

Dual 40 - 6740

Thank You

Welcome to the Oldfield family and thank you for putting your trust in Oldfield Amplifiers. We value that trust as much as we feel confident you will enjoy your new Oldfield amplifier.

Your new Oldfield amplifier is built to provide you with the best tonal experience and durability available in a guitar amplifier. As with all Oldfield's, it is hand built with you, the player, as the central focus of our efforts. By using the highest grade components, point-to- point vacuum tube circuitry and fine craftsmanship, your amplifier will inspire many hours of musical satisfaction and lasting enjoyment.

> Thanks, The Oldfield Team

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 Δ For your safety read, retain, and follow all instructions. Heed all warnings.

 Δ Only connect the power supply cord to an earth-grounded AC receptacle. This amplifier is designed to operate on standard North American 115V AC and should only be plugged in to a receptacle meeting those specifications.

 Δ **WARNING:** To prevent damage, fire or shock hazard, do not expose this unit to rain or moisture.

 Δ Unplug the power supply cord before cleaning the unit exterior (use a damp cloth only). Wait until the unit is completely dry before reconnecting it to power.

 Δ Maintain at least 6 inches (15.25 cm) of unobstructed air space behind the unit to allow for proper ventilation and cooling of the unit.

 Δ This product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.

 Δ This product may be equipped with a polarized plug (one blade wider than the other) or a three-prong grounded plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of this plug.

 Δ Protect the power supply cord from being pinched or abraded.

 Δ This product should only be used with a cart or stand that is recommended by the manufacturer.

 Δ The power supply cord of this product should be unplugged from the outlet when left unused for a long period of time, or during electrical storms.

 Δ This product should be serviced by qualified service personnel when: the power supply cord or the plug has been damaged; or objects have fallen, or liquid has been spilled onto the product; or the product has been exposed to rain; or the product does not appear to operate normally or exhibits a marked change in performance; or the product has been dropped, or the enclosure damaged.

 Δ Do not drip or splash liquids, nor place liquid filled containers on the unit.

 Δ **CAUTION:** No user serviceable parts inside, refer servicing to qualified personnel only. Do not expose the circuit of the amplifier under any circumstances.

 Δ **CAUTION:** By nature vacuum tubes get very hot during operation. Do not touch vacuum tubes until they have sufficiently cooled.

 Δ Oldfield amplifiers are capable of producing very high sound pressure levels which may cause temporary or permanent hearing damage. Use care when setting and adjusting volume levels during use.

 Δ Failure to comply with any of these safety precautions could result in damage to the amplifier and in worst cases bodily harm. Non-compliance with any safety precaution may void any stated warranties.

Overview

Congratulations on your purchase of a new Oldfield Dual 40 amplifier. The Dual 40 is capable of producing a vast array of tones with its two channels and expanded functionality. The Dual 40 is well suited for just about any style of music and any playing situation.

This amplifier is all tube and hand-wired using the best quality components available for guitar amplification. It is built to last a lifetime and give the owner countless hours of enjoyment whether on stage, in the studio, or in the home.

The Dual 40 has two very distinctly voiced channels. Channel One leans towards the British style tones and Channel Two is purely American. Each channel has its own gain and full tone controls. The master volume is global to the amplifier. Channel switching and certain functions are controlled either through panel switches or the supplied foot controller.

Feature summary:

Two channels 40 watts output power into 8Ω All tube, hand-wired circuitry (2) EL34 Power Section (4) 12AX7 Preamp Section 5AR4 Tube / Solid State Selectable Rectifier Full Power / Half Power Option Fully Bypassed Effects Loop Finger–jointed Cabinet

Front Panel: Controls And Features

(Reference the front panel viewing left to right)



1. **Amplifier Input**: Connect your instrument with a proper instrument cable to the Amplifier Input jack.

2. **Manual Channel Selector Switch**: This switch is used to select either Channel One or Channel Two of the amplifier. (Note: The switch must be in the Channel One position when operating the amplifier using the foot switch to change channels.)

3. Gain Mode 1: Controls the volume of the first gain stage of Channel One. Rotating the control clockwise will make the Channel One volume louder and increase overall gain and harmonics. 4. Gain Mode 2: Controls the volume of the second gain stage of Channel One. Rotating the control clockwise will make the Channel One volume louder and increase overall gain and harmonics. An important item to understand about the second gain stage of Channel One is that it is stacked on top of the first gain stage. When the amplifiers is in Mode 2 the Gain Mode 1 Control and the Gain Mode 2 Control work together. (Note: The Mode 2 Gain Control has no effect unless the mode switch on the back panel is set to the Mode 2 position.)

5. **Channel One Treble**: Rotating the control clockwise will increase the high end frequency output of Channel One.

6. **Channel One Middle**: Rotating the control clockwise will increase the mid frequency output of Channel One.

7. **Channel One Bass**: Rotating the control clockwise will increase the low end frequency output of Channel One.

8. **Channel Two Gain**: Controls the volume of Channel Two. Rotating the control clockwise will make the Channel Two volume louder and increase overall gain and harmonics.

