



L3HARRIS

DAILEY-WELLS

02/15/2020

Mary Beth Strong
Administrative Manager
Lake County Sheriff's Department
4913 Helbush Drive
Lakeport, CA 95453

Ref: Bid 20-08

Dailey Wells Communications is pleased to provide the attached response to your sealed bid request for the St Helena Site. The attached quote provides list price and discounted prices. Please note that all 3rd party vendor items provide a discount of 10% off of list.

Please review the attached quote and let us know if you have any questions. There are know installation or services provided in this bid.

Best Regards,



Michael Priolo:

Lake County Bid No 20-08 - Harris/Tait ASIP Analog Infrastructure -Tone Remote

Item	Part Number	Description	Quantity	Unit List	Customer Discount %	Unit Sale	Ext Sale
1 Satellite Sites Sites:							
10	TB9435S-100H	CHASSIS, TB9400, SINGLE, 100W	1	\$ 1,278.00	30	\$ 894.60	\$ 894.60
20	T01-01103-DAAA	Reciter, TB9400, 148-174MHz	1	\$ 2,272.00	30	\$ 1,590.40	\$ 1,590.40
30	T01-01121-DBBA	Linear Pwr Amp, TB9400, 148-174MHz, 100W	1	\$ 1,838.00	30	\$ 1,286.60	\$ 1,286.60
40	TBA30A0-0200	TB9000 Power Management Unit AC with Aux24volts	1	\$ 1,889.00	30	\$ 1,322.30	\$ 1,322.30
50	TBAS062	SFE SIMULCAST ENABLE (TB91/94)	1	\$ 2,730.00	30	\$ 1,911.00	\$ 1,911.00
60	TBAS071	SFE IP NETWORKING SATELLITE	1	\$ 761.00	30	\$ 532.70	\$ 532.70
70	219-01561-00	CABLE, PMU IEC, 6.5FT	1	\$ 11.00	30	\$ 7.70	\$ 7.70
80	TBAA03-13	Auxiliary Support Bracket, TB8/9	1	\$ 40.00	30	\$ 28.00	\$ 28.00
Zetron Tone Remote Equipment							
90	901-9588	Model 250 Tone Remote Adapter	1	\$ 1,148.00	10	\$ 1,033.20	\$ 1,033.20
100	950-0898	Dual Rack Mount Adapter Kit	1	\$ 99.00	10	\$ 89.10	\$ 89.10
110	709-7540	Generic Interface cable with flying leads	1	\$ 88.00	10	\$ 79.20	\$ 79.20
Additional Accessories							
120	TELEWAVE ANT150Y7-WR	148-174 MHz, 5 dBd YAGI ANTENNA	1	\$ 837.03	10	\$ 753.33	\$ 753.33
130	ANDREWS LDF4-50A	100' 1/2" FOAM HELIX 50 OHM COAXIAL CABLE	100	\$ 2.30	10	\$ 2.07	\$ 207.00
140	POLIS-B50HN-C2-MA	125-1000MHz BULKHEAD PROTECTOR	1	\$ 81.76	10	\$ 73.58	\$ 73.58
150	ANDREWS L4TNF-PSA	Positive Stop N-Female for 1/2"	2	\$ 24.68	10	\$ 22.21	\$ 44.42
160	ANDREWS L4TNM-PSA	Positive Stop N-Male for 1/2"	3	\$ 24.68	10	\$ 22.21	\$ 66.64
170	Telewave T-1530	118-174MHz, 100w Single Isolator	1	\$ 2,179.66	10	\$ 1,961.69	\$ 1,961.69
180	TPRC-1508-2	148-174MHz 8" Dual Cavity Bandpass/reject	1	\$ 1,384.04	10	\$ 1,245.64	\$ 1,245.64
190	430174	150' 1/2" SUPERFLEX CABLE	150	\$ 4.54	10	\$ 4.09	\$ 612.90
200	441175	N MALE CONN. 1/2"	4	\$ 27.60	10	\$ 24.84	\$ 99.36
210	312466	6'N- MALE-N-MALE RG142 JUMPER	6	\$ 76.94	10	\$ 69.25	\$ 415.48
220	313411	GROUNDING KIT For 1/2" LDF4-50 cable	6	\$ 19.99	10	\$ 17.99	\$ 107.95
230	F01U306547	IP-224 Gateway Basic	2	\$ 3,150.00	10	\$ 2,835.00	\$ 5,670.00
240	F01U165538	IP-224 MOUNTING BRACKETS (DUAL)	2	\$ 68.00	10	\$ 61.20	\$ 122.40
250	F01U117426	AHS-1 ALIGNMENT HANDSET	1	\$ 83.00	10	\$ 74.70	\$ 74.70
260	F01U165544	DB-37 TO 4-WIRE CABLE	2	\$ 250.00	10	\$ 225.00	\$ 450.00
270	15920	138-174MHz DIPOLE ANTENNA	1	\$ 1,001.65	10	\$ 901.49	\$ 901.49
280	485569	DUAL 8" VHF NOTCH PASS CAVITY	1	\$ 1,384.04	10	\$ 1,245.64	\$ 1,245.64
290	TELANT150Y7-WR	148-174MHz, 5dBd YAGI ANTENNA	2	\$ 837.03	10	\$ 753.33	\$ 1,506.65
300	429150	400' 1/2" HELIAX CABLE LDF-4	400	\$ 2.30	10	\$ 2.07	\$ 828.00
310	377273	1/2" MALE CONNECTOR	3	\$ 24.68	10	\$ 22.21	\$ 66.64
320	307941	1/2" N FEMALE CONNECTOR	3	\$ 24.68	10	\$ 22.21	\$ 66.64
340	441175	N. MALE CONN. 1/2"	4	\$ 27.60	10	\$ 24.84	\$ 99.36
350	40756	POLY PHASER LIGHTNING ARRESTOR	2	\$ 74.45	10	\$ 67.01	\$ 134.01
360	418162	CLICK ON HANGERS (10-PK) (5)	5	\$ 26.89	10	\$ 24.20	\$ 121.01
370	488136	WEATHERPROOFING KIT	2	\$ 19.94	10	\$ 17.95	\$ 35.89
380	204353	STANDOFF ADAPTER	1	\$ 37.16	10	\$ 33.44	\$ 33.44
390	506097	CHANNEL NUT HARDWARE	5	\$ 7.54	10	\$ 6.79	\$ 33.93
400	484188	STACK HANGERS (10-PK)	1	\$ 27.65	10	\$ 24.89	\$ 24.89
410	253900 (62652)	SPLIT 3/8" WASHER LOCK	4	\$ 0.10	10	\$ 0.09	\$ 0.36
420	265322	HEAD CAP SCREWS 3/8-16 (100-PK)	1	\$ 59.98	10	\$ 53.98	\$ 53.98
43	207567	3/8-16 S.S NUTS (50-PK)	2	\$ 8.39	10	\$ 7.55	\$ 15.10
						Subtotal:	\$ 25,846.90
						Tax (7.25%):	\$ 1,873.90
						Shipping Est:	\$ 1,300.00
						TOTAL:	\$ 29,020.80

