TT+ TOURING & THEATRE

TT+ TOURING & THEATRE

TT+ High Definition Touring and Theatre is the flagship RCF touring solution for first class live concerts, performing arts, sport events, speech reinforcement and high-end fixed installations. Low weight and easy set-up, robust and reliable hardware and flying equipment, remote monitoring and management via RDNet. The TT+ range consists of true active and passive models for point source, vertical and horizontal deployment with a top of the class sound performance and maximum scalability.

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TT+ SYSTEM SOLUTIONS

ACTIVE AND CONTROLLED

TT+ systems are active and feature highly advanced digital or analogue electronic processing. TT+ high power digital amplifiers offer very low distortion and natural sound with very efficient heat dissipation coupled with low energy consumption.
The integration of precise analog and digital processing, available with simple presets, offers monitoring and control of the system with proprietary RDNet Networking Management Software.

LARGE VENUE SYSTEMS

When large scale music applications require absolute precision and clarity, the TT+ sound system is easily scalable, from a few modules to full-size line arrays. The FiRPHASE controlled linearity avoids phase distortion, so the system engineer requires simple time delay alignments for any desired system design.

THEATRE SYSTEMS

The TT+ series offers a variety of line array systems, speakers and stage monitors that combine compact size and an unobtrusive look with outstanding sound definition and power — perfect for performance and theatrical sound reinforcement.

/ LIVE TOURING

With the integration of high-efficiency amplifiers and transducers, TT+ reduces transportation costs, energy requirements, and cabling. The fast system deployment, full remote management, reliable electronics, and weatherproof cabinets save time and concerns in time-sensitive applications.

/ STADIUMS AND ARENAS

Whether the venue hosts a live performance or a sport match, TT+ delivers superior vocal coherence with optimal intelligibility. The advanced electro-acoustic design, with extended SPL, can withstand crowd noise with absolute clarity.

New perspective on linearity

FiRPHASE

RCF speakers are designed using a proprietary and advanced FiR filtering technology, conceived to deliver transparent sound, absolute clarity and perfect stereo images to the listener.
The special FiRPHASE filters allow for coherent distribution of sound for all listeners without phase distortions, ensuring minimum latencies in the system.

PHASE MATTERS

The design of the FIR filter for this specific purpose should start from an accurate measurement of the loudspeaker phase. FiRPHASE algorithm use this measurement and adapt the loudspeaker's phase without touching the amplitude equalization.
The advanced technique used by FiRPHASE is a recursive method (least squares method) combined with a proprietary algorithm that calculates the best FIR filter coefficients according to amplitude and phase constrains.
The algorithm corrects phase and amplitude (if necessary) by identifying the weak points of both the transducers and cabinet of the loudspeaker. This technique allows a deep control of phase at mid-low frequency with relatively small filters, while also achieving a higher resolution than that one as theory suggests.

When searching for an extended bass with enhanced performance, RCF engineers found a way to remove the high-pass filter, replacing it with a forward-thinking approach. Introducing BMC (Bass Motion Control), the newly advanced woofer excursion management feature. ART 9 with BMC can handle the lowest audible frequencies without affecting the woofer stability, with extended linearity and better sound integrity.

The BMC method works by creating a complete map of the dynamic behavior of the woofer, to generate a custom algorithm that only limits over-excursions. This gives total freedom of signal reproduction to the transducer. When high-pass filters normally protect the woofer motion from becoming destructive, but change the phase behavior, the new BMC algorithm breaks conventional rule. In combination with FiRPHASE technology, ART 9 has a level of DSP audio performance never achieved in this range of speakers.

/ CONCERT HALLS

The least distortion possible at any volume level, paired with complete remote management of every speaker, makes the TT+ the perfect indoor sound system. Enjoy the pinpoint accurate coverage with full dynamic range, from pianissimo to fortissimo, from symphonic music to electronic performances.

/ HOUSES OF WORSHIP

TT+ systems deliver unique intelligibility, well-defined coverage control, and excellent microphone feedback rejection. From small and medium-sized houses of worship to large community churches, enjoy high definition voice and music at the desired SPL level.

TT+ TECHNOLOGY

INNOVATION

Our engineering and development department offers innovative concepts with precise control of any detail, from the loudspeaker voice coil wire to the efficiency of the amplifier topology.

INTEGRATION

RCF is one of the few loudspeaker manufacturers worldwide with the ability to completely design and manufacture all the aspects of a sound system - transducers, speaker systems, amplification, and management software.

INTENSITY

Among many engineered parts and a large number of measurements, hundreds of computer-aided simulations aim to develop the best transducer behavior, amplifier performance, and waveguide response, even before prototyping.

/ PRECISION TRANSDUCERS

We design our transducers to maximize the purity of sound, combining the absence of distortion and the ability to withstand long term high-power levels. RCF develops advanced transducer technology internally, being instrumental in technological inventions such as carbon fiber cone molding, double silicon spiders, inside/outside voice coil windings to edge wound voice coil manufacturing, and pure titanium diaphragm forming

/ ADVANCED ELECTRONICS

TT+ gives you the freedom to work in many different venues with the same system, merely changing the number of modules. The high-powered TT+ Class-D amplifiers, tailored for each transducer, deploy pristine sound with efficient heat dissipation at the lowest possible distortion, along with low power consumption.

From 1949, RCF is committed to the perfect reproduction and amplification of sound. Our products and components are designed and developed internally, to ensure the maximum quality and reliability. The solid know-how and the continuous technological innovation makes RCF a sound production partner for all the audio professionals and enthusiasts.

RCF professional woofers have represented the ultimate performance, the highest power handling and the most advanced technology. With high energy magnetic designs, complex cooling systems and leveraging new technologies, our neodymium transducers are in a class all their own. Technology and craftsmanship: every professional compression driver and woofer is carefully constructed in our factory in Reggio Emilia, Italy, using the most advanced moulding and assembly technologies.

/ ROBUST AND DURABLE

The high-quality Baltic birch plywood cabinet features every layer glued by a water-resistant adhesive already before the painting process. The weatherproof polyurea paint forms a thick full coating of the cabinet, making it highly resistant to scratches and bumps. Rigging has a high safety factor, with all the weight under control. TT cabinets feature die-cast aluminum handles with ergonomic rubber hand-grip.

/ HEAVILY BRACED INTERNAL STRUCTURE

The internal structure is heavily braced to survive long term use and transportation, assembling all the parts and metal inserts with high-quality metric screws. The amplifier is housed in a separate chamber from the transducers to offer the best efficiency and reliability.

TTL 55-A

ACTIVE THREE-WAY LINE ARRAY MODULE

The TTL 55-A is a high power, three way, active line array module engineered to deliver incredible output for use in indoor and outdoor large spaces. The system is designed to be easily scalable from few modules for medium and small theatres to full size arrays for very large outdoor stadiums and public spaces.
Three new designs for six neodymium transducers that power the system represent many years dedicated to pioneering new solutions using the best materials available on the market.

THE BEST VOCAL CLARITY FROM A LARGE LINE ARRAY

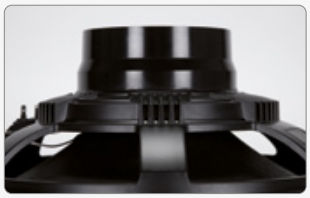
The TTL 55-A midrange transducer features unique "Impedance Control Coil" technology. A secondary coil wound on the speaker yoke and driven in opposite phase to the primary coil has the function of cancelling the primary coil inductance, increasing the speaker sensitivity and reducing the speaker distortion. A primary effect of this technology is the improvement of the temporal behaviour of the speaker, improving the crossover transition from the midrange to the compression drivers.

The TTS 56-A is the powerful choice for the large format TTL 55-A line array systems.

The TTS 36-A is the preferred choice for more compact systems.

COMPRESSION DRIVERS

- 3 x 1.5" throat neo compression drivers, 2.5" voice coil
- Very compact diameter design



WOOFERS

- 2 x 12"high power vented neo woofers, 4"voice coil
- Minimum weight basket design

MIDRANGE

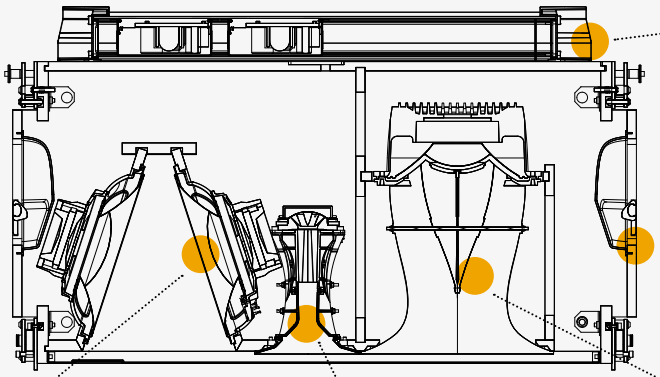
- 10" Very high BL neo midrange, 3.5" voice coil
- Aluminium sealed basket design

RDNET ON BOARD

p.n. 13000188 (220-240V) - p.n. 13000189 (115V)

- 143 dB SPL Max
- 3500 W 4-way class-D amplification
- 2 x 12" high power neodymium woofers, 4" v.c.
- 10" neodymium midrange, 3.5" v. c.
- 3 x 1.5" neodymium compression drivers, 2.5" v. c.
- FiRPHASE Technology
- 96 kHz, 32 bit DSP processing
- Tour grade Baltic birch cabinet and mechanics

INSIDE VIEW



/ POWER PLATFORM

The power section comprises 4 high power digital amplifiers, a state of the art 32 bit floating point DSP processing network board, high quality analog inputs.

/ TOURING GRADE CABINET

The cabinet is in Baltic birch and the mechanics are laser cut in high grade steel. The weight of the system is less than many similar size passive competitors.

/ LF CLAM SHELL CONFIGURATION

The 2 woofers, in a band-pass loading configuration, provide a very tight and powerful bass response. The acoustical configuration is very efficient in the 100 Hz region and free from dual source cancellations.

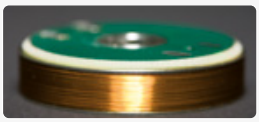
/ HF ARRAY

The high frequency section employs three high power 2,5" voice coil compression drivers housed on a very compact slotted horn. Precision assembled titanium domes produce high power and clarity.

/ HORN LOADED MF

The 10" midrange is a state of the art neodymium design. It features a sealed aluminium basket, incredibly high BL product, a secondary "distortion reduction" coil. The transducer is loaded on a 4-slot constant directivity horn that guarantees uniform vertical coupling module to module.

"distortion reduction" coil



The TTL 55-A amplifier represents state of the art execution of a DSP controlled multi-way Class-D amplification. The analog input board offers xlr and output links, cluster size control switches, high frequencies correction switches, and a pre-loaded equalization by-pass switch.

The signal processor is a 32 bit floating point DSP. The DSP takes care of crossovers, equalisations, soft-limiters, rms limiters, large signal compression and customised presets for the 4 way amplification.

TEC AWARD NOMINATION

33

TTL 33-A II

ACTIVE THREE-WAY LINE ARRAY MODULE

The TTL 33-A II offers high performance from a small size 3 way line array. Incredibly high output and dynamics, extreme accuracy and high frequency extension, plus compact size, make the TTL 33-A II the ideal tool for reinforcing mid-to-large size outdoor and indoor live performances and events.

Advanced technologies, knowledge, experience, continuous engineering effort and dedication combine to deliver unique results.

Active, ultra compact, wide dispersion, line array module that sets a new standard in touring and theatre sound reinforcement.

The READERS' CHOICE AWARDS WINNER

RELIABLE MECHANICS

Laser cut, high quality steel bars and precision machining for easy to use and reliable mechanics. The very light weight of the cabinet makes building the cluster very simple, fast and effortless.

DIGITAL PROCESSING

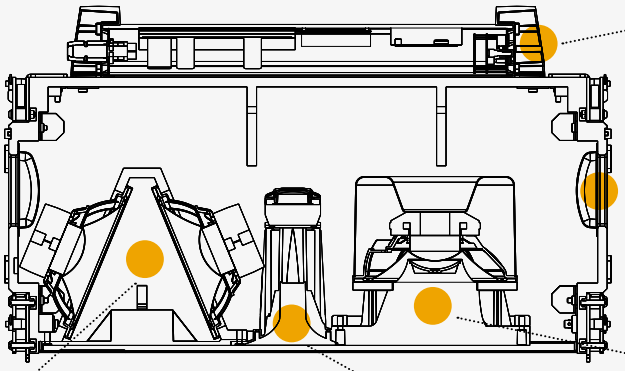
The integrated digital processor is based on a state-of-the-art, 32-bit, floating point DSP running at a sample rate of 96kHz. The calculation capacity largely exceeds the processing needs and the DSP is never pushed to the limit.

