RTS Wireless Intercom

RTS is an industry leader in the design and manufacture of intercom solutions. From the Advanced Digital Audio Matrix (ADAM) systems used to coordinate major network broadcasts of the world's largest events to small-format systems used for in-house productions, RTS is dedicated to innovating the future of global communications.

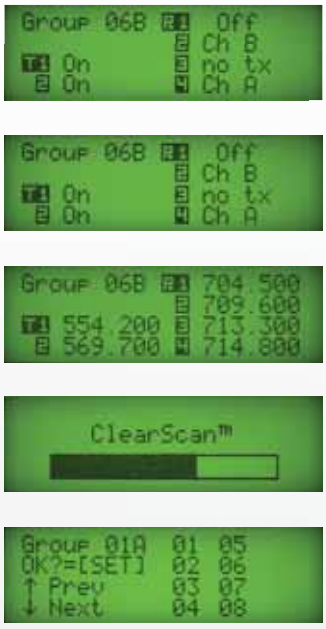
TECHNOLOGY

What good is technology if you can't make it work for you? So often today in our industry new products come out that are more complicated to use and are consequently a hindrance rather than a tool. RTS has the answer. The RTS BTR-80N, BTR-800 and BTR-700 wireless intercom systems are extremely powerful and flexible, yet offer a simplified user interface that lets you get started right out of the box.

Bright, clear, readable LCD displays put all of the features and information you need to access right at your fingertips. Without layer after layer of menus to deal with, the graphical user interface allows even new users to access, change and store system settings as well as frequency selections.

Basic primary screens run the entire operating system with various supplemental screens for other tasks. The status of every beltpack in the system, as well as operating frequencies and group/channel status, is readily available.

The powerful enhanced ClearScan auto frequency selection feature is easily activated and progress is easily monitored on the ClearScan progress screen. Results are then displayed and users have the option to accept, reject or modify the results. This dynamic feature allows system frequency selection and set up in just minutes in a new or unknown venue location.



Screen samples of BTR-800 graphical user interface

BTR-80N 2-Channel UHF Synthesized Wireless Intercom System

The BTR-80N narrow band wireless intercom system offers the most comprehensive, user-friendly and versatile set of features available in wireless intercom systems anywhere in the world. Providing an unprecedented 25 kHz of modulated band width, the BTR-80N narrow band system allows more users per channel in the cramped UHF spectrum. Combining the award-winning performance of the BTR-800 wireless intercom system with revolutionary narrow band technology and additional innovative features, the BTR-80N is the best-performing, most versatile wireless intercom system ever made.

While providing excellent audio performance, the narrow band system is based on the award-winning and world leading BTR-800 wireless intercom system and provides all of the standard features of the BTR-800 system, such as DSP and Intelligent Power Control, and more. The BTR-80N narrow band systems offers up to four full-duplex wireless TR-80N or TR-82N beltpacks per base station. An unlimited number of additional beltpacks can be added in half-duplex operation. Additional features include selectable transmitter power output, selectable receiver squelch control, RF meter display on base station and beltpack displays, remote battery indicators on base station display, low battery tone indicator on beltpack, AC or DC power input on base station, simultaneous 2-wire and 4-wire operation, and more.

- **UHF Operation** — The BTR-80N, TR-80N and TR-82N operate in the UHF band from 482 to 722 MHz and operate in specific 18 MHz frequency bands. An industry-leading 32 frequency band combinations are available to order.
- **Frequency Agile** — Choose from 1440 user selectable frequencies in 25 kHz increments or select frequency plans from preset intermodulation-avoiding groups. The independent 18 MHz frequency bands provide 720 TX and 720 RX selectable frequencies.
- **Selectable Output Power** — The BTR-80N, TR-80N and TR-82N provide a user-selectable transmit output power. The BTR-80N has a maximum output power of 249 mW down to 10 mW with an additional setting to turn off transmit power to each individual transmitter. The TR-80N and TR-82N have a maximum output power of 100 mW down to 5 mW with an additional setting to turn on the auto Intelligent Power Control feature to provide outstanding "near-far" operation.
- **Engineering Defined Frequency Plans** — Each narrow band system comes with 36 engineering selected, intermodulation-avoiding groups of channel plans that allows the user to get the system operational right out of the box.
- **Two-Channel Intercom Access** — Hardwired intercom channels that are run to the BTR-80N base station can be 2-wire (partyline) or 4-wire (digital matrix). These intercom inputs to the BTR-80N can be set up to be individual per channel or they can be mixed on a channel. Individual adjustment for in and out level control are provided in the BTR-80N front panel user interface.
- **Flexible Number of Beltpack Users per Base Station** — In full-duplex operation, the BTR-80N will support up to 4 TR-80N or TR-82N beltpacks. By placing TR-80N or TR-82N beltpacks in Push-to-Transmit operation (half-duplex), you can expand your system to multiple users on one BTR-80N base station. When the TR-80N or TR-82N are placed in Push-to-Transmit operation, the intelligence of the narrow band system provides a First-On-Latch-Out feature that will not allow the beltpacks to interfere with each other when operating on the same frequency. This feature provides future expansion possibilities and will allow multiple users on the same channel whose primary function is to listen all the time and talk infrequently.
- **Enhanced ClearScan Frequency Scan and Auto Selection** — This powerful frequency scanning and selection feature is easily activated and progress is easily monitored on the BTR-80N, TR-80N and TR-82N display screens. Results are provided and users have the option to review, accept or reject the results. This dynamic feature allows system frequency selection and set up in just minutes in a new or unknown venue.
- **Battery Options** — The TR-80N and TR-82N beltpacks can operate from standard alkaline AA batteries or from the optional NiMH battery packs. Operation on alkaline batteries provides up to 12 hours of continuous duty and up to 10 hours on NiMH. Drop-in chargers are available in single and four-gang configurations.