- Notes:
- (1) Price based off Sonoma County BPO 170032
 - (2) Tax may be waived with a valid tax exempt certificate
 - (3) Price does not include programming or installation
 - (4) Shipping is added to price
 - (5) Pricing based off customer provided part numbers
 - (6) 1 Year Warranty on 10-110 and 230-250

Company Confidential

Please address Purchase Orders as follows:

Dailey and Wells Communications, Inc.
 3440 E. Houston Street
 San Antonio, TX 78219
 Attn: Michael Priolo
 Email: mpriolo@dwcomm.com



L3HARRIS

DAILEY-WELLS

BID Form

TOTAL BID FOR ST. HELENA MICROWAVE/VOTING COMMUNICATIONS PROJECT INCLUDING 7.25 % SALES TAX

Subtotal: Base plus options: \$ 25,846.90

Other Discounts: (e.g. Bulk discount/Dlr. Adj.) _____

Delivery: \$ 1,300.00

Sales Tax: \$ 1,877.90

Fees: _____

Total Cost: 29,020.80

Total cost spelled out: _____

Darley Wells Communications [Signature] 2/15/2020

Company Name

Authorized Signature

Date

Michael P Priolo
Name (Please print)

3440 E Houston St San Antonio, TX 78219
Mailing Address (Please print)

(213) 810-6113
Office Phone # / Cell Phone #

mpriolo@dwcomm.com
Email address

AWARD

ACCEPTED:

Date: _____

Chairman, Board of Supervisors

ATTEST: Carol J. Huchingson
Clerk of the Board

By: _____
Deputy

INVITATION FOR BID NO.