RD NET INPUT BOARD

The TTL 33-A II is equipped with a dedicated networking board. Using our proprietary RDNet protocol it is possible to monitor and control all the system parameters.

- 135 dB SPL Max
- 1250 W Class-D switching amplifiers
- Wide, constant directivity, coverage angle
- 2 x 8" high power neodymium woofers, 2.5" v. c.
- 8" neodymium midrange, 2.5" v. c.
- 3 x 1" neodymium compression drivers, 1.5" v. c.
- High quality analog input board
- 96 kHz, 32 bit DSP processing
- FiRPHASE Technology
- Soft limiter and RMS protection

INSIDE VIEW



/ POWER PLATFORM

The TTL 33-A II is powered by a 1250 W switching power supply and 3 digital amplifiers: 500 W mid-bass, 500 W midrange and 250 W compression driver. The result is very high output, extremely low distortion and natural sound.

/ TOURING GRADE CABINET

The cabinet is made from high quality Baltic birch plywood and the mechanics are laser cut in high grade steel. The weight of the system is less than many similar size passive competitors.

/ CONTROLLED MID-BASS

Light and reliable neodymium 8", in a band-pass loading configuration, provides a tight and loud mid-bass. Careful acoustic design makes the sensitivity in the 100 Hz region almost double that of a typical, similar size, design.

/ COMPRESSION DRIVERS

A new compression driver has been developed for array applications. The ratio between the size of the diaphragm and the overall diameter, along with the very small total size, makes the ND1411-MT a unique driver for in-line applications on straight horns.

/ HIGH OUTPUT MIDRANGE

A fast and accurate loaded 8" horn takes care of the midrange frequencies in the TTL 33-A II. A powerful neodymium magnet, aluminium die-cast basket, aluminium back helps heat dissipation.

RDNET ON BOARD

p.n. 13000360 (220-240V) - p.n. 13000361 (115V)

TTL 6-A

ACTIVE THREE-WAY LINE ARRAY MODULE

The TTL 6-A is a high powered, three way, active line source, engineered to deliver high fidelity output for indoor and outdoor use, in medium and large spaces. TTL 6-A provides all the advantages of line array technology, such as high direct sound, increased range and uniform level distribution, with additional ease of use. It is the preferred sound set-up for stacked systems, especially when wider dispersion is required.
The 3-way TTL 6-A line source is equipped with 2 x 12" low frequency woofers, 4 x 6.5" midrange and a 3.0" voice coil compression driver with wave-guide for distinctive, homogenous directivity. The integration of four Class-D amplification channels and advanced digital processing set a new standard for distortion, noise and thermal efficiency.

RDNET
ON BOARD

p.n. 13000475 (220-240V) - p.n. 13000476 (115V)

- 139 dB max SPL
- 4 x Class-D amplifier, 2200 W total power
- Premium-quality DSP with optimized phase response
- 1.4" neo compression driver, 3.0" v.c. with a waveguide
- 4 x 6.0" neo midranges
- 2 x 12" neo woofer
- 90°x 30° directivity (+5°, -25°)
- RDNet remote monitoring and control
- Maximum output, perfect audio fidelity
- Tour grade cabinet and mechanics

EASY TO HANDLE, FLY AND INSTALL

The TTL6-A is a versatile line array module allowing multiple installation options. Use it as a single speaker, as a large PA system or in combination with a subwoofer – the choice depends on the applications.

WEATHER RESISTANT CABINET

The cabinet is made of high-quality Baltic birch plywood: every layer is glued with a special adhesive. This makes the cabinet completely weather resistant even before the painting process.
Our in-house paint department uses a special polyurea paint to create a full cabinet coating, making it highly resistant to scratches and bumps.
The cabinet features four die-cast powder-coated aluminum side handles with rubber handgrips.

UNIQUE HORN DESIGN

The vertically asymmetrical horn design accurately projects the sound energy and avoids unwanted rejection. This horn design allows two TTL 6-A to perfectly cascade for excellent control of directional characteristics. In difficult acoustic environments intelligibility is significantly increased.

RCF PRECISION TRANSDUCERS

- LOW FREQUENCIES - 2 x 3.0" voice coil neodymium 12" woofers
- MID FREQUENCIES - 4 x 2.0" voice coil 6.0" neodymium midranges
- HIGH FREQUENCIES - The ND840 large-format neodymium compression driver with 1.4" exit throat delivers one of the key advantages of the TTL6-A: the 3.0" voice coil allows a crossover point of 800Hz and therefore this driver can produce almost all of the vocal range. This allows better coverage and superior efficiency.

TTL 4-A

ACTIVE TWO-WAY ARRAY SPEAKER

The TTL 4-A speaker module delivers top-quality sound for highly demanding events indoors or outdoors on small to medium-sized areas. Its design provides the audio engineer with the best tonal balance and intelligibility while maintaining an unobtrusive and adaptable footprint. With all the advantages of TT+ technology, such as high directivity, long-range, power, and precision, it's designed for professional applications.

WATER RESISTANT BALTIC BIRCH PLYWOOD

The cabinet is made in high quality Baltic Birch plywood. Every layer is glued with a special adhesive that makes the cabinet completely water resistant even before the painting process.

MAXIMUM EFFICIENCY

Following the TT+ no-compromise viewpoint, the TTL 4-A is a low distortion and 0° phase self-powered touring system equipped with a high efficiency Class-D amplifier that delivers potent SPL with the lowest power dissipated as heat.

100°X25° WAVEGUIDE WITH COHERENT DIRECTIVITY

This special waveguide design allows the deployment of multiple TTL 4-A for excellent control of directional characteristics. In difficult acoustic environments, intelligibility is significantly increased.

RDNET ON BOARD

p.n. 13000584 (90-240V)

- 135 dB max SPL
- 2 x Class-D amplifiers, 1600 Watts RMS total power
- 2 x 10" neodymium woofer, 2.5" v. c.
- 1.5" neo compression driver 4.0" v. c.
- 100° x 25° coverage
- 45 ÷ 20.000 Hz frequency range
- FiRPHASE Technology
- Tour grade cabinet and mechanics
- RDNet remote monitoring and control

TTW 4-A

WIDE DIRECTIVITY ACTIVE TWO-WAY SPEAKER

The TTW 4-A point source speaker module delivers top-quality sound for highly demanding events indoors or outdoors on small to medium-sized areas. Its design provides the audio engineer with the best tonal balance and intelligibility while maintaining an unobtrusive and adaptable footprint. It is especially suitable for stacked and flown systems when a wide dispersion is required. With all the advantages of TT+ technology, such as coherent directivity, power, and precision, it's designed for professional applications.

HANDLES

The TTL 4-A, TTW 4-A and TTP 4-A cabinet features two die-cast aluminum side handles with ergonomic rubber hand-grip and two recessed handles on the back.

DSP PROCESSING

The integrated digital processor is based on a state-of-the-art 32-bit DSP running at 48 kHz sampling rate. The calculation capacity largely exceeds the processing needs and the DSP is never pushed to the limit. It runs algorithms for the crossover, the equalization of the transducers, the limiter, and system presets such as high pass filters, air absorption, and cluster size corrections.

STATE OF THE ART MECHANICS

The mechanical structure is built in high strength structural Swedish steel. A quenching and tempering process guarantees a yielding strength almost 4 times higher than commercial grade steel and maintains its mechanical properties down to –40° C. Thanks to this special material, the mechanics have a high safety factor and a weight that is under control.

100°X50° WAVEGUIDE WITH COHERENT DIRECTIVITY

This special waveguide design allows the deployment of multiple TTW 4-A for excellent control of directional characteristics. In difficult acoustic environments, intelligibility is significantly increased.

RDNET ON BOARD

p.n. 13000573 (90-240V)

- 134 dB max SPL
- 2 x Class-D amplifiers, 1600 Watts RMS total power
- 2 x 10'' neodymium woofer, 2.5" v. c.
- 1.5" neo compression driver 4.0" v. c.
- 100° x 50° coverage
- 45 ÷ 20.000 Hz frequency range
- FiRPHASE Technology
- Tour grade cabinet and mechanics
- RDNet remote monitoring and control

TTP 4-A

NARROW DIRECTIVITY TWO-WAY SPEAKER

The TTP 4-A point source speaker module delivers top-quality sound for highly demanding events indoors or outdoors on small to medium-sized areas. Its design provides the audio engineer with the best tonal balance and intelligibility with an unobtrusive and adaptable footprint. It is the preferred sound set-up for stacked and flown systems when a controlled dispersion is required. With all the advantages of TT+ technology, such as coherent directivity, power, and precision, it's designed for professional applications.

PRECISION TRANSDUCERS

2 x 10" low frequency woofers and a high performance 4.0" compression driver on a rotatable/swapable 60°x25° horn for directivity. The horn design accurately projects the sound energy to avoid unwanted reflections. This design allows up to three TTP 4-A perfect cascades for control of directional characteristics. In difficult acoustic environments, intelligibility is significantly increased.

/ TTP 4-A CLUSTER CONFIGURATION

60°X25° WAVEGUIDE WITH COHERENT DIRECTIVITY

This special waveguide design allows the deployment of multiple TTP 4-A for excellent control of directional characteristics. In difficult acoustic environments, intelligibility is significantly increased.

RDNET ON BOARD

p.n. 13000604 (90-240V)

- 135 dB max SPL
- 2 x Class-D amplifiers, 1600 Watts RMS total power
- 2 x 10'' neodymium woofer, 2.5'' v. c.
- 1.5'' neo compression driver 4.0'' v. c.
- 60° x 25° coverage
- 45 ÷ 20.000 Hz frequency range
- FiRPHASE Technology
- Tour grade cabinet and mechanics
- RDNet remote monitoring and control

TT C4-A

ACTIVE TWO-WAY ARRAY SPEAKER

Top-quality sound for highly demanding events indoors or outdoors in small to medium-sized areas. The TT 4C series fills the gaps between point source and line array speakers, with all the flexibility of a central rotatable horn, providing the audio engineer with augmented coverage adaptability. This approach combines all the advantages of TT+ technology, such as controlled dispersion, outstanding clarity and extreme power with three coverage options, multiple rigging accessories, remote control and recallable presets. A groundbreaking solution for a vast range of applications.

POWER AND PRECISION

Up to 135 dB max SPL thanks to the 1600W RMS Class-D power section and the high efficiency of the RCF precision transducers with 32-bit DSP running at 48 kHz sampling rate.

STATE OF THE ART CLASS D AMPLIFIERS

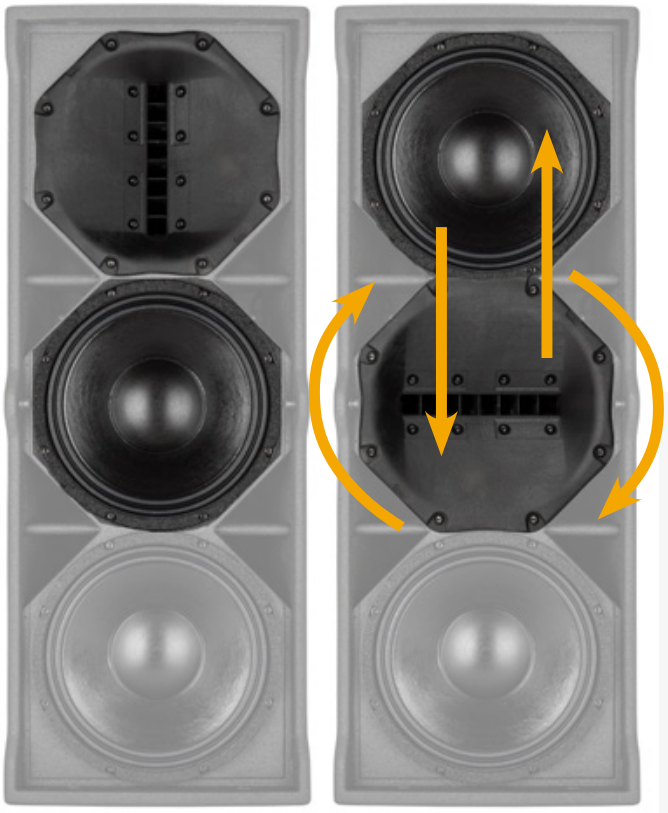
Two independent Class-D amplifiers with 1600W total power output per module make the TTL 4-A one of the most powerful column array modules on the market compared to its size.

