



McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903-2699 Phone: 607-723-3512 www.mcintoshlabs.com

MA12000
Integrated Amplifier
Owner's Manual



Thank you from all of us at McIntosh

Make a Note

:LWK WKH 0\$,QWHUJUDWHG \$PSOLHU \RX SKDYH
LQYHVWHG LQ D SUHFLVLRQ LQVWUXPHQW WKDW ZLOO SURYLGH
\RX ZLWK PDQ\ \HDUV RI HQMR\PHQW SOHDFH WDNH D IHZ
PRPHQWV WR IDPLOLDUL]H \RXUVHOI ZLWK WKH IHDWXUHV DQG
LQVWUXFWLRQV WR JHW WKH PD[LIRORSHU IRUPDQFH IURP
\RXU HTXLSPHQW
,I \RX QHHG IXUWKHU WHFKQLFDO SXUEKDYH SOHDFH FRQWDFW
\RXU GHDOHU ZKR PD\ EH PRUH DPLOLDU ZLWK \RXU
SDUWLFXODU VHWXS LQFOXGLQJ RWKHUHQHUR <RX FDQ DOVR
FRQWDFW OF,QWRVK ZLWK DGGLWLRQDO TXHVWLROV RU LQ WKH
XQOLNHO\ HYHQW RI QHHGLQJ VHU\LFH

McIntosh Laboratory, Inc.
2 Chambers Street
Binghamton, New York 13903

Technical Assistance: (607) 723-3512
Customer Service: (607) 723-3515
Fax: (607) 724-0549
Email: support@mcintoshlabs.com
Website: mcintoshlabs.com

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0DNH D 1RWH	2
7UDGHPDUN DQG /LFHQVH ,QIRUPDWLRQ	3
*HQHUDO ,QIRUPDWLRQ	4
&RQQHFWRU DQG &DEOH ,QIRUPDWLRQ	4
,QWURGXFWRQ	5
3HUIRUPDQFH)HDWXUHV	5
'LPHQVLRQV	6
,QVWDOODWLRQ	7
5H DU 3DQHO &RQQHFWRQ	8
0DNLQJ &RQQHFWRQV	9
3KRQR 8QEDODQFHG ,Q SXW	9
%DODQFHG ;/5 ,Q SXW DQ 2XWSXW	9
56	9
:LUHG ,5 ,Q SXW	9
3RZHU &RQWURO 7ULJJH 2XWSXWV	10
3DVVWKUX	10
'DWD 2XW	10
+HDGSKRQH V	11
+'0, \$5& DQG &(&	11
/LS 6\QF 0RGH \$5&	11
+'0, DQG 2SWLFDO *DLQ	11
86%	12
2SWLFDO	12
&RD[	12
MCT	12
3DVVWKUX ([DPSOH	13
&RQQHFWRQ IRU %L \$PSOLFLFDWLRQ	14
+RZ WR XVH WKH 5HPRWH &RQWURO	16
5HPRWH &RQWURO 'LDJUD	17
7ULP)XQFWLRQV DQG 6HWWLQJV	18
+RZ WR 2SHUDWH WKH 6HWWLQJ 0RGH	20
'HIDXOW 6HWWLQJV	20
)LUPZDUH 9HUVLRQ	20
,Q SXW 6HWWLQJV	20

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DOG /v({Æu Ÿ}v	
7KH 0F,QWRVK 0\$ LQFRUSRUD SURWHFWHG WHFKQRORJ\ WKDV DQG RWKHU LQWHOOFWXDO SH XVHV WKH IROORZLQJ 7HFKQRO	
Trademark	License Information
	\$6,2 LV D WUDGHPDUN VRIWZDUH RI 6WHLO 7HFKQRORJLHV *PE+
	0DQXIDFWXUH XQG IURP 'ROE\ /DERUDW 'ROE\ 'ROE\ \$XGLR WKH GRXEOH 'V\PER DUH WUDGHPDUNV R /DERUDWRULHV
	)RU '76 SDWHQWV V SDWHQWV GWV FRP XQGHU OLFHQVH IURP '76 WKH 6\PERO '76 WKH 6\PERO WRJHW 'LJLWDO 6XUURXQG WUDGHPDUNV DQG R RI '76 ,QF LQ WKH 6WDWHV DQG RU RW '76 ,QF \$OO 5LJKW
	7KH WHUPV +'0, +'0 +LJK 'HILQLWLRQ 0X ,QWHUIDFH DQG WK DUH WUDGHPDUNV R WUDGHPDUNV RI +'0 \$GPLQLVWUDWRU ,C

LQIRUPDWLRQ JR WR ZZZ PFL3QDWRWKQDE2XWSPXWV
7KH.5.OSXW ZLWK D LOPakPoltOdnneS63BOHMDFN LV

Q R Q I I R J K P U M G L R Q Q R Q H O F W Q W R M K H , 5 D W H D Q 2 / R W V 3 R U X W K D V H Q G 5 H
R D S ; R Q W Q W K V 0 R R Q H F W H G W 8 W R D R & R Q Q H F W P L S R Q H Q W M L S
% O R F N V X F K D V D ; D Q W H F K O R V G H I O H R & P L Z K L H S K W R R S O X / J I V

RDQGR E W K S U V H Q V R U V Q H H G W R E D H F W Q Q Q F W H G W R N W K H
 D W H U D D D W L K Q D V O V M W R P D F R I Q D N P E M C o n t r o l d r W H U Q D O
 V R 6 H H Q W R H U Z J D L O O K D Y H W S R U G R U L K H R 5 Y H U 3 W K W V L O V Q D Q V H R P D
 M K V I V W R H P W R S D Q B W L R Q V H Q V R W W H U H R P L Q L S K R Q H S O X J P D Q Q
 U F K H L Q G L V R D V L G H Q W W K H X Q L W K H R P S Q Q B E W K R O R R D Q W K H U E
 W X Q R Y H U L W H J S S O M L C R O V % D W M W H I U L H U V W K R X V I G H 0 \$ N / C

QHYHU EH WKURZQ DZD RU RQ32-Q Data Pmt Cable EXW
GLVSRVHG RI LQ DFFRUG DQF7KZLWK WICHORR FDOH LV D P
BHXGQQWKRRWRQEVNDEOJLWMMWHRIPGQVSSKVDQH SOXJ WR
)RU DGGLWLRDO LOIRUPDWLRQORIGWRUH

Q\$W L R Q D & L G U R X L K W H U R F, Q W R V K 3 U R G X F W Y S O H D V H Y L V L W
W K N Q O G H Q W R V K 7 N E H L W H D W Z Z Z B E L O W R V K O D E V F R P
U W R D O H U W \ R X

PVKDV S}H KHV WHG O /v({E u (DB9-pin3)
 GRO DOG RU KLJK DP ELHOW (DB9-pin5)



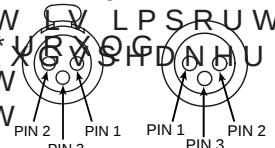
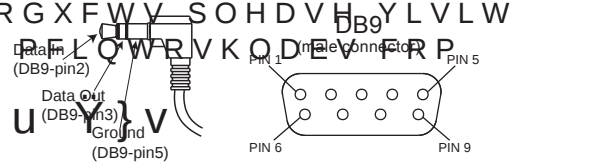
Diagram of a DB9 connector showing pins 6 and 9.

R SRZHU LV UHPRYHG IURP
 H QZEO UHVXPHZFRQ ILJXUDWURO IRU WKH ;/5 % DODQFHG
 R QHFWRU V DQ UDKH Q\$ FHKG WDEWKH GLDUDP IRU
 R QV LQ DQ UDKH Q\$ FHKG WDEWKH GLDUDP IRU

00QHFWLHRQ LW LV LPSRUWDQW QQHFWLHRQ WKH VSDGH OXJ
 3QH RIRKHGRXGSHDNHU RSHQLQJ RI DW OHDVW LQF
 3HFWLRQV SXW

3, 1 2XWSXW PIN 2 PIN 3 PIN 1 PIN 1 PIN 3 PIN 2 McIntosh Plug-In Jumper Connector
 7KH 0\$ XWLOLJHV WZ SKRC
 VWIOH 30XJ, O -XPSHUV FR
 2XWSXW DFNV 2XWSXW 3rd of an inch
 3XWLOLJHV 7.62 millimeters
 7KH 3RZHU & RQWURO 7ULJJHU
 DVVWKUX, QSXW -DFN UHFHLYH
 7KH 3RZHU 2Q 3W 6LJQDOV

Control Meter (100 kHz) Control Ground



/všÆ} μ Ÿ}v

1RZ \RX FDQ WDNH DGYDQWDJH
VWDQGDUGV RI H[FHOOHQFH LQ
\$PSOL¿HU 7KH 3RZHU \$PSOL¿HU
0\$ ZLWK D SRZHU RXWSXW RI
FKDQQHO ZLOO GULYH D SDLU.
KLJK OHYHO RI SHUIRUPDQFH
7KH ÀH[LEOH 3UHDPSOL¿HU VH
7XEHV DQG SURYLGHV FRQQHF
VRXUFHV DQG PD\ DOVR EH XVHG
3RZHU \$PSOL¿HU V
7KH 0\$ UHSURGXFWRQ LV
DQG DEVROXWHO\ DFFXUDWH
6RXQG RI WKH 0XVLF ,WVHOI´

Performance Features

- Power Output with Patented Autoformer

7KH 0\$ FRQVLVWV RI D
3RZHU \$PSOLILHU ZLWK OHVV
7KH 0F,QWRVK GHVLJQHG DQG
DOORZV FRQQHFWRQ RI
7KH 3RZHU \$PSOLILHU¹ XZHW
7UDQVLVWRUV WR PLQLPL]H
WHPSHUDWXUH

- Sentry Monitor and Thermal Protection

0F,QWRVK 6HQWU\ 0RQLWU
SURWHFWLRQ FLUFXLWV HQVXUH
ORQJ DQG WURXEOH IUHH RSHUD
3URWHFWLRQ &LUFXLWV JXDUG

- Power Guard

7KH SDWHQWHG 0F,QWRVK 3RZHU
DPSOLILHU FOLSSLQJ DQG SURWH
/RXGVSHDNHUV 7XEHV ZLOO

- Electronic Switching and Balanced Connections

7KH 3UHDPSOLILHU XVHV /RJLF
(QHEWURPDJQHWF 6ZLWFKHV
XOFWLRQV IRUHQHOLDEOH Q
7KHUHLV D %DQFHG ,QSW
FRPSRQHQW
RI TXDOLW\ /RXGVSHDNHUV WR

- Digital Audio Inputs

7KH 'LJLWDO ,QSWV GHFRGH
FURQLQ[MHWXQDQWRXUHV \$&RD
QSWV IRUHQHOLDEOH QSWV
WR GHVLJQDQWLRQJLWDO 0&7 ,QSW
&LUFXLWU\
GLUHFWO\ GHFRGHV 6\$&' &' VLJQ
VHPSRUWFRPSRQHQW 7KH 86%
SURFHVWVWHDRLQJ DXGLZLW
N+] VDP SOLQJ UDWH 7KH ,QSW
'6' DV ZHOO DV ';' ELW VLJQ
N+] VDP SOLQJ UDWH

- Moving Coil and Moving Magnet Phono Inputs

7KH 0\$ KDV WZR SUHFLVLRO
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV
&LUFXLWV IRUHQHOLDEOH QSWV

- Eight Band Equalizer

7KH (TXDOL]HU &RQWUROV SURYLGH
FHOWHU IUHTXHQFLHV RI
N+] DQG N+] 7KHUHLV DOVR
ORGHWRUHQHOLDEOH QSWV
DOVHOHFWHG %XSW
&LUFXLWV IRUHQHOLDEOH QSWV

- Multifunction Display and Power Meters

7KH JUROW 3DOHO 'LVSOD\ LOGE
YRXPBGHLYHOV DOG
3RZHU 2XWSXW 0HWUHV DUH SHDN
LQGLFDWH WKH SRZHU RXWSXW
7KHUHLV IRUHQHOLDEOH QSWV
6HPLFRQGXFWRU &RPSRQHQWV ,QGX

- Power Control Output and Trigger Assignment

FRQWURO FRQQHFWRQ
RQ DOOQLQSKWVZHQ \$PSOLILHU
QDQHOHFWWLQDQVWQKQGH
IRUHQHOLDEOH QSWV
JLYHQ ,QSW 2XWSXW LV VHOL

- PassThru Mode

7KH DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ

- Remote Control

7KH 86% DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ

- Special Power Supply

7KH ODUJH 3RZHU 7UDQVIRUPH
FDSDFLWRUV ZLWK -RXOHV F
UHQRWHG 3RZHU 6XSSOI HQV
RSHUDWRUHQHOLDEOH QSWV
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ

- Solid Cinch™ Speaker Binding Posts

0F,QWRVK 3GLVWRUWLRODQG
KLJK FXUHQW 3KFOR
GLDFHOWHU ZLGH DQG VSDGH OX
EH XVHG EXW RQO\ LQ WKH 8QL

- Glass Front Panel and Super Mirror Chassis

N+]
Finish
7KH IDPRXV 0F,QWRVK DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ
DOOQLQSKWVZHQ DOOQLQSKWVZHQ

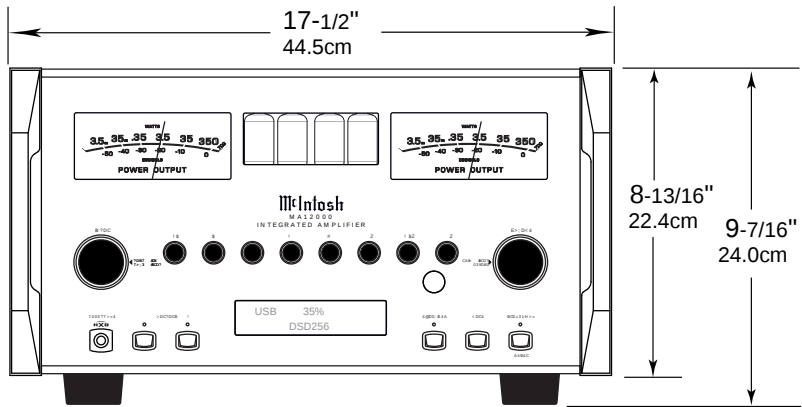
- Power Guard

7KH SDWHQWHG 0F,QWRVK 3RZHU
DPSOLILHU FOLSSLQJ DQG SURWH
/RXGVSHDNHUV 7XEHV ZLOO
LQGLFDWH WKH SRZHU RXWSXW
7KHUHLV IRUHQHOLDEOH QSWV
6HPLFRQGXFWRU &RPSRQHQWV ,QGX

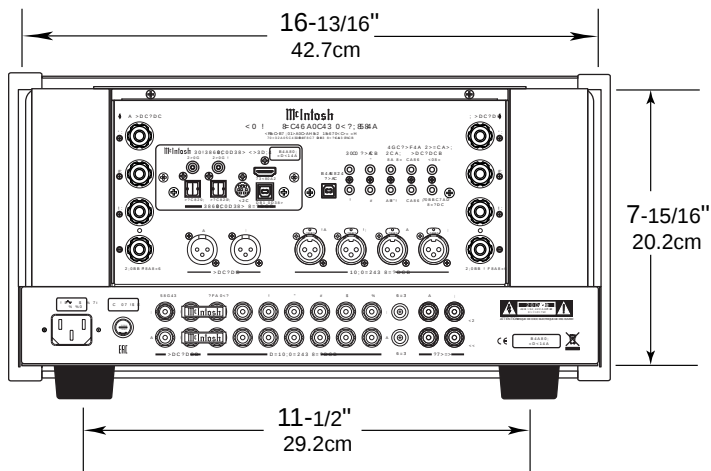
Dimensions

7KH IROORZLQJ GLPHQVLRQV FDQ DVVLVW LQ GHWHUPLQLQJ
WKH EHVW ORFDWLRQ IRU \RXU 0\$ 7KHUH LV
DGGLWLRQDO LQIRUPDWLRQ RQ WKH QH[W SDJH SHUWDLQLQJ WR
LQVWDOOLQJ WKH 0\$ LQWR FDELQHV

