

# Telex<sup>®</sup>

## Professional Intercom Systems

NEW  
PRODUCT  
INSIDE



# TELEX<sup>®</sup>



# Master Stations



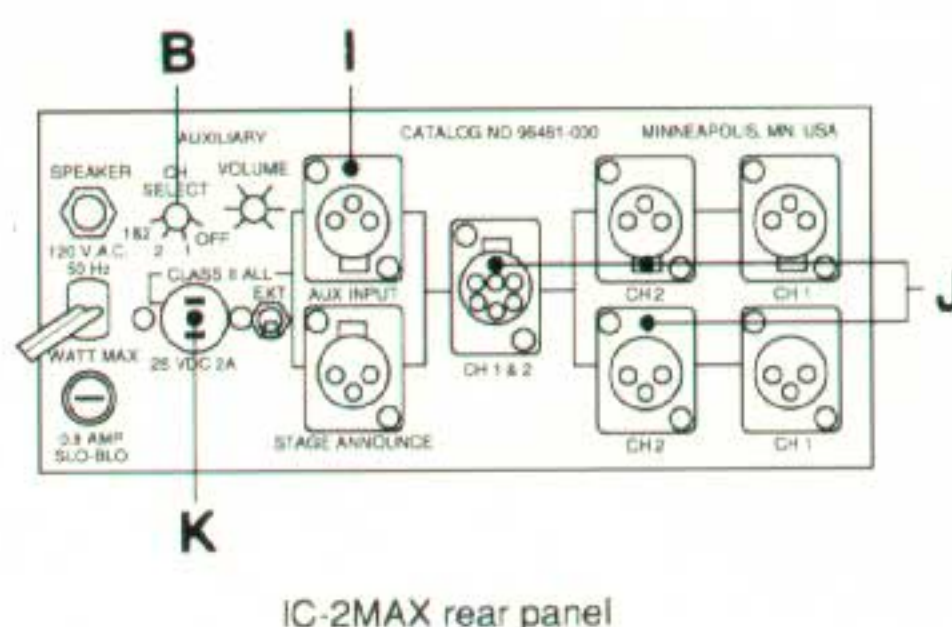
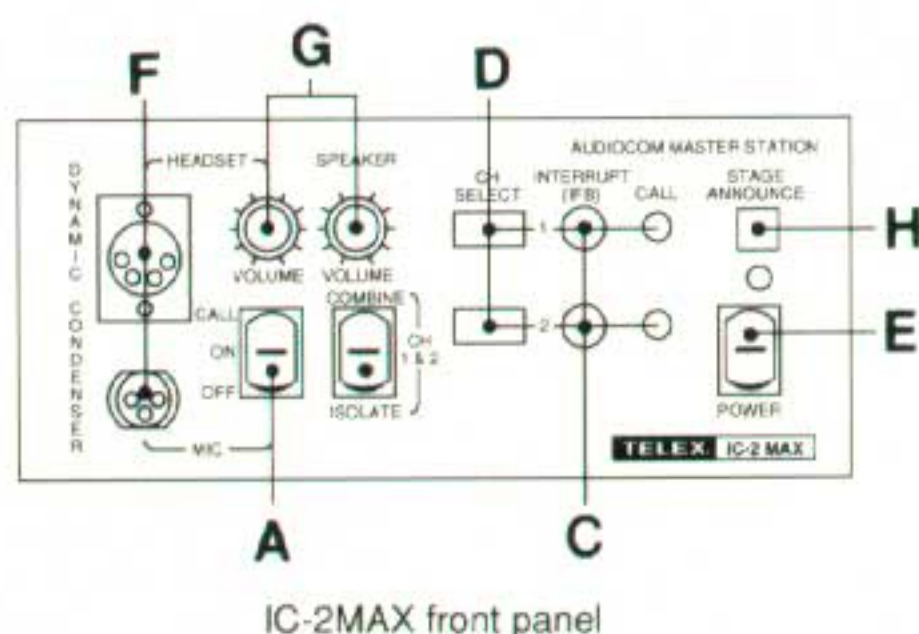
## IC-2MAX

Two Channel with power supply

Order No. 96461-000

### Director Control

This two channel master station allows the operator to communicate with the entire system (up to 150 remote stations), or by individual channel. A special *combine/isolate* feature makes it possible, by permitting the two channels to operate as one party line, or as two separate channels.



### Standard Features for Both Stations

**A. Call Light Signalling** — An operator at the master station can use this silent 20 kHz tone signal switch to activate a call light at the remote station(s). Conversely, remote stations needing to signal the master station can alert the operator by activating the call light associated with their channel.

**B. Auxiliary Program Input** — Operator can feed an auxiliary audio source such as on-air programming to any channel(s) using the select switch on the rear panel.

**C. IFB** — By pressing an IFB (Interrupt Fold Back) button, the operator can momentarily interrupt any channel's auxiliary program feed for cueing purposes. In the television broadcast industry, an IFB system permits the director to talk to the on-air talent through small earsets by muting the "live" program and connecting the director's headset/mic to that channel.

**D. Channel Select Buttons** — Indicate "on" status by displaying a color bar when pressed.

**E. Power On/Off** switch with LED indicator.

**F. Jacks for headset and gooseneck microphones.**





## IC-4M

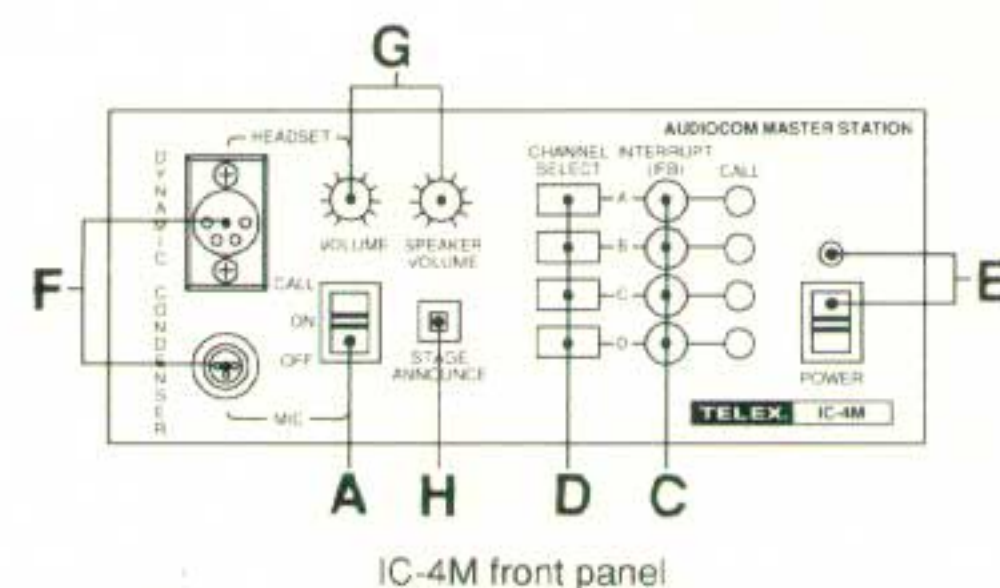
Four Channel with  
power supply

Order No. 96185-000

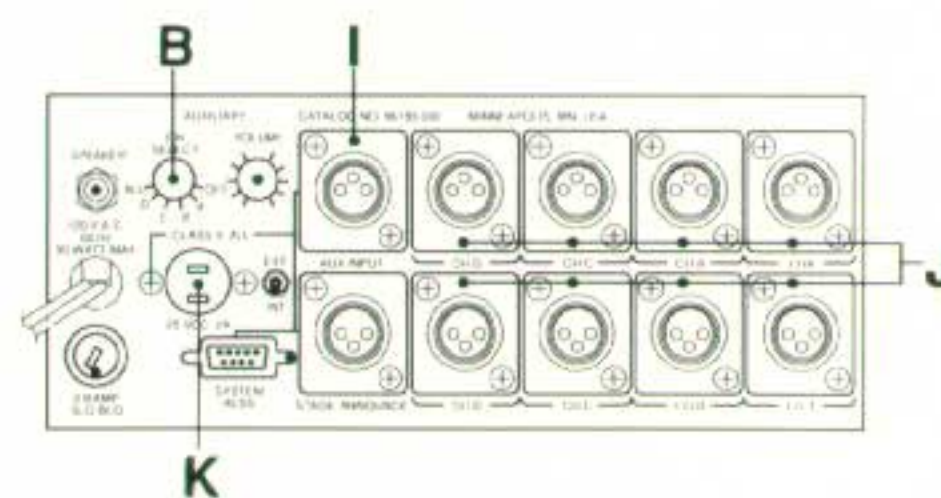
### Four Channel Versatility

The IC-4M provides four separate channels of intercom between the master station and up to 150 remote stations. The operator can have discrete communications with groups of remote stations that have been assigned to any of four different channels.

For greater station/channel flexibility, the IC-4M is designed to work with the Telex IC-4SX System Expander.



IC-4M front panel



IC-4M rear panel

## IC-4R

Remote Master Station  
without power supply

Not shown

Order No. 96190-000

Designed to provide four-channel capability at a remote station. The IC-4R receives its power from the IC-4M, and is similar in operation, except it does not have an auxiliary input or IFB feature.

**G. Volume controls** for headset (listen) and IC-SR (optional) remote speaker.

**H. Stage Announce Button** — Allows operator to page or make announcements through a balanced output into an external PA system.

**I.** Rear panel includes a female XLR-3F **auxiliary input connector** with level adjustment and channel assignment switch.

**J.** Each channel has two connectors on the rear panel (one XLR-3F, one XLR-3M) for **easy installation**. (IC-2MAX also has one XLR-6F for both channels.)

**K. Internal Power Supply** — Or can be operated with 24 Vdc via a rear panel two-pin "Jones" plug.

• **Sidetone Adjustments** — can be made for each channel through screwdriver ports at the top of the unit.

• **Balanced Line** system design.

• **Rack Mountable** in the standard 19" (483 mm) EIA configuration — single or dual.



# System Expander



## IC-4SX

### Programmable System Matrix

Order No. 96210-000

#### Connect Stations and Channels

The IC-4SX offers a versatile and convenient way to set up a closed circuit intercom channel/station matrix. It gives four channel master stations like the IC-4M or IC-4R greatly expanded station selection capability, making it possible to assign any of 12 stations (up to 150 belt packs) to four channels (ABCD) or a private position. Each station can consist of one belt pack headset station, or a number of belt packs daisy-chained together. All individuals on the same station in a private mode can communicate with one another, but are completely isolated from the master station *and* all other remote stations. But all stations assigned to a given alphabetical channel are connected and can communicate freely.

Once a desired network configuration is set, it can be stored, reprogrammed, or recalled at any time. When the system is turned off, it will return to the last program displayed when power is returned, with all stored information in memory.

#### Standard Features

**A. Channel Button** — Press A, B, C, D or Private, followed by one or more of the 12 station buttons to assign those stations to that channel.

#### B. Station Buttons

**C. Station Status Readout** — Appears above each station button with the appropriate channel letter. To blank out readouts above unused stations, use Blank Station button.