TEMPERATURE UNDER CONTROL

Internal temperature control is driven by air flowing via natural convection, cooling its critical parts. The housing of the electronics and the amplifiers in a solid aluminum extrusion block acts as an efficient thermal sink.

ENGINEERED FOR MAXIMUM RELIABILITY

The housing is tightly fitted and sealed to the rear of the cabinet. A recessed and protected panel houses the connections for power and signal.



THE SOLUTION SPEAKER

The game-changing rigging solutions and the versatile transducers allow the speaker to be used alone for 100° x 25° homogeneous coverage or stacked/ flown in a column. The 90° rotatable waveguide can be moved from the upper to the central position - swapping the woofer, allowing the speaker to be arranged in constant curvature clusters with up to six modules.

TTL C4-A

p.n. 13000672 (90-240V)

TTW C4-A

p.n. 13000671 (90-240V)

TTP C4-A

p.n. 13000670 (90-240V)

TT 25-A II

ACTIVE HIGH DEFINITION TWO-WAY SPEAKER

The TT 25-A II is the most flexible and powerful tool in its class. TT 25-A II offers high output and dynamics, and extreme linearity and accuracy in a compact size. TT 25-A II is a 2-way active system featuring a 15" neo woofer, an 86 mm voice coil in a bass reflex configuration; a 1,5" exit, 75 mm voice coil neo compression driver; and a 90° x 60° constant directivity horn, 90° rotatable. The TT 25-A II is the ideal professional speaker for sound reinforcement, live performances and events.

SPEAKER FUNCTION CONTROL

The rear panel features a simple rotary encoder to control all the speaker functions. A bright 7 segment display helps the system setting. The only switch on the panel sets the local or remote control. A simple command from RDNet totally disables the input panel.

RIGGING POSSIBILITIES

- Top M20 insert
- Pole Mount on the bottom
- Top on bottom fly tracks (6x)
- Side quick lock pins (4x)
- Side M10 rigging points (4x)

" the most flexible and powerful tool in its class "

RDNET ON BOARD

p.n. 13000446 (220-240V) - 13000447 (115V)

- 134 dB max SPL
- 1100 W Class-D Amplifier
- 90 x 60 constant directivity coverage angle
- 15" neo woofer, 3.5" v.c.
- 1.5" neo c. driver, 4.0"v.c.
- FiRPHASE Technology
- RDNet remote monitoring and control
- Multifunctional cabinet
- Very high output

TT 22-A II

ACTIVE HIGH DEFINITION TWO-WAY SPEAKER

TT 22-A II is a 2-way active system featuring a 12" neodymium woofer, 86 mm voice coil in a bass reflex configuration and a 1,4" exit, 75 mm voice coil neo compression driver. A well-thought acoustic design, plus the highest quality transducers and a powerful amplifier, make the TT 22-A II speaker system the perfect solution for live sound situations, playback and monitoring. The amplifier section features 1100 W power, 800 W low frequency, and 300 W high frequency. The cabinet is made of marine baltic birch plywood and features high resistance polyurea coating. The cabinets feature 2 side handles, 6 x fly-track rigging points, quick lock pin receptacles and a steel pole mount.

NEW WOOFER DESIGN

The TT 22-A II new woofer features an extremely fast and accurate bass response and a natural and neutral mid-range response.

CABINET FEATURES

- Two newly designed side handles with rubber hand-grip.
- Quick Lock pin receptacles.

The design philosophy for the new TT+ series is based upon offering the sound engineer solutions and tools that are ready to use. Key factors are the ability to sustain very high power with highly efficient sound pressure levels. Intense sound levels do not compromise high definition or extended dynamic range. Modern construction materials result in mechanical weight ratios that are light for flying and portability.

RDNET ON BOARD

p.n. 13000444 (220-240V) - 13000445 (115V)

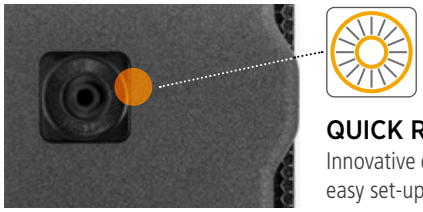
" extremely careful acoustic design plus the highest quality transducers "

- 131 dB max SPL
- 1100 W Class-D Amplifier
- 90 x 60 constant directivity coverage angle
- 12" neo woofer, 3.5" v.c.
- 1.5" neo c. driver, 3.0" v.c.
- FiRPHASE Technology
- RDNet remote monitoring and control
- Multifunctional cabinet
- Very high output

TT 10-A

ACTIVE TWO-WAY HIGH DEFINITION SPEAKER

The RCF TT 10-A is the latest member of the TT+ family, containing a 10" driver and a 1.7" compression driver. With high SPL and a small footprint, it is the perfect solution where high-power is required from an unobtrusive enclosure, whether in live sound, playback or monitoring, corporate events and broadcast studios. Despite its size and weight, the TT 10-A offers an incredible 9 maximum 0 SPL of 130 dB.



QUICK RIGGING

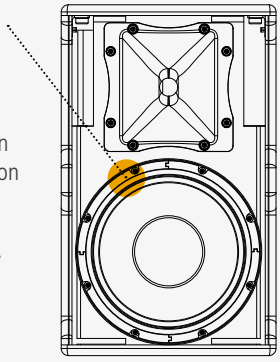
Innovative quick fit bracket socket for easy set-up and stable rigging

INSIDE VIEW

/ PRECISION AND POWER

The RCF TT 10-A low-mid frequency section employs a 10" neodymium magnet cone driver, while the high-frequency section is equipped with an efficient 1.75" diaphragm compression driver on a rotatable 90°x 70° horn.

Each transducer has been specifically designed. The woofer provides large excursion and is very light weight.



The RCF TT 10-A on-board amplifier features a 1000 W RMS switching power supply module, 700 Watt low frequency digital amplifier module, and a 300 Watt high frequency digital amplifier module.

RDNET ON BOARD

p.n. 13000549 (220-240V) - p.n. 13000559 (115V)

- 130 dB SPL Max
- 1000 W RMS 2-way Class-D Amplifier
- 60 ÷ 20000 Hz Frequency Range
- Rotatable 90° x 70° Constant Directivity Horn
- 10" neodymium Woofer, 2.5" v. c.
- Horn loaded 1" neo comp. driver, 1.75" v. c.
- FiRPHASE Technology
- RDNet remote monitoring and control
- Easy to install with built in rigging point
- Quick Fit Bracket Socket

TT 08-A II

ACTIVE TWO-WAY HIGH DEFINITION SPEAKER

The RCF TT 08-A II is the most flexible and powerful tool in its class. It fulfills a number of applications, from live sound, to playback and monitoring, corporate events to broadcast studios. Though remarkably compact and lightweight, the TT 08-A II offers an incredible maximum sound pressure level and from of 128 dB. Its performance efficiency is higher than many larger 10" speaker systems.

The input section provides In/Out XLR connectors, system sensitivity control and 4 status LEDs. The onboard DSP provides linear phase FiRPHASE filters and crossover, system equalization, polarity control, fast limiter, RMS limiter and configuration control. Rigging is easy with two quick-fit bracket sockets. The cabinets feature a steel pole mount cap and a forged aluminium handle on top with rubber handgrip.

QUICK RIGGING
Innovative quick fit bracket socket for easy set-up and stable rigging

FEATURE

/ MULTIPLE APPLICATIONS

Pole mount, top and bottom M10 suspension points, quick fit bracket side sockets: the TT 08-A II cabinet it is fully equipped for every application. One side of the cabinet presents a 35° angle, perfect for monitoring.

RDNET ON BOARD

p.n. 13000547 (220-240V) - p.n. 13000558 (115V)

- 128 dB SPL Max
- 1000 W RMS 2-way Class-D Amplifier
- 65 ÷ 20000 Hz Frequency Range
- Rotatable 90° x 70° Constant Directivity Horn
- 8" neodymium Woofer, 2.5" v. c.
- Horn loaded 1" neo comp. driver, 1.75" v. c.
- FiRPHASE Technology
- RDNet remote monitoring and control
- Easy to install with built in rigging point
- Quick Fit Bracket Socket

515

TT 515-A

PROFESSIONAL ACTIVE SPEAKER

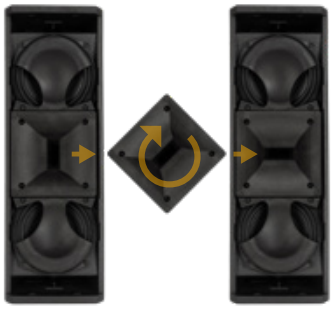
Flexibility, power, and compactness make the TT 515-A ideal for installed and portable professional applications where size and weight are critical factors. This approach combines the advantages of TT+ technology such as controlled dispersion, outstanding clarity and extreme power, multiple flexible rigging accessories, weatherproof protection, and RDNET real-time monitoring and management software with recallable presets. Its transducer configuration pairs two custom-loaded 5-inch cone drivers to a rotatable CMD waveguide surrounding a titanium 1.75-inch high-frequency compression driver. Whether it's used as a compact main system, as fills, or surrounds in a larger system, TT 515-A is quick to deploy and fast to tune.

A LITTLE BOX WITH SUPERPOWERS

The amplifier integrates a low-noise 32-bit DSP circuit, controlled through the RCF proprietary RDNet network to easily handle soft clipping limiters, RMS limits, polarity, amplitude, timing, and equalization. The regulated power supply guarantees full power from 100 V to 260 V. The amplifier is housed in a unique Vibrostop floating aluminum panel for extra protection during transportation.

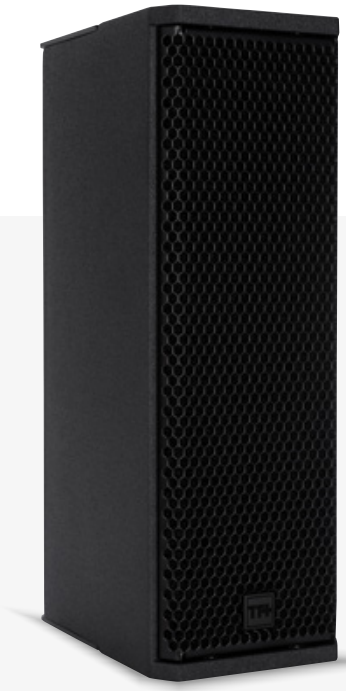
BASS MOTION CONTROL

The advanced woofer excursion management increases linearity and improves bass punch with a radical new approach. BMC extends the lowest audible frequency without affecting the transducer's stability, limiting over-excursions for greater reliability and superior performance at high volume levels.



100° X 70° ROTATABLE CONSTANT-DIRECTIVITY WAVEGUIDE

CMD horn that is easily rotatable in the field using only a screwdriver.



RDNET ON BOARD

p.n. 13000686 (220-240V) - p.n. 13000719 (115V)

- 127 dB max SPL
- 2 x Class-D amplifiers, 1000 W RMS
- 100° x 70° coverage
- LF 2 x 5" neodymium woofer, 2" v.c.
- HF 1.75" titanium comp. driver
- 70 – 20.000 Hz frequency range
- Bass Motion Control excursion management
- FiRPHASE Technology

BUILT FOR EVERYDAY USE

The cabinet is made of high-quality birch plywood with weather-proof outer treatment. The subs are lightweight and stackable, with eight M10 threaded inserts to allow easy rigging. Two M20 threaded pole mounts on the top and side allow the woofer to be used in vertical or horizontal configurations, with rubber feet on both sides. Two stabilizing brackets make the vertical placement stable and firm. The heavy-duty coating, the powder-coated metal grille, and the rugged structure of the cabinet withstand long-term use and transportation. Separate housing for the amplifier guarantees component efficiency and reliability. An acoustically transparent sound foam backing on the inside of the grille ensures protection from dust and humidity.

TT 808-AS

PROFESSIONAL ACTIVE SUBWOOFER

TT 808-AS is a compact low-profile high-performance active subwoofer. It features two vented-loaded 8" cone woofers powered by a 1000 Watts two-channel amplifier -one for each woofer- on a baltic birch plywood cabinet painted with black polyurea and weatherproof treatment. Management and tuning are available via RDNet software or using the two preset buttons, a polarity button, and a variable delay accessible from the back panel. The cabinet features rubber feet on two sides and two threaded pole-mounts for horizontal and vertical placement. Two stabilizing brackets make the vertical placement stable and firm. TT 808-AS can be used stand-alone, in subwoofer arrays, or as the low-frequency complement for TT 515-A speaker.

