









1945 1938 1935

# 

The story started 60 years ago: Pan Chien-Yeu's father built China's first condenser microphone for his radio station after studying in Germany. Pan learned from his father and graduated with BSEE from Chau-Ton University. Pan has 45 years of electroacoustics professional design experience. It was 26 years ago that David Liu started to manufacture microphones. When David and Pan met in 1996, the best design and hands-on experience and the best quality mass production collaborated.

Together with all kinds of talents: mechanical, electrical, material, work-in-process, administration, computer science, RF engineering, visual communications, sales,... A team of determined people works around the clock, and after years of efforts, here we have created the products for the audio industry with the best sound performance from and the reasonable price - Superlux - products that let you play your music without overloading your budget. For OEM customer, Goang Fann provides from design to manufacturing services to meet the demands, from name brands to customized contracting installation projects.

rue sound is the real value of Superlux products. Reasonable price is vital not only for budget limits, but also important for competitive business operations.

Industry standards are the guidelines to Superlux from design to products. Discipline to follow the standards sets a strong foundation. We value your music, your sound, and your business. When you choose Superlux products, you can just play your music. There are no burdens to your sound quality, no burdens to your financial considerations.

W e love music, we enjoy listening, and we are proud to be part of music creation. More music, more fun.



David and Pan



# SUPERLUX RANGE

PAGE 4 Wired Microphones

PAGE 34



Accessories



PAGE 44 Speakers



**PAGE 28** Wireless Systems



PAGE 40 Cables



PAGE 48 Consumer



**PAGE 32** 





**PAGE 42** Headphones



Superlux continually research to improve products. The specifications could be changed without prior notice. For latest specifications, please visit www.superlux.com.tw or contact sales department.

PAGE 69 OEM/ODM projects

# Microphones

Studio

**Detail expressed sonic quality** 

4

Broadcast

**On Air, Live Moment** 

8

Live Sound

**Beats shake** 

10

Contractor

Flexible choices

24

### **Studio Microphones**

Condenser studio microphones capture every detail. Touching the spirits.

Details enic quality

Precision crafted from design to production. Studio microphones demand the most detailed sonic nuance and sustained ultra high SPL as well. Gold coating with vacuum evaporation process with  $3\mu \rm m$  thickness. Precision tensioned diaphragm, and no tolerance assembly with precision instrumented tuning provides years of stable performance.

High quality and ultra low noise pre-amplifier circuitry achieving wide frequency response from 20Hz to 20KHz, and 130dB dynamic range.

Linearity characteristics provide the freedom to the musicians and producers to create their works at their will.







#### CMH8G 8D

Vacuum Tube Condenser

Valve amplifier provides exceptional warm sound, and smooth sound textures. Suitable for creative applications.

G version provides dual diaphragm structure with remote 9 direction variations.

D version is dual diaphragm switch between omni and cardioid directivity.



#### **CMH8C 8B 8A**

Large Diaphragm, variable directivity

All purpose studio grade condenser microphone. 1" gold deposited diaphragm with skillful workmanship, for the most vivid sound.

 $\ensuremath{\mathsf{H8C}}$  is the full version, comes with dual diaphragm for 3 switchable polar patterns.

H8B is single diaphragm with fix cardioid polar

H8A was designed for limit budget.



#### **CMH8CH 8BH 8AH**

Large Diaphragm, smile curve

Similar to the ensemble of CM-H8C/B/A. These 3 black versions kept the same variation. The difference is not only external appearances, but also internal design. Extended frequency performance in bass extension and HF enhancement. LED indicator will show if the phantom power source is working.

Pro Recording Studio Classical Recording Warm Vocals Strings Acoustic Guitar Classical Piano **Brass** 

Woodwinds Percussions Pro Recording Studio Live Recording Vocals Strings Acoustic Guitar Piano

Brass Woodwinds Percussions

Pro Recording Studio Live Recording **Bright Vocals** Strings Acoustic Guitar Jazz Piano Brass Woodwinds Percussions



® 8 0 0 P



- **8800**
- 1" gold coated 3µm thin film diaphragm Low noise transformer balanced output
- · Champagne finish

• 1" gold coated 3µm thin film diaphragm

CMH8AH Cardioid, Internal Low Cut

CMH8BH Cardioid, -10dB, Low Cut CMH8CH -10dB, Low Cut, 3 polar sw.

- A5 plastic carrying case including shock mount and foam windscreen.
- Black finish

• 1" gold coated 3µm thin film diaphragm Aluminium carrying case · Champagne finish

- Specific power supplier included
- · Specific cable from microphone to power supplier included.

CMH8D Omni, Cardioid 2 polar sw. CMH8G Remote 9 polar sw.

CMH8A Cardioid. Internal Low Cut CMH8B Cardioid, -10dB, Low Cut CMH8C -10dB. Low Cut. 3 polar sw













H8D matched with PS1 power supplier H8G matched with PS3 power supplier S65 windscreen foam included HM7 shock mount included HM8 stand mount included

**Related Products** 

HM18AG Pop screen HM48B. HM58B Table arm SMKH8A Stereo kit, matched pair CMH8A SMKH8B Stereo kit, matched pair CMH8B SMKH8C Stereo kit, matched pair CMH8C

HM-8 stand mount included A3 carrying case YA-1 adapter

#### **Related Products**

PS2A Phantom power supplier S65 Windscreen foam HM7 Shock mount HM18AG Pop screen HM48B, HM58B Table arm

S65 windscreen foam HM26A shock mount HM8B stand mount included YA-1 adapter

**Related Products** 

PS2A Phantom power supplier HM18AG Pop screen HM48B, HM58B Table arm





#### ½" True Condenser

Precision ½" gold sputtered diaphragm. Based on years of condenser microphone experiences, this all new design included interchangeable cartridge.



**S125** 

#### 1/2" True Condenser

Precision 1/2" gold sputtered diaphragm. Based on years of condenser microphone experiences, this all new design added with triple-layer wind screen for up-close vocal in recording studio as well as on the stage.





#### XY Stereo Electret

Coincident XY design, this all new design stereo microphone is a perfect tool for easy stereo recording setting, from studio, to live. Powered by internal battery or phantom power. For professional as well as amateur. Convenient blue light LED power indicator.



#### CMH8K

#### **Electret Instrument**

3 interchangeable capsules - cardioid, super cardioid, and omni. Multi purposes pencil type microphone. Easy to change for various applications. Excellent performance in electroacoustics characteristics and compact size.

Studio Live Recording Lead Vocal Strings Acoustic Guitar Piano **Brass** Wood Winds

Studio Live Stage Lead Vocal Strings Winds Percussions Live Recording Studio Recording Strings Piano Percussions Winds

Live Recording Vocal **Strings** Acoustic Guitar Piano **Brass** Wood Winds Percussion





Percussions



- $\frac{1}{2}$ ",  $3\mu$ m thin film diaphragm Flat and wide response
- Modular capsule design
- -10 and -20dB PAD settings
- 2<sup>nd</sup> order 75Hz and 150Hz switch-
- able low cut filters. Laser engraved serial numbering
- Precision automation manufacturing and SMD assembling.





- Built-in -10dB pad switch
- Built-in 3<sup>rd</sup> order (-18dB/oct) 150Hz low cut filter.
- Protective rubber cover on switch window to prevent accidental change.
- Conductive shielding, extremely low inherent noise and RF immunity.













- - Wide and uniform response
  - Shock mount capsule, very low handling noise.

Included Items:

HM38 mic clin

Mic pouch

A4 Carrying Case

DS01 Table Stand

S25 Wind screen

- · Phantom or battery Matched capsules
- Pre cut out foam for popular digital recorder in carrying case.
- Wide frequency response, emphasis
- on mid-high band High dynamic range, low distortion, transparent sound
- Detail texture suitable for mid high band instrument recording and live sound.

HM40 Shock mount S09F Wind screen included HM43 Pop screen included

**Related Products** HM26B Shock mount **PS2A** Power Supply

HM38S Clip Included

**Related Products** S40 Wind screen **PS2A** Power Supply

Mic Pouch Soft leather

**Related Products** 

SMKH8K Stereo pack, pair of CMH8KU and HM15 Mic cable 5M, XLR5F to 2 XLR3M

CMH8KHUO Includes all 3 capsules CMH8KO Includes omni capsule CMH8KH Includes super cardioid cansule

CMH8KU Includes cardioid capsule

YA10 Camera mount adapter HM40C On camera shock mount

Battery 1.5V AA alkaline

HM32 Shock mount included S08 Wind screen included

**Related Products** HM26B Shock mount **PS2B** Power Supply



AM100S24102AO Omni Capsule Omni directional capsule for S241 to interchange from cardioid to omni in recording application. Extremely flat response from 20Hz to 20KHz.



# Broadcast Microphones Precision tuned and crafted for broadcasting application. From indoor to outdoor.

# On Air.

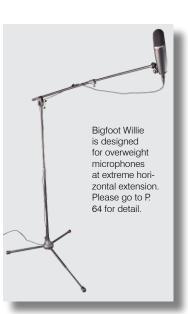
### **Live Moment**

Capture every word...

Value your message...

Intelligibility with clear, noise free quality for studios and locations...

From news to productions.









#### Classical Ribbon

Classical ribbon sonic texture. Suitable guitar as well as speech. Another typical application is stereo Blumlein recording due to it's inherit figure-8 directivity. Also received well result on live stage music production for it's rapid transient response over condenser counterpart



#### CMH8E

#### Large Condenser

Specially design for broadcaster. Also suitable for instrument pickup. Internal pop screen reduced wind noise. Good for DAW and environmental immunity due to the close cell capsule structure.

1" diameter, gold deposited  $3\mu m$  thin

Low noise transformer output

External 2 positions low cut filter

Fix suspension mount and cable

DJ Speech **Broadcast** Strings, winds instruments

film diaphragm

hanger



**PRA118** 

Shotgun Microphone

ater and SNG/ENG tasks.

Highly directional pro shotgun electret

microphones. Special designed for film

and EFP productions. Also good for the-



- Exceptional off-axis suppression
- · Very low coloration
- Flat on-axis response
- Long and short versions

DJ, Speech Guitar, E-Guitar Bass section Percussion



- · Phantom power required.
- · High sensitivity, wide dynamic range, low
- Low impedance output, low distortion.
- · Pre-amplifier with integrated shielding to provide excellent performance.
- Figure-8 polar pattern, symmetrical front to back inside out.
- · Easy to replace ribbon module.

U bracket Attached

PS2A Phantom power supplier S65 Windscreen foam HM48B, HM58B Table arm

**Related Products** 

PRA118L 54 cm, S15 foam PRA118S 34 cm, S14 foam HM37S, and carrying case included. **Related Products** PS2B Phantom power supplier HM30S Shock mount HM35 Shock mount HM-35C Camera mount YA10 Camera mount adapter



Cable Right angle cable included.

**Related Products** 

PS2A Phantom power supplier

HM31 Shock mount

HM48B. HM58B Table arm





#### XY Stereo Microphone

Matched pair capsules. For live recording, realism spacial capturing. 2 balanced outputs for pro audio/video system. Low-cut switch for reducing noise. Phantom or battery power.

Broadcast/TV Pro recordina Outdoor production Handheld digital recording



#### **PRA318**

#### Omni Interview

Omni dynamics are popular for SNG works. Aluminium alloy used for lowest handling load. En lengthen handle for easy reach and good for hand held operation. No proximity effect for best speech clarity

SNG/ENG Interview Speech Recording



#### Shotgun Mic, Battery Power

Highly directional pro shotgun electret condenser microphones. Special designed for film and EFP productions. Also good for theater and SNG/ENG tasks. Battery for easy connection to amateur equipment.

Film, EFP ENG. SNG Theater live sound





- Matched capsules
- Balanced outputs
- Phantom or battery power
- · External low cut switch





- · Frequency response designed for speech intelligibility
- No proximity effect
- Aluminium body, light and sturdy
- Special wind noise proof, good for outdoor



- Exceptional off-axis suppres-
- Very low coloration
- Flat on-axis response
- Battery power
- External low cut switch

Included Items:

HM38S mic clip

Mic cable 5M, XLR5F to 2 XLR3M Mic pouch convenient carrying case

S50 Windscreen Battery 1.5V alkaline AA

**Related Products** 

HM40C On camera shock mount YA10 Camera mount adapter

PRA318L Long shaft, 23 cm PRA318S Short shaft, 18 cm

S07 Windscreen included HM30 Shock mount included

#### **Related Products**

YA10 Camera mount adapter DS01 Light weight table stand Included Items:

HM38S, and carrying case S14 Windscreen Battery 6V, 4LR44, alkaline

**Related Products** 

HM35 Shock mount HM35C Camera mount YA10 Camera mount adapter



# Vocal

When it comes to the mood

12

# Wearing

**Hands free** 

14

# Instrument

**Woods meets Brass...** 

16

## Drum Sets

**Beating together** 

20



One for all

22



### **Vocal Microphones**

Words for feeling, songs for touching. Ways to sing, always a match to your voice.

## When it comes to the mood...





easy to hold with minimum handling noise. Sonic quality meets the singer's expectation to be a helpful tool to perform their music. Controlled directivity minimizes feedback, tailored response fits the popular curve that almost everyone is used to. There are choices of variations for artists to select the best match - in sound as well as in appearance.



#### WL **TOP248**

Vocal Microphone

High performance Nd magnet and double diaphragm. Achieving high sensitivity and flat response. Excellent sonic quality to impress

the audience. Rubber coating for comfort handling.

Lead Vocal Speech Music Instruments



**TOP258** 

Vocal or Instrument Mic

High performance ND magnet and double diaphragm. Achieving high sensitivity and flat response. Flat pop filter head to close-up miking. Rubber coating for comfort handling.



Vocal Microphone

The Classical sound hand held vocal microphone. Strengthen grill and sturdy shaft for years of stable performance. Controlled directivity and tailored response suitable for vocal.



**PRO258** 

Vocal or Instrument Mic

The Classical sound hand held vocal/ instrument microphone. Strengthen grill and sturdy shaft for years of stable performance. Controlled directivity and tailored response suitable for vocal. Flat grill for close-up miking.

Vocal

Lead Vocal Speech

Music Instruments

Winds Strings Percussion Vocal







Winds

Strings

Percussion







TOP248S On/off switch included HM38S Clip included

HM38S Clip included

PRO248S On/off switch included HM38S Clip included

HM38S Clip included





Vocal Microphone

Spherical grill with on/off switch. Classical vocal sound and comfort holding. Multiple pack for convenient stage works.



Vocal Microphone

Flat front grill without on/off switch. Designed for vocal and for intrument pick up as well



Vocal Microphone

Zinc alloy body with Nd magnet capsule makes this economic design microphone to be the best choice even compared with pricier competitors. Built-in on/off switch.



#### Value Bundle Item

ECOA1 A2 A3

#### Vocal Microphone

Zinc alloy body with slider ball on-off switch makes this economic design microphone to be the best choice even compared with pricier competitors.

Vocal Speech General purpose	Vocal Speech General purpose	Vocal Speech General purpose	Vocal Speech General purpose
© Q	Ø Q	Ø \( \tau \)	Ø C)
DDAO1 Circula David	DDAD4 Circle Deel.	Min Dough Coft corruing coop	ECOA1 Cinale pools

PRAC1 Single Pack PRAC3 Triple Pack PRAC5 Five Pack HM42A Clip included PRAD1 Single Pack PRAD3 Triple Pack PRAD5 Five Pack HM42A Clip included Mic Pouch Soft carrying case HM9A Clip included

ECOA1 Single pack ECOA2 Double pack ECOA3 Triple pack HM9A Clip included

## **Wearing Microphones**

Nature way to perform, for guitarist, drummer, and dancing singers...

Always helpful...

# Hands Free

You always need your hands somewhere else than holding the microphone. Other than a microphone on a stand, wearing the microphone is a brilliant way to dance freely on the stage and still keep the microphone at a constant position to your mouth. Wearing microphones always provides a model for wireless belt-pack transmitters.











#### PRA20

WL

#### Dynamic Headworn

Dynamic microphone specially design for close-up miking as headworn always keep the microphone at a very short distance. Especially suitable for speech and to work without phantom power.

Speech Presenter Conference



Condenser Headworn Condenser microphone specially design for close-up miking as headworn always keep the microphone at a very short distance. Especially suitable for singing and music production

WL

Lead Vocal Guitar player Dancer Drummer



Condenser Headworn Condenser microphone specially design for close-up miking as headworn always keep the microphone at a very short distance. New design to organize the cable neatly.

Vocal Guitar player Dancer Drummer



Figure 8 Miniature Figure 8 condenser microphone for hidden recording. Good surrounding sound rejection. High gain before feedback for live stage.



PRA20TQG TA4F for wireless PRA20XLR XLR3M plug Included Items: S11 Wind screen





PRA30TQG TA4F for wireless PRA30XLR PS418S included PRA30DXLR PS418D included Included Items: S11 Wind screen Battery 1.5V alkaline AA (DXLR)





E10ATQG TA4F for wireless E10AXLR PS418S included E10ADXLR PS418D included Beige Skin color version Included Items: S23 Wind screen Battery 1.5V alkaline AA (DXLR)



Speech

Drama Gym Instructor

E10BTQG TA4F for wireless E10BXLR PS418S included E10BDXLR PS418D included Beige Skin color version Included Items: S23 Wind screen Battery 1.5V alkaline AA (DXLR)



**E12A** 

WL

#### Omni Sub Miniature

Sub miniature condenser microphone with minimized appearance. Specially designed frequency response for vivid sound performance.

TV broadcasting Speech General purpose





E12ATQG TA4F for wireless E12AXLR PS418S included E12ADXLR PS418D included Included Items: S53 Wind screen Tie clip, clip base, Battery 1.5V AA batteries (DXLR)



**WO518** 



Omni Miniature Omni condenser microphone for hidden recording. Picks up surrounding sound easily. Suitable for recording without live sound.

WL

TV broadcasting Speech General purpose





W0518TQG TA4F for wireless W0518XLR PS418S included W0518DXLR PS418D included Included Items:

S12 HF boost wind screen S13 Wind screen

Battery 1.5V alkaline AA (DXLR)





Cardioid Miniature Cardioid condenser microphone for hidden miking. Suitable for live sound application.

TV broadcasting Speech General purpose



WU518TQG TA4F for wireless WU518XLR PS418S included WU518DXLR PS418D included Included Items:

S12 HF boost wind screen S13 Wind screen Tie clip

Battery 1.5V alkaline AA (DXLR)

## **Instrument Microphone**

A selection of various microphones is important for various instruments.

# Melody mix

# d vs. Brass

Soft wood winds meets strong brass, elegant strings meets pounding percussions. Instrument microphones face various styles and levels, and capture vivid sound to storm strength. Transform the sound faithfully into electronic signal.



#### **PRA383**

#### Clip-On Gooseneck Mic

Easy to clip onto various instruments and simple to adjust by bending the short gooseneck for the sweet spot. A good choice for wireless belt-pack.





#### E101

#### Guitar Microphone

A tie clip style miniature microphone added with a guitar clip and special tuning for acoustic guitar. A suitable choice for wireless acoustic guitar setup.





#### **D112**

#### Harmonica Mic

Blues harmonica microphone, curves meets the holding hands when playing. Level knob for player to adjust suitable sound level. Permanent attached cable. Hi-Z matched with popular guitar amplifier.

#### Harmonica



#### **PRO218A**

#### Kick Drum Microphone

Specially designed for kick drum for its 174dB SPL maximum level and tuned frequency response. Also suitable for bass section instruments.

#### Kick Drum Bass section













PR0218A



WB383 TA4F for wireless PRA383XLR PS418S included PRA383DXLR PS418D included Battery 1.5V alkaline AA (DXLR) included E101TQG TA4F for wireless E101DXLR PS418D included Tie clip Included Guitar clip Included S06 Wind screen included

Battery 1.5V alkaline AA (DXLR)

**Related Products** CP838 Converter for low impedance, balanced output.

HM30B Mic clip included Mic pouch Soft carrying bag (SGL DRKB5C2MKII includes 1



#### **PRO228A**

#### Tom-tom Microphone

Specially designed for tom-tom with permanent attached microphone clip. Also suitable for winds. 150dB SPL ability.



#### **PRO268B**

#### Instrument Microphone

Drum set overhead

Back electret condenser microphone for drum set overhead. Also suitable for mid to high frequency instruments. Inter-changeable capsule design.



#### **PRA288A**

#### Snare Noise Microphone

Specially designed for snare noise pick-up. Tuned frequency response with roll off low end, and slightly roll off hi end. Good for mid-high frequency biased instrument.



Value Bundle Item

**D10B** 



#### Instrument Microphone

Specially designed for mid-high frequency band instruments. High SPL capability. Humbucking coil to reduce interference by other equipment.