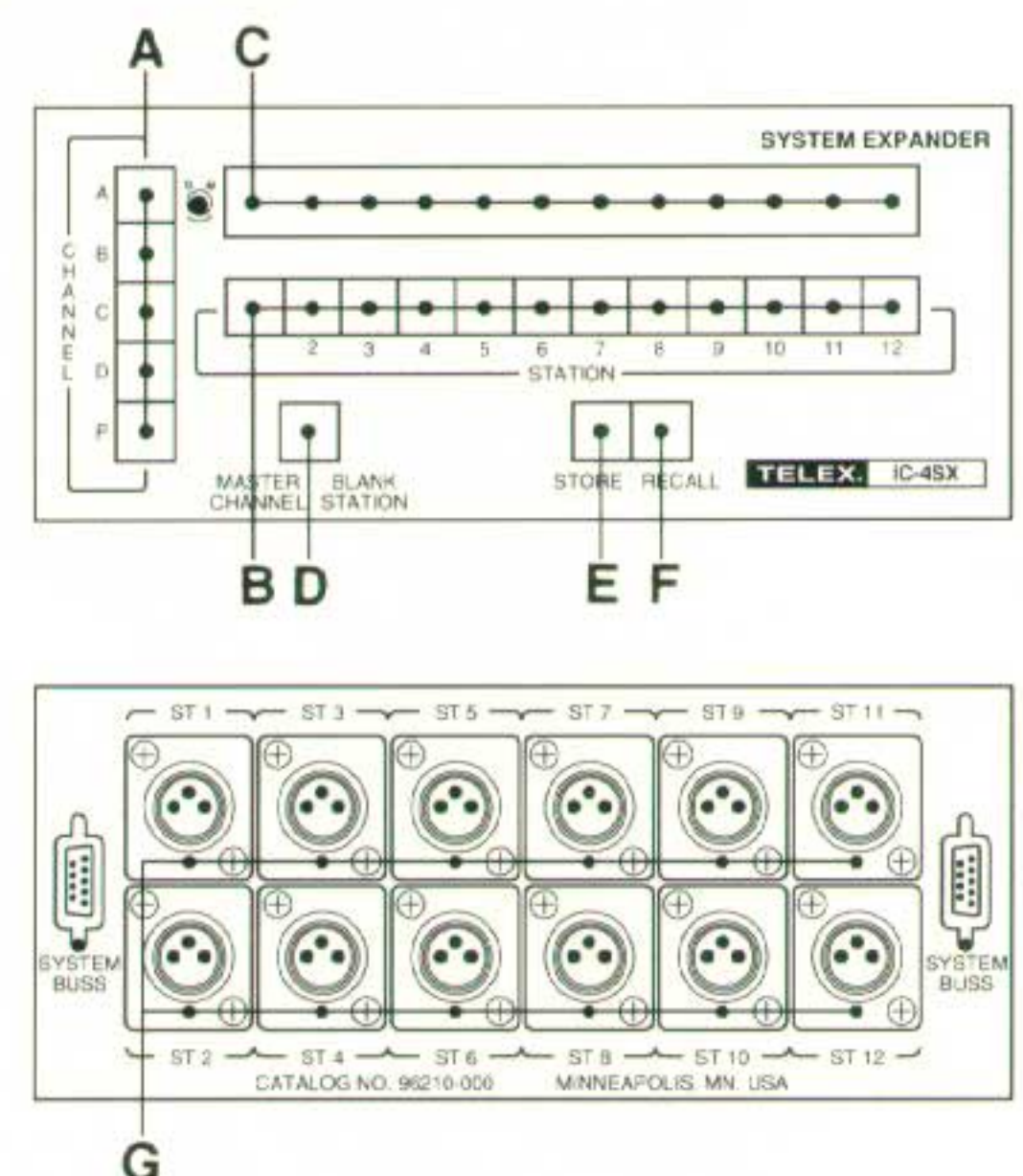
These readouts also act as a Call-Signal feature. When a remote station connected to the IC-4SX calls the master station, the channel assignment readout above the station number flashes. Unlike other systems, this unique Telex feature gives the operator a precise idea where call requests originate.

**D. Master Channel/Blank Station** — To connect the entire network into one party line circuit, press this button, and then any one of the four channel buttons. To return stations to their original status, press the Master Channel/Blank Station button a second time. This button can also be used to "turn off" the readout above unused stations. Press button and then the station button(s) to be blanked out.

**E. Store Button** — The IC-4SX can hold up to four different combinations of channel/station configurations in memory. Press the store button, and then one of the station buttons (1, 2, 3, 4) to store a program in memory.

**F. Recall Button** — Press this button, followed by the desired number (1, 2, 3, 4) to recall a stored channel/station configuration.

**G. Rear Panel** — Connections to the 12 possible station selections are made through 12 XLR-3F type receptacles on the rear panel.





# Power Supplies



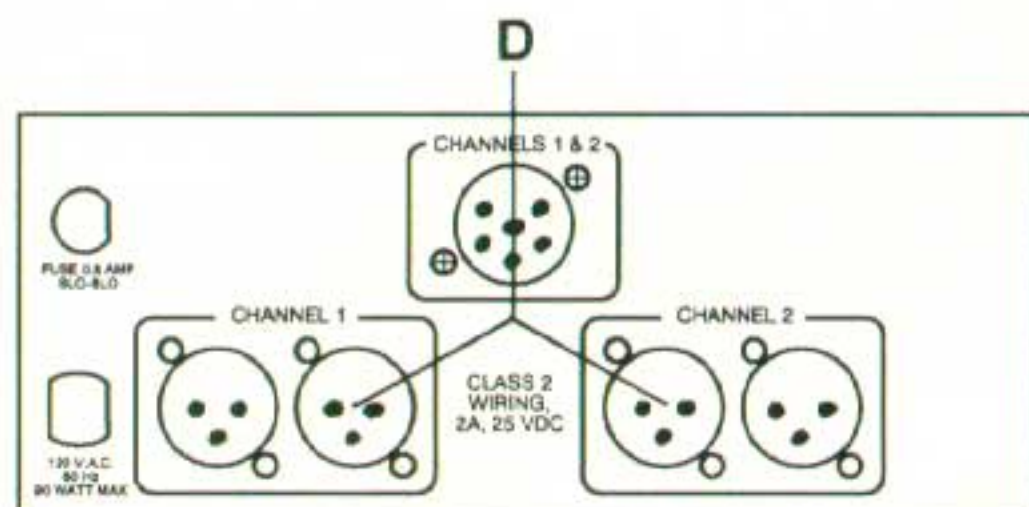
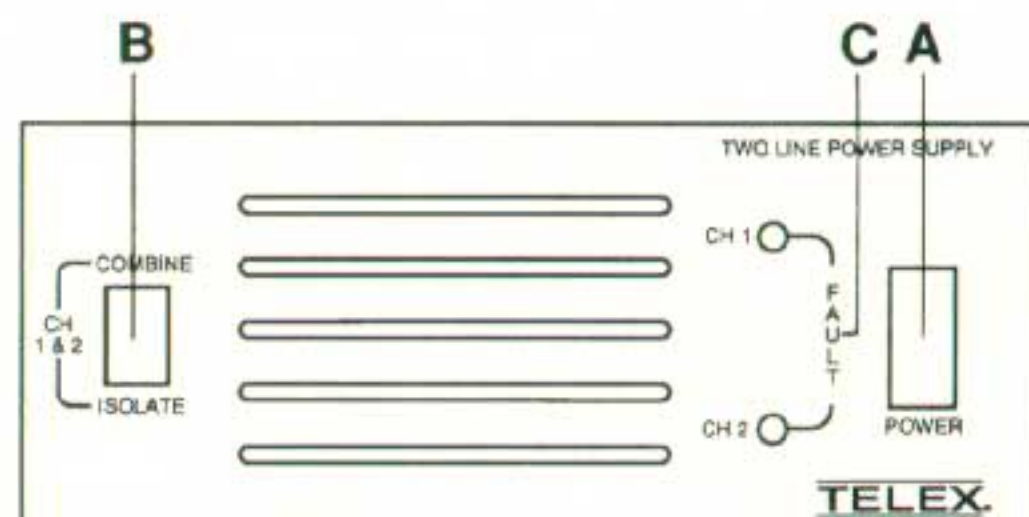
## PS-2L

### Two Channel Power Supply

Order No. 96167-000

#### Powers 150 Stations

The two amp PS-2L power supply will power up to 75 belt pack headset stations per channel. Using the combine/isolate switch, an installer can set up two separate networks of remote stations and use them as two isolated groups, or on a party line. Unit can be field modified for 220 Vac operation, and rack mounting brackets are available.



#### Standard Features

##### A. Power On/Off Switch.

**B. Combine/Isolate Switch** — Allows for two independent channels (isolate) or one party line (combine).

**C. Built-in short circuit and overload warning system** via a **Fault Light LED** for each channel.

**D. Rear Panel** — Two female XLR-3F type connectors are provided for each channel, in addition to one female XLR-6F type connectors that combine both of those channels for remote stations with two channel capability.

## PS-1F

### Single Channel Power Supply

Order No. 92890-000

#### Flush Mount

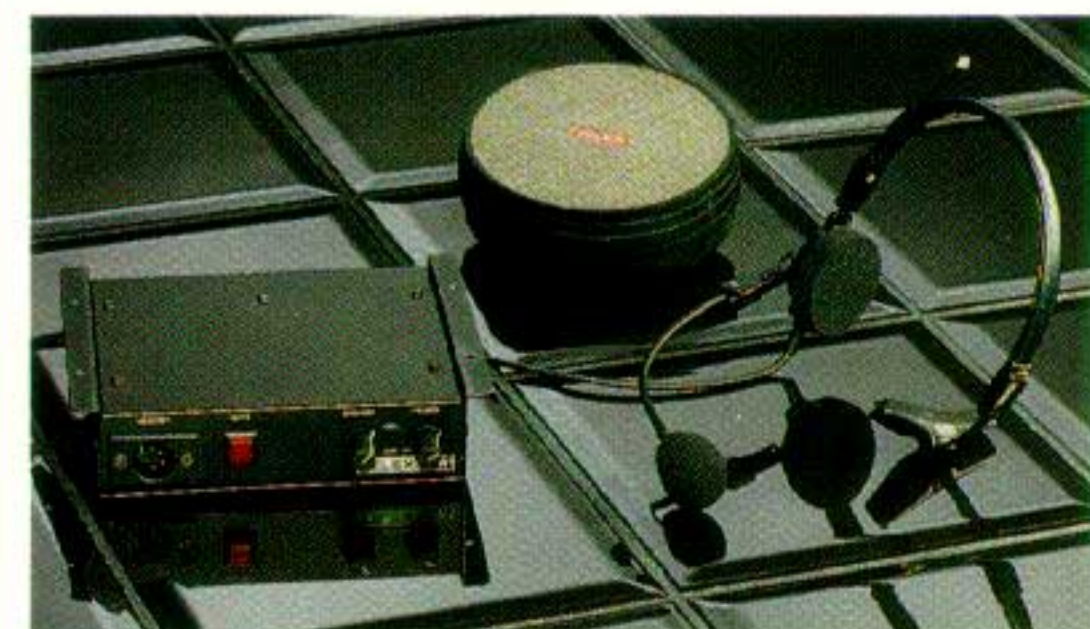
A 500 mA, single channel flush mount power supply, the PS-1F is able to power up to 25 belt pack headset stations. Connections are made via three wire barrier stops to permit wire rap terminals, or screw clamp wiring connections.