- User-adjustable receiver squelch control
- RF meter on BTR-80N, TR-80N and TR-82N
- Beltpack battery gauge on BTR-80N display
- Ability to turn off remote beltpack transmitter from base station
- BTR-80N is easily adapted for two transmitter output
- BTR-80N is designed for AC or DC power input
- Auxiliary audio input is assignable with level control
- "Fifth person" talk/listen user station at the BTR-80N base station
- Wireless talk around (broadcast ISO)
- Stage announce output with relay closure
- Intelligent power control
- TR-82N dual listen operation
- Cast magnesium beltpacks
- Beltpack low battery indicator with tone warning

BTR-800 2-Channel UHF Synthesized Wireless Intercom

the most versatile wireless intercom ever

- **TR-800 and TR-825 Wireless Beltpacks** — Four beltpacks per base station. Each BTR-800 base station can support up to four beltpacks in full-time transmit, full-duplex operation. Multiple base station/beltpack systems can be used together to meet the needs of virtually any wireless communications application.
- **Frequency Agile** — Choose from 1440 user selectable frequencies using the BTR-800 graphical user interface. Frequencies can be selected from factory preset groups of intermode free choices or any frequency in 25 kHz increments. Select from 720 TX and 720 RX frequencies each from independent 18 MHz operational bands.
- **UHF Operation** — The BTR-800, TR-800 and TR-825 operate in the UHF band from 470 to 722 MHz. Bases and beltpacks operate in specific 18 MHz operational bands.
- **Enhanced ClearScan Frequency Auto Selection and Graphical User Interface.** (See page 3.)
- **Intermodulation-Free Factory Selected Groups** — Each BTR-800 system comes with 24 factory-selected, intermodulation-avoiding groups that allows the user to get started right out of the box.
- **Two-Channel Intercom Access From Each Beltpack** — Hardwired channels are run to the BTR-800 base station and can be 2-wire, 4-wire or mixed. The BTR-800 is fully compatible with AudioCom, RTS and Clear-Com hardwired intercom systems.
- **Dual Listen Operation** — Each TR-825 beltpack provides two volume controls; one for each intercom channel that allows for individual level control. Listen to production in one ear and tech in the other ear. The TR-825 can operate in either stereo (split-feed) or mono mode.

- Frequency agile
- 1440 selectable frequencies
- Two independent intercom channels
- ClearScan auto frequency selection
- Stage announce output with relay closure
- Wireless talk around (broadcast ISO)
- Dual Listen Operation (TR-825)
- Four beltpacks per base station
- Cast magnesium beltpacks

- **Stage Announce Output With Relay Closure** — Each beltpack can initiate the stage announce feature. The user's audio is routed out the back of the base station via a 3-pin XLR connector. The signal is dry, line level +8 dB and adjustable. A convenient relay closure is provided for triggering two-way radios, IFB sends, green-room speakers or any other closure activated device.
- **Wireless Talk Around (Broadcast ISO)** — Each beltpack can momentarily route its audio only to the other wireless beltpacks on its current channel with the push of a button. The user's audio is lifted off of the intercom bus so that only the other wireless beltpacks can hear.
- **"Fifth Person" Talk/Listen Station At Base** — The BTR-800 base station features a full talk/listen headset station so that an additional user can communicate on one, the other or both intercom channels at once.
- **Intelligent Power Control** — This breakthrough technology takes system range and performance to a whole new level. Each beltpack senses when it is close to the base station and intelligently reduces its output by 10 dB. This effectively eliminates overloading the base station receiver front end, which is the primary cause for the "near-far" desensing problem experienced in other wireless intercoms.
- **Cast Magnesium Beltpacks** — TR-800 and TR-825 beltpacks are constructed of extremely light, strong and durable cast magnesium. Using magnesium substantially decreases the weight of the beltpack while assuring the utmost ruggedness and durability.
- **Two Great Battery Options** — TR-800 and TR-825 beltpacks can be operated from standard alkaline AA batteries that provide up to 14 hours of continuous duty operation. For applications where rechargeable batteries are required, optional NiMH battery packs are available. NiMH batteries do not develop harmful memories like NiCads and offer up to 12 hours of operation. Drop-in chargers are also available in single and four-gang configurations.
- **Detachable Beltpack Antennas** — TR-800 and TR-825 beltpacks feature detachable antennas that utilize stud type threaded connectors that do not have a fragile center pin to break off or bend. Detachable antennas make storage or shipping easy.