**Strings** 

Winds Percussion

Acoustic Guitar, Guitar Amp





Tom-Tom

Percussion

Snare

Winds



Strings

Winds

Guitar



Ohoe

Surna

Snare noise



Mic pouch Soft carrying bag (SGL pack) DRKB5C2MKII includes 3 PRO-228A

HM30S Mic clip included S20Wind screen included (SGL pack) Mic pouch Soft carrying bag (SGL pack) DRKB5C2MKII includes 2 PRO-268B

HM10B Mic clip included Mic pouch Soft carrying bag (SGL pack)

DRKB5C2MKII includes 1 PRA-288A

HM38S Mic clip included Mic pouch Soft carrying bag **Related Products** HM54 Shock mount HM25 Drum clamp





**Electret Instrument** 

High sensitivity, flat frequency response electret condenser microphone. Specially design for instrument miking application. Phantom and battery dual power allow E124 to be used in pro-audio as well as amateur systems.

Acoustic Guitar Strings Piano Percussion

E100

Kick drum Boundary Mic

Low profile boundary mic with built-in electronics. Easily place on a pillow or other surface in a kick drum for excellent attack and bass punch. Very high SPL ability and lower sensitivity to match Kick drum without overloading mic amplifier in a mixer. 1.5M perma-

Kick drum High SPL bass section



Instrument Microphone

New small diaphragm electret condenser. Suitable for high frequency signal pickup. Especially for overhead in a drum set, or unobstructed settings for most music instruments

Percussion Strings Brass Piano



FK2

Kick Drum Microphone

Specially designed for kick drum with high SPL ability and tuned frequency response. Also suitable for bass instrument pick-up. Rich punch and good attack. Permanent attached mic clip.

Kick Drum Bass section





Mic pouch Soft carrying bag (SGL pack) DRK681 includes 1 E100

2 ()



S27 Wind screen HM10B Mic clip

DRKK5C2 includes 2 E102

Mic pouch Soft carrying bag (SGL pack)



(i) (i)

Mic pouch Soft carrying bag (SGL pack) DRKF5H3 includes 1 FK2

HM38S Mic clip Mic pouch Soft carrying bag Mic Cable Choices of 6-meter, XLR3F to Ø6.3 plug or XLR3F to XLR3M cable Battery 1.5V alkaline AA S09 Wind screen

**Related Products** HM32S Shock mount



HM43 Pop filter



**PRA638** 

Instrument Microphone

General purpose instrument condenser microphone. Flat pop screen for up-close miking, Suitable for guitars, strings, and winds.



**PRA218A** 

Kick Drum Microphone

Hi SPL capability, specially designed for kick drum. Also suitable for other bass band or high SPL instruments. Permanent attached mic clip.



**PRA218B** 

Kick Drum Microphone

Hi SPL capability, tuned frequency response, specially designed for kick drum. Also suitable for other bass band or high SPL instruments

Guitar Amp Bass Amp Keyboard Amp Speaker

**PRA628** 

Instrument Microphone

guitars, strings, and winds.

General purpose instrument dy-

namic microphone. Flat pop screen

for up-close miking, Suitable for

Acoustic Guitar Winds **Strings** Piano

**3** 

Kick, drum Set Bass instrument Kick, drum Set Bass instrument





HM10B Mic clip

HM12DA Gooseneck clip





Mic pouch Soft carrying bag (SGL pack)

Included Items: HM10B Mic clip HM12DA Gooseneck clip Mic pouch Soft carrying bag (SGL pack)





Mic pouch Soft carrying bag (SGL pack)

DRKA3C2 includes 1 PRA218A DRKA5C2 includes 1 PRA218A



HM30B Mic clip included. Mic pouch Soft carrying bag (SGL DRKK5C2 includes 1 PRA218B



FT4 Tom-Tom Microphone

Specially designed for tomtom with permanent attached microphone clip. Also suitable for winds.



Winds





DRKF5H3 includes 3 FT4



FS6 Snare Drum Microphone

Specially designed for snare drum with permanent attached microphone clip. Also suitable for winds

Snare Drum Wood Winds Brass



#### **H08**

Overhead/Vocal Mic

19mm back electret condenser microphone, suitable for wide range applications. From drum set overhead to project studio, covering vocal, guitar, strings, and winds.

Overhead, Drum Set Vocal Guitar Strings and Winds



#### **HI10**

Hi-Hat Microphone

Integrated electronics back electret condenser small diaphragm microphone, suitable for high frequency instruments. From hi-hat in drum set, guitar, to strings.

Overhead, hi-hat Guitar Strings





#### Instrument Mic

Integrated electronics back electret condenser microphone with interchangeable capsules. Suitable for high frequency instruments. From overheads, hi-hat, to strings.

Overhead, hi-hat Guitar Strings Winds





Mic pouch Soft carrying bag (SGL Mic pouch Soft carrying bag (SGL

DRKF5H3 includes 1 FS6





Mic pouch Soft carrying bag (SGL

DRKF5H3 includes 2 HO-8



HM10B Mic clip included S20 Wind screen included Mic pouch Soft carrying bag (SGL pack)

DRKF5H3 includes 1 HI-10



HM10S Mic clip included S20 Wind screen included Mic pouch Soft carrying bag (SGL pack)

DR-681 includes 3 E-109



#### **PRA228A**

Instrument Microphone

Tuned response dynamic suitable for tom-tom, floor tom or snare. Also suitable for guitar or similar intruments. Permanent attached mic clip.

Tom-tom, drum set Guitar Strings



**PRA268A** 

Instrument Microphone

Back electret condenser instrument microphone for drum set overhead or hi-hat. Also suitable for strings and wood winds. Permanent attached mic clip.

Overhead, drum set Winds Strings





Mic pouch Soft carrying bag (SGL

DRKA3C2 includes 2 PRA228A DRKA5C2 includes 4 PRA268A



S09 Wind screen (SGL pack) Mic pouch Soft carrying bag (SGL pack) DRKA3C2 includes 2 PRA268A DRKA5C2 includes 2 PRA268A













#### **DRK681**

#### 8 x Condenser Mic Set

This full condenser drum set comprises with 4 x Superlux PRA-383XLR covering Tom-tom and snare, new E100 kick mic, and 3 new E109 condenser mics for overheads and hi-hat. These high quality condenser microphones are also good for strings, winds and percussion.

Recording Studio Live Stage Strings, Winds Percussion



#### Giant 7 Mic Set

Best choice for live sound as well as studio. Comprise with 1 PRO-218A for kick, 3 PRO-228A for tom-tom, and snare, 1 PRA-288A for snare noise, and 2 PRO-268B condenser for overhead. These high quality mics are also suitable for other instrument pick-up. Packed in a convenient plastic carrying case

Recording Studio Live Stage Percussion

#### DRKF5H3

#### Super 8 Mic Set

8 mic set, with 2 x HO-8 for overhead. 1 x FK-2 for kick, 3 x FT-4 for tom-tom, 1 x FS-6 for snare and 1 x HI-10 for hi-hat. Packed in a convenient plastic carrying case. Not only for drum set, but also a good choice for other instruments.

Live Stage Recording Studio Percussion



















Aluminium carrying case

- 1 E100
- 4 PRA383XLR
- 3 E109
- 3 HM10S mic clips
- 3 S20 Wind screens



- 1 x PR0218A
- 3 x PR0228A
- 2 x PR0268B
- 1 x PRA288A
- 3 x HM10S mic clips
- 2 x S20 foam wind screen

**Related Products** HM12A Drum clamps. Refer P. 38 Plastic carrying case 1 x FK2

- 3 x FT4
- 1 x FS6 2 x H08
- 1 x HI10

1 x HM10B mic clip included.

**Related Products** HM12A Drum clamps. Refer P. 38







#### Complete 7 Mic Set

7 mic set, comprised with 3 tom-tom mics, 1 snare mic, (with permanent clips) 1 PRA-218B for kick, and 2 E102 condenser for overhead. Packed in a aluminium case, with 4 x HM-12A drum clamps and 8 microphone cables

Live Stage



#### Compact 5 Mic Set

Designed for live stage and practice room. Simple, yet complete with 1 PRA-218A for kick, 2 x PRA-228A for tom-tom, and 2 PRA-268A condenser for overhead. All microphones included permanent attached mic clip.



#### DRKA5C2

#### Extended 7 Mic Set

Designed for live stage and practice room. Including 1 PRA-218A for kick, 4 PRA-228A for tom-tom and snare, and 2 PRA-268A condenser for overhead. All microphones included permanent attached mic clip.

Live Stage Luxury Practice Room

Project Studio Percussion

Live Stage Practice Room

Ø 3 Q Q



















Aluminium carrying case

- 1 x PRA218B
- 3 x TOM-TOM Mic
- 1 x Snare mic
- 2 x E102
- HM-30B for PRA-218B
- 4 x HM12A drum clamps
- 8 x Cables XLR to XLR

Plastic carrying case

- 1 x PRA218A
- 2 x PRA228A
- 2 x PRA268A

**Related Products** HM12A Drum clamps. Refer P. 38 Plastic carrying case

- 1 x PRA218A
- 4 x PRA228A
- 2 x PRA268A

**Related Products** 

HM12A Drum clamps. Refer P. 38

### **Value Bundle**

Ready solutions for various tasks. Bundle microphone, cable, and stand within a convenient carrying bag. Take it and do it.

# One for all Your needs, our solutions





#### **MSKA**

Singer Pack

Boom stand MS108, vocal microphone ECO-A, HM9A mic clip, soft mic pouch, 6-meter mic cable, top open carrying bag that holds all.

1 x 6M XLR-XLR mic cable<sup>1</sup>, or

Singer Teacher Presenter

Ø ()

1 x ECOA



#### MSK10B

Instrument Mic Set

Instrument microphone D-10B incorporating humbucking coil bundle with MS108 boom stand. Package includes cable, clip, and carrying bag.

Guitar player String player Winds player Percussion Vocal





- 1 x D10B
- 1 x 6M XLR-XLR mic cable<sup>1</sup>, or XLR-½" phone plug<sup>2</sup>

#### **MSK124**

Condenser Mic Pack

Excellent instrument/vocal microphone packed with light weight aluminium traveller stand MS-128. This package is the answer to traveller acoustic instrument musicians.

Guitar player String player Winds player





- 1 x E124D
- 1 x 1.5V AA alkaline
- 1 x 6M XLR-XLR mic cable<sup>1</sup>, or XLR-1/4" phone plug2



## **Contractor Series**

Elegant appearance, easy to install, long term supplying stability, this range of products meets your needs.







Standard mounting flange.



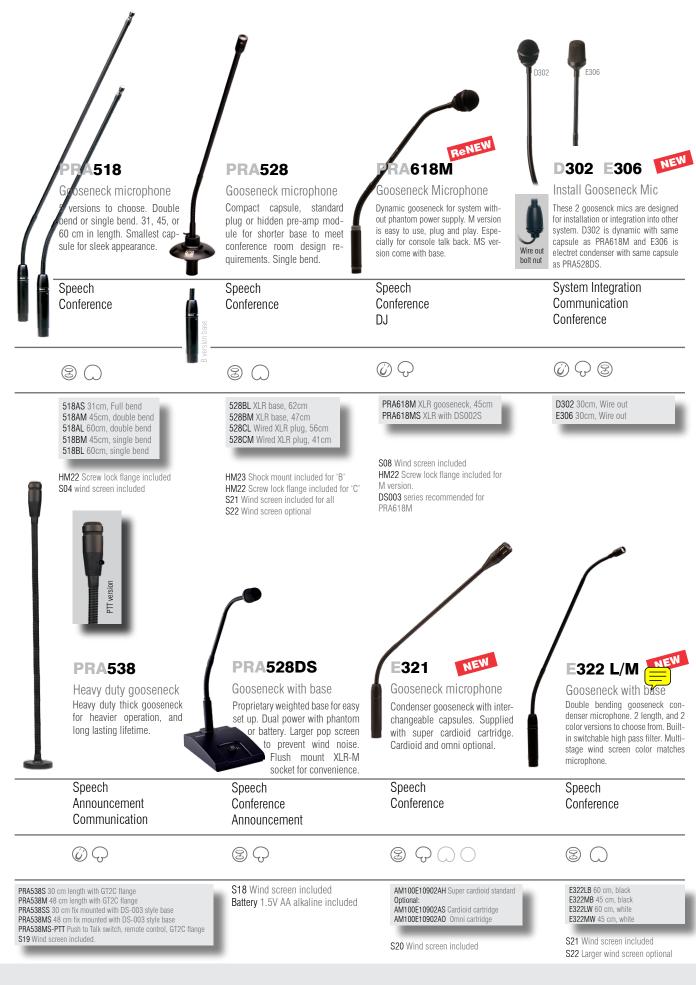
Shock mount Flange to prevent structure bond vibration noise.



XLR-F flush socket with open end cable.



and XLR-M plug





GT2B Screw flange for 5/8" thread



#### GT6F

XLR3F base, surface mount. With open end cable.



**DS003** 

Gooseneck mic base XLR3F to XLR3M socket for convenient connection.

# Easy Place Wherever....











**E303** 



Acoustic Boundary

Uni-directional, white or black finish. Especially suitable for table top placement. Builtin power circuit for phantom power.

Speech Piano Tap dance General purpose **E304** 



Acoustic Boundary

Omni directional, white or black finish. Especially suitable for table top placement. Built-in power circuit for phantom power.

Speech Piano Tap dance General purpose **PRA52** 

Ceiling Mount Microphone For ceiling mount applications such as choir and orchestra pickup. Permanent attached 10 meter cable between capsule and power adapter. XLR output plug.

Choir **Strings** Winds











E303W Cardioid, white E303B Cardioid, black

Included Items Cable 7.5-meter TA3F to XLR3M

E304W Omni, white E304B Omni, black

Included Items Cable 7.5-meter TA3F to XLR3M PRA52B Black version

PRA52W White version

Included Items Steel bending bracket S06 Wind screen



#### **PRA418**

#### Omni Acoustic Boundary

Omni directional acoustic boundary microphone. Suitable for recording and logging applications.

#### **PRA428**

Cardioid Acoustic Boundary

Cardioid directional acoustic boundary microphone. Suitable for live sound, or recording with background noise.



#### **E323**

Flush Mount Half Cardioid Uni-directional directional versions. White or black finish. Especially suitable for table top flush mount. Built-in electronics with XLR-M plug.



E324

Flush Mount Omni Mic Omni directional versions. White or black finish. Especially suitable for table top flush mount. Built-in electronics with XLR-M plug.

#### Speech Piano Tap dance General purpose

#### Speech Piano Tap dance General purpose

Speech General purpose Speech Surveillances General purpose















Included Items PS418D Power adapter Cable 7.5M TA3F plugs Battery AA 1.5V alkaline



E323W Cardioid, white E323B Cardioid, black

E324W Omni, white E324B Omni, black



**D401S** 

Omni Microphone

Omni microphone without proximity effect for best speech clarity. For places without feedback problem, omni become better choice than cardioid counterpart. Such as podcast, disptach, talkback... On/off switch included,



**D105S** 

Vocal Microphone A popular handheld microphone for contractor in system integration. On/off switch convenience operation.



**PRA448** 

Flush Mount Microphone Flush mount dynamic microphone for indoor and outdoor with stainless steel plate. Standard gang box plate size for easier installation. DPDT push switch for momentary on/off and remote control.

Warehouse, Factory,

School, Restaurant.

Security Access,

Fast food, Apartments,



PRA535NC

Push-to-Talk Microphone Heavy duty PTT microphone for communication. Noise cancelling version for high background noise environment to keep intelligibility. Remote control sync with PTT switch. 3.4M coil cable output.

Announcement, Communication, Transportation vehicle, Security Access, Emergency, Dispatch





Communication

Language Labs

Dispatch, Talkback



Court house

Ballroom,

Convention center,

Conference facilities







(C)

**Podcast** 

HM38S Mic clip included Recommended Item: GM13D Gooseneck

DS003 Gooseneck base

HM38S Mic clip included Mic pouch Carrying bag included

PRA448S On/off switch included

PRA535 Standard version PRA535NC Noise cancelling

HM53 Wall bracket included

# People like freedom, no bounds, and certainly want **Wireless Microphones** to use everything without wires. Here you are. RF transmission and reception is not difficult. Wireless with stable reception and convenient channel setting is a challenge. Superlux has achieved true diversity and channel management through years of research for this new UHF system with infrared channel control. The digital control system provides excellent stability and ease of use. **Less for more** With a selection of Superlux microphones, the excellent sonic quality is avaliable not only with wire, but also wireless now.

# true diversity



























W0518







#### Handheld Transmitter

Hand held wireless microphone with choices of Superlux famous microphone capsules, dynamics as well as condensers. FIC technology allows easy RF channel synchronization.

Recommended Capsules UT4/125: S125 condenser UT4/108A: D108A dynamic

UT4/248: TOP248/PR0248 dynamic UT4/238C: PR0238C condenser

Recommended Microphones

input socket to adapt various sources.

NEW

Body pack wireless transmitter with choices of

Superlux famous hands free microphones, dynamics as well as condensers. FIC technology

allows easy RF channel synchronization. TA4M

**Body Pack Transmitter** 

UT2

UT2/383: PRA383 condenser clip-on UT2/20: PRA20 dynamic headworn UT2/30: PRA30 condenser headworn UT2/10A: E10A condenser headworn UT2/10B: E10B condenser headworn UT2/518: W0518 condenser miniature





#### True Diversity Receiver

True diversity, dual reception systems guaranteed perfect signal continuity without dropout. Easy to use color information display, 1-button FIC frequency infrared communication syching transmitter and receiver.





UT2

S125

UT64/125 Handheld set

UT4/125 Handheld transmitter UT-6 Diversity Receiver





**UT62/20** 

Headworn Dynamic UT2 Belt-pack transmitter UT6 Diversity Receiver PRA20TQG Headworn dynamic microphone



**UT62G** 

E. Guitar set UT2 Belt-pack transmitter UT6 Diversity Receiver GA03 Guitar Cable



UT64/108A

Handheld set UT4/108A Handheld transmitter UT6 Diversity Receiver



**UT62/30** 

Headworn Condenser UT2 Belt-pack transmitter UT6 Diversity Receiver PRA30TQG Headworn condenser microphone



UT62/383

Instrument Set

UT2 Belt-pack transmitter **UT6** Diversity Receiver PRA383 Mini clip-on gooseneck instrument mic



UT64/248

Handheld set UT4/248 Handheld transmitter UT6 Diversity Receiver



UT62/10A

Headworn Dynamic UT2 Belt-pack transmitter UT6 Diversity Receiver E10ATQG Headworn condenser microphone



#### UT62/0518B

Speech set

UT2 Belt-pack transmitter UT6 Diversity Receiver W0518B/TQG Lavaliere omnl microphone



UT64/238C

Handheld set UT4/238C Handheld transmitter UT6 Diversity Receiver



**UT62/10B** 

Headworn Dynamic UT2 Belt-pack transmitter UT6 Diversity Receiver E10BTQG Headworn condenser microphone



#### UT62/12A

Speech set

UT2 Belt-pack transmitter UT6 Diversity Receiver E12ATQG Miniature omni microphone

#### **Wireless System Accessories**





UHF Antenna DA

Dual 1 input - 4 outputs UHF antenna distribution system. 1 rack space.



Dipole Antenna Dipole antenna









# **Measurement Mic & others**

See what's there, know what you've heard.

seeing is believing...

# Precision



Professionals work based on quantization, to control the variables and make things happen exactly as predicted.





#### **ECM999**

1/2" Measurement Mic.

Industry standard ½" phantom powered measurement microphone suitable for real time analyzer and PC based measurements. Due to its flat and wide frequency, it is also suitable for recordings.

Measurements Recording



#### **ECM888B**

1/4" Measurement Mic.

Industry standard 1/4" dimension. 6V battery powered measurement microphone suitable for real time analyzer and PC based measurements. Due to its flat and wide frequency, it is also suitable for recordings.

Measurements Recording



#### **PINK STICK**

Signal Generator

Phantom powered, no battery needed. Rotary switch operates this tiny generator with pink noise, 1KHz tone, and pulse for polarity check. Mute setting in between every signal for easy muting.

Measurements Testing









HM10B Mic clip included S02 Wind screen included HM32 shock mount included 4LR44 Battery included

## Accessories

Power adapters, phantom power suppliers, converters, adapters, microphone mounts, shock mounts, pop screens, stereo bars...

# Convenience

gives you an important hand



from winds and vibrations.





#### **PS418D**

#### Pre-Amp and Power Adapter

Provides power to miniature microphones from phantom power or battery. Switchable low cut filter helps to cut un-necessary low band in order to reduce noise.

#### **PS418S**

Pre-Amp and Power Adapter

Provides power to miniature microphones from phantom power. Tiny inline design minimized space requirements.



#### **CP818**

Impedance Adapter Convert Lo-Z to Hi-Z, or vice versa. XLR-F to phone plug.



#### **CP828**

Impedance Adapter Convert Lo-Z to Hi-Z, or vice versa. XLR-M to phone plug.



**CP838** 

Impedance Adapter
Convert Lo-Z to Hi-Z, or vice versa. XLR-M to phone socket



#### PS2A

#### Phantom Power Supplier

Provides 48V phantom power to 2 microphones. Auto ranging from 100VAC to 240VAC power source. Various power cords for different countries.



#### PS2B

#### Phantom Power Supplier

Provides 12V or 48V phantom power to 2 microphones. Powered by two 9VDC batteries or external AC adapter (not included).