Distribution: Original - Purchasing
Copy - Bidder
Copy - LCSO

TB9400 BASE STATION

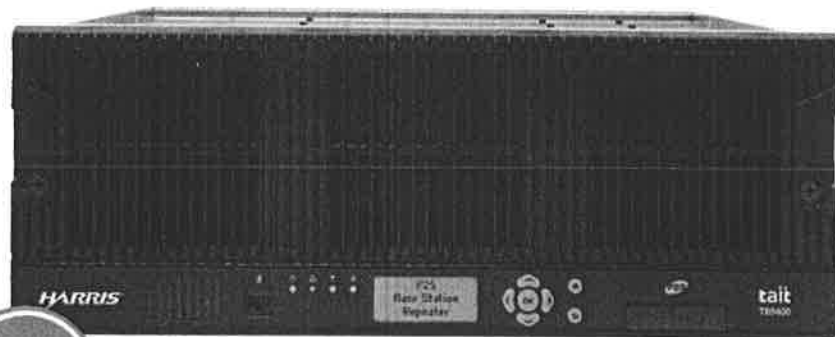
P25 Phase 2 Capable Repeater

The L3Harris TB9400 is open-standards compliant, ensuring interoperability among agencies.

This Base Station/Repeater has made smooth migrations easier than ever before, and is capable of analog simulcast over IP, P25 Phase 1 and P25 Phase 2. The built-in software voter and simulcast controller reduces required hardware and saves rack space.

The TB9400 provides cost-effective deployment and improved operational performance.

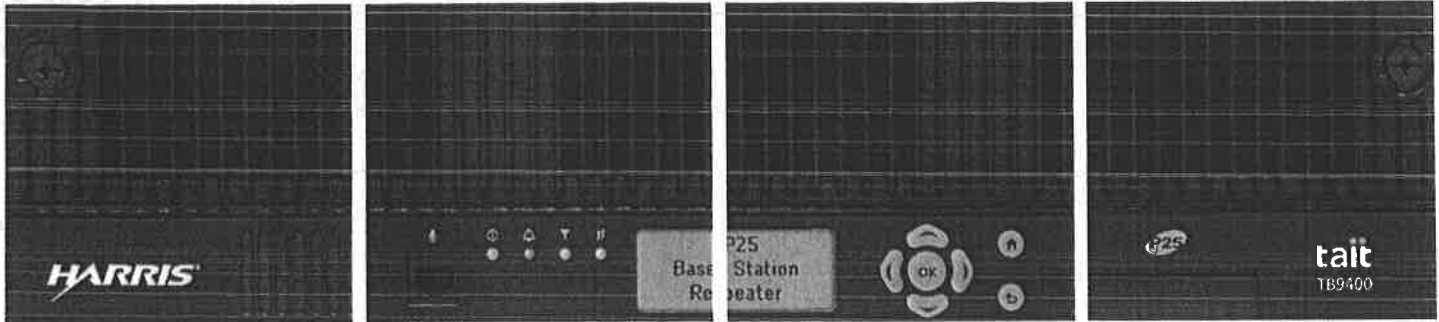
Modular by design, this secure and reliable Base Station/Repeater scales with each organization's needs as they change and grow. Remote management and monitoring options include built-in diagnostics and access level control, multiple user accounts, fault diagnosis, and detailed alarm monitoring and management via IP.



MORE EFFICIENT, FLEXIBLE P25 AND ANALOG NETWORKING

KEY BENEFITS

- > **Operation in VHF, UHF and 700/800 MHz frequency bands**
- > **Scalable network design with IP connectivity**
- > **Advanced capacity and interoperability with adherence to P25 standards**
- > **Extensive remote management and monitoring options with a focus on security**
- > **MIL-STD designed and tested for reliability to mitigate network outages**



FEATURES AND BENEFITS

CORNERSTONE OF A P25 PHASE 2 SOFTWARE-UPGRADABLE SYSTEM

The TB9400 base station contributes to keeping your people safe and to running an effective and efficient operation.