## Ticket Booth Security Intercoms IC-W1

Order No. 96500-002

## IC-W2 with VOX Control

Order No. 96500-001



Telex Ticket Booth Intercom Systems include a speaker microphone that mounts in the ticket booth window and provides two-way interactive communications through a full duplex system. The IC-W2's VOX feature eliminates constant background noise, because the speaker is activated only when the mic is in use. Both models include a separate power supply.



# Headset Stations



## BP-1 Single Channel Belt Pack

Order No. 96600-001

## BP-2 Two Channel Belt Pack

Order No. 96600-000

### Convenient Portability

Telex Audiocom remote headset stations are compact units designed for convenient belt pack portability and are compatible with balanced or unbalanced systems. All belt packs include XLR-type male and female connectors to allow daisy chain line connections, and feature a black matte finish for unobtrusive stage presence during theatre blackouts. The BP-1 and BP-2 belt packs are the newest members of the Audiocom family of balanced line intercom systems.

### Standard Features

- **Fully Compatible** with unbalanced systems (such as Clear-Com) via a select switch concealed under the rear cover. Accepts both Audiocom 20 kHz and Clear-Com DC Call-Signals.
- **Tactical Feel Keypad** features shaped, easy-to-read identification function controls which protect unit from damage and inadvertent switching.
- **Large Volume Control** is ergonomically designed to provide ease of operation while protecting from inadvertent bumping.
- Stylish, compact and lightweight yet extremely **sturdy construction** features Makroblend\* UT-400 polycarbonate. All control surfaces and the rear cover are fully gasketed with Neoprene to resist moisture.
- **Dual Function Talk Button** — Press and hold for momentary talk feature, press twice and release for latched, hands-free talk mode.
- **Mic Kill** — If a remote station's talk button is inadvertently left on in a noisy environment, this remote talk off feature allows the master station to disengage the mic by momentarily interrupting power.



- Headset and cable **connections are at the bottom of the unit** for ease of use and added comfort. This feature reduces total length considerably from units with connections at both ends of the belt pack.
- BP-2 two channel unit has **Channel Select Switch** for remote station channel control.
- **Call and Mic-on LED** lights make status monitoring easy. **Call-Signal** feature transmits light signals to other stations.
- **BP-1 has one XLR-3M and one XLR-3F** type connector. **BP-2 has two universal 6-pin XLR type** connectors (one male, one female), which accept both Switchcraft and Neutrik models.
- Surface mounted PC boards and components make the BP series belt packs highly dependable.
- **Dimensions/Weight** — 4.25"W x 4.125"H x 2.0"D (108 x 105 x 51 mm), 8 oz (227 g).

\*Makroblend UT-400 is a registered trademark of Mobay Chemical Corporation.





## The IC Series Metal Belt Packs

The IC series metal belt packs are the original portable Audiocom headset stations for balanced line systems. A male XLR type headset connector with listening volume control, microphone on/off switch, and call light controls are conveniently located on the top panel. The heavy gauge aluminum housing is virtually crush proof, and includes a recessed control panel, which avoids damage or inadvertent switching. Tapped screw holes are provided to fasten the unit to a video or film camera if desired, and standard EIA rack mounts are available as an option.

### Single Channel Metal Belt Pack IC-1/LS

**Order No. 92850-004**

This unit is a single channel belt pack with Call-Signal. It features a call light and an off-on-call switch which uses an inaudible 20 kHz tone to activate light signal transmission to other remote stations.

### Two Channel Metal Belt Packs IC-2A

**Order No. 96118-000**

This two channel belt pack is switch selectable, which allows the user to actively select either of two channels of communication at the remote station. It also includes adjustable sidetone, and features Call-Signal, and two 6-pin XLR type Neutrik connectors.

### IC-2B Binaural

**Order No. 96099-000**

This two channel belt pack without Call-Signal features a mono/stereo switch, for binaural capability, with separate listen controls for each channel. Also included are adjustable sidetone, and an extra connector for carbon headsets (as used in some TV camera intercom circuits).

### IC-1B Electronic Circuit Board Not shown

**Order No. 90906-148**

This circuit board from the IC-1/LS belt pack is ideal for custom installations, and requires external volume control knob, Mic On/Off switch, and connectors.

## Flush Mount Headset Stations

### IC-1F/LS

Single Channel with Call-Signal

**Order No. 92860-004**

### IC-2AF

Two Channel with Call-Signal and Sidetone

**Order No. 96129-000**

These permanent remote headset stations allow flush mount installation in standard two gang electrical wall boxes (not supplied). The stainless steel matte black front plate provides a male XLR-4 type headset connector with mic on/off switch, a listening volume control, and call signalling. The IC-2AF also includes a sidetone feature, and two-channel switch selector.



# Speaker Stations



## SS-2P

Order No. 96550-001

## SS-2F

Flush Mount

Order No. 96544-001

### Standard Features

**A. Built-in miniature condenser microphone** picks up normal voice levels from arm's length.

**B. Connection for Telex GM-E electret condenser gooseneck microphone.**

**C. Standard 4-pin dynamic headset input.**

**D. Two channel versatility** is provided by this **channel select switch**.

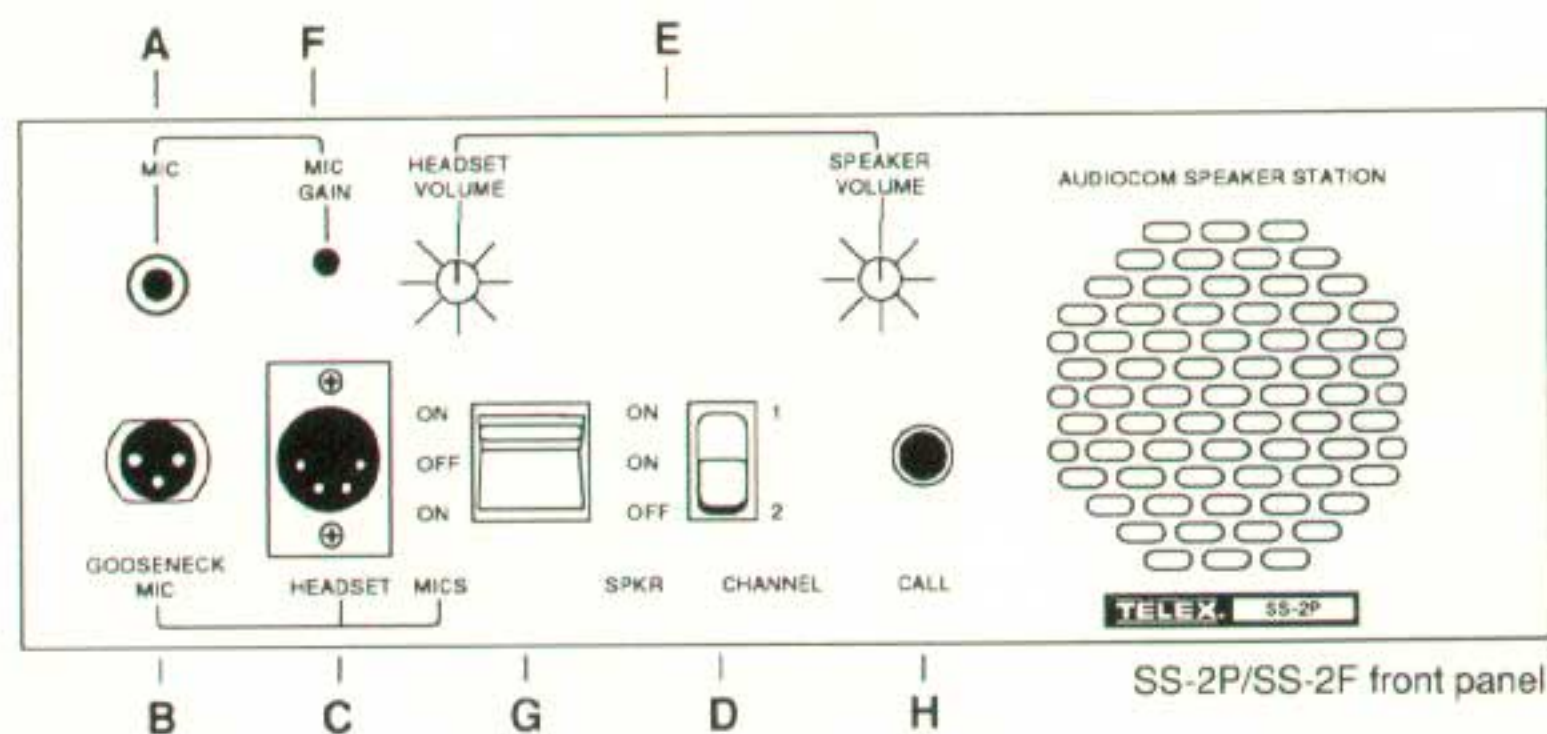
**E. Volume controls** for headset and speaker.

**F. Screwdriver mic gain** for built-in mic.

**G. Rocker switch** controls three operating modes; **full duplex intercom**, **receive only** (page), and momentary **hold-to-talk button** which automatically mutes speaker when built-in mic is keyed.

**H. Call Light Button.**

**I. XLR-6 connectors** (SS-2P), and **screw terminals** (SS-2F) on rear of unit allow units to be daisy-chained together.



SS-2P/SS-2F front panel



SS-2P only rear panel

A convenient internal switch allows system compatibility between balanced (Telex) and unbalanced line (Clear-Com, etc.). Power is supplied by the intercom system channel.

In addition to the features listed here, the SS-2F is designed to flush mount into a standard 5 gang mason box (Steel City #GW535C).

## Remote Speaker Option IC-SR

Not shown

Order No. 96225-000

This three watt speaker connects easily to the IC-4M, IC-4R, IC-2MAX or BTR-200 II wireless base station repeater via a standard 1/4" (6.3 mm) phone plug. Master station controls the volume.



# Headsets, Handsets and Microphones



**V-210**



**V-220**



**PH-8**



**PH-4/PH-5**



**PH-1**



**PH-2/PH-3**



**HD-3A**



**PH-10**



**PH-16**



**HM-100**



**GM-E**



**HS-6A**

**V-210 (Order No. 300027-001)**

**V-220 (Order No. 300027-002)**

**MB-11 Mic (Order No. 300028-000)**

**CA-20 Cord (Order No. 300029-001)**

The V-Series headsets are high fidelity, studio-quality products that may be tailored to specific needs using modular cord sets and microphones. The V-210 is a single-sided headset, the V-220 is dual-sided, both with ball and socket boom with a hinge on the boom's center for extra-flexible mic movement. The V-Series features unique floating earcups which adjust to virtually any size or shape head for maximum comfort and isolation. Tunable feature offers top audio response. A wide variety of cord sets are available, including the CA-20 XLR-4 female, 5' cord listed above, and the CA-22 XLR male, 5' cord (Order No. 300029-000). Two modular mic capsules are offered; the MB-11 supercardioid dynamic, listed above, and the MB-12 supercardioid electret (Order No. 300028-001).

