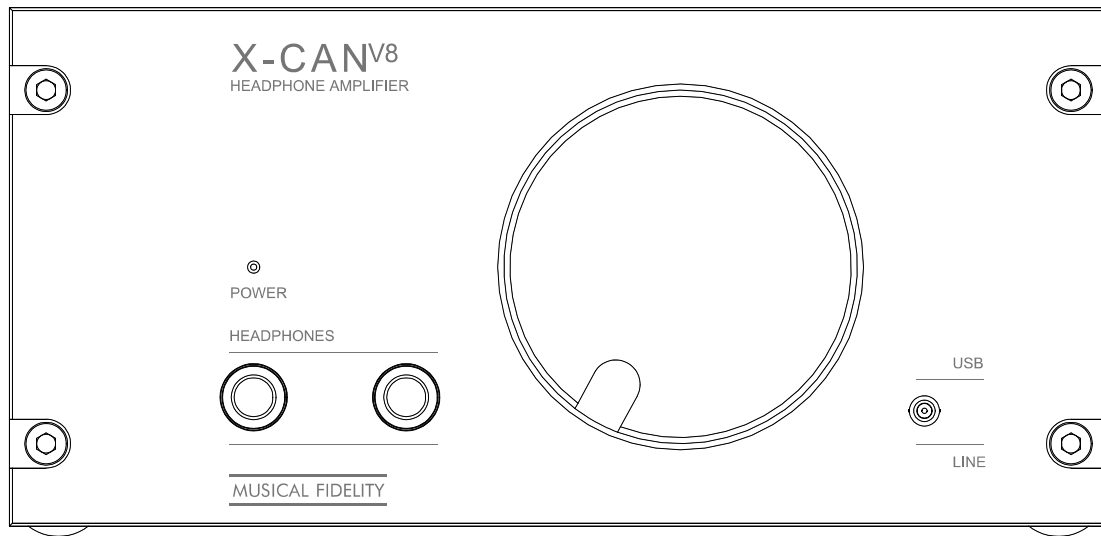


# X-CAN<sup>V8</sup>

## X-SERIES VALVE INPUT HEADPHONE AMPLIFIER WITH USB INPUT



### INSTRUCTIONS FOR USE

*Thank you for purchasing the Musical Fidelity X-CAN V8 headphone amplifier*

*This amplifier features ECC88 dual triode valve input circuits coupled with low output impedance driver stages to drive up to two pairs of headphones. A USB input is also provided for listening to computer-based music collections.*

*The X-CAN V8 is a perfect answer to most headphone amplifier requirements in a single, beautifully engineered package.*

*Used properly and carefully, it should give many years of outstanding musical reproduction.*

*Dust regularly with a soft duster or soft brush, but be careful when using cleaning or polishing agents - they may harm the surface finish.*

*If you have any questions about your audio system,  
Please consult your dealer who is there to help and advise.*

MUSICAL FIDELITY

PAGE	Section	
3	General advice	<ul style="list-style-type: none"><li>- Installation precautions</li><li>- User information</li></ul>
4	Disposal information	EU disposal information
5	Installation	<ul style="list-style-type: none"><li>- Introduction</li><li>- Cleaning</li><li>- Installation</li><li>- Audio connection</li></ul>
6	Facilities and connections	<ul style="list-style-type: none"><li>- Illustrations – Main unit front &amp; rear panels</li></ul>
7, 8	Amplifier operation	<ul style="list-style-type: none"><li>- Starting, Volume, Mute</li><li>- Computer setup for USB (PC and MAC),</li></ul>
9	Amplifier problems?	<ul style="list-style-type: none"><li>- Basic amplifier fault finding</li></ul>
10	Amplifier specifications	
11	Manual history	

**INSTALLATION PRECAUTIONS & USER INFORMATION**

This new X-CAN V8 is designed and built to provide trouble-free performance, but as with all electronic devices it is necessary to observe a few precautions:

Heed all warnings shown on the back of the product.

Only connect the X-CAN V8 power supply to a mains outlet having the same voltage as marked at the back of the power supply.

Always ensure that when disconnecting and reconnecting your audio equipment the mains supply is switched off.

Position the power lead and signal interconnects where they are not likely to be walked on or trapped by items placed on them.

