AR

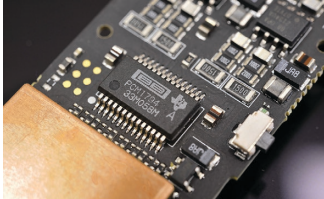# HIGH FIDELITY AUDIO

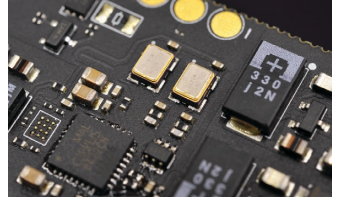## 2017-2018

Hi-Res AUDIO
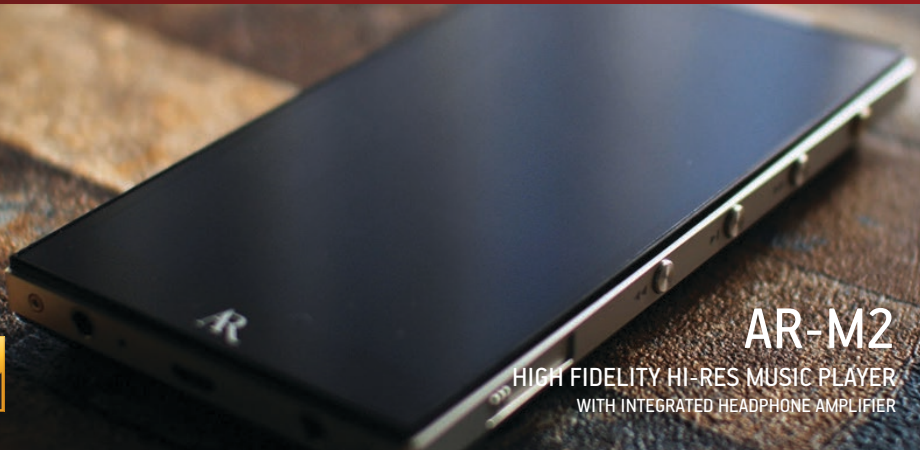
AR-M2
HIGH FIDELITY HI-RES MUSIC PLAYER
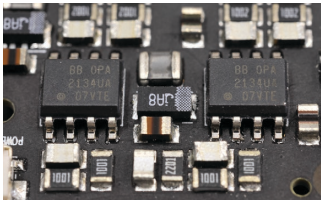### WITH INTEGRATED HEADPHONE AMPLIFIER
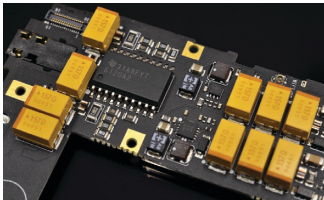

QUALCOMM QUAD-CORE PROCESSOR

BURR-BROWN PCM1794 DAC

DUAL VCTCXO AUDIO CLOCK

DEDICATED PRE-AMPLIFIER STAGE

BUILT-IN CLASS A HEADPHONE AMPLIFIER

MICRO SDXC EXPANSION UP TO 256GB

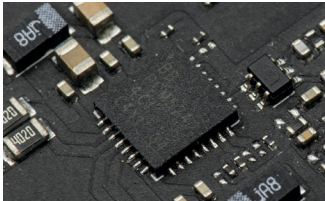# OPTIONAL ACCESSORIES FOR M2 & M20

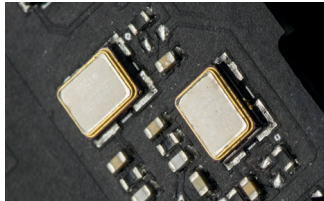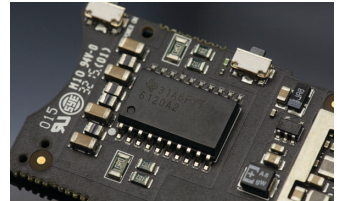GENUINE LEATHER CASE

