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861v6 to v8 upgrade instructions

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Purpose of the kit:

The kit is intended to be used to upgrade 861v6 to the specification of 861v8. Earlier versions of 861 cannot be upgraded to v8 specification. The kit is intended to be used on fully-functioning units and not as a means of repairing a unit. If a unit is faulty, its repair should be undertaken using the Meridian Service Guide.

Please bear in mind that the product needs to be registered in order to activate the new warranty period.

Summary of work to be carried out:

- Fetch the existing settings file (the User-Type) from the unit using Meridian set-up program, MConfig. This must be done prior to the upgrade process.
- Replace the power-supply unit (PSU) within the unit.
- Replace the Power board (sometimes referred to as the Cap board) within the unit
- Replace OE14 digital output card with OE34 digital output card.
- Add ID29 input card (in place of ID26, if fitted).
- Add ID41 Sooloos card (in place of ID40, if fitted).
- Apply safety labels alongside mains inlet socket.
- Re-assemble the unit.
- Update firmware.
- Test the unit.
- Create new settings file based on file "fetched" from unit prior to upgrade.
- Affix one of the serial number labels supplied with the kit to the back panel of the product.
- Enter relevant information on the upgrade certificate supplied with the kit and affix a serial number label to the certificate.
- Complete registration of the upgrade kit online: <https://www.meridian-register.com/newreg/> to initiate the new warranty.
- If re-installing the unit, carry out the Meridian Room Correction set-up process.

Optional cards

There are some optional cards which may already be fitted to the 861v6 being upgraded.

OA08, OA18, a second IA04:

The unit may feature OA08 and OA18 analogue output cards and/or a second IA04 analogue card. If these cards are fitted in the correct locations, they do not need to be removed during the upgrade. The correct locations are shown in the document detailing additional cards included with the upgrade kit.

ID26, IA40:

The 861v6 may be fitted with an ID26 digital input card and/or an IA40 Sooloos card. These two cards are superseded by new cards supplied as part of the upgrade kit. The superseded cards should be removed and disposed of as desired.



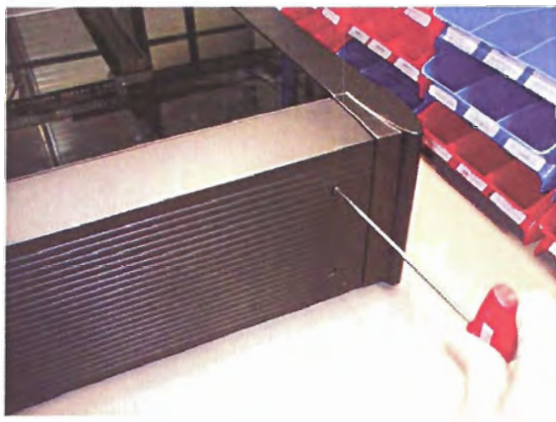
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Procedure

1. Fetch the existing settings file

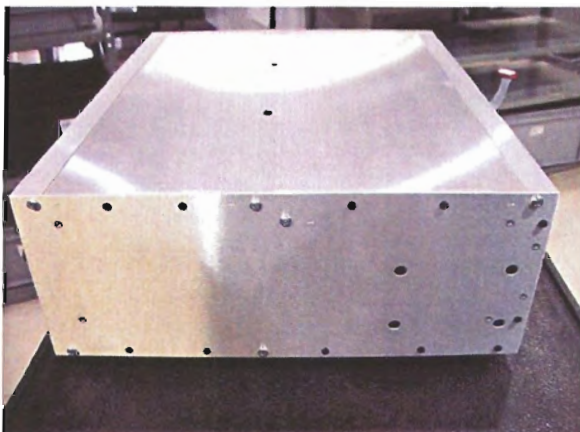
Before carrying out any work on the unit, "Fetch" the customer's settings file using the Meridian set-up program, MConfig. Save the settings on the PC so that it can be used as a reference to create a new file for the upgraded unit.