#### **DS003**

#### Gooseneck mic base

XLR3F to XLR3M socket for convenient connection.

DS003 Flushed XLRF socket DS003S Same as 003, with switch DS003A Raised XLRF socket with lock DS003AS Same as 003A, with switch



#### **DS002**

#### Gooseneck mic base

XLR3F to XLR3M socket for convenient connection including on/off switch.







**YA10** Camera mount Adapts 5/8" thread clips onto various cameras



**HM35** Shock mount Suitable for Ø15~27mm microphones



**HM42** Universal clip Suitable for Ø24~32mm microphones



Universal clip Suitable for Ø20~35mm microphones

HM9



Camera shock mount Suitable for  $\emptyset15{\sim}27\text{mm}$  microphones mount onto cameras

HM35C

**HM37** 



Universal clip Suitable for Ø16~45mm microphones

**HM101** 



**HM10** Universal clip Suitable for  $@19 \sim 24 \text{mm}$  microphones



Universal clip Suitable for Ø18  $\stackrel{\cdot}{\sim}$  20mm microphones



**HM54** Shock mount Suitable for Ø24~40mm microphones



**HM29** Universal wireless clip Suitable for Ø29~39mm microphones



**HM38** Universal clip





Suitable for Ø24~26mm microphones

plastic thread metal thread

camera mount

screw know, metal thread



**HM30** 

**HM32** 

Shock mount

Shock mount Suitable for Ø24mm microphones such as PRO218A and PRA218B

Suitable for Ø20~26mm microphones



**HM39** 

Universal wireless clip Suitable for Ø32~38mm microphones



**HM40** 

Shock mount Suitable for Ø12~30mm microphones

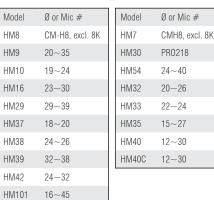


HM40C

Camera shock mount Suitable for Ø12~30mm micro-



Shock Mounts mm Ø or Mic #





**HM33** 

Shock mount Suitable for Ø22~24mm microphones



#### **HM7**

#### Shock mount

For CMH8A/ 8B/ 8C/ D/ G/ AH/ BH/ CH. Minimized vibration noise to unnoticeable.

#### **MA90**

#### Stereo bar

Suitable for various stereo recording. Length: 620 mm Weight: 0.64 kg Microphone angle detented every 15°

Hanging eylet



#### **HM26A B C**

#### Shock mount

A version for CMH8A/8B/8C/D/G/AH/BH/CH

B version for Ø22~26mm microphone C version for H08





#### **HM31**

#### Shock mount

For R102. Minimized vibration noise to un-noticeable.



#### **C2**

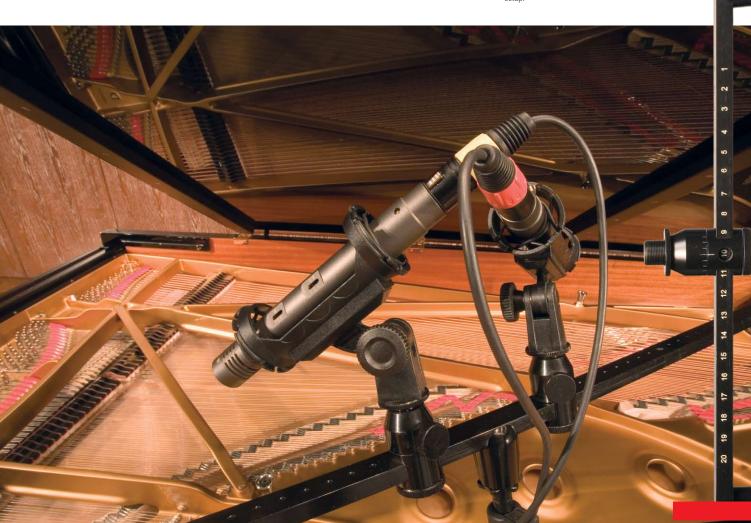
#### Dual mic adapter

Variable distance between 6~17CM

#### **HM15**

#### Dual mic adapter

Fix 17cm space, suitable for ORTF setup



# **Clips, Drum clips**



**DMC01** 

Drum clip

Clamps to drum flange, rod sticks... 3/8" screw for mic clips.



**DMC02** 

Drum clip

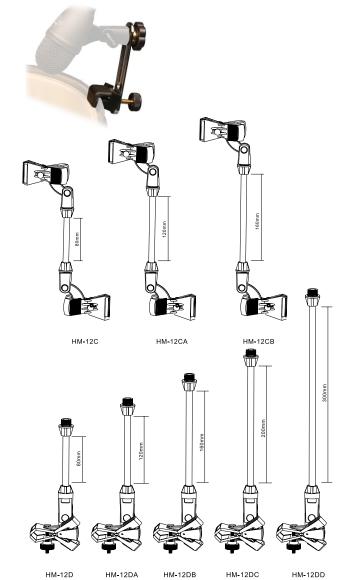
Clamps to drum flange, rod sticks... 3/8" screw for mic clips.



**DMC03** 

Drum clip

Clamps to drum flange, rod sticks... 3/8" screw for mic clips.





#### HM12E

Universal clamp

**HM12A**Universal clamp

Clamps to drum flange, rod sticks... 5/8" thread for adapting to other accessories.

Clamps to drum flange, rod sticks... 5/8" screws for mic clips.



#### **HM12F**

Universal clamp

Double clamps to drum flange, rod sticks, or microphone



Universal clamp

Double clamps to drum flange, rod sticks, or microphone. 3 lengths at 80nnm 120mm, and 160mm



#### HM12D DA DB DC DD

Universal clamp

Clamps to drum flange, or rod sticks, 5/8" screw for mic clips. 5 lengths at 80nnm 120mm, 160mm, 200mm, and 300mm.



#### **HM25**

Drum clamp

Clamps to drum flange, with variable distance mic clips to adjust ideal miking position.

## **Foam Windscren**

**S02** 

Measurement Mic Foam For Ø 7~10mm microphone, such as ECM999.



**S04** 

Gooseneck Mic Foam For  $\emptyset$  7 $\sim$ 10mm microphone, such as PRA518.



**S08F** 

Pencil Mic Foam

For Ø 20mm microphone, such as CMH8K.



**S09** 

Instrument Mic Foam
For Ø 23~30mm microphone, such as E124.



**S09F** 

1/2" small diaphragm Foam For Ø 22mm microphone, such as S241.



**S11** 

Headworn Mic Foam For Ø 10-18mm microphone, such as PRA20/30.



**S12** 

Miniature Mic Foam
For 8mm microphone, such as W0518
and WU518.



**S25** 

E524D Foam For E524D stereo XY microphone.





**S65** 

Large Mic Foam For Ø 50 $\sim$ 55mm microphone, such as CMH8 series



**S40** 

Vocal Mic Foam For Ø46-52mm microphone, 5 colors to choise





Model	Inner Ø	Depth	Max. Ø	For Mic Ø	Microphone	Color
S02	6	25	21	7~10	ECM999	
S04	6	31	25	7~10	PRA518	
S06	10	13	18	10~15	PRA52	BK, WH
S07	21	55	46	22~30	PRA318S/L, E531	
S08F	20	19	35	20	CMH8K	
S09	22	52	46.5	23~30	E124	
S09F	22	36	46.5	22	S241	
S11	16	17	28	10~18	PRA20/30	
S12	8	5	11	8	WO(U)518	
S13	8	5	20	8	W0(U)518	
S14	17	260	43	18~21	PRA116B, 118S	
S15	17	390	43	18~21	PRA118L	
S18	20	52	38	21~29	PRA528DS	
S19	NA	NA	NA	30~34	PRA538	
S20	18	32	45	19~25	E109	
S21F	12.5	20	27	12.5	E322, PRA528B, C	BK, WT
S22F	12.5	20	24	12.5	E322, PRA528B, C	BK, WT
S23	NA	NA	NA	NA	E10A, E10B	BK, BG
S25	NA	NA	NA	NA	E524D	
S27	6	25	21	7~10	E102	
S40	50	60	55	46~52	Handheld Vocal	BK, BL, GN, RD, YL
S50	35	71	70	35~55	E522, 523	
S53	NA	18	23	NA	E12A	
S65	46	90	52	50~55	CM-H8	



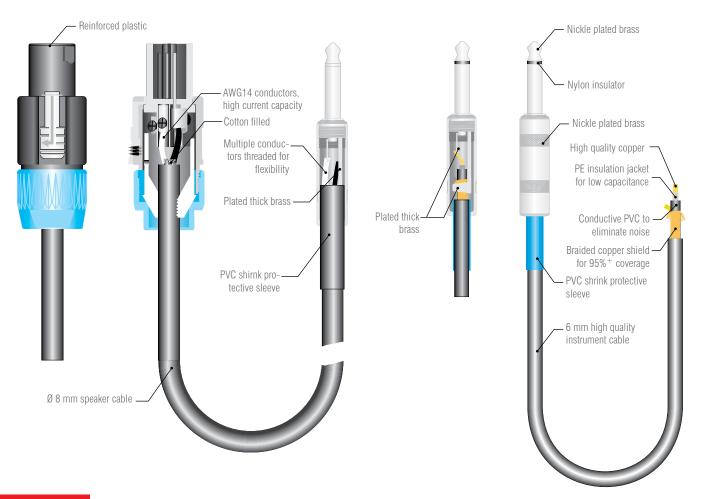


Quality connectors, conductors, and insulators are vital to signal transmission

# Plug 'n' Play delivering music...



# **FAIRLINE** features



## **FAIRLINE** cable series

#### Instrument signal cable

Angle 1/4" mono phone plugs

Model	Length
SFI0.3RR	0.3M
SFI0.6RR	0.6M
SFI0.9RR	0.9M
SFI1.5RR	1.5M
SFI3RR	3M
SFI6RR	6M

Straight 1/4" mono phone plugs

Model	Length
SFI0.3PP	0.3M
SFI0.6PP	0.6M
SFI0.9PP	0.9M
SFI1.5PP	1.5M
SFI3PP	3M
SFI4.5PP	4.5M
SFI6PP	6M

Straight and angle 1/4" mono phone plugs

Model	Length
SFI0.9PR	0.9M
SFI1.5PR	1.5M
SFI3PR	3M
SFI4.5PR	4.5M
SFI7.5PR	7.5M

#### Speaker cable, AWG#14

Speakon plugs, 2 conductors

Model	Length
SFS3SS	3M
SFS5SS	5M
SFS10SS	10M
SFS15SS	15M
SFS20SS	20M

1/4" mono plugs

Model	Length
SFS3PP	3M
SFS5PP	5M
SFS10PP	10M
SFS15PP	15M
SFS20PP	20M

Speakon and 1/4" mono plug

Model	Length
SFS0.9SP	0.9M
SFS3SP	3M
SFS9SP	9M

#### Balanced signal cable

XLR3F to XLR3M, AWG# 24

Model	Length
SFM0.5FM	0.5M
SFM1.5FM	1.5M
SFM2.5FM	2.5M
SFM5.0FM	5M
SFM7.5FM	7.5M
SFM10FM	10M
SFM20FM	20M

#### Un-balanced signal cable

XLR3F to 1/4" phone plug, AWG# 24

Model	Length
SFM5FP	5M
SFM7.5FP	7.5M
SFM10FP	10M

#### Bulk roll

100 meters roll package SFM 100, AWG# 24 balanced signal cable SFI 100, instrument signal cable SIS 100, AWG#14 speaker cable

#### Color code

Various color available for bulk roll. Please suffix color code while ordering



# **ECO** cable series

#### Balanced signal cable

XLR3F to XLR3M, AWG# 24

Model	Length
CFM0.5FM	0.5M
CFM1FM	1M
CFM2.5FM	2.5M
CFM5.0FM	5M
CFM7.5FM	7.5M
CFM10FM	10M
CFM20FM	20M

#### Un-balanced signal cable

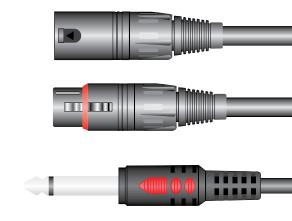
XLR3F to 1/4" phone plug, AWG# 24

Model	Length
CFM5FP	5M
CFM7.5FP	7.5M
CFM10FP	10M

#### Instrument signal cable

Straight 1/4" mono phone plugs

Model	Length
CFI0.3PP	0.3M
CFI0.6PP	0.6M
CFI0.9PP	0.9M
CFI1.5PP	1.5M
CFI3PP	3M
CFI4.5PP	4.5M
CFI6PP	6M
CFI9PP	9M



# **Headphones, Headsets**

Listen and talk comfortably with high quality headphones and headsets.



# Proprietary drivers









#### **HD660**

Monitor Headphone

Precision sound reproduction performance makes HD660 suitable for critical monitor purpose

#### **HD330**

Headphone

Enhanced sound reproduction makes HD330 suitable for easy music listening, and for engineers to simulate the general public listening experience.

#### **HMD660**

Dynamic headset Precision headphones with PRA20

professional wearing dynamic capsule. For sports live broadcast and similar applications.

#### **HMC660**

Condenser headset Precision headphones with PRA30 professional wearing condenser capsule. For sports live broadcast

Monitor General purpose

1~3M coil spring cord

#### General purpose

1~3M coil spring cord

#### Broadcast Pro Sound Engineer





1~3M Coil spring cord for open

1.5M straight cord for X and E version

#### Broadcast Pro Sound Engineer

and similar applications.



1~3M Coil spring cord for open

1.5M straight cord for X and E version

HD660 3.5mm & 6.3mm stereo plug with spring coil cable

HD330 3.5mm & 6.3mm stereo plug with spring coil cable

HMD660 Open ends HMD660X 3.5mm stereo headphone plug with 6.3mm adapter, and XLR mic plug.

HMD660E 3.5mm stereo headphone plug with 6.3mm adapter, and 3.5mm stereo mic plug wired as mono.

HMC660 Open ends HMC660X 3.5mm stereo headphone plug with 6.3mm adapter, and XLR mic plug.

HMC660E 3.5mm stereo headphone plug with 6.3mm adapter, and 3.5mm stereo mic plug wired as mono.

# Loudspeakers

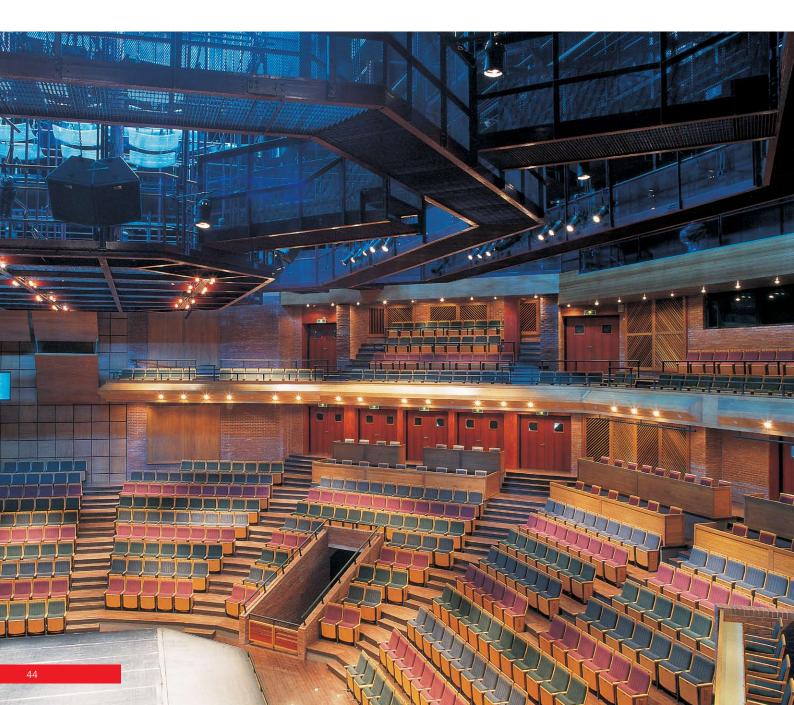
Loudspeakers should be LOUD enough and work smoothly with no audible distortion. True value by sound.

# **Power Touch**

# echoes your beats

Superlux is committed to produce high quality loudspeakers the same as Superlux does for the microphones. Only sound counts - audiences must be satisfied first.

Excellent performance, and price within reach.





#### **NEW ACTIVE Design**





Active 12" 2-way speaker Built 300 + 100 watts power amplifier with active crossover network. Active dynamic control for maximum performance and trouble free operation.

Reinforce plastic box 3" voice coil LF unit 1.75" HF horn driver 300 W rms power



**SN115A** 

free operation.

Active 15" 2-way speaker Built 300 + 100 watts power amplifier with active crossover network. Active dynamic control for maximum performance and trouble

Reinforce plastic box 3" voice coil LF unit 1.75" HF horn driver 300 W rms power



#### **SN110**

10" 2-way speaker Light weight, easy to carry small PA box for smaller venue.



#### **SN112**

12" 2-way speaker Popular size plastic box. Precision sound and distant throw ability. 300 watts continuous power handling.



#### **SN115**

15" 2-way speaker Extended low frequency reproduction specially for music with bass performance. 500 watts continuous power handling.



#### **SN118S**

18" sub woofer Extending the deep bass for the plastic boxes. 4" voice coil capable of handling 600 watts of continuous power, reaching 130+ dB SPL.

Reinforce plastic box 2" voice coil LF unit 1.75" HF horn driver 200 Watts RMS

Reinforce plastic box 3" voice coil LF unit 1.75" HF horn driver 300 Watts RMS

Reinforce plastic box 3" voice coil LF unit 1.75" HF horn driver 500 Watts RMS

18mm MDF box 4" voice coil 600 Watts RMS

# Wood & Fly



12" 2-way speaker

Multiply birch plywood. Fly version available. High power bass and horn driver.



SM15/F 15" 2-way speaker Multiply birch plywood. Fly version available. High power bass and horn driver.

#### 300 watts RMS



SM112/F 12" 2-way speaker Multiply birch plywood. Fly version available. High power bass and horn driver.

## 350 watts RMS



SM115/F 15" 2-way speaker Multiply birch plywood. Fly version available. High power bass and horn driver.



SM215

Dual 15" 2-way speaker

Multiply birch plywood. Fly
version available. High power
bass and horn driver.

600 watts RMS 600 watts RMS 1200 watts RMS



Line Array, Module

Multiply birch plywood box with scratch resist paint. Dual 8" high power MLF driver with dual 2" high power horn driver.

Dual 8" Birch plywood 350 Watts rms

SA118S NEW



Line Array, Subwoofer Multiply birch plywood box with 18" bass reflex for deepest low frequency reproduction.

18" bass reflex Birch plywood 600 Watts rms





Line Array, Subwoofer Multiply birch plywood box with folded horn loading dual 15" bass drivers.

Dual 15" Folded Bass Horn Birch plywood 1200 Watts rms



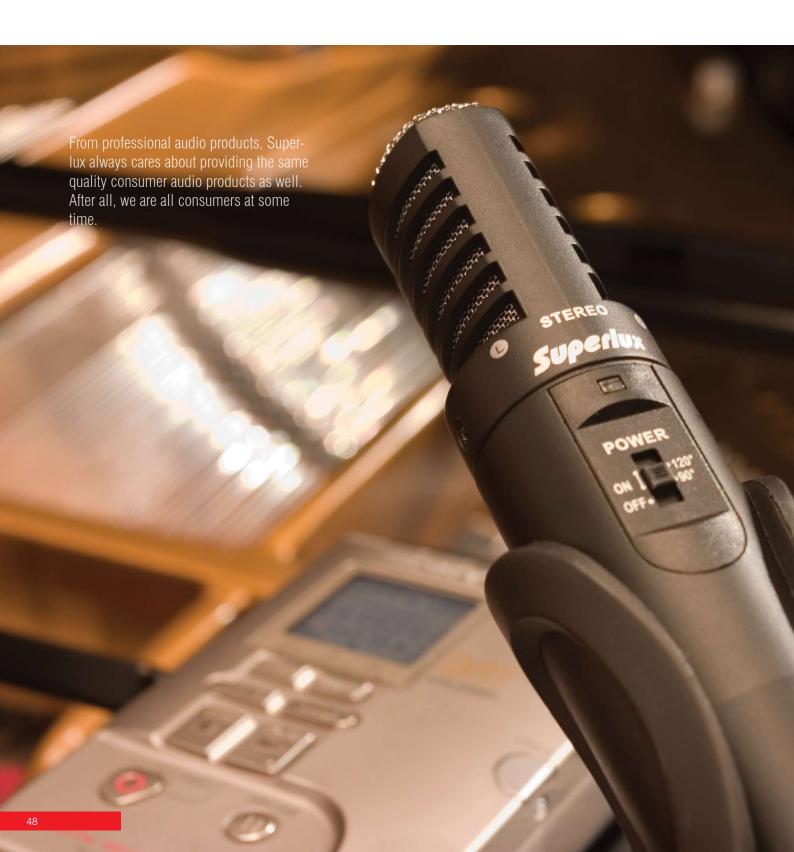


# **Consumer Electronics**

Not only for you to enjoy, but also for very basic tools in daily living and working

# First Step

make a good start





#### **HD440**

#### Stereo Headphone

To experience your games and music, HD440 is the right choose for personal entertainment covering stereo to Dolby headphone for surround reality. Enhanced bass reproduction for ultimate personal entertainment experience.

