

iQ6 Six-Line POTS Telco Gateway Talkshow System for Axia® IP-Audio Networks



OVERVIEW

Telos® iQ6 is a six-line digital phone system designed specifically for use with Axia networked mixing consoles — that's why we call it a "Telco gateway." iQ6 acts as a portal for Axia systems, supplying caller audio, mix-minus, Program-On-Hold audio, and switching control for six POTS phone lines, using a single RJ-45 network connection.

iQ6 is built around the Telos Hx6, our most advanced six-line POTS Talkshow system. It features two high-performance digital hybrids and includes Telos' famous Digital Dynamic EQ, noise gate, caller ducking, and acoustic echo cancellation. Includes complimentary XScreen call-screening software from Broadcast Bionics.

FEATURES

- Single-cable Ethernet connection to Axia IP-Audio networks transports caller audio, mix-minus, Program-On-Hold audio and hybrid switching control – no separate audio connections or contact closures to solder.
- Direct, on-console control of iQ6 operations, with add-on modules for popular Axia iQ and Axia Fusion® mixing consoles. Talent never needs to take their eyes off the control board; shows run smoother with less errors.
- Works with Telos VSet6 six-line phone controllers with large, colorful VGA LCD displays that provide intuitive operation and setup.
- Telos-exclusive Status Symbols on-console and phone controllers provide producers and talent with animated, high-contrast icons that communicate line and caller status at a glance.
- Six-line capacity; works with POTS (analog) phone lines.
- Our most advanced digital hybrids, with DSP algorithms optimized for superior performance with today's wide variety of far-end call types (VoIP, cell, POTS, app-based).
- Telos DDEQ (Digital Dynamic EQ) and adjustable smart-level AGC ensure spectrally consistent audio from call to call — even on notoriously tough cellular calls.
- Excellent trans-hybrid loss of >55dB.
- Smooth, proven, symmetrical wide-range AGC by the audio processing experts at Omnia®.
- Studio adaptation and a subtle, inaudible pitch shifter to prevent feedback in open-speaker studio environments.
- A sophisticated caller override that improves performance and allows precision adjustment of the degree to which talent audio "ducks" the caller audio.
- iQ6 versions matched to your choice of analog POTS phone lines.
- Caller ID.
- Easy setup and configuration via Ethernet using any PC and your favorite Web browser.
- XScreen call-screening software from Broadcast Bionics, provided at no cost.

IN DEPTH

Six lines of crystal-clear caller audio. One easy RJ-45 connection.

A multi-line phone system that connects to your console with just one cable? Smooth, detailed caller audio — even from cellular callers? That's iQ6, the no-hassle Telco gateway for Axia mixing consoles.

iQ6 plugs right into Livewire® AoIP network networks, saving money and time by eliminating the cost and labor of old-fashioned discrete I/O, cabling, and soldered connectors. All connections to and from the iQ6 system — receive and send audio, hybrid control, mix-minus for six phone lines, even connections to VSet6 phone controllers and included PC-based call-screening software — travel over a single skinny CAT-5 cable. Setup is simple: Plug it into your Axia network, do some fast web-based configuration, and voila! you're taking calls.



The photo above shows a complete Axia iQ console system, with QOR.32 console engine, iQ6 Talkshow system, and iQ control surface with onboard phone controller. Control of both iQ6 hybrids and Status Symbols information icons are right on the mixer's surface.

You can also pair iQ6 with Telos Vset phones and their full-color, high-contrast display screens. iQ6 is extremely flexible: You can connect up to 12 control devices at once — phones, PCs, or console controllers — to take charge from nearly anywhere. Separate Send and Receive level meters for each hybrid are conveniently located right on the front panel for extra monitoring confidence.

How does iQ6 sound? Like a Telos, of course! Inside, two of our most advanced hybrids handle up to six POTS phone lines. Those hybrids are equipped with Digital Dynamic EQ and adjustable smart-level, symmetrical wide-range AGC by Omnia to keep callers sounding clean, clear, and spectrally consistent call after call. An adjustable caller override lets you dial-in just the right amount of call ducking. Our subtle, inaudible pitch-shifter helps prevent open-speaker feedback. And conference linking lets you set up high-quality conferencing between callers at the touch of a button — no external equipment needed.



The iQ6 front panel is simple and informative, with separate send and receive meters for each hybrid, a Program-On-Hold audio presence indicator, a high-resolution OLED display for setup, and navigation keys for quick front-panel adjustments.



The back panel likely looks much different from any other phone system you've seen. There are no discrete audio I/O, GPIO, PoH or output connections — the RJ45 connection to your Axia Livewire network handles all of that. Like its brother, the Telos Hx6, iQ6 connects directly to 6 POTS lines.