2. Remove the outer cover



Remove the four screws on each side which secure the outer cover to the chassis. From the rear of the unit, slide the outer cover backwards away from the chassis.

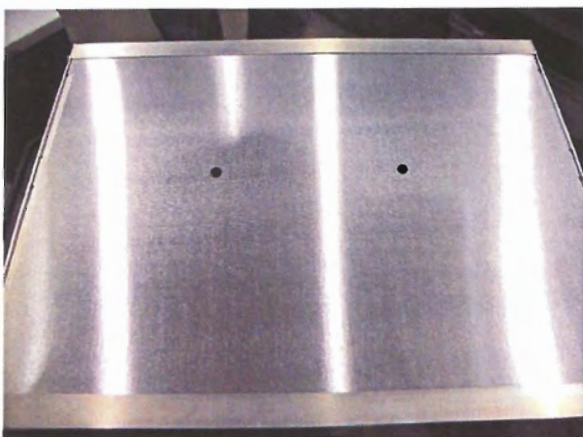
3. Remove the inner top cover



On each side of the chassis remove the four black self-tapping screws which secure the inner top cover to the chassis.

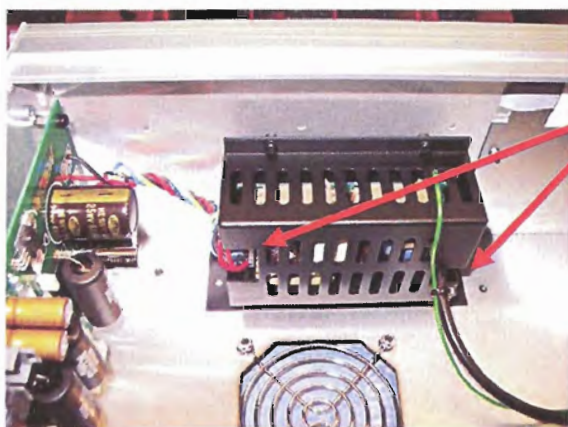


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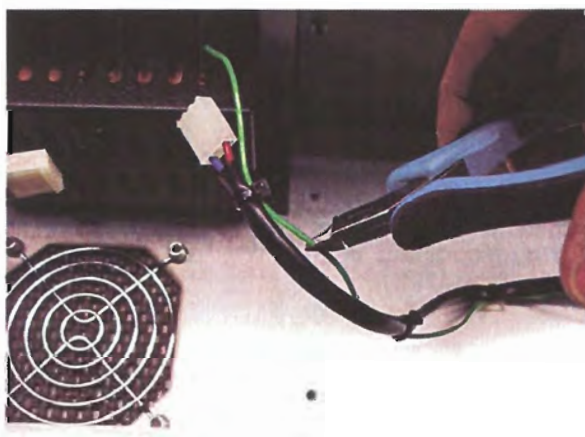


There are two screws on the top of the inner top cover. Remove the screws and the associated nylon washers. Remove the inner cover

4. Removing the PSU



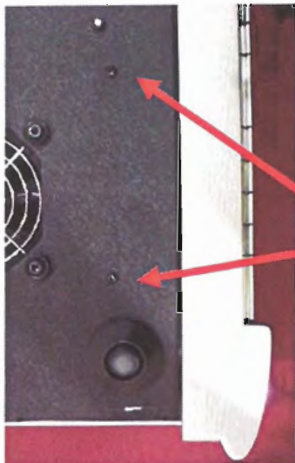
Disconnect the Input and output looms from the PSU.