- > Flexible network design through IP connectivity and linking
- > Individual and group calls
- > Supports end-to-end encryption, including highly secure AES
- > Enable application suite includes: Monitor, Repeat, Secure, and Fleet Management

DELIVERS ON PUBLIC SAFETY

Benefit from the spectral efficiency, multi-vendor interoperability, security, migration and data capability demanded by P25 standards.

- > Provides choice of vendor and equipment
- > 12.5 kHz P25 Phase 1 and analog operation
- > 6.25 kHz equivalent P25 Phase 2 TDMA operation

DIGITAL VOICE COMMUNICATIONS FOR OPERATIONS

Robust design provides clear mission-critical voice communications.

- > Transfer voice and data across a packet-switched infrastructure using standard IP communications
- > Quality of service assignments for voice and signaling for optimal network packet routing
- > Built-in optional central voting facility selects the best quality signal for transmission

DESIGNED FOR DEMANDING ENVIRONMENTS

TB9400 network design services deliver the resilience, capacity and coverage required for your communications network.

- > Rugged construction, efficient heat sinks and three-fan, front-to-rear cooling
- > Continuously rated at full output power
- > Meets MIL-STD-810F
- > Continuous operation with smart AC/DC
- > Ongoing communications during an outage with failsoft

SUPPORTS COST EFFECTIVE DEPLOYMENT AND OPERATION

TB9400 applications and design elements make the TB9400 cost effective to deploy, minimizing individual site equipment and number of sites. It is a low cost of ownership solution, with upgrades, reconfigurations, and diagnostics.

- > Integrated simulcast controller replaces the typical external controller and minimizes rack space
- > LSM support means digital P25 simulcast networks require fewer sites
- > C4FM simulcast operation
- > Built-in continuous wave identification generation meets FCC call-sign requirements
- > Identical 4U form-factor and module packaging to the P25 Phase 1 TB9100 base station
- > Supports two base station software versions for swift rollback
- > Rx only option for reduced deployment costs

FUTURE-PROOF TO PROTECT INVESTMENT

Interfaces and functions ensure your P25 system can expand with the evolving needs of your organization and your regulatory environment.

- > Modular design for cost effective deployment, maintenance and upgrade
- > Software configurable
- > Feature upgrades through software license

EFFICIENT, SECURE NETWORK MANAGEMENT

The TB9400 management applications suite allows you to efficiently manage your network and its key functions.

- > Remote management via web server and SNMPv3 support
- > Alarm monitoring and management, via IP, with 12 remotely monitored digital inputs
- > Detailed alarm reporting monitors over 50 key base station parameters
- > Inbuilt diagnostics to remotely confirm optimal operation
- > Password protection and access level control on web server
- > Multiple user accounts
- > System logs retained for 30 days
- > Remote fault diagnosis
- > Remote software downloads
- > Up to 1,000 configurable channels for efficient deployment
- > Front panel LCD display and navigation buttons for on-screen menu (can be disabled)
- > Supports authorization for remote authentication
- > Users may be authorized as an Administrator, a Maintainer or a Guest

SPECIFICATIONS FOR: TB9400 BASE STATION-P25 PHASE 2 CAPABLE REPEATER

GENERAL			
Frequency Bands	VHF	UHF	700/800 MHz
Frequency Ranges			
Transmit (Tx)	136-156 MHz, 148-174 MHz	400-440 MHz, 440-480 MHz	762-776 MHz, 850-870 MHz
Receive (Rx)	136-156 MHz, 148-174 MHz	400-440 MHz, 440-480 MHz	792-824 MHz
Frequency Stability	±0.5ppm		
Channels/Zones	1,000		
Dimensions (D x W x H)	15.8 in x 19 in x 7 in (400.5 mm x 482.6 mm x 176.8 mm) 4U rack space		
Weight - lb (kg)	Single 50 W 43.2 lb (19.6 kg)	Single 100 W 46.5 lb (21.1 kg)	Dual 50 W 54.7 lb (24.8 kg)
Channel Spacing	12.5 kHz Analog and P25 (Phase 1 - FDMA channel is 12.5 kHz, Phase 2 - 2 TDMA voice channels are 6.25 kHz equivalent)		
Frequency Increment	2.5 kHz, 3.125 kHz	5 kHz, 6.25 kHz	5 kHz, 6.25 kHz
Operating Temperature	-22° to +140°F (-30° to +60°C)		
External Frequency Reference	10 MHz / 12.8 MHz (auto detect)		
Power Supply	AC 88-264 V (with power factor correction)	DC 12 V, 24 V, 48 V, PMU (+ve or -ve earth)	

