remove the 2 screws from the DSP Card.

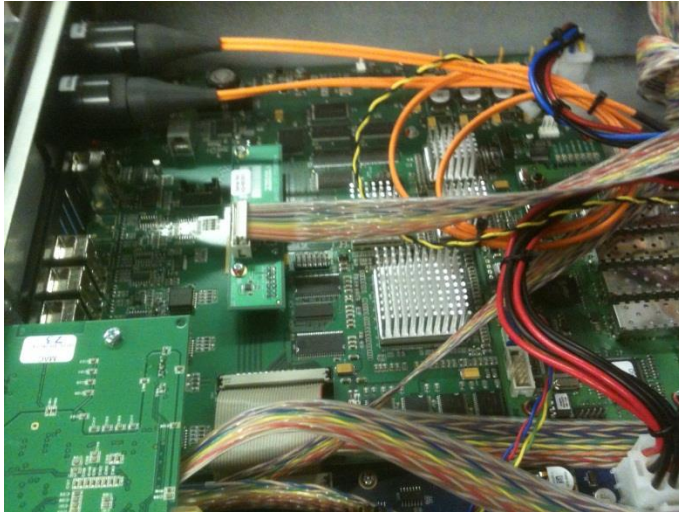


Fit the 2 spacers.

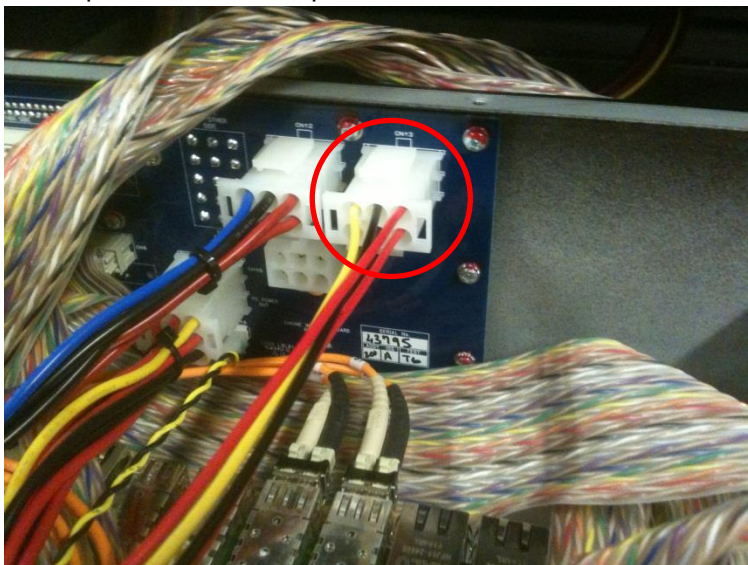


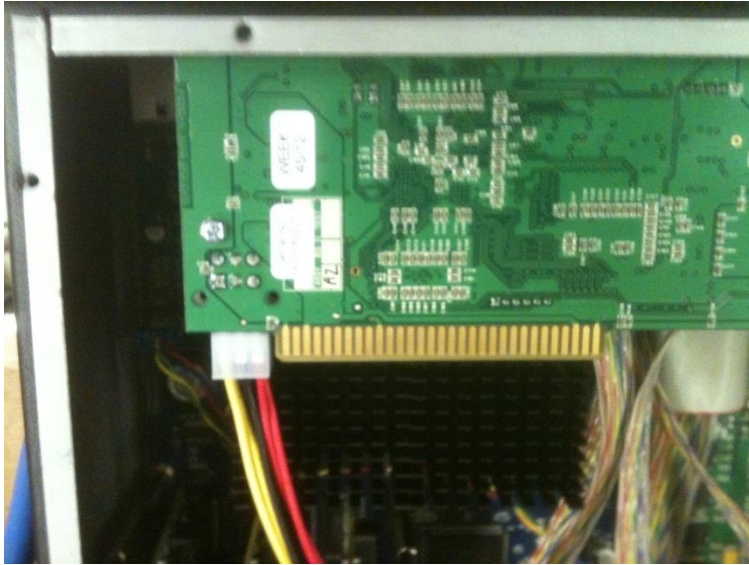
Fit the PA16063 Waves interface card, ensuring the 2 rows of pins on the main PCB fit into the header on the connector PCB correctly. Screw down using the 2 screws previously removed from the board.

Fit the twist and flat cable from the Waves soundgrid card.



Fit the power cable to the power distribution board and to the Waves Soundgrid Card.





Waves Installation is complete.
Refit the engine lid, taking care to refit the fan cable correctly.
Refit the engine to the console chassis.

You can now power the console back on .

SOFTWARE SETUP NOTES

Enable Waves in the Console options page and restart.

The Waves IO port will appear as an option and can be added in the audio IO page.
The option will also activate external Waves control integration features allowing the Waves system to synchronize features such as snapshot firing and the session load and save, via Ethernet.

Connect both the Waves port and the console network port to the Waves compatible network switch.

Ensure the Waves computer is on the current version compatible with the mixer version installed on the mixer. Refer to your Waves Central account to download and install this, following instructions included from Waves.

The Waves port will appear as “Digico IO” in the Waves inventory. Refer to Waves instructions for the relevant Waves software for operation of the integration features.

If required the PC waves audio only driver can be downloaded from Wave Central once an account has been created. This can be created at no initial cost by using the serial number on the Waves licence card included in the kit.

For all further information on the operation of the Waves software please refer to Waves Support