On-Console Control



iQ6 connects directly to Axia mixing consoles using Livewire IP-Audio to eliminate the cost and complexity of old-style inputs, outputs, and mix-minuses. IP-Audio networking technology provides the ideal way to integrate broadcast phones into the on-air console. Users enjoy seamless console integration, with phone controls right on the board so that talent can dial, answer, screen, and drop calls without ever diverting their attention from the console. Information about line and caller status can be displayed right on the console as well, with Telos Status Symbols icons that communicate line and caller status at a glance — ensuring that phone segments are always smooth and error-free.

There are plenty of other advantages to melding phones with consoles. Like ease of installation: IP-Audio consoles with built-in phone controllers don't need any additional wires or connections. Their control signaling, caller audio and backfeeds ride on the network connection that's already there. Bringing caller audio into the IP-Audio domain makes it routable like any other audio source. And since the console now communicates directly with the phone hybrid, mundane tasks such as mixminus generation, starting recording devices, and playback of recorded off-air conversations can all be automated. All of which means faster, more precise phone segments — since operators' eyes never need to leave the console.

VSet6 Phone Controllers



For off-console control, iQ6 works with functional, easy-to-use Telos VSet6 six-line phone controllers. Their big, colorful VGA LCD displays with animated high-contrast Status Symbols make fast work of call screening, queue placement and other tasks; built-in controls for profanity delay and record devices round out its useful toolset.

VSet6 is an IP-based phoneset that also connects to Axia networks with a single Ethernet connection. There's almost no learning curve; VSet phones work like traditional Telos controllers, with calls selected, held, and dropped in the way to which operators have grown accustomed. Easy VSet controls let talent manage incoming lines, lock calls on-air, start an external recording device, and take a queue of calls to air sequentially, for precise management of multi-call interviews or conferences. Next Call functionality speeds workflow for producers, screeners, and talent. The LCD display delivers detailed line status, caller information, caller ID, time ringing-in or on-hold, and even comments entered in the included Xscreen screening software. A built-in address book and call history log round out VSet6's features. Each VSet6 has its own web server for easy remote configuration and software upgrades.

Broadcast Bionics XScreen Call-Screening Software Included



XScreen software comes with every iQ6 Engine purchase and provides call control, call screening, data capture, and chat functionality enabling you to quickly answer, screen, and route calls using multiple PC clients. The cloud-based database keeps a log of calls and provides further alert and directory functionality.

XScreen can record and manage caller audio (Livewire systems only) and can additionally act as a softphone for talking to and screening callers directly through a USB headset or soundcard on your XScreen client PC.

XScreen is available in free (Lite) and full (subscription) versions. When you install XScreen for the first time you will receive a 90-day free trial license for the full version. After 90 days you can continue to use the full version with an annual subscription, or use the reduced, Lite functionality free of charge. Please download your XScreen software from www.xscreen2.com.

SPECIFICATIONS

General

- Telos 3rd-generation Adaptive Digital Hybrids
- Telos Exclusive Feedback Reduction Functions
- Send-to-Caller Processing: High-Pass Filter, Frequency Shifter, AGC/Limiter, Program-on-Hold AGC/ Limiter, Sample Rate Conversion (with AES option)
- Receive-From-Caller Processing: High-pass "Hum" Filter, Smart AGC / Platform Leveler, Noise Gate, Telos DDEQ (Digital Dynamic Equalization) 3-band Adaptive Spectral Processor, Sample Rate Conversion (with AES option)

Input / Output Channels

- Send channels: 2x
- Receive channels: 2x
- Program-on-Hold channels: 1x
- Connection: 100-BaseT Ethernet (Livewire)

Switching Matrix and Conferencing

- Audio Routing and Switch: All Digital
- Telephone Lines: 6
- Hybrids: 2

Control Ports

- Ethernet 100BASE-T
 - Web server for configuration and software update
 - Call-Screening Interface server allows up to 8 instances of call screening software to connect simultaneously
- GPIO channels: 2x
- Control Interface: Up to 12 attached controllers (any mix of VSet6 phones, Console Controllers or screening software) via Ethernet connection

Power Supply

- Type: Internal auto-ranging, 85–250 VAC auto-switching, 50–60 Hz
- Power consumption: 14.2 Watts

Analog Telephone Connectivity

- Universal interface for worldwide application
- Programmable loop current
- Programmable ring and disconnect signaling (loop drop or tone)
- Programmable Flash time
- Caller ID decoding using Bellcore 212 modem standard

Regulatory

North America: FCC and CE tested and compliant, power supply is UL approved.

Europe: Complies with the European Union Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended by Commission Decisions 2005/618/EC, 2005/717/ EC, 2005/747/EC (RoHS Directive), and WEEE.