**PH-8 (Order No. 70415-001)**

Super lightweight, single-sided headset with the ultimate in day-long comfort. High quality monaural dynamic earphones with dynamic noise cancelling microphone on adjustable boom that can be bent to practically any mouth-to-mic configuration. Straight cord with female XLR-4 type plug.

**PH-4 (Order No. 70340-000)**

**PH-5 (Order No. 70350-000)**

Super lightweight, dual-sided for day-long comfort. High quality monaural (PH-4) or binaural (PH-5) dynamic earphones with dynamic noise

cancelling microphone on adjustable boom. Straight cord with female XLR-4 type plug (PH-4), or XLR-5 type plug (PH-5).

**PH-1 (Order No. 64438-005)**

Single-sided headset allows user to have one ear open to environmental audio. Dynamic, monaural earphone with foam filled cushion covered in supple polyurethane and cushion cover sock. Noise cancelling dynamic microphone is attached to a continuously adjustable ball joint which allows placement on either side of the head. 5' straight cord with clothing clip and female XLR-4 type plug.

**PH-2 (Order No. 64437-006)**

**PH-3 (Order No. 64437-007)**

Dual muff headset with circumaural foam ear cushions effectively reduce ambient noise for less audio fatigue. Dynamic monaural (PH-2) or binaural (PH-3) earphones with a dynamic noise cancelling microphone on ball joint boom. 5' straight cord with clothing clip and female XLR-4 type plug (PH-2), or XLR-5 type plug (PH-3).

**HD-3A (Order No. 63700-011)**

Dual-sided *Hearing Protection Headset* with noise cancelling dynamic microphone and Environmental Protection Agency Noise Reduction Rating (NRR) 21. Coil cord with female XLR-4 type plug.

**PH-10 (Order No. 70470-003)**

Dual-sided monaural hearing protector type headset with noise cancelling dynamic microphone on ball joint boom.

Dual mono dynamic earphones with Environmental Protection Agency Noise Reduction Rating (NRR) 24. Coil cord with XLR-4F type plug. Optional liquid filled cushions available (Order No. 70753-001).

**PH-16 (Order No. 70770-003)**

High noise attenuating under helmet, dual receiver headset with noise cancelling dynamic microphone. Straight cord with XLR-4F type plug. Environmental Protection Agency Noise Reduction Rating (NRR) 24. Optional liquid filled cushions available (Order No. 70753-001).

**HM-100 (Order No. 60837-032)**

Dynamic, noise cancelling microphone with push-to-talk switch for handheld operation. Transmits clear voice communications even in noisy environments. Coil cord with female XLR-4 type plug.

**GM-E (Order No. 96212-000)**

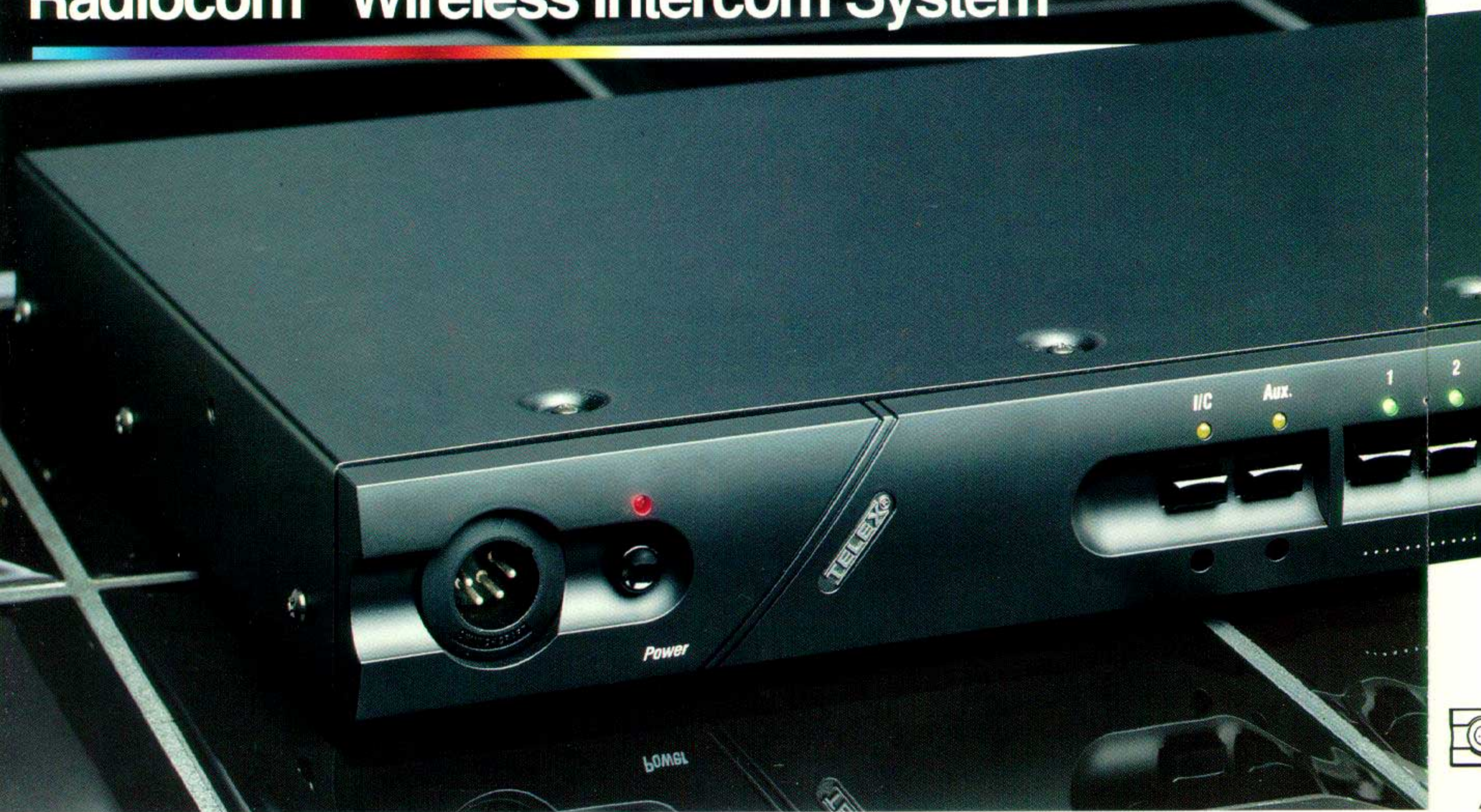
Electret condenser gooseneck microphone for convenient, hands-free communication through intercom main stations. This small electret microphone is rugged and dependable, and has excellent vocal frequency range. It is permanently mounted to a flexible gooseneck with excellent memory — once it is placed in position, it stays!

**HS-6A (Order No. 96145-000)**

Telephone style handset with convenient PTT switch and cradle. Dynamic earphone and microphone elements. Coil cord with female XLR-4 type plug.



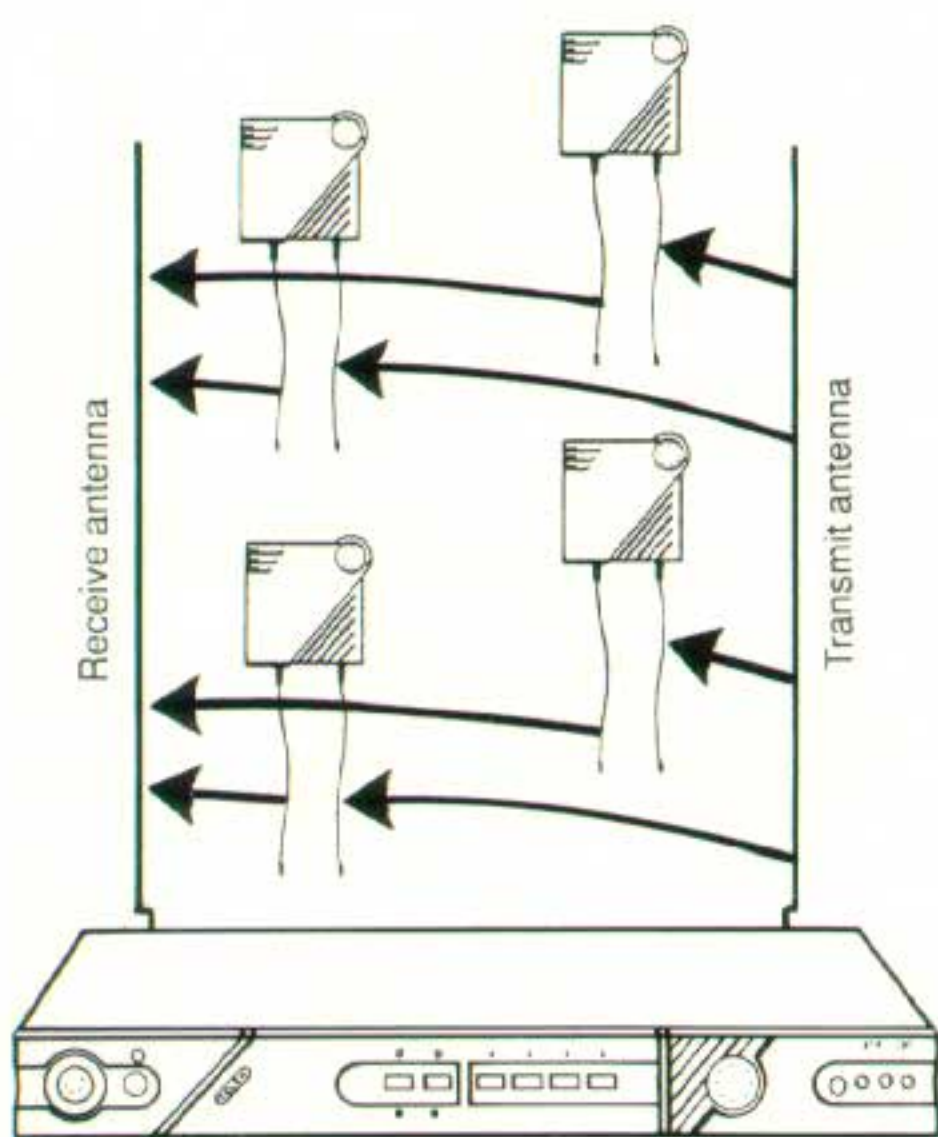
# Radiocom™ Wireless Intercom System



## BTR-200 II Base Station Repeater

Order No. 70683-xxx\*

### Efficient System Control



The BTR-200 II is a four-channel base station repeater with four receive channels and one common transmit channel, as shown here. It includes one 5/8 wave transmit antenna and one 5/8 wave receive antenna, plus a power supply.