#### Personal Entertainment

- Gaming
- · AV surround experience

1.5 meters straight cable, 3.5mm

stereo plug with 6.3mm adapter.



#### E531B

#### MS Stereo Microphone

MS setup capsules. For live recording, realism spacial capturing. 90° and 120° setting to control stereo width. Integrated with power switch for reducing battery consumption. Permanent attached cable with 3.5mm stereo angle plug.

#### Digital recording DV/DAT/MD Concert logging

- Easy to use
- Permanent attached cable
- 90° and 120° stereo width
- Power switch with LED indicator
- Battery power





#### XY Stereo Mic, Battery

Matched pair capsules. For live recording, realism spacial capturing. Unbalanced stereo output for amateur/ consumer audio/video system. Internal low-cut switch for reducing noise. Battery power with on/off switch.

#### Broadcast/TV Amateur recording DV/DAT compatible

- · Matched capsules
- · Stereo unbalanced output
- · Battery power
- On/off switch with locking plate
- · Internal low cut switch







HM29A Clip & base S07 Windscreen Included

Optional items: Conversion cable: 3.5mm stereo socket to 2 x 6.3mm mono plug





Included items:

HM38S Mic clip Mic cable 1 3M, XLR3F to stereo

3.5mm plug Mic cable 2 0.5M, XLR3F to

stereo 3.5mm angle plug Mic pouch

Battery 1.5V AA alkaline

Optional items:

HM40C Camera shock mount

S50 Wind screen

Conversion cable: 3.5mm stereo socket to 2 x 6.3mm mono plug



#### **D106**

#### Dynamic microphone

Low cost super cardioid microphone for general applications. Comes with 3.5mm plug and 3.5 to 6.3mm adapter.

A convenient choice for MA500 or MA818.

On/off switch.



#### Dynamic microphone

Omni directional microphone without handling noise. Suitable for home recordings as well as general applications.

Belt clip for easy store away while not in use, a good match for MA500, also works well with MA818.



#### **E210**

or MA818.

#### Miniature Microphone

microphone, PS210 battery power adapter. 3M cable. Tie clip. For portable PA application, EM210 1.5M cable only supplied with MA500

Comprises EM210 omni directional



#### **E302**

#### Mini Test Microphone

Omni measurement microphone. Specially designed for home theater automatic alignment setting. Permanet attached cable with 3.5mm stereo plug. Suitable for popular plug-in power mic inputs.

#### Students Net meeting

#### **General Application** Net meeting

#### Teacher Mobile retail stands Compact PA system











- 3M cable
- · Optional stand DS106



- Belt clip 1.5M cable with 3.5mm stereo plug wired as mono
- Optional stand DS106





#### Including Items:

- EM210 microphone with 3M cable
- PS210 battery power adapter
- · Battery 1.5V AA alkaline





- · Simple to use
- Table stand included
- 5 meters cable

DS01 Mini table stand included HM9B Mic clip included





**MA818** Portable mini-PA

stand.

Tour Guide School Teacher Presenter

• 27 watts power

hours charging. • 50Hz~18KHz

• THD < 1%

178mm · Weight 3kg

adapter











#### MA818/535NC MA818/105

PTT NC pack

MA818 packed with PRA535NC PTT microphone for best background noise rejection.

# Headworn cardioid

MA818 packed with E105 headworn cardioid microphone for hands free operation. For smaller and quiet space with warmer sound.

3.5mm to 6.3mm adapter included.

#### MA818/108

Headworn figure 8

MA818 packed with E108 headworn figure 8 microphone for hands free and back ground noise rejction.

3.5mm to 6.3mm adapter included.

#### MA818/210

Lavaliere pack

MA818 packed with EM210 lavaliere microphone

3.5mm to 6.3mm adapter included.

#### MA818/10A

Handheld pack

MA818 packed with D10A omni microphone with no proximity effect and tuned frequency response for the good intelligibility.

3.5mm to 6.3mm adapter included.

#### MA818/106

Handheld pack

MA818 packed with D106 handheld super cardioid microphone, matched with a HM42A mic clip. At smaller and quiet space, this popular style microphone meets common expectation with minor proximity effect with warmer sound.

Optional DS106 table stand for microphone.

#### **MA500**



#### Personal voice enhancer

Very light weight portable PA can be strap to waist as a belt pack. Powered by 6 x AA alkaline batteries or rechargeable batteries. High efficient 2.5" driver driven by 5 watts power amplifier. Specially designed for kindergarten teacher and mobile retail stands.

#### School Teacher Mobile retail stands Tour Guide

- · Mic and line inputs
- AA Batteries operated (not included)
- 5 watts power, 8 hour operaton
- 2.5" high efficient driver
- · 320 g (without batteries)





#### MA500/105

Headworn cardioid

MA818 packed with E105 headworn cardioid microphone for hands free operation. For smaller and quiet space with warmer sound



#### MA500/108

Headworn figure 8

MA818 packed with E108 headworn figure 8 microphone for hands free and back ground noise rejction.



#### MA500/210

Lavaliere pack

MA818 packed with EM210 lavaliere microphone



#### MA500/10A

Handheld pack

MA818 packed with D10A omni microphone with no proximity effect and tuned frequency response for the good intelligibility.



#### E105

Cardioid Headworn

Back electret condenser cardioid microphone specially design for close-up miking as headworn always keep the microphone at a very short distance. New design to organize the cable neatly.

NEW

3.5mm stereo plug wired as mono output covering popular microphone interface.

#### Teacher Mobile retail stands Compact PA system



Included Items: S23 Wind screen **Recommended Items:** PS210 Battery power adapter



Figure 8 Headworn

Back electret condenser figure 8 microphone for noise cancelling. Excellent surrounding sound rejection. High gain before feedback for live stage

3.5mm stereo plug wired as mono output covering popular microphone interface.

#### Speech in noisy environment



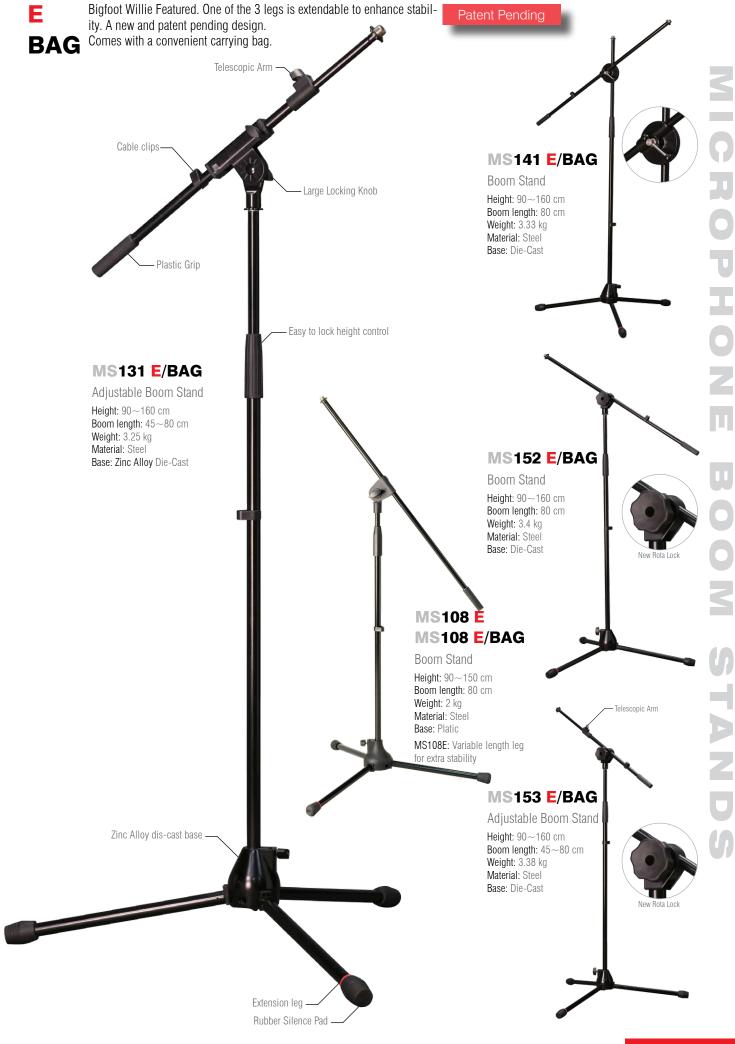


Included Items: S23 Wind screen **Recommended Items:** PS210 Battery power adapter

## **Stands**

Important support to the equipment, and even more important to support your business.









Large pop screen

 $\emptyset$  185mm double layer nylon facric for wide coverage. Adjustable tilting.



#### HM18AG

Pop screen

Package includes 2 filters: Metal mesh and nylon fabric for different result. Photo shown with not included D-1 table stand.





# SPS400 Indoor Speaker Stand

Height: 100~160 cm Capacity: 20 kg Weight: 2.8 kg Material: Steel

#### SPS430L

Monitor Speaker Stand

Height: 90~114 cm Capacity: 25 kg Weight: 7 kg Material: Steel

#### **SPS838**

Ceiling/wall mount

Capacity: 10 kg Weight: 1 kg Material: Steel



#### **SPS867A**

Ceiling/wall mount

Height Adj: 20~27cm Capacity: 25 kg Weight: 2.2 kg Material: Steel



#### **SPS868**

Ceiling/wall mount

Capacity: 25 kg Weight: 2.1 kg Material: Steel



#### **SPS878**

Ceiling/wall mount

Capacity: 30 kg Weight: 3.9 kg Material: Steel



#### **SPS813**

PA speaker wall mount

Capacity: 50 kg Weight: 13.5 kg Material: Steel



#### **SPS823**

Wall mount

Capacity: 50 kg Weight: 4.63 kg Material: Steel







#### **RS921**

#### 21U Rack

Weight: 22 kg Material: Steel Includes: Empior and metric screws



#### **DS70**

#### Display Rack

Weight: 10 kg Material: Steel Includes: 20 x display

hooks

#### **RS916**

#### 16U Rack

Weight: 19.5 kg Material: Steel Includes: Empior and metric screws



#### **RS912**

#### 12U Rack

Weight: 17.5 kg Material: Steel Includes: Empior and metric screws



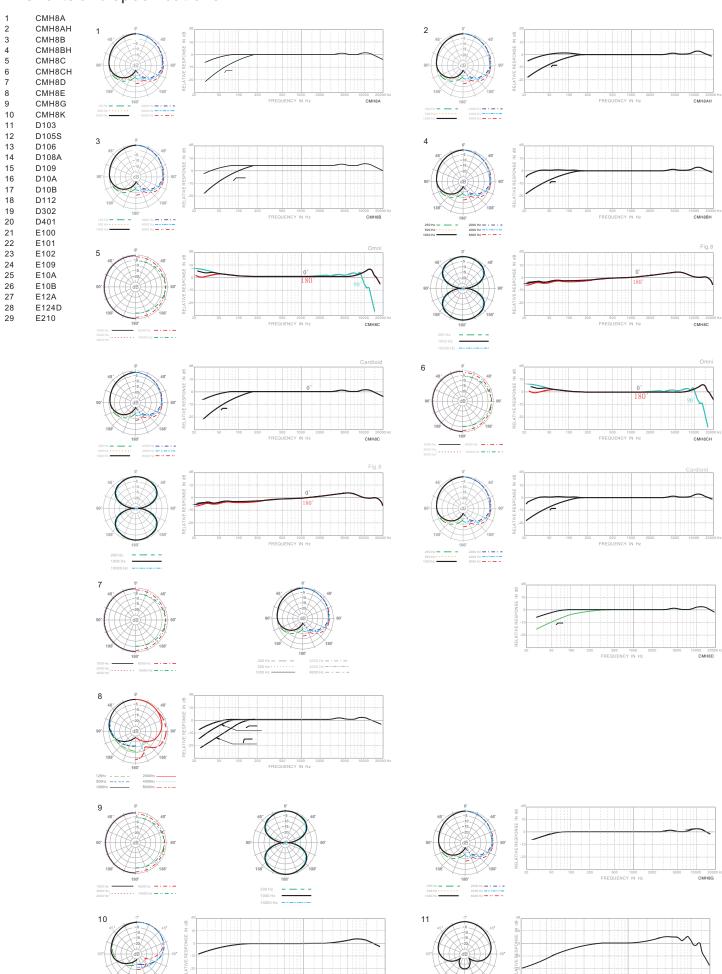
#### **RS908**

#### 8U Rack

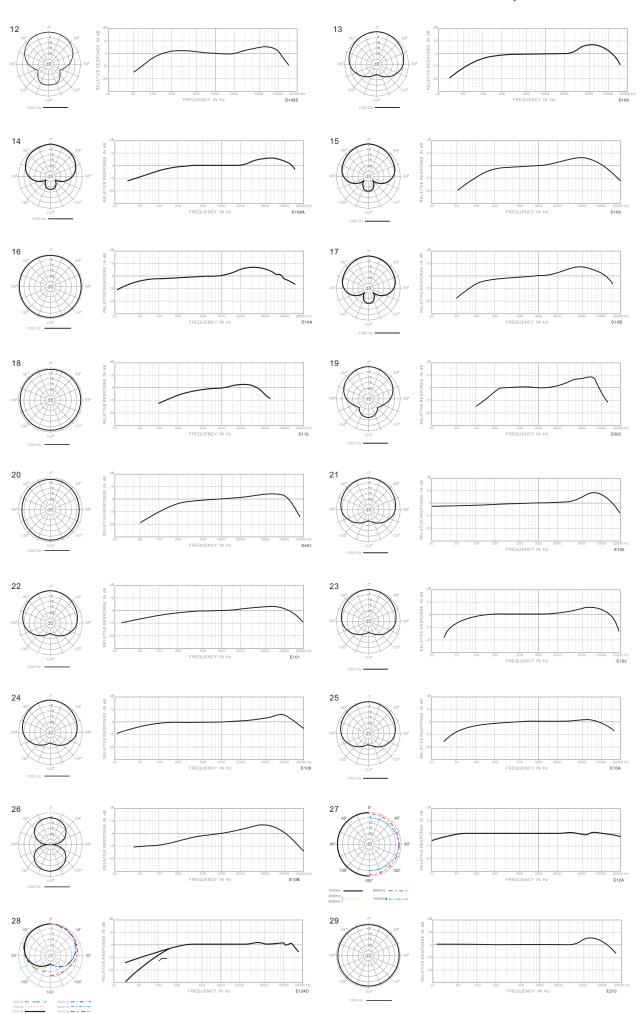
Weight: 15.6 kg Material: Steel Includes: Empior and metric screws

