PUNQTUM

BY RIEDEL

APPLICATION NOTE

I/O Settings Separation

Q-Series Network Based Partyline System

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1 Preface

Welcome to the PunQtum digital partyline family!
This document provides detailed information about the PunQtum Q-Series digital partyline system.

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1.1 Information

Symbols

The following tables are used to indicate hazards and provide cautionary information in relation to the handling and use of the equipment.

	This text indicates a situation that needs your close attention. It may also be used to alert against unsafe practices.

	This text is for general information. It indicates the activity for ease of work or for better understanding.

Service

- All service must be provided ONLY by qualified service personnel.
- There are no user-serviceable parts inside the devices.
- Do not plug in, turn on or attempt to operate an obviously damaged device.
- Never attempt to modify the equipment components for any reason.

	All adjustments have been done at the factory before the shipment of the devices. No maintenance is required and no user-serviceable parts are inside the unit.

Environment

- Never expose the device to high concentrations of dust or humidity.
- Never expose the device to any liquids.
- If the device has been exposed to a cold environment and transferred to a warm environment, condensation may form inside the housing. Wait at least 2 hours before applying any power to the device.

Disposal

	This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an authorized collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product please contact the local authority responsible.

2 About PunQtum Q-Series Digital Partyline System

PunQtum Q-Series digital partyline system is a digital, easy to use, full-duplex communications solution for theater and broadcast applications as well as for all kinds of cultural events like concerts, etc.
It is an all-new, network-based partyline system which combines all standard partyline system features including wireless access and more with the advantages of modern IP networks.
PunQtum Q-Series works on standard network infrastructure and is easy to install and set up.
The system works “out of the box” with a factory default configuration but can be quickly configured by user-friendly software to meet individual needs.
The system is completely decentralized. There is no master station or any other central point of intelligence in the whole system. All processing is handled locally in each device except for the PunQtum wireless Apps which require a PunQtum Q210 PW Speaker Station to serve as a bridge to the Q-Series digital partyline system. The capacity of one partyline system is set to a maximum of 32 channels, 4 program inputs, up to 4 public announce outputs and 32 control outputs. Each PunQtum Q210 PW Speaker Station serves up to 4 PunQtum Wireless App connections.

PunQtum Q-Series digital partyline systems are based on Roles and I/O settings to ease the use and administration of partyline systems.
A Role is a template for the channel configuration of a device. This allows channel settings and alternate functions to be predefined for different Roles needed to run a live show. As an example, think of the stage manager, sound, light, wardrobe and security personnel having different communication channels available to deliver a perfect job.
An I/O setting is a template for the settings of the equipment connected to a device. This, for example, allows I/O settings to be available for different Headsets being used at a venue to cover for different environmental situations.
Each device can be configured to any Role and I/O setting available.

Multiple PunQtum partyline systems can share the same network infrastructure. This allows for the creation of production islands within a campus using the same IT network infrastructure. The number of devices (Beltpacks/Speaker Stations and Wireless Apps) is theoretically infinite but limited by the network capacity. Beltpacks are powered by PoE, either from a PoE switch or from a Speaker Station. They can be daisy-chained to reduce wiring efforts on site.

Beltpacks and Wireless Apps support simultaneous use of 2 channels with separate TALK and CALL buttons as well as one rotary encoder for each channel. An alternate page button allows the user to quickly reach alternate functions such as public announce, Talk To All, Talk To Many, to control general purpose outputs and access system functions like Mic Kill asf. The Beltpack is designed with a combination of premium materials, including high-impact plastics and rubber to make it both tough and comfortable to use in any situation.

PunQtum Q-Series Beltpacks, Wireless Apps and Speaker Stations allow users to replay missed or not understood messages. Program input signals can be fed into the system using an analog audio input at any Speaker Station.

Sunlight readable, dimmable RGB color displays used for Beltpacks and Speaker Stations make for excellent readability of the intuitive user interface.

3 I/O settings separation

PunQtum Q-Series digital partyline systems were based on single I/O settings per device class. This became more and more a hurdle when administrating bigger installations connecting to multiple external systems.

Starting with Q-Tool version 2.2 and respective firmware releases for all devices, I/O settings are divided into:

- Front I/O settings that cover all settings related to a user operating a device. Front I/O settings are mainly headset related.
- Back I/O settings that cover all settings related to external systems connected to a device. Back I/O settings are available for Q210 devices currently.

3.1 Automatic conversion of I/O settings

Q-Tool V2.2 and up automatically converts I/O settings defined in older system configuration files by splitting the settings into Front I/O and Back I/O settings keeping the original name.

This process might lead to duplicate settings under different names. Please remove duplicates and edit the names of Front I/O and Back I/O settings manually to reestablish meaningful naming of the I/O settings.