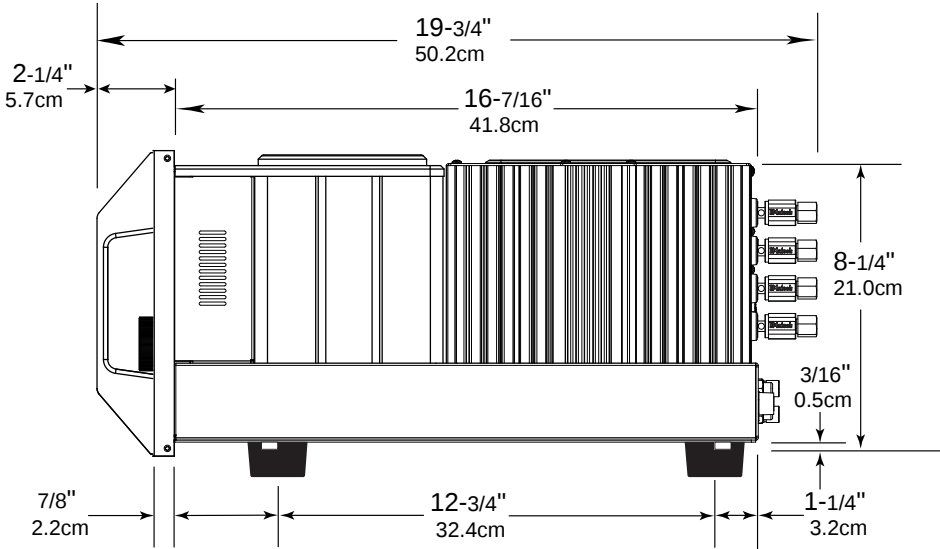
Front View of the MA12000



Rear View of the MA12000



Side View of the MA12000



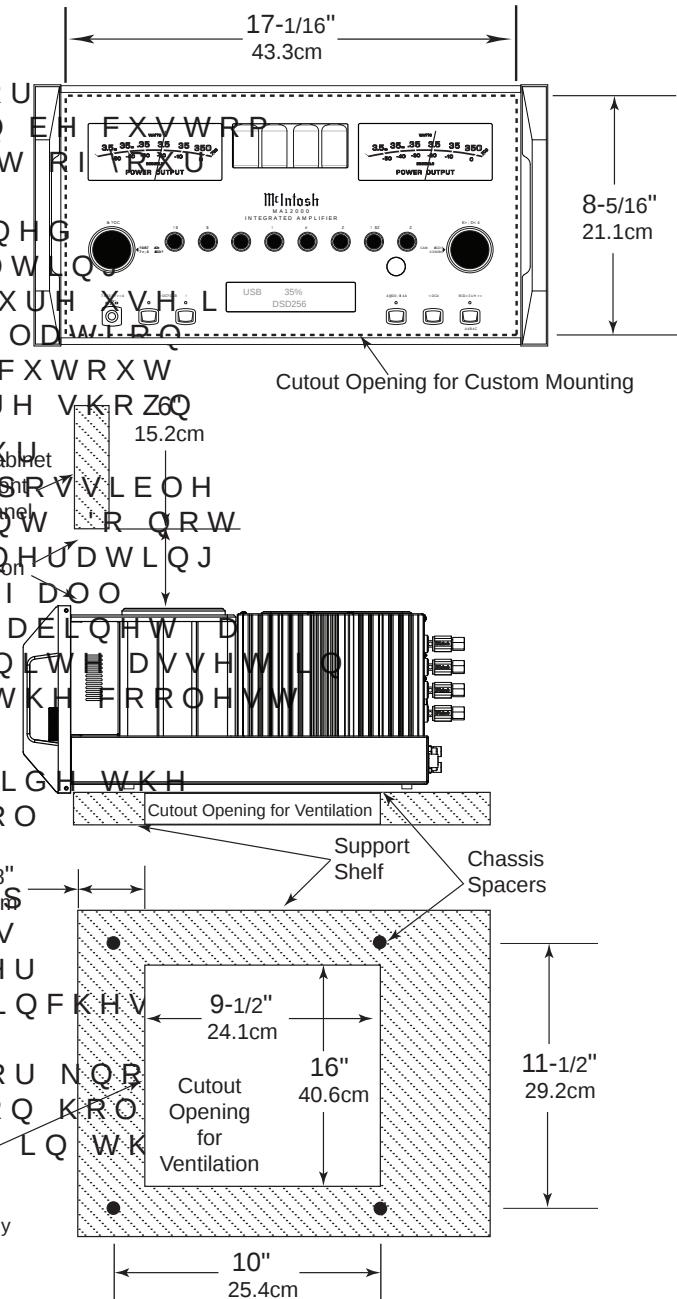
/v•š oo Ÿ}v

7KH 0\$ FDQ EH SODFHG XSULJKW RQ D WDEOH RU
VKHOI VWDQGLQJ RQ LWV IRXU IHHW ,W DOVR FDQ EH
LQVWDOOHG LQ D SLHFH RI IXUQLWXUH RU FDELQHW RI
FKRLFH 7KH IRXU IHHW PD\ EH UHPRYHG IURP WKH
0\$ ZKHQ LW LV FXVWRP LQVWDOOHG DV R\WLOLQH
EHORZ 7KH IRXU IHHW WRJHWKHU ZLWK WKH PRXQWLQJ
VFUHZV VKRXOG EH UHWDLQHG IRU SRVVLEOH IXWXUH
WKH 0\$ LV UHPRYHG IURP WKH FXVWRP LQVWDOODWLRQ
DQG XVHG IUHH VWDQGLQJ 7KH UHTXLUH SDQHO FXWRXW
YHQWLODWLRQ FXWRXW DQG XQLW GLPHQVLRQV DUH VKRZQ
\$OZD\V SURYLGH DGHTXDWH YHQWLODWLRQ IRU IRXU
0\$ &RRO RSHUDWLRQ HQVXUHV WKH ORQJHVW SRVVLEOH
RSHUDWLQJ OLIH IRU DQ\ HOHFWURQLF LQVWUXPHQW RQRW
LQVWDOO WKH 0\$ GLUHFWO\ DERYH D KHDW\HQHUDWLQJ
FRPSRQHQW VXFK DV D KLJK SRZHUHG DPSOL¿HU ,D ODO
WKH FRPSRQHQWV DUH LQVWDOOHG LQ D VLQJOH FDELQHW DV
TXLHW UXQQQLQJ YHQWLODWLRQ IDQ FDQ EH D GH¿QWH DVVHWLO
PDLQWDLQLQJ DOO WKH VVWHP FRPSROHQWV DW WKH FRROHW
SRVVLEOH RSHUDWLQJ WHPSHUDWXUH
\$ FXVWRP FDELQHW LQVWDOODWLRQ VKRXOG SURYLGH
IROORZLQJ PLQLXP VSDFLQJ GLPHQVLRQV IRU FRRO
RSHUDWLRQ
\$OORZ DW OHDVW LQFKHV FP DERYH WKH WRS
LQFKHV FP EHORZ WKH ERWWRP DQG LQFKHV
FP RQ HDFK VLGH RI WKH ,QWHJUDWHG \$PSOL¿HU
VR WKDW DLU¿RZ LV QRW REVWUXFWHG \$OORZ LQFKHV
FP GHSWK EHKLQG WKH IURQW SDQHO \$OORZ
LQFK FP LQ IURQW RI WKH PRXQWLQJ SDQHO IRU NOR
FOHDUDQFH %H VXUH WR FXW RXW D YHQWLODWLRQ KRO
PRXQWLQJ VKHOI DFFRUGLQJ WR WKH GLPHQVLRQV LQ WKH
GUDZLQJ

MA12000 Front Panel
Custom Cabinet Cutout

MA12000 Side View
in Custom Cabinet

MA12000 Bottom View
in Custom Cabinet



'\$7\$ 32576 VHQG VLJ56DOFVRQHFWRU IRU
6RXUFH &RPSRQH QWV WRODQFZLFQWUBO FRPSXWHU RU
&2\$;
'LJLWDO &RDJLDO
,QSWV +0, \$5&
,QSWV ,QSWV 32:(5 &21752/ 2873876
237,&\$/
'LJLWDO ,QSWV 86% \$XGLR 6(59,&(3257 IRUIURP D FRPSDWLWHD,5F,QWRVK &RPSRQH QW ZK
,QSW 7ISH WHUYLFH XVH RQ SRRP,6HQVRU 0\$ LV VZLWFKHG 2Q 2II



D I]vP }vv Y}v•

Phono/Unbalanced Inputs

8QEDODQFHG ,QSXWV VXFk DV WKH WZR 3+212 ,13876
DQG 81%\$/\$1&(' ,13876 WKURXJKH %\$/\$1&(' ,1387 DOORZV D VRXUFH WR EH
5&\$ SKRQR FDEOHV VHH)LJXUHRQQWRFRQXMEQJWKH EDODQFHG FDEOHV LI WKH VRXUFH
0\$ WR RWKHU FRPSRQHQQWVKDVUWKLWLRQSWDROQ WKH
UHG FRQQHFWRU LV XVHG WR FRQDIEOHVWKHDQDQWRFKHQXHG WR FRQHFWRU WKH
<RX DUH IUHH WR EUHDN WUDGLSWLRQVWQHHSWKHDFKPSQHNDW287387; KDV1D&
VWUDLJKW RU OHIW DQG ULJKVSDLUKW E/B FRQHFWRUV ODEHOHG5DIRXW5LJKW DQG /IRU



Figure 01—RCA/Phono cables

Balanced/XLR Input and Output

3,1 6KLHOG *URXQG
3,1 6LJQDO
3,1 6LJQDO

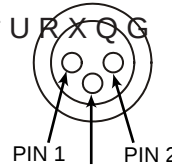


Figure 02—XLR pin diagram

RS232

7KH 0\$ FDQ DFFHSW WKH DQDORJ LQSXW IURP
ZLGH YDULHW\ RQ FRPSRQHQQWV VXFk DV & SODFHU
WXQHUV DQG WXUQWDEOHV 7KH DUH WZR VHWV RI
XQEDODQFHG LQSXWV GHGLFDWHG IRU WXUQWDEOH
FRQQHFWRURQV ZKLFK DOORZ FXVWRPLJWDRQ RV WKH LQSXW FRQQHFWRU WKH 0\$
OHYHO 6HH 3KRQR \$GMXVWPHQWV XWUQWDRQ FRQWUROOHU GHYLFHV 2LWK 56
VLJQDO VWUHQJWK IURP SKRQR FRQWUHQV 7R WDW DQG DWKLV IHDWXUH &RX ZLOO QHHG D
ORZHU WKDQ WKH OLQH OHYHODSSBRSYHGWWRP6PRVW RWKHU
FRPSRQHQQWV 7KH WXUQWDEOHZLQDQDEOR KXIH DSSURXQG
FRQQHFWRURQV ZKLFK VKRXOG EH 6VHF\DWHG &WR OHV
0\$ ¶V *1' %LQGLQJ 3RVW WRWKRLQGLQJ EHDQURXQG
KXP 7XUQ WKH %LQGLQJ 3RVWLQFKQWHFQVWNRN2PR
ORRVHQ DQG DWWDFK WKH JURXQLQJ ZKHUHQ 7XUQWKH %LQGLQJ
3RVW FORFNZLVH WR VHFUXH WKH XEUPRLQGLQJFRQWURO WKH WZR
7KH 0& 3+212 ,1387 VKRXOG EHFXRQHFWURZ

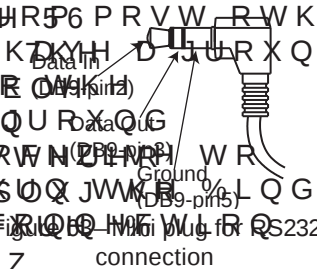


Figure 03—RS232 connection

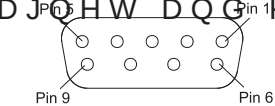


Figure 04—DB9 connector pin layout

Wired IR Input

7KH ,5 ,QSXW DOORZV DQ H[WH
DWWDFKHG WR WKH 0\$ 7K
,1 %\ DWWDFKLQJ DQ ,5 UHFH
)LJXUH WKH 0\$ ¶V 5HPP
XVHG LQ DQRWKHU ORFDWLRQ
0\$ ¶V IURQW ,5 VHQVRU

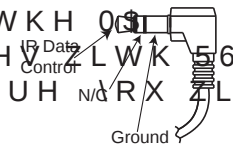


Figure 05— ,5 PP FRQQHFWRU

,I XVLQJ DQ H[WHUQDO ,5 UHF
LQ WKH VDPH URRP DV WKH 0\$
WIRable the front IR sensor 7KLV ZLOO D
SRWHQWLDO WLPLQJ LVVXH F
&RQWURO¶V FRPPDQGV IURP W

IURQW ,5 FDQ EH WXUQHG RQ RII E\ GRLQJ WKH IROORZLQJ

- 3UHV V DQG +ROG WKH /HIW .QRE IRU WZRVLFHFRQGV
- 7XUQ WKH /HIW .QRE WR WKH PHQX FKRLFH
- 7XUQ WKH 5LJKW .QRE FORFNZLVH IRU QDEOHG RQ RU FRXQWHUFORFNZLVH RII
- 3UHV V DQG UHOHDVH WKH /HIW .QRE WR H[LW WKH 6HWXS PHQX

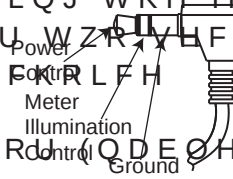


Figure 06—Power control (trigger) mini plug

Passthru

7KH 0\$ 1V 3\$667+58 IHDWXUH DORZV RXU FKRLFH ZLOO EH VDYI
IRXU FKDOOH VVWHP WR EH LQFRUSRUDWHG LQWR DFRQW
3OXJ WKH IHDWXUH VVWHP WR EH LQFRUSRUDWHG LQWR DFRQW
WKH VXSSOLHG \$& 3RZHU &RUG LQWR WKH \$& FRQFHFWRU
IURW WSHDNHU WKH FRQFHFWRU WKH FRQFHFWRU WKH FRQFHFWRU
VWDQGDUG DPSHUH ,(& ORFDWHG LQ WKH IHDWXUH WKH FRQFHFWRU
FRUQHU RI WKH 0\$ 3OXJ WKH IHDWXUH WKH FRQFHFWRU WKH FRQFHFWRU
\$& 3RZHU &RUG LQWR D JURXQG DQG DSHDNHU WKH FRQFHFWRU
RXWOHW

7KH 0\$ SUHDP SOLHU LV QRUDWDYDHPWK 3DVVWKUX GL
WKH VRXUFH XQLW DQG IRX FDOOLQJ WKH VRXQG
IURP WKLW XQLW XQWLO WKH VRXUFH XQLW LV VKXWRII RU

AC Power

7KLV FRQQHFWLRQ LV HVVHQWLDO IRU WKH IHDWXUH WKH FRQFHFWRU
WKH VXSSOLHG \$& 3RZHU &RUG LQWR WKH \$& FRQFHFWRU
VWDQGDUG DPSHUH ,(& ORFDWHG LQ WKH IHDWXUH WKH FRQFHFWRU
FRUQHU RI WKH 0\$ 3OXJ WKH IHDWXUH WKH FRQFHFWRU WKH FRQFHFWRU
\$& 3RZHU &RUG LQWR D JURXQG DQG DSHDNHU WKH FRQFHFWRU
RXWOHW