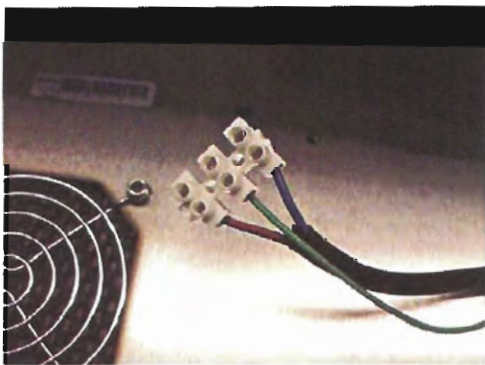
Cut the green grounding wire and the blue and brown mains inlet wires a few centimetres from the PSU.



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These two T10 Torx screws on the underside of the unit secure the PSU to the chassis. Remove these screws and the PSU can be lifted out of the unit.



Secure the mains inlet wires into the three-way terminal strip as shown. Ensure that the connections are tight.

4. Removing the Power board



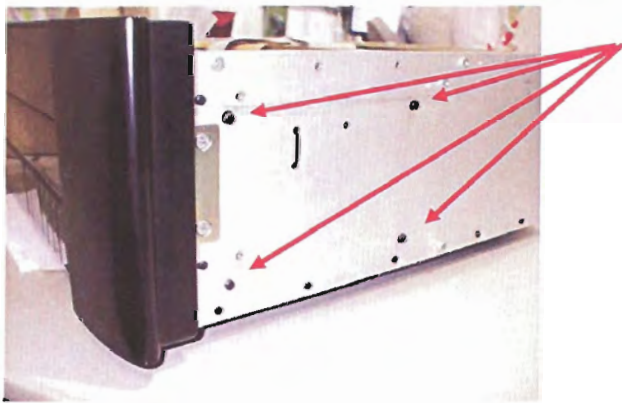
Disconnect the two looms connecting the Power board to the Motherboard.



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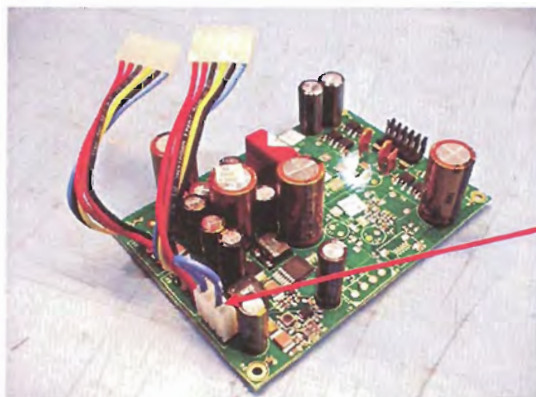
Remove the grey three-way loom from the Motherboard



Remove the Power board by undoing the four screws securing it through the side of the chassis.

Retain all fixing screws, washers and the hexagonal mounting-pillars used on the Power board as some of these parts will be required to mount the new board.

5. Fitting the new Power board



Ensure that the "Start-up" loom is fitted to the new board as shown here



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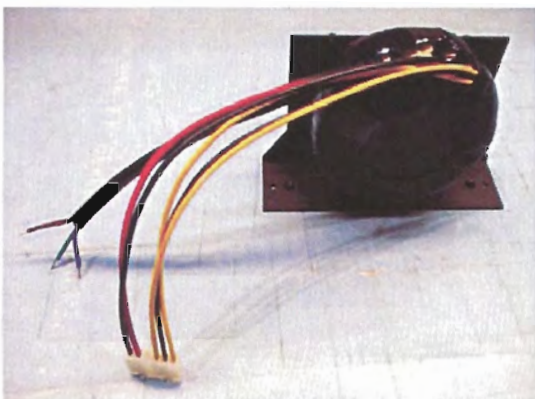
Fit the new board using the silver cross-headed screws supplied with the kit.

Do not use the shakeproof washers which were previously fitted. These can cut through the tracks on the board causing the unit to fail.