The amplifier integrates a low-noise 32-bit DSP circuit, controlled through the RCF proprietary RDNet Networked Management software. Internal DSP easily handles soft clipping limiters, RMS limits, polarity, amplitude, delay, and equalization. All settings, monitoring, and more advanced features, such as the subwoofer array configurator, are available inside RDNet. Internal DSP processing includes multiple EQs, delays, crossovers, and a special BMC processing for a coherent distribution of sound without phase distortion and deep, tight bass at any volume.

RDNET ON BOARD

p.n. 13000693 (220-240V) - 13000731 (115V)

- 129 dB max SPL
- 1000 W RMS Class-D Amplifier
- 40 Hz to 400 Hz frequency range
- 2 x 8" neodymium woofers, 2.5" v.c.
- Bass Motion Control excursion management
- Flexible Rigging
- Rotatable TT+ Logo

25

TT 25-CXA

ACTIVE HIGH DEFINITION COAXIAL MONITOR

The TT 25-CXA is a full range, high performance coaxial monitor. The linear curve response, the consistent coverage and acoustic output make the TT 25-CXA II the professional choice for the most demanding situations. The voicing is accurate and deep, the sound transparent in the mids and extremely accurate at very high frequencies. The size is compact and the profile very low for a discrete appearance. The TT 25-CXA is a full range, high power active system that sets a new standard in touring and theatre sound reinforcement. By producing flat amplitude and phase response, full-range bandwidth and exceptional impulse response, the TT 25-CXA far exceeds the capabilities of conventional stage monitors.

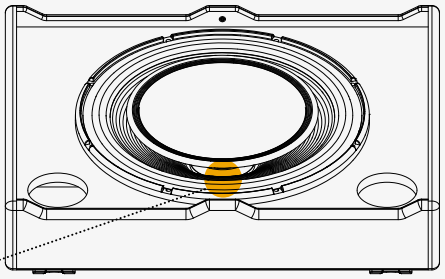
CONSISTENT BEAM WIDTH

The beam width remains consistent across the horn's operating frequency range and coverage (60°conical) allows the performer great freedom of movement within the coverage area.

CABINET CONSTRUCTION

The cabinet is made of marine Baltic birch plywood and features high resistance polyurea coating. The cabinets feature one aluminium top handle and a side pole mount.

INSIDE VIEW



/ LOUDSPEAKER COMPONENTS

The TT 25-CXA II horn on a coaxial transducer exhibits constant Q. Frequency response is uniform across the specified beam width, with minimal side lobes. The compact, active, TT 25-CXA enclosure houses a coaxial 15-inch neodymium cone driver and a 64 mm diaphragm compression driver, along with phase-corrected control electronics and amplification.

RDNET ON BOARD

p.n. 13000448 (220-240V) - 13000449 (115V)

- 133 dB max SPL
- 1100 W Class-D Amplifier
- 60° x 60° constant directivity coverage
- 15" neo coaxial woofer, 3.5"v.c.
- 1.5" neo coaxial c. driver, 2.5"v.c.
- FiRPHASE Technology
- RDNet remote monitoring and control
- Multifunctional cabinet
- Very high output

TT 20-CXA

ACTIVE HIGH DEFINITION STAGE MONITOR

The TT 20-CXA is a full range, high performance symmetrical monitor. The flat frequency response, the consistent coverage of 90°x70° and acoustic output make the TT 20-CXA the professional choice for any stage as a monitor or full range front of house system. The compact size and low profile are fundamental to a discrete appearance. With an exceptional impulse response, the TT CXA series far exceeds the capabilities of conventional stage monitors. The cabinet is made of Baltic birch plywood and protected with a premium textured polyurea coating.

HANDLES & POLE MOUNT

The cabinets feature an aluminium top handle and a side pole mount. Both are designed to facilitate transport, positioning and loading operations.

RDNET INTEGRATION

The new TT 20-CXA amplifier integrates RDNet Input/Output in a single amplifier board.

TOP QUALITY TRANSDUCERS

The high frequency section features a 70° x 90° horn-loaded 3" compression driver with constant directivity coverage angle. The Direct Drive technology provides exceptional sound quality, making the TT 20-CXA the right choice for medium to large-scale applications. The loudspeaker's low frequency section comprises two 8" high-power neodymium woofers in symmetrical configuration. The 2.5" voice coil and innovative design ensure high power handling.

AMPLIFIER AND DSP

The amplifier section features class-D dual switching power supply module: 700 W low frequency, 300 W high frequency. The onboard RDNet functionality includes remote monitoring, custom-made equalizations and high pass, two-way position, high frequency distance correction and many other features. The embedded FiRPHASE filters phase distortions.

RDNET ON BOARD

p.n. 13000544 (220-240V) - 13000560 (115V)

- 131 dB SPL Max
- 1000 W RMS, two-way Class-D amplifier
- 60 ÷ 20000 Hz Frequency Range
- 90° x 70° constant directivity coverage
- 2 x 8'' neodymium Woofers, 2.5'' voice coil
- Horn loaded 1.4" neo comp. driver, 3'' voice coil
- Symmetrical Design
- Multifunctional Cabinet
- FiRPHASE Technology
- Onboard RDNet Control

TTS 56-A

ACTIVE HIGH POWER SUBWOOFER

The TTS 56-a is a high power, high output active subwoofer system that sets a new standard in touring sound reinforcement. The new 21" neodymium design represents many years dedicated to pioneering new solutions for transducer technology. The integration of the 6800 W, 2 channel Class-D amplification and advanced digital processing set a new standard for distortion, noise and thermal efficiency.
The TTS 56-A amplifier section features 2 x 3400 W highly advanced digital amplifier modules. The power amplifiers and the input board are housed on a heavy duty aluminium panel suspended from the main cabinet. Flexible mounts insulate the electronic parts from vibrations.

EACH MODULE FEATURES

- Power Factor Correction (PFC)
- Separated power supply and amplification
- High efficiency, very low consumption
- Comprehensive, smart protection features: thermal, over-current, non audio signals
- Two "on board" ventilation fans

The input section provides a special switch to create a cardioid configuration when TTS 56-A subwoofers are used in groups of three.

THE NEW 21" TRANSDUCER DESIGN FEATURES

Very high force, neodymium magnet assembly. 115 mm diameter, 33 mm length, inside-outside copper voice coil, reinforced silicon double spiders, carbon fiber doped water resistant cone, heavy duty aluminum basket magnet assembly, complex ventilation for minimum power compression.

INPUT BOARD

The input section provides:
- In/Out XLR connectors
- Crossover Out XLR connector
- System sensitivity control
- Crossover set-up (60 Hz - 90 Hz)
- High pass set-up (30 Hz - 45 Hz)
- 4 status LEDs
- RDnet Ethercon In/Out connectors

RDNET ON BOARD

p.n. 13000190 (90-240V)

- 145 dB max SPL
- 6800 W(2 x 3400 W Class-D amplifiers)
- 2 x 21" high power neodymium woofers, 4.5" v. c.
- 96 kHz, 32 bit DSP processing
- Time delay alignment
- Cardioid preset for groups
- Tour grade Baltic birch cabinet
- Maximum output per size on market

36 TTS 36-A

ACTIVE HIGH POWER SUBWOOFER

The TTS 36-A is a high power, high output active subwoofer system that sets a new standard in touring sound reinforcement. The new 18" neodymium design is the result of many years dedicated to pioneering new solutions in transducer technology. The integration of 4000 W, 2 channel Class-D amplification and advanced digital processing set a new standard for distortion, noise and thermal efficiency.

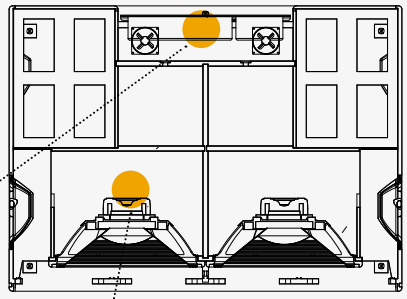
INPUT BOARD

The input section provides:
- In/Out XLR connectors
- Crossover Out XLR connector
- System sensitivity control
- Crossover set-up (90 Hz - 120 Hz)
- High pass set-up (35 Hz - 50 Hz)
- 4 status LEDs
- RDnet Ethercon In/Out connectors

RDNET ON BOARD

p.n. 13000272 (90-240V)

INSIDE VIEW



/ POWER PLATFORM

The power section comprises 2 x 2000 W digital amplifiers, state of the art 32 bit floating point DSP processing, time delay setting, network board, high quality analog inputs.

/ BASS-REFLEX LOADING

The 2 x 18" woofers, in a separate chamber bass reflex configuration, provide a very tight and powerful extended bass response.

- 143 dB max SPL
- 4000 W (2 x 2000 W Class-D amplifiers)
- 2 x 18" high power neodymium woofers, 4.5" v. c.
- 96 kHz, 32 bit DSP processing
- RDNet remote monitoring and control
- Time delay alignment
- Bass reflex design, Cardioid preset for groups
- Tour grade Baltic birch cabinet
- Maximum output per size

TTS 18-A II

ACTIVE HIGH POWER SUBWOOFER

The RCF TTS 18-A II is a compact, high output subwoofer system ideal in combination with TT+ two way systems. The RCF TTS 18-A II woofer features lightweight neodymium magnet, inside-outside copper voice coil; silicon double spiders; water resistant treated cone; magnet assembly complex ventilation for minimum power compression. The amplifier section features a 1400 watt RMS SMPS class-D amplifier with full DSP and RDNet network capabilities.

INSIDE VIEW

/ HIGH PERFORMANCE HYPERVENTED WOOFER

RCF manufactures these components to deliver the cleanest, punchiest, undistorted low frequency reproduction. In order to dissipate the heat generated by the powerful 4.0" voice coil, RCF engineers have developed a unique ventilation system with very low power compression. The Hyper Ventilation System is the result of a complex combination of ventilation ducts in the voice coil former, in the magnetic structure and in the woofer's basket. In addition, a demodulation ring reduces the harmonic and intermodulation distortion associated with voice coil displacement and, as input current varies, the system inductances are more linear.

RDNET ON BOARD

p.n. 13000545 (90-240V)

- 137 dB SPL Max
- 30-400 Hz Frequency Range
- 18" Hyper Vented Woofer, 4" Voice Coil
- DSP Controlled Input Section with selectable presets (e.g.cardioid)
- 1400 W RMS Class-D Amplifier
- RDNet remote monitoring and control
- Vertical and horizontal placement with M20 pole receptacle on top and side

APPLICATIONS

- Touring sound reinforcement for small and mid-sized venues
- Portable and installed audio-visual systems
- Theatres and night clubs
- Stage monitor, side fill and drum fill reinforcement
- DJ sound systems

TTS 15-A

ACTIVE HIGH POWER SUBWOOFER

The RCF TTS 15-A is a compact, high output subwoofer module ideal in combination with TT+ two way touring systems. The RCF TTS 15-A features low weight for easy handling, weatherproof cabinet, a 15" woofer powered by a 1100 watt RMS SMPS class-D Amplifier with full DSP and RDNet network capabilities.

The Class-D 1100 W RMS SMPS amplifier is easily monitored and controlled from RDNet.

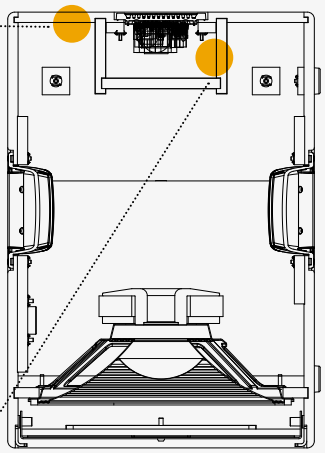
APPLICATIONS

- Touring sound reinforcement for small and mid-sized venues
- Portable and installed audio-visual systems
- Theatres and night clubs
- Stage monitor, side fill and drum fill reinforcement
- DJ sound systems

INSIDE VIEW

/ CABINET

The RCF TT+ cabinets are made of high-quality birch plywood with weatherproof treatment. The subs are stackable and light-weight, for an easy set-up and tear down. A pole receptacle on top and side allows the use of the woofer in various configurations. The polyurea coating and rugged structure of the cabinet have been designed to survive long-term use and transportation and the separate housing for the amplifier guarantees the best component efficiency and reliability.