Power Control (Trigger) Outputs

- 7KH 0\$ KDV WKUHH 3RZHU &RUG LQWR WKH \$& FRQFHFWRU
- 7ULJJHU
- MAIN
 - 75,*
 - 75,*

3RZHU &RQWURO HQDEOHV SRZHU RQ WKH IHDWXUH WKH FRQFHFWRU
FRQQHFWHG FRPSRQH QWV VR WKH IHDWXUH WKH FRQFHFWRU
DXWRPDWLFDOO\ SRZHU RQ RU IHDWXUH WKH FRQFHFWRU
0\$:KHQ HQDEOHG DQ ,QSWX PXLVWREH DQWVWKH FRQFHFWRU
&RQQHFW FRPSRQH QWV WR WKH IHDWXUH WKH FRQFHFWRU
VWHUHR PLQL SOXJ 6HH)LJXUH 7KH IHDWXUH WKH FRQFHFWRU
E\ VHQLQJ RQ RII VLJQDOV LQ WKH IHDWXUH WKH FRQFHFWRU
YROW WR FRQQHFWHG OF,QWRV LQ WKH IHDWXUH WKH FRQFHFWRU
&RQWURO 7ULJJHU DQG RQ WKH IHDWXUH WKH FRQFHFWRU

- 3UHV V DQG +ROG WKH /HIW .QRE IRU WZRVLFHFRQGV
- 7XUQ WKH /HIW .QRE WR WKH PHQX FKRLFH
- 7XUQ WKH 5LJKW .QRE WR VFUROO WKURXJK WKH

IROORZLQJ RSWLRQV

- 2II
 - %DODQFHG
 - 8QEDO
 - 8QEDO
- 1RWH LI\RX KDYH FKDOOLQJ WKH QDPH WKH QHZ QDPH ZLOO
- 3UHV V DQG UHOHDVH WKH /HIW .QRE WR H[LW WKH 6HWXS PHQX

Data Out

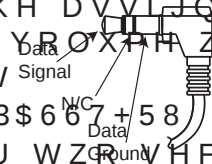


Figure 07—Data port mini plug

Headphones

HDMI (ARC) and CEC

7KH 0\$ IHDWXUHV +LJK 'ULYKH+HDGSKRQH ,QSXW &RQQHFWWRUPKDV\$58 ZLOO EH DYDLOD
\$PSOL¿FDWLRQ 7KH RXWSXW \$IXWKH 5HLWXUOL &HDQQHO &LUFXLWULP DQORZLQZVWKH \$XGLR
+HDGSKRQH \$PSOL¿FDWLRQ SURYHGHFWLROHQDQG &RQWURO &RPPDQG RI +0 7R EH PDQXDOO
SRZHU ZLWK WKH ÀH[LELOLW\ WRQXWIRQL]HYL FHLGH7BDQDQFWLRQ SURSHUQV PDRVHVXUH
RI KHDGSKRQHV W\SHV LQFOXGLQJVKLHJWLXPSSHGDQFHQDEOHG LQ IRXU 79TV VHWXS PHQX
KHDGSKRQHV 7R \$FWLYDWH RU GHDFWLYDWH WKH &RQVXPHU (OHFWURQLFV
&RQQHFW IRXU KHDGSKRQHV X&RQVDRXWHU &RIQLQWKRQV RI 9ROXPHRU 3RZHU
SOXJ WR WKH +(\$'3+21(6 MDFN FRQWURORJJKWKRI+WKHHYLFHV FRQHRWHG WRWKH
,1387 .QRE 7KH LQLWLDO YROXPH, RQ\$XM KSHUGSRQWKH IROORZL(QS<VWFUHHQ
ZLOO EH WKH ODVW YROXPH XVHG3RU V KHDGSKROGVZLWKHDW :QRXU,Q3WKH RULJKW .QRE 9
VWDUWXS OLPLW RI :KHQ KHDGSKRQHGVDR FRQGHFWHWXS WKH GHODI YDOXH IURP
WKH RWKHU RXWSXWV ZLOO EH.PXVHGDWRQWKH MKWV. GHEDWRWKHUIPV78D+GUHOHDVH WKI
VHWWLQJ LV FKDQJHG LQ 6HWXS &(& 92/' VFUHHQ RU WKH 36(7837ULP, VFUHHQ ZLOO WLPH R
7KH 0\$ +HDGSKRQH &URVVI&HG 3':5UWFWRHUQ DURXQG VHFRQGV RI QR I
&LUFXLWULP+SURYHV WKH VRXQG XUQ WKH 5LJKW .QRE 92/80(WR
ORFDOLJDWLRQ IRU +HDGSKRQHFKRRVH 2Q RU+2II , D/ V K%ÿ o ']v
UHVWRUHV WKH GLUHFWLRQDO 3UHVVDQG UHOHDVH WKH 9DQWLQREVWRUHLWVXFK DV
WKH VSDWLDO VRXQG VWDJH. ORUPDOO\ KHDUG ZLWK WHOHYLVLRQ VHWV KDYH VRXQ
/RXGVSHDNHU OLVWHQLQJ +,PDQ EH FQDEOHG RU WISLFDO PXVLF VRXUFHV %HF
GLVDEOHG LQ 7ULP IXQFWLRQV 7KH KHDGSKRQH &RQH FRVW\$58 EHVW KDV EHHQ DGGHG WR W
SOXJJHG LQ 7KH GHIDXOW \$XGRU 5HMHUQ' &LQFOXGLW &WRFXLWURX\$UVR 7KH DQGLWWR I
EH RQ 7R FKDQJH WKH +;' VFWLRQ IXQFWLRQ :KHQ OLVWLRQV BDQGLQSHZVJKBV9 EHH
• :LWK KHDGSKRQHV DWWDEKHG SUHV, 8SXW 6LJQDO WRX\$&FRXQXEWERRVWHG DV
UHOHDVH WKH /HIW .QRE SURYLGHV D YLQFKURQLJHG 9LGHR3DQV\$RQGRKROG WKH /HIW
Trim 0RQLWUR 6LJQDO DXWRPDWLFDOOVHFRQGV WR HQWHU 6HWXS
• 7XUQ /HIW .QRE WR WKH 3X(\$'3+21(ORQLWUR 6LJQDO RU /LS*DLQF VFRGHHQURP
+;' VFUHHQ \$XWR WR 0DQXDO SHUIRUP WKH IRORVZDQGVWRHSG/ WKH /HIW
• 7XUQ WKH 5LJKW .QRE 92/80(UHVVDQG KROG WKH /HIW :QRXU,Q3WKH /HIWZQRE WR FK
FKRRVH 2Q RU 2II VHFRQGV WR HQWHU 6HWXS +0, 237, RU 237, WR D
• 3UHVVDQG UHOHDVH WKH+IRWDQREVWRUHLWV.QRE WR WKHUIPV78H/5LJKW .QRE 92/8
7ULP VFUHHQ ZLOO WLPH RXW6DQGRQV DFWUHHQ *DLQ IURP G% WR G% LQ
DURXQG VHFRQGV RI QR LQ\$XMUQ WKH 5LJKW .QRE 92/80(UHVVDQG UHOHDVH WKH /
FKRRVH \$XWR RU 0DQXDO PHQX

USB

7KH 86% LQSWX RI WKH 0\$
FDSDELWLW\ WR SOD\ PXVLF I

Software Requirements

Apple® 0DFLQWRVXWHUV UHTXL
ODWHU \$SSOH FRPSXWHUV U
LQVWDOO WR FRPPXQLFDWH Z
)RU :LQGRZV EDVHG FRPSXWH
63 RU ODWHU LV UHTXLUH
86% \$XGLR GULYHU PXVW EH L
FRPPXQLFDWH ZLWK WKH 0\$

7R install the McIntosh USB Driver IRU :LQGRZV
EDVHG FRPSXWHUV

'RZQORDG WKH ODWHVW GULYHU I
ZHE <https://www.mcintoshlabs.com/products/>

LQWHJUDWHG DPSOLHU 0\$

7KH GULYHU FDQ EH IRXQG LQ WK
RI WKH ZHESDJH XQGHU 6RIWZDUH
'\$ 'LJLWDO \$XGLR ORGXOH 0F,QW
:LQGRZV 'ULYHU

- 8Q]LS WKH 0F,QWRVKB8VE\$XGL
- 5XQ WKH)LOH
- &KRRVH ³<HV' WR DOORZ FKDQJHV WR \RXU
FRPSXWHU VHH)LJXUH
-)ROORZ VRIWZDUH SURPSWGHUWHUWQQRDQHMKLRG SDUW\
³,QVWDOO' DV QHHGHG -5LYHU OHGLD &HQWHU
- &OLFN ³)LQLVK' ZKHQ GUYLHUWQVWDOO\ SOD\ ZLOO VKRZ WKH VDP SOLQJ UDWH

1H[W FRQQHFW WKH &RPSXWHUWRLWKH0\$ IRUWKH 86% LQSWX

USB2.0 &DEOH 7\SH \$ WR 7\SH %

:LQGRZV VKRXOG GHWHFW WKH QHZ GHYLFH LI \RX

LQVWDOOHG WKH GULYHU VRIWZDUH 7KHUWZLWLFHWHGQSRWHQDQRZ GLJLWDO VRXUFHV WR EH

LQVWDOO WKH GULYHU DV LQGHSHQVHG WRWKH0\$ LQWKH 726/,1. FDEOHV

ORZHU SDUW RI \RXU PRQLWRUDOR NRZQ DV ³RSWLFDO DXGLR FDEOHV' 7KH 2SWLFDO

<RX FDQ XVH WKH :LQGRZV &RPSXW35DQQRQGHQKFW WKHMKROXWLRQ GLJLWDO DXGLR XS

QHZ DXGLR GHYLFH ZKLFK ZLOO WBSNDU DFLW 7KH0\$ '\$ ZLOO SURFHVV

+' +6 86% \$XGLR' <RX PDI DOVR VROHHFW WKLV VWDQGDUG IRUPDW 63',) 3&0 VLJQDOV DV ZHOO DV

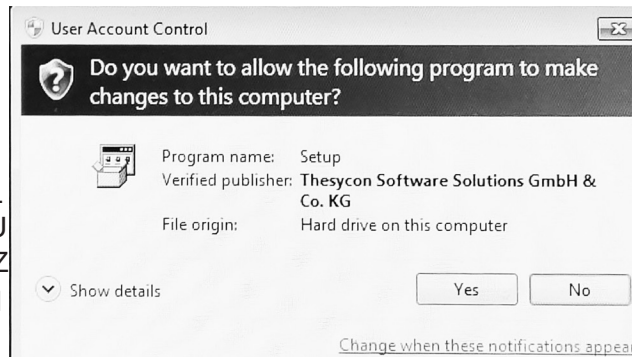


Figure 08— QVWDOOLQJ 86% GULYHU
VRIWZDUH



Figure 09— 86% &DEOH

'ROE\ 'LJLWDO DQG '76 HQFRG
VWUHPV 8QVXSSRUWHG IRUP
DQG RU XQSOHDVDQW VRXQGV

Coax

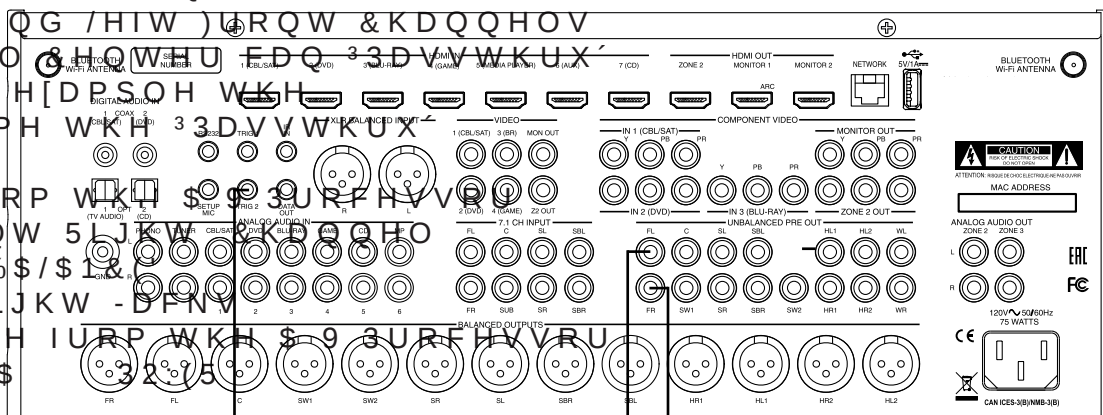
7KH WZR 'LJLWDO &RD[&RD[L
LYHUVRXUFHV WR EH FRQQHFWHG V
'LJLWDO \$XGLR 5&\$ &RD[LDO &
,QSWV FDQ KDQGOH KLJK UHV
WR N+] ELW 7KH 0\$ '\$
VWDQG DUG IRUPDW 63',) 3&0 V

'ROE\ 'LJLWDO DQG '76 HQFRG
VWUHPV 5HPHPEHU XQVXSS
LQ VWUDQJH DQG RU XQSOHDV

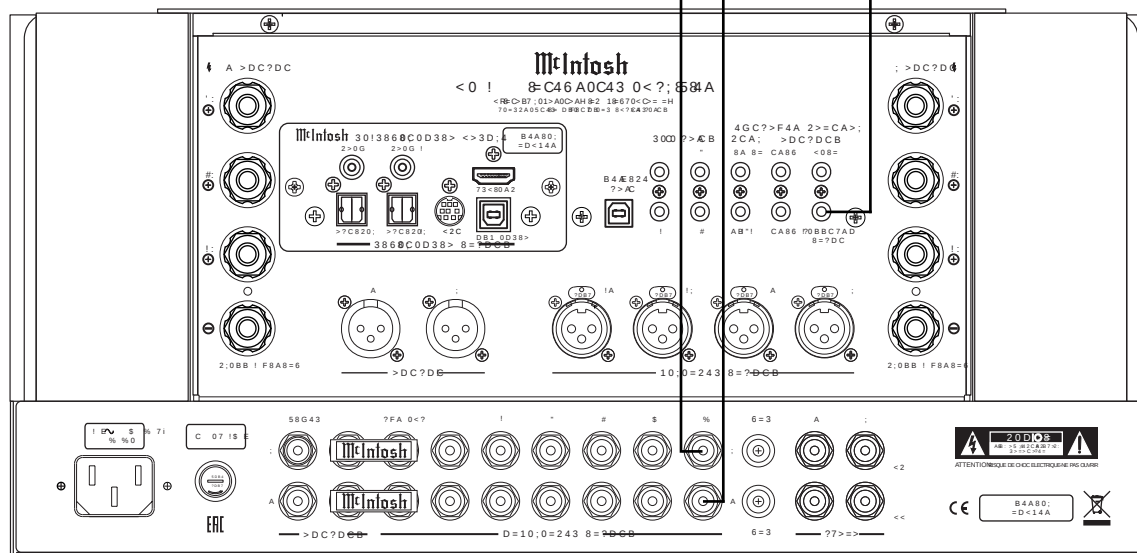
MCT

7KH 'LJLWDO 0&7 ,QSW &LUFX
GLUHFWO\ GHFRGHV 6\$&' &' VL
IURP DQ H[WHUQDO 7UDQVSRU
D VHFUXH GLJLWDO FRQQHFWL
WKH SOD\EDFN RI WKH KLJK G
6\$&'V 5HJXODU &'V FDQ DOVR
0&7 FRQQHFWLRQ 8VH DQ 0&7
0&7 GLQ MDFNV IURP WKH VRX
'LJLWDO 0&7 &DEOH LV D 0F,Q
FDEOH DQG LV LQFOXGHG ZLW
7KH 0&7 FDEOH LV SDUW QXPE
RUGHUHG IURP WKH 0F,QWRVK
LQVWDOOLQJ UDWH

7KH 0\$ FDQ EH SDUW RI D 0XOWLFKQQHO 6RXQG
6\VWHP IRU %/8 5\$< \$XGLR '9' \$XGLR DQG +RPH A/V Processor
7KHDWHU 0RYLHV 7KH 5LJKW DQG /HIW)URQW &KDQQHOV
IURP DQ \$XGLR 9LGHR &RQWURO &HQWU FDO 33DVVWKUX'
WKH 0\$,Q WKH IROORZLQJ H[DPSOH WKH VIDEO MONITOR
81%\$/\$1&(' ,QSXW ZLOO EHFRPH WKH 33DVVWKUX'
LQSXW
&RQQHFW \$XGLR &DEOHV IURP WKH \$93URFHVVRU
) /)URQW /HIW DQG)5)URQW 5LJKW &KDQQHO
2XWSXWV WR WKH 0\$ 81%\$/\$1&.
1XPEHU ,13876 /HIW DQG 5LJKW -DFNV
&RQQHFW D &RQWURO &DEOH IURP WKH \$93URFHVVRU
75,*JHU 2XWSXW WR WKH 0\$
&21752/ 3\$667+58 ,1387 -DFN



6 H H ³ 3 D V V W K U X ' R Q S D J H I R U P R U H L Q I R U P D W L R Q



}vv ŸvP ({Æ]r u%o]. Ÿ}v

7KH 0\$ 3RZHU \$PSOLILHU & LUFXLVU WRJHWKHU
ZLWK DQ DGGLWLRQDO VHSDUDWH 3RZHU \$PSOLILHU PDI
EH XVHG WR %L \$PSOLI D /RXGVSHDNHU 6VWHP
WKH LOOXVWUDWLRQ RQ WKLV SDJH
WKH 0\$ LV FRQQHFWHG WR WKH 0\$
)UHTXHQF\ 6HFWLRQ RI WKH /RXGVSHDNHU 7KH DGGLWLRQDO
VHSDUDWH 3RZHU \$PSOLILHU LV FRQQHFWHG WR WKH /RXGVSHDNHU
)UHTXHQF\ 6HFWLRQ RI WKH /RXGVSHDNHU 6VWHP

Warning: The Loudspeaker System used for Bi-Amplification must have the jumpers removed from between the MID/HIGH and LOW Frequency Sections of the Loudspeaker System. Failure to remove them could result in damage to the MA12000 and/or the separate Power Amplifier.