Do not use near water, or place water-filled containers on the X-CAN V8, for example, a flower vase or potted plants. **If water does spill inside, immediately pull out the mains plug from the wall socket and inform your dealer, who should then check the unit before further use. Entry of liquid into the X-CAN V8 is dangerous, and may cause electric shock or fire hazard.**

Do not place the unit near direct heat sources such as radiators, direct sunlight or other equipment.

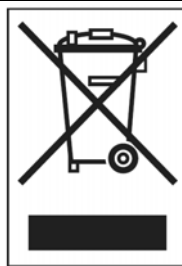
Do not remove any covers or try to gain access to the inside. There are no internal adjustments or fuses you can replace yourself. Refer all service work to an authorised Musical Fidelity agent.

**Note: Unauthorised opening of the equipment will invalidate any warranty claim.**

Dust regularly with a soft cloth or soft brush but be careful when using cleaning or polishing agents - they may harm the surface finish.

The electronics in modern hi-fi equipment is complex and may, therefore, be adversely affected or damaged by lightning. For protection of the audio system during electrical storms, remove the mains plugs and disconnect any aerial lead.

If after-sales service is required, to help the dealer identify the X-CAN V8 please quote the serial number located on the rear panel of the unit.

**DISPOSAL**

The crossed out wheeled bin label that appears on the back panel of the product indicates that the product must not be disposed of as normal household waste. To prevent possible harm to the environment please separate the product from other waste to ensure that it can be recycled in an environmentally safe manner. Please contact local government office or retailer for available collection facilities.

**DISPOSITION**

La poubelle sur roulettes barrées X, qui apparaît en logo sur le panneau arrière du produit, indique que celui-ci ne doit pas être traité comme un déchet domestique commun. Afin de protéger l'environnement, ce produit électronique devra être géré séparément et donc recyclé selon les nouvelles normes Européennes Rohs concernant les déchets d'appareils électroniques. Prière de contacter les services concernés gouvernementaux ou votre point de vente pour l'élimination et l'enlèvement de déchets électroniques équipés de composants électroniques.

**DISPOSAL**

La etiqueta cruzada hacia fuera del compartimiento que aparece en el panel trasero del producto indica que el producto no se debe reciclar como basura normal de la casa. Para prevenir daños posible al ambiente separe por favor el producto de otras basura para asegurarse de que puede ser reciclada de una manera ambientalmente segura. Entre en contacto por favor a su oficina gubernamental local o a su minorista para las instalaciones disponibles de la colección.

**RIFIUTI**

L'etichetta del cassonetto barrato riportato sul retro dell'apparecchio indica che il prodotto non deve essere smaltito tramite la procedura normale di smaltimento dei rifiuti domestici. Per evitare eventuali danni all'ambiente, separare questo prodotto da altri rifiuti domestici in modo che possa venire riciclato in base alle procedure di rispetto ambientale. Per maggiori dettagli sulle aree di raccolta disponibili, contattate l'ufficio govenativo locale od il rivenditore del prodotto.

**FACHGERECHTE ENTSORGUNG:**

Das auf der Geräterückseite angebrachte Label deutet darauf hin, dass das Produkt nicht mit konventionellem Hauskehricht entsorgt werden darf. Um Schäden und Verschmutzungen an Umwelt und Mensch zu vermeiden, muss das Produkt fachgerecht entsorgt und von anderem Abfall getrennt werden. Wenden Sie sich bei Fragen hierzu an Ihren Fachhändler oder an eine öffentliche Informationsstelle.

**AFVAL**

Het label op de achterzijde van dit apparaat, een afvalbak op wielen met een kruis doorgehaald, geeft aan dat dit apparaat niet samen met gewoon huishoudafval mag worden weggegooid. Om mogelijke schade aan onze leefomgeving te voorkomen dient dit apparaat, gescheiden van gewoon huishoudelijk afval, te worden afgevoerd zodat het op een milieuvriendelijke manier kan worden gerecycled. Neem voor beschikbare inzamelplaatsen contact op met uw gemeentelijke reinigingsdienst of met uw elektronica leverancier.

**HÄVITTÄMINEN**

Yliuksattua jäteastiaa kuvaava tarra tuotteen takalevyssä kertoo, että tuotetta ei saa käsitellä normaalina talousjätteenä. Ympäristön suojelemiseksi on tuote pidettävä erillään muusta jätteestä ja se on kierrätettävä ekologisesti kestäväällä tavalla. Ota yhteyttä laitteen myyjään tai Pirkanmaan Ympäristökeskukseen lähimmän kierrätyskeskuksen löytämiseksi.