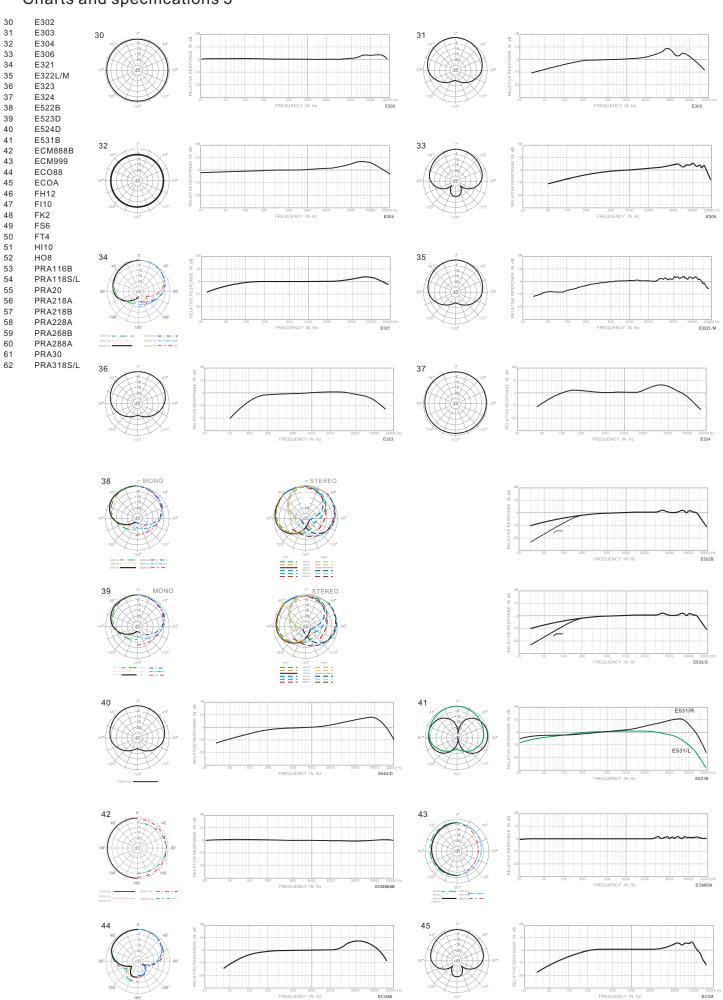


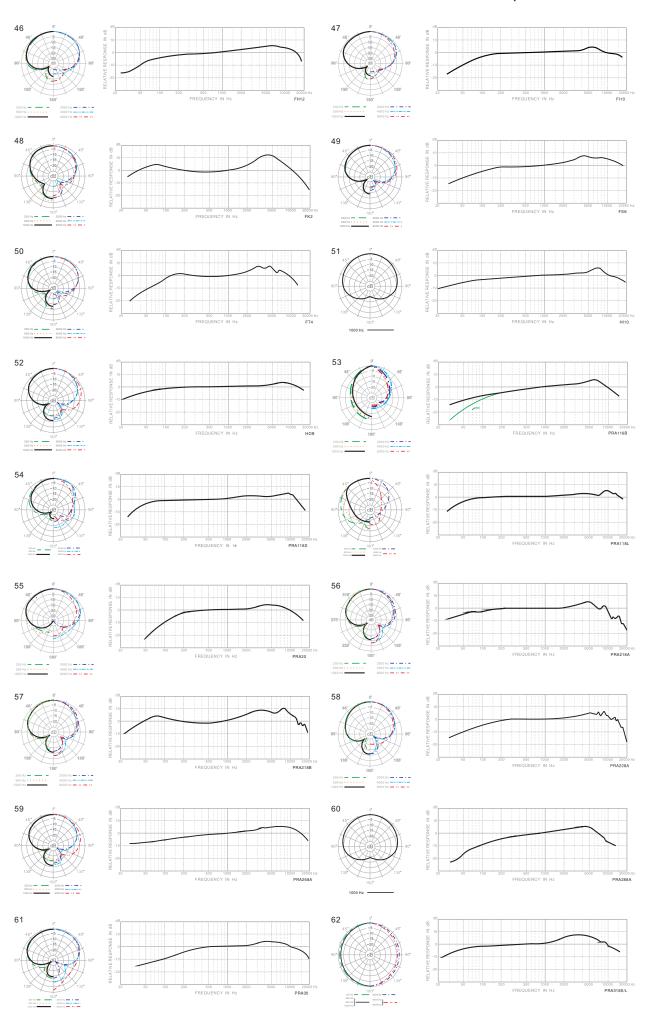
8

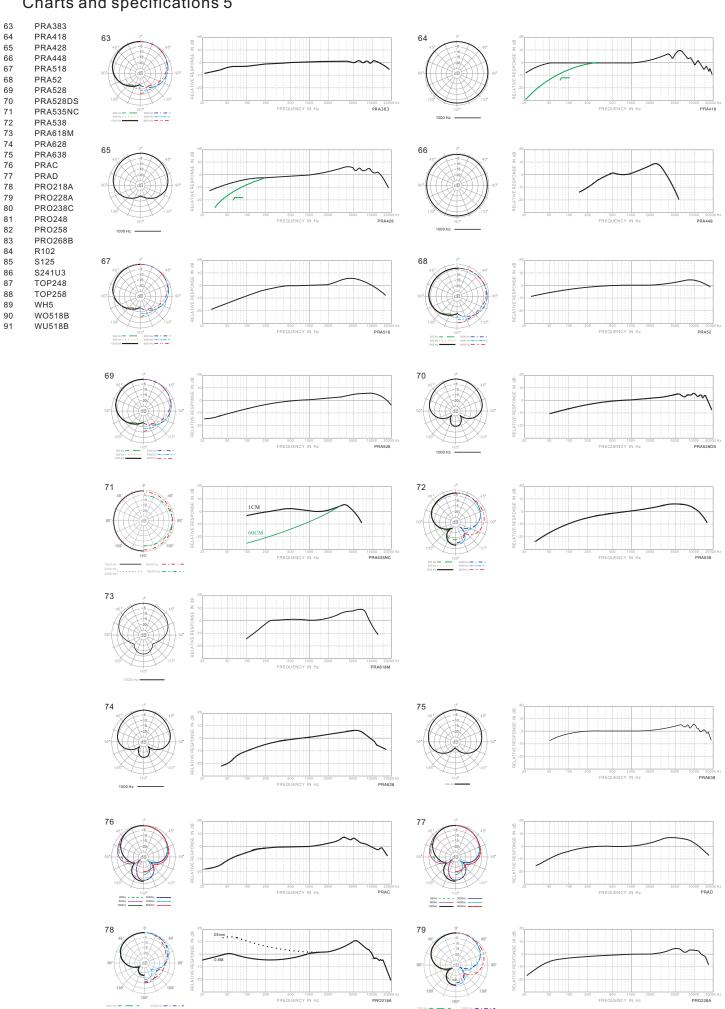


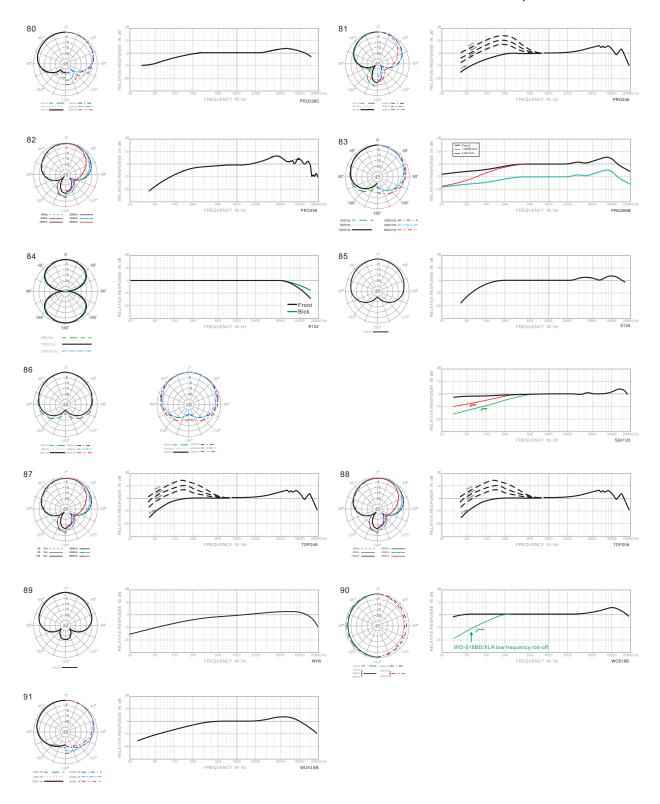
280 Hu 2000 Hu











Model	Transd Type	ucer Dimension	Acoustic	Specialties	Polar	Frequen LF	cy Response HF	Built-in Filter	PAD	Sensitivity @ 1 Pa	Imped- ance	Min, Load
CMH8A	Condenser	1"	Pressure Gradient		Cardioid	30Hz	20KHz	100Hz, Internal	NA	-34dBV	200Ω	1ΚΩ
CMH8AH	Condenser	1"	Pressure Gradient		Cardioid	30Hz	20KHz	100Hz, Internal	NA	-34dBV	200Ω	1ΚΩ
CMH8BH	Condenser Condenser	1"	Pressure Gradient Pressure Gradient		Cardioid Cardioid	30Hz 30Hz	20KHz 20KHz	100Hz 100Hz	-10dB -10dB	-34dBV -34dBV	200Ω 200Ω	1KΩ 1KΩ
CMH8C	Condenser	1"	Pressure Gradient	Dual Capsule	Variable, 3	30Hz	20KHz	100Hz	-10dB	-30.5/-35.4dBV	200Ω	1ΚΩ
CMH8CH	Condenser	1"	Pressure Gradient	Dual Capsule	Variable, 3	30Hz	20KHz	100Hz	-10dB	-30.5/-35.4dBV	200Ω	1ΚΩ
CMH8D	Condenser	1"	Pressure Gradient	Dual Capsule, Vacuum Tube	Variable, 2	30Hz	20KHz	100Hz	NA	-28/-32dBV	200Ω	1ΚΩ
CMH8E	Condenser	1"	Pressure Gradient	Axial	Cardioid	30Hz	20KHz	80Hz, 100Hz	-10dB	-38.4dBV	200Ω	1ΚΩ
CMH8G	Condenser	1"	Pressure Gradient	Dual Capsule, Vacuum Tube	Variable, 9, Remote	30Hz	20KHz	NA	NA	-34dBV	200Ω	1ΚΩ
CMH8K D103	Electret Condenser Dynamic	16mm	Pressure, Pressure Gradient Pressure Gradient	Exchangeable, 3 capsules	Omni, Cardioid, Super cardioid Super Cardioid	40Hz 60Hz	20KHz 16KHz	NA NA	NA NA	-40dBV -52dBV	200Ω 500Ω	1KΩ 1KΩ
D105S	Dynamic		Pressure Gradient		Super Cardioid	30Hz	12.5KHz	NA	NA	-53dBV	500Ω	1ΚΩ
D106	Dynamic		Pressure Gradient		Cardioid	70Hz	12KHz	NA	NA	-53dBV	500Ω	1ΚΩ
D108A	Dynamic		Pressure Gradient		Super Cardioid	50Hz	16KHz	NA	NA	-55dBV	250Ω	1ΚΩ
D109	Dynamic		Pressure Gradient	Hi-Z	Super Cardioid	80Hz	15KHz	NA	NA	TBA	10kΩ	100kΩ
D10A	Dynamic		Pressure Pressure Credient		Omni Supar Cardinid	85Hz	12.5KHz	NA NA	NA	TBA	1ΚΩ	2ΚΩ
D10B D112	Dynamic Dynamic		Pressure Gradient Pressure	Hi-Z	Super Cardioid Omni	60Hz 100Hz	16KHz 6KHz	NA NA	NA NA	TBA -48dBV	500Ω 10kΩ	1KΩ 100KΩ
D302	Dynamic		Pressure Gradient	Gooseneck	Super Cardioid	100Hz	10KHz	NA	NA	-56dBV	500Ω	1ΚΩ
D401	Dynamic		Pressure		Omni	80Hz	15KHz	NA	NA	TBA	500Ω	1ΚΩ
E100	Electret Condenser	14mm	Pressure Gradient	Kick boundary	Cardioid	60Hz	16KHz	NA	NA	-60dBV	600Ω	1ΚΩ
E101	Electret Condenser	9.7mm	Pressure Gradient	Acoustic guitar	Cardioid	50Hz	18KHz	NA	NA	-40dBV	200Ω	1ΚΩ
E102	Electret Condenser	6mm	Pressure Gradient		Cardioid	60Hz	15KHz	NA	NA	-48dBV	200Ω	1ΚΩ
E109	Electret Condenser	16mm	Pressure Gradient	Wearing	Cardioid	40Hz	20KHz	NA NA	NA NA	-40dBV	200Ω	1ΚΩ
E10A E10B	Electret Condenser Electret Condenser	9.7mm 9.7mm	Pressure Gradient Pressure Gradient	Wearing Wearing	Cardioid Fig-8	50Hz 50Hz	15KHz 15KHz	NA NA	NA NA	-44dBV -42dBV	200Ω 200Ω	1KΩ 1KΩ
E124D	Electret Condenser	9.7mm	Pressure Gradient		Cardioid	40Hz	18KHz	NA NA	NA	-50dBV	600Ω	1ΚΩ
E210	Electret Condenser	9.7mm	Pressure		Omni	30Hz	20KHz	NA	NA	-42dBV	200Ω	1ΚΩ
E302	Electret Condenser	6mm	Pressure	Measurement	Omni	20Hz	20KHz	NA	NA	-43dBV	800Ω	1ΚΩ
E303	Electret Condenser	9.7mm	Pressure Gradient	Boundary	Cardioid	30Hz	18KHz	NA	NA	-39dBV	600Ω	1ΚΩ
E304	Electret Condenser	9.7mm	Pressure Pressure Condings	Boundary	Omni	20Hz	18KHz	NA	NA	-39dBV	600Ω	1ΚΩ
E306 E321	Electret Condenser Electret Condenser	9.7mm 16mm	Pressure Gradient Pressure Gradient	Gooseneck Gooseneck	Cardioid Cardioid	60Hz 20Hz	15KHz 18KHz	NA NA	NA NA	-36dBV -40dBV	200Ω 600Ω	1KΩ 1KΩ
E322	Electret Condenser	9.7mm	Pressure Gradient	Gooseneck	Cardioid	40Hz	20KHz	NA NA	NA NA	-40dBV	600Ω	1ΚΩ
E323	Electret Condenser	9.7mm	Pressure Gradient	Flush mount	Cardioid	60Hz	14KHz	NA	NA	-34dBV	200Ω	1ΚΩ
E324	Electret Condenser	9.7mm	Pressure	Flush mount	Omni	60Hz	14KHz	NA	NA	-30dBV	200Ω	1ΚΩ
E522B	Electret Condenser	XY Stereo	Pressure Gradient	XY Stereo	Cardioid	30Hz	20KHz	100Hz, Internal	NA	-53dBV	1ΚΩ	2ΚΩ
E523D	Electret Condenser	9.7mm	Pressure Gradient	XY Stereo	Cardioid	30Hz	20KHz	100Hz	NA	-47dBV	200Ω	1ΚΩ
E524D	Electret Condenser	16mm	Pressure Gradient	XY Stereo	Cardioid	20Hz	20KHz	NA	NA	-48dBV	200Ω	1ΚΩ
E531B ECM888B	Electret Condenser Electret Condenser	MS Stereo 6mm	Pressure Gradient Pressure	90° or 120° Measurement	Cardioid / fig-8 Omni	100Hz 20Hz	15KHz 20KHz	NA NA	NA NA	-45dBV -43dBV	1KΩ 800Ω	2KΩ 3KΩ
ECM999	Electret Condenser	6mm	Pressure	Measurement	Omni	20Hz	20KHz	NA NA	NA NA	-37dBV	200Ω	1ΚΩ
EC088	Dynamic		Pressure Gradient		Super Cardioid	80Hz	12KHz	NA	NA	-53dBV	500Ω	1ΚΩ
ECOA	Dynamic		Pressure Gradient		Cardioid	70Hz	14KHz	NA	NA	-53dBV	500Ω	1ΚΩ
FH12	Dynamic		Pressure Gradient		Super Cardioid	50Hz	16KHz	NA	NA	-56dBV	250Ω	1ΚΩ
FI10	Dynamic		Pressure Gradient		Super Cardioid	50Hz	18KHz	NA	NA	-56dBV	250Ω	1ΚΩ
FK2 FS6	Dynamic Dynamic		Pressure Gradient Pressure Gradient		Super Cardioid Super Cardioid	30Hz 50Hz	10KHz 16KHz	NA NA	NA NA	-62dBV -55dBV	200Ω 200Ω	1KΩ 1KΩ
FT4	Dynamic		Pressure Gradient		Super Cardioid	20Hz	12.5KHz	NA NA	NA NA	-55dBV	200Ω	1ΚΩ
HI10	Electret Condenser	14mm	Pressure Gradient		Cardioid	50Hz	18KHz	NA	NA	-38dBV	200Ω	1ΚΩ
H08	Electret Condenser	14mm	Pressure Gradient		Super Cardioid	40Hz	18KHz	NA	NA	-33dBV	200Ω	1ΚΩ
PRA116B	Electret Condenser	9.7mm	Interference Tube		Shot Gun	50Hz	14KHz	NA	NA	-38dBV	600Ω	1ΚΩ
PRA118S/L	Electret Condenser	14mm	Interference Tube		Shot Gun	30Hz	16KHz	NA	NA	-33/-35dBV	200Ω	1ΚΩ
PRA20 PRA218A	Dynamic Dynamic		Pressure Gradient Pressure Gradient		Cardioid Super Cardioid	50Hz 20Hz	15KHz 12.5KHz	NA NA	NA NA	-67dBV -53dBV	200Ω 500Ω	1ΚΩ 1ΚΩ
PRA218B	Dynamic		Pressure Gradient		Super Cardioid Super Cardioid	30Hz	10KHz	NA NA	NA NA	-63dBV	200Ω	1ΚΩ
PRA228A	Dynamic		Pressure Gradient		Super Cardioid	50Hz	16KHz	NA	NA	-53dBV	500Ω	1ΚΩ
PRA268A	Dynamic		Pressure Gradient		Super Cardioid	50Hz	16KHz	NA	NA	-43dBV	200Ω	1ΚΩ
PRA288A	Dynamic		Pressure Gradient		Super Cardioid	80Hz	20KHz	NA	NA	-56dBV	500Ω	1ΚΩ
PRASO	Electret Condenser		Pressure Gradient		Super Cardioid	50Hz	15KHz	NA	NA	-40dBV	200Ω	1ΚΩ
PRA318S/L PRA383	Dynamic Electret Condenser	9.7mm	Pressure Pressure Gradient		Omni Cardioid	50Hz 40Hz	15KHz 18KHz	NA NA	NA NA	-74dBV -42dBV	500Ω 200Ω	1KΩ 1KΩ
PRA418	Electret Condenser	9.7mm	Pressure Grauletti	Boundary	Omni	30Hz	20KHz	NA NA	NA NA	-42dBV -44/-42dBV	270/200Ω	1ΚΩ
PRA428	Electret Condenser	9.7mm	Pressure Gradient	Boundary	Cardioid	30Hz	20KHz	NA	NA	-45/-44dBV	270/200Ω	1ΚΩ
PRA448	Dynamic		Pressure		Omni	150Hz	4.5KHz	NA	NA	-51dBV	500Ω	1ΚΩ
PRA518	Electret Condenser	6mm	Pressure Gradient	Gooseneck	Cardioid	50Hz	16KHz	NA	NA	-39dBV	200Ω	1ΚΩ
PRA52	Electret Condenser	9.7mm	Pressure Gradient	0	Cardioid	50Hz	16KHz	NA	NA	-39dBV	200Ω	1ΚΩ
PRA528 PRA528DS	Electret Condenser Electret Condenser	9.7mm 9.7mm	Pressure Gradient Pressure Gradient	Gooseneck	Cardioid Cardioid	50Hz	16KHz 16KHz	NA NA	NA NA	-39dBV	200Ω	1KΩ 1KΩ
PRA535NC	Dynamic Dynamic	3.1 milli	Pressure Gradient Pressure	Gooseneck Noise Cancelling	Omni	50Hz 300Hz	5KHz	NA NA	NA NA	-36dBV -68dBV	200/600Ω 200Ω	1ΚΩ
PRA538	Dynamic		Pressure Gradient	Gooseneck	Super Cardioid	100Hz	15KHz	NA NA	NA NA	-58dBV	500Ω	1ΚΩ
PRA618	Dynamic		Pressure Gradient	Gooseneck	Super Cardioid	100Hz	10KHz	NA	NA	-56dBV	500Ω	1ΚΩ
PRA628	Electret Condenser		Pressure Gradient		Cardioid	80Hz	16KHz	NA	NA	-56dBV	500Ω	1ΚΩ
PRA638	Electret Condenser	16mm	Pressure Gradient		Cardioid	50Hz	20KHz	NA	NA	-36dBV	200Ω	1ΚΩ
PRAC			Pressure Gradient		Cardioid	50Hz	16KHz	NA NA	NA NA	-54dBV	200Ω	1ΚΩ
DDAD	Dynamic		Pressure Gradient		Cardioid Super Cardioid	50Hz 20Hz	16KHz 10KHz	NA NA	NA NA	-54dBV -64dBV	200Ω 45Ω	1KΩ 1KΩ
PRAD PRO218A	Dynamic		Pressure Gradient							-54dBV	300Ω	1ΚΩ
PRO218A PRO228A	Dynamic Dynamic		Pressure Gradient Pressure Gradient		•	50Hz	16KHz	NA	NA	-D4UDV		
PR0218A	Dynamic				Super Cardioid Super Cardioid	50Hz 50Hz	16KHz 16KHz	NA NA	NA NA	-34dBV	200Ω	1ΚΩ
PR0218A PR0228A	Dynamic Dynamic Dynamic		Pressure Gradient		Super Cardioid							1ΚΩ 1ΚΩ
PR0218A PR0228A PR0238C PR0248, T0P248 PR0258, T0P258	Dynamic Dynamic Dynamic Electret Condenser Dynamic Dynamic Dynamic		Pressure Gradient Pressure Gradient Pressure Gradient Pressure Gradient		Super Cardioid Super Cardioid Super Cardioid Super Cardioid	50Hz 50Hz 50Hz	16KHz 16KHz 16KHz	NA NA NA	NA NA NA	-44dBV -54dBV -54dBV	200Ω 300Ω 300Ω	1ΚΩ 1ΚΩ
PR0218A PR0228A PR0238C PR0248, T0P248 PR0258, T0P258 PR0268A	Dynamic Dynamic Electret Condenser Dynamic Dynamic Electret Condenser Electret Condenser		Pressure Gradient Pressure Gradient Pressure Gradient Pressure Gradient Pressure Gradient		Super Cardioid Super Cardioid Super Cardioid Super Cardioid Super Cardioid	50Hz 50Hz 50Hz 50Hz	16KHz 16KHz 16KHz 20KHz	NA NA NA NA	NA NA NA NA	-44dBV -54dBV -54dBV -45dBV	200Ω 300Ω 300Ω 200Ω	1ΚΩ 1ΚΩ 1ΚΩ
PR0218A PR0228A PR0238C PR0248, T0P248 PR0258, T0P258 PR0268A R102	Dynamic Dynamic Dynamic Electret Condenser Dynamic Dynamic Electret Condenser Ribbon	2.5µm	Pressure Gradient	Active Ribbon	Super Cardioid Super Cardioid Super Cardioid Super Cardioid Super Cardioid Figure 8	50Hz 50Hz 50Hz 50Hz 25Hz	16KHz 16KHz 16KHz 20KHz 15KHz	NA NA NA NA	NA NA NA NA	-44dBV -54dBV -54dBV -45dBV -39dBV	200Ω 300Ω 300Ω 200Ω 250Ω	1ΚΩ 1ΚΩ 1ΚΩ
PR0218A PR0228A PR0238C PR0248, T0P248 PR0258, T0P258 PR0268A R102 S125	Dynamic Dynamic Dynamic Electret Condenser Dynamic Dynamic Electret Condenser Ribbon Condenser	1/2"	Pressure Gradient	Active Ribbon	Super Cardioid Super Cardioid Super Cardioid Super Cardioid Super Cardioid Figure 8 Cardioid	50Hz 50Hz 50Hz 50Hz 25Hz 20Hz	16KHz 16KHz 16KHz 20KHz 15KHz 20KHz	NA NA NA NA NA TBA	NA NA NA NA NA -10dB	-44dBV -54dBV -54dBV -45dBV -39dBV -45dBV	200Ω 300Ω 300Ω 200Ω 250Ω 50Ω	1ΚΩ 1ΚΩ 1ΚΩ 1ΚΩ
PR0218A PR0228A PR0238C PR0248, T0P248 PR0258, T0P258 PR0268A R102	Dynamic Dynamic Dynamic Electret Condenser Dynamic Dynamic Electret Condenser Ribbon		Pressure Gradient		Super Cardioid Super Cardioid Super Cardioid Super Cardioid Super Cardioid Figure 8	50Hz 50Hz 50Hz 50Hz 25Hz	16KHz 16KHz 16KHz 20KHz 15KHz	NA NA NA NA	NA NA NA NA	-44dBV -54dBV -54dBV -45dBV -39dBV	200Ω 300Ω 300Ω 200Ω 250Ω	1ΚΩ 1ΚΩ 1ΚΩ
PR0218A PR0228A PR0238C PR0248, T0P248 PR0258, T0P258 PR0268A R102 S125 S241U3	Dynamic Dynamic Electret Condenser Dynamic Elynamic Dynamic Dynamic Electret Condenser Ribbon Condenser Condenser	1/2"	Pressure Gradient	Active Ribbon  Trilogy capsules	Super Cardioid Super Cardioid Super Cardioid Super Cardioid Super Cardioid Super Cardioid Figure 8 Cardioid Cardioid	50Hz 50Hz 50Hz 50Hz 50Hz 25Hz 20Hz 20Hz	16KHz 16KHz 16KHz 20KHz 15KHz 20KHz 20KHz	NA NA NA NA NA TBA 75Hz, 150Hz	NA NA NA NA NA -10dB -10, -20dB	-44dBV -54dBV -54dBV -45dBV -39dBV -45dBV -35dBV	200Ω 300Ω 300Ω 200Ω 250Ω 50Ω 200Ω	1ΚΩ 1ΚΩ 1ΚΩ 1ΚΩ 1ΚΩ