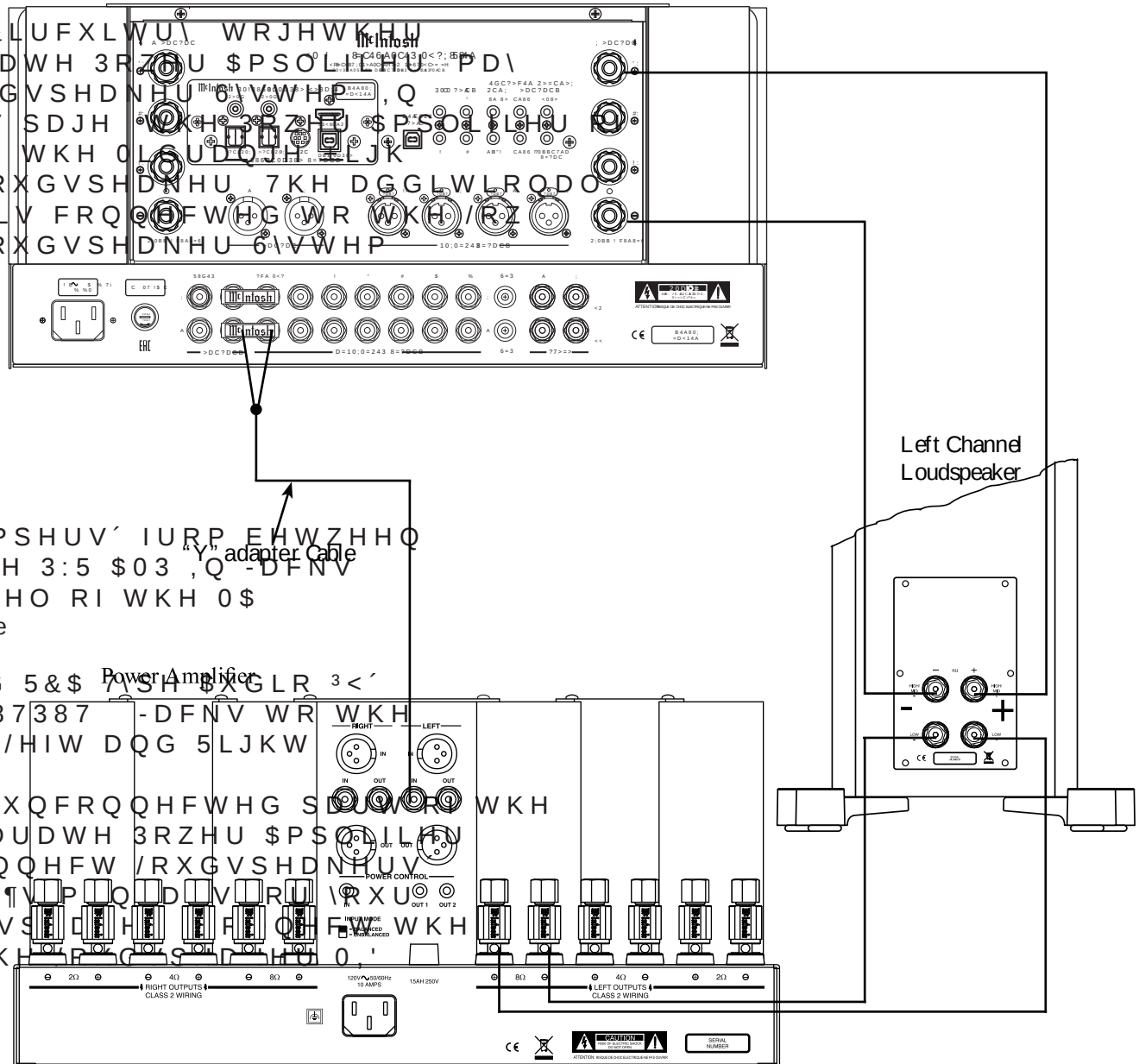
MA12000 Connections:

5HPRYH WKH 30F,QWRVK -XPSHUV' IURP EHWZHHQ
WKH 287387 -DFNV DQG WKH 3:5 \$03 ,Q -DFNV
ORFDWHG RQ WKH 5HDU 3DQHO RI WKH 0\$

Note: Place the "McIntosh Jumper" in a safe place for possible future use.

8VLQJ D SDLU RI VKLHOGHG 5&\$ VSH \$GLR 3<'
\$GDSWHUV FRQQHFW WKH 287387 -DFNV WR WKH
3:5 \$03 ,Q -DFNV IRU ERWK /HIW DQG 5LJKW
&KDQQHOV
&RQQHFW WKH UHPDLQLQJ XQFRQQHFWHG SDUW
3<' \$GDSWHUV WR WKH VHSDUDWH 3RZHU \$PSOLILHU
5HIHUUHQJ WR 3+RZ WR &RQQHFW /RXGVSHDNHU
RQ SDJH DQG WKH RZQHUV PDI
3RZHU \$PSOLILHU DQG /RXGVSHDNHU
0\$ %LGLQJ 3RVW WR WKH
+ , + , QSXW 7HUPLQDOV

Note: The Loudspeaker Connection illustrations on this page are for the Left Channel. Connect the Right Channel Loudspeaker in the same manner.



SUHS DUHG VHF WLRQ RI WKH FDEOH HQG LQWR WKH WHUPLQDO
 VLGH DFFHV V KROH DQG WLJKWHQ WKH WHUPLQDO FDS XQWLO
 WKH FDEOH LV ILUPO\ FODPSHG LQWR WKH %LQGLQJ 3RVW 7KH VXSSOLHG 0\$ 5HPRWH
 VR WKH OXJV RU ZLUH FDQQRW VOLS RXW 5HIHU WR ILJXUHV FDSDEOH RI GLUHFWO\ FRQ
 / DQG 0

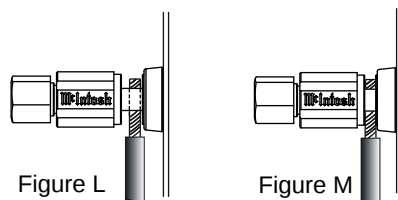


Figure L

Figure M

, I WKH /RXGVSHDNHU V LPSHGDQFH LV LQ EHWZHHQ
 WKH DYDLODEOH FRQQHFWLRQV XVH WKH QH DUHVW ORZHU
 LPSHGDQFH FRQQHFWLRQ

Note: The impedance of a Loudspeaker actually varies as the Loudspeaker reproduces different frequencies. As a result, the nominal impedance rating of the Loudspeaker (usually measured at a midrange frequency) might not always agree with the impedance of the Loudspeaker at low frequencies where the greatest amount of power is required. Contact the Loudspeaker Manufacturer for additional information about the actual impedance of the Loudspeaker before connecting it to the McIntosh MA12000.

WARNING: Loudspeaker terminals are hazardous live and present a risk of electric shock. For additional instruction on making Loudspeaker Connections contact your McIntosh Dealer or McIntosh Technical Support.

&RQQHFW WKH 0\$ SRZHU FRUG WR DQ DFWLYH \$&
 RXWOHW

How to use the Remote Control

Notes: 1. If at any time the MA12000 seems unresponsive to the HR085 Remote Control Commands, press the  DEVICE Push-button to select  first.

2. For additional information on using the HR085 Remote Control with the McIntosh Model, please refer to the "How to Operate" starting on page 27.
3. For additional information on assigning the Data Ports, refer to "Data Ports" on page 23.

Trim

3UHVV WKH 75,0 3XVK EXWWRQ
 IXQFWLRQ %DODQFH 7ULP /HY
 0\$)URQW 3DQHO 'LVSOD\ V
 8S RU 'RZQ 3XVK EXWWRQ WR

Note: Press the TRIM Push-button to recall the last Trim function selected.

Output Selection

3UHVV WKH %/8(6HWXS 3XVK
 WKH \$0 2XWSXW RU)0 2XW
 FRQWURO WKH 5H DU 3DQHO \$X
 2)) DQG 3RZHU &RQWURO 75,*

Note: For additional information on assigning the Outputs (1 and 2) and Power Control Triggers (1 and 2) refer to pages 22 and 23.

Remote Control Diagram

/(('V LOOXPLQDWH ZKHQ VHQGLQJ D UHPRWH FRPPDQG
DQG ZKHQ SURJUDPPLQJ WKH UHPRWH FROWURO

6HOHFW WKH '(9,&(WR VHOHFW WKH WDELOJW
IRU WKH UHPRWH FRQWURO IR FRPPDQGV

6(783 3XVK EXWWRQ LV XVHG DV D
36KLIW .H\ WR VHOHFW D IXQFWLRQ
ZLWK EOXH FRORU QRP HQFODWXUH

6HOHFWV \$0 7XQHU 2SHUDWLQJ)XQFWLRQ VHOHFW 2XWSXW
ZKHQ XVHG ZLWK WKH 6(783 VKLIW 3XVK EXWWRQ DQG 7UDFN
6HOHFWLRQ RQ FHUWDLQ 0F,QWRVK & SODHU

3UHVW WKH 7ULP 3XVK EXWWRQ DQG WKHQ WKH
/(9(/ 83 3XVK EXWWRQ WR VHOHFW DQG DGMXVW
YDULRXV IXQFWLRQV 0(18 LV XVHG ZLWK
0F,QWRVK 0RGHOV GLVSOD\LQJ FKRLFHV RQ
YLGHR VFUHHQ

\$FWLYDWHV WKH 75,0 0RGH *8,'(LV
XVHG ZLWK 0F,QWRVK 0RGHOV GLVSOD\LQJ
LQVWUXFWLRQV RQ D YLGHR VFUHHQ

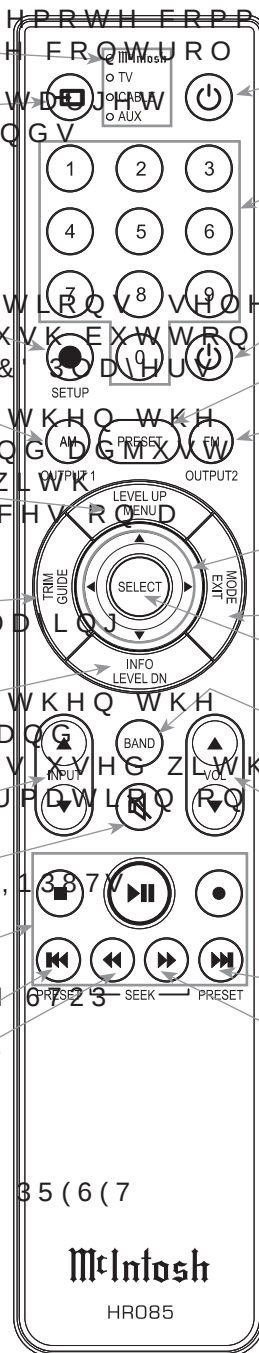
3UHVW WKH 7ULP 3XVK EXWWRQ DQG WKHQ WKH
/(9(/ '2:1 3XVK EXWWRQ WR VHOHFW DQ
DGMXVW YDULRXV IXQFWLRQV ,1)2 LV XVHG ZLWK
0F,QWRVK 0RGHOV GLVSOD\LQJ LQIRUPDWLRQ RQ
D YLGHR VFUHHQ

6FUROOV WKURXJK WKH DYDLDEOH ,1387V
0XWHV WKH DXGLR

6HOHFWV WUDQVSRUW IXQFWLRQV RI 0723
3/\$< 3\$86(5(&25' %\$&
IRU WKH SUHYLRXV VHOHFWLRQ)\$67
5(9(56()\$67)25:\$5' DQG
1(;7 IRU WKH QH[W VHOHFWLRQ

6HOHFWV 3UHYLRXV 7XQHU 6WDWLQJ 35(6(7

7XQHU VFDQV 'RZQ WKH GLDO
WR 6((. WKH QH[W 6WDWLQJ



3UHVW WR 3RZHU WKH ,QWHJUDWH
8VH WR VHOHFW WXQHU SUHVHVW
DFFHVV DQ \$0)0 6WDWLQJ)UHTXH
GLVF WUDFNV RU DQ\ QXPEHUHG R

3UHVW WR 3RZHU WKH ,QWHJUDWH
'LUHFW DFFHVV WR VWRUHG 7XQHU
XVHG ZLWK WKH QXPHULF 3XVK EX

6HOHFWV)0 7XQHU 2SHUDWLQJ)XQ
ZKHQ XVHG ZLWK WKH 6(783 VKLIW
6HOHFWLRQ RQ FHUWDLQ 0F,QWRVK

8VH and T WR WXQH 8S RU 'RZQ WKH
'LDO XH[W IRU WKH QH[W RU SUHYL
5DGLR 3URJUDP ZHUH DSSOLFDEO

(; ,7 WKH 75,0 0HQX DQG LV XVHG Z
0RGHOV GLVSOD\LQJ LQIRUPDWLRQ
VFUHHQ

8VHG WR 6(/(&7 (QWHU WKH LQGLF

3UHVW WR FKDQJH %URDGFDVW %\$
FRQQHFHWHG 7XQHU 6HOHFW FHUW
RQ D YDULHW\ RI 0F,QWRVK 0RGHO

\$GMXVW WKH 92/XPH OHYHO XS R

6HOHFWV 1H[W 7XQHU 6WDWLQJ 35

7XQHU VFDQV 8S WKH GLDO WR
6((. WKH QH[W 6WDWLQJ

Note: Push-buttons whose function is not identified
above are for use with other McIntosh Products.