**AFSKAFNING**

Logoet med en skraldespand med kryds over på bagsiden af apparatet indikerer at dette produkt ikke må kasseres som normal husholdningsaffald. For at forebygge mulig skade på miljøet, bedes De separere dette produkt fra andet affald, og sikre at det bliver genbrugt på en miljørigtig måde. Kontakt venligst de lokale myndigheder eller din forhandler for oplysning om nærmeste tilgængelige opsamlingssted for elektronikaffald.

**ΔΙΑΔΙΚΑΣΙΑ ΑΠΟΡΡΙΨΗΣ**

ΤΟ ΣΗΜΑ ΜΕ ΤΟΝ ΔΙΑΓΕΓΡΑΜΜΕΝΟ ΤΡΟΧΗΛΑΤΟ ΚΑΔΟ ΑΠΟΡΡΙΜΑΤΩΝ ΣΤΗΝ ΠΙΣΩ ΟΨΗ ΤΟΥ ΜΗΧΑΝΗΜΑΤΟΣ

ΔΗΛΩΝΕΙ ΟΤΙ ΤΟ ΠΡΟΙΟΝ ΑΥΤΟ ΔΕΝ ΠΡΕΠΕΙ ΝΑ ΔΙΑΧΕΙΡΙΣΘΕΙ ΣΑΝ ΣΥΝΗΘΙΣΜΕΝΟ ΟΙΚΙΑΚΟ ΑΠΟΒΛΗΤΟ. ΠΡΟΣ ΑΠΟΦΥΓΗ ΕΝΔΕΧΟΜΕΝΗΣ ΕΠΙΒΑΡΥΝΣΗΣ ΤΟΥ ΠΕΡΙΒΑΛΛΟΝΤΟΣ, ΞΕΧΩΡΙΣΤΕ ΤΟ ΠΡΟΙΟΝ ΑΠΟ ΤΑ ΑΛΛΑ

ΑΠΟΡΡΙΜΑΤΑ ΩΣΤΕ ΝΑ ΕΞΑΣΦΑΛΙΣΘΕΙ Η ΑΝΑΚΥΚΛΩΣΗ ΤΟΥ ΜΕ ΤΟΝ ΠΡΕΠΟΝΤΑ ΤΡΟΠΟ.

ΠΑΡΑΚΑΛΟΥΜΕ ΝΑ ΕΠΙΚΟΙΝΩΝΗΣΕΤΕ ΜΕ ΤΗΝ ΤΟΠΙΚΗ ΥΠΗΡΕΣΙΑ ΑΝΑΚΥΚΛΩΣΗΣ Η ΜΕ ΤΟ ΚΑΤΑΣΤΗΜΑ ΑΓΟΡΑΣ ΓΙΑ ΠΕΡΙΣΣΟΤΕΡΕΣ ΛΕΠΤΟΜΕΡΕΙΕΣ.

**INTRODUCTION**

Congratulations on the purchase of the new X-CAN V8 integrated valve headphone amp. Great attention has been paid to internal layout, isolating each circuit section to prevent possible interaction.

The unit features our highly refined ECC88 dual triode valve input amplifier circuit coupled with a new low output impedance driver stage to improve current delivery and dynamics to lower impedance headphones. Twin jack sockets are provided so it is possible to share the musical experience!

A USB input is also provided for listening to computer-based music collections. This interfaces easily with most PC/MAC computers without additional drivers.

The resultant performance achieved by this unit is among the best in the world. It has excellent signal to noise ratio, low distortion, wide bandwidth, huge dynamic range, extraordinary resolution and fine detail.

**CLEANING**

Before cleaning the unit, switch off power at the mains switch and remove the mains plug from the wall socket.

Clean the cabinet and remote control unit using a moist cloth. Using solvents, white spirit or thinners is not advised, as they could damage the surface finish.

**INSTALLATION**

Position the X-CAN V8 on a stable, horizontal surface where there is no risk of it being knocked, or subjected to vibration such as from loudspeakers.

The X-CAN V8 must be protected from humidity - if the unit is moved from a cold place to a warm room, leave the unit for an hour or so to allow sufficient time for the moisture to evaporate.