/ DSP PROCESSING

The fully featured DSP handles all the processing within the cabinet and allows control of soft clipping limiters, RMS limits, polarity, amplitude and equalization.

RDNET ON BOARD

p.n. 13000543 (90-240V)

- 134 dB SPL Max
- 40-400 Hz Frequency Range
- 15"Woofer, 3.0"v.c.
- DSP Controlled Input Section with selectable presets (e.g.cardioid)
- 1100 W RMS Class-D Amplifier
- RDNet remote monitoring and control
- Vertical and horizontal placement with M20 pole receptacle on top and side

NETWORKED SOUND SYSTEM MANAGER

RDNet is the RCF management software suite for Sound System Engineers. A robust management network for RCF devices, a line-array design tool, a monitoring platform, and a complete audio analyzer in one package. RDNet provides intuitive management of every connected device/object on the network. A network user can control all DSP settings inside any compatible device, including advanced subwoofer configurations, from a single object to a group of objects.

TOOLBOX FOR SOUND SYSTEM DESIGN

RDNet is more than just a speaker management software - you can control parameters and internal routings of multiple RCF devices, such as digital matrixes or amplifiers, both in live or installed applications. Featuring an advanced measurement suite and the ability to save/recall presets on the cloud, RDNet is the all-in-one solution for both touring and installed sound systems.

- Array and Zones Grouping
- Multiple-type EQ, Bass Shaper and FiRPHASE EQ
- Auto Scan and complete monitoring
- Shape Designer Array Calculator
- Real-time Measurement Suite
- Automatic Cluster Size shaping and Air Compensation
- Subwoofer configuration tool
- Cloud Storage

/ DOWNLOAD THE SOFTWARE

The RDNet software is available for free for registered users on RCF's website User's Area.

/ STRAIGHT-FORWARD SOUND DESIGN

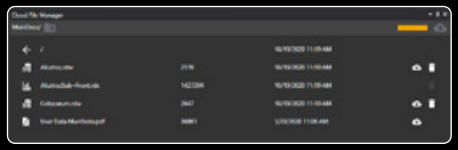
Shape Designer prediction software enables a two-dimensional acoustic simulation of the array configuration and suggest LF Corrections based on the cluster size. The system curvature angles and sound projection data are computed with maximum sound pressure levels for the given design. The software provides system curvature and weight, system rigging points, and cabinet angles.

MONITOR AND MANAGE
The RDNet Scan function sequentially scans all audio devices, recognizes, assigns digital address labels, and adds devices as objects in the main window. The real-time monitoring features a multitude of parameters such as fan speed, temperature, the inclination of a single speaker, VU Meters, peak levels and more. RDNet takes direct control on the internal EQ and High-Pass filter on each cabinet.

GET THE MOST OF YOUR SYSTEM
RDNet gives the ability to control devices in Groups for easy supervision. Arrays customizable Group properties are Zones, Air Compensation, Cluster Size, FiRPHASE Gain. When assigning Group Array objects in Zones: every Zone has its color for quick reference of set parameters. An incremental control shapes the Air Absorption Compensation, which can be very useful with changes in humidity or temperature (e.g., soundcheck on a sunny day, concert on a humid night). The line array's low-mid shaping is automatically calculated on the Cluster size to obtain the perfect linear frequency response from the entire system.

RDNet measures

TAKE ALL APPROPRIATE MEASURES
RDNet Measure is a powerful 4-input Dual-Channel FFT Audio Analyzer able to measure Magnitude, Phase, RTA, Coherence, and Impulse response. Functions included spans from a delay finder, a multiple signal generator, and an integrated SPL meter/ logger with calibration tools. There's no need for external software to get the job done.



TRAVEL LIGHT ON CLOUDS
You don't need your personal computer anymore. Just connect your computer to the web, sign-in to your account, and you are ready to go with a complete set of audio tools for your RCF audio system. You can also save your projects and measurements and recall them anywhere you are.

/ NETWORKED SPEAKER CONTROL

When the RCF sound system is connected via Control2 or Control8 interfaces, the system engineer has complete control of time delay and equalization of all speakers, individually or grouped. With its built-in communication board and DSP, each device is an active part of the system, able to store presets, receive commands, and continuously send status information of single components or transducers. Comprehensive monitoring is standard in RDNet: VU metering, clip indicator, limiter intervention, device inclination, communication issues, and much more.

/ EASY SUBWOOFER CONFIGURATION

Guided subwoofer configurations help the engineer to set up subwoofer Cardioids, Arcs, or EndFire configurations in one pass, while the Bass Shaper fine-tunes the desired timbre on low frequencies. With three sliders and a few steps, it's easy to correct low-end behavior while maintaining tonal balance across the entire system.

Control 8

8 OUTPUT MASTER UNIT

The RDNet Control 8 is a real-time monitor and control system able to manage up to 256 devices linked 32 per bus in 8 buses. All data collected from the slaves is delivered to the sound engineer by USB in a local installation or by Ethernet from remote locations. The interface can be directly connected to the DSP on board of HDL products through the exclusive RDNet protocol, making it possible to address single cabinets or groups, specific presets or modification parameters, in real-time. The key point of RDNet Control 8, in fact, is to ensure minimum refresh time (at least 5 per second) of all system data performance, like RMS signals, compressor activities, temperatures, fans speed and warnings.

COMMUNICATION FLEXIBILITY

The link between the PC and the RDNet Control 8 unit can be made through USB port or Ethernet port.

TOPOLOGY FLEXIBILITY

The RDNet Control 8 unit can manage up to 8 subnets. Up to 32 audio devices can be connected to each subnet (8 subnets x 32 = total 256 audio devices).

CONTROL FLEXIBILITY

The PC cyclically requires that the RDNet Control 8 unit monitor the operating state of audio devices that make up the communication network. All data is collected by the central unit that performs a sequential scan of all audio devices. Digital address allocation is automatic. Information relating to the functioning of all audio devices is acquired in real-time, a feature that allows a network global view. It is possible to check each single audio device and edit its parameters (e.g. output level, mute, equalization, delay, etc.) by using the PC software. The overall audio device configuration can be saved as a file on the PC and later reloaded. It is possible to synchronize all parameter values of the RDNet Control 8 unit to the ones of the PC software preset.

p.n. 17170154

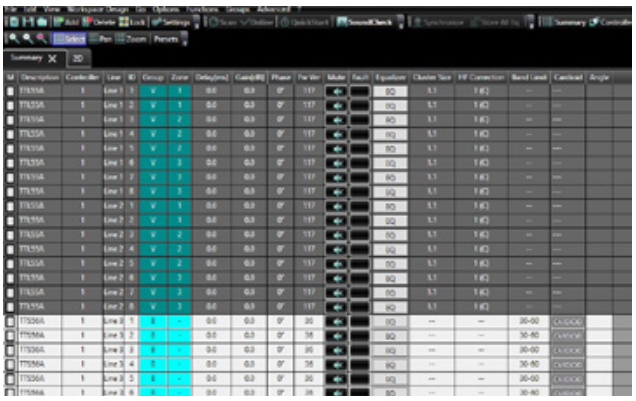
- RDNet control and monitoring in a single device by Ethernet or USB
- Up to 8 subnet of up to 32 slaves devices
- Automatic network configuration and registration
- Slave devices status and functions real time control
- Monitoring and display of faults and warnings
- User configurations storage and recall

“ control system able to manage up to 256 devices ”

Control 2

2 OUTPUT USB MASTER UNIT

The RDNet Control 2 is a hardware interface to connect RCF TT+ devices to a Personal Computer (PC) by means of an USB connection. The RDNet system was purposely developed to create a data network for monitoring and command of more systems. The RDNet Control 2 unit can manage up to 2 subnets. Up to 32 devices can be connected to each subnet (2 subnets x 32 = total 64 devices). The addressing of the various devices is handled automatically by RDNet Control 2 interface. Each device is assigned a unique address during the power on procedure of network.



> We have developed a dedicated networking board for the latest TT+ products. Using our proprietary RDNet protocol it is possible to monitor all system parameters, from the input to the status of each single amplifier. Having a Dsp on board each cabinet, it is possible to address single cabinets or groups of cabinets' specific presets or modifications of parameters like gain, equalisation or delay. The RDNet protocol is based on RS-485 communication protocol, it is very stable and it is possible to send and receive data on a simple XLR cable.

p.n. 17170163 (USB POWERED)

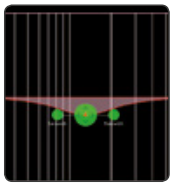
- RDNet control and monitoring in a single device by USB communication
- Up to 2 subnet of up to 32 slaves devices
- Automatic network configuration and registration
- Slave devices status and functions real time control
- Monitoring and display of faults and warnings sent from slave devices
- User configurations storage and recall

" full control from a pocket size device "

DX 1616

MATRIX AUDIO PROCESSOR

DX 1616 AES-Dante remote software. This network-based software designed for Microsoft Windows and Mac OSX allows the management of the DX 1616 Matrix Sound Processor.
-Pre-Amp configuration, selecting source types like analog, AES/EBU, Dante
-Designing Input groups for festival applications
-Input source processing with EQ, delay and compressor
-Powerful 16x16 router to assign processing tasks to flexible output patches.



DSP MODULE

The DSP module offers high pass filters, low pass filters, parametric EQ, all pass filters, level, compressor and output delay for perfect system control even if no RDNet controlled speaker is part of the system.

HOME

The home screen gives the most important information of the signal flow to the system engineer in one view. All inputs with pre-fade level meters including the routing to dedicated DSP modules for typical system tasks for main PA, side PA, subwoofer and distributed speakers. Useful groups of inputs allow easy setup and configuration for any large event application with several mixing desks or multiple sources.

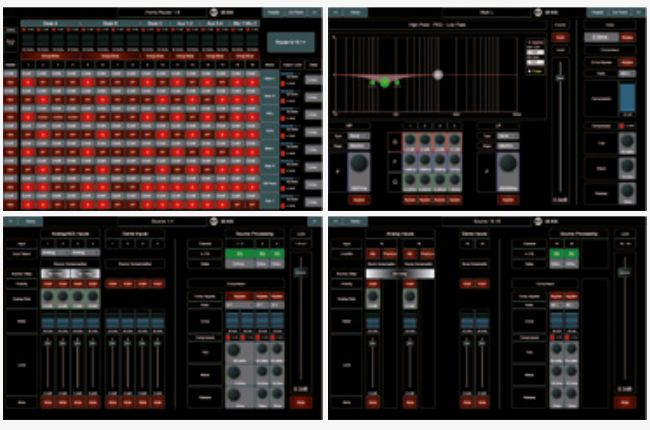
SOURCE PROCESSING

The powerful source processing window allows the configuration of the input preamps (analog, AES/EBU, mic/line) and Dante inputs as well. For each source the user can adjust gain, polarity, input EQ, input compressor and input delay.

OUTPUT PATCH

Thanks to 16 analog outputs, DX 1616 offers flexible routing possibilities. The engineer can use up to 16 individual DSP modules for each output or he can even assign several analog outputs to a specific DSP module to use these outputs as high quality line drivers. In combination with the RCF CP16 control panel any demand of wiring the audio system is supported.

p.n. 12399033



- Hybrid architecture DSP
- 48 kHz sampling, 40 bit floating point engine
- 16 x 16 I/O matrix
- Dante enabled network audio transport
- 8 AES/EBU inputs - 8 AES/EBU outputs
- Ethernet connectivity and control
- Maximum latency 3 ms
- Easy to use software GUI

CR 16-ND

CONTROL RACK

The CR 16-ND is a 10 Unit flight case designed to control RCF Professional speaker systems. The CR 16-ND includes one Control 8 that manages the RDNet connection up to 256 devices, one DX 1616 matrix processor that takes care of audio signal routing and processing and one CP 16 control panel to bring audio and control signals to 4 x LK 25 multipin outputs. Each LK 25 has four audio channels, two RDNet channels and two spare sends. Each signal is doubled to XLR redundant outputs.

DIGITAL I/O

The DX 1616 matrix audio processor features Ethernet control, Dante redundant inputs, eight AES/EBU inputs and outputs. The signals are managed from a 40 bit floating point, high resolution DSP.

AUDIO AND CONTROL CENTER

With modern audio technologies, sound systems have to accept several source types, such as analog signals, digital signals and even audio via network.