TR-825 beltpack

TR-800 beltpack

BTR-700 Single-Channel UHF Synthesized Wireless Intercom

the most versatile wireless intercom ever

- **TR-700 Wireless Beltpacks** — Four beltpacks per base station. Each BTR-700 base station can support up to four beltpacks in full-time transmit, full duplex operation. Multiple base station/beltpack systems can be used together to meet the needs of virtually any wireless communications application.
- **Frequency Agile** — Choose from 1440 user selectable frequencies using the BTR-700 graphical user interface. Frequencies can be selected from groups of intermode free choices, or any frequency in 25 kHz increments. Select from 720 TX and 720 RX frequencies each from independent 18 MHz operational bands.
- **UHF Operation** — Both the BTR-700 and the TR-700 operate in the UHF band from 518 to 722 MHz. Bases and beltpacks operate in specific 18 MHz operational bands.
- **Enhanced ClearScan Frequency Auto Selection And Graphical User Interface** — (See page 3.)
- **Intermodulation-Free Factory Selected Groups** — Each BTR-700 system comes with 24 factory-selected, intermodulation-avoiding groups that allows the user to get started right out of the box.
- **"Fifth Person" Talk/Listen Station At Base** — The BTR-700 base station features a full talk/listen headset station so that an additional user can communicate on the intercom channel.
- **Intelligent Power Control** — This breakthrough technology takes system range and performance to a whole new level. Each beltpack senses when it is close to the base station and intelligently reduces its output by 10 dB. This effectively eliminates overloading the base station receiver front end, which is the primary cause for the "near-far" desensing problem experienced in other wireless intercoms.

- Frequency agile
- 1440 selectable frequencies
- ClearScan auto frequency selection
- Four beltpacks per base station
- Cast magnesium beltpacks

TR-700 beltpack

- **Cast Magnesium Beltpacks** — TR-700 beltpacks are constructed of extremely light, strong and durable cast magnesium. Using magnesium substantially decreases the weight of the beltpack while assuring the utmost ruggedness and durability.
- **Detachable Beltpack Antennas** — TR-700 beltpacks feature detachable antennas that utilize stud type threaded connectors that do not have a fragile center pin to break off or bend. Detachable antennas make storage or shipping easy.
- **Two Great Battery Options** — TR-700 beltpacks can be operated from standard alkaline AA batteries that provide over 14 hours of continuous duty operation. For applications where rechargeable batteries are required, optional NiMH battery packs are available. NiMH batteries do not develop harmful memories like NiCads and offer a full 12 hours of operation. Drop-in chargers are also available in single and four-gang configurations.

NiMH Battery Charger

Available in either 1 bay or 4 bay, these chargers provide quick charging of your NiMH battery packs.

BTR-240 2.4 GHz Wireless Base System

With best-in-class audio performance and latency, license-free operation, and an array of user-friendly features, wireless intercom has never been easier.

Connection flexibility:

- The BTR-240 gives you a wide range of interfacing options so you can build a system that precisely fits your needs, whether over a wired or wireless network.
- A 2- and 4-wire intercom interface and XLR in/out for connecting to general audio systems gives you the flexibility to utilize communications equipment from across a wide range of manufacturers.
- In addition to connecting to a WiFi network in a large facility, the BTR-240 can serve as a backup via an Ethernet/Cat-5 wired connection. Now facilities like schools, houses of worship, and theatres can easily extend their existing partylines into the wireless world.

- License Free 2.4 GHz, IEEE 802.11b WLAN technology
- Expand coverage using BTR-24 access points
- Multi-level security and audio encryption
- 2-wire and 4-wire intercom interface
- ClearScan channel selection
- Auto-select Electret or Dynamic microphone
- Choice of two (2) independent or simultaneous audio channels
- TR-240 beltpacks operate wired or wireless
- Eight (8) full-duplex beltpacks with virtually unlimited number of half-duplex beltpacks
- TR-240 beltpacks can operate as an access point
- Multiple antenna options and accessories
- Durable ABS construction
- Easy-to-read LCD indicates system status
- Removable Li-Ion batteries with wide temperature range and up to eight (8) hours of operation

ACS-101 & APS-1

ACS-101*

Broadband Antenna Combiner/Splitter

The ACS-101 amplified broadband combiner/splitter makes it possible to operate 10 UHF wireless intercom base transceivers using only two antennas. In addition to accommodating ten transmit and 10 receiver antennas, it provides power connection for up to 10 base transceivers. It also features excellent output isolation (better than SC-600). The ACS-101 is necessary in multi-frequency systems to prevent intermodulation. The ACS-101 is an ideal complement to your BTR-700, BTR-800 or BTR-80N (BTR-800 / BTR-80N set to normal output power).