Connect the two power looms to the Motherboard

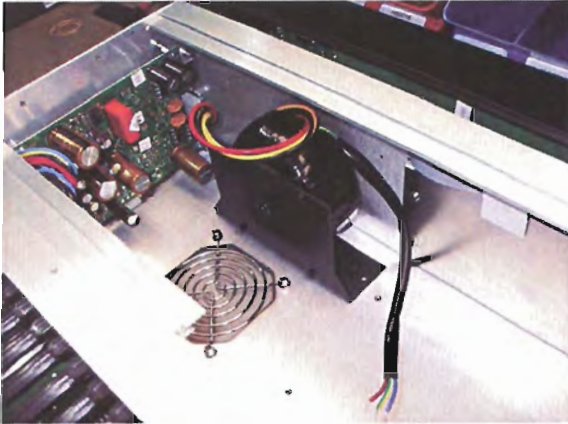
6. Fitting the new Transformer Assembly



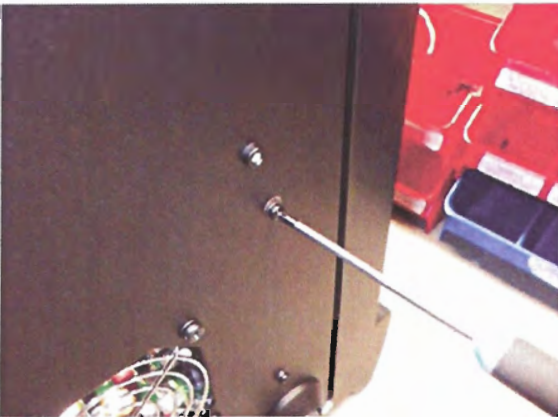
Use the piece of sleeving provided to cover the brown, blue and yellow/green wires on the transformer assembly.



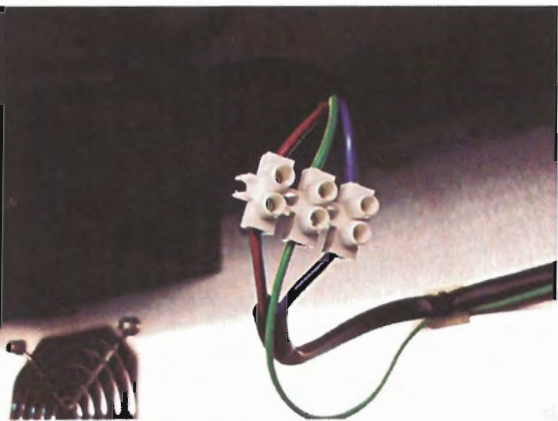
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The transformer assembly should be fitted to the chassis in the orientation shown, with the mounting plate away from the front-panel (see next instruction).



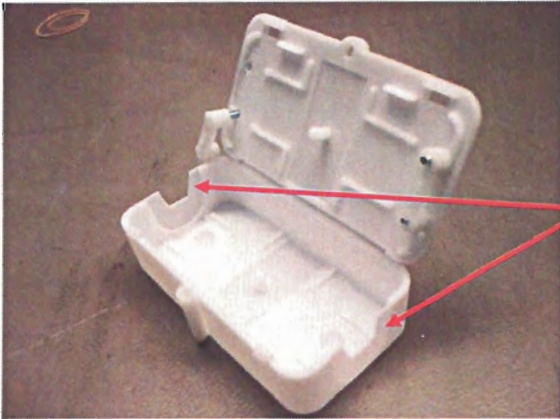
To secure the transformer assembly, use the two M3 x 8mm screws (supplied with the kit) with shakeproof and flat washers retained from removing the old PSU.



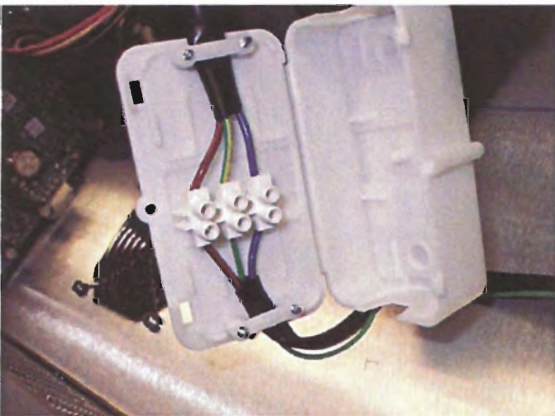
Secure the transformer input wires to the corresponding connections on the three-way screw terminal strip; brown-to-brown, blue-to-blue, green to green/yellow.