FOLIO CASE KIT

AR-M20

HIGH FIDELITY HI-RES MUSIC PLAYER
WITH INTEGRATED HEADPHONE AMPLIFIER

Hi·Res AUDIO

BURR-BROWN PCM5242 DAC   DUAL CRYSTAL CLOCK SOURCE   BUILT-IN CLASS AB AMPLIFIER

	M2	M20
PROCESSOR	QUALCOMM MSM8926	QUALCOMM MSM8926
OPERATING SYSTEM	ANDROID 4.3	ANDROID 4.3
DAC	BURR-BROWN PCM1794A	BURR-BROWN PCM5242
CLOCK SOURCE	DUAL VCTCXO	DUAL XO
PRE-AMP	BURR-BROWN OPA2134	EMBEDDED IN DAC
HEADPHONE AMPLIFIER	TI TPA6120A2 / CLASS A	TI TPA6120A2 / CLASS AB
VOLUME CONTROL	ALPS ANALOGUE POTENTIOMETER	DIGITAL (150 STEPS, 0.5dB/STEP)
MAX OUTPUT	3.7V RMS	2.1V RMS
OUTPUT INTERFACE	3.5MM HEADPHONE OUT, 3.5MM LINE OUT	3.5MM HEADPHONE OUT
SCREEN	5 IN TOUCH / 720 X 1280	5 IN TOUCH / 720 X 1280
BUILT-IN MEMORY	64GB	32GB
MEMORY EXPANSION	MICRO SDXC (UP TO 256GB)	MICRO SDXC (UP TO 256GB)
WIRELESS NETWORK	802.11 B/G/N	802.11 B/G/N
HI-RES FORMAT	FLAC/ALAC/DSD/WAV/DXD/APE/AIFF	FLAC/ALAC/DSD/WAV/DXD/APE/AIFF
BATTERY	4200 mAh, up to 8 hours	3150 mAh, up to 16 hours
DIMENSION & WEIGHT	2.76W x 5.35H x 0.59D In / 8.5 oz	2.76W x 5.35H x 0.458 In / 6.3 oz

ANDROID BASED HI-RES MUSIC PLAYER
ACOUSTIC RESEARCH M2 / M20

DUAL AUDIO PATH
Acoustic Research M2 and M20 run on customized Android 4.3. The customized operating system offers two audio paths for different applications:

Proprietary Bit-Accurate Audio Path
The proprietary audio path offers ultimate uncompromised sound quality for music listening. This audio path allows bit-accurate audio transmission from application to the DAC.

Android Audio Framework
This standard audio path offers compatibility for third party audio application.   Customer may load third party applications such as Spotify, Tidal, Qobuz, or other applications into the system to enjoy their music.

POWER MANAGEMENT
Dedicated audio I/O interfaces allow simultaneous battery charging and uncompromised high quality wired audio playback. USB power source, including portable power bank, may be used to extended the play time of the music player.

AR MUSIC PLAYER PRO
FOR M2 AND M20

AR MUSIC PLAYER PRO is a new player app that enhances the user experience of M2 and M20. The new app offers a number of improvements over the original preloaded AR MUSIC PLAYER.

IMPROVED MUSIC BROWSING
• Revised music database hierachy
• Embedded keyword searching

IMPROVED MUSIC FORMATS AND TAGGING
• 32-Bit floating point PCM audio support
• CUE sheet tagging support for enhanced large music file support

EMBEDDED STREAMING SERVICES
• DLNA network streaming
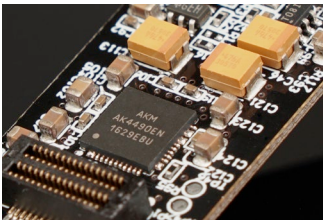• Embedded support for Tidal and Qobuz

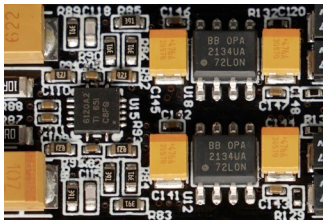M2 and M20 users may download update from ACOUSTICRESEARCH-HIFI.COM:
• M2 2.6.3 or later
• M20 1.5.8 or later

AR-M200

HIGH FIDELITY HI-RES MUSIC PLAYER & BLUETOOTH STREAMER
WITH INTEGRATED HEADPHONE AMPLIFIER

Hi·Res AUDIO

AKM AK4490 PREMIUM DAC

BUILT-IN CLASS A HEADPHONE AMPLIFIER

BLUETOOTH aptX HD STREAMING

|	
DAC	AKM AK4490
CLOCK SOURCE	SINGLE XO + PLL
PRE-AMP	BURR-BROWN OPA2134
HEADPHONE AMPLIFIER	TI TPA6120A2 / CLASS A
VOLUME CONTROL	DIGITAL (150 STEPS, 0.5dB/STEP)
MAX OUTPUT	2.0V RMS
OUTPUT INTERFACE	3.5MM STEREO, 4.4MM JEITA TRRRS
SCREEN	2.5 / 240 x 320
BUILT-IN MEMORY	32GB
MEMORY EXPANSION	MICRO SDXC (UP TO 256GB)
BLUETOOTH AUDIO	BI-DIRECTIONAL (aptX HD/aptX/SBC)
HI-RES FORMAT	FLAC/ALAC/DSD/WAV
BATTERY	1700 mAh, up to 7.5 hours
DIMENSION & WEIGHT	2.32W x 4.72H x 0.61D In / 4.3 oz