* ACS-101 available in select countries

- Two models to choose from
- Reduces 20 antennas to two (ACS-101) or reduces two antennas to one (APS-1)
- Extremely low intermode production
- Compatible with BTR-700 and BTR-800 systems
- Handles both transmit and receive
- Rugged and durable construction
- One year warranty
- Made in the USA

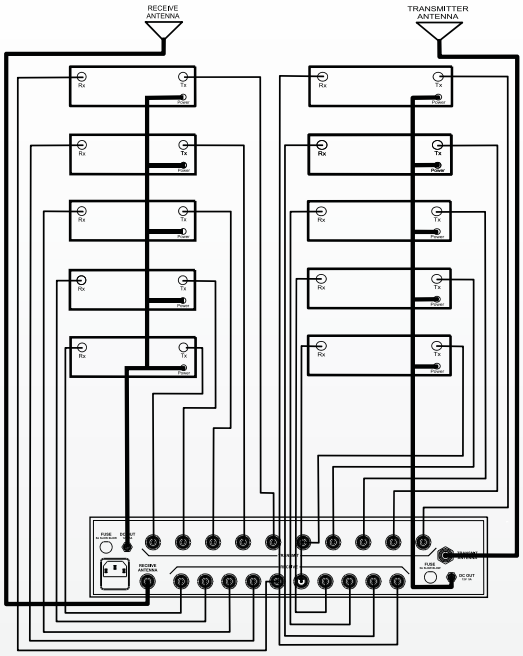
APS-1

2-Way Combiner/Splitter

The APS-1 is a passive broadband combiner/splitter that makes it possible to combine two antennas to one (receive), or split one antenna to two (transmit).

System Configuration

for the typical system configuration using the ACS-101 to support 10 BTR-1 base stations.



The TT-16 base station transmitter and the TR-16 beltpack talent receiver is a 16-channel synthesized wireless IFB system designed to provide a convenient wireless link to on-air talent in the studio or in the field at remote locations. Operating in the low band VHF 64–68 MHz range (NTSC TV Ch 3 and 4), the units operate reliably at distances of over 225 m. In unoccupied television channels, up to five TT-16 transmitters will operate simultaneously within the same location.

TT-16*

16-Channel Broadcast Wireless IFB Transmitter

The TT-16 features 16 user-selectable frequencies controlled from front panel control buttons. A backlit LCD display allows the user to select the RF channel used, change hi/lo RF transmit power, select intercom input source and adjust the input levels. The Enhanced Dynamic Range feature greatly improves the Signal-to-Noise Ratio and works with the TR-16 talent receiver to provide clearer, more dynamic audio. The TT-16 has a 3-pin XLR connector on the back of the unit that will accept intercom signal input and is selectable between RTS two-wire intercoms, AudioCom or Clear-Com. Other types of balanced audio input can also be used. The TT-16 also has a 1/4″ input jack on the back of the unit that will accept unbalanced line level signal input. Selection of the intercom type used and signal level adjustment is made from the front panel.

* TT-16 available in select countries

TR-16*

16-Channel Broadcast Wireless IFB Talent Receiver

Like the TT-16, the TR-16 features 16 user-selectable frequencies controlled from top panel control buttons. The TR-16 is designed with a 3.5 mm earphone connector to be used with standard IFB earpieces, such as the RTS Telethin announcers earpiece system or any other 8–500 Ω earphone. The TR-16 features a selectable high frequency boost control to equalize the high frequency loss associated with the use of behind the collar acoustic tubes and earphone drivers. Additionally, the TR-16 has Enhanced Dynamic Range for increased dynamic range. Operating on two AA batteries (up to 20 hours on alkaline cells), the TR-16 also features a low battery indicator on the backlit LCD display when 10% of battery life remains.

* TR-16 available in select countries

- 16 user-selectable channels
- Enhanced Dynamic Range for improved dynamic audio
- Balanced or unbalanced audio input
- Covers TV Ch 3 and TV Ch 4
- 20 hours of operation on two AA alkaline batteries