With the CR 16-ND, RCF provides the perfect companion and control center. While RDNet takes care of the individual speaker or a group of speakers, the DX 1616 matrix signal processor will manage up to 16 inputs - no matter if they are analog signal, AES/EBU or even Dante.

Thanks to a powerful DSP matrix, the engineer can assign each source to processing routes and flexible output patches. To ensure worldwide HDL 50-A system standards, the CP 16 control panel is part of the CR 16-ND control rack offering Ethercon sockets, XLR inputs and outputs, and multi-pin outputs, perfectly designed to match the RCF cabling solution.

Dual Switch Not Included.

Ask RCF and adapt the System to your networking protocol.

p.n. 12100004

- 10 RU flight case on shock mounts
- DX 1616 matrix audio processor
- Control 8 master unit
- CP16 control panel
- 16 analog audio inputs, 16 analog audio outputs
- 8 AES/EBU inputs - 8 AES/EBU outputs
- Dante input
- 4 x LK 25 multicore audio/RDNet outputs

PR 63

POWER RACK

The Power Rack PR 63 features PD 63 A-419 power distribution with a 63 A Cekon power input with 5 m fixed cable. Three-phase power is distributed in a 32 A Cekon output, 4 x LKS19 output, 6 x Powercon output, 1 Powercon auxiliary output to power the CR 16-ND Control Rack.
All outputs are equipped with individual RCBOs (Residual Current-operated Circuit-Breaker with Overcurrent protection) for maximum reliability. In case of damage, only the faulty output is skipped while the rest of the system continues to function.

In a sound reinforcement system, power has to be managed in a clever and safe way to ensure reliability. Only by using high quality cables and sockets will it be tour-proof. The LKS 19 power cable provides 6 x 20 A power feeds in a very tight package. For additional speakers or even for the subwoofers close to the PR-63, the Powercon sockets can be used in parallel to the LKS 19 sockets.

63-AMPERE RACK

From a single 63-Ampere Cekon connector the power rack delivers power distribution to large PA systems, including (up to) 12+12 left-right line array systems, a large subwoofer system and complete stage monitoring. 32-Ampere power output for chain motors and 16-Ampere Powercon output to supply CR 16-ND are included.

LK 25 MULTIPIN

The LK 25 connectors feature easy-grip long and slim metal locking rings, aluminum back shells and skin tops with an anti-bending spring.
The roller studs ensure easier coupling and longer operations due to low wear and tear of coupling ramps. Each cable has 4 audio channels, 2 RDNet control channels and 2 patchable spare lines. RCF offers a dedicated LK 25 fan out cable and two extension cables (10 m and 20 m).

SOLIDLY BUILT CABLES

RCF offers professional cables solidly built and easy to handle. All LK 25 and LKS 25 connections grant IP 67 protection and high strength for the intensive use and winding operations.

p.n. 12100006

- 63 Ampere Cekon power input with 5 m cable
- 32 Cekon outputs
- 4 x LKS 19 outputs
- 6 x Powercon outputs + 1 Powercon auxiliary output
- 24 x individual power line RCBOs
- 32 Ampere and Auxiliary individual front RCBOs
- Tour Grade flight case construction

CABLING AND TRANSPORTATION

Besides the speaker design, transportation and weather protection are an integral part of the system.
The TTL 55-A Kart allows four TTL 55-A speakers to be transported in vertical position.
All subwoofers are equipped with detachable front wheel boards, which makes the setup easy without having the rattling noise of wheels displayed towards the audience when using subs in cardioid setups.
RCF active sound reinforcement systems feature sophisticated weather protection to ensure a safe operation even under worse weather condition.

/ LKS 19 CONNECTORS

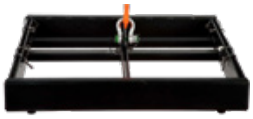
Thanks to the use of LKS 19 power distribution system with dedicated fan out cables, it is possible to connect TTL 55-A, TTL 33-A II and companion subwoofers from a single 19 pin connector. One single cable run can power a full sized line array column. RCF offers dedicated fan out cables for arrays and subwoofers as well as extension cables of 10 m or 20 m.

/ DEDICATED ACCESSORIES

A full range of custom accessories complements the RCF line array systems. Starting from suspension and stacking to cabling and transportation, RCF provides solutions for a practical assembly, ease of use and transportation from the smallest to the largest system.

ACCESSORIES

RIGGING



p.n. 13360207

FL-B LG TTL 55

Suspension bar for TTL 55-A Array system supplied with 4 quick release pins and accessory FL-B PK TTL55 increasing the degrees of inclination with respect to standard model

p.n. 13360120

FL-B TTL 55

Suspending bar for TTL55-A line array system (including Pickup Point and Quick Lock pins).

p.n. 13360052

FL-B TTL 33

Suspending bar for TTL 33-A and TTL 33-A II array systems.

p.n. 13360063

FL-B SH TTL 33

Short suspending bar for TTL 33-A and TTL 33-A II array system (including 2 Quick lock pins).

p.n. 13360131

FL-B LINK TTL 55-33-31

Transition Frame to connect up to 8 TTL 33-A/TTL 33-A II or TTL 31-A/TTL 31-A II under a TTL 55-A line array system.

p.n. 13360154

KRT-WH LIFT TTL 55

Lifting trolley for TTL55-A arrays.

p.n. 13360129

HOIST SPACING CHAIN TTL 55

Hoist Connector Chain to distance the motor and the chain bag from the suspending bar keeping in vertical balance the system.

p.n. 13360128

SAFETY CHAIN TTL 55

Safety chain for TTL55 array system.

p.n. 13360130

SHACKLE TTL55

3/4" Shackle ~ 4-3/4 tons for TTL55-A array system. To be added to the flybar accessory in case the pick up is made with 2 motors.

RIGGING

p.n. 13360127

FL-B PK TTL 55

To be added to the flybar when rigging with 2 motors. Pins included.

p.n. 13360143

SHACKLE TTL 33-31

5/8" Shackle ~ for TTL 33-A/TTL 33-A II, TTL 31-A/TTL 31-A II array systems. To be added to the flybar accessory in case the pick up is made with 2 motors.

p.n. 13360349

FL-B TTL 6

Flybar for TTL 6-A and TTL 6-AS.

p.n. 13360423

FL-B V TT 4

Vertical fly bar for TTL 4-A, TTW 4-A and TTP 4-A.

p.n. 13360425

FL-B H TT 4

Horizontal fly bar for TTL 4-A, TTW 4-A and TTP 4-A.

p.n. 13360428

FL-B LINK TT 4

Link bar to connect, in horizantal arrays, TTL 4-A and TTP 4-A to TTW 4-A adjusting to the correct interlink angle (increase of +12.5°).

p.n. 13360485

FL-BR TT 515

FL-BR Flying Mount Bracket for one TT 515-A speaker. It features robust brackets and hardware to attach the speaker to a ceiling or truss using clamps, hooks or shackles for chains and cables.

p.n. 13360427

V-BR TT 4

TTL 4-A, TTW 4-A and TTP 4-A vertical U braket with PIN.

p.n. 13360402

H-BR TT 10

TT 10-A horizontal U braket.

RIGGING

p.n. 13360399

H-BR TT 08 II

TT 08-A II horizontal U braket.

p.n. 13360401

V-BR TT 10

TT 10-A vertical U braket.

p.n. 13360400

V-BR TT 08 II

TT 08-A II vertical U braket with M10/PIN.

p.n. 13360459

H-BR TT 515

H-BR Horizontal Mount Bracket for TT 515-A speaker. It features robust brackets and hardware to mount the speaker to a wall, ceiling, or truss in horizontal configuration. Adjustable inclination allows obtaining the desired sound coverage.

p.n. 13360328

V-BR TT 22 II

TT 22-A II wall mount brackets with adjustable inclination.

p.n. 13360329

V-BR TT 25 II

TT 25-A II wall mount brackets with adjustable inclination.

p.n. 13360484

V-BR TT 515

V-BR Vertical Mount Bracket for TT 515-A speaker. It features robust brackets and hardware to mount the speaker system to a wall, ceiling, or truss in vertical configuration. Adjustable inclination allows obtaining the desired sound coverage.

p.n. 13360031

AC EB 4X

Kit including no.4 shouldered 10mm eye bolts

RIGGING

p.n. 13360030

AC DS4X

Kit of 4 hooks for suspending fly track bar.

p.n. 13360351

AZM-BR 2X

To be added for horizontal array control.

STACKING

p.n. 13360057

STCK-KIT TTL 33

Accessory to add to Fly bar TTL 33 for stacking option on sub.

Quick lock pins to be added.

p.n. 13360110

AC PRO-PM

Steel adjustable pole accessory for a satellite loudspeaker on a subwoofer. Both ends of the adjustable pole are fitted with an expanding mandrel system for a tight and vibration-free fit for the base and satellite speakers.

p.n. 13360034

AC PMA

Speaker pole mount.

p.n. 13360232

AC PMX

Speaker pole mount with pushbutton system and hand crank to avoid uncontrolled reverse motion. Locking screw provides additional safety.

p.n. 13360066

M20 PLATE

Threaded plate for M20 pole mount.

p.n. 13360458

PM-KIT TT 515

This adapter is used to mount loudspeakers on standard 35 mm diameter pole commonly used for loudspeaker stands. Pole not included.

ACCESSORIES

STACKING

p.n. 13360067

PM-KIT M20

M20 adjustable pole for speakers.

p.n. 13360068

AC PMA TT

Pole mount plate for TTS 18-A II and TTS 15-A.

p.n. 13360111

AC PRO-LF

Steel professional adapter sleeve for loudspeaker stands. Integrated expanding mandrel system which provides a tight and firm fit for the speaker.

p.n. 13360109

AC PRO-FS

Steel speaker floor stand with folding base and telescopic rod. Tube diameter 35mm. Load capacity up to 50kg.

TRANSPORTATION

p.n. 13360121

KRT-WH 4X TTL 55

Kart with wheels for 4 TTL55-A.

p.n. 13360059

KRT-WH 4X TTL 33

Kart to transport 4 TTL33-A/TTL33-A II modules with the fly-bar connected.

p.n. 13360384

KRT-WH TTS 18 II

Detachable front wheel board including 4 x 100 mm wheels.

p.n. 13360383

KRT-WH TTS 15

Kart to transport TTS 15-A. Detachable front wheel board including 4 x 100 mm wheels.

p.n. 13360140

CVR FRONT TTS 56

Quick lock wood front protection for TTS 56-A subwoofer. Compatible under the TTS 56-A cover.

COVERS

p.n. 13360134

CVR TTL 55

Single protection for one TTL 55 array module. Includes a soft bag on top to store cables and spare pins. To be used in conjunction with TTL 55-A single kart.

p.n. 13360135

CVR TTS 56

Protection cover for one TTL 56-A subwoofer. Best used in conjunction with TTL 56-A front wood cover.

p.n. 13360396

CVR TTS 18 II

Cover for TTS 18-A II

p.n. 13360395

CVR TTS 15

Cover for TTS 15-A

p.n. 13360326

CVR TT 25 II

Protection cover bag for TT 25-A II

p.n. 13360325

CVR TT 22 II

Protection cover bag for TT 25-A II

p.n. 13360404

CVR TT 10

Protection cover for TT 10-A.

p.n. 13360403

CVR TT 08 II

Protection cover bag for TT 08-A II.

COVERS

p.n. 13360482

CVR TT 515

Protection cover for TT 515-A.

p.n. 13360486

CVR TT 808

Protection cover for TT 808-AS.

p.n. 13360327

CVR TT 25-CXA

Protection cover bag for TT 25-CXA

p.n. 13360440

CVR TT 4

Protection cover for TTL 4-A, TTW 4-A and TTP 4-A.

p.n. 13360405

CVR TT 20-CXA

Protection cover for TT 20-CXA.

RAIN PROTECTIONS

p.n. 13360136

RP 1X TTL 55

Rubber rain cover protection for TTL55-A amplifiers.

p.n. 13360083

RP 1X TTL 33

Rubber rain cover protection for TTL 33-A and TTL 33-A II amplifiers.

p.n. 13360381

RP 1X HDL 6

1 x Rain Cover for TT 08-A II, TT 10-A, TT 20-CXA, TT515-A and TT 808-AS

p.n. 13360137

RP 1X TTS 56

Rubber rain cover protection for TTS 56-A amplifiers.