PENTACONN   USB TYPE-C

3.5MM

Pentaconn

4.4MM JEITA TRRRS Socket by Nippon DICS

M200 AS BLUETOOTH RECEIVER/DAC

In Bluetooth Receiver mode, you may pair M200 with a smart phone as if M200 is a Bluetooth speaker/headphones. With Qualcomm's aptX HD technology, HD audio streaming is available. Sound quality is enhanced with the premium DAC and the high fidelity class A amplifier in M200.
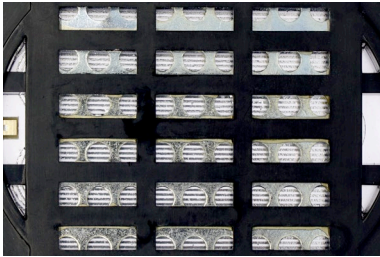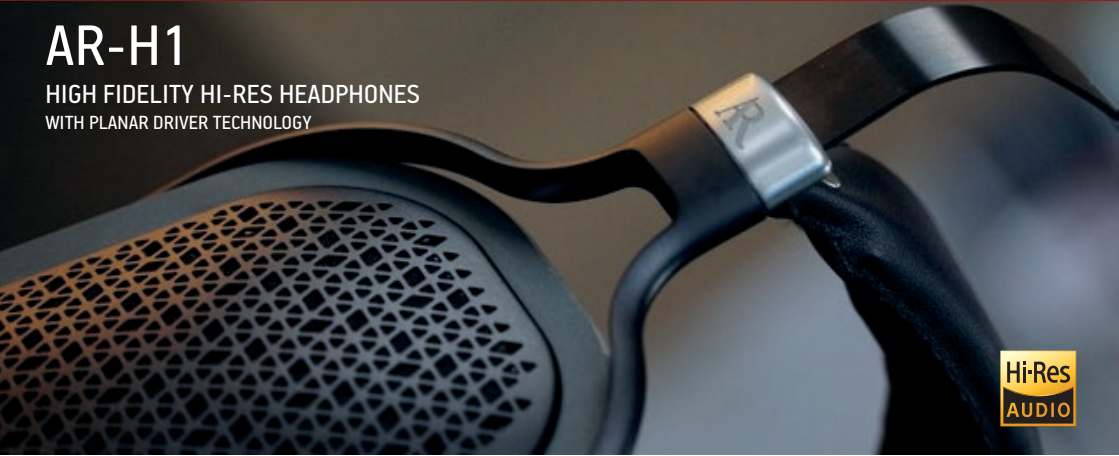
BLUETOOTH
AUDIO

Qualcomm® aptX™ HD
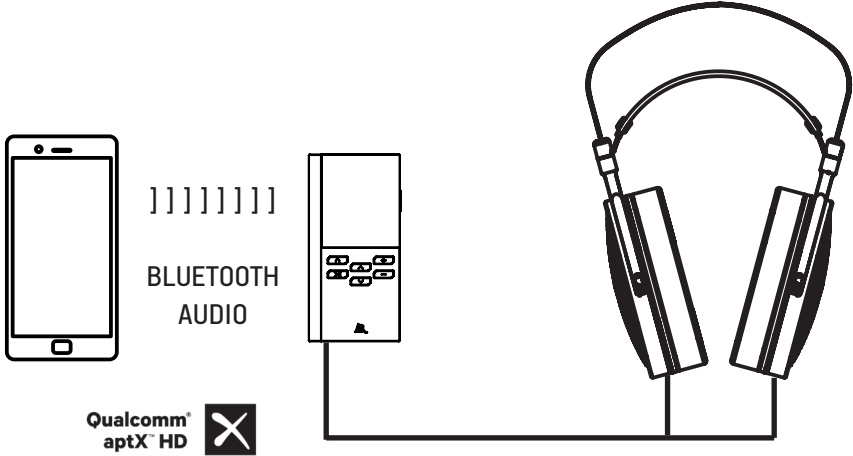
GENUINE LEATHER CASE

OPTIONAL ACCESSORIES FOR AR-M200

BLUE   BURGUNDY   BLACK

AR-H1
HIGH FIDELITY HI-RES HEADPHONES
WITH PLANAR DRIVER TECHNOLOGY

Hi-Res AUDIO

PLANAR MAGNETIC DRIVER TECHNOLOGY

INTERCHANGEABLE CABLE INTERFACE

PLANAR MAGNETIC DRIVER

Like more well known balanced armature earphones, planar magnetic driver is a different electro-acoustic transducer design unlike the common moving coil (dynamic) driver. It loses less energy due to weight. The unique coil design also minimizes energy loss due to self-inductance.