TRH-2
Leather Holster for TR-700 & TR-800

ALP-450
UHF Directional Antenna

ALP-600M
Telescoping Antenna Mast

ALP-600
UHF Bi-Directional Antenna

BC-800NM
1-Bay Charger with NiMH Battery Pack

BC-800NM4
4-Bay Charger with NiMH Battery Packs

AB-2
Universal Bracket for ½ Wave Antenna with 10′ Coax Cable

RA-5
UHF Directional Antenna

FP-11
2.4 GHz Flat-Panel Directional Antenna

UHF Base Station Accessories

Model	Description
AB-2	Universal bracket for CLA-X ½ wave antennas with 10′ coax
ALP-450	Directional log periodic antenna. Covers 450–900 MHz. Forward coverage pattern increases signal gain up to 5 dB. Supplied with mounting hardware for wall or mic stand and 10′ coaxial cable. Measures 9½″ L x 11″ H painted matte black.
ALP-600	Bi-directional log periodic antenna. Covers 520–760 MHz. Includes mounting hardware and 10′ (3 m) coaxial cable with TNC connector.
ALP-600B	ALP-600 antenna bracket kit
ALP-600M	ALP-600 antenna mast-telescoping
ALP-700	Bi-directional log periodic antenna. Covers 470-760 MHz. Unique side-to side and front to back coverage pattern increases single gain up to 1,8dBd. Includes mounting hardware, clamp and 10’ (3 meters) coaxial cable with TNC connector. Painted black with TNC connector. Measures 274,6mm x 422mm (L x H).
APS-1	Two to one antenna combiner/splitter with TNC connectors
CXU	50 Ω low loss coaxial cable with TNC connectors (multiple lengths available)
FA	½ wave colinear antenna (multiple frequency ranges)
RM-800	Rackmount reinforcement for BTR-800/ BTR-700
TP-2	TNC 50 Ω termination plug and ACS-101 antenna combiner
TP-3	XLR-3 Intercom “dummy load” plug (AudioCom)
TP-3R	XLR-3 Intercom “dummy load” plug (RTS)

UHF Beltpack Accessories

Model	Description
BC-800NM Euro	1 bay charger w/switching power supply, Euro cord, NiMH pack
BC-800NM4 Euro	4 bay charger w/switching power supply, 4 NiMH battery packs, Euro cord
BP-700	Alkaline battery holder TR-700/TR-800/TR-825/TR-80N/TR-82N /TR-1/RKP-4
BP-800NM	NiMH battery pack TR-700/TR-800/TR-825/TR-80N/TR-82N/ TR-1/RKP-4
BPA 1/4	Wave beltpack antenna (multiple frequency ranges)
SBC-1	Swivel beltclip for TR-700/TR-800/ TR-700/TR-800/TR-825/TR-1/RKP-4
TRH-2	Heavy duty leather swivel holster with belt loop for TR-700/TR-800/TR-80N

2.4 GHz Wireless Intercom Accessories

Model	Description
ANT-FP	Flat panel dual element directional antenna
ANT-FPM	Metal tilt & swivel antenna mounting bracket for ANT-FP
CC-24	Carry base for BTR-24 system
FP-11	2.4 GHz flat-panel directional antenna
LG-PS	US power supply for BTR-24/TR-24
RA-3	Omnidirectional antenna (3 dB) with TNC reverse polarity
RA-5	2.4 GHz omnidirectional antenna, magnetic mount with TNC reverse polarity connector
RA-7	Omnidirectional antenna (7 dB) with TNC reverse polarity connector
RPT-3	3′ coax with TNC reverse polarity connector
RPT-10	10′ coax with TNC reverse polarity connector
TNC-RP	TNC reverse polarity coupler (jack-to-jack)

PH-88 & PH-44

LIghtweight Headsets

Super lightweight headsets with dynamic noise-cancelling microphone. Adjustable microphone boom for precise positioning. The high-quality wide band dynamic earphones are covered in supple leather-style material for superior fit, isolation and frequency response. PH-88 is a single muff mono and PH-44 is a dual muff mono. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

MH-300 & MH302

Premium Lightweight Headsets

MH single- and dual-sided headsets combine a unique, multifunctional modular design with low-profile, lightweight construction. Expanded frequency response ensures clear communications and enhanced audio performance. MH-300 is a single-sided headset and MH-302 is a dual-sided headset.

PH-1, PH-2 & PH-3

Full-Cushion, Medium Weight Headsets

Medium-weight headset with foam filled cushions offers a light feel with moderate isolation from ambient noise. Dynamic noise-cancelling microphone is easily positioned with unique continuously adjustable ball joint. PH-1 is a single muff mono, PH-2 is a dual muff mono and PH-3 is a dual muff stereo. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

HR-1 & HR-2

Medium Weight Headsets

Medium-weight passive noise reduction headsets with dynamic noise-canceling microphones. The headsets have a noise reduction rating of 21 dB; suitable for use in a moderately noisy environment. The ergonomic headband design distributes pressure evenly with no pressure points, ensuring hours of comfortable wear. This headset folds into a compact form for ease of storage. HR-1 is a single muff and HR-2 is a dual muff. Available in 4- or 5-pin XLR connectors (male or female) and pigtail.

BTR-80N

The BTR-80N system operates in TV channels 16 to 36 and 38 to 55. This is the frequency range of 482 to 608 and 614 to 722 MHz. The BTR-80N frequency bands are typically 18 MHz wide.

The BTR-80N systems are offered on 32 standard frequency band splits noted as follows:

F1, F2, F3, F4, F5, F6
H1, H2, H3, H4, H5, H6
A1, A2, A3, A4, A5, A6
B2, B3, B4, B5, B6
C3, C4, C5, C6
D5, D6, D7
E5, E6

BTR-800 and BTR-700

The BTR-800 and BTR-700 systems operate in TV channels 14 to 36 and 38 to 55. This is the frequency range of 470 to 608 and 614 to 722 MHz. The BTR-800 and BTR-700 frequency bands are 18 MHz wide

Frequency bands F to C are always BTR-800/BTR-700 transmit bands (TR-800/TR-825/TR-700 receive bands) and frequency bands 1 to 6 and 88 are BTR-800/BTR-700 receive bands (TR-800/TR-825/TR-700 transmit bands).

