

# REFERENCE

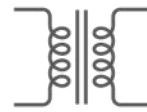
## THE NEXT GENERATION





# THE ACOUSTIC PRINCIPLES OF PWK

THE BENCHMARK FOR PERFORMANCE 75 YEARS LATER



## HIGH EFFICIENCY / LOW DISTORTION

Providing more accurate sound with less power and less distortion - resulting in louder, cleaner audio.



## CONTROLLED DIRECTIVITY

Accurately directing sound to the proper locations to create a more lifelike soundstage without wasting acoustic energy where sound is not needed or desired.



## WIDE DYNAMIC RANGE

The softest sounds are reproduced with remarkable clarity and the loudest sounds are delivered without harshness or distortion.



## FLAT FREQUENCY RESPONSE

Reproducing recorded sound as accurately as possible without coloration.

# OVERVIEW

*ELEVATING THE PERCEPTION BEYOND COMPETITIVE OFFERINGS*



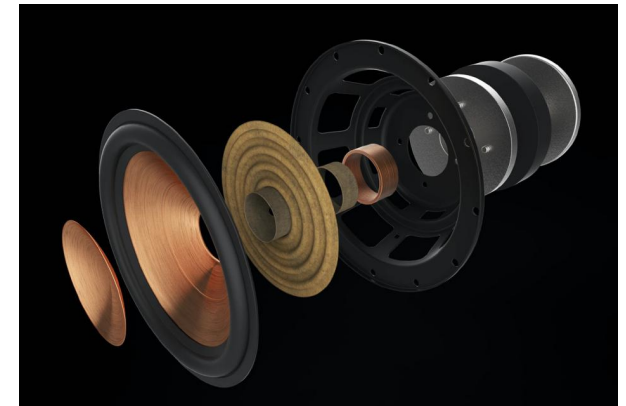
## INDUSTRIAL DESIGN OVERHAUL

- An all-new design, aimed at elevating the perception of the line beyond competitive offerings.



## NEXT GEN. TRACTRIX®

- Aesthetic improvement over current.
- Better directivity control.
- Highlights Klipsch's acoustic advantage.



## UPDATED WOOFER DESIGNS

- Trickle-down technologies from Reference Premiere to bring an all-new level of performance.

# REFERENCE

Industrial Design Updates





# REFERENCE

Industrial Design Updates

NEXT GENERATION



EDGE-TO-EDGE HORN HIGHLIGHTS KLIPSCH'S  
ACOUSTIC STORY & ADVANTAGE.

HIDDEN FASTENERS ELEVATE THE DESIGN.

CURRENT GENERATION



# REFERENCE

## Industrial Design Updates

COPPER TWEETER MODELED AFTER  
LUXURY DESIGN ACCENTS



# REFERENCE

## Industrial Design Updates

ALL-NEW ATMOS CONNECTIONS

CORK PAD REPLACES  
RUBBER BUMPERS

ALL-NEW INPUT PANEL DESIGN



# REFERENCE

Industrial Design Updates



REMOVABLE PLUG COVERS  
CONNECTIONS WHEN NOT IN USE



# REFERENCE

Industrial Design Updates



WIRES INCLUDED WITH ATMOS  
ELEVATION SPEAKER PURCHASE

REMOVABLE WIRE PLUG  
HOLDS WIRES IN PLACE

# REFERENCE

Industrial Design Updates



BINDING POST DESIGN ENSURES EASY  
SETUP FOR ANY CONNECTION TYPE.