dŒ]u &μv Ÿ}v• v ^ «vP•

7KH 7ULP)XQFWLRQV DOORZ \RX WR PDNH FKDQJHV
TXLFNO\ WR PDQ\ GLIIHUHQW VHWWLQJV 7R DFFHVV WKH 7ULP
0HQXV

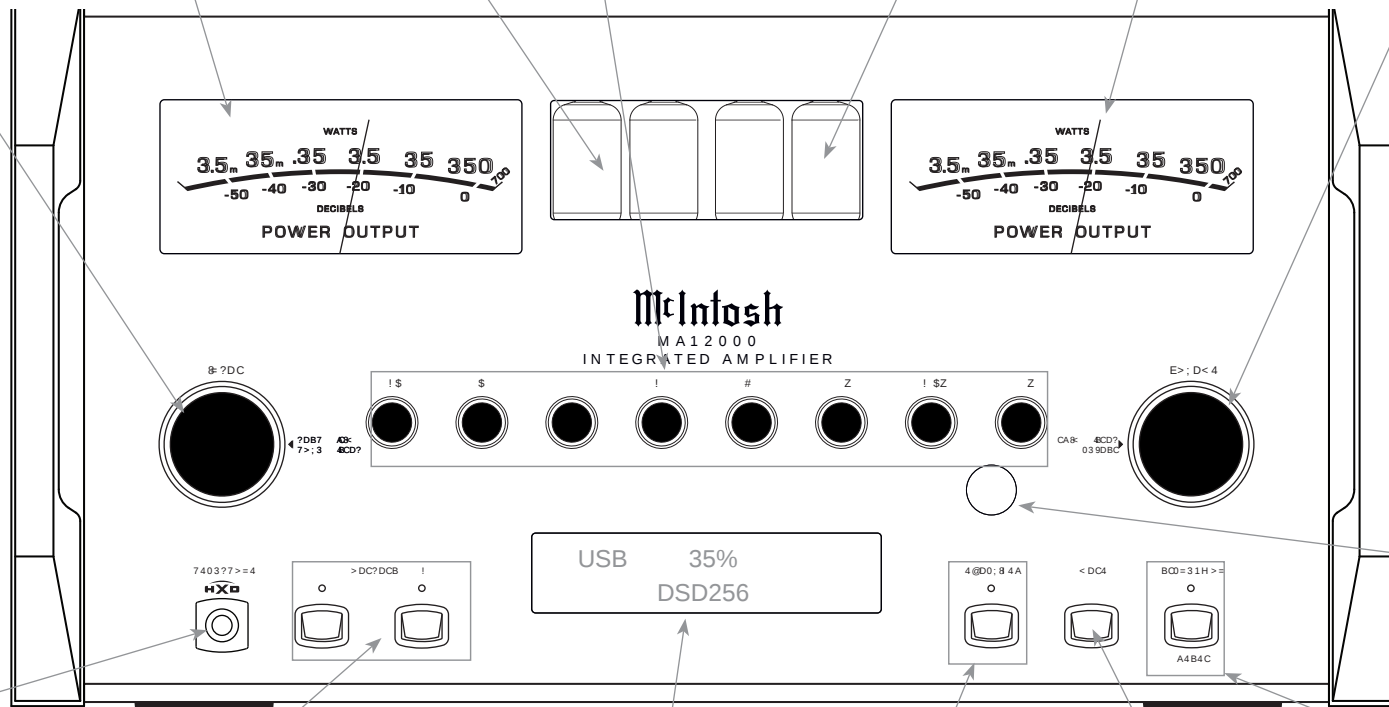
- 3UHV V DQG UHOHDVH WKH /HIW ,1387 .QRE
- 1DYLJDWH E\ WXUQLQJ WKH /HIW .QRE
- &KDQJH VHWWLQJV E\ WXUQLQJ WKH 5LJKW
92/80(.QRE

RU XVH WKH 5HPRWH &RQWURO DV GHVFULEHG ³+RZ WR XVH
WKH 5HPRWH &RQWURO´ RQ SDJH

%%/\$1&(	Center	7UDQVLWLRQV EHWZHHQ IXOO OHIW DQG IXOO ULJKW
,1387 75,0	0dB	G% WR G% LQ G% LQFUHPHQWV
(48\$/ ,=(5	2II	2Q RU 2II
0212 67(5(2	6WHUHR	0RQR RU 6WHUHR
0(7(5 /,*+76	On	2Q RU 2II
78%(/,*+76	On	2Q RU 2II
',63/\$< %5,*+71(66		%ULJKWQHVV DGMXVWPHQWV
+'0, /,3 6<1&'(/\$< 7KLV ZLOO RQO\ GLVSD\ ZKHQ WKH FXUUHQWV,1387% EHWZHHQ PV DQG PV LQ PV LQFUHPHQWV +'0, DQG /LSV 6\QF 0RGH LV VHW WR 0DQXDO		

RU

/HIW &KDQQHO (48\$/,=(5 &RQWUROV LQFUHDV\$ILRWG&KEDQMH
 \$PSOLILHU 2XWSXWKH YROXPH OHYHOV DW WKH\$PSQWILHU U2HTX\$QV LHV
 Meter RI +] +] +] +] +] Meter
 +] +] DOG +]



(48\$!/,=(5 3XVK EXWWRQ 5751' %< 21 3XVK EXWWRQ
LQGLFDWRU ZKHQ GHDFWQ & DFDHGRU VZLWFKHV V
WKH DXGLR VLJQDO EISD21VWU W)K H6WDQGE\ DQG
(TXDOL]HU &RQWUROV PLFURSUFHVVVRUV

19

How to Operate the Setup Mode

<RXU 0F,QWRVK 0\$ KDV EHHQ IDFWRU\ FRQILJXUHG
WR DOORZ LPPHGLDWH HQMR\PHQW SETUP inputs
WKH QHHG IRU IXUWKHU DGMXVWPHQW Hold INPUT
FKDQJHV WR WKH IDFWRU\ GHIDXOW VHWWLQJ VHD
LV SURYLGHG WR FXVWRPLJH WKH 7RSHILWLO\ P
WKH)URQW 3DQHO ,QIRUPDWLRQ WKH 1387 &RQWUR
0\$)URQW 3DQHO ,OOXVWUDWLRQ WKH 1387 &RQWUR
SDJH ZKLOH SHUIRUPLQJ WKH IROORZLQJ VVHSV.

Note: If the MA12000 is currently On, proceed to step 2.

3UHVW WKH 67\$1'%< 21 3XVK) EXXWWRQ
3DQHO RU SUHVW WKH 3PZHU 21 3XVK EXXWWRQ
WKH 5HPRWH &RQWURO WR V
7KH 0\$ ZLOO JR WKURXJK
LQLWLDOL]DWLRQ ZLWK WKH
'LVSOD\ ILUVW LQGLFDWLQJ
WKH ODVW XVHG VRXUFH DQG
IROORZHGE\ WKH YROXPH V
DW JHUR DQG WKHQ LQFUHDV
VHWWLQJ 5HIHU WR ILJXUH

BAL 1 15%

)LJXUH

3UHVW DQG KROG LQ WKH ,1
WKH)URQW 3DQHO ,QIRUPDW
30\$ 9 RU KLJKHU OD
YHUVLRQ 6 1 \$)*BBBB'
5HIHU WR ILJXUH

IA12000 V1.00

/N: AFG

)LJXUH

5RWDWH WKH ,1387 &RQWURO WR VHOHFW WKH 6HWXS
ORGH 0HQX LWHP 36(783 ,QSWV +ROG
,1387 ' &RQLQXH WR URWDWH WKH ,1387

&21752/ WR YLHZ WKH RWKHU 6783 0RGH
2SWLRQV 5HIHU WR ILJXUH

Firmware Version

7KH 0\$ IXQFWLRQDOLW\ LV
VRIWZDUH WKDW LV NQRZ DV)
)LUPZDUH ,GHQWLILFDWLQJ 1X
7KH ILUVW)LUPZDUH 1XPEHU L
7KH 0\$ DOQ KROG LQ WKH ,1
3UHVW WKH 6HWXS 0RGH
5HIHU WR ILJXUH ,1
6HWXS 0RGH

5HIHUULQJ WR WKH)URQW 3

LVSOD\WKH OXPEHU DWVHU V
)LUPZDUH 5HIHU WR
7R YLHZ WKH VFRQG)LUPZDUH
WKH 'LJLWDO \$XGLR &LUFXLWU
WKH IROORZLQJ VVHSV
3UHVW DQG KROG LQ WKH ,1
6HWXS 0RGH
5RWDWH WKH ,1387 &RQWUR
,QIRUPDWLRQ 'LVSOD\ LQGLF
RU KLJKHU 'LJLWDO \$X
YHUVLRQ 5HIHU WR ILJXUH

DA2 FIRMWARE
V1.00

)LJXUH

7R H[LW WKH 6HWXS 0RGH S

/v%μš ^ «vP•

7KH 0\$ SURYLGHV WKH DELC
,13876 2II RU EDFN 2Q LI WKH
VZLWFKHG 2II 7KH GHIDXOW ,
EH FKDQJHG WR PDWFK WKH QD
FRQQHFWHG WR LW RU DQ\ RWH
ZLWKLQ &KDUDFWHUV
,1387 6:,7&+(' 21 2))

Default Settings		
Function Name	Default	Options.
MA12000	9B 8B	
3DQHO	QIRUPDWLRQ	
0\$	IROORZHGE\	
1387	YROXPH VHWWLQJ	
6783	LQGLFDWLQJ	
2XWSXW	0DLQ 2XWSXW	
75,**(5	2XWSXW 0DLQ 2XWSXW	
'\$7\$ 32576 WKUX	\$OO 'DWD6SHFLILF	
3\$667+58	OFF	\$/ RU 81\$/
1387 &RQWURO	QWLO	,QSWV
LQGLFDWLQJ	LQGLFDWLQJ	
LQGLFDWLQJ	\$XWR	0DQXDO
6783	0DLQ	GE WR
56 5DWH	%DXG	WR
5HPRWH &RQWURO	URWDWH	Alternate
)URQW ,5 6HQ	VRQDEOHG	'LVDEOHG
\$XWR 2II	(QDEOHG	'LVDEOHG

Note: When an INPUT is switched Off, its name will no longer appear on the Front Panel Information Display when using the INPUT Control (Front Panel or Remote Control).

[illegible]

0138738 ROWURO)LJXUH
(HEHVVDU URWDWH WKH 5RWDWH WKH 92/80(\$'-867
(150(1667 OSXW W%\$F%\$U\$1F%\$HU 3% WR 30'
Q WKH IROORZLQ H[DPSON WKH W%\$F%\$U\$1F%\$HU 3% WR 30'
OSXW ZLOO EH IJODPHG WP 0(' \$ 695

Q\$XW ZLCO EH CHQDTHG WR 0(, \$ 059
KH 0\$ 'HIDXOW ,Q\$XW 1DPHV 81%\$7
\$/ &2\$; HWF DV LQGLFDWHG RQ WKH)URQW 3DQH
VSOD\ EDO EH FYVWBPPIHG WR D GLIHHH\WKHDPH XS

HO FKDUUDFWHUVUORQJ 781(5 & 53M5BWHWKKH, 133M & RQWUR
VZILUPWDWHWKH
YDLODEOHFKDUUDFWHUVIRU UHQDQDQYKWKQH LV33M W RQWDXGH
LVSODLOJGLFDPWHV B & RQWUR 50%WR'FKDQJH WKH FK
R+ILJXUH 0 1 2 3 4 5 6 7 8 9 : ; <W R ILJXUH

Q WKH IROORZLQJ H[DPSON WKH %\$/ , QSXW ZLOO EH
H QDPHG WR 30(',\$ 695' RENAME: OPTI
3UHVVDQG KROG LQ WKH ,1387 & MEW URO WR HQWHU WKH
6(783 02(')LJXUH

5RWDWH WKH ,1387 &RQWURSHXSDWOW³6178SURQSHXWXQWLO
UDROG ,1387 BSWKH DSSKHUV RQ WKHL, QMKIPWDRQ 30(',\$ 695' 5
'LVSOD\ 5HIHU WR ILJXUH
H 61%\$ / ,QSW ZLOO EH

SETUP: Inputs
(Hold INPUT)

RENAME: BAL
>MEDIA SVR <

) LJXUH

3UHVVV DQG KROG LQ WKH ,13877 & RQW HRO VKXHQH Z QDPH SUI
3-6 (783 %\$ / 2 5HODPH DSSH 1387 & RQW HRO XQWLO 36 (78
'LVSOD\ ,I QHFHVVDU\ URWDWH 5HODPH 1387 & RQW HRO VKXHQH

'LVSOD\ 5HIHU WR ILJXUH

SETUP: MEDIA SVR
On / Rename

)LJXUH

([LW WKH 6(783 0RGH E\ VHY
,1387 &RQWURO

Kµš%µš ^ «vP•

7KH 2XWSXW 6HWWLQJV SURYLGH WKH DEOH LW\ WR FKDQJH K
WKH 0\$ 2XWSXW 2XWSXW DQG +HDGSKRQH
IXQFWLRQ

287387 5RWDWH WKH ,1387 &RQWURO

%\ GHIDXOW 287387 DQG DUH VHW WZR DYDLODEOH VHWWLQJ
XVLQJ WKH)URQW 3DQHO 287387 DQG 3XVK EXWWRQV
RU E\ XVLQJ WKH 287387 DQG 3XVK EXWWRQV WKH HWWL
5HPRWH &RQWURO ,I LW LV GHVHULHU WKH 287387
DQG RU DOZDV 2Q UHJDUGOHVV, QIDWKH 287387 DQG RU
3XVK EXWWRQ VHWWLQJ SHUIRUP WKH WKH 287387 VHWWL
3UHV DQG KROG LQ WKH ,1387 &RQWURO WR HQWHU WKH
6(783 02'(7KH 0\$ 'HIDXOW 6HWWLQJ I
5RWDWH WKH ,1387 &RQWURO VHWWLQJ WKH 287387 VHWWL
ZKHQ WKH +HDGSKRQH &DEOH 3
0\$)URQW 3DQHO +(\$'3+21(6
DUH WZR DYDLODEOH VHWWLQJ

SETUP: Outputs
(Hold INPUT)

)LJXUH

+ROG ,1387 ' DSSHDUV RQ WKH ,QIRUPDWLRQ
'LVSOD\ 5HIHU WR ILJXUH

SETUP: OUTPUT 1
Switched

)LJXUH

3UHV DQG KROG LQ WKH ,1387 &RQWURO WKH 287387 VHWWL
36(783 287387 6ZLWFKHG' DSSHDUV WKH ,1387 &RQWUR
+(\$'3+21(6 0XWH \$OO 2XWSXW

SETUP: OUTPUT 1
Unswitched

)LJXUH

'LVSOD\ 5HIHU WR ILJXUH
5RWDWH WKH 92/80(\$'-867

ILJXUH
&RQWUR WKH 92/80(\$'-867 &RQWUR
,1387 &RQWURO

SETUP: OUTPUT 2

Switched

SETUP: OUTPUT 2

Unswitched

SETUP: HEADPHONES

Mute All Outputs

)LJXUH

0XWH \$OO 2XWSXWV

SETUP: HEADPHONES

Mute No Outputs

)LJXUH

Power Control Triggers 1 and 2

%\ GHIDXOW WKH 3RZHU &RQWURO 75,*JHU DOG 75,*JHU
DUH DVVLJQHG WR DFWLYDWH ZKHQ 2XWSXW RU 2XWSXW
LV VHOHFWHG 7ULJJHUV DQG EDQ FH DHDVVLJQHG WR
IXQFWLRQ WKH VDPH DV WKH 0\$,1 3RZHU &RQWURO -DEN RU
EH DVVLJQHG WR D JLYHQ ,QSXW

Note: The MAIN Power Control Jack is controlled by
the STANDBY/ON Front Panel Push-button and
the Remote Control Power Push-buttons.