9. **Channel Two Treble**: Rotating the control clockwise will increase the high end frequency output of Channel Two.

10. **Channel Two Middle**: Rotating the control clockwise will increase the mid frequency output of Channel Two.

11. **Channel Two Bass**: Rotating the control clockwise will increase the low end frequency output of Channel Two.

12. **Master**: Rotating the control clockwise will increase the overall volume of the amplifier.

13. **Presence:** Rotating the control clockwise will increase the overall top end frequency of the tone and slightly decrease negative feedback.

14. **Indicator Light**: On when the amplifier is receiving electrical power.

15. **Off/Standby/Play:** When the switch is in the Off position the amplifier is totally shut down. With the switch in the middle position the amplifier is turned on and in Standby mode. With the switch in the up position the amplifier is ready to play. When turning the amplifier on it is recommended that the operator leave the switch in the Standby position for at least 30 seconds before moving the switch into the play position.

16. **Channel One Mid Boost**: When in the ON position this switch will boost the mid frequencies of Channel One (Note: The switch must be in the ON position when operating the amplifier using the foot switch to control the Channel One Mid Boost.).

17. **Channel Two Mid Boost**: When in the ON position this switch will boost the mid frequencies of Channel Two (Note: The switch must be in the ON position when operating the amplifier using the foot switch to control the Channel Two Mid Boost.).

Rear Panel: Controls And Features

(Reference the front panel viewing left to right)



1. **Fuse**: Replace only with a 3A slo-blo fuse. Never install a larger fuse than specified. Failure to install the properly rated fuse could result in damage to the amplifier. Fuses provide a critical safeguard for the amplifier and a blown fuse could be an indication of a much bigger problem either with the amplifier or the power source. See a service technician if the amplifier is repeatedly blowing fuses.

2. **Rectifier Selection Switch:** Your amplifier has the ability to operate on either a tube rectifier or from a solid state rectifier and the Rectifier Selection Switch determines the mode of operation. The tube rectifier will be a bit warmer with a softer feel while the solid state will provide the player with a bit more volume and edge. The amp must be in Standby mode before changing the position of this switch.

3. **Bias Adjust Control**: This control allows either the end user or a qualified technician to set the idle current of the power tubes. Approximately 35ma should be used to set the bias.

4. **Power Level:** The power level switch will allow the amplifier to operate in either Pentode or Triode mode. While in Pentode mode the amp will achieve full power. When operating in triode mode the amp will produce roughly half of the full power. It needs to be noted that while in Triode Mode the amplifier tone is different than when operated in full Pentode Mode and tone controls will need to be adjusted accordingly. The amp must be in Standby mode to select rectifier operation.

5/6/7. **EFFECTS LOOP:** Send / Receive / Bypass switch for the effects loop.

8. **SPEAKER IMPEDANCE SELECTOR:** Position the selector switch to match the amplifier speaker load.

9/10. **Main And External Speaker Jacks:** Connect a speaker to either of these jacks. Both jacks can be used at the same time to drive multiple cabinets. Do not connect a combined speaker load less than 40hms or greater than 16ohms. IMPORTANT: A speaker load must be connected to the amplifier at all times during amplifier operation. Failure to do so will result in output transformer failure very quickly and will not be covered under warranty. It is a good practice to get in the habit of listening for normal amp noise as soon as the standby switch is moved into the play position. If no noise is heard the amplifier should be turned off immediately and the speaker connections checked. 11. Channel One Mode Switch: Manually selects Mode One to Mode Two for Channel One. (Note: The switch must be in the Mode Two position when operating the amplifier using the foot switch to control the Channel One Mode.).

12. **Footswitch Jack:** Connect the foot switch controller to this jack.

Tube Layout



Tube Locations Left To Right At Rear Of Amplifier

RECTIFIER TUBE: 5R4. Replace only with high quality 5R4 (or compatible) tube.

POWER TUBES: EL34 (x2). Replace only with a high quality matched duet of EL34 tubes. The Dual 40 is a fixed biased amplifier and therefore will need to be re-biased when changing output tubes.

PHASE INVERTER TUBE: Replace with any high quality 12AX7 tube.

PER-AMP GAIN TUBE Channel Two: Replace with any high quality 12AX7 tube.

CATHODE FOLLOWER TUBE Channel One: Replace with any high quality 12AX7 tube.

PER-AMP GAIN TUBE Channel One: Replace with any high quality 12AX7 tube.



1. **Channel Selector**: Stomp the Channel footswitch to switch the Dual 40 between channels. When the amplifier is operating on channel one the indicator light is turned on. The amplifier panel switch must be in the channel 2 position in order for the footswitch to work.

2. **Mode Selector**: Stomp the Mode footswitch to switch the Dual 40 between channel one modes.

When the amplifier is operating in channel one / mode two the indicator light is turned on. The amplifier panel switch must be in the mode 2 position in order for the footswitch to work.