Four belt pack headset stations can be operated in a full duplex network from one BTR-200 II, and two BTR-200 II base stations can be connected to create a larger network of up to eight belt pack headset stations. (An unlimited number of half-duplex TR-200Ps may be used. See product information at right.) Radiocom is fully compatible with most wired intercom systems.

Carefully selected frequency groups in the 150 to 216 MHz range avoid interference from low band signals. High selectivity between channels is achieved through an exclusive computer-designed system of IF filters, and a double conversion IF.

Several pre-selected groups of four channels are available from stock and come installed for your convenience. Although complete as a stand alone base station, the BTR-200 II comes with rack mount brackets and takes up only one rack space.

\*The last three digits of the Order No. (xxx) determine frequency. Consult price sheet for frequency choices.

### Standard Features

- A. Four-pin Headset Connector.**
- B. Power-on Button and LED.**
- C. External Intercom** — On/off button and LED for wired intercom connections

(functions as channel select in RTS TW intercom mode).

### D. Trimmer Pot for Wired Intercom Volume Adjustment.

**E. Auxiliary Audio** — On/off button and LED for auxiliary audio source. Audio can be fed to the system, allowing each station to monitor on-stage mics, PA, program or other sources.

### F. Trimmer Pot for Auxiliary Audio Volume Adjustment.

**G. Portable Station Connect Buttons and Carrier Status LEDs** — Individual push buttons control remote station reception, while LED indicators quickly inform the operator which channels are operating.

### H. Headset Volume Control.

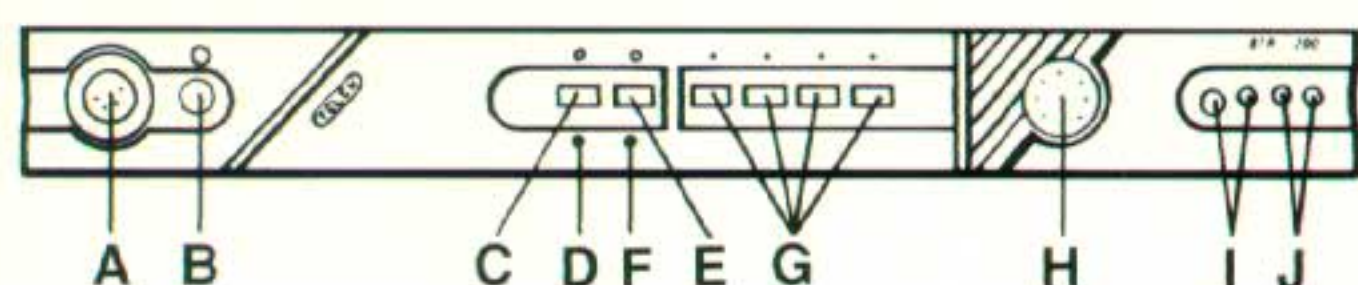
**I. Mic On Button and LED** — Dual talk function — push once for push-to-talk or twice in rapid succession for latched hands-free mode.

### J. Recessed Mic Gain Control and LED.

## BTR-200B II Base-to-Base Repeater Not Shown Order No. 70683-1xx\*

This new addition to Radiocom allows base-to-base operation. Transmit full duplex audio between two buildings, or across large areas (i.e. golf courses)





without using telephone cable. Unit operates as a single-channel station.

## TR-200P

### Push-to-Transmit Belt Pack Transceiver

Not Shown  
Order No. 70681-xxx\*-1

The new push-to-transmit TR-200P allows you to use an unlimited number of belt packs with a wireless base station. Stations using the TR-200P can listen to all audio, but can transmit only when the push-to-talk button is activated and the channel is clear. While TR-200Ps cannot be mixed with TR-200s on the same channel, they *can* be integrated within the same wireless system.

## TR-200

### Belt Pack Transceivers are built for rugged use.

Order No. 70681-xxx\*

Don't be fooled by the TR-200's compact size, light weight and modern styling. It was designed to withstand years of drops, moisture and shipping impact, and is backed by the Radiocom three year warranty program. What makes the TR-200 so durable? Surface level, low profile controls protect the electronics, and the case is made of a revolutionary

new polycarbonate material called Makroblend UT-400.

The unit has one transmit and one receive channel and operates in the 150 to 216 MHz range, with several frequencies available in stock.

\*The last three digits of the Order No. (xxx) determine frequency. Consult price sheet for frequency choices.

### Standard Features

**K. Two attached 1/4-wave flexible wire antennas.**

**L. Four-pin male connector for headset** — Compatible with most standard four-pin intercom headsets, which means big savings for those who want to add Radiocom to their current system, but have a sufficient supply of headsets.

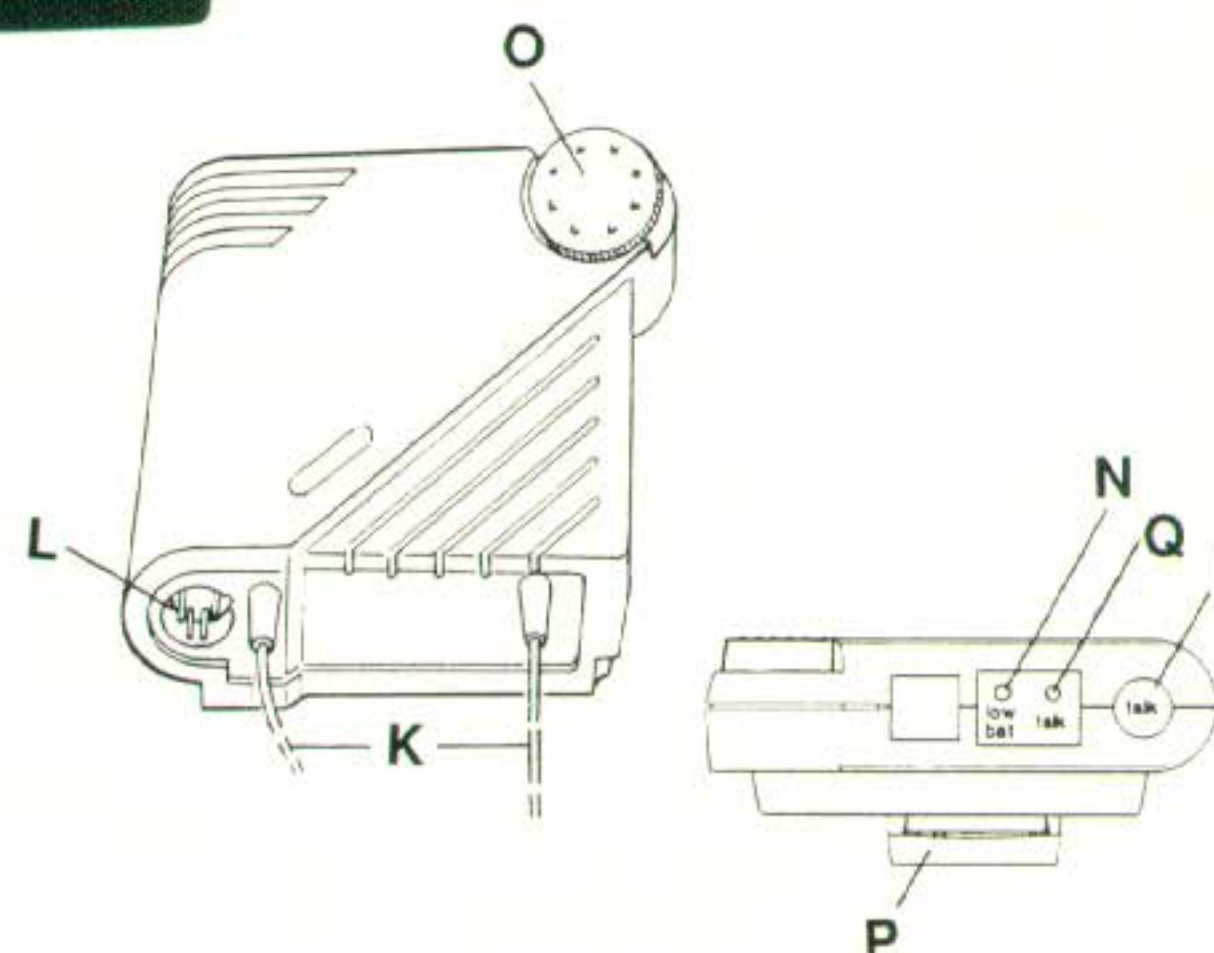
**M. Dual function talk button** — Press once for push-to-talk, and press twice for a latched hands-free talk mode.

**N. Low Battery LED** — Lights continuously when batteries are low. Unit has an impressive **24-hour battery life** when using six alkaline "AA" batteries. (Expect eight hours with optional "AA" rechargeable NiCd batteries. BC-4 catalog #70741-000.)

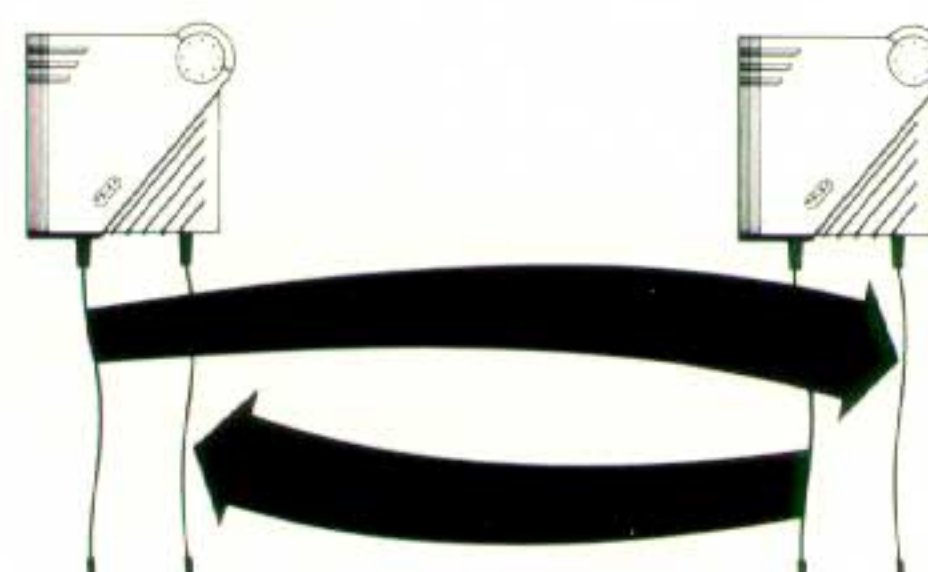
**O. Large, easy-to-feel headset volume control.**