ANALOG, P25 CONFIGURATIONS

	50 W	100 W	Receive-only
136-156 MHz, 148-174 MHz	P25, Analog FM	P25, Analog FM	P25, Analog FM
400-440 MHz, 440-480 MHz*	P25, Analog FM	P25, Analog FM	NA*
762 MHz-870 MHz**	P25, Analog FM	P25, Analog FM	P25, Analog FM

* UHF Rx-only configuration is not available and in progress

** The actual frequency coverage in this band is:

Transmit: 762-776 MHz and 850-870 MHz

Receive: 792-824 MHz

TRANSMITTER

Frequency Bands	VHF	UHF	700/800 MHz
P25 Adjacent Channel Power	-60 dBc (ETSI) -67 dBc (TIA-102)	-60 dBc (ETSI) -67 dBc (TIA-102)	-67 dBc (TIA-102)
Analog Adjacent Channel Power	—	-60 dBc (EIA)	—
P25 Modulation Fidelity	2% (TIA-102)	2% (TIA-102)	2% (TIA-102)
Transmit Modulation Types	FM, C4FM, LSM, H-DQPSK	—	—
Transmit Power Rating	50 W Programmable 5-50 W (in 1 W steps)	100 W 50 W Programmable 10-100 W (in 1 W steps)	—
Deviation Limiting (Narrowband FM)	—	2.5 kHz	—
FM Hum and Noise	-50 dB	-50 dB	-45 dB
Conducted/Radiated Emissions	-36 dBm to 1 GHz	-36 dBm to 1 GHz	-20 dBm to 9 GHz

TX POWER CONSUMPTION

Power Source	120 VAC	230 VAC	12 VDC	24 VDC	48 VDC
Tx Standby @ 50 W	44 VA (30 W)	117 VA (31 W)	2 A (24 W)	975 mA (23 W)	480 mA (23 W)
Tx @ 50 W	238 VA (235 W)	250 VA (220 W)	18 A (216 W)	9 A (216 W)	4.2 A (202 W)
Tx @ 100 W	400 VA (395 W)	395 VA (375 W)	32 A (385 W)	15.5 A (370 W)	7.4 A (355 W)

RECEIVER

Modulation Types	C4FM, H-CPM, Analog FM
P25 Sensitivity - (TIA-102)	0.22 uV (-120 dBm) @ 5% BER
Analog Sensitivity	-119 dBm @ 12 dB SINAD
Inter-modulation Rejection - (TIA-102)	85 dB
P25 Selectivity - (TIA-102)	60 dB
Analog Selectivity - (EIA)	85 dB
Co-channel Rejection - (TIA-102)	9 dB
P25 Conducted Spurious Emissions	<-90 dBm (9 kHz to 2 GHz) <-70 dBm (2 GHz to 12.75 GHz)

SPECIFICATIONS FOR: TB9400 BASE STATION-P25 PHASE 2 CAPABLE REPEATER

REGULATORY DATA

	USA	Canada	Europe	Australia/New Zealand
VHF (136-156 MHz, 148-174 MHz)	CFR 47	RSS-119	EN300-113, EN301-489, EN60950	AS/NZS4768
UHF (400-440 MHz, 440-480 MHz)	CFR 47	RSS-119	EN300-113, EN301-489, EN60950	AS/NZS4768
762-870 MHz	CFR 47	RSS-119	NA	NA

Specifications are subject to change without notice and shall not form part of any contract. They are issued for guidance purposes only. All specifications shown are typical.