3. **Boost 1 Selector**: Stomp the Boost 1 footswitch to activate the boost function for channel one.

When the channel one boost mode is engaged the indicator light is turned on. The amplifier panel switch must be in the + position in order for the footswitch to work.

4. **Boost 2 Selector**: Stomp the Boost 2 footswitch to activate the boost function for channel two.

When the channel two boost mode is engaged the indicator light is turned on. The amplifier panel switch must be in the + position in order for the footswitch to work.

Connect the footswitch to the amplifier with a quality 5 pin midi cable.

Warranty

The following warranties apply to the original owner of the amplifier. All warranty work must be performed by Oldfield or an authorized technician for the warranty to be in effect. Warranties do not cover normal wear and tear or abuse. Failure to comply with the safety precautions outlined earlier in the owner's manual will void all warranties.

Rectifier and Power Tubes: Guaranteed for thirty days after date of purchase. If a failure occurs Oldfield will replace any rectifier or power tube during this period free of charge

Preamp Tubes: Guaranteed for ninety days after date of purchase. If a failure occurs Oldfield will replace any preamp tube during this period free of charge.

Power Transformer, Output Transformer And Choke: These items are guaranteed for one year after date of purchase against manufacturer's defects. If a failure occurs due a defect in manufacturing Oldfield will replace any of these items during this period free of charge. <u>Warranties on these items are void if the owner uses any type of power soak</u> or attenuator in conjunction with the operation of the amplifier or fails to connect a speaker load to the amplifier while in operation.

Defects Due To Workmanship: Oldfield guarantees the amplifier to be free from workmanship defects for five years.

Circuit Components: Any failed circuit component will be replaced at Oldfield's discretion for a period of five years after the purchase date.

In every case Oldfield guarantees to work with the customer to remedy any situation in a timely manner and to the satisfaction of the amplifier owner.

Operational Notes

The Oldfield Dual 40 amplifier offers the player a lot of functionality and at first glance can appear to be somewhat complicated to operate. A little experimentation goes a long way to understanding all the tones hidden inside your Dual 40 so don't be afraid to flip some switches and twist some dials to broaden your understanding.

Below are some suggested starting points:

<u>JTM 45 / 67 Plexi / 59 Bassman</u>

Channel Selector - 1 Mode Switch - 1 Mid + 1 Switch - Off Channel One / Mode 1 Gain - 12 O'Clock Master - 12 O'Clock Tone Controls - 12 O'Clock

65 Blackface Bandmaster / Clean American Tone Channel Selector - 2 Mode Switch - N/A Mid + 2 Switch - Off Channel Two Gain - 12 O'Clock Master - 12 O'Clock

Tone Controls - Treble 1 O'Clock, Middle 12 O'Clock, Bass 11 O'Clock

Brit Crunch

Channel Selector - 1 Mode Switch - 1 Mid + 1 Switch - On Channel One / Mode 1 Gain - 2 O'Clock Master - 10 O'Clock Tone Controls - Treble 1 O'Clock, Middle 12 O'Clock, Bass 11 O'Clock

80's Brit Tone

Channel Selector - 1 Mode Switch - 2 Mid + 1 Switch - Off Channel One / Mode 1 Gain - 2 O'Clock Channel One / Mode 2 Gain - 2 O'Clock Master - 11 O'Clock Tone Controls - Treble 1 O'Clock, Middle 12 O'Clock, Bass 11 O'Clock

80's Hair Band Tone / 90's Alt Rock Tone

Channel Selector - 1 Mode Switch - 2 Mid + 1 Switch - On Channel One / Mode 1 Gain - 3 O'Clock Channel One / Mode 2 Gain - 3 O'Clock Master - 9 O'Clock Tone Controls - Treble 1 O'Clock, Middle 1 O'Clock, Bass 11 O'Clock Blues Tone Channel Selector - 2 Mode Switch - N/A Mid + 2 Switch - On Channel Two Gain - 1 O'Clock Master - 10 O'Clock Tone Controls - Treble 1 O'Clock, Middle 12 O'Clock, Bass 11 O'Clock

<u>Jimi Tone</u>

Channel Selector - 1 Mode Switch - 1 Mid + 1 Switch - Off Channel One / Mode 1 Gain - 2 O'Clock Master - 12 O'Clock Tone Controls - Treble 1 O'Clock, Middle 11:30 O'Clock, Bass 11 O'Clock

Sultans Of Swing Tone

Channel Selector - 2 Mode Switch - N/A Mid + 2 Switch - Off Channel Two Gain - 1 O'Clock Master - 1 O'Clock Tone Controls - Treble 1 O'Clock, Middle 11 O'Clock, Bass 12 O'Clock

Page Tone

Channel Selector - 1 Mode Switch - 2 Mid + 1 Switch - Off Channel One / Mode 1 Gain - 2:30 O'Clock Channel One / Mode 2 Gain - 8 O'Clock Master - 1 O'Clock Tone Controls - Treble 1 O'Clock, Middle 1 O'Clock, Bass 12 O'Clock