**P. Wide, sturdy belt clip.**

**Q. Talk indicator LED.**



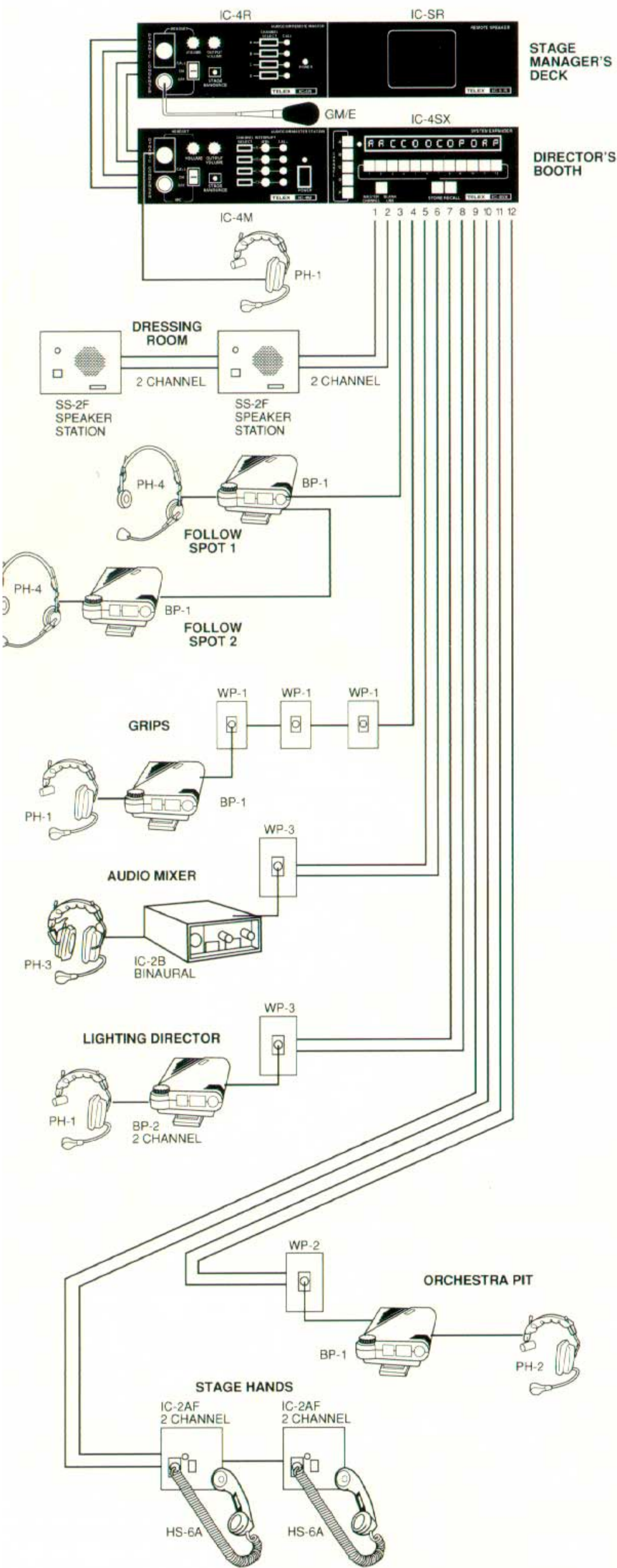
When a professional but simple and inexpensive *two station* wireless intercom system is needed, just select two TR-200 Belt Packs with matching frequency groups, plug in headsets and your system is complete.



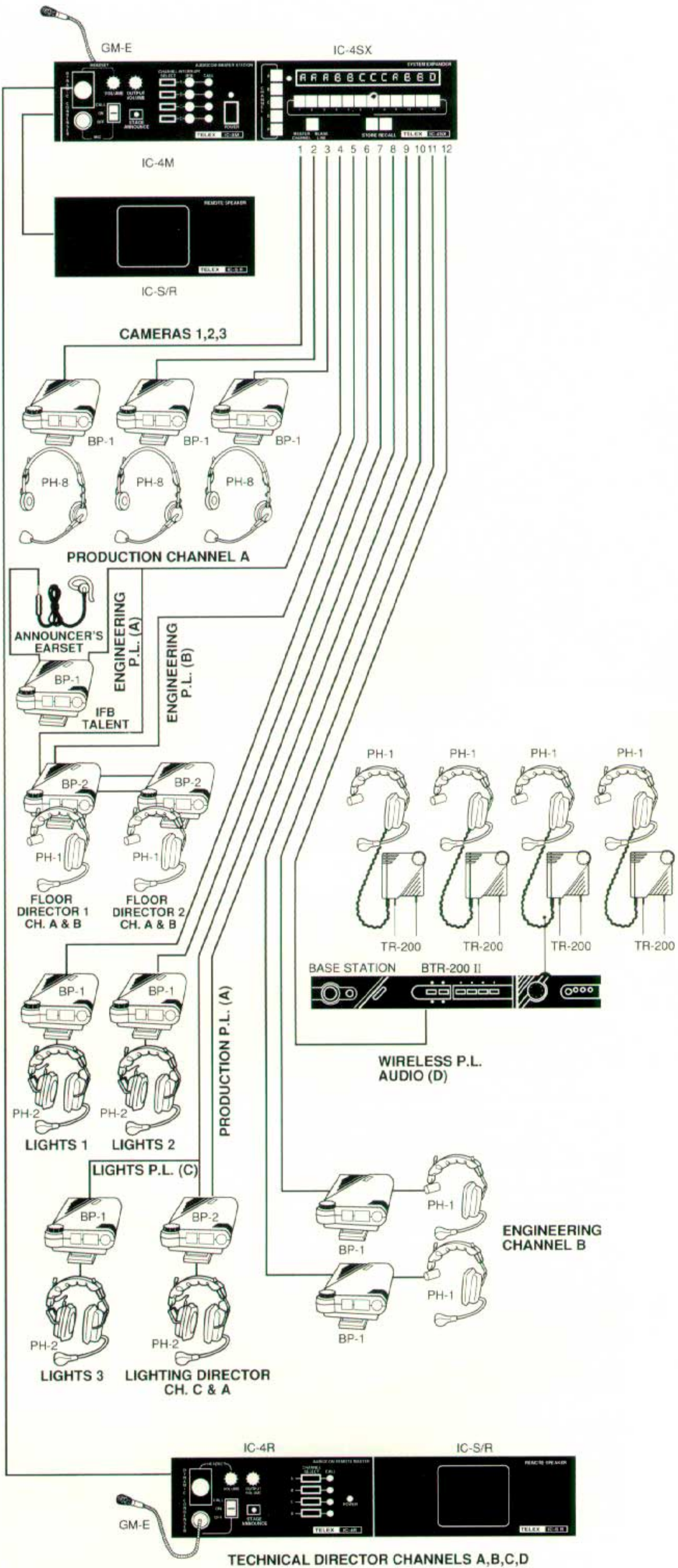


# Intercom System Layout Guide

## Theatre



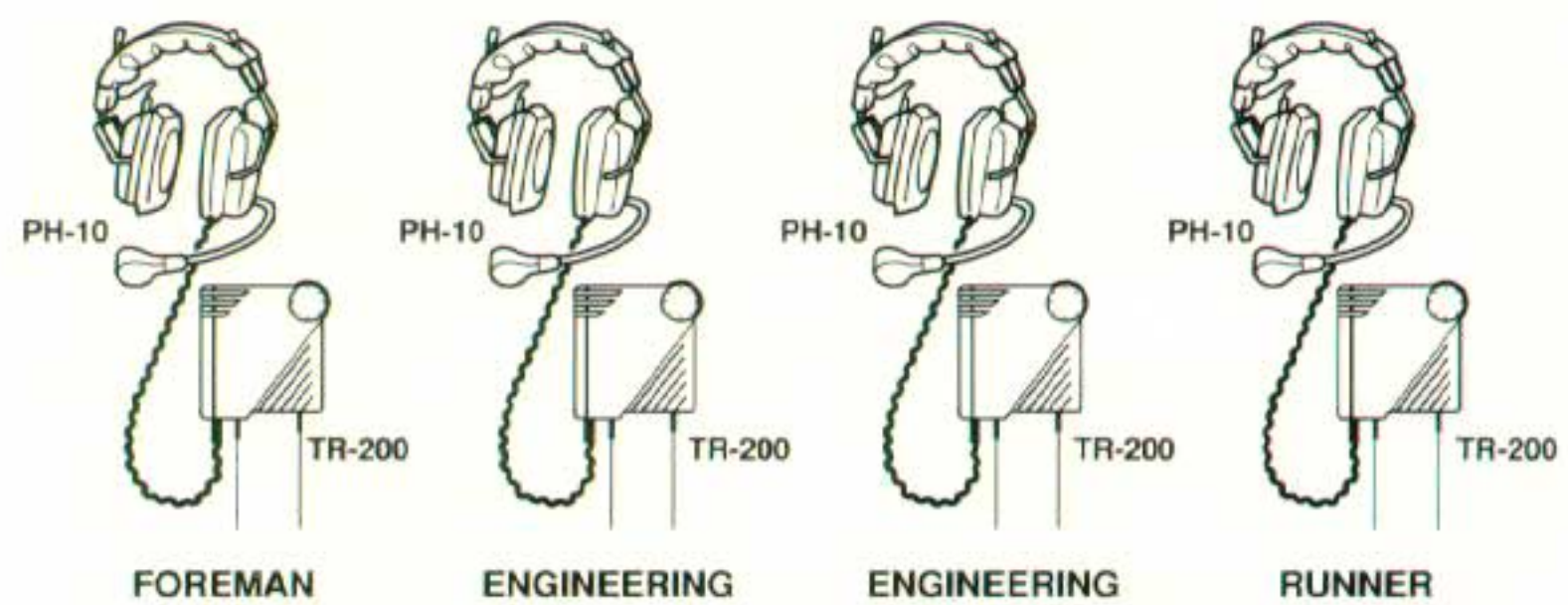
## Broadcast Van



NOTE: P.L. = Party Line



Aluminum Extrusion Facility  
110-115 dB SPL high noise environment



The diagram illustrates the wiring for a Press Box system, divided into three main sections: the Press Box, the Spotters, and the Field.

**Press Box (PS-2L):** This central unit features a "TWO LINE POWER SUPPLY" with "LINE 1" and "LINE 2" outputs. It also includes a "COMBINE" switch (LINE 1 & 2) and an "ISOLATE" switch. A "TELEX (PS-2L)" label is present. An "AC" power source is connected to the top left.

**DEFENSIVE SPOTTER:** This section includes a headset (PH-2) connected to a base unit (BP-1). The BP-1 is connected to a switch (WP-1) via a cable labeled "ME-25". This switch is connected to "LINE 1" of the Press Box.

**OFFENSIVE SPOTTER:** This section is identical to the defensive side, featuring a headset (PH-2), base unit (BP-1), and switch (WP-1) connected to "LINE 2" of the Press Box.

**Field:** This section shows the coaches' area. It includes a "DEFENSIVE COACH" with headset (PH-1) and base unit (BP-1), and an "OFFENSIVE COACH" with headset (PH-1) and base unit (BP-1). A "HEAD COACH" is also shown, capable of switching between offense and defense. The coaches are connected to a central switch (WP-3) via cables labeled "ME-100" and "ME-100/2". The WP-3 switch is connected to "LINE 1" and "LINE 2" of the Press Box. The entire field section is labeled "FIELD" and "PERMANENT WIRING two 2-cond, shielded cables or 3 'dry' pairs".