The BTR-800 system is offered on 17 different frequency band splits noted as follows:

E88
F1, F2, F3, F4
H1, H2, H3, H4
A2, A3, A4
B3, B4, B6
C3, C4, C6

The BTR-700 system is offered on 3 standard frequency band splits noted as follows:

A2, B4, C6

RTS Intercoms
UHF Frequency Band Chart

RKP-4B	TV CHANNEL	START FREQUENCY	END FREQUENCY	TV CHANNEL (NTSC)	BTR-800	BTR-700
	14	470	476	14	88	
	15	476	482	15		
	16	482	488	16		
F	17	488	494	17	F	
	18	494	500	18		
	19	500	506	19		
H	20	506	512	20	H	
	21	512	518	21		
	22	518	524	22		
A	23	524	530	23	A	A
	24	530	536	24		
	25	536	542	25		
B	26	542	548	26	B	B
	27	548	554	27		
	28	554	560	28		
C	29	560	566	29	C	C
	30	566	572	30		
	31	572	578	31		
D	32	578	584	32		
	33	584	590	33		
	34	590	596	34		
E	35	596	602	35	E	
	36	602	608	36		
NOT USED	37	608	614	37	NOT USED	NOT USED
	38	614	620	38		
1	39	620	626	39	1	
	40	626	632	40		
	41	632	638	41		
2	42	638	644	42	2	2
	43	644	650	43		
	44	650	656	44		
3	45	656	662	45	3	
	46	662	668	46		
	47	668	674	47		
4	48	674	680	48	4	4
	49	680	686	49		
	50	686	692	50		
5	51	692	698	51		
	52	698	704	52		
	53	704	710	53		
6	54	710	716	54	6	6
	55	716	722	55		
	56	722	728	56		
7	57	728	734	57		
	58	734	740	58		
	59	740	746	59		

Overall	BTR-80N	BTR-800	BTR-700	BTR-240
RF Frequency Range	482–722 MHz (TV 16 to TV 36 and TV 38 to TV 52)	470–608 MHz, 614–722 MHz in 18 MHz TX and RX bands	470–608 MHz, 614–722 MHz in 18 MHz TX and RX bands	North America: 2.412 to 2.462 GHz Europe: 2.412 to 2.472 GHz
Power Requirement	(AC and DC) 100–240 VAC, 50–60 Hz, 12–15 Volts DC	100-240 VAC, 50–60 Hz, IEC receptacle	100-240 VAC, 50–60 Hz, IEC receptacle	12–15 VDC, 1.5 Amps
Product Dimensions (W x H x D)	19.0″x 1.72″x 14.0″ (48.3 x 4.4 x 35.6 cm)	19.0″x 1.72″x 14.0″ (48.3 x 4.4 x 35.6 cm)	19.0″x 1.72″x 14.0″ (48.3 x 4.4 x 35.6 cm)	1RU, 7.5″L x 19″W x 1.75″H (19.1 x 48.3 x 4.5 cm)
Product Weight	7.28 lb (3.3 kg)	7.14 lb (3.24 kg) / 6.97 lb (3.16 kg)	7.14 lb (3.24 kg) / 6.97 lb (3.16 kg)	3.48 lb (1.58 kg)
Shipping Dimensions (W x H x D)	22.0″x 5.0″x 16.5″ (55.9 x 12.7 x 41.9 cm)	17.0″x 5.0″x 23.0″ (43.2 x 12.7 x 58.4 cm)	17.0″x 5.0″x 23.0″ (43.2 x 12.7 x 58.4 cm)	23.6″x 13.3″x 5.53″ (59.9 x 33.8 x 14.0 cm)
Shipping Weight	11 lb (4.9 kg)	11.68 lb (5.3 kg)/ 10.58 lb (4.8 kg)	11.68 lb (5.3 kg)/ 10.58 lb (4.8 kg)	7.7 lb (3.5 kg)
FCC ID	B5DM528	B5DM514/ B5DM516	B5DM514/ B5DM516	B5DM532
EC Declaration of Conformity: Eligible to bear CE mark	BTR-80N	BTR-700 BTR-800	BTR-700 BTR-800	BTR-240
Frequency response	300 Hz – 5 kHz	300 Hz – 8 kHz	300 Hz – 8 kHz	350 Hz – 3 kHz
Four Wire Input	Level adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)
Four Wire Output	Level adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)
Audiocom Intercom	Level adjustable (1 Vrms typical) Line impedance 300 Ω	Input/output level adjustable (1 Vrms typical) Line impedance 300 V	Input/output level adjustable (1 Vrms typical) Line impedance 300 V	Level adjustable (0.775 Vrms typical)
RTS Intercom	Level adjustable (0.775 Vrms typical) Line impedance 200 Ω	Input/output level adjustable (0.775 Vrms typical) Line impedance 200 V	Input/output level adjustable (0.775 Vrms typical) Line impedance 200 V	Level adjustable (1 Vrms typical)
Clear-Com Intercom	Level adjustable (1 Vrms typical) Line impedance 200 Ω	Input/output level adjustable (1 Vrms typical) Line impedance 200 V	Input/output level adjustable (1 Vrms typical) Line impedance 200 V	Level adjustable (1 Vrms typical)
Auxiliary Input	Adjustable (2 Vrms typical)	Adjustable (2 Vrms typical)	Adjustable (2 Vrms typical)	Level adjustable (2 Vrms typical)
Auxiliary Output	Adjustable (2 Vrms into 600 Ω)	Adjustable (2 Vrms typical into 600 V) (at rated deviation)	Adjustable (2 Vrms typical into 600 V) (at rated deviation)	Level adjustable (2 Vrms typical into 600 Ω)
Stage Announce Output	Adjustable (2 Vrms typical at rated deviation into 600 Ω)	Internally adjustable (1 Vrms typical at rated deviation into 100 KV) / N/A	Internally adjustable (1 Vrms typical at rated deviation into 100 KV) / N/A	N/A
Stage Announce Relay	Dry contact, rated at 1 Amp, 24 V Max	Dry contact, rated at 1 Amp, 24 V Max / N/A	Dry contact, rated at 1 Amp, 24 V Max / N/A	N/A
Transmitter				
Type	Two synthesized transmitters, 712 channels each	Synthesized, 720 channels	Synthesized, 720 channels	802.11b, up to 13 channels depending on location
Transmit Power	249 mW – 10 mW	100 mW Max (High), 10 mW (Normal) / 50 mW Max (High) 5 mW (Normal)	100 mW Max (High), 10 mW (Normal) / 50 mW Max (High) 5 mW (Normal)	North America: 200 mW Europe: 70 mW
Microphone Audio Input	30–3500 Ω	30–3500 Ω	30–3500 Ω	30–3500 Ω
Receiver				
Type	Triple conversion superheterodyne, four independent IF's, 712 channels each	Dual conversion superheterodyne, synthesized, FM, 720 channels	Dual conversion superheterodyne, synthesized, FM, 720 channels	802.11b, up to 13 channels depending on location
RF Sensitivity	<0.8 µV for 12 dB SINAD	<0.8 µV for 12 dB SINAD	<0.8 µV for 12 dB SINAD	N/A
IF Selectivity	3 dB at 230 kHz	3 dB at 230 kHz	3 dB at 230 kHz	N/A
Squelch Quieting	90 dB	95 dB	95 dB	N/A
Distortion	1% at full deviation	<1% at full deviation	<1% at full deviation	N/A
Local Headset Output	40 mW output into 600 Ω	40 mW output into 600 Ω (1% Distortion)	40 mW output into 600 Ω (1% Distortion)	100 mWrms into 300 Ω