Control   188	Model	Equivalent Noise SPL	Maximum SPL	Dynamic Range	Power	Consumption	Connector	Dimension in mm	Weight gram	Switch Version	YA-1 adapter Included?
Page											Υ
Mart	CMH8AH	18dB	132dB	114dB	P48	2.7mA	XLR3M, Gold	Ø54 x 200	550		Y
Page											
Page											
Mart											Y V
Per											Y
Mart											
Part											
Pers	CMH8K						3P XLR, Gold		170		Υ
1988	D103						XLR3M, Gold	Ø58 x 140	350		
Mart	D105S						XLR3M	Ø45 x 180	240	All	Υ
Mart											
Page											Υ
1988							· · · · · · · · · · · · · · · · · · ·			All	
Page											V
Page											Ť
Profess											
Page										ΔΙΙ	٧
Per		24dB	149dB	125dB	P48	4mA				7411	,
Part								DO4 X 20.0			
Page											Υ
Post								Ø20 x 112			Υ
Part											
Page											
Property	E124D	20dB		111/107dB	P48, Battery 1.5V	2mA		Ø31(24) x 205			Y
Part	E210		118dB		1.5~5V bias		3.5mm plug		20		
Part	E302	22dB	128dB	106dB	1.5~5V bias		3.5mm plug		90		
Part		24dB		103dB	P9~48	4mA	TA3M / XLR3M	Ø84 x 22.5	240		
1948		24dB		103dB			TA3M / XLR3M				
1822											
March											
1985											
Part											
Band						2mA					
Property										All	
Part										All	
March   Marc								76 WIUIII, 1023.3 X 2 10			
Part								Ø21 v 170		All	
Part											Y
Part		2005	10205	10005	10 10	2101				All	
Process											
PC			134dB								Υ
March	FI10		134dB				XLR3M	Ø49 x 173	395		Υ
THE	FK2		147dB				XLR3M	Ø51 x 115	210		Υ
March   Marc	FS6		140dB				XLR3M	Ø43 x 101	130		Υ
Mathematical   Math	FT4		150dB				XLR3M	Ø43 x 101	130		Υ
PARTIERS   2018						5mA					Υ
PATH 155C    208											
PARAPIRA   1368						TBA					
PAZ-1848		2008		114dB	P48			021 x 340(540)			Y
PARAZBR   1448								Ø42 v 120			V
PACAZBA											
PARABBA   2568   13768   11268   P9-48											
PRA288A   140/B   120/B   19-48   148/BM   106/B   174/BM   114/B		25dB		112dB	P9~48						Υ
PRASION         24dB         136dB         112dB         P9-48         TASE/NRSM         20           PRASISCI         XLRM         034 x 180/330         110/140         Y           PRASISCI         123/184B         P5418S/D         3.5mA         TASE         020 x 150         160           PRA418         132/184B         P5418S/D         TASE         060 x 15         80           PRA428         134/120MB         P5418S/D         TASE         64 x 9 x 16         110           PRA448         TASE         64 x 9 x 16         110         114 x 5 x 70 x 9         5           PRA448         TASE         260B         130/08         104 dB         P9-48         3mA         XLR3M         080 x 14/450 x 130 -165           PRA529         260B         132/18         106/08         P9-48         3mA         XLR3M         020 x 14/47/5662         150 -220           PRA5280         260B         132/18         106/08         P9-48         3mA         XLR3M         020 x 14/47/5662         150 -220           PRA5280         164/14         P12-48, Battery 15/0         312 mA         XLR3M         080 x 140/80         500/50           PRA5280         144/08         P2-48, Battery 15/0		2000		,,,,,,							Y
PRASISS/L         YASM         034 x 180/230         110/140         Y           PRASBS         2388         137d8         144d8         PS418S/D         3.5mA         TASF         200 x 150         160         170         170         170         170         160         170		24dB		112dB	P9~48						
PRA383   13/08								Ø34 x 180/230			Υ
PRA4188         132/11888         PS418S/D         TASF         66 x x x 16         110           PRA428         134/12081         PS418S/D         TASF         64 x 92 x 16         110           PRA428         134/12082         PS418S/D         17AF         64 x 92 x 16         110           PRA518         2618         13008         10488         P9~48         3mA         XLR3M         08 x 31/4560         130—15           PRA528         2618         13208         10688         P9~48         3mA         XLR3M         02 x 41/47/56/02         150—2           PRA5280         2618         13208         10688         P9~48         3mA         XLR3M         02 x 41/47/56/02         150—2           PRA5280S         124/11408         P12~48, Battery 1.5V         3/1.2mA         XLR3M         02 x 130 x 5         250         250/20           PRA5280S         14018         P12~48, Battery 1.5V         3/1.2mA         XLR3M         080 x 130 x 55         210         Y         Y           PRA5280S         14068         P9~48         XLR3M         080 x 130 x 55         210         Y         Y           PRA528         14069         P9~48         XLR3M         080 x 130 x 55         210<		23dB	137dB	114dB	PS418S/D	3.5mA					
PRA448         PRA518         2668         1308         1048         P9—48         3mA         XLR3M         88 x31/45/60         130 −165         PRA528         78 may 1	PRA418		132/118dB					Ø65 x 15	80		
PRA518         26dB         130dB         104dB         P9-48         3mA         XLR3M         Ø8 x31/45/60         130-165           PRA529         26dB         132dB         106dB         P9-48         3mA         XLR3M         012 x 27         180           PRA528D 26dB         132dB         106dB         P9-48         3mA         XLR3M         020 x 41/47/56/62         150-220           PRA528D 26D 27         124/11dB         P12-48, Battery 1.5V         37.2mA         XLR3M         060 x 41/47/56/62         250 / 20           PRA538	PRA428		134/120dB				TA3F	64 x 92 x 16	110		
PRA52         268B         1324B         106dB         P9~48         3mA         XLR3M         Ø12 x 27         180           PRA5280         26dB         124/114dB         P12~48, Battery 1.5V         3/1.2mA         XLR3M         020 x 41/47/66/62         150~220           PRA528DS         124/114dB         P12~48, Battery 1.5V         3/1.2mA         XLR3M         020 x 41/47/66/62         150~220           PRA53B         ************************************							pin out	114.5 x 70 x 29	85		
PRA528         26dB         132dB         106dB         P9~48         3mA         XLR3M         020 x41/47/56/62         150~20           PRA528DS         124/114dB         P12~48, Battery 1.5V         3/1.2mA         XLR3M         1000           PRA53SNC         124/114dB         P12~48, Battery 1.5V         3/1.2mA         XLR3M         677.94 x 50         250 / 20           PRA638         140dB         140dB         XLR3M         803 x 450         170         170           PRA628         146dB         P9~48         XLR3M         660 x 130 x 35         210         Y           PRA628         140dB         P9~48         XLR3M         660 x 130 x 35         210         Y           PRA628         140dB         P9~48         XLR3M         660 x 130 x 35         210         Y           PRA628         140dB         P9~48         XLR3M         653 x 180         363         All         Y           PRA629         140dB         P9~48         XLR3M         653 x 180         363         All         Y           PRA2         140dB         P4         XLR3M         653 x 180         363         All         Y           PR0228A         170dB         P4         <											
PRA528DS         124/114dB         P12-48, Battery 1.5V         3/1.2mA         XLR3M         1000           PRA528DC         wire out         67 x 94 x 50         250 / 20           PRA53B         wire out         67 x 94 x 50         250 / 20           PRA61B         140dB         wire out         67 x 94 x 50         250 / 20           PRA62B         14ddB         Y         XLR3M         600 x 130 x 35         210         Y           PRA62B         14ddB         P9-48         XLR3M         660 x 130 x 35         190         Y           PRAC         140dB         P9-48         XLR3M         653 x 180         363         All         Y           PRAD         140dB         XLR3M         653 x 180         363         All         Y           PRO21BA         170dB         XLR3M, Gold         653 x 180         350         Y           PR022BA         150dB         XLR3M, Gold         653 x 180         350         Y           PR022BA         150dB         P48         3mA         XLR3M, Gold         643 x 123         185         Y           PR024S, T0P24B         XLR3M, Gold         654 x 180         343         Yes         Y           PR024S											
PRASSSNC         wire out         67 x 94 x 50         250 / 20           PRAS38         1400B         500,550         500,550           PRA618         1400B         1400B         NLR3M         830 x 450         170           PRA628         1446B         P9~48         NLR3M         860 x 130 x 35         210         Y           PRA628         1400B         P9~48         NLR3M         660 x 130 x 35         190         Y           PRAC         1400B         FN 400B         NLR3M         605 x 180         363         All         Y           PRAD         1400B         FN 400B         NLR3M         605 x 180         363         All         Y           PRO228A         1500B         FN 48         NLR3M, Gold         675 x 140         350         Y           PR0228A         1500B         P48         3mA         NLR3M, Gold         695 x 140         350         Y           PR0228A         1500B         P48         3mA         NLR3M, Gold         695 x 180         343         Yes         Y           PR0248, T0P248         TEST         NLR3M, Gold         695 x 180         343         Yes         Y           PR0258, T0P258         TEST		26dB		106dB				Ø20 x 41/47/56/62			
PRA538         wire out         032 x 310/480         500/550           PRA618         140dB         XLR3M         030 x 450         170           PRA628         144dB         XLR3M         060 x 190 x 35         210         Y           PRA638         146dB         P9~48         XLR3M         060 x 190 x 35         210         Y           PRA638         146dB         P9~48         XLR3M         060 x 190 x 35         210         Y           PRA638         146dB         P9~48         XLR3M         060 x 190 x 35         190         Y           PRAC2         140dB         Y         XLR3M         063 x 180         363         All         Y           PRO218A         170dB         Y         XLR3M, Gold         058 x 140         350         Y           PR0228A         150dB         P48         3mA         XLR3M, Gold         043 x 123         185         Y           PR0238C         26dB         130dB         194dB         P48         3mA         XLR3M, Gold         054 x 180         240         Y           PR0248, T0P24B         Y         XLR3M, Gold         054 x 180         343         Yes         Y           PR0268A         25d			124/114dB		P12~48, Battery 1.5V	3/1.2mA					
PRA618         140dB         XLR3M         030 x 450         170           PRA628         144dB         Y         XLR3M         060 x 130 x 35         210         Y           PRA638         146dB         P9~48         XLR3M         060 x 130 x 35         190         Y           PRAC         140dB         Y         XLR3M         053 x 180         363         All         Y           PRAD         140dB         Y         XLR3M         053 x 180         370         Y           PRO218A         170dB         Y         XLR3M, Gold         058 x 140         350         Y           PR0228A         150dB         Y         XLR3M, Gold         058 x 140         350         Y           PR0238C         26dB         130dB         P48         3mA         XLR3M, Gold         054 x 180         240         Y           PR0248, T0P248         Y         XLR3M, Gold         054 x 180         343         Yes         Y           PR0258, T0P258         Y         XLR3M, Gold         054 x 180         343         Yes         Y           PR0268A         25dB         140dB         15dB         P48         2mA         XLR3M, Gold         054 x 180 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
PRA628         144dB         XLR3M         Ø60 x 130 x 35         210         Y           PRA638         146dB         P9~48         XLR3M         Ø60 x 130 x 35         190         Y           PRAC         140dB         XLR3M         Ø53 x 180         363         All         Y           PRAD         140dB         XLR3M         Ø53 x 180         370         Y           PR0218A         170dB         XLR3M, Gold         Ø58 x 140         350         Y           PR0228A         150dB         XLR3M, Gold         Ø43 x 123         185         Y           PR0238C         26dB         130dB         P48         3mA         XLR3M, Gold         Ø45 x 180         343         Yes           PR0258, T0P258         Y         XLR3M, Gold         Ø54 x 180         343         Yes         Y           PR0268A         25dB         140dB         P48         2mA         XLR3M, Gold         Ø54 x 180         343         Yes         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         Ø54 x 180         343         Yes         Y           R102         20dB         >140dB         120dB         <			44040								
PRA638         146dB         P9~48         XLR3M         Ø60 x 130 x 35         190         Y           PRAC         140dB         XLR3M         £XLR3M         £33 x 180         363         All         Y           PRAD         140dB         XLR3M         £XLR3M         £83 x 180         370         Y           PRO218A         170dB         XLR3M, Gold         £85 x 140         350         Y           PR0228A         150dB         Y         XLR3M, Gold         £43 x 123         185         Y           PR0238C         26dB         130dB         104dB         P48         3mA         XLR3M, Gold         £95 x 180         240         Y           PR0248, T0P248         Y         XLR3M, Gold         £95 x 180         343         Yes         Y           PR0258, T0P258         Y         XLR3M, Gold         £95 x 180         343         Yes         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         £95 x 288         280         Y           R102         20dB         >140dB         130dB         P48         4mA         3PXLR, Gold         57 x 27 x 195         500         Y											V
PRAC         140dB         XLR3M         Ø53 x 180         363         All         Y           PRAD         140dB         XLR3M         Ø53 x 180         370         Y           PRO218A         170dB         XLR3M, Gold         Ø58 x 140         350         Y           PR0228A         150dB         XLR3M, Gold         Ø43 x 123         185         Y           PR0238C         26dB         130dB         P48         3mA         XLR3M, Gold         Ø43 x 123         185         Y           PR0248, T0P248         YE         XLR3M, Gold         Ø54 x 180         343         Yes         Y           PR0258, T0P258         YE         XLR3M, Gold         Ø54 x 180         343         Yes         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         Ø54 x 180         343         Yes         Y           R102         20dB         >140dB         >120dB         P48         2mA         XLR3M, Gold         Ø29 x 288         280         Y           S125         18dB         148dB         130dB         P48         3.5mA         XLR3M, Gold         TBA         TBA         Y           S2					DO 40						Y
PRAD         140dB         XLR3M         053 x 180         370         Y           PRO218A         170dB         XLR3M, Gold         058 x 140         350         Y           PRO228A         150dB         XLR3M, Gold         043 x 123         185         Y           PRO238 C         26dB         130dB         14dB         P48         3mA         XLR3M         045 x 180         240         Y           PRO238, TOP248         Y					F9~40					AII	v
PR0218A         170dB         XLR3M, Gold         658 x140         350         Y           PR0228A         150dB         XLR3M, Gold         43 x123         185         Y           PR0238C         26dB         130dB         10dB         P48         3mA         XLR3M, Gold         65 x180         240         Y           PR0248, 10P248         FR0258, T0P258         XLR3M, Gold         65 x180         343         Yes         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         65 x180         343         Yes         Y           R102         20dB         >140dB         >120dB         P48         2mA         XLR3M, Gold         65 x2195         500         Y           S125         18dB         148dB         130dB         P4B         3.5mA         XLR3M, Gold         7x x7 x195         500         Y           S241U3         16dB         143dB         127dB         P4B         3.5mA         XLR3M, Gold         72x x155         220         Y           WH5         WH5         XLR3M         7x XLR3M         7x XLR3M         7x XLR3M         7x XLR3M         7x XLR3M										All	
PR0228A         1508B         XLR3M, Gold         043 x 123         185         Y           PR0238C         26dB         130dB         10dB         P48         3mA         XLR3M, Gold         045 x 180         240         Y           PR024B, T0P24B         FR025B, T0P25B         TUSAN, Gold         055 x 180         343         Yes         Y           PR026B, T0P25B         TUSAN, Gold         054 x 180         343         Yes         Y           PR026B, T0P25B         TUSAN, Gold         054 x 180         343         Yes         Y           PR026B, T0P25B         TUSAN, Gold         054 x 180         343         Yes         Y           PR026B, T0P25B         TUSAN, Gold         054 x 180         343         Yes         Y           PR026B, TUSAN, Gold         25dB         140dB         115dB         P48         3.5mA         XLR3M, Gold         057 x 27 x 195         500         Y           S241U3         16dB         143dB         127dB         P48         3mA         XLR3M, Gold         022 x 155         220         Y           WH5         WH5         XLR3M         XLR3M, Gold         08 x 12         100 <td></td>											
PR0238C         26dB         130dB         104dB         P48         3mA         XLR3M, Gold         045 x 180         240         Y           PR0248, T0P248         FR0258, T0P258         XLR3M, Gold         054 x 180         343         Yes         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         029 x 238         280         Y           R102         20dB         >140dB         >120dB         P48         3mA         XLR3M, Gold         57 x 27 x 195         500         Y           S125         18dB         148dB         130dB         P48         3.5mA         XLR3M, Gold         TBA         TBA         Y           S241U3         16dB         143dB         127dB         P48         3mA         XLR3M, Gold         022 x 155         220         Y           WH5         W15         XLR3M         TBA         500         All         Y           W0518         132dB         P9~48         XLR3M         XLR3M         08 x 12         100											
PR0248, T0P248         XLR3M, Gold         654 x 180         343         Yes         Y           PR0258, T0P258         XLR3M, Gold         654 x 180         343         Y         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         629 x 288         280         Y           R102         20dB         >140dB         >120dB         P48         4mA         3P XLR, Gold         57 x 27 x 195         500         Y           S125         18dB         148dB         130dB         P4B         3.5mA         XLR3M, Gold         TBA         TBA         Y           S241U3         16dB         143dB         127dB         P4B         3mA         XLR3M, Gold         022 x 155         220         Y           WH5         Y         XLR3M         508 x 12         100         All         Y		26dB		104dB	P48	3mA					
PR0258, T0P258         XLR3M, Gold         054 x 180         343         Y           PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         029 x 288         280         Y           R102         20dB         >140dB         >120dB         P48         4mA         3P XLR, Gold         57 x 27 x 195         500         Y           S125         18dB         148dB         130dB         P48         3.5mA         XLR3M, Gold         TBA         TBA         Y           S241U3         16dB         143dB         127dB         P4B         3mA         XLR3M, Gold         022 x 155         220         Y           WH5         ***********************************					· ·-					Yes	
PR0268A         25dB         140dB         115dB         P48         2mA         XLR3M, Gold         029 x 238         280         Y           R102         20dB         >140dB         >120dB         P48         4mA         3P X±R, Gold         57 x 27 x 195         500         Y           S125         18dB         148dB         130dB         P48         3.5mA         XLR3M, Gold         TBA         TBA         Y           S241U3         16dB         143dB         127dB         P48         3mA         XLR3M, Gold         022 x 155         220         Y           WH5         XLR3M         TBA         500         All         Y           W0518         132dB         P9~48         XLR3M         08 x 12         100											
R102     20dB     >140dB     >120dB     P48     4mA     3P XtR, Gold     57 x 27 x 195     500     Y       S125     18dB     148dB     130dB     P48     3.5mA     XLR3M, Gold     TBA     TBA     Y       S241U3     16dB     143dB     127dB     P48     3mA     XLR3M, Gold     602 x 155     220     Y       WH5     XLR3M     TBA     500     All     Y       W0518     132dB     P9~48     XLR3M     Ø8 x 12     100		25dB	140dB	115dB	P48	2mA					
S125         18dB         148dB         130dB         P48         3.5mA         XLR3M, Gold         TBA         TBA         Y           S241U3         16dB         143dB         127dB         P48         3mA         XLR3M, Gold         022 x155         220         Y           WH5         XLR3M         TBA         500         All         Y           W0518         132dB         P9~48         XLR3M         08 x12         100			>140dB	>120dB							Y
\$241U3     16dB     143dB     127dB     P48     3mA     XLR3M, Gold     \$022 \times 155     \$20     Y       WH5     XLR3M     TBA     \$500     All     Y       W0518     132dB     P9~48     XLR3M     \$08 \times 12     100											Υ
W0518 132dB P9~48 XLR3M Ø8 x 12 100											Y
	WH5						XLR3M	TBA	500	All	Υ
WU518 1328B P9~48 XLR3M Ø8 x12 100	W0518										
			100 10		D0 10		VIDOM	710 v 12	400		

# Which microphone for you?

Facing variety of microphones, how to find the right one for your application? This question, could be put this way: "Which mic is the best?" Yes, if the answer is that easy, maybe there is only one microphone in the world to fulfill all demands. There are reasons of all kinds of demands, the answer varies accordingly.

#### Which type of transducer?



#### **Dynamics**

Durable and simple structure, operates in all kinds of environments. A good dynamic microphone is capable to operate at very high sound pressure level without distortion. Due to structure limit, dynamics cannot be built as small as condenser, but dynamics doesn't require power to operate.



#### Condenser

Extremely light weight diaphragm, very sensitive to sound. Very small versions available for hiding applications. High performance condenser microphones are regarded as standard equipment of recording studios for extreme detail capturing. Operates with power, such as phantom or battery.

#### Which kind of directivity?



#### 0mni

Equal sensitivity to all direction, so that the microphone doesn't need to pointing toward the sound source. Low handling and wind noise. Welcome by news gathering, and music recording applications.



#### Cardioid

Picks up most signal on axis. Rejects side and picks up least to the back. Suitable for live sound re-inforcement. Apparent proximity effect and most singer likes to take this bass boost advantages which is not good for speech.



#### Super Cardioid

Narrower than cardioid pattern. Suitable for multiple microphone setup. Least sensitive angle pointing toward side to rear where most stage monitors are located. Same proximity effect as cardioid microphone.



#### Figure 8, bi-directional

Equal sensitive to both ends, and rejects the sides. Good to noisy environment to reject distant noise and low frequency. Also a good choice for stereo recordings, such as Blumlein.

Typical pressure gradient characteristic.



Based on interference tube theory, to achieve highest axial signal pick-up and rejects off-axis sound as much as possible. Due to poor wind noise rejection, suitable wind screen shall be used at outdoor



#### **About Frequency Response**

#### Flat

Suitable for working at controlled environment, or for acoustic measurements. Although people persuit flatness, but for none-professionals, it is a challenge to makes it works as expectation.

#### Popular curve response

Based on years of practical experience of pro users. There are curves to be build for various applications, so that it is very simple to use the microphone for the purpose. Limiting bandwidth, and emphasing are typical skill.