# Accessories



WP-1



WP-2



WP-3



IF-1



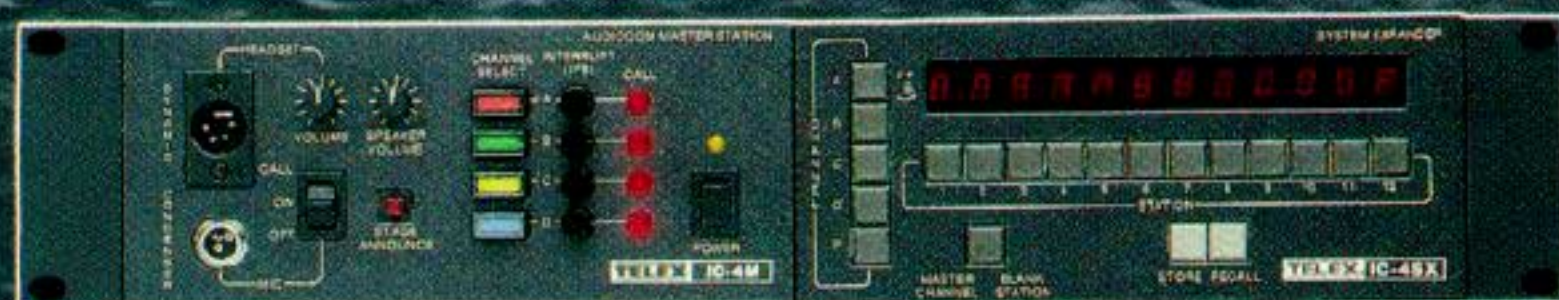
CCB-1



RM-11



RM-13



RM-12



RM-14

## Cables

For intercom connections between stations, microphone type audio connecting super flex cables with black connectors are available in several lengths.

### Headset Extension Cables (male & female XLR-4 type connectors)

HE-15	15'	(4.57 m)	92925-000
HE-30	30'	(9.14 m)	92925-001

### Microphone Type Intercom Cables (male & female XLR-3 type connectors)

ME-25	25'	(7.6 m)	96150-000
ME-50	50'	(15.2 m)	96150-001
ME-100	100'	(30.4 m)	96150-002

### Two Channel Intercom Cables (male & female XLR-6 type connectors)

ME-25/2	25'	(7.6 m)	96151-000
ME-50/2	50'	(15.2 m)	96151-001
ME-100/2	100'	(30.4 m)	96151-002

## Miscellaneous Accessories

**WP-1** Single-Channel Wall Plate — male XLR-3 type conn. ....**96136-000**

**WP-2** Single-Channel Wall Plate with Two-Channel Switch— male XLR-3 type conn. ....**96136-001**

**WP-3** Two-Channel Wall Plate — male XLR-6 type conn. ....**96136-002**

**RM-11** Rack Mounting Brackets for one PS-2L, IF-1, IC-4M, IC-4R, IC-4SX or IC-2MAX .....**94398-000**

**RM-12** Rack Mounting Brackets for two (side by side) PS-2L, IF-1, IC-4M, IC-4R, IC-4SX or IC-2MAX .....**92793-001**

**RM-13** Rack Mounting Brackets for IC-series belt pack stations ...**96125-000**

**RM-14** Rack Mounting Brackets for remote speaker station SS-2P .....**92793-003**

### Belt Clip Replacements:

Metal (with screws)	92873-001
Gray Plastic	96605-001
Black Plastic	96605-000
Screws for Plastic Clips	540081

**Service Manuals** for all master stations and power supplies .....**38109-311**

**Service Manuals** for all accessories .....**38109-312**

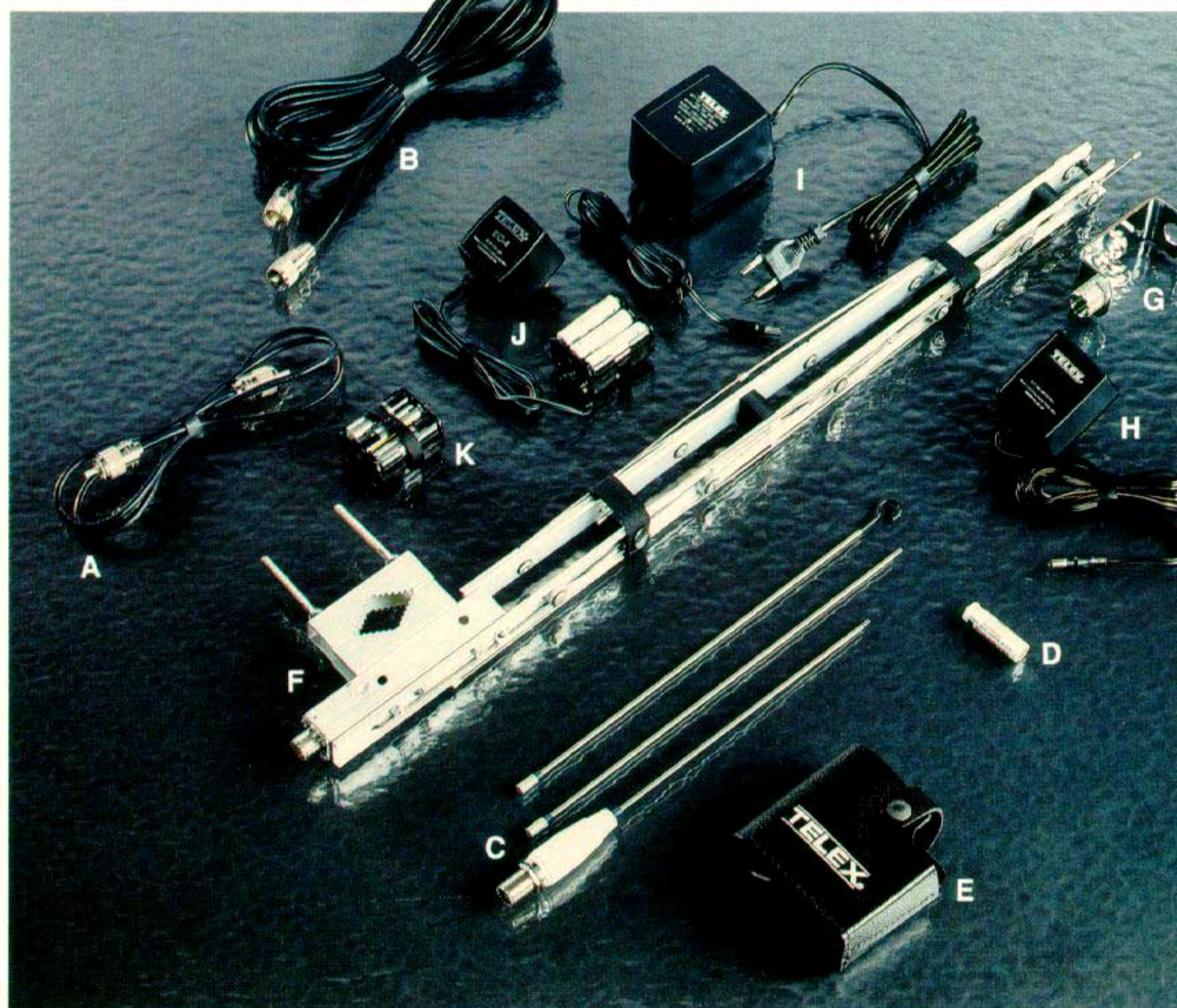
## Interface/Accessories

**IF-1 Interface** provides interconnection between Audiocom and other wired intercoms or telephone lines. It will adapt Audiocom to RTS\* or any universal, 2 or 4 wire circuitry and carbon, and is also rack mountable with option adapter kit. Can be powered locally or from the intercom channel .....**94400-000**

**CCB-1 Telex/Clear-Com Interface** is designed to interface Audiocom balanced lines with unbalanced line products (Clear-Com) .....**96230-000**

**TW-5W Splitter Box** one in five out Not shown .....**9000322400**





**JB-2 Junction Box** is a breakout box that can take one two-channel cable and split it into two single-channel outputs, or it can take two single-channel cables and combine them to form one single two-channel cable. It includes one male and one female XLR-3 type connector for each channel, and one male and two female XLR-6 type connectors for channels one and two combined. ....  
**96139-000**

**I-B/U Interface Adaptor Cable** converts from Neutrik 6-pin to Switchcraft 6-pin  
**96566-000**

\*RTS Systems is a division of Telex Communications, Inc.

## Radiocom Accessories

A. **CX-4** Coax antenna cable 4' (1.2 m)  
**63901-001**

B. **CX-25** Coax antenna cable 25' (7.6 m) .....  
**63901-000**

C. **UA-58L** 5/8 wave transmit/receive antenna low, 154-172 MHz .....  
**878553**

Not shown:  
**TX-58H** 5/8 wave transmit antenna high, 177-184 MHz.....  
**878555**

**RX-58H** 5/8 wave receive antenna high, 205-216 MHz.....  
**878554**

D. **NCB-AA** NiCd AA battery for TR-200 (requires 6) .....  
**7800-86**

E. **TRH-1** leather swivel holster with belt loop for TR-200 .....  
**70898-000**

F. **ALP-1** Directional log antenna 150-175 MHz .....  
**63910-000**

G. **ASA-1** Mic stand bracket for 5/8 wave antenna .....  
**63907-000**

Not shown:  
**AWB-1** Wall bracket for 5/8 wave antenna .....  
**63906-000**

H. **PA-2** Power supply for BTR-200 II 120 V .....  
**59702-001**

I. **PA-2E** Power supply for BTR-200 II 240 V .....  
**59224-002**

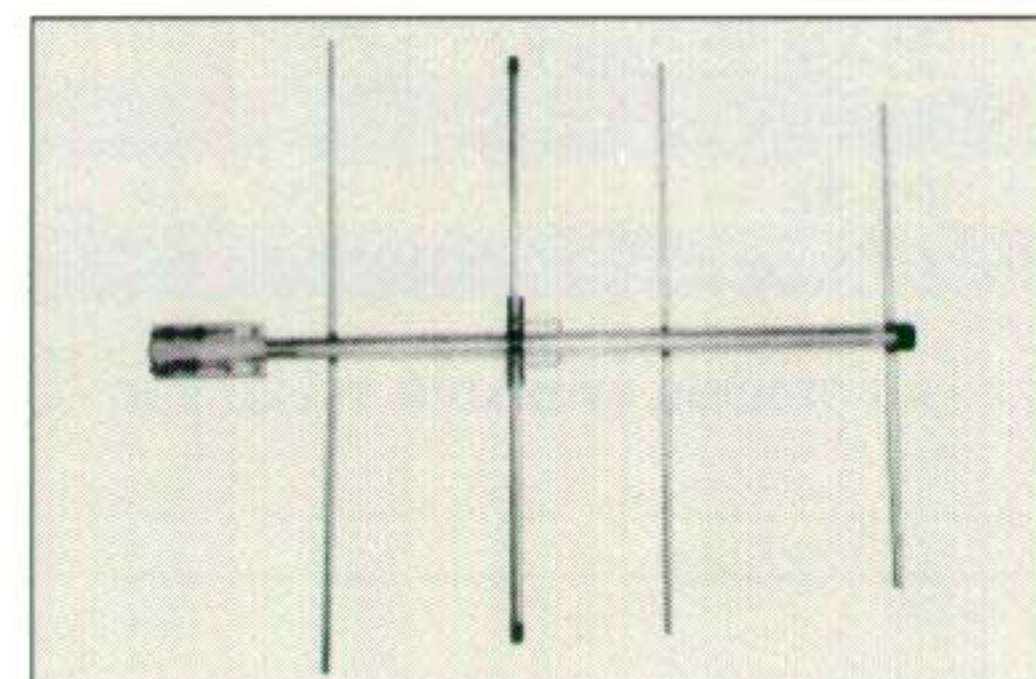
J. **BC-4** NiCd batteries, sled and 120 V charger (batteries included)  
**70741-000**