CONTROL AND AUDIO CABLES

p.n. 13360226

RDNET INPUTS TTL 33-A II

Accessory to convert TTL 33-A input board to TTL 33-A II.

p.n. 13360227

RDNET INPUTS TTL 31-A II

Accessory to convert TTL 33-A input board to TTL 33-A II.

p.n. 13360176

RDNET IN-OUT PLUG

RDNet control board for RDNet Ready speakers.

p.n. 12399016

CBL ETHERCON 0.7M

Ethercon link cable 0.6 m. Compatible with RDNet.

p.n. 12399017

CBL ETHERCON 1.5M

Ethercon link cable 1.5 m. Compatible with RDNet.

p.n. 12399035

CBL ETHERCON 3M

Ethercon link cable 3 m. Compatible with RDNet.

p.n. 12399018

CBL ETHERCON 5M

Ethercon link cable 5 m. Compatible with RDNet.

p.n. 12399019

CBL ETHERCON TO XLR F 0.2M

To adapts cable Ethercon to XLR female connector to RJ45 RDNet socket on the speaker.

ACCESSORIES

CONTROL AND AUDIO CABLES

p.n. 12399020

CBL ETHERCON TO XLR M 0.2M

To adapts cable Ethercon to XLR male connector to RJ45 RDNet socket on the speaker.

p.n. 12399023

CBL LK 25 MULTIPIN 10M

LK 25 male to female extension multi-pin cable. Length 10 m.

p.n. 12399022

CBL LK 25 MULTIPIN 20M

LK 25 male to female extension multi-pin cable. Length 20 m.

p.n. 12399021

CBL LKS 25-2 FANOUT

LKS 19 male connector to 6x Neutrik Powercon.

POWER DISTRIBUTION

p.n. 13360138

POWER CABLE X6 TTL 55-A

AC Cable to power up to 6 TTL 55-A or TTS 56-A amplifiers.

p.n. 12399024

CBL LKS 19 ARRAY FANOUT

Array fan out cable 0.5 - 1.3 - 2.1 - 2.9 - 3.7 - 4.5 m.

p.n. 12399025

CBL LKS 19 SUB FANOUT

Sub fan out cable 2X 2.5 - 2X 5.0 - 2X 10.0 m.

POWER DISTRIBUTION

p.n. 12399026

CBL LKS 19 BREAKOUT

Breakout box with LKS 19 Input/Output to 6x powercon.

p.n. 12399146

CBL LKS 19 POWER 20M

LKS 19 male to female extension power cable, length 20 m. Feeds 6 power lines.

p.n. 12399027

CBL LKS 19 POWER 10M

LKS 19 male to female extension power cable, length 10 m. Feeds 6 power lines.

p.n. 12399028

CBL POWERCON LINK 10M

Powercon link cable 10 m.

p.n. 12399029

CBL POWERCON LINK 5M

Powercon link cable 5 m.

p.n. 12399030

CBL POWERCON LINK 1.5M

Powercon link cable 1.5 m.

p.n. 12399031

CBL POWERCON LINK 0.7M

Powercon link cable 0.7 m.

p.n. 13360145

CBL POWER BOX 6X

AC Stage Box to connect 1 x 19 pin LKS female connector. Full compatibility with Socapex SL 419 series. 6 x 20 Amp fuse protections. 1 x IEC 32 Amp 3-phase male connector.

QUICK LOCK PINS (4X)

p.n. 13360132
QL-PIN D11.1 L44.5 4X

Spare set in case original pins are damaged or lost.

PRODUCT	POSITION	TYPOLOGY
FL-B TTL 55	FRONT	LINK
FL-B LINK TTL 55-33-31	FRONT	LINK

p.n. 13360219
QL-PIN D9.6 L21.3 4X

4 quick lock pins kit.

PRODUCT	POSITION	TYPOLOGY
TTL 6-A	REAR	LINK
TTL 6-AS	REAR	LINK
V-BR TT 1	SIDE	LOCK
V-BR TT 2	SIDE	LOCK
V-BR TT 5	SIDE	LOCK
V-BR TT 22 II	SIDE	LOCK
V-BR TT 25 II	SIDE	LOCK

p.n. 13360122
QL-PIN D9.6 L25.4 4X

4X pin set.
Spare set in case original pins are damaged or lost.

PRODUCT	POSITION	TYPOLOGY
TTL 55-A	FRONT	LINK
TTL 55-A	REAR	LINK
TTL 55-A	FRONT	LOCK
TTL 36-AS	FRONT	LINK
TTL 36-AS	FRONT	LOCK
TTL 36-AS	REAR	LINK

p.n. 13360222
QL-PIN D9.6 L31 4X

4X pin set.
Spare set in case original pins are damaged or lost.

PRODUCT	POSITION	TYPOLOGY
TTL 6-A	FRONT	LINK
TTL 6-AS	FRONT	LINK
FL-B TTL 6	FRONT	LOCK
FL-B TTL 6	REAR	LINK

QUICK LOCK PINS (4X)

p.n. 13360060
QL-PIN D9.6 L25.4 4X

4 quick lock pins kit for TTL 33-A array system.

PRODUCT	POSITION	TYPOLOGY
TTL 33-A II	REAR	LINK
TTL 33-A II	FRONT	LOCK
KRT-WH 4X TTL 55	FRONT	LINK
FL-B TTL 33	FRONT	LOCK
FL-B SH TTL 33	FRONT	LOCK

p.n. 13360077
QL-PIN D7.9 L19 4X

4 quick lock pins for TTL 31-A and NXL 23-A array system.

PRODUCT	POSITION	TYPOLOGY
TTL 31-A II	FRONT	LINK
TTL 31-A II	REAR	LINK
TTL 31-A II	FRONT	LOCK
FL-B TTL 31	FRONT	LOCK
TTL 12-AS	FRONT	LINK
TTL 12-AS	REAR	LINK

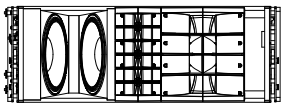
p.n. 13360335
QL-PIN D11.2 L31 4X

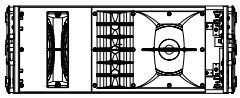
4 x side pin set for TTW 4-A, TTL 4-A and TTP 4-A.

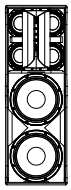
PRODUCT	POSITION	TYPOLOGY
TTW 4-A	SIDE	LINK
TTL 4-A	SIDE	LINK
TTP 4-A	SIDE	LINK

TECHNICAL SPECIFICATIONS

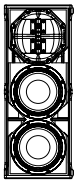
ACTIVE SPEAKERS

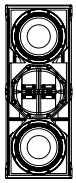


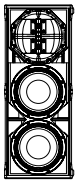


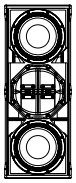


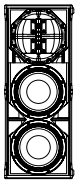
	TTL 55-A	TTL 33-A II	TTL 6-A
	RDNET ON BOARD	RDNET ON BOARD	RDNET ON BOARD
	p.n. 13000188 (220-240V) p.n. 13000189 (115V)	p.n. 13000360 (220-240V) p.n. 13000361 (115V)	p.n. 13000475 (220-240V) p.n. 13000476 (115V)
ACOUSTICAL SPEC.			
Frequency Response	50 Hz ÷ 20 kHz	60 Hz ÷ 20 kHz	45 Hz ÷ 20 kHz
Max SPL	143 dB	135 dB	139 dB
Horizontal coverage angle	90°	100°	90°
Vertical coverage angle	max 7°	max 15°	30°
Compression Driver	3 x 1.5" neo, 2.5" v.c.	3 x 1.0" neo, 1.5" v.c.	1.4" neo, 3.0" v.c.
Midrange	10" neo, 3.5" v.c.	8" neo, 2.5" v.c.	4 x 6.0" neo, 2.0" v.c.
Woofer	2 x 12" neo, 4" v.c.	2 x 8" neo, 2.5" v.c.	2 x 12" neo, 3.0" v.c.
INPUT SECTION			
Input connector	xlr, RDNet Ethercon	xlr, RDNet Ethercon	xlr, RDNet Ethercon
Output connector	xlr, RDNet Ethercon	xlr, RDNet Ethercon	xlr, RDNet Ethercon
Input sensitivity	4 dBu	-2 dBu / + 4 dBu	+ 4 dBu
PROCESSOR SECTION			
Crossover frequencies	320 Hz - 1300 Hz	400 Hz - 1800 Hz	200, 800 Hz
Protections	thermal, excurs., rms	thermal, hf	thermal, rms
Limiter	soft limiter	fast limiter	soft limiter
Controls	Dsp controlled	hf correction, cluster size, HPF	Close, Linear, Far, 2x Presets
AMPLIFIER			
Total power (RMS)	3500 Watt	1250 Watt	2200 Watt
High frequencies (RMS)	500 Watt	250 Watt	400 Watt
Mid frequency (RMS)	1000 Watt	500 Watt	700 Watt
Low frequencies (RMS)	2 x 1000 Watt	500 Watt	1100 Watt
Cooling	convection/forced	convection/forced	convection
Connection	Powercon in-out	Powercon in-out	Powercon in-out
PHYSICAL SPEC.			
Height	380 mm (15")	290 mm (11.42")	1100 mm (43.31")
Width	1020 mm (40")	760 mm (30.0")	378 mm (14.88")
Depth	550 mm (21.6")	441 mm (17.36")	468 mm (18.42")
Weight	70.5 Kg (155.43 lbs)	33 Kg (72.75 lbs)	53 Kg (116.84 lbs)
Cabinet	baltic birch plywood	baltic birch plywood	baltic birch plywood
Hardware	array fly-ware	array fly-ware	Pole mount, integrated
Handles	2 side	2 side	2 side

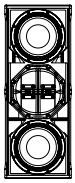

TTL 4-A


TTL C4-A


TTP 4-A


TTP C4-A


TTW 4-A


TTW C4-A

TTL 4-A

RDNET ON BOARD

p.n. 13000584 (90-240V)
p.n. 13000672 (90-240V) TTL C4-A

45 Hz ÷ 20 Hz
135 dB
100°
25°
1.5" neo, 4.0" v.c.
-
2 x 10" neo, 2.5" v.c.
xlr, RDNet On Board
xlr, RDNet On Board
+ 4 dBu
900 Hz
thermal, rms
soft limiter
selectable preset, volume, delay
1600 Watt
600 Watt
-
1000 Watt
convection
Powercon in-out
825 mm (32.48")
316 mm (12.44")
369 mm (14.53")
30.4 Kg (67.02 lbs)
baltic birch plywood
Instal./rental fittings
2 side, 2 rear

TTP 4-A

RDNET ON BOARD

p.n. 13000604 (90-240V)
p.n. 13000670 (90-240V) TTP C4-A

45 Hz ÷ 20 Hz
135 dB
60°
25°
1.5" neo, 4.0" v.c.
-
2 x 10" neo, 2.5" v.c.
xlr, RDNet On Board
xlr, RDNet On Board
+ 4 dBu
900 Hz
thermal, rms
soft limiter
selectable preset, volume, delay
1600 Watt
600 Watt
-
1000 Watt
convection
Powercon in-out
825 mm (32.48")
316 mm (12.44")
369 mm (14.53")
30.4 Kg (67.02 lbs)
baltic birch plywood
Instal./rental fittings
2 side, 2 rear

TTW 4-A

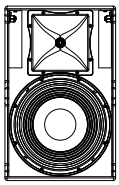
RDNET ON BOARD

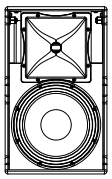
p.n. 13000573 (90-240V)
p.n. 13000671 (90-240V) TTW C4-A

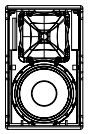
45 Hz ÷ 20 Hz
134 dB
100°
50°
1.5" neo, 4.0" v.c.
-
2 x 10" neo, 2.5" v.c.
xlr, RDNet On Board
xlr, RDNet On Board
+ 4 dBu
900 Hz
thermal, rms
fast limiter
selectable preset, volume, delay
1600 Watt
600 Watt
-
1000 Watt
convection
Powercon in-out
825 mm (32.48")
316 mm (12.44")
369 mm (14.53")
30.4 Kg (67.02 lbs)
baltic birch plywood
Instal./rental fittings
2 side, 2 rear