#### Variable response

Incorporating switchable filters to elliminates interference, such as sub-sonic filter to cut air-conditioner and floor vibrations. And allows full flat when used in controlled environment.

# Goang Fann manufacturing for Superlux as well as name brands. Years of OEM experience based on faithful concept.

## OEM, ODM

Superlux GDC is the developing mile stone of GF group at Shanghai. 8 buildings in a 35,000 square meters land space will be ready to operate in August 2007. Automated and computerized global distribution center will serve international customers with more efficient and rapid operation.

# Original Engineering 'n' Design



Goang Fann welcome OEM and ODM business for name brands and special contract order for customized products.

Our production capabilities based on own plastic injection, die-casting, CNC, all metal works, toolings, paintings, capsules assembly, cable wires fabricating, electronics productions, speaker driver assembly... from raw material to finish products.

ISO14001 certified system guarantee quality and environmental protection. ROHS production qualification meets the latest advanced requirement.

Please contact sales@tenlux.com. tw for OEM detail. We are more than happy to work with you to fulfill your project tasks.





# Index

Model	Page	Model	Page	Model	Page	Model	Page
4U2SET	33	DMC03	38	ECM999	33	HM40C	36
AM100S24102A0	6	DRK681	21	EC088S	13	HM42	36
AT0	30	DRKA3C2	21	ECOA	13	HM43	35
AT1	30	DRKA5C2	21	FH12	13	HM48B	55
C2	37	DRKB5C2MKII	21	FH12S	13	HM501	55
CFI0.3PP	41	DRKF5H3	21	FI10	13	HM502	55
CFI0.6PP	41	DRKK5C2	21	FK2	18	HM503	55
CFI0.9PP	41	DS002	35	FS6	19	HM54	36
CFI1.5PP	41	DS003	25	FT4	19	HM58B	55
CFI3PP	41	DS003	35	GM13D	24	HM6	54
CFI4.5PP	41	DS01	54	GM13G	24	HM7	37
CFI6PP	41	DS011	54	GT2B	25	HM9	36
CFI9PP	41	DS70	59	GT6F	25	HMC660	43
CFM0.5FM	41	E100	18	HD330	43	HMC660E	43
CFM10FM	41	E101DXLR	17	HD440	49	HMC660X	43
CFM10FP	41	E101TQG	17	HD660	43	HMD660	43
CFM1FM	41	E102	18	HI10	19	HMD660E	43
CFM2.5FM	41	E105	51	HM10	36	HMD660X	43
CFM20FM	41	E108	51	HM101	36	H08	19
CFM5.0FM	41	E109	19	HM12A	38	LS718S	56
CFM5FP	41	E10ADXLR	15	HM12C	38	MA500	51
CFM7.5FP	41	E10ATQG	15	HM12CA	38	MA500/105	51
CMH8A	5	E10AXLR	15	HM12CB	38	MA500/108	51
CMH8AH	5	E10BDXLR	15	HM12D	38	MA500/10A	51
CMH8B	5	E10BTQG	15	HM12DA	38	MA500/210	51
CMH8BH	5	E10BXLR	15	HM12DB	38	MA818	50
CMH8C	5	E124D	18	HM12DC	38	MA818/105	50
CMH8CH	5	E12ADXLR	15	HM12DD	38	MA818/106	50
CMH8D	5	E12ATQG	15	HM12E	38	MA818/108	50
CMH8E	9	E12AXLR	15	HM12F	38	MA818/10A	50
CMH8G	5	E210	49	HM15	37	MA818/210	50
CMH8KH	6	E302	49	HM18AG	55	MA818/535NC/P	50
CMH8K0	6	E303B	26	HM22	24	MA90	37
CMH8KU	6	E303W	26	HM23	24	MA91	55
CMH8KUH0	6	E304B	26	HM24	24	MS101	52
CP818	35	E304W	26	HM24C	24	MS101/BAG	52
CP828	35	E306	25	HM25	38	MS104/BAG	54
CP838	35	E321	25	HM26A	37	MS105/BAG	54
D1	54	E322LB	25	HM26B	37	MS107	52
D103	13	E322LW	25	HM26C	37	MS108E	53
D105S	27	E322MB	25	HM29	36	MS108E/BAG	53
D106	49	E322MW	25	HM30	36	MS128/BAG	52
D108A	13	E323B	27	HM31	36	MS131E/BAG	53
D109	13	E323W	27	HM31	37	MS141E/BAG	53
D10A	49	E324B	27	HM32	36	MS152E/BAG	53
D10B	17	E324W	27	HM35	36	MS153E/BAG	53
D112	17	E522B	49	HM35C	36	MS158/BAG	58
D302	25	E523D	9	HM37	36	MS200	54
D401S	27	E524D	6	HM38	36	MS300	52
DMC01	38	E531B	49	HM39	36	MSK-10BP	23
DMC02	38	ECM888B	33	HM40	36	MSK-10BX	23
DIVIOUL	00	FOIMIOOOD	00	TIME	UU	WOR TODA	20