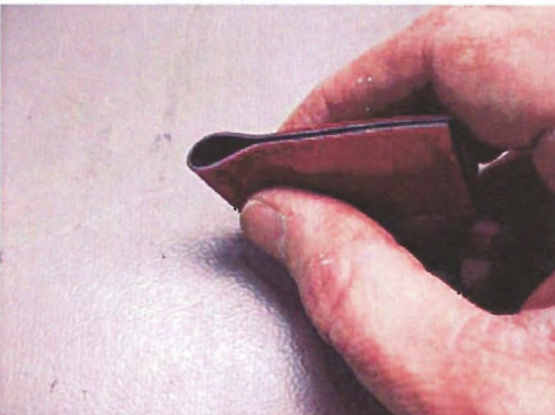
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Create suitable cut-outs at each end of the cable enclosure for the mains wires to pass through.



Fit the connection enclosure around the screw-terminal strip using the strain-relief clamps to retain the cables. Shut the enclosure and secure with the screw provided.



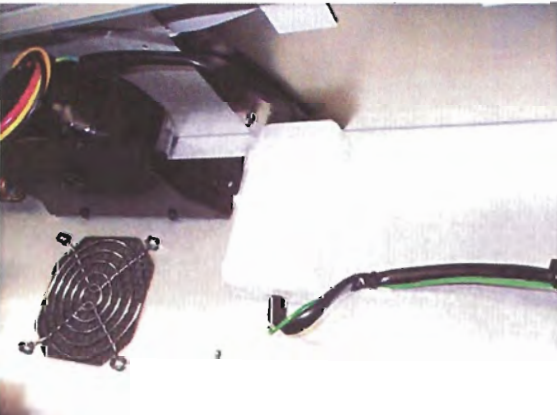
Fold the large double-sided adhesive strip to create a double-thickness pad.



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Apply the double-thickness pad created in the previous step to the connection enclosure.



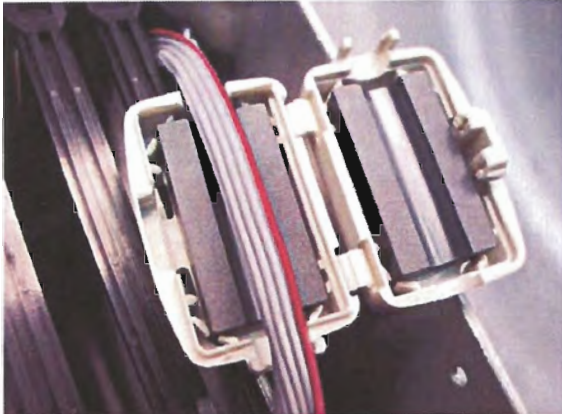
Secure the connection enclosure to the floor of the chassis using the double thickness pad.



Locate the display loom which runs along the side of the chassis from the CO00 board to the front-panel. Position the ferrite clamp supplied with the kit to the display loom just behind the Motherboard.



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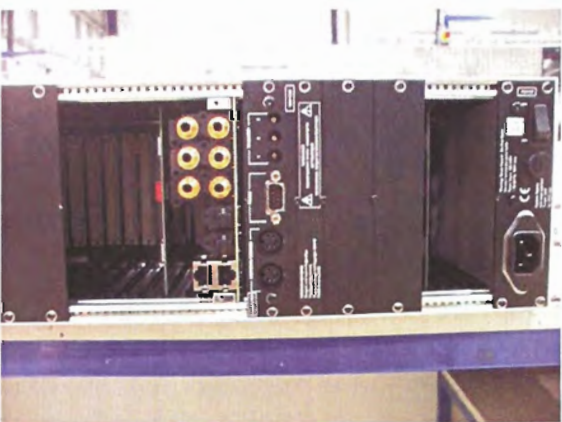


Close the clamp, ensuring that the loom is not trapped in the process. To do this, it will be necessary to fold the loom over on itself as shown.