**POWER CONNECTIONS**

The X-CAN V8 requires a free mains socket for its power supply. The power supply then connects using its flying lead to the DIN 24V AC socket at the back of the unit. We advise that you use only the supplied X-series adaptor for this unit, or a Musical Fidelity power supply.

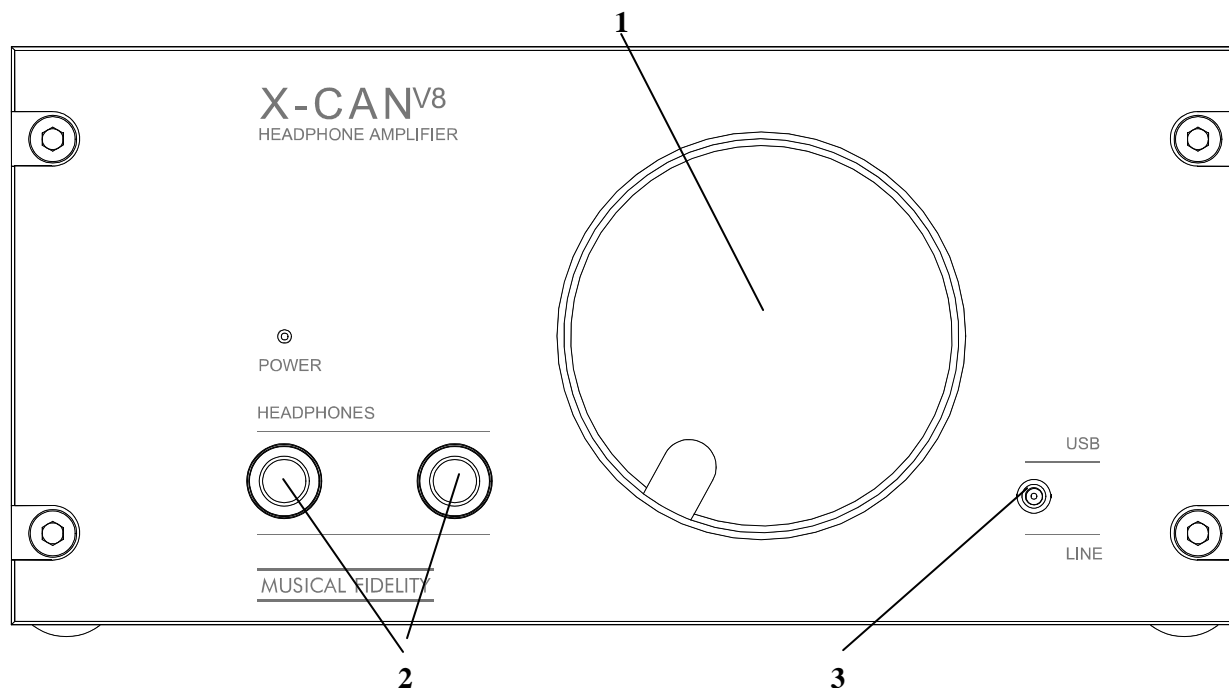
**AUDIO CONNECTIONS**

**Inputs:** Connect analogue input to RCA line inputs (see p.7 For more information). Use good quality fully connected (signal and ground) coaxial phono cables for all signal connections.

**Outputs:** Connect one or two sets of headphones to the output sockets

The **LOOP** outputs allow direct pass-through of the input signals to tape/MD/CD recorder, for example. They are directly connected to the line inputs and are not affected by the volume control on the XCAN V8