Overall	TR-80N/TR-82N	TR-825/TR-800	TR-700	TR-240
RF Frequency Range	482–722 MHz (TV 16 to TV 36 and TV 38 to TV 52)	470–608 MHz, 614–722 MHz in 18 MHz TX and RX bands	470–608 MHz, 614–722 MHz in 18 MHz TX and RX bands	North America: 2.412 to 2.462 GHz Europe: 2.412 to 2.472 GHz
Power Requirement	6 AA cells, alkaline (NiMH optional)	6 AA cells, alkaline (NiMH optional)	6 AA cells, alkaline (NiMH optional)	Lithium Ion Rechargable Battery, 7.5 VDC
Typical Battery Life Alkaline	14 hours (continuous duty)/ 11 hours (continuous duty)	11 hours (continuous duty)/ 14 hours (continuous duty)/ 14 hours (continuous duty)	11 hours (continuous duty)/ 14 hours (continuous duty)/ 14 hours (continuous duty)	N/A
Typical Battery Life Nickel Metal Hydride (1500 mAh)	14 hours (continuous duty)/ 11 hours (continuous duty)	11 hours (continuous duty)/ 14 hours (continuous duty)/ 14 hours (continuous duty)	11 hours (continuous duty)/ 14 hours (continuous duty)/ 14 hours (continuous duty)	N/A
Product Dimensions (W x H x D)	3.75″x 5.05″x 1.65″ (9.5 x 12.8 x 4.2 cm)/ 3.75″x 5.35″x 2.02″ (9.5 x 13.5 x 5.1 cm)	3.75″x 5.35″x 2.02″ (9.5 x 13.5 x 5.1 cm)/ 3.75″x 5.05″x 1.65″ (9.5 x 12.8 x 4.2 cm)/ 3.75″x 5.05″x 1.65″ (9.5 x 12.8 x 4.2 cm)	3.75″x 5.35″x 2.02″ (9.5 x 13.5 x 5.1 cm)/ 3.75″x 5.05″x 1.65″ (9.5 x 12.8 x 4.2 cm)/ 3.75″x 5.05″x 1.65″ (9.5 x 12.8 x 4.2 cm)	1.75″L x 3.75″W x 5.25″H (4.5 x 9.5 x 13.3 cm)
Product Weight	1.81 lb (0.82 kg)/ 1.94 lb (0.88 kg)	21 oz (0.60 kg) with alkaline batteries/ 15 oz (0.43 kg) with alkaline batteries/ 16 oz (0.45 kg) with alkaline batteries	21 oz (0.60 kg) with alkaline batteries/ 15 oz (0.43 kg) with alkaline batteries/ 16 oz (0.45 kg) with alkaline batteries	12.9 oz (0.37 kg)
Shipping Dimensions (W x H x D)	13.75″x 3.75″x 6.5″ (34.9 x 9.5 x 16.5 cm)	7.0″x 4.0″x 14.0″ (17.8 x 10.2 x 35.6 cm)	7.0″x 4.0″x 14.0″ (17.8 x 10.2 x 35.6 cm)	7.0″x 4.0″x 14.0″ (17.8 x 10.2 x 35.6 cm)
Shipping Weight	3.31 lb (1.5 kg)/ 3.52 lb (1.6 kg)	1.37 lb (0.62 kg)/ 1.32 lb (0.60 kg)/ 1.26 lb (0.57 kg)	1.37 lb (0.62 kg)/ 1.32 lb (0.60 kg)/ 1.26 lb (0.57 kg)	1.37 lb (0.62 kg)
FCC ID	B5DM530/ B5DM531	B5DM517/ B5DM515/ B5DM515	B5DM517/ B5DM515/ B5DM515	None Required
EC Declaration of Conformity: Eligible to bear CE mark	TR-80N TR-82N	TR-700 TR-800 TR-825	TR-700 TR-800 TR-825	TR-240
Transmitter				
Type	Two synthesized transmitters, 712 Channels Each	Synthesized, 720 channels	Synthesized, 720 channels	
Transmit Power	100 mW – 5 mW	50 mW Max (Auto-power reduction when close to base)	50 mW Max (Auto-power reduction when close to base)	50 mW
Microphone Audio Input	30–3500 Ω	30–3500 Ω	30–3500 Ω	30–3500 Ω
Receiver				
Type	Triple conversion superheterodyne, four independent IF's, 712 channels each	Two, dual conversion superheterodyne, synthesized, FM, 720 channels/ dual conversion superheterodyne, synthesized, FM, 720 channels/ dual conversion superheterodyne, synthesized, FM, 720 channels	Two, dual conversion superheterodyne, synthesized, FM, 720 channels/ dual conversion superheterodyne, synthesized, FM, 720 channels/ dual conversion superheterodyne, synthesized, FM, 720 channels	802.11 B, up to 13 channels depending on location
RF Sensitivity	<0.8 µV for 12 dB SINAD	<0.8 µV for 12 dB SINAD/ <0.7 µV for 12 dB SINAD/ <0.7 µV for 12 dB SINAD	<0.8 µV for 12 dB SINAD/ <0.7 µV for 12 dB SINAD/ <0.7 µV for 12 dB SINAD	N/A
IF Selectivity	3 dB at 230 kHz	3 dB at 230 kHz	3 dB at 230 kHz	N/A
Squelch Quieting	90 dB	95 dB	95 dB	N/A
Distortion	1% at full deviation	<1% at peak level	<1% at peak level	N/A
Local Headset Output	40 mW output into 600 Ω	40 mW output into 600 V (1% Distortion)	40 mW output into 600 V (1% Distortion)	70 mWrms into 300 Ω