Secure the ferrite clamp to the side of the chassis as shown using the small double-sided adhesive pad supplied.

7. Fitting the new plug-in cards

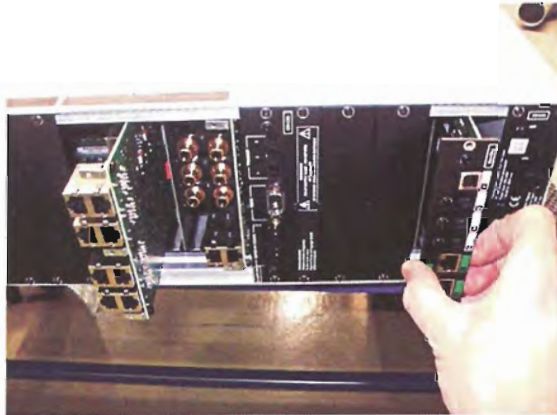


Remove the back-panel section which covers the digital output and digital input cards. Remove the digital output card. Remove the back-panel section(s) from the area next to the mains inlet as shown. Remove the ID28 card if fitted.

In summary, prepare the unit so that it looks as shown in the picture.



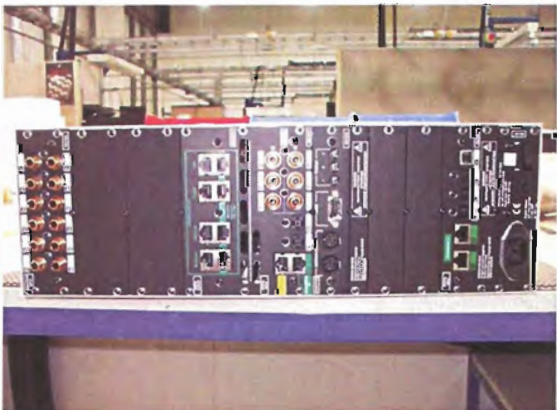
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Fit the new OE34 digital output card (OE34) in the first available slot to the left of the existing cards as shown. Fit the new ID29 digital input to the left of the space available.



Fit the small "Warning" back-panel section supplied. This is made easier if it is done prior to fitting the fixing screws for the ID29 card.



Fit the new back-panel section over the digital input and output cards. Refit all appropriate screws to the back panel sections.



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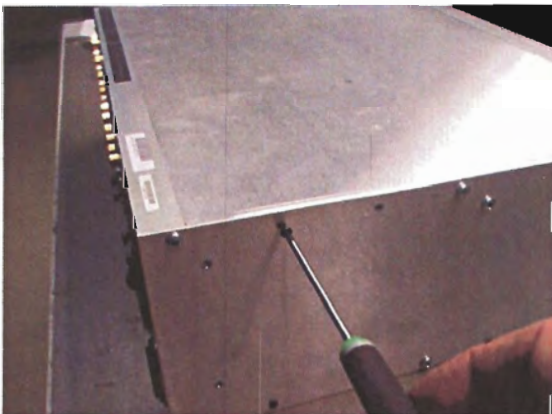


Affix the two safety labels to the Mains inlet panel as shown here.