TB9400 Base Station

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



L3HARRIS™
FAST. FORWARD.

1025 W. NASA Boulevard
Melbourne, FL 32919

Model 250

Tone Remote Adapter

Spec Sheet

Features

- Exceptional audio quality
- Decodes all 15 industry standard function tone sequences
- Seven installer-selectable guard tone frequencies for compatibility with a wide range of applications
- BCD, "One-Of-N" and binary channel select
- Up to six control outputs; two relays
- Automatic line loss compensation
- Latched and momentary functions
- Two and four wire tone remote interface
- Control functions: PTT, Monitor, channel select, PL select, PL Strip, Wildcard
- Rugged metal enclosure, 19" rack mount option available
- 14 pre-set radio interface configurations to choose from - covers most popular applications
- Test modes facilitate setup and adjustment
- Pre-wired cables are available for popular radios
- Easy configuration setup from front panel dip switches
- Line integrity function



Tone Remote Control Summary

Tone remote equipment uses the Tone Remote Control (TRC) Protocol to send control information to the Model 250. The Model 250 in turn translates the tone remote commands into base station radio control.

Each tone remote command from a dispatch console or "radio remote" consists of a high level guard tone followed by a function tone and an optional holding tone that remains present as long as the transmitter is keyed. If the command is not intended to key the transmitter then the holding tone is omitted.

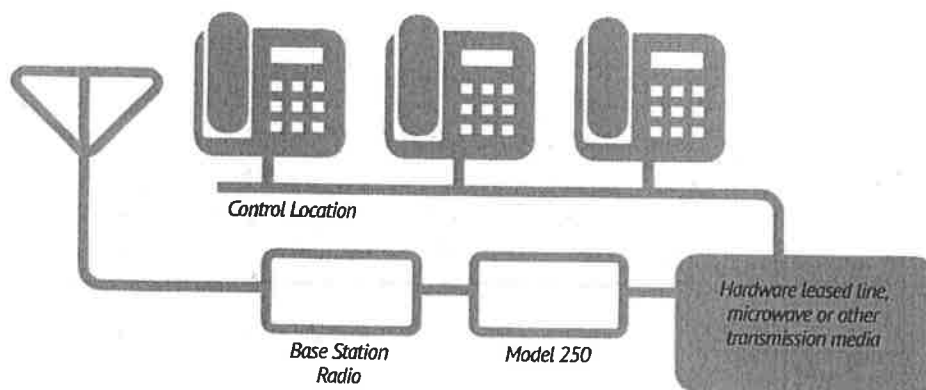
Due to its state-of-the-art DSP design, the Model 250 can accept a wide variation in TRC levels. Often, when multiple remotes are wired in parallel at varying distances, or when remotes from different manufacturers are connected, the signal levels from each remote will be quite different. The Model 250 has been designed to handle this situation with ease, amplifying audio from each remote as it connects and delivering the audio to the radio at the correct level.

Introduction

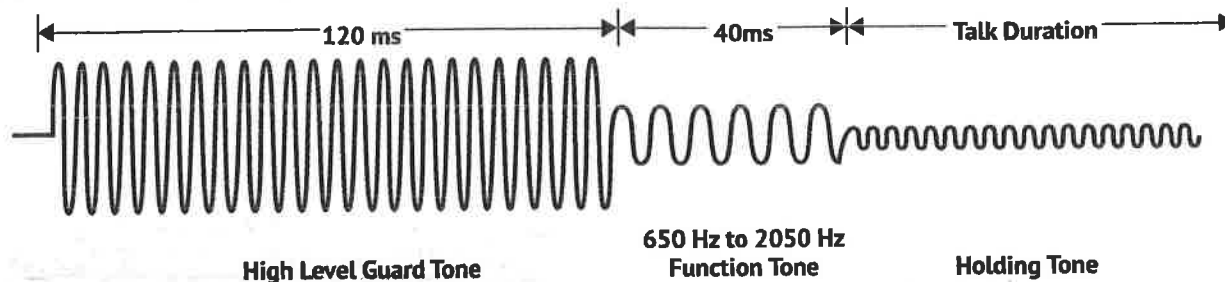
The Model 250 is a tone termination panel that includes features typically only found in high-end remote control stations.