### MAIN UNIT FRONT PANEL

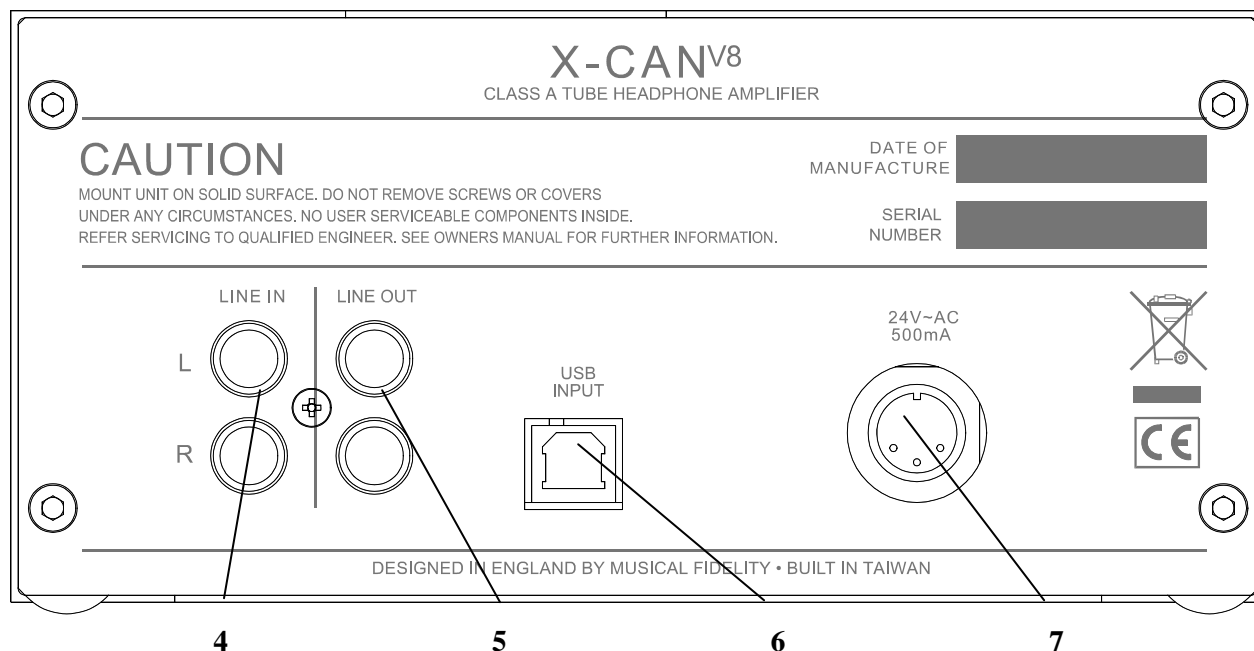


1. **VOLUME** knob

2. **DUAL 1/4" JACK** Headphone sockets

3. **USB/LINE** Selector switch

### MAIN UNIT REAR PANEL



4. **LINE INPUT** RCA sockets

5. **LINE OUTPUT** RCA sockets

6. **USB INPUT** B type socket

7. **POWER SUPPLY** Input din socket

**STARTING**

Once all connections are made, the power LED on the front panel will light, indicating unit is ready for use.

**VOLUME**

The volume control knob should be adjusted for normal listening levels.

**LINE IN**

To use the line input connect desired source to line in RCA sockets. To listen to music from the line input, move the front panel switch to the down position.

**USB INPUT**

To use the USB input connect computer to USB input socket. To listen to music from the USB input, move the front panel switch to the up position

**LINE OUT**

The line output RCA sockets are included to facilitate connection of the XCAN V8 into an existing system. To take advantage of this, the XCAN V8 can be connected to the tape output (or similar) of any pre- or integrated amplifier. Any device that was plugged into the tape output should now be plugged into the line output RCA sockets on the X-CAN V8 which will reinstate the original connection, the X-CAN V8 passing on the signal for recording or other purposes. These outputs are not affected by the XCAN V8 volume control.

**HEADPHONES**

Up to two pairs of headphones can be connected to the unit through the front panel jack sockets.

Both sets will then be simultaneously controlled by the volume control.

Note: Two different headphones thus connected may produce differing output levels and/or musical tones. This is normal and due to design of the respective headphones.

**Computer setup for input USB input**

A good quality USB A to B cable is required to connect the unit to the computer (not supplied).

Plug the B (square) end into the socket in the back of the X-CAN V8

Plug the A (rectangle) end into a free USB socket on the computer.

The computer should detect the new hardware and install a generic driver automatically (No setup or driver disk required).

CD, MP3, WAV files played on any software should now play through the X-CAN V8. This device has been designed to work with PC Windows 98, ME, 2000, XP as well as Apple Macintosh OS X.

