DUALCOM™ SERIES UNIVERSAL ALARM COMMUNICATOR

Compliance Listing Guide

BEFORE YOU BEGIN

This guide provides compliance information for the DualCom Series Universal Alarm Communicator. Read through the contents of this guide before starting the installation process. It describes the functions along with available installation options. Information contained in this guide allows you to learn the operation, functionality, and programming features of the communicator to meet specific applications.

The DualCom Series Universal Alarm Communicator provides a fully supervised alarm communication path for commercial control panels. This section applies to the following models:

- DualComNF   Cellular Communicator with Network/LTE for Commercial Fire
- DualComN   Cellular Communicator with Network/LTE for Commercial Burglary

PROGRAMMING REQUIREMENTS

Notice to users, installers, authorities that have jurisdiction, and other involved parties: This product incorporates field-programmable software. In order for the product to comply with the requirements of a certificated installation, certain programming features or options must be limited to specific values or not used at all as indicated below.

Program feature or option	Standard	Permitted?	Possible settings	Settings permitted
System Reports, RESTORAL	ANSI/UL 864	Y	NO, YES, DISARM	YES, DISARM
Communication, CHECKIN MINUTES	ANSI/UL 864	Y	3-240	3-238 (Dual Path) 3-58 (Single Path)
Communication, FAILTIME MINUTES	ANSI/UL 864	Y	3-240	3-240 (Dual Path) 3-60 (Single Path)

COMMERCIAL FIRE INSTALLATION

CID Dialer Connection
Directly connect both tip and ring terminals from the control panel to the communicator. See Figure 1. This connection captures Contact ID messages from any fire panel that are based on the SIA communication standard DC-05-1999.09-DCS. Messages are then formatted into a Serial 3 message and sent to an SCS-1R Receiver or SCS-VR Receiver.

Communication Failure
The phone line voltage on the second tip and ring will drop when DualComNF is in a communication failure state. This triggers the host panel to annunciate a communication failure. When communications have restored on DualComNF, voltage will be restored on the second tip and ring terminal, allowing the host panel to see a restoral on the phone line.

Figure 1: Wiring Diagram for Tip and Ring Connection

ANSI/UL 864

Fire Protective Signaling Systems using Internet/Intranet/Cell Networks

A Performance Based Technologies system as defined in UL 864 10th Edition may be configured as the following:

Network Primary and Cellular Backup Programming

Network Programming	Cellular Programming
Comm Type = NET	Comm Type = CELL
Checkin Min = 238	Checkin Min = 238
Failtime Min = 240	Failtime Min = 240

Cellular Primary with no Backup

Path 1 Programming	
Comm Type = CELL	Checkin Min = 58
Path Type = Primary	Failtime Min = 60
Test Rpt = No	Checkin = Yes

Network Primary with no Backup

Path 1 Programming	
Comm Type = NET	Checkin Min = 58
Path Type = Primary	Failtime Min = 60
Test Rpt = No	Checkin = Yes

6 Screws Included with Backbox

Network Cable Routing Locations

For Future Use

Figure 2: Model 685-R Backbox Installation

Model 685-R Backbox Installation

For Commercial Fire applications using DualComNF and the included red plastic Model 685-R backbox, mount the backbox to the wall with the 1" #6 screws included with the fire communicator. Mount the fire communicator to the backbox with the 1/2" #6 screws. See Figure 2. Locate the fire communicator within 20 feet of the control panel and route all wire in conduit.

Refer to the DualCom Series Programming and Installation Guide (LT-1859) for communication test procedure.

Cellular Communication Failure Test Procedure

For commercial fire systems, the following test procedure can be used to demonstrate local annunciation of a communication path failure where required by the AHJ.

1. Connect the communicator to the FACP as shown in Figure 1 and program the communicator according to the tables above.
2. Program the appropriate settings for the central station receiver and allow the communicator to check in with the receiver.
3. Enter the programming menu and change the receiver port number to an invalid (closed) port.
4. Exit programming and allow the communicator to resume operation.
5. The communicator will unsuccessfully attempt to communicate and then drop the voltage on the second tip and ring terminals which will cause the FACP to annunicate a phone line trouble.
6. After successfully demonstrating local annunciation, return to the programming menu and change the receiver port back to the correct (open) port to verify communication.
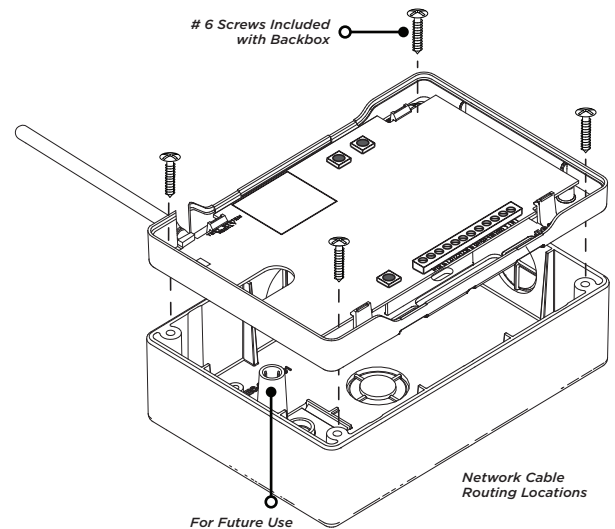
NEW YORK CITY (FDNY) SPECIFICATIONS

Introduction

The programming specifications contained in this section must be completed when installing CellCom Series Communicators for New York City (FDNY) fire alarm IP communication applications. Refer to the FDNY Certificate of Approval #6262 for the complete conditions of approval.

Network and Cellular Communication, Primary and Secondary

When installed as a central station Internet (Network) communicator or slave transmitter, both primary and secondary channels of communication shall be required and shall meet the conditions below. Network communication shall be used as the primary channel of communication to the Central Station and a Cellular Communicator shall be used as the secondary channel of communication or in reverse order: Cellular Communicator as the primary channel and Network connection as the secondary channel.

Network Primary And Cellular Backup Programming

NETWORK PROGRAMMING	CELLULAR PROGRAMMING
Comm Type = NET	Comm Type = CELL
Checkin Min = 5	Checkin Min = 5
Failtime Min = 5	Failtime Min = 5
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy

Cellular Primary and Network Backup Programming

CELLULAR PROGRAMMING	NETWORK PROGRAMMING
Comm Type = CELL	Comm Type = NET
Checkin Min = 5	Checkin Min = 5
Failtime Min = 5	Failtime Min = 5
Test Rpt = Yes	Test Rpt = Yes
Test Freq = 1 Dy	Test Freq = 1 Dy

DUALCOM SERIES UNIVERSAL ALARM COMMUNICATOR

Specifications

Primary Power   Nominal 12 - 24 VDC

Current Draw at 12 VDC

     Standby   75 mA

     Alarm   95 mA Peak Cellular Communication

Current Draw at 24 VDC

     Standby   45 mA

     Alarm   85 mA Peak Cellular Communication

Dimensions and Color

DualComNF

Housing Dimensions   5.5"W x 3.75"L x 1"H

Housing Color   Red

DualComN

Housing Dimensions   5.5"W x 3.75"L x 1"H

Housing Color   White

Certifications

Cellular

     FCC Part 15: XMR201707BG96

     IC: 10224A-201709BG96

Underwriters Laboratories (UL) Listed

DualComNF

New York City (FDNY COA#6262)

Underwriters Laboratory (UL) Listed

     ANSI/UL 864 Fire Protective Signaling Systems

     (CID Capture)

DualComN

     ANSI/UL 1610 Central Station Burglar

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