,Q WKH ILUVW H[DPSON WKH 3RZHU &RQWURO 7ULJJHUV
DQG ZLOO EH DVVLJQHG WR 0\$,1 5RWDWH WKH ,1387 &RQWURO WR VHOHFW 6(783
3UHV DQG KROG LQ WKH ,1387 &RQWURO WR VHOHFW 6(783
6(783 02'(
5RWDWH WKH ,1387 &RQWURO WR VHOHFW 6(783
7ULJJHUV +ROG ,1387 ' DSSHUV RQ WKH ,1387
,QIRUPDWLRQ 'LVSOD\ 5HIHU WR ILJXUH
DSSHUV RQ WKH 'LVSOD\ 5HIHU WR ILJXUH

SETUP: Triggers
(Hold INPUT)

SETUP: TRIGGER 2
Input (Hold INPUT)

SETUP: Data Ports
(Hold INPUT)

3UHV DQG KROG LQ WKH ,1387 &RQWURO WR VHOHFW 6(783
3UHV DQG KROG LQ WKH ,1387 &RQWURO WR VHOHFW 6(783
'LVSOD\ 5HIHU WR ILJXUH

SETUP: TRIGGER 1
Output 1

SETUP: TRIGGER 2
Bal : OFF

SETUP: DATA PORT 1
All Data

5RWDWH WKH 92/80(\$'-867 &RQWURO WR VHOHFW 6(783
3UHV DQG KROG LQ WKH ,1387 &RQWURO WR VHOHFW 6(783
LQFOXGLQJ 2XWSXW RU ,QSXW 5HIHU WR ILJXUH

SETUP: TRIGGER 1
Main

SETUP: TRIGGER 2
Bal : ON

SETUP: DATA PORT 1
BAL

,Q D VLPLODU PDQQHU SHUIRUP VHWV DQG
FKDQJH WKH 7ULJJHU VHWV DQG
ODLQ 5HIHU WR ILJXUH DQG

Data Ports

'DWD 3RUW &RQQHFWLRQV EHW
0F,QWRVK 6RXUFH &RPSRQH
FRQWURO RI WKH VRXUFH FRPS
VXSSOLHG +5 5HPRWH &RQW
IRXU 'DWD 3RUWV DUH VHW WR
VHOHFWHG VRXUFH 7R GHGLFD
RQH VRXUFH FRPSRQH H[DP
FRQFHFWHG WR WKH %\$/ QSXW
3RUW SHUIRUP WKH IROORZL
3UHV DQG KROG LQ WKH ,1387
6(783 02'(
5RWDWH WKH ,1387 &RQWURO
WR VHOHFW 6(783
3UHV DQG KROG LQ WKH ,1387
'LVSOD\ 5HIHU WR ILJXUH
DSSHUV RQ WKH 'LVSOD\ 5HIHU WR ILJXUH

3UHV DQG KROG LQ WKH ,1387
'LVSOD\ 5HIHU WR ILJXUH

5RWDWH WKH 92/80(\$'-867
3UHV DQG KROG LQ WKH ,1387
'LVSOD\ 5HIHU WR ILJXUH

,Q D VLPLODU PDQQHU SHUIRUP VHWV DQG
FKDQJH WKH 7ULJJHU VHWV DQG
,1387 &RQWURO

Passthru

Comm Port Baud Rate

:KHQ WKH 0\$ LV SDUW RI D 7-RPH 0\$ KHDW DUERU UHPRWHO\ FRQWUROOHG IURP RWKHU
0XOWLFKDQQHO \$XGLR 6\ VWHP WKH 5LJKW DQG 5LJKW WKH 5HDU 3DQHO 56 -DFN
&KDQQHOV IURP DQ \$XGLR 9LGHR 3URFHVVVRU ZLOO ELH SDQHQHFWHUG WR ILJXUH
'HFRGHU FDQ 3DVVWKUX' IURPEWKHQRV SDJH DQG VWRS ELW ZLWK RWKHU HTXLSPHQW
,QSWW LQWR WKH 0\$ 3RZHU \$PSOLIEHWW SHUDWRKQXPSHHWIRUP WKH IROORZLQJ VWHSV
7KH 3DVVWKUX' \$XGLR 6LJQDOELWDSH DMDRQDEOR IRUQJH IURP WKH GHIDXOW VSHHG RI
VHSDUDWH H[WHUQDO 3RZHU \$PSOLIEHWW SHUDWRKQXPSHHWIRUP WKH IROORZLQJ VWHSV
3UHDPSOLILHU 2XWSXW -DFNV 7UHDPSOLILHU 2XWSXW -DFNV 7UHDPSOLILHU 2XWSXW -DFNV
VHOHFWLRQ RI WKH VSHFLILHG 0\$(783, Q\$XW WR EH XVHG
IRU WKH 5LJKW DQG /HIW)URQW &KDWQHWWKQ WKH 7H&RQWURO XQWLO 36(783
EHORZ WKH 5LJKW DQG /HIW)URQW &KDWQHWWKQ WKH 7H&RQWURO XQWLO 36(783
\$XGLR 9LGHR 3URFHVVVRU ZLOO ELH SDQHQHFWHUG WR ILJXUH
81%\$/\$1&(' ,1387 -DFNV RQ WKH 0\$
5HIHU WR SDJH IRU DGGLWLRQDO FURPHSWRQ LQIRUPDWLRQ

Note: The Phono and Digital Inputs are not assignable as a Passthru Input.

SETUP: RS232
115200 Baud

3UHV DQG KROG LQ WKH ,1387 &RQWURO WR HQWHU WKH
6(783 02'(
5RWDWH WKH ,1387 &RQWURO XQWLO 36(783
3DVVWKUX 2II' DSSHUV RQ WKH 6(783
'LVSOD\ 5HIHU WR ILJXUH ,1387 &RQWURO

SETUP: Passthru
Off

5RWDWH WKH 92/80(\$'-867 &RQWURO WR VHOHFW
36(783 3DVVWKUX 81%\$/' ,QSWW 5HIHU WR
ILJXUH

SETUP: Passthru
UNBAL 6

([LW WKH 6(783 ORGH E\ VHYHUDO SUHVHV RI WKH
,1387 &RQWURO

Remote Control Codes

IR Sensor

Power Mode

7KH +5 5HPRWH &RQWURO LQKXG ZLWKWK3HQHO 6HQVRLH ZKSLFHQHLYSRUDWHV DQ
0\$ XWLOLJHV WKH 1250\$/0W,QHWRVJKQ&RQWURO WKH +5 5ZIRPVRKH&RQV DQDFDQ\ESHODFH
&RGHV 7KH VHFRRG VHW RI &RQZLWFRHGRGHVWRKSUHSYHQW LQWKH IHRUZHQLFIDZKLQQ IDQHQVBUZQ
ZLOO UHVSRRG WR LV UHIHUUH,5WRQDRLWKH \$RQQLHFWHG 7R QSDIRWLLPDWHHOWKHP)LRQWHVDDQ
&RGHV 7KH \$OWHUQDWH &RGH,5DWHQVRHSHZKIRQVWKH IROORZELQJQVMHFSIVXVHU DFWLYLWL L
0\$ LV XVHG LQ WKH VDPH ORFDWHVQDQQRVGLQ WKH ,13725QWVWRQR)HQFWLLRQKH
0F,QWRVK 3UHDPSOLILHU DQG RU6\$78302'5RHHVIRHU WKLVLJXUHYRQXSDJHGMXVWPHQW HWF F
ZLOO SUHYHQW WKH 5HPRWH &RQVWRWDWHRWKH IHF3ZQRQWHUROLJQQVLQ136W83/SHRQWDEOHV
RSHUDWLRQ RI ERWK XQLWV DW WKH (QDPH)WGPIDSSRUDFWRYQVSHU,IQRURWDMLRQORZSQD\VHVS
WKH 5HPRWH &RQWURO \$/7(51\$7(&RIGHVVRHULRXUPHWKH 3UHVVDQG KROGLQWKH ,1
IROORZLOJ VWHSV 6(783.02'(5RWDWH WKH ,1

```

3UHVV DQG KROG LQ WKH ,1387 &RQWUO RQWLO 36(783UH.5
6(783 02'( 5HIHU WR ILJXUH RQ S Enabled
5RWDWH WKH ,1387 &RQWUO RQWLO 36(783UH.5
&RGHV 1RUPDO' DSSHDUV RQ WKH ,QIRUPDWLRQ
'LVSOD\ 5HIHU WR ILJXUH 5RWDWH WKH 92/80( $'-867

```

XQWLO 36(783 \$XWR 211 (QD
,QIRUPDWLRQ 'LVSOD\ 5HIHU
5RWDWH WKH 92/80(\$'-867

```
&R0WTFPOWRVHOHFWS  
SETP: Auto Off  
Enabled  
)LJXUH
```

SETUP: IR Codes
Normal

SETUP: Front IR Disabled

5RWDWH WKH 92/80(\$'-867 & RQWDEG WFWKH WR ILJXUH
\$OWHUQDWH &RGHV 5HIHU WR ILJXUH 6(783 ORGH E\ VH
[REDACTED], 1387 & ROWURO

'LVDEOHG 5HIHU WR ILJXUH

Disabled

SETUP: IR Codes Alternate

3UHVV WKH ,1387 &RQWURO

,W LV QRZ QHFHVVDU\ WR FKDQJH WKH +5 5HPRWH
&RQWURO RYHU WR WKH \$OWHUQDWH &RGHV ,QIRUPDWLRQ
RQ WKH +5 5HPRWH &RQWURO LV DYDLODEOH IRU
GRZQORDG IURP WKH OF,QWRVK :HE 6LWH

<http://www.mcintoshlabs.com/us/Products/pages/ProductDetails.aspx?CatId=preamplifiers&ProductId=MA12000>

([LW WKH 6(783 0RGH E\ VHYHUDO SUHVVRHV RI WKH
.1387 &ROWURO

Factory Reset

Reset of Microprocessors

,I LW EHFRPHV GHVLUDEOH WR ,QHWWX DQG 7ULP 6MWWX QXQFWRRQ KQJIDWWRULFURSURFHVVRUV FDQ EH UHVFHW E
VHWWLQJV 6HWXS DQG 7ULP 6MWWX QXQFWRRQ KQJIDWWRULFURSURFHVVRUV FDQ EH UHVFHW E
GHIDXOW YDOXH V SHUIRUP WKSHUIRUPRZQQJWWHISROORZLQJ
3UHV V DQG KROG LQ WKH ,1387 &RQWURO XQWLO WKH
6(783 02'(5HIHU WR ILJXUH 6(783 02'(,QGLFDWRU VZLWFKHV 2II LQ
5RWDWH WKH ,1387 &RQWURO XQWLO WKH 5RWDWH WKH ,1387 &RQWURO XQWLO WKH
5(6(7 +ROG ,1387 ' DSSHUV RQH UHOHDVH WKH 67\$1' %< 21 3XVK EXWWRQ DQG

FACTORY RESET
(Hold INPUT)

)LJXUH

WKH 0\$ ZLOO VZLWFK 2II
:KHQ WKH 67\$1' %< 21 /(' LV LOOXPLQDWHG
SUHV V WKH 67\$1' %< 21 3XVK EXWWRQ WKH
0\$ ZLOO UHVXPH QrupDO RSHUDWLRQ

Note: This can be performed with the MA12000 On
or in the Standby Mode.

,QIRUPDWLRQ 'LVSOD\ 5HIHU WR ILJXUH
3UHV V DQG KROG LQ WKH ,1387 &RQWURO XQWLO
3)\$&725< 5(6(7 ,Q 3URJUHVV ' DSSHUV RQ
WKH ,QIRUPDWLRQ 'LVSOD\ WKHQ UHOHDVH WKH ,1387

FACTORY RESET
In Progress!

)LJXUH

FACTORY RESET
Completed!

)LJXUH

&RQWURO 5HIHU WR ILJXUH V DQG
3UHV V WKH)URQW 3DQHO 67\$1' %< 3XVK EXWWRQ WR
VZLWFK 2Q WKH 0\$

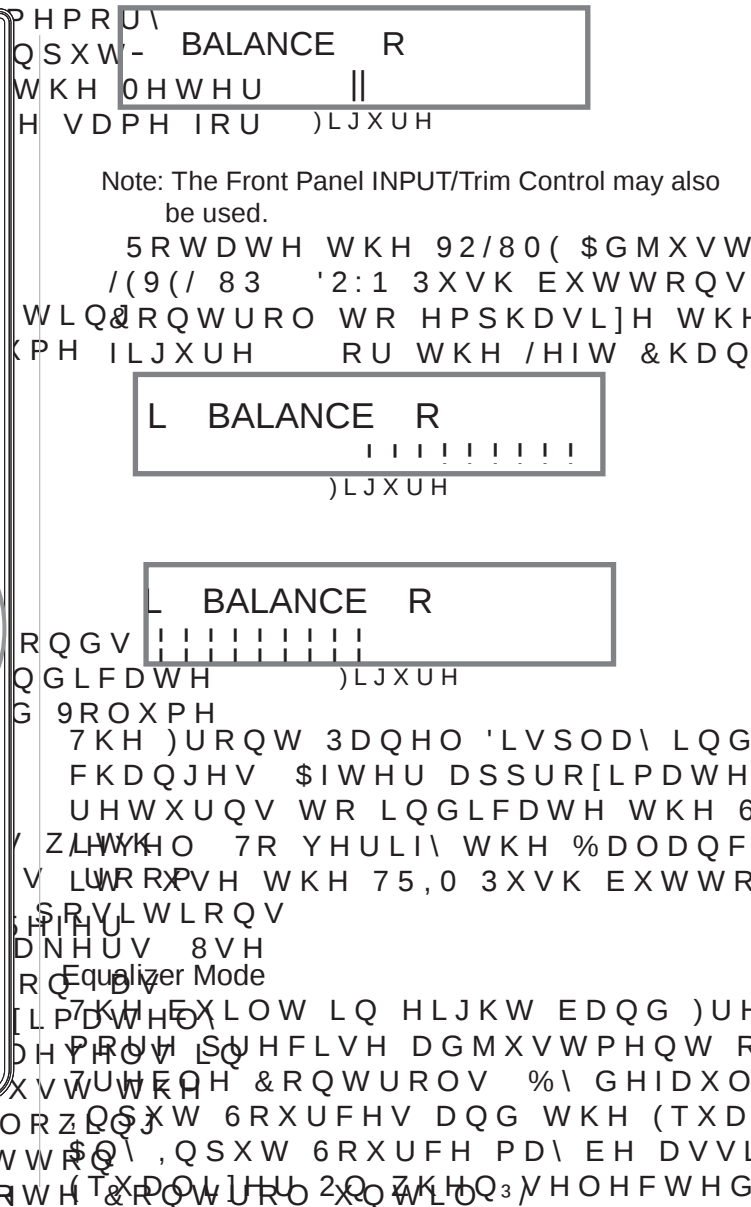
Power On and Off

[illegible]

5RWDWH WKH ,1387 &RQWURO \$IRVH DSSURILPDGH
VRXUFH RU SUHVVRWKH 3388 WKH LVSDI UHWXU
EXWWRQ RQ WKH 5HPRWH &RQWURO 5HIHU WR IL

5RWDWH WKH)URQW 3DQHO 92/800 &RQWURO EODQX
WKH 92/XSPH 8SRZQXVK EXWWRO GLHUHQW SURJUD
5HPRWH &RQWURO IRU WKH GHYLFVWLQV DQG QJ
WR ILJXUH UHODWLYH WR WKH

7KH 0\$ KDV YDULRXV 7ULP 6BENK # RXLRQSHZLNWKU
\$GMXVWPHQWV 7KH 7ULP)XQFWDLRQFHQSHXGRU%
, QSXW 7ULP /HYHO (TXDOL]HU 0RGHVYKWR & 5W
/RDGLQJ ZKHQ D 3KRQR , QSXW LVHSODWFGHG 5QW
IRU 0& DOG & DSDFLWDOFH IRU 00 0ROR 6WHUHR



IRU D JLYHQ ,QSW 6RXUFH SHUIRUP WKH IROORZLQJ VWHSV 5HIHU WR ILJXUH 'LVSOD\ UHWXUQV WR LQGLFDWHG RQ WKH)URQW 3DQHO ,QIRUPDWLRQ

Note: The audio signal present at the FIXED OUT

Jacks is unaffected by the Equalizer settings.