*Please note:*

*This device is a high speed serial data processor, and by its nature, requires a very high volume of USB bandwidth. It will benefit greatly from being the only device connected on its USB 'bus'. Sharing the same bus with other devices may cause unwanted artefacts such as dropouts or temporary loss of signal. This especially includes the use of the X-CAN V8 on a USB hub/splitter alongside other USB components*

**PC users**

Check the computer has picked up the device and is currently using it by clicking: (most Windows versions)

- Start
- Settings
- Control panel
- Sounds and Multimedia
- Audio

Check that "USB audio device" appears under PREFERRED AUDIO DEVICE tab

A second mixer will now be available which will be the default mixer whenever the X-CAN V8 is plugged in. Use this mixer to select the source or adjust levels if required.

**Mac users**

Check the computer has picked up the device and is currently using it by clicking: (MAC OS X)

- System preferences
- Hardware
- Sound

Check that "USB audio DAC" is selected under the OUTPUT tab.

If the computer's warning sounds/chimes are to played through the X-CAN V8, make sure it is selected under the SOUND EFFECTS tab too.

Note: USB may also be selected as an output in some individual programs



Basic problem-solving with an amplifier is similar to troubleshooting other electrical or electronic equipment. Always check the most obvious possible causes first, such as the following examples:

Problem	Probable Cause	Remedy
No power	Mains power supply is not fully inserted into mains socket Mains power supply lead is not fully inserted into rear socket	Plug in securely
No sound	Wrong connections between input sources and the unit	Check audio input lead connections
Sound is not precise, lacking in bass and stereo image	Headphone(s) connector plug not fully pushed in Lead fault in headphones	Check plug is inserted fully and securely Check phones on Headphone output of a different unit
Hum	Audio connector plug not fully pushed in Cable Fault Unsuitable Cable (e.g. cable grounds not connected)	Insert plug securely Check cable is connected at both ends. N.B. some esoteric cables have internal wiring intentionally disconnected/modified. For best results on all inputs analogue AND digital, please use good quality screened coax; signal and screen directly connected both ends.
No audio output, or too low level output	Incorrect or missing connections USB Driver not selected (PC or MAC)	Check connections and make sure they are secure. See P.9 <u><b>PC users</b></u> or <u><b>MAC users</b></u> section
No audio output from USB input	USB Cable not connected USB Driver not selected (PC or MAC)	Check connections and make sure they are secure. See P.9 <u><b>PC users</b></u> or <u><b>Mac users</b></u> section
Not detected when connected to USB	USB Cable faulty USB not working/enabled on computer Correct USB drivers not installed (can happen particularly with factory-preinstalled Windows operating systems)	Check and replace cable Check USB port functions with another device. Please check with the computer manufacturer. Enquire about USB driver or update.
Dropouts in sound (USB input)	Shared USB port with another device Computer busy with another application Computer low on resources	Avoid sharing the USB port with other devices, if possible. At times an application (program) may intervene, sometimes invisibly e.g. a virus scanner. When this happens, computer resources are temporarily used up, and playback may suffer. This is not a fault. Try running fewer applications if possible.

If none of these actions affect a cure, please contact the dealer, or an authorised Musical Fidelity service agent. Remember; never open the case of the X-CAN V8, as this will invalidate the guarantee.

Output:	Power	1.3 Watts per channel into 32 Ohms
	Output devices per channel	2
	Output impedance	2 Ohms
Line input:	THD + N, 20Hz to 20 kHz	<0.008% typical
	Signal / noise ratio	>100dB unweighted >109dB 'A' weighted
	Input impedance	22 k Ohms
	Frequency response	20Hz to 70 kHz, +0, -1dB
Connections:	Line level inputs:	1 pair line level RCA connectors,
	Line level outputs:	1 pair RCA [loop outputs]
	Digital inputs:	1 USB 1.1 [32, 44.1, 48 kHz sample rates] connection for <u>computer</u> only
Power requirement:	12-0-12V (24V total) AC at 500mA	Using mains adaptor (supplied)
Standard accessories:	Power Supply Unit	T48A-24-500-3 1 off
Dimensions:	Main unit	
	180mm	7 inches Wide
	88mm	3 ½ inches High including feet
	240mm	9 ½ inches Deep including terminals
Weight:	1.85 kg, 4 ¼ lbs	Unboxed
	2.5 kg 5 ½ lbs	Boxed unit including power supply and all accessories



Musical Fidelity reserves the right to make improvements which may result in specification or feature changes without notice.

RELEASE	DATE	CHANGES
Issue 1	30 <sup>th</sup> October 2007	