DRIVER	PLANAR MAGNETIC DRIVER
FREQUENCY RESPONSE	10Hz - 60kHz
SENSITIVITY	100dB/V@1kHz
IMPEDANCE	33-OHM
INTERCHANGEABLE CABLE INTERFACE	2.5MM TS-PLUG PER EAR CUP
WIRED CONNECTIVITY	1.2M UNBALANCED/3.5MM STEREO
WEIGHT	14 OZ
INCLUDED ACCESSORIES	1.2M UNBALANCED/3.5MM STEREO SOFT CARRYING BAG

INTERCHANGEABLE CABLE INTERFACE

H1 ships with the traditional 3.5mm stereo cable with 6.3mm adapter. Still, the interchangeable cable interface gives customer the flexibility to purchase and to use various cable upgrades. That will enable the possibilities to improve the overall performance with better conductors, or high end advanced interfaces such as Pentaconn balanced connections.

WHAT IS 4.4MM JEITA TRRRS INTERFACE?

4.4MM TRRRS interface is a new standard for headphone connections set by The Japan Electronics and Information Technology Industries Association (JEITA). The new interface is a more reliable alternative to the proprietary 2.5mm interface. Apart from better physical reliability, the lower contact resistance also ensures better signal transmission over the traditional 3.5mm standard stereo interface and 2.5mm balanced stereo interface.

OPTIONAL 4.4MM JEITA TRRRS CABLE UPGRADES

OCC 4.4MM TRRRS BALANCED CABLE
FOR AR H1

- Octa-Conductor 6N-OCC Copper Cable
- 4.4mm JEITA TRRRS interface
- Dual 2.5mm Silver+Rhodium plated brass plugs
- Total length 1.2m

OFC 4.4MM TRRRS BALANCED CABLE
FOR AR-H1

- Double Shielded OFC Cable
- 4.4mm JEITA TRRRS interface
- Dual 2.5mm gold plated brass plugs
- Total length 1.2m

AR-E10 / E100
HIGH FIDELITY HI-RES IN-EAR EARPHONES

Hi·Res AUDIO

Qualcomm® aptX™ X

HYBRID ACOUSTIC MODULE (E10 only)

By mounting the balanced armature driver and the beryllium dynamic driver to the chassis module, the error in driver mounting can be minimized. This ensures more consistent acoustic accuracy.

	E10	E100
DRIVER	HYBRID ACOUSTIC MODULE BALANCED ARMATURE DRIVER 8MM BERYLLIUM DYNAMIC DRIVER	10MM BERYLLIUM DYNAMIC DRIVER
FREQUENCY RESPONSE	20Hz - 40kHz	20Hz - 40kHz
SENSITIVITY	95dB/mW@1kHz	98dB/mW@1kHz
IMPEDANCE	25-OHM	32-OHM
INTERCHANGEABLE I/F	2-PIN IEM	2-PIN IEM
WIRED CONNECTIVITY	1.2M UNBALANCED/3.5MM STEREO 1.2M BALANCED/4.4MM JEITA TRRRS	1.2M UNBALANCED/3.5MM STEREO
WIRELESS CONNECTIVITY	BLUETOOTH (aptX READY)	BLUETOOTH (aptX READY)
INCLUDED ACCESSORIES	1.2M UNBALANCED/3.5MM STEREO 1.2M BALANCED/4.4MM JEITA TRRRS BLUETOOTH CABLE CARRYING CASE SOFT SILICON RUBBER EARPHONE TIPS MEMORY FOAM EARPHONE TIPS	1.2M UNBALANCED/3.5MM STEREO BLUETOOTH CABLE CARRYING CASE SOFT SILICON RUBBER EARPHONE TIPS MEMORY FOAM EARPHONE TIPS

GREY

RED

WHITE

FLASH 1.0
HIGH FIDELITY PORTABLE BLUETOOTH SPEAKER
WITH FULL DIGITAL PASS TECHNOLOGY

Qualcomm® aptX™

	FLASH 1.0	BOLT 1.0
SPEAKER CONFIG	QUAD MICRO DRIVER + BASS RADIATOR	DUAL DRIVER + ACTIVE SUBWOOFER
AMPLIFIER	2 x 5W / <1% THD@MAX OUTPUT	2 x 5W + 10W RMS / <1% THD@MAX OUTPUT
INPUT	BLUETOOTH w/aptX, 3.5MM LINE IN	BLUETOOTH w/aptX, 3.5MM LINE IN
BATTERY LIFE	About 8 hours	About 8 hours
DIMENSION AND WEIGHT	5.75W x 1.89H x 4.69D In / 19.5 oz	9.53W x 4.33H x 2.36D In / 47.3 oz

BOLT 1.0
HIGH FIDELITY PORTABLE BLUETOOTH SPEAKER
WITH FULL DIGITAL PASS TECHNOLOGY

WHITE

GREY

AR

HIGH FIDELITY AUDIO