It provides a means of connecting a base station radio to industry standard tone remote encoders, such as Zetron's radio remotes and dispatch consoles. The Model 250 Tone Remote Adapter connects to an audio circuit or leased line from the tone remote and to the unique interface of the base station radio.

The Model 250 includes integrated setup utilities that reduce the need for service equipment. Designed for fast installation and easy setup, it can be configured in the field without tools.



Single Tone Remote Control Sequence



Specifications

GENERAL

Input Voltage: 10.5 to 16 Volts DC
 Operating Current: 180 mA typical, 260 mA max
 Operating Temp.: -30° to +70° Celsius.
 95% relative humidity at +50° C (non-condensing).
 Indicators: Power, status
 Adjustments: Rx audio, Tx audio, Line Tx
 Configuration/setup: Using front panel switches
 Guard tone frequencies: Configurable for 2100Hz, 2175Hz, 2300Hz, 2323Hz, 2600Hz, 2800Hz, 2970Hz
 Audio filtering: Guard tone notch and hi-pass filters in both directions
 Audio connections: Rx discriminator or speaker, and microphone Tx
 Control outputs: 6 open drain outputs, 2 relays and PTT. Two of the signals are configurable for monitor and COR.

MECHANICAL

Line Connector: RJ11 modular jack
 Radio Connector: Detachable 0.156" crimp pin style
 Line type: 2-wire half-duplex, 4-wire full or half-duplex

ELECTRICAL

Line impedance: Balanced 600 ohm or 200 k ohm
 Tone Decode Level: Guard: -16 to +10dBm
 Function: -26 to 0dBm
 Holding: -36 to -10
 FET output drive: Open drain, 115 mA sink capability
 Relay contact rating: 2 A at 30 Vdc
 Rx to Line output drive: 0dBm
 Line to Tx output drive: 50mV to 5Vpp output into a high impedance load

SELECTABLE CONFIGURATIONS

- 1 Frequency, Monitor, PL strip, 6 Wildcards
- 1 Frequency, Monitor, PL strip, 4 PL, 2 Wildcards
- 2 Frequency, Monitor, 6 Wildcards
- 2 Frequency, Monitor, 4 PL, 2 Wildcards
- 4 Frequency (1 of 4), Monitor, 3 Wildcards
- 7 Frequency (1 of 7), Monitor
- 8 Frequency (binary), Monitor, 4 PL
- 8 Frequency (binary), Monitor, 3 Wildcards
- 12 Frequency (binary), Monitor, 1 Wildcards
- 14 Frequency (binary), Monitor
- 15 Frequency (binary)
- 1 Frequency, Monitor, Latched outputs
- Inverted BCD

ZETRON

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The Power to Respond

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See Zetron price list for option pricing. Specifications subject to change without notice.

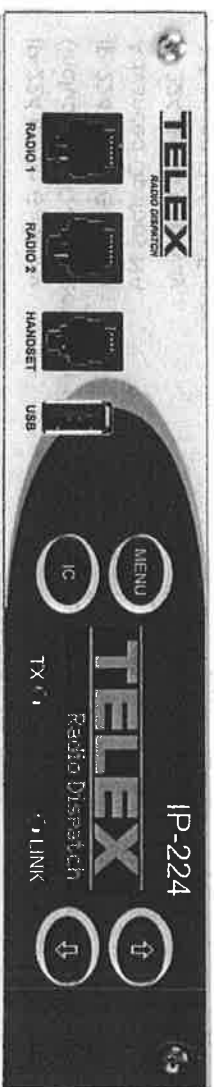
005-1238D January 2018

IP-224 IP Radio Gateway

The IP-224's sleek design combines form with function, allowing easy installation, operation, and servicing.

The unit may be rack-mounted or placed directly on a desktop, and it is equipped with an LCD display to clearly provide user feedback when programming. VU meters are also provided via the display for alignment purposes. All other configurations are completed in the web browser configuration windows.

The IP-224 is backward compatible, allowing the use of IP-224 and IP-223 adapters in the same system. This will allow a migration to the new products when desired.



