



**Color LCD - 12.1" or 10.4"
Touch Screen Input,
Room Light Readable or,
Sunlight Readable**

APPLICATIONS

The PROCOM Series OpS permits operator control of multiple radios, telephones, interphones and intercom from an integrated access panel for:

- Air Traffic Control Communications
- Mobile Tactical Control Communications
- Command Center Communications
- Marine Traffic Control Communications
- Communications Training and Simulation
- Emergency Services Dispatch - Fire, Police, Disaster Communication

FEATURES

- Provides multiple access to Intercom, telephone, Radio, P.A. and other devices
- All digital audio processing
- Full Non-blocking and Conferencing with multiple access to ICOM, TELCO, CRYPTO, RADIO, P.A. and AUX audio devices
- Sealed Touch Screen input device.
- Local loudspeaker with level control
- Individual level control for two headsets
- LCD screen displays channel status in various colors. Hi-Bright available
- Digital multi-channel link to switch node
- RS-232 Data Port available on switch link
- Independent record port
- DC source powered 24, 28 or 48 UDC
- Built to meet MIL-STD-461 EMI/RFI standards
- Ruggedized per MIL-STD-810 Environments and Type IV Mobility hard mounting
- Easily mounted in standard rack or console
- Optional Red/Black capability

OVERVIEW

The PROCOM Series Operator Station, (OpS) is a rugged, transportable operator station used with the Telegenix PROCOM 2000 series and PROCOM 1800 series Voice Communication Switching Systems (VCSS). The OpS provides the capability for the operator to access various telephone trunks, intercom, radio channels and other devices within the VCSS.

The OpS is adapted for mounting in a low profile, sloped front desktop or wall mount enclosure, with a bezel for console mounting, or in 19" rack mount with prewired speakers. A 2-wire telephone grade cable links the OpS to a PROCOM communication control unit (CCU). The OpS provides audio volume control and amplifiers for a local loudspeaker and two independent headsets. The backlit LCD display with touchscreen is provided for system device selection and status display. The fully programmable display includes a telephone dial page with selective call signaling (either pulse dial or DTMF).

Two LCD display sizes are available, 10.4" or 12.1". The display shows incoming signals and channel selection status. LCD Colors are user selectable. Circuit Selectors can provide two buttons per radio (TX, RX, etc.) so that there is independent control of device selection (TX, RX, Idle) and audio destination (Headset, Speaker). Captions are user programmable with Unicode (International) multi-lingual character sets. Integral high brilliance backlighting can be provided for sunlit areas such as control towers.

OpS's provide an all digital link to the CCU using a single pair of telco grade (22 AWG) wire, tested to 18,000 ft. (5 km).

Audio Signals

Frequency Response	Less than +1, -3 dB, 300 to 3400 Hz.
Distortion	Less than 2% THD, 300-3400 Hz
Signal to noise ratio	More than 50 dB at 1020 Hz.
Idle channel noise ratio	Less than -60 dBm at 3000 Hz
Crosstalk Isolation:	More than 90 dB between channels, 100 to 10k Hz
Recording:	600 ohm interface to local recorder. E1 channel to digital recorders available at connected switch node
Input Level:	
Microphone:	Nominal 0.45 Vp-p dynamic or Electret (50-150 ohms)
Auxiliary:	600 ohm balanced Nominal -10 dBm (-20 to 0 dBm)
Output Level:	
Headphone	150, 300, 600 ohm Nominal -10 dBm (Off to 0 dBm)
Loudspeaker	Off to Greater than 3 Watts
Auxiliary:	600 ohm balanced Nominal -10 dBm (-20 to 0 dBm)

Command Inputs

PTT Key:	Dry contact closures work with the OpS microprocessor to cause programmed system functionality
Push-buttons:	Sealed touchscreen provides contacts for twenty-four 2-button circuit selectors, plus 10 function buttons per page. PROCOM 2000/1800 systems can have multiple pages of circuit selectors, or special function buttons.

Display Indications

LCD	The full color 10.4" or 12/1" COTS display provides for user selection of all colors and indicators. Button, caption and message text can be coded in user selected language and character set.
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Communications

ISDN Port BRI	Synchronous Full Duplex, 160 kbps, 2B+D (2 voice & 1 data channels)
Data Port:	RS-232 Serial Peripheral 9,600 Baud (nominal)
Physical pair	Up to 18,000 ft. (5 km) using a single pair of 22 AWG copper wire



Rear view of 10.4" Desktop OpS

Environmental

Temperature:	0°C to +50°C (operating) -57°C to +85°C (non-operating)
Altitude:	0 to + 9,200 feet (operating) 0 to + 45,000 feet (non-operating)
Humidity	5% to 95% (condensing)
Transport	Designed for Type IV Mobility

Power Requirement

Source:	+22.5 to +28.8 VDC (per MIL-STD-1275)
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The OpS can be powered locally from an external DC power supply, or remotely from the switch nodes when the cable run is less than 50 ft. (15 meters)

Power:	12 Watts (Nominal) 20 Watts (High Bright)
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Dependability

MTBF Critical	Better than 100k hours
Availability:	> .99999
MTTR	< 10 minutes
Other	99% BIT failure detection

Dimensions & Weight (10.4" Display)

Desktop/Wall mount	10.5"W x 7.9"H x 3.6"D (3.9 lb.) 267 x 200 x 91 mm (1.7 kg)
Console Mount	11.7"W x 9.0H x 3.7"D (14.7 lb.) 300 x 230 x 94 mm (2.1 kg)
Rack Mount (with Speakers)	19"W x 10.5"H x 3.7"D (9.0 lb.) 480 x 267 x 94 mm (4.1 kg)

For 12.1" display, contact Telegenix

Accessories

Various headsets, handsets, footswitches, and microphones adaptable using Dual Jack Units.
ISDN-S, ISDN-U, RS-530 communications available using Resource Adapter unit.
VOIP using Gateway Adapter units.