Licensing of this equipment is the User's responsibility and ability to license depends on the User's classification, User's application and frequency selected.

For information on any of the products featured in this catalog, please visit our website at: **www.rtsintercoms.com**

AudioCom

The AudioCom MS-4002 and MS-2002 master stations provide unique balanced audio design that allow users to utilize the longest two-wire partyline cable runs in the industry. AudioCom master stations offer users the ultimate in performance and flexibility. Operators can utilize headset or speaker/mic operation and have full access to all intercom channels both individually and as “all talk”. AudioCom master station users can also utilize innovative features like the “Remote Mic Kill” function to silence any open mic on the intercom channel so that extraneous noise can be eliminated, backlit lettered buttons for darkened environments and the ability to operate in an unbalanced mode to be completely Clear-Com compatible. Whatever your requirements may be, AudioCom is the one two-wire intercom that sounds great! If your application requires the highest performance and flexibility, you need the AudioCom balanced audio intercom system.

* MS-4002 available in select countries

Zeus III/Zeus III LE

Zeus III/Zeus III LE is the next generation of compact intercom system units, giving compact systems more options for their intercom configurations. With 32 channels in/out and two configurable partyline interface channels, Zeus III/Zeus III LE is ideal for environments with limited space. With the addition of Ethernet, the Zeus III/Zeus III LE can be configured from virtually anywhere on a network using AZedit matrix control software. Alternatively, the Zeus III/Zeus III LE can be directly connected to AZedit via the USB connector on the front panel or the serial connector on the back of the unit. The system has 32 standard RJ45 connectors, making it easier to connect your intercom system with audio lines and keypanels by keeping the RTS wiring scheme. Equipped with built-in redundant power supply for extra safety.

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