MSK-124PC         25         PRADE         13         SFIBBRR         41         SPB410BL         63           MSK-AP         23         PRADE         13         SFI4-SPP         41         SPB400L         67           MSK-AR         23         PRADE         13         SFI4-SPP         41         SPB400L         67           MSK-AR         23         PRADE         17         SFI4-SPP         41         SPB303         67           MTSDO1         44         PRD20AB         12         SFIB-SPR         41         SPB303         67           MTSDO1         44         PRD20AB         12         SFIB-SPR         41         SPB306         67           MTSDO1         44         PRD20AB         12         SFIM-SPR         41         SPB306         67           PRATIBUS         0         PRD20AB         12         SFIM-SPR         41         SPS60         67           PRATIBUS         0         PSTA         55         SFIM-SPR         41         10-PP48         12           PRAJDUAR         15         PSTA         55         SFIM-SPR         41         10-PP48         12           PRAJDUAR         15	Model	Page	Model	Page	Model	Page	Model	Page
MSK-AP         25         PRAD         15         SHA SPR         41         SP6303         67           MSK-AX         23         PRO218A         17         SF14 SPR         41         SP6313         67           MSD14         64         PRO228A         17         SF16 SPR         41         SP6833         67           MTSD14         64         PRO248         12         SF16 SPR         41         SP5863         67           PRAT16B         6         PRO248         12         SFM SFM         41         SP5868         67           PRAT16B         0         PRO268         12         SFM SFM         41         SP5868         67           PRAT18B         0         PRO268         12         SFM SFM         41         SP5868         67           PRAT18B         0         PRO268         12         SFM SFM         41         SP5873         67           PRAT18B         0         PS52         3         SFM SFM MIP         41         10 PS6         12           PRADWAR         15         PS28         3         SFM SPM MIP         41         10 PS6         12           PRADWAR         16         PS418S	MSK-124P	23	PRA638	18	SFI3PR	41	SPS410AB	56
MSC-AX         23         PRO0218A         17         SF14-SPR         41         SPS613         57           MTS004         64         PRO0228A         17         SF16PP         41         SPS603         57           MTS014         64         PRO028B         12         SF16RB         41         SPS607A         57           MTS024         64         PRO024B         12         SF10-SPR         41         SPS607A         57           PRA116B         9         PRO024B         12         SFM15PM         41         SPS67A         57           PRA116B         9         PRO024B         12         SFM15PM         41         SPS67A         57           PRA116B         0         PR0024B         12         SFM15PM         41         SPS61A         57           PRA116B         0         PS2A         05         SFM15PM         41         TOP24B         56           PRA216G         15         PS2A         05         SFM25PM         41         UDA78         12           PRA227BA         15         PS2A         05         SFM35PM         41         U1740A         29           PRA228BA         17         PS41BB <td>MSK-124X</td> <td>23</td> <td>PRAC</td> <td>13</td> <td>SFI3RR</td> <td>41</td> <td>SPS410B</td> <td>56</td>	MSK-124X	23	PRAC	13	SFI3RR	41	SPS410B	56
NTSD014         64         PRO028BA         17         SP66PP         41         SPS823         67           MTSD14         64         PRO028B         15         SP66PR         41         SPS867A         67           PRM STDKA         64         PRO028B         12         SPM SFM         41         SPS867A         67           PBA116B         0         PRO28B         12         SPM ISFM         41         SPS863         57           PBA118B         0         PRO28B         12         SFM ISFM         41         SPS82         56           PBA118B         0         PBO28B         17         SFM ISFM         41         SPS82         56           PBA118B         0         PSD         35         SFM ISFM         41         TOP74B         12           PBA200AL         15         PS2A         35         SFM SFM         41         TOP74B         12           PBA20BA         15         PS3B         35         SFM SFM         41         U12         02           PBA20BA         15         PS4BB         35         SFM SFM         41         U12         02           PBA20BA         15         RS3BB	MSK-AP	23	PRAD	13	SFI4.5PP	41	SPS430L	57
MTS014         94         PR0248         13         SFIGRR         41         SPS838         67           MTS024         94         PR0248         12         SFTA.DFR         41         SPS667A         67           PRN18BIC         93         PR02488         12         SFM0.FM         41         SPS678         67           PRA11BL         9         PR02688         12         SFM1.FM         41         SPS678         67           PRA11BL         9         PR02688         12         SFM1.FM         41         SPS678         67           PRA11BL         9         PS02A         35         SFM1.SFM         41         DT9248         12           PRA21BL         15         PS2B         35         SFM2.SFM         41         T0P246         12           PRA21BL         15         PS2B         35         SFM3.SFM         41         T0P246         12           PRA21BL         16         PS418S         35         SFM3.SFM         41         U1C210         22           PRA22BL         17         RH1         30         SFM3.SFM         41         U1Z710         23           PRA22BL         17         RH1	MSK-AX	23	PR0218A	17	SFI4.5PR	41	SPS813	57
MTSD244         64         PR0248         12         SFIX.SPR         41         SPSB61A         57           PINK STICK         33         PR0248         12         SFMLD.SFM         41         SPSB68         57           PRA1188         9         PR0268         12         SFMLDEFM         41         SPSK1         58           PRA1188         9         PB1         6         SFMLDEFM         41         SPSK2         50           PRA2000R         16         PS2A         35         SFMLDEFM         41         10P2485         12           PRA2000R         16         PS2B         35         SFMLDEFM         41         10P2485         12           PRA200A         18         PS4180         35         SFMLDEFM         41         10P2485         12           PRA20A         19         PS4180         35         SFMLSEFM         41         10P2405         12           PRA28BA         10         PS4185         35         SFMLSEFM         41         10T2/10A         29           PRA28BA         17         RK1         30         SFS10PP         41         10T2/10A         29           PRA20FG         16	MTS004	54	PR0228A	17	SFI6PP	41	SPS823	57
PINK STICK         03         PR0248S         12         SFM0.5FM         41         SP868B         57           PR0418B         u         PR052BB         12         SFM1.5FM         41         SPS678         57           PR0411BS         u         PR058BB         17         SFM10FP         41         SPS62         56           PR04010G         15         PS2A         55         SFM26FM         41         10P248         12           PR04010G         15         PS2A         55         SFM26FM         41         10P248         12           PR0421BA         16         PS3         5         SFM50FM         41         10P248         12           PR0421BA         16         PS448D         55         SFM57FM         41         U12/10A         29           PR0422BA         19         PS448D         35         SFM7.5FP         41         U12/10A         29           PR0422BA         19         RS100C         SFM7.5FP         41         U12/10A         29           PR0422BA         17         RK1         30         SFS10SS         41         U12/10A         29           PR042BBA         17         RK1 <t< td=""><td>MTS014</td><td>54</td><td>PR0238C</td><td>13</td><td>SFI6RR</td><td>41</td><td>SPS838</td><td>57</td></t<>	MTS014	54	PR0238C	13	SFI6RR	41	SPS838	57
PRA116B         9         PRO258B         12         SFM1.5FM         41         SF9587         57           PRA118L         9         PR026BB         17         SFM10FM         41         SF9K1         56           PRA20TOG         15         PS2A         35         SFM2.FFM         41         10°248         12           PRA20TOG         15         PS2A         35         SFM2.FFM         41         10°248         12           PRA20TAG         15         PS2B         35         SFM2.FFM         41         10°248         12           PRA218A         18         PS418O         35         SFM5.0FM         41         10°248         12           PRA218A         18         PS418O         35         SFM5.0FM         41         10°24         30°           PRA28BA         19         PS418S         36         SFM7.5FM         41         10°270         32°           PRA28BA         17         RK1         20         SFS10FP         41         10°2710         32°           PRA38TAC         15         RS908         30         SFS10FP         41         10°2710         32°           PRA30TAC         15         RS	MTS024	54	PR0248	12	SFI7.5PR	41	SPS867A	57
PRA118L         9         PRO2688         17         SEM10FM         41         SPSK1         5           PRA118S         9         PS1         5         SFM0FP         41         SPSK2         56           PRA201G         15         PS2B         35         SFM2FM         41         10P248         12           PRA20ALR         15         PS2B         35         SFM2FM         41         10P248S         12           PRA218A         15         PS31B         5         SFM5FP         41         10P28         12           PRA228A         19         PS418S         35         SFM7.5FP         41         UT2/10A         29           PRA28BA         19         R102         9         SFM7.5FP         41         UT2/10A         29           PRA28BA         17         RK1         30         SFS10PP         41         UT2/10A         29           PRA28BA         17         RK1         30         SFS10PP         41         UT2/10A         29           PRA30DXLR         15         RS91B         58         SFS10SP         41         UT2/10A         29           PRA30DXLR         15         RS91B         5	PINK STICK	33	PR0248S	12	SFM0.5FM	41	SPS868	57
PRA11BS         9         PS1         5         SFM10FF         41         SPSK2         68           PRA20TOG         15         PS2A         35         SFM20FM         41         10P248         12           PRA20KLR         15         PS2B         35         SFM20FM         41         10P248         12           PRA21BA         18         PS3         5         SFM50FM         41         10P248         12           PRA22BA         19         PS418S         35         SFM50FM         41         10A28         30           PRA22BA         19         PS418S         35         SFM7.5FM         41         10Z/10A         29           PRA28BA         17         RK1         30         SFS0.9SP         41         10Z/10B         20           PRA38DOLR         15         RS912         69         SFS10SP         41         10Z/10B         20           PRA30DLR         15         RS916         69         SFS10SP         41         10Z/30B         20           PRA31BS         9         RS916         69         SFS10SP         41         10Z/30B         20           PRA31BS         9         RS920F	PRA116B	9	PR0258	12	SFM1.5FM	41	SPS878	57
PRAZOTOG         15         PSZA         35         SFMZ-SFM         41         TOP2485         12           PRAZORAR         16         PSZB         35         SFMZOFM         41         TOP2485         12           PRAZ18A         18         PS3         SS MSFMS-FM         41         UDAZ8         30           PRAZ2BA         19         PS418S         25         SFMT-SFM         41         UTZ/10A         29           PRAZ6BA         19         R102         9         SFMT-SFM         41         UTZ/10B         29           PRAZ6BA         17         RK1         30         SFS10PP         41         UTZ/10B         29           PRA30TUR         15         RS908         59         SFS10SS         41         UTZ/20         29           PRA30TUR         15         RS916         59         SFS10SS         41         UTZ/20         29           PRA30TUR         16         RS916         59         SFS10SS         41         UTZ/20         29           PRA30SUR         17         S02         39         SFS20PP         41         UT4/10BA         29           PRA38SUR         17         S04         59 <td>PRA118L</td> <td>9</td> <td>PR0268B</td> <td>17</td> <td>SFM10FM</td> <td>41</td> <td>SPSK1</td> <td>56</td>	PRA118L	9	PR0268B	17	SFM10FM	41	SPSK1	56
PRAZOXLR         15         PS2B         35         SFM30FM         41         T0P248S         12           PRAZ18A         16         PS3         5         SFM50FM         41         T0P258         12           PRAZ18B         16         PS418S         35         SFM5FP         41         UD242         29           PRAZ28BA         19         PS418S         35         SFM7.5FM         41         UT2710A         29           PRA28BA         17         RK1         30         SFS0.9P         41         UT2710A         29           PRA30DKR         15         RK2         30         SFS1.0SP         41         UT2710A         29           PRA30TGG         15         RS908         59         SFS1.0SS         41         UT2720         28           PRA30TGG         15         RS908         59         SFS1.5SP         41         UT270         29           PRA31BL         9         RS918         59         SFS1.5SPP         41         UT2703         29           PRA31BL         9         RS921         59         SFS2.0PP         41         UT4710SA         29           PRA33BLS         9         RS921	PRA118S	9	PS1	5	SFM10FP	41	SPSK2	56
PRA218A         10         PS3         5         SFM5.0FM         41         TOP.258         12           PRA218B         18         PS418D         35         SFM5.FP         41         UDA28         30           PRA228A         19         PS418S         35         SFM7.SFP         41         UT2/10A         28           PRA268A         17         RK1         30         SFS0.9SP         41         UT2/10A         29           PRA30DXLR         15         RS90         59         SFS10SP         41         UT2/10A         29           PRA30DXLR         16         RS90         59         SFS10SS         41         UT2/10A         29           PRA31BL         16         RS912         59         SFS15FP         41         UT2/30         29           PRA31BL         9         RS916         59         SFS15SS         41         UT2/30         29           PRA31BL         17         S02         39         SFS20FP         41         UT2/30         29           PRA31BL         17         S04         39         SFS3FP         41         UT4/105A         29           PRA383TOG         17         S04	PRA20TQG	15	PS2A	35	SFM2.5FM	41	T0P248	12
PRA218B         18         PS418D         36         SFM5FP         41         UDA28         30           PRA22BA         19         PS418S         36         SFM7.5FM         41         UT2         29           PRA26BA         17         RK1         30         SFM7.5FP         41         UT2/10B         29           PRA26BA         17         RK1         30         SFS10PP         41         UT2/10B         29           PRA30DOXIR         15         RS908         59         SFS10PP         41         UT2/10B         29           PRA30TOG         15         RS901         59         SFS15PP         41         UT2/30         29           PRA318L         9         RS916         59         SFS15SS         41         UT2/308         29           PRA318L         9         RS916         59         SFS20PP         41         UT2/308         29           PRA38DTC         17         S02         39         SFS20SS         41         UT2/108         29           PRA38BUC         17         S04         39         SFS3SP         41         UT4/12S         29           PRA38BUC         17         S09	PRA20XLR	15	PS2B	35	SFM20FM	41	T0P248S	12
PRA228A         19         PS418S         35         SFM7.5FP         41         UT2/10A         29           PRA268A         19         R102         9         SFM7.5FP         41         UT2/10A         29           PRA28BA         17         RK1         30         SFS10SP         41         UT2/10A         28           PRA30DXLR         15         RS908         59         SFS10SP         41         UT2/20         29           PRA30DXLR         15         RS908         59         SFS10SP         41         UT2/30         29           PRA31BL         16         RS912         59         SFS1SSS         41         UT2/30         29           PRA31BL         16         RS921         59         SFS1SSS         41         UT2/383         29           PRA31BL         17         S02         39         SFS2SS         41         UT4/108A         29           PRA31BL         17         S04         30         SFS3PP         41         UT4/108A         29           PRA38SULR         17         S08         39         SFS3PS         41         UT4/238C         29           PRA31BL         27         S09	PRA218A	18	PS3	5	SFM5.0FM	41	T0P258	12
PRA26BA         19         R102         9         SFM7.SFP         41         UT2/10A         29           PRA26BA         17         RK1         30         SFS0.9SP         41         UT2/10B         29           PRA30TOL         15         RK2         30         SFS10PP         41         UT2/12A         29           PRA30TOL         15         RS908         59         SFS10SS         41         UT2/20         29           PRA30RLR         15         RS912         59         SFS16SS         41         UT2/30         29           PRA31BL         9         RS916         59         SFS16SS         41         UT2/31         29           PRA31BS         9         RS916         59         SFS16SS         41         UT2/31         29           PRA31BS         9         RS916         59         SFS16SS         41         UT2/15B         29           PRA31BS         9         RS916         39         SFS20SS         41         UT4/12B         29           PRA38BXLR         17         S04         39         SFS3SP         41         UT4/23B         29           PRA38BXLR         17         S09	PRA218B	18	PS418D	35	SFM5FP	41	UDA28	30
PRA28BA         17         RK1         30         SFS0.9SP         41         UT2/10B         28           PRA30DXLR         15         RK2         30         SFS10PP         41         UT2/12A         29           PRA30TOG         15         RS90B         59         SFS10SS         41         UT2/20         29           PRA30TR         15         RS916         59         SFS15SS         41         UT2/30         29           PRA31BS         9         RS916         59         SFS1SSS         41         UT2/383         29           PRA38BDKIR         17         S02         39         SFS2OSS         41         UT4/10BA         29           PRA38BTOG         17         S04         39         SFS3SP         41         UT4/12B         29           PRA38BTAR         17         S08F         39         SFS3SP         41         UT4/12B         29           PRA38BTAR         17         S08F         39         SFS3SP         41         UT4/28B         29           PRA38BTAR         17         S09F         39         SFS3SP         41         UT6/210B         30           PRA41B         27         S12	PRA228A	19	PS418S	35	SFM7.5FM	41	UT2	29
PRA30DXLR         15         RK2         30         SF510PP         41         UT2/12A         29           PRA30TGG         15         RS908         59         SF510SS         41         UT2/20         29           PRA30RLR         15         RS912         59         SF515SS         41         UT2/303         29           PRA318LS         9         RS921         59         SF520PP         41         UT2/318         29           PRA38BDXLR         17         S02         39         SF520PS         41         UT4/108A         29           PRA38BTOR         17         S04         39         SF53SPP         41         UT4/128         29           PRA38BXLR         17         S04         39         SF53SPP         41         UT4/128         29           PRA38BXLR         17         S09F         39         SF53SP         41         UT4/28BC         29           PRA418         27         S09F         39         SF53SP         41         UT6/270C         30           PRA448         27         S11         39         SF53SP         41         UT6/270G         30           PRA448S         27         S12	PRA268A	19	R102	9	SFM7.5FP	41	UT2/10A	29
PRA30TOG         15         RS908         59         SF510SS         41         UTZ/20         29           PRA30XLR         15         RS912         59         SF515SPP         41         UTZ/30         29           PRA318L         9         RS916         59         SF515SS         41         UTZ/383         29           PRA318DS         9         RS921         59         SF520PS         41         UTZ/383         29           PRA38BTOG         17         S02         38         SF520PS         41         UT4/108A         29           PRA38BTOG         17         S04         39         SF53SP         41         UT4/28C         29           PRA38BTOG         17         S08F         30         SF53SP         41         UT4/24B         29           PRA418         27         S09         39         SF53SP         41         UT4/24B         29           PRA428         27         S11         39         SF53SP         41         UT6/210A         30           PRA448         27         S12         39         SF35SP         41         UT6/210A         30           PRA448S         27         S12         <	PRA288A	17	RK1	30	SFS0.9SP	41	UT2/10B	29
PRA30XLR         16         RS912         59         SFS15PP         41         UT2/30         29           PRA31BL         9         RS916         59         SFS15SS         41         UT2/383         29           PRA31BS         9         RS921         59         SFS20PP         41         UT2/518         29           PRA38BXLR         17         S02         39         SFS20PP         41         UT4/108A         29           PRA38BXLR         17         S08F         39         SFS3PP         41         UT4/23BC         29           PRA41B         27         S09F         39         SFS3SS         41         UT4/24B         29           PRA41B         27         S09F         39         SFS5SS         41         UT6/210A         20           PRA41B         27         S09F         39         SFS5SS         41         UT6/210A         20           PRA44B         27         S11         39         SFS5SS         41         UT6/210A         30           PRA44B         27         S11         39         SFS1SPP         41         UT6/210A         30           PRA44BS         27         S12 <th< td=""><td>PRA30DXLR</td><td>15</td><td>RK2</td><td>30</td><td>SFS10PP</td><td>41</td><td>UT2/12A</td><td>29</td></th<>	PRA30DXLR	15	RK2	30	SFS10PP	41	UT2/12A	29
PRA31BL         9         RS916         59         SFS15SS         41         UTZ/583         29           PRA31BS         9         RS921         59         SFS20PP         41         UTZ/518         29           PRA383TOG         17         SO2         39         SFS2DSS         41         UT4/108A         29           PRA383TOG         17         SO4         39         SFS3PP         41         UT4/1238C         29           PRA383XLR         17         SOBF         39         SFS3SS         41         UT4/1248         29           PRA418         27         SO9F         39         SFS3SS         41         UT6/248         29           PRA448         27         S11         39         SFSSSS         41         UT62/10A         30           PRA448S         27         S12         39         SFSSSS         41         UT62/10A         30           PRA418BA         27         S12         39         SFSSSS         41         UT62/10A         30           PRA51BAL         25         S125         39         SM112         46         UT62/10A         30           PRA51BAL         25         S24	PRA30TQG	15	RS908	59	SFS10SS	41	UT2/20	29
PRA318S         9         RS921         59         SFS20PP         41         UT2/518         29           PRA383DXLR         17         SO2         39         SFS20SS         41         UT4/108A         29           PRA383DXLR         17         SO4         39         SFS3PP         41         UT4/125         29           PRA383XLR         17         SO8F         39         SFS3SS         41         UT4/248         29           PRA418         27         SO9F         39         SFS5SS         41         UT62         29           PRA428         27         S09F         39         SFS5SS         41         UT62/10A         30           PRA448S         27         S11         39         SFS5SS         41         UT62/10A         30           PRA448S         27         S12         39         SF9SPP         41         UT62/10A         30           PRA448S         27         S12         39         SF9SSPS         41         UT62/10A         30           PRA518BL         25         S12         S12         39         SM112F         46         UT62/10A         30           PRA518BM         25 <td< td=""><td>PRA30XLR</td><td>15</td><td>RS912</td><td>59</td><td>SFS15PP</td><td>41</td><td>UT2/30</td><td>29</td></td<>	PRA30XLR	15	RS912	59	SFS15PP	41	UT2/30	29
PRA383DXLR         17         SO2         39         SFS2DSS         41         UT4/108A         29           PRA383TQG         17         SO4         39         SFS3PP         41         UT4/125         29           PRA383XLR         17         SO9F         39         SFS3SP         41         UT4/238C         29           PRA418         27         SO9F         39         SFS3SS         41         UT6/248         29           PRA428         27         S11         39         SFS5SS         41         UT6/10A         30           PRA448S         27         S11         39         SFS9SP         41         UT62/10A         30           PRA518AL         25         S12         39         SFS9SP         41         UT62/10A         30           PRA518AL         25         S12         59         SM112         46         UT62/10A         30           PRA518AL         25         S15         59         SM112F         46         UT62/20         30           PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA518BM         25         S40 <td< td=""><td>PRA318L</td><td>9</td><td>RS916</td><td>59</td><td>SFS15SS</td><td>41</td><td>UT2/383</td><td>29</td></td<>	PRA318L	9	RS916	59	SFS15SS	41	UT2/383	29
PRA383TOG         17         S04         39         SFS3PP         41         UT4/125         29           PRA383XLR         17         S08F         39         SFS3SP         41         UT4/238C         29           PRA418         27         S09F         39         SFS3SS         41         UT6/248         29           PRA428         27         S09F         39         SFS5SPP         41         UT6 2/10A         30           PRA448S         27         S11         39         SFS5SS         41         UT62/10A         30           PRA518AL         25         S125         6         SM112         46         UT62/10B         30           PRA518AS         25         S14         39         SM112F         46         UT62/20         30           PRA518BL         25         S15         39         SM115F         46         UT62/30         30           PRA518BL         25         S241         6         SM118S         45         UT62/383         30           PRA528BL         25         S25         39         SM118S         45         UT62/0518B         30           PRA528BL         25         S65         <	PRA318S	9	RS921	59	SFS20PP	41	UT2/518	29
PRA383XLR         17         S08F         39         SFS3SP         41         UT4/238C         29           PRA418         27         S09         39         SFS3SS         41         UT4/248         29           PRA428         27         S09F         39         SFS5PP         41         UT62/10A         30           PRA448S         27         S11         39         SFS9SP         41         UT62/10B         30           PRA518AL         25         S12         39         SFS9SP         41         UT62/10B         30           PRA518AL         25         S12         6         SM112         46         UT62/20         30           PRA518AS         25         S14         39         SM112F         46         UT62/30         30           PRA518BL         25         S15         39         SM115F         46         UT62/30         30           PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA52BL         25         S40         39         SM12         46         UT62/0518B         30           PRA52BL         25         S65         39 <td>PRA383DXLR</td> <td>17</td> <td>S02</td> <td>39</td> <td>SFS20SS</td> <td>41</td> <td>UT4/108A</td> <td>29</td>	PRA383DXLR	17	S02	39	SFS20SS	41	UT4/108A	29
PRA418         27         S09         39         SFSSSS         41         UT4/248         29           PRA428         27         S09F         39         SFSSPP         41         UT6         29           PRA448         27         S11         39         SFSSSS         41         UT62/10A         30           PRA518AL         25         S12         39         SFS9SP         41         UT62/10B         30           PRA518AL         25         S125         6         SM112         46         UT62/10A         30           PRA518AN         25         S14         39         SM112F         46         UT62/20         30           PRA518BL         25         S15         39         SM115F         46         UT62/30         30           PRA518BM         25         S25         39         SM118S         45         UT62/383         30           PRA518BM         25         S40         39         SM12F         46         UT64/108A         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA218S         47	PRA383TQG	17	S04	39	SFS3PP	41	UT4/125	29
PRA428         27         S09F         39         SFS5PP         41         UT6         29           PRA448         27         S11         39         SFS5SS         41         UT62/10A         30           PRA448S         27         S12         39         SFS9SP         41         UT62/10B         30           PRA518AL         25         S125         6         SM112         46         UT62/12A         30           PRA518AM         25         S14         39         SM112F         46         UT62/30         30           PRA518BL         25         S15         39         SM115F         46         UT62/30         30           PRA518BM         25         S241         6         SM118S         45         UT62/383         30           PRA518BM         25         S40         39         SM118S         45         UT62/383         30           PRA528BM         25         S40         39         SM12F         46         UT64/108A         30           PRA528BM         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA18S         47 <td>PRA383XLR</td> <td>17</td> <td>S08F</td> <td>39</td> <td>SFS3SP</td> <td>41</td> <td>UT4/238C</td> <td>29</td>	PRA383XLR	17	S08F	39	SFS3SP	41	UT4/238C	29
PRA448         27         S11         39         SFSSSS         41         UT62/10A         30           PRA448S         27         S12         39         SFS9SP         41         UT62/10B         30           PRA518AL         25         S125         6         SM112         46         UT62/12A         30           PRA518AM         25         S14         39         SM112F         46         UT62/20         30           PRA518BA         25         S15         39         SM115F         46         UT62/30         30           PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA518BM         25         S25         39         SM118S         45         UT62/0518B         30           PRA528BL         25         S40         39         SM12F         46         UT64/108A         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BN         25         SA18S         47         SM15         46         UT64/128C         30           PRA528CH         25         SA28 <t< td=""><td>PRA418</td><td>27</td><td>S09</td><td>39</td><td>SFS3SS</td><td>41</td><td>UT4/248</td><td>29</td></t<>	PRA418	27	S09	39	SFS3SS	41	UT4/248	29
PRA448S         27         S12         39         SFS9SP         41         UT62/10B         30           PRA51BAL         25         S125         6         SM112         46         UT62/12A         30           PRA51BAM         25         S14         39         SM112F         46         UT62/20         30           PRA51BAS         25         S15         39         SM115         46         UT62/30         30           PRA51BBM         25         S241         6         SM115F         46         UT62/383         30           PRA51BBM         25         S25         39         SM118S         45         UT62/0518B         30           PRA51BM         25         S40         39         SM12         46         UT62/0518B         30           PRA52BBL         25         S65         39         SM12F         46         UT64/108A         30           PRA52BBL         25         SA118S         47         SM15         46         UT64/128C         30           PRA52BC         25         SA215S         47         SM15F         46         UT64/238C         30           PRA52BC         25         SFI0.3PP	PRA428	27	S09F	39	SFS5PP	41	UT6	29
PRA518AL         25         S125         6         SM112         46         UT62/12A         30           PRA518AM         25         S14         39         SM112F         46         UT62/20         30           PRA518AS         25         S15         39         SM115         46         UT62/30         30           PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA518BM         25         S25         39         SM118S         45         UT62/0518B         30           PRA518BM         25         S40         39         SM12F         46         UT64/108A         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528BM         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SF10.3PR	PRA448	27	S11	39	SFS5SS	41	UT62/10A	30
PRA518AM         25         S14         39         SM112F         46         UT62/20         30           PRA518AS         25         S15         39         SM115         46         UT62/30         30           PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA518BM         25         S25         39         SM118S         45         UT62/0518B         30           PRA518M         25         S40         39         SM12         46         UT62/G         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528DS         25         SA28         47         SM215         46         UT64/248         30           PRA52BD         26         SF10.3PP         41         SMKH8B         5         W0518BDLR         15           PRA535         27         SF10.6PP	PRA448S	27	S12	39	SFS9SP	41	UT62/10B	30
PRA518AS         25         S15         39         SM115         46         UT62/30         30           PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA518BM         25         S25         39         SM118S         45         UT62/0518B         30           PRA528BL         25         S40         39         SM12         46         UT64/108A         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CL         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SFI0.3PR         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3PR         41         SMKH8B         5         W0518BDLR         15           PRA53S         27         SFI0.6PR	PRA518AL	25	S125	6	SM112	46	UT62/12A	30
PRA518BL         25         S241         6         SM115F         46         UT62/383         30           PRA518BM         25         S25         39         SM118S         45         UT62/0518B         30           PRA518M         25         S40         39         SM12         46         UT64/108A         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3PR         41         SMKH8B         5         W0518BDXLR         15           PRA53S         27         SFI0.6PP         41         SMKH8K         6         W0518BXLR         15           PRA538MS         25         SFI0.9P	PRA518AM	25	S14	39	SM112F	46	UT62/20	30
PRA518BM         25         S25         39         SM118S         45         UT62/0518B         30           PRA518M         25         S40         39         SM12         46         UT62/G         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52BD         26         SFI0.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA53S         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA538MS         25         SFI0.9PR         41         SN112A         45         WU518BDXLR         15           PRA538MS PTT         26 <t< td=""><td>PRA518AS</td><td>25</td><td>S15</td><td>39</td><td>SM115</td><td>46</td><td>UT62/30</td><td>30</td></t<>	PRA518AS	25	S15	39	SM115	46	UT62/30	30
PRA518M         25         S40         39         SM12         46         UT62G         30           PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SF10.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SF10.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA53S         27         SF10.6PP         41         SMKH8K         6         W0518BXLR         15           PRA538M         25         SF10.9PR         41         SN112A         45         WU518BXLR         15           PRA538MS PTT         25         SF10.9PR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25	PRA518BL	25	S241	6	SM115F	46	UT62/383	30
PRA528BL         25         S65         39         SM12F         46         UT64/108A         30           PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA53W         26         SFI0.6PP         41         SMKH8C         5         W0518BTQG         15           PRA535NC         27         SFI0.6PR         41         SMKH8K         6         W0518BDXLR         15           PRA538MS         25         SFI0.9PR         41         SN112A         45         WU518BDXLR         15           PRA538MS PTT         25         SFI0.5PR         41         SN115A         45         WU518BXLR         15           PRA538SS         25 </td <td>PRA518BM</td> <td>25</td> <td>S25</td> <td>39</td> <td>SM118S</td> <td>45</td> <td>UT62/0518B</td> <td>30</td>	PRA518BM	25	S25	39	SM118S	45	UT62/0518B	30
PRA528BM         25         SA118S         47         SM15         46         UT64/125         30           PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3RR         41         SMKH8B         5         W0518BDLR         15           PRA52W         26         SFI0.6PP         41         SMKH8K         6         W0518BTLR         15           PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA538M         25         SFI0.9PR         41         SN112A         45         WU518BDLR         15           PRA538MS PTT         25         SFI0.9PR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         WU518BXLR         15           PRA538SS	PRA518M	25	\$40	39	SM12	46	UT62G	30
PRA528CL         25         SA215S         47         SM15F         46         UT64/238C         30           PRA528CM         26         SA28         47         SM215         46         UT64/248         30           PRA52BDS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA52W         26         SFI0.6PP         41         SMKH8C         5         W0518BTQG         15           PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA538M         25         SFI0.9PR         41         SN112A         45         WU518BDXLR         15           PRA538MS         25         SFI0.9PR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         YA10         36           PRA538SS         25         SFI1.5PR         41         SPA01         56         YA10         36	PRA528BL	25	S65	39	SM12F	46	UT64/108A	30
PRA528CM         25         SA28         47         SM215         46         UT64/248         30           PRA528DS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA52W         26         SFI0.6PP         41         SMKH8C         5         W0518BTQG         15           PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA538NC         27         SFI0.9PP         41         SN112A         45         WU518BDXLR         15           PRA538MS         25         SFI0.9PR         41         SN112A         45         WU518BTQG         15           PRA538MS PTT         25         SFI0.9PR         41         SN115A         45         WU518BXLR         15           PRA538SS         25         SFI1.5PR         41         SPA01         56         SFI0.5PR         41         SPS400         57         SFI0.5PR         41         SPS400         57         SFI0.5PR         41         SPS400         57         SFI0.5PR	PRA528BM	25	SA118S	47	SM15	46	UT64/125	30
PRA528DS         25         SFI0.3PP         41         SMKH8A         5         WH5         13           PRA52B         26         SFI0.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA52W         26         SFI0.6PP         41         SMKH8C         5         W0518BTQG         15           PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA538NC         27         SFI0.9PP         41         SN112A         45         WU518BDXLR         15           PRA538MS         25         SFI0.9PR         41         SN112A         45         WU518BXLR         15           PRA538MS PTT         25         SFI0.9PR         41         SN115A         45         WU518BXLR         15           PRA538SS         25         SFI1.5PR         41         SN115A         45         YA10         36           PRA538SSS         25         SFI1.5PR         41         SPA01         56         57	PRA528CL	25	SA215S	47	SM15F	46	UT64/238C	30
PRA52B         26         SFI0.3RR         41         SMKH8B         5         W0518BDXLR         15           PRA52W         26         SFI0.6PP         41         SMKH8C         5         W0518BTQG         15           PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA535NC         27         SFI0.9PP         41         SN112A         45         WU518BXLR         15           PRA538M         25         SFI0.9PR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         WU518BXLR         15           PRA538SS         25         SFI1.5PR         41         SN115A         45         YA10         36           PRA538SS         25         SFI1.5PR         41         SPA01         56         SFI1.5PR         41         SPS400         57	PRA528CM	25	SA28	47	SM215	46	UT64/248	30
PRA52W         26         SFI0.6PP         41         SMKH8C         5         W0518BTQG         15           PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA535NC         27         SFI0.9PP         41         SN112A         45         WU518BDXLR         15           PRA538M         25         SFI0.9PR         41         SN112A         45         WU518BXLR         15           PRA538MS PTT         25         SFI0.9PR         41         SN115A         45         WU518BXLR         15           PRA538SS         25         SFI1.5PR         41         SPA01         56         YA10         36           PRA538SS         25         SFI1.5RR         41         SPS400         57         57	PRA528DS	25	SFI0.3PP	41	SMKH8A	5	WH5	13
PRA535         27         SFI0.6RR         41         SMKH8K         6         W0518BXLR         15           PRA535NC         27         SFI0.9PP         41         SN112A         45         WU518BDXLR         15           PRA538M         25         SFI0.9PR         41         SN112A         45         WU518BTQG         15           PRA538MS PTT         25         SFI0.9RR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         YA10         36           PRA538SS         25         SFI1.5PR         41         SPA01         56         SFI1.5PR         41         SPS400         57	PRA52B	26	SFI0.3RR	41	SMKH8B	5	W0518BDXLR	15
PRA535NC         27         SFI0.9PP         41         SN112A         45         WU518BDXLR         15           PRA538M         25         SFI0.9PR         41         SN112A         45         WU518BTQG         15           PRA538MS         25         SFI0.9RR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         YA10         36           PRA538SS         25         SFI1.5PR         41         SPA01         56         FRA538SS         25         SFI1.5RR         41         SPS400         57 <td>PRA52W</td> <td>26</td> <td>SFI0.6PP</td> <td>41</td> <td>SMKH8C</td> <td>5</td> <td>W0518BTQG</td> <td>15</td>	PRA52W	26	SFI0.6PP	41	SMKH8C	5	W0518BTQG	15
PRA538M         25         SFI0.9PR         41         SN112A         45         WU518BTQG         15           PRA538MS         25         SFI0.9RR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         YA10         36           PRA538SS         25         SFI1.5PR         41         SPA01         56         FRA538SS         25         SFI1.5RR         41         SPS400         57         57	PRA535	27	SFI0.6RR	41	SMKH8K	6	W0518BXLR	15
PRA538MS         25         SFI0.9RR         41         SN115A         45         WU518BXLR         15           PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         YA10         36           PRA538S         25         SFI1.5PR         41         SPA01         56           PRA538SS         25         SFI1.5RR         41         SPS400         57	PRA535NC	27		41		45	WU518BDXLR	15
PRA538MS PTT         25         SFI1.5PP         41         SN115A         45         YA10         36           PRA538S         25         SFI1.5PR         41         SPA01         56           PRA538SS         25         SFI1.5RR         41         SPS400         57	PRA538M	25	SFI0.9PR	41	SN112A	45		15
PRA538S       25       SFI1.5PR       41       SPA01       56         PRA538SS       25       SFI1.5RR       41       SPS400       57	PRA538MS	25	SFI0.9RR	41	SN115A	45	WU518BXLR	15
PRA538SS         25         SFI1.5RR         41         SPS400         57	PRA538MS PTT	25	SFI1.5PP	41	SN115A	45	YA10	36
	PRA538S	25	SFI1.5PR	41	SPA01	56		
PRA628 18 SFI3PP 41 SPS410A 56	PRA538SS	25	SFI1.5RR	41	SPS400	57		
	PRA628	18	SFI3PP	41	SPS410A	56		

# Note