6HOHFW WKH GHVLUH ,QSW 6HOHFW 3(48\$/,(5 2II' DV LQGLFDWHG RQ WKH)URQW 3DQHO ,QIRUPDWLRQ

6HOHFW 3(48\$/,(5 2II' DV LQGLFDWHG RQ WKH)URQW 3DQHO ,QIRUPDWLRQ

EQUALIZER
Off

)LJXUH

-2.5 dB

)LJXUH

INPUT TRIM
+4.0 dB

)LJXUH

PHONO CAPACITANCE
50nF

)LJXUH %

6HW WKH (48\$/,(5 2Q IRU WKH GHVLUH ,QSW 6HOHFW 3(48\$/,(5 2II' DV LQGLFDWHG RQ WKH)URQW 3DQHO ,QIRUPDWLRQ

EQUALIZER
On

)LJXUH

Phono Adjustments

:KHQ D 3KRQR ,QSW 0& RU 00 Mono/Stereo Mode

\$IWHU DSSUR[LPDWHO\ VHFROG WKH IROORZLQJ VWHSV 5HIHU WR ILJXUH 'LVSOD\ UHWXUQV WR LQGLFDWHG RQ WKH)URQW 3DQHO ,QIRUPDWLRQ

Trim Level

6RXUFH &RPSRQH QWV FDQ KDYH LQGLFDWHG RQ WKH)URQW 3DQHO ,QIRUPDWLRQ

6HOHFW 75,0 33+212 5(6,67\$1& (Note: The audio signal present at the FIXED OUT

PHONO RESISTANCE
400

)LJXUH

MONO / STEREO

PUT TRIM
0.0 dB

)LJXUH

ONO / STEREO

)LJXUH

\$IWHU DSSUR[LPDWHO\ VHFRQGV WKH QIRUPDWLRQ
'LVSOD\ UHWXUQV WR LQGLFDWH WKH
9ROXPH /HYHO

Meter Backlight

7KH)URQW 3DQHO 0HWHU ,OOXPLODWRQ PDI EH VZLWFKHG
2Q RU 2II E\ SHUIRUPLQJ WKH IROORZLQJ
6HOHFW 30(7(5 /,*+76 2Q' DV L
)URQW 3DQHO ,QIRUPDWLRQ 'LVS

METER LIGHTS
On

)LJXUH

6ZLWFK 2II WKH 0HWHU ,OOXPLODWRQ 6HH ILJXUH

METER LIGHTS
Off

)LJXUH

\$IWHU DSSUR[LPDWHO\ VHFRQGV WKH ,QIRUPDWLRQ
'LVSOD\ UHWXUQV WR LQGLFDWH WKH 6RXUFH 6HOHFWLRQ DQG
9ROXPH /HYHO

- Notes: 1. Meter Illumination of recent McIntosh
Power Amplifiers will also switch On/Off
when connected to the MA12000 via a power
control cable.
2. Some A/V Processors will provide an On/Off
Control Signal when the MA12000 Passthu
Input Jack is connected to the A/V Processor
via the power control cable.

.1)250\$7.21 '.63/\$< .//80.1\$7.21

7KH %ULJKWQHVV /HYHO RI WKH)URQW 3DQHO ,QIRUPDWLRQ
'LVSOD\ FDQ EH DGMXVWHG IURP EULJKW

SHUIRUPLQJ WKH IROORZLQJ EHFRPHV DYDLODEOH 0F,QWRV
6HOHFW 3',63/\$< %5,*+71(66'DFRXQWLFDWHGH SWK DQG VSDW
RQ WKH)URQW 3DQHO ,QIRUPDWLRQZ'LW &ODR X6VSHUWHUUV V
ILJXUH

DISPLAY
BRIGHTNESS

)LJXUH

5HGXEH WKH %ULJKWQHVV
75,0/(9)/ 5SHU WR ILJXUH

DISPLAY
BRIGHTNESS

)LJXUH

\$IWHU DSSUR[LPDWHO\ VHFRQGVWKH QIRUPDWLRQ
'LVSOD\ UHWXUQV WR LQGLFDWHWKH 6RXUFH 6HOHFWLRQ DQG
9ROXPH /HYHO

Headphone HXD

:KHQ KHDGSKRQHV DUH FRQQHFWHG WR WKH 0\$
)URQW 3DQHO -DFN DQ DGGLWLRQDO 75,0)LJXUH

GHIDXOW VHWWLQJ LV +;' 2Q 7
SHUIRUPLQJ WKH IROORZLQJ
RQ DQG 0RPHQWDULO\ SUHVV WKH ,1
LW WR VHOHFW 3+('\$3+21(+;')LJXUH

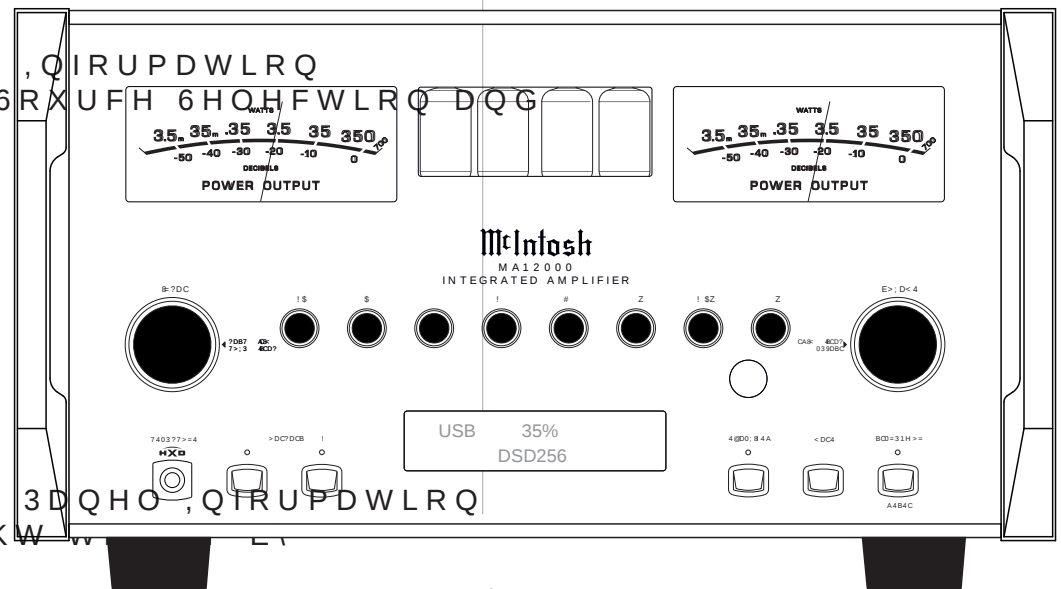
HEADPHONES HXD
On

)LJXUH

7R GHDFWLYDWH WKH +;' 0R
\$GMXVW &RQWURO XQWLO WK
WKH 6RXUFH 6HOHFWLRQ DQ

HEADPHONES HXD
Off

)LJXUH



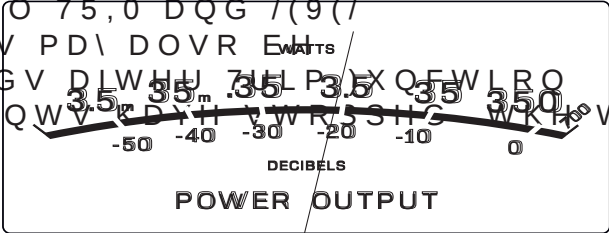
)LJXUH

Equalizer

3UHVVVLQJ WKH 0XWH 3XVK EXWWRQ D VHFRQG WLPH RU
3UHVV WKH)URQW 3DQHO (48\$/DQXWKQEXWWRQPH FRQWURZHU 7ULP)XQFWRQV 3XVH WKH VWH
DFWLYDWH WKH 0\$ (TXDOL]HU &RQWURO &LUFXLWU\ 3RZHU \$PSOLILHU &RQQHFW W
IRU WKH FXUUHQWO\ VHOHFWHG ,QSW 6RXUFH 7KH /(' VHSUDWH 3RZHU \$PSOLILHU D
DERYH WKH (48\$/=(5 3XVK EXWWRQ ZLOO LOOXPLQDWH -XPSHUV WKDW DUH ORFDWHG I
7KH 0\$ UHPHPEHUV IRU HDERVHOHFWHG ,QSW &RQQHFW SDLU RI GDDPFWKH DQGSKRQHV WR WKH
ZKHWKHU WKH (TXDOL]HU &RQWURO &LUFXLWU\ LV DFWLYDWHG JXUH VWHUHR SKROH
RU GHDFWLYDWHG 7R GHDFWLYDWH WKH (TXDOL]HU &RQWURO HQLOQJ 7KH GHDXOW VHWWLQJ
&LUFXLWU\ IRU WKH FXUUHQWO\ VHOHFWHG ,QSW 6RXUFH SUHQVJ 7KH GHDXOW VHWWLQJ
WKH (48\$/=(5 3XVK EXWWRQ DQG WKH 2XWSXW &RQQHFW DQG WKH 3XVH WLRQ
SXVK EXWWRQ ZLOO H[WLQJXLV IRU DGGLWLRQDO ,QSW 3XVH WLRQ
Note: 1. The audio signal present at the FIXED OUTPUT
Jacks is unaffected by the Equalizer Circuitry.

Trim

3UHVV WKH)URQW 3DQHO ,1387 75.0 &RQWURO WR
DFWLYDWH WKH 0\$ 7ULP)XQFWRQV 3XVH WKH
WKH)URQW 3DQHO ,1387 7ULP &RQWURO WR 3RZHU VHOHFW WKH
GHVLUH 7ULP)XQFWLRQ DQG WKH URDW WKH 92/80(
\$GMXVW &RQWURO WR YDU\ RU PDNH FKDJHV 5HIHU WR
ILJXUH 7KH 5HPRWH &RQWURO 75.0 DQG /(9/(
83 DQG /(9/('2:1 3XVK EXWWRQV PD\ DOVR EH
XVHG \$SSUR[LPDWHO\ VHFRQGV DWHU 7ULP)XQFWLRQ
6HOHFWLRQ DQG RU DGMXVWPHQWV DWHU 7ULP)XQFWLRQ WKH
7ULP ORGH VZLWFK RII



Mute

3UHVV WKH 087(3XVK EXWWRQ WR 0XWH WKH \$XGLR LQ
2XWSXW /RXGVSHDNHUV 2XWSXW DQG +HDGSKRQHV
7KH DXGLR VLJQDOV SUHVHQW WKH WKH)URQW 3DQHO
-DFNV DUH QRW HIIHFWHG E\ DFWLYDWHG WKH 3XVH WLRQ
7KH)URQW 3DQHO 'LVSOD\ ZLOO DFWLYDWH WKH 3XVH WLRQ
1DPH DQG ZLWK WKH ZRUG 087(3XVK EXWWRQ WR 0XWH WKH
YROXPH VHWWLQJ 5HIHU WR ILJXUH

COAX 1 MUTE

48kHz

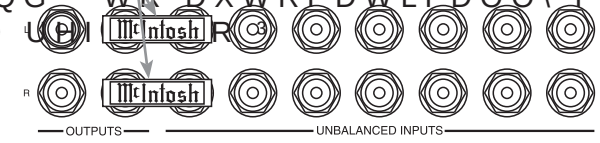
)LJXUH

Using a Separate Power Amplifier

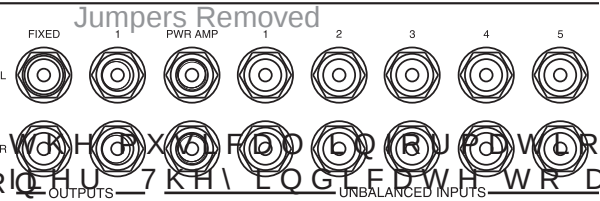
7KHUH DUH WZR GLIIHUHQW ZD\V WKH \$XVH RDWHSDRPWLSDZHR
DPSOLILHU ZLWK D 0\$ 7KH H[WLQJXLV 3RZHU \$PSOLILHU V

Using Output 2

7KH H[WLQJXLV 3RZHU \$PSOLILHU V
LQ DQRWKHU URRP DQG DQ H[V



)LJXUH
between the above mentioned jacks, when the
MA12000 Internal Power Amplifier is to be used.
3RZHU \$PSOLILHU DQG WKH VHSUDWH 3RZHU \$PSOLILHU
5HIHU WR WKH 0\$ 2XWSXW &RQQHFW DQG WKH
ORFDWHG RQ WKH VHSUDWH 3RZHU \$PSOLILHU
Note: The MA12000 VOLUME Control will affect the sound



level of all the Loudspeakers.

RSHUDWLRQ RI WKH 0\$ IURP WKDW URRP :LWK DQ
H[WHUQDO 3RZHU \$PSOLILHU FRQQHFWHG DV LOOXVWUDWHG
RQ WKH 0F,QWRVK &RQQHFWLRQ 'LDJUDP VHSDUDWH
VKHMLB")3 SUHVV WKH)URQW 3DQHO 287387
3XVK EXWRQ RU SUHVV RQ WKH 5HPRWH &RQWURO WKH
%/8(6HWXS 3XVK EXWRQ IROORZHG E\ SUHVVLQJ WKH
287387 3XVK EXWRQ WR VZLWFK 2Q RU 2II WKH
H[WHUQDO 3RZHU \$PSOLILHU

Passthru

:KHQ WKH 0\$ LV FRQQHFWHG WRJHWKHU ZLWK
D 0F,QWRVK 0XOWLFKDQQHO \$ 9 &RQWURO &HQWUHU RU
6XUURXQG 'HFRGHU DQG KDV WKH 3\$667+58 0RG
DFWLYDWHG LW ZLOO DXWRPDWLFDOO\ WXUQ
3URFHVVURU RU 6XUURXQG 'HFRGHU LV WXUQH
LQGLFDWH RQ WKH)URQW 3DQHO 'LVSOD\ 33\$
5HIHU WR ILJXUH

PASSTHRU

)LJXUH

7KH 0\$ 287387 287387)URQW 3DQH
3XVK EXWRQV DUH DFWLYH ZKHQ LQ WKH
7KH RWKHU)URQW 3DQHO &RQWUROV DQG
GHDFWLYDWHG DV ORQJ DV WKH 3DVVWKU