TECHNICAL SPECIFICATIONS

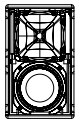
ACTIVE SPEAKERS

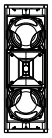


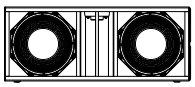




	TT 25-A II	TT 22-A II	TT 10-A
	RDNET ON BOARD	RDNET ON BOARD	RDNET ON BOARD
	p.n. 13000446 (220-240V) p.n. 13000447 (115V)	p.n. 13000444 (220-240V) p.n. 13000445 (115V)	p.n. 13000549 (220-240V) p.n. 13000559 (115V)
ACOUSTICAL SPEC.			
Frequency Response	50 Hz ÷ 20 kHz	50 Hz ÷ 20 kHz	60 Hz ÷ 20 kHz
Max SPL	134 dB	131 dB	130 dB
Horizontal coverage angle	90°	90°	90°
Vertical coverage angle	60°	60°	70°
Compression Driver	1.5" neo, 4.0" v.c.	1.5" neo, 3.0" v.c.	1" neo, 1.75" v.c.
Midrange	-	-	-
Woofer	15" neo, 3.5" v.c.	12" neo, 3.5" v.c.	10" neo, 2.5" v.c.
INPUT SECTION			
Input connector	xlr, RDNet on-board	xlr, RDNet on-board	xlr, RDNet on-board
Output connector	xlr, RDNet on-board	xlr, RDNet on-board	xlr, RDNet on-board
Input sensitivity	-2 dBu/+4 dBu	-2 dBu/+4 dBu	+ 4 dBu
PROCESSOR SECTION			
Crossover frequencies	750 Hz	800 Hz	900 Hz
Protections	thermal, HF	thermal, HF	thermal, rms
Limiter	fast limiter	fast limiter	fast limiter
Controls	8 selectable presets	8 selectable presets	
AMPLIFIER			
Total power (RMS)	1100 Watt	1100 Watt	1000 Watt
High frequencies (RMS)	300 Watt	300 Watt	300 Watt
Mid frequency (RMS)	-	-	-
Low frequencies (RMS)	800 Watt	800 Watt	700 Watt
Cooling	convection	convection	convection
Connection	Powercon in-out	Powercon in-out	Powercon in-out
PHYSICAL SPEC.			
Height	670 mm (26.38")	600 mm (23.62")	490 mm (19.29")
Width	425 mm (16.73")	365 mm (14.37")	306 mm (12.04")
Depth	425 mm (16.73")	379 mm (14.92")	299 mm (11.77")
Weight	26 Kg (57.32 lbs)	22.6 Kg (49.82 lbs)	11.5 Kg (25.35 lbs)
Cabinet	Polyurea coated Baltic birch	Polyurea coated Baltic birch	baltic birch plywood
Hardware	6 Fly tracks, q. lock, p. mount	6 Fly tracks, q. lock, p. mount	Instal./rental fittings
Handles	2 side	2 side	1 top, 1 bottom



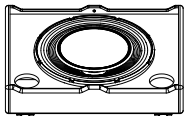


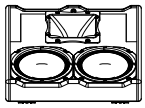


TT 08-A II	TT 515-A	TT 808-AS
RDNET ON BOARD	RDNET ON BOARD	RDNET ON BOARD
p.n. 13000547 (220-240V) p.n. 13000558 (115V)	p.n. 13000686 (220-240V) p.n. 13000719 (115V)	p.n. 13000693 (220-240V) p.n. 13000731 (115V)
65 Hz ÷ 20 kHz	70 Hz ÷ 20 kHz	40 Hz ÷ 400 Hz
128 dB	127 dB	129 dB
90°	100°	-
70°	70°	-
1" neo, 1.75" v.c.	1" neo, 1.75" v.c.	-
-	-	-
8" neo, 2.5" v.c.	2 x 5" woofer, 2" v.c.	2 x 8" neo, 2.5" v.c.
xlr, RDNet on-board	xlr, RDNet on-board	xlr, RDNet Ethercon
xlr, RDNet on-board	xlr, RDNet on-board	xlr, RDNet Ethercon
+ 4 dBu	-2 dBu / + 10 dBu	-2 dBu / + 10 dBu
900 Hz	1200 Hz	-
thermal, rms	excurs.	excurs.
fast limiter	fast limiter	fast limiter
	Bypass, Linear/High Pass, Volume, RDnet on boar	gain, equalization, bypass on board
1000 Watt	1000 Watt	1000 Watt
300 Watt	300 Watt	-
-	-	-
700 Watt	700 Watt	2 x 500 Watt
convection	convection	convection
Powercon in-out	Powercon in-out	Powercon in-out
420 mm (16.54")	456 mm (17.95")	243.5 mm (9.59")
270 mm (10.63")	154 mm (6.06")	603.5 mm (23.76")
278 mm (10.94")	237.5 mm (9.35")	430 mm (16.93")
11 Kg (24.25 lbs)	9,8 Kg (21.61 lbs)	20 Kg (44.09 lbs)
baltic birch plywood	baltic birch plywood	baltic birch plywood
Instal./rental fittings	multi-functional	multi-functional
1 top, 1 bottom	Top, bottom	2 x side

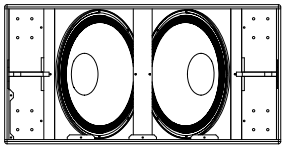
TECHNICAL SPECIFICATIONS

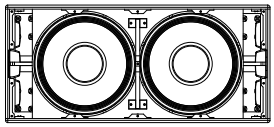
ACTIVE SPEAKERS

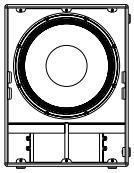


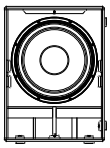


	TT 25-CXA	TT 20-CXA
	RDNET ON BOARD	RDNET ON BOARD
	p.n. 13000448 (220-240V) p.n. 13000449 (115V)	p.n. 13000560 (220-240V) p.n. 13000544 (115V)
ACOUSTICAL SPEC.		
Frequency Response	50 Hz ÷ 20 Hz	60 Hz ÷ 20 Hz
Max SPL	133 dB	131 dB
Horizontal coverage angle	60°	90°
Vertical coverage angle	60°	70°
Compression Driver	Coaxial 1.5" neo, 2.5" v.c	1.5" neo, 3" v.c.
Midrange	-	-
Woofer	Coaxial 15" neo, 3.5" v.c	2 x 8" neo, 2.5" v.c.
INPUT SECTION		
Input connector	xlr, RDNet on-board	xlr, RDNet on-board
Output connector	xlr, RDNet on-board	xlr, RDNet on-board
Input sensitivity	-2 dBu/+4 dBu	-2 dBu/+4 dBu
PROCESSOR SECTION		
Crossover frequencies	900 Hz	900 Hz
Protections	thermal, HF	thermal, HF
Limiter	soft limiter	fast limiter
Controls	8 selectable presets	bypass, linear/high pass, volume
AMPLIFIER		
Total power (RMS)	1100 Watt	1000 Watt
High frequencies (RMS)	300 Watt	300 Watt
Mid frequency (RMS)	-	-
Low frequencies (RMS)	800 Watt	700 Watt
Cooling	convection	convection
Connection	Powercon in-out	Powercon in-out
PHYSICAL SPEC.		
Height	353 mm (13.9")	318 mm (12.52")
Width	580 mm (22.83")	445 mm (17.52")
Depth	486 mm (19.13")	450 mm (17.72")
Weight	18 Kg (39.68 lbs)	14 Kg (30.86 lbs)
Cabinet	Polyurea coated B. birch	baltic birch plywood
Hardware	pole mount	pole mount
Handles	1 top	1 top









TTS 56-A	TTS 36-A	TTS 18-A II	TTS 15-A
RDNET ON BOARD	RDNET ON BOARD	RDNET ON BOARD	RDNET ON BOARD
p.n. 13000190 (90-240V)	p.n. 13000272 (90-240V)	p.n. 13000545 (90-240V)	p.n. 13000543 (90-240V)
30 Hz ÷ 100 Hz	35 Hz ÷ 120 Hz	30 Hz ÷ 400 Hz	40 Hz ÷ 400 Hz
145 dB	143 dB	137 dB	134 dB
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
2 x 21" neo, 4.5" v.c.	2 x 18" neo, 4.5" v.c.	18" neo, 4" v.c.	15" neo, 3" v.c.
xlr, RDNet Ethercon	xlr, RDNet Ethercon	xlr, RDNet on-board	xlr, RDNet on-board
xlr, RDNet Ethercon	xlr, RDNet Ethercon	xlr, RDNet on-board	xlr, RDNet on-board
-2 dBu / + 10 dBu	-2 dBu / + 10 dBu	+ 4 dBu	+ 4 dBu
Hi-Pass Frequencies: 30-45 Hz	Hi-Pass Frequencies: 30-45 Hz	HPF* 30 Hz, 40 Hz	HPF* 40 Hz, 50 Hz
Low-Pass Frequencies: 60-90 Hz	Low-Pass Frequencies: 60-90 Hz	LPF** 50 Hz to 100 Hz	LPF** 60 Hz to 400 Hz
thermal, excurs., rms	thermal, excurs., rms	thermal, rms	thermal, rms
soft limiter	soft limiter	fast limiter	fast limiter
Dsp controlled	Dsp controlled	Gain, Eq, Preset Switch, Output Delay	Gain, Eq, Preset Switch, Output Delay
6800 Watt	4000 Watt	2800 Watt	2200 Watt
-	-	-	-
-	-	-	-
2 x 3400 Watt	2 x 2000 Watt	2800 Watt	2200 Watt
convection/forced	convection/forced	convection/forced	convection/forced
Powercon in-out	Powercon in-out	Powercon in-out	Powercon in-out
590 mm (23.22")	525 mm (20.66")	708 mm (27.87")	600 mm (23.62")
1170 mm (46.06")	1170 mm (46.06")	540 mm (21.26")	445 mm (17.52")
988 mm (38.89")	850 mm (33.46")	732 mm (28.82")	633 mm (24.92")
122.8 Kg (270.73 lbs)	100 Kg (220.46 lbs)	56.8 Kg (125.22 lbs)	41.3 Kg (91.05 lbs)
baltic birch plywood	baltic birch plywood	baltic birch plywood	baltic birch plywood
Steel bars x fork-lift, 4 wheels	Steel bars x fork-lift, 4 wheels	array fly-ware	array fly-ware
6 side	6 side	2 side	2 side

* Hi-Pass Frequencies. ** Low-Pass Frequencies

PROJECTS AND CUSTOM DESIGNS

EASE DATA SOFTWARE

STATE OF THE ART FACTORY

RCF is an integrated designer and manufacturer, with the ability to provide top quality transducers or complete speaker systems, both passive and active, with integrated digital amplifier assemblies.
This characteristic is a major advantage in terms of product performance and competitiveness, since each time a new speaker cabinet is planned, the design of its transducer is carried-out simultaneously, in order to deliver uncompromised quality from the system.

PREDICTION SOFTWARE PACKAGE

In order to assist with the set up procedures for the TT+ Line Array Systems, RCF has developed a complete prediction software package. The software enables a complete two dimensional simulation of the behaviour of the cabinets arrays and also suggest the correct subwoofers combination. The system curvature angles and the sound projection data are computed with maximum sound pressure levels for the given design.
The rigging menu provides data for weight, centre of gravity and length of the array configuration. Rigging points and rigging hardware configurations are also computed.

SYSTEMS MODELING - EASE SIMULATIONS

An audio system design for environments like stadiums, sports arenas, theatres, auditoriums, airports, places of worship -as well as concerts and live events- is often carried out taking into consideration the acoustics of the environment, the architectural and installation constraints, the maintenance costs and, on top of everything, the user's requirements. RCF R&D also has a dedicated automatic system for the high resolution measurements of the acoustical 'footprint' of the speakers, based on 360° balloon (i.e. GLL speaker data) required by EASE acoustic modelling software. This data is available both from the RCF website and the acoustic simulation software company.

ENGINEERING SUPPORT GROUP

The extensive range of RCF products enables the Engineering Support Group to submit multiple design solutions optimised and tailored according to budget and the requested performance spec. The design proposals are based on supplied venue details, including environmental acoustic simulation, product list, block diagram and speaker coverage mapping.

WEBSITE DOCUMENTATION

The RCF Website provides Manuals, Specsheet, Drawings, EASE data and GLL files, all available for download.

CUSTOM PRODUCTS AND MONITORING OPTIONS

All TT+ products are available with custom solutions to fulfil every system specification or requirement. Special optional control boards have been developed for various requirements like large systems, real time monitoring, fault reports, and GP inputs and outputs.

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The data and designs are not binding; RCF reserves the right to modify the data and designs at any time and without previous notice.

Note to specifications: audio power data refers to peak power

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