K. **BSL-1** Spare battery sled for TR-200 (batteries not included) .....  
**878557**

L. **YAG-1** directional Yagi antenna 150-157 MHz .....  
**879909**

Not shown:  
**YAG-2** directional Yagi antenna 169-186 MHz .....  
**879908**

**YAG-3** directional Yagi antenna 204-216 MHz .....  
**879907**





# Specifications

## Audiocom Nominal System Specifications

- Audio Line Impedance:** 300 ohm resistive termination for system

**Station Bridging Impedance:** (Individual Stations) 10K ohms nominal

**dc Line Voltage:** 24 Vdc nominal — 12 to 30 Vdc operational

**Wiring Requirements:** 3/c cable (triplex) or 2/c shielded microphone cable

**Station Inputs:**

  - Microphone (dynamic):** Designed for 50-600 ohm mics
  - Microphone (carbon):** Designed for 20-50 ohm mics
  - Line:** 10,000 ohm-balanced transformer coupled

**Station Outputs:**

  - Headphone:** Designed for 150-600 ohm phones (75 mW into 150 ohms minimum)
  - Line:** 10 mW into 300 ohms (+10 dBm) minimum
- Operating Distance:** Typical two station system with a single 24 Vdc power supply, 5 miles using no., 26 AWG low capacity cable (without light signalling).

**NOTE:** System performance over long distances is controlled by two key factors:

  - 1) dc voltage drop in the wiring is determined by cable length, wire size and current drain of the stations connected.
  - 2) audio signal attenuation is determined by the length and size of wire plus the capacitance of the cable. Loss of signal level may be compensated by increasing the station gain (volume level) when needed.

**Environment:**

  - Storage:** -13°F to +158°F (-25°C to +140°C)
  - Operation:** +5°F to 140°F (-15°C to +60°C)
  - Relative Humidity:** 0% to 95% (non condensing)

## Individual Audiocom Specifications

DC Current Requirements (nominal at 24 Vdc)			
Products	No Talk	During Talk	During Light Signal
IC-4M, IC-4R	100 mA	100 mA	150 mA
IC-4SX	120 mA (min)	—	240 mA (max)
IC-2MAX	100 mA	100 mA	150 mA
IC-1B, IC-1F	8 mA	12 mA	—
IC-1/LS, IC-1F/LS	12 mA	20 mA	30 mA
IC-2A, IC-2AF	16 mA	24 mA	35 mA
IC-2B	12 mA	24 mA	—
BP-1/BP-2	30 mA	30 mA	30 mA
SS-2P, SS-2F	25 mA	60 mA	65 mA
IF-1	20 mA	20 mA	—
CCB-1	8 mA	8 mA	12 mA
AC Power Requirements			
Products		No Load	2 Amp Load
IC-4M, IC-2MAX	105 to 125 Vac, 50-60 Hz	8.5	90 W
PS-1F	105 to 125 Vac, 50-60 Hz	4.0	30 W
PS-2L	105 to 125 Vac, 50-60 Hz	5.0	86 W
BTR-200 II/BTR-200B II	115 Vac, 50-60 Hz	8.0	—
All models available in 220 Vac			



# Radiocom Specifications

## BTR-200 II Base Station Repeater

### Overall

**Power Requirement:** 115 Vac, 60 Hz, 8W (220 Vac, 50 Hz, Model Avail.) or 12 to 15 Vdc (external)

**Temp. Range:** -4°F to 130°F (-20°C to 55°C)

**Dimensions:** 15.75"W x 1.75"H x 10.5"D (40 cm x 4.5 cm x 27 cm)

**Weight:** 4.5 lbs. (2 kg)

**Transmit Antenna:** 5/8 wave (supplied) S0239 connector on chassis

**Receive Antenna:** 5/8 wave (supplied) S0239 connector on chassis

### Transmit

**RF Freq. Range:** 150 to 216 MHz

**RF Freq. Stability:** Crystal Controlled, 0.005%

**RF Power Output:** 50 mW Typical

**Modulation:** F3, 4000 Hz Deviation, 100 micro-seconds Pre-emphasis

**Modulation Limiter:** Internal Compressor

**Modulation Freq. Range:** 300 to 5000 Hz  $\pm 2$  dB

**Microphone Audio Input:** 30 ohms to 3500 ohms

**Microphone Input Sensitivity:** 2 mV Dynamic, 4 mV Electret

**Radiated Harmonics and Spurious Emissions:** -45 dBC, Exceeds FCC Specifications

**External Audio Input:** Auxiliary & Intercom Inputs

**FCC Acceptance:** Type accepted under FCC Parts 90 and 74

### Receive

**RF Freq. Range:** 150 to 216 MHz

**RF Freq. Stability:** Crystal Controlled, 0.005%

**Type:** Dual Conversion Superheterodyne, FM

**RF Sensitivity:** Less than 0.5  $\mu$ V for 12 dB SINAD

**IF Selectivity:** 3 dB at 30 kHz (4 pole Monolithic Filters)

**Image Rejection:** 70 dB or better

**Squelch Quieting:** 90 dB

**Squelch Threshold:** 1  $\mu$ V (Internal)

**Signal-to-Noise Ratio:** 90 dB

**Audio Output:** 32 mW into 600 ohms (Headset)

**Other Audio Outputs:** Speaker, Auxiliary, Intercom

**Distortion:** Less than 1% at Rated Output

**FCC:** Notification under FCC Part 15

## TR-200 Belt Pack Transceiver

### Overall

**Power Requirements:** 6 "AA" Cells (Alkaline, Neda, MN 1500) NiCd optional

**Current Drain:** 65 mA

**Temperature Range:** -4°F to 130°F (-20°C to 55°C)

**Dimensions:** 4.25"W x 4.125"H x 2.0"D (108 mm x 105 mm x 51 mm)

**Weight:** 13 oz with batteries (369 g)

**Transmit Antenna:** 1/4 wave wire (attached)

**Receive Antenna:** 1/4 wave wire (attached)

### Transmit

**RF Frequency Range:** 150 to 216 MHz

**RF Frequency Stability:** Crystal Controlled, 0.005%

**RF Power Output:** 50 mW Typical

**Modulation:** F3, 4000 Hz Deviation, 100 micro-seconds Pre-emphasis

**Modulation Limiter:** Internal Compressor

**Modulation Frequency Range:** 300 to 5000 Hz  $\pm 2$  dB

**Microphone Audio Input:** 30 ohms to 3500 ohms

**Microphone Input Sensitivity:** 2 mV Dynamic, 4 mV Electret

**Radiated Harmonics and Spurious Emissions:** -45 dBC, Exceeds FCC Specifications

**FCC Acceptance:** Type accepted under FCC Parts 90 and 74

### Receive

**RF Frequency Range:** 150 to 216 MHz

**RF Frequency Stability:** Crystal Controlled, 0.005%

**Type:** Dual Conversion Superheterodyne, FM

**RF Sensitivity:** Less than 0.5  $\mu$ V for 12 dB SINAD

**IF Selectivity:** 3 dB at 30 kHz (Ceramic Filters)

**Image Rejection:** 70 dB or better

**Squelch Quieting:** 90 dB

**Squelch Threshold:** 3.0  $\mu$ V (Internal)

**Signal-to-Noise Ratio:** 90 dB

**Audio Output:** 32 mW into 600 ohms (Headset)

**Distortion:** Less than 1% at Rated Output

**FCC:** Notification under FCC Part 15

### Dimensions/Weight

**IC-2MAX:** 3.5" (89 mm) high x 8.25" (210 mm) wide x 11.25" (286 mm) long, 9 lbs (4.1 kg)

**IC-4M:** 3.5" (89 mm) high x 8.25" (210 mm) wide x 11.25" (286 mm) long, 10 lbs 2 oz (4.6 kg)

**IC-4R:** 3.5" (89 mm) high x 8.25" (210 mm) wide x 11.25" (286 mm) long, 5 lbs 6 oz (2.3 kg)

**IC-4SX:** 3.5" (89 mm) high x 8.25" (210 mm) wide x 11.25" (286 mm) long, 7 lbs 3 oz (3.26 kg)

**IC-SR:** 3.25" (83 mm) high x 8.25" (210 mm) wide x 5.5" (140 mm) long, 2 lbs (907 g)

**PS-2L:** 3.5" (89 mm) high x 8.25" (210 mm) wide x 9.5" (241 mm) long, 8 lbs (3.6 kg)

**IC-1/LS:** 1.75" (44 mm) high x 3" (76 mm) wide x 5.4" (137 mm) long, 18 oz (510 g)

**IC-2A:** 1.75" (44 mm) high x 3" (76 mm) wide x 5.4" (137 mm) long, 23 oz (652 g)

**IC-1F:** 4.5" (114 mm) high x 4.6" (117 mm) wide x 2.3" (58 mm) long, 16 oz (454 g)

**IC-1F/LS:** 4.5" (114 mm) high x 4.6" (117 mm) wide x 2.3" (58 mm) long, 16 oz (454 g)

**IC-2AF:** 4.5" (114 mm) high x 4.6" (117 mm) wide x 2.3" (58 mm) long, 16 oz (454 g)

**IC-2B:** 1.75" (44 mm) high x 4" (117 mm) wide x 5.5" (140 mm) long, 26 oz (737 g)

**IF-1:** 3.5" (89 mm) high x 8.25" (210 mm) wide x 8.5" (216 mm) long, 4 lbs 8 oz (2 kg)

**CCB-1:** 1.625" (41 mm) high x 2.625" (67 mm) wide x 5" (127 mm) long, 16 oz (454 g)

**SS-2P:** 3.2" (81 mm) high x 10.1" (257 mm) wide x 5.3" (135 mm) long, 2 lbs 8 oz (1133 g)

**SS-2F:** 4.3" (109 mm) high x 10.8" (274 mm) wide x 3.7" (94 mm) long, 2 lbs (907 g)

**BTR-200 II/BTR-200B II:** 1.75" (44 mm) high x 15.75" (400 mm) wide x 10.5" (267 mm) long, 4.5 lbs (2 kg)

**TR-200/TR-200P:** 2" (51 mm) high x 4.25" (108 mm) wide x 4.125" (105 mm) long, 13 oz (369 g) with batteries

**BP-1/BP-2:** 2" (51 mm) high x 4.25" (108 mm) wide x 4.125" (105 mm) long, 8 oz (227 g)