Optical and Coaxial Digital Inputs

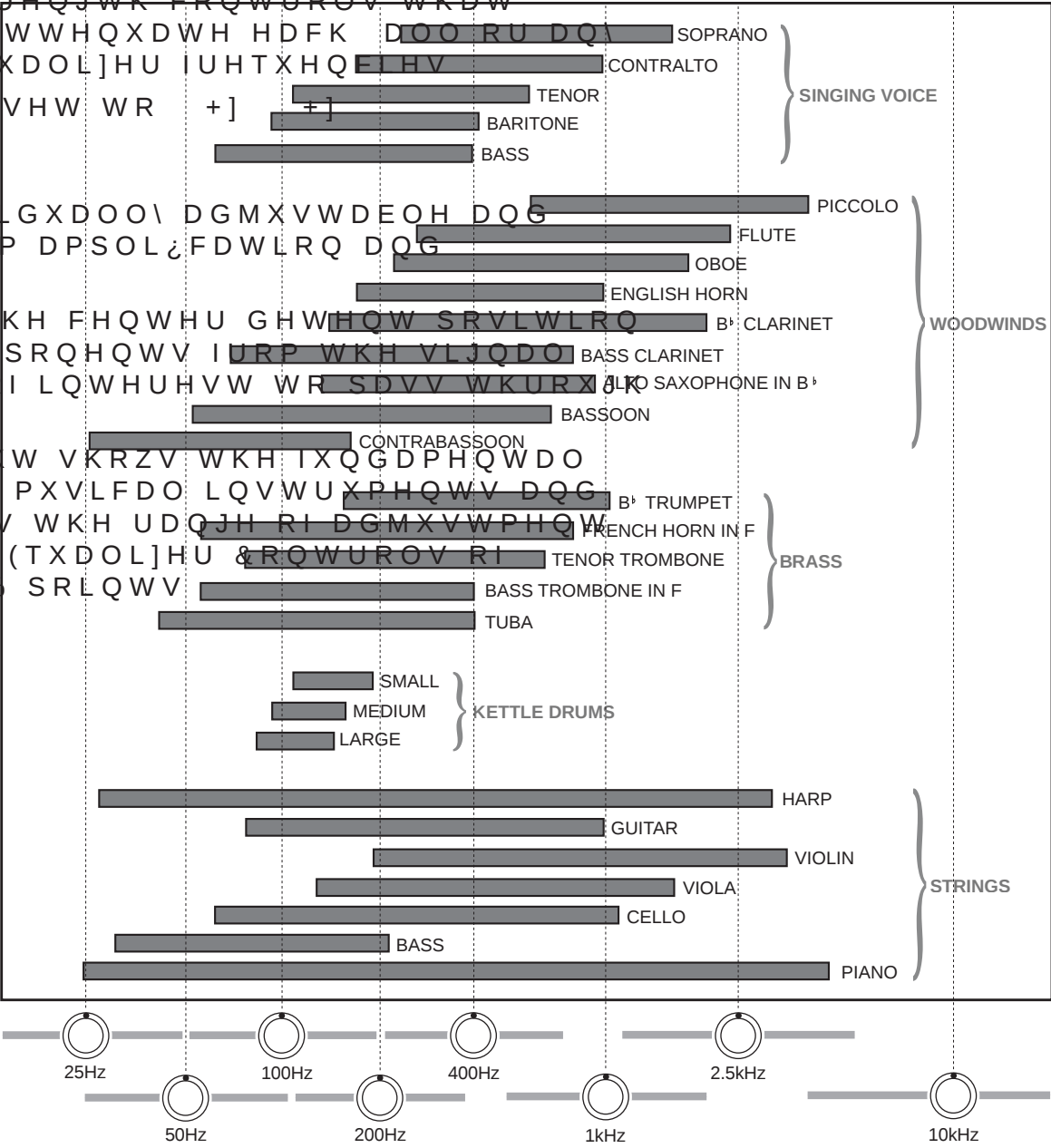
:KHQ D 'LJLWDO ,QSXW 2SWLFDQ RU &RD[LDO &RQQHFWLRQ
RQ WKH 0\$ LV VHOHFWHG WKH)URQW 3DQHO 'LVSOD\
ZLOO LQGLFDWH WKH VDPSOH UDWH ZKHQ D VLJQDO LV SUHVHQR
VXFK DV 3 N+]
'XULQJ WKH WLPH WKHUH LV QR 'LJLWDO 6LJQDO SUHVHQR RQ
WKH VHOHFWHG LQSXW WKH GLVSOD\ ZLOO LQGLFDWH 3BBBBBB'



Equalizer Controls

7KH 0\$ KDV HLJKW VLJQDO VWUHQJWK FRQWUROV WKDW
FDQ SDVV WKURXJK DPSOLI RU DWWHQXDW HDFS DOO RU DQ
FRPELQDWLRQ RI WKH PDUNHG HTXDOL]HU IUHTXHQFLHV
(TXDOL]DWLRQ IUHTXHQFLHV DUH VHW WR +] +]
+] +] +] +] +] DQG
+]
)UHTXHQFI &RQWUROV DUH LQGLYLGXDOO\ DGMXVWDEOH DQG
FDQ SURYLGH XS WR G% PD[LXP DPSOL¿FDWLRQ DQG
G% DWWHQXDWLRQ
3ODFLQJ DQ\ &RQWURO .QRE LQ WKH FHQWHU GHWHUHQW SRVLWLRQ
UHPRYHV WKH WRQH FLUFXLW FRPSRQHQWV IURP WKH VLJQDO
SDWK DOORZLQJ WKH IUHTXHQFI RI LQWHUHVW SDVV WKURXJK
XQDOWHUHG
7KH LOOXVUDWLRQ WR WKH ULJKW VKRZV WKH IXQGDPHQDO
IUHTXHQFI UDQJH RI DFRXVWLFDO PXVLFDO LQVWUXPHQWV DQG
WKH KXPDQ YRLFH ,W DOVR VKRZV WKH UDQJH RI DGMXVWPHQW
RI IUHTXHQFLHV IRU HDFS RI WKH (TXDOL]HU &RQWUROV RI
WKH 0\$ DW WKH G% DQG G% SRLQWV

Fundamental Frequencies of Acoustical Musical Instruments and the Human Voice



WÆ u%o]. Æ ^%o].

Total Harmonic Distortion
PD[LPXP +] WR +]

Intermodulation Distortion
PD[LPXP IRU DQ\ FRPELQDWLRQ RI IUTXHQFLHV
IURP +] WR +]

Frequency Response
G% IURP +] WR +]
G% IURP +] WR +]

Preamplifier Output 1 and 2 (for rated input)
9 XQEDODQFHG 9 0D[LPXP
9 EDODQFHG 9 0D[LPXP

Preamplifier Output Impedance
RKPV

Sensitivity (for rated output)
+LJK /HYHO P9 XQEDODQFHG
P9 EDODQFHG
3KRQR 00 P9
3KRQR 0& P9

Signal To Noise Ratio (A-Weighted)
+LJK /HYHO G% EHZRZ UDWHG RXWSXW
3KRQR 00 G% EHZRZ P9 LQ SXW
3KRQR 0& G% EHZRZ P9 LQ SXW

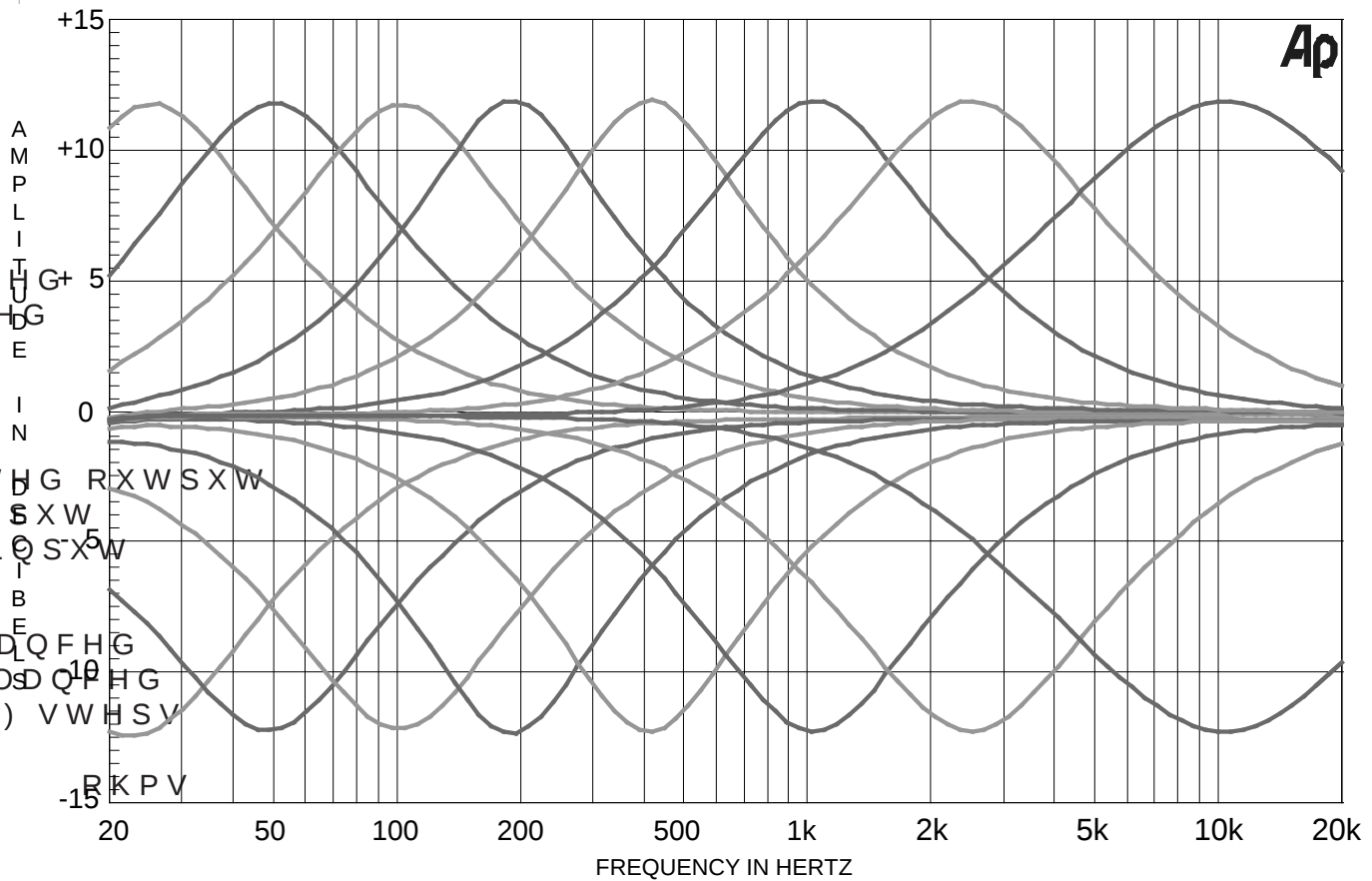
Input Impedance
+LJK /HYHO . RKPV 8QEDODQFHG
N RKPV %DOSQFHG
3KRQR 00 WR S) LQ S) VVHVS
. RKPV
3KRQR 0& RU
100pF

Maximum Input Signal
+LJK /HYHO 9 XQEDODQFHG
3KRQR 00 P9
3KRQR 0& P9

Headphone Impedance
WR RKPV
Equalizer Controls

+] +] +] +] +]
+] DQG +]

Voltage Gain
+LJK /HYHO WR 5HF 2XWSXW
+LJK /HYHO WR 2XWSXW DQG
3KRQR 00 WR 5HF 2XWSXW G
3KRQR 0& WR 5HF 2XWSXW G
3KRQR 00 WR 2XWSXW DQG
3KRQR 0& WR 2XWSXW DQG



]P]š o μ]} ^%o]. Y}v•

Total Harmonic Distortion

G % 2 KPV

G % 2 KPV

Digital Input Signal Format

&RD[LDO DQG 2SWLFDO ,QSWV 3&0 '6'
0&7 DQG 86% ,QSWV 3&0 '6'
+'0, \$5& 3&0 'ROE\ 'LJLWDO

Intermodulation Distortion

Power Control and Trigger Output

PD[LXPX LI WKH LQVWDQW DQG HRXPV SHDN SRZHU
RXWSXW GRHV QRW H[FHHG WZLFH WKH UDWHG SRZHU RXWSXW
IRU DQ\ FRPELQDWLRQ RI IUHTXHQFHV

Digital Input Sample Rate

2SWLFDO 3&0 %LW %LW N+] WR N+]
&RD[LDO 3&0 %LW %LW N+] WR N+]
0&7 3&0 6\$&' %LW %LW N+] WR N+]
86% 3&0 %LW %LW %LW N+] WR N+]
';' ';' N+] ';' N+]
'6' '6' '6' '6' '6'
+'0, 3&0 ELW N+] N+]
'76
'ROE\ 'LJLWDO

Dynamic Headroom

Wide Band Damping Factor

*UHDWHU WKDQ

Power Guard

/HVV WKDQ 7+' ZLWK XS WR
+]

Digital Inputs

&RD[LDO 9 S S RKPV
2SWLFDO GEP WR GEP 726
0&7 9 S S RKPV
86% 86% 7\SH % &RQQHFWRU

Frequency Response

G % IURP +] WR +]
G % IURP +] WR +]

Power Amplifier Specifications

Input Sensitivity (for rated output)

9ROWV

Power Output

0LQLXP VLQH ZDYH FRQWLQXPXV D\HULH SRZHU RXWSXW
SHU FKDQQHO ZLWK ERWK FKDQQHOV PSUDWLRQ RXWSXW
ZDWWV LQWR RKP ORDG
ZDWWV LQWR RKP ORDG
ZDWWV LQWR RKP ORDG

Signal to Noise Ratio (A-Weighted)

G % EHQZUDWRQ RXWSXW

Input Impedance

RKPV

Output Load Impedance

RU RKPV

Maximum Input Signal

3RZHU \$PSOLILHU ,Q 9

Rated Power Band

Voltage Gain

G % 2 KPV

Field AC Voltage conversion of the MA12000 is not possible. The MA12000 is factory configured for one of the following AC Voltages:

9ROWV +] DW DPSV
9ROWV +] DW DPSV
9ROWV +] DW DPSV
9ROWV +] DW \$PSV
9ROWV +] DW DPSV
9ROWV +] DW DPSV
9ROWV +] DW DPSV
9ROWV +] DW DPSV
9ROWV +] DW DPSV

6WDQGE\ /HVV WKDQ ZDWWV

Note: Refer to the rear panel of the MA12000 for the correct voltage.

Overall Dimensions

:LGWK LV LQFKHV FP
+HLJKW LV LQFKHV FP
'HSWK LV LQFKHV FP LQ
3DQHO .QREV DQG &DEOHV

Weight

SRXQGV NJ QHW SRX
VKLSSLQJ FDUWRQ

Shipping Carton Dimensions

:LGWK LV LQFKHV FP
+HLJKW LV LQFKHV FP
'HSWK LV LQFKHV FP

W I]vP /v•šÆµ Ÿ}v•

,Q WKH HYHQW LW LV QHFHVVDUI\ WR UHSDFN WKH HTXLSPHQW IRU
 VKLSPHQW WKH HTXLSPHQW PXVW EH SDFNHG H[DFWO\ DV
 VKRZQ EWORZYHU\ LPSRUWDQW WKDW WKH IRXU SODVWLF
 IHHW DUH DWWDFFKHG WR WKH ERWWRP RI WKH HTXLSPHQW 7ZR
 _____ [_____ LQFK VFUHZV DQG ZDVKHUV PXVW EH XVHG
 WR IDVWHQ WKH XQLW VHFUXHO\ WR WKH ERWWRP SDG DQG ZRRG
 VNLG 7KLV ZLOO HQVXUH WKH SURSHU HTXLSPHQW RFDWLRO
 RQ WKH ERWWRP SDG)DLOXUH WR GR W XOW LQ
 VKLSSLQJ GDPDJH
 8VH WKH RULJLQDO VKLSSLQJ FDUWRQ DQG SDUWV
 RQO\ LI WKH\ DUH DOO LQ JRRG VHU\LFHDEO GLWLRQ
 ,I D VKLSSLQJ FDUWRQ RU DQ\ RI WKH LQWHU W V
 DUH QHHGHG SOHDVH FDOO RU ZULWH & XVV SHU\LFH
 'HSDUWPHQW RI OF,QWRVK /DERUWRQ 5HIHU WR SDJH

MA12000 Packing Material List

4XDQV DWW 1XPHFULSWLRQ

6KLSSLQJ FDUWRQ WRS
 6KLSSLQJ FDUWRQ ERWWRP
)URQW DQG UHDO SHUHG SDG
 6LGH IRDP SDG
 7RS DQG ERWWRP IRDP SDG

,QQHU FDUWRQ WRS
 ,QQHU FDUWRQ ERWWRP
 ,QQHU IRDP SDG
 6KLSSLQJ VNLG
 KH[FDS [LQFK VFUHZ
 LQFK IODW ZDVKHU
 3ODVWLF IRRW
 IODW ZDVKHU