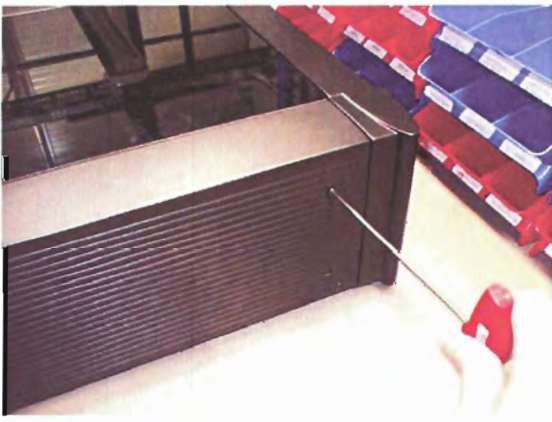
Note: These labels are specific to the operating voltage of the product; either 220/230V or 110/115V.

On 220/240V units the fuse remains unchanged.

On 110V/115V units, replace the fuse with the 3.15A fuse supplied with the kit.



Refit the inner top cover using the eight screws along the top edges of the side panels and the two screws and nylon washers through the top cover.



Refit the outer cover. The hardware is now upgraded.



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8. Update the firmware

Update the firmware of the unit in the usual way. The firmware files are available from the "Partners" section of the Meridian Media Centre website:

<http://media.meridian-audio.com/>

Access to this area is restricted, requiring a username and password. These are available from your Meridian account manager.

If unsure of how to update firmware, please contact Meridian for further assistance.

9. Test the unit

These tests are to ensure that the service has been carried out without disrupting the normal functionality of the product.

To carry out the testing, the following equipment will be required:

- An analogue line-level source
- A digital audio source (SPDIF)
- An amplifier or other device capable of playing back a line-level audio signal.
- A Meridian product capable of receiving a SpeakerLink signal.
- A Meridian product capable of outputting a SpeakerLink signal.
- A Sooloos system with a network connection available to test the upgraded unit.
- A Windows PC running the Meridian set-up program (MConfig), a null-modem RS232 cable and a proven USB-to-serial adapter if required.

(a) Analogue output check (if appropriate)

If the unit is not fitted with any analogue output cards, proceed to section (b). If any analogue output cards are fitted, test the analogue outputs:

- Set the unit to "Type 1" (all analogue outputs):
- Check that audio is passed from an analogue input to the analogue outputs. If balanced outputs are fitted, this may necessitate the use of balanced-to-unbalanced adapters.
- Check that the volume control varies the analogue outputs as expected.

(b) Test the OE34 SpeakerLink output card:

- Set the unit to "Type 3" (all digital outputs):
- Check that audio is passed from an analogue input to the SpeakerLink outputs.
- Check that audio is passed from a digital input to the SpeakerLink outputs.



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(c) Test the ID41 Sooloos card:

- Set the unit to a Factory Type suitable for whichever speaker set-up is in use.
- Use MConfig to assign a source to a Sooloos system on the "Products" page.
- Connect the unit to the network used by the Sooloos system.
- Test for audio playback from the Sooloos system.
- Test for control of the Sooloos system from the 861 e.g. "Pause" and "Play".
- Test for control of the 861 from the Sooloos system e.g. volume control.

(d) Test the ID29 digital input card:

- Use MConfig to assign sources to the optical inputs and the SpeakerLink input on the ID29 card. Check these produce audio through the 861.

(e) "Soak" test the unit

The unit should be left running for a reasonable length of time while processing an audio signal. Meridian recommends a minimum of eight hours for this procedure. Once the soak-period is completed the unit should be tested once again as described above.

Configure the unit for use in the customer's system

The unit should be configured as appropriate for use in the customer's system. This is done by creating a new settings file using the Meridian set-up program, MConfig. The new file can be based on the original settings file "Fetched" from the unit while it was in its previous v6 status – it is possible to have two "instances of the set-up program open simultaneously, so the settings can be manually copied across.

NB Although "Calibration" settings can be copied from the original file to the new file, Room Correction measurements and profiles cannot. If re-installing the unit, it will be necessary to run the Room Correction process from scratch.

New warranty

It is important to note that the new warranty is initiated when the upgrade kit is registered to a customer. This is most easily done via the Meridian website here:

<https://www.meridian-register.com/newreg/>