# REFERENCE

## Acoustic Updates



### THE NEXT GENERATION OF TRACTRIX®

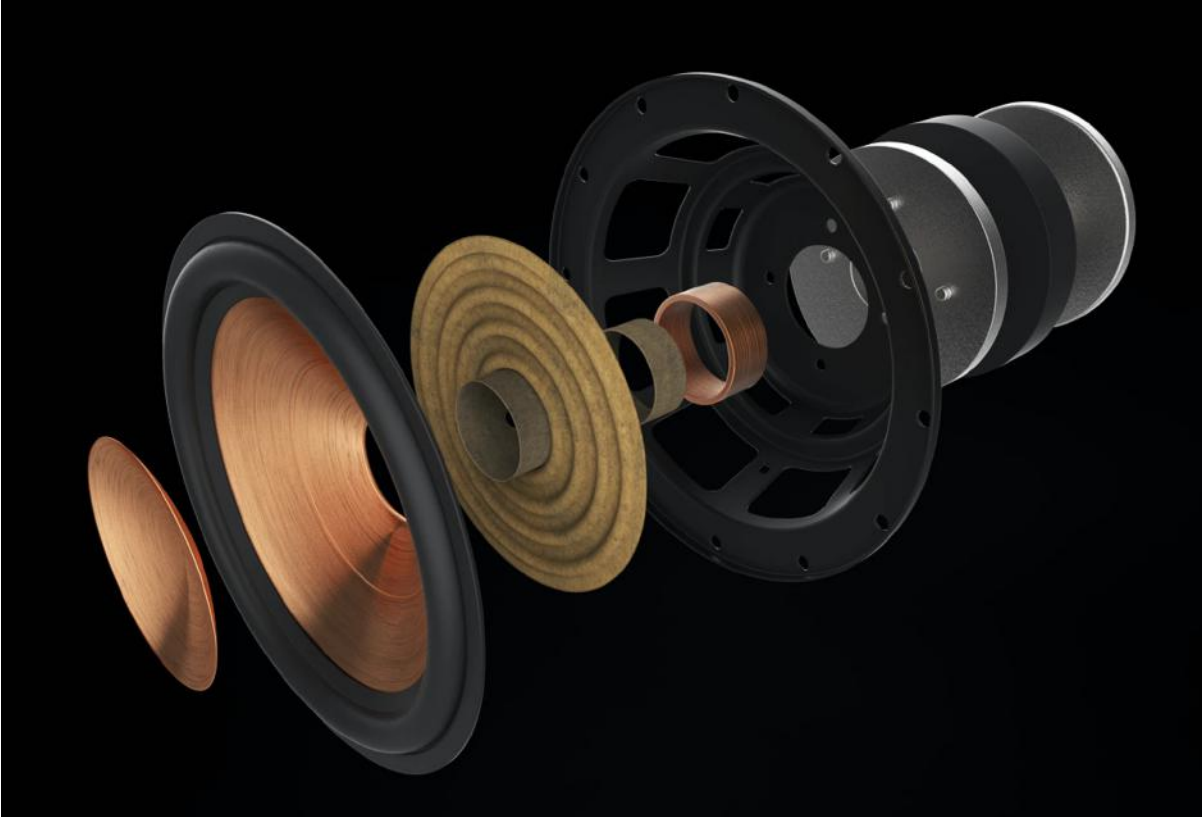
The next generation of the legendary tractrix horn, providing best-in-class high frequency reproduction and controlled directivity.

#### *Improved Directivity Control*

- Larger horns allow for directivity control across a wider range of frequencies.
- This results in:
  - *Better soundstage & imaging*
  - *More accurate sweet spot in the listening space.*

# REFERENCE

## Acoustic Updates



## UPDATED WOOFER DESIGNS

- Trickle-down designs from Reference Premiere
  - Steeper angling of cones
    - Smoother response - improves cone break up (i.e., resonances) at higher frequencies.
    - Better crossover integration for improved accuracy and transparency.
- Increased rigidity from additional ribbing.
- New material name:
  - *Spun-Copper Thermo-Crystal Polymer (TCP).*

# REFERENCE

Acoustic Updates

## SPUN-COPPER THERMO - CRYSTAL POLYMER

Accurate manufacturing process  
nomenclature.

Crystalline structures are regularly  
structured and tightly packed.

- Enables materials to be structurally stronger and more rigid.
- Prevents degradation caused by repetitive motions.

“Many Parts”

- Composed of repeating subunits, which build strength and rigidity.