FEATURES:

PTT (Push-To-Talk), monitor, and F1 and F2 relays (programmable to any function tone or revert to F1)	Secure remote web-browser-based programming and configuration
Eight digital outputs for channel selection, completely programmable per function tone	Nine selectable PTT frequencies
CTCSS (Continuous Tone Coded Squelch System) generation (64 frequencies)	Software gain control
Local handset port for monitoring activity and transmission back to base or to radio, uses optional AHS-1 alignment handset.	Menu-driven front panel controls for TX, RX, spare audio, IP addressing, and CTCSS
ANI (Automatic Number Identification) over-the-air-protocol decode and display	Supports USB, RS485, CAN-bus, RS232, and TTL
RX AGC (Automatic Gain Control)	Single- or dual-function tone generation
RX (Receive) audio squelch	Backwards compatible with Telex Radio Dispatch equipment
SoIP (Serial-over-Internet Protocol)	Number of channels or talk groups up to 1000
Crosspatch mode, console mode, and data channel	Four PTT modes and three monitor modes

Advanced interface Option:

- P25 (Kenwood/Tait)
- Kenwood NEXEDGE®
- Icom IDAS™
- TETRA (Hytera/PowerTrunk/Sepura)
- Sprint Direct Connect
- MOTOTRBO™
(This feature is only available for North America)
- E.F. Johnson RS5300 P25 radio interface
- DMR (Tait/Hytera)
- iDEN Interface

Available Accessories:

- Single or dual rack mounts
- AHS-1 handset
- Radio Interface cables, please see backside for list

Power Requirements
Ethernet Speed
Flash Memory
SDRAM Memory
Lease Line
Radio Interface
Hum and Noise
Non-Relay Outputs
Radio Input Level
Line Output Level
Tone Frequencies
Function Tone Range
Total Tone Duration
Tone Magnitude
Vocoder
Relay Contact Ratings
Digital I/O Ratings
Transmit Output Impedance
Receive Input Impedance
Audio Distortion
Audio Frequency Response
LAM Sensitivity
COR Sensitivity
DTMF Detection Bandwidth
Monitor Timer
Control Type
Electro Static Discharge Immunity
Line Protection
Memory Protection
Level Controls
Operating Temperature Range
Storage Temperature Range



IP-224 is the next generation of IP radio gateway to form the heart of the Telex Radio Dispatch System.

IP-224

Based upon the Linux operating system, the IP-224 provides an extremely reliable means of remote-controlling two audio devices. The IP-224 can be easily configured to work with both digital and analog consoles, and it performs a wide variety of other tasks related to using radios on a digital network, including state-of-the-art system diagnostics.

PRODUCT INFORMATION

Base Hardware

SAP #	Description
F.01U.306.547	IP-224 Radio Gateway (Includes MDC and Fleetsync)
F.01U.347.907	IP-224 Radio Gateway Advanced Options NA
F.01U.347.906	IP-224 Radio Gateway Advanced Options Export

Software Options

SAP #	Description
F.01U.343.869	IP-224 Field Code Advanced Options NA
F.01U.343.868	IP-224 Field Code Advanced Options Export

Accessories

SAP #	Description
F.01U.319.163	IP-224 to Hytera DMR interface cable
F.01U.165.538	IP-224 mounting brackets (dual)
F.01U.165.539	IP-224 mounting brackets (single)
F.01U.165.540	IP-224 cable - Kenwood TK-X150/X180, 5X10 and NXDN radios
F.01U.165.541	IP-224 cable - Kenwood TK-X90 radio
F.01U.165.544	IP-224 DB-37 cable assembly to 4-Wire tone cable
F.01U.165.545	IP-224 Motorola CDM/PRO cable interface
F.01U.165.548	IP-224 EFJ 5300 radio interface (cable only)
F.01U.165.554	IP-224 MTRBI radio interface (Includes cables)
F.01U.165.542	IP-224 to Sepura interface cable
F.01U.306.539	IP-224 to Hytera Tetra interface cable
F.01U.306.540	IP-224 to PowerTrunk TETRA interface cable
F.01U.306.543	IP-224 to Tait P25 and DMR interface cable
F.01U.306.546	IP-224 to ICOM IDAS interface cable
F.01U.306.549	IP-224 to MOTOTRBO interface cable
F.01U.117.426	Alignment handset



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