AMORPHOUS



CRYSTALLINE





# NEXT GENERATION – REFERENCE

## SKU Assortment



R-800F  
Dual 8" TCP Woofers  
1" Aluminum Tweeter



R-605FA  
Dual 6.5" TCP Woofers  
1" Aluminum Tweeter  
Integrated Height Channel



R-600F  
Dual 6.5" TCP Woofers  
1" Aluminum Tweeter



R-50M  
5.25" TCP Woofer  
1" Aluminum Tweeter



R-40M  
4" TCP Woofer  
1" Aluminum Tweeter



R-30C  
4 x 3.5" TCP Woofers  
1" Aluminum Tweeter



R-50C  
Dual 5.25" TCP Woofers  
1" Aluminum Tweeter



R-40SA  
4" TCP Woofer  
1" Aluminum Tweeter  
Multipurpose Application

# NEXT GENERATION – REFERENCE

Current range vs new range



	CURRENT REFERENCE PREMIERE RANGE	NEW REFERENCE PREMIERE RANGE
TRACTRX HORN PRIORIETARY TECHNOLOGY	YES	YES
TWEETER	<ul style="list-style-type: none"><li>• Titanium LTS vented tweeter mated on 90x90° tractrix horn</li></ul>	<ul style="list-style-type: none"><li>• Edge to edge tweeter mated on a tractrix horn for better directivity, more efficiency and less distortion</li><li>• Larger horn for more accurate sweet spot &amp; better soundstage</li><li>• Titanium LTS vented tweeter</li></ul>
WOOFER	<ul style="list-style-type: none"><li>• Spun copper img woofer</li></ul>	<ul style="list-style-type: none"><li>• Updated woofer design in spun-copper thermo - crystal polymer</li></ul>
BINDING POSTS	<ul style="list-style-type: none"><li>• Single gold-plated binding posts</li></ul>	<ul style="list-style-type: none"><li>• New binding post design ensures easy setup for any connection type</li></ul>
DOLBY ATMOS		<ul style="list-style-type: none"><li>• Better cable management &amp; wires included with atmos elevation speaker purchase</li></ul>
DESIGN	<ul style="list-style-type: none"><li>• Apperent fasteners</li></ul>	<ul style="list-style-type: none"><li>• More premium look</li><li>• Hidden fasteners</li><li>• Copper tweeter modeled after luxury design accents</li></ul>



# NEXT GENERATION – REFERENCE

End-user benefits



## A FEW THINGS TO REMEMBER:

1. DESIGNED & ENGINEERED IN THE USA
2. PREMIUM DESIGN
3. ATMOS CORD MANAGEMENT
4. INCREASED PERFORMANCE FOR BOTH MUSIC & MOVIES

**REFERENCE  
SUBWOOFERS**  
THE NEXT GENERATION



# REFERENCE SUBWOOFERS

Industrial Design Updates





# REFERENCE SUBWOOFERS

Industrial Design Updates



*New* SILICONE RUBBER TRIM RINGS

*New* TONAL MATTE FINISH VINYL BAFFLE



# REFERENCE SUBWOOFERS

Acoustic Updates

## INCREASED CABINET VOLUME

- Larger cabinets achieve a lower cutoff frequency.
- Provides deep, cinematic bass for all your favorite content.

## MEASURABLE PERFORMANCE INCREASES

- Increased low frequency extension
- Increased maximum output

CURRENT range



R-120W



R-100W

NEW range



R-121SW



R-101SW



# REFERENCE SUBWOOFERS

Acoustic Updates

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AMORPHOUS



CRYSTALLINE



# REFERENCE SUBWOOFERS

Acoustic Updates



PORT MOVED TO LEFT-HAND CORNER TO INCREASE  
PORT LENGTH AND IMPROVE CABINET TUNING



# REFERENCE SUBWOOFERS

Acoustic Updates



## R-121SW

Replaces R-120SW  
12" TCP Woofer  
400W Peak Power



## R-101SW

Replaces R-100SW  
10" TCP Woofer  
300W Peak Power





# NEXT GENERATION – REFERENCE

End-user benefits



## 4 THINGS TO REMEMBER:

1. DESIGNED & ENGINEERED IN THE USA
2. MORE PREMIUM DESIGN
3. LESS DISTORSION
4. DEEPER & BADDER

# Klipsch®