# Com Series

## HOW-TO GUIDE: DSC PASSTHRU





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## DSC PASSTHRU OVERVIEW

CellCom and DualCom Universal Communicators enable you to take over and manage DSC panels with connection to the DSC Bus. This feature is called DSC Passthru.

This guide is designed to walk you through DSC passthru installation and setup. For more complete information, refer to the <u>CellCom Installation Guide (LT-1817)</u> or the <u>DualCom Installation Guide (LT-1859)</u>.

#### Procedure

The installation must follow this procedure:

<u>Step 1</u>: Mount the communicator.

- <u>Step 2</u>: Wire the communicator.
- <u>Step 3</u>: Configure the master code.
- Step 4: Configure DSC settings (remotely or locally).
- <u>Step 5</u>: Remote programming.

#### **Required Materials**

The following software and hardware components are required to perform system takeovers:

- Compatible DSC PowerSeries Panels (refer to <u>"DSC Panel Compatibility"</u>)
- CellCom or DualCom with minimum firmware Version 202
- (Optional) Programming keypad and Model 330 or Model 330-24V programming cable
- (Optional) Cat 5 Ethernet cable
- 18-22 AWG unshielded wire (RYGB)
- Remote Link minimum Version 2.02
- (Optional) Model 330-DSC programming harness and DLS panel programming software



Figure 1: CellCom and DualCom Components

## **STEP 1: MOUNT THE COMMUNICATOR**

It is not necessary to remove the PCB from the housing when installing the communicator. The communicator should be mounted to a wall using the included #6 screws in the mounting holes. Refer to <u>Figure 1</u> for mounting hole locations.

Mount the communicator in a secure, dry place to protect it from tampering and weather damage. If using a 685 Series Conduit Backbox, refer to the <u>685 Installation Sheet (LT-1431)</u> for mounting instructions.

## **STEP 2: WIRE THE COMMUNICATOR**

The communicator can be connected to the DSC Bus of a compatible DSC panel. See <u>Table 1</u> and <u>Figure 2</u> for the necessary wiring connections.



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**Caution:** Remove all AC and battery power from the panels before wiring.

- 1. Attach the antenna to the SMA connector. Refer to Figure 1.
- 2. Connect system batteries as needed, then connect the panels to an appropriate power source.
- 3. Connect a programming keypad to the communicator.
  - a. For 12 VDC applications, connect the keypad to the communicator PROG header with a Model 330 programming harness.
  - b. For 24 VDC applications, connect the keypad to the communicator PROG header with a Model 330-24V programming harness with an in-line resistor.
- 4. After programming is complete, remove the keypad and replace the housing cover on the mounted base.

**Note:** Address 1 is reserved by the system for programming keypads.

Communicator to DSC Wiring						
Com	DSC Bus	Typical Color				
DC+	RED	Red				
DC-	BLK	Black				
Z4+	YEL	Yellow				
Z4-	GRN	Green				
T or T1	TIP	Green				
R or R1	RING	Red				
N/A	Bell+ to Bell- (1k $\Omega$ EOL)	N/A				
N/A	Zones 1 - 8 (5.6k Ω EOL)	N/A				
PROG	PC Link (COM) Tab Up	Green, Yellow				

**Table 1: Wire Connections** 



Figure 2: DSC Wiring

## **STEP 3: CONFIGURE THE MASTER CODE**

To use remote arming and disarming features, DSC Panels must be programmed as Stay/Away (No Partitions) and user code 40 must match in the communicator and the DSC panel.

To advance through the programming menu, press **CMD**. To go back, press the Back Arrow key. To enter a menu, press any select key or area. To select an option, press the select key or area under that option.

- 1. At a keypad, repeatedly tap CMD until MENU? NO YES displays. Select YES to enter the User Menu.
- 2. At ENTER CODE, enter the communicator's master code and press CMD.
- 3. Go to USER CODES, then press any select key or area to enter the menu.
- 4. The keypad displays ADD DEL CHG. Select ADD.
- 5. At USER NUMBER, enter 40.
- 6. At CODE NO, enter the code from the DSC panel's user 40.
- 7. At USER NAME, enter MASTER.
- 8. At **MASTER? NO YES**, select **YES**. When the master code is successfully added, the keypad displays **USER 40 ADDED**.

## **STEP 4: CONFIGURE DSC SETTINGS**

During configuration, refer to <u>"Troubleshooting"</u> for programming messages and troubleshooting steps.

#### **Remotely (Dealer Admin)**

- 1. Go to Customers.
- 2. Find and select the system name.
- 3. Go to Full Programming > System Options.
- 4. In Keypad Input, select DSC.
- 5. Press Begin DSC Setup.
- 6. Enter the host panel's installer code in **Installer Code**.
- 7. Press Begin.
- 8. After setup is complete, Dealer Admin automatically retrieves zones from the host panel. If you need to retrieve zones again later, open **System Options** and select **Get Zones**.

stem Options	Cross Zone Time	000
	Power Fail Delay	DSC Setup
	Swinger Bypass Trips	6 Installer Code
	Reset Swinger Bypass	
	Time Change	e egin
Hours	Hours from GMT	luo
	4 Keypad Input	DSC
	(	5 Begin DSC Setup Get Zones 8
	Weather Zip Code	00000
	Use Celsius Units	$\bigcirc$
	CID Format	DMP

#### Locally (Keypad)

To advance through the programming menu, press **CMD**. To go back, press the Back Arrow key. To enter a menu, press any select key or area. To select an option, press the select key or area under that option.

- 1. Power up or reset the communicator.
- 2. At the communicator keypad, enter 6653 (PROG) and press CMD.
- 3. Advance to SYSTEM OPTIONS, then press any select key or area to enter the menu.
- 4. Advance to KYPD INPUT, then press any select key or area.
- 5. Press the third select key or area to select **DSC**.
- 6. To save programming, advance to **STOP** and press any select key or area.
- 7. Ensure the DSC panel's IP address is set as default.
- 8. At the communicator keypad, enter 2313 (DIAG) and press CMD.
- 9. Advance to **DSC SETUP** and press any select key or area.
- 10. At INST CODE, enter the DSC panel installer code and press CMD.
- 11. After configuration is finished, the keypad advances to **GET ZONES**. Press any select key or area.
- 12. At **INST CODE**, enter the DSC panel installer code and press **CMD** to retrieve zones.

As the communicator retrieves zones from the DSC panel, the number of zones is displayed and incremented as **ZONE CT** (zone count).

#### Troubleshooting

Message	Meaning	Next Steps
PROGRAMMING	The communicator is attempting to configure DSC panel programming settings for DSC Passthru.	Wait for the configuration attempt to complete. Afterward, a programming status message is displayed (success, fail, or busy).
PROGRAM SUCCESS	The DSC panel has been successfully configured.	Finish configuration at <b>GET ZONES</b> .
PROGRAM FAIL	The DSC panel could not be programmed.	Check Installer Code, wiring connections, and communication settings, then retry programming.
BUS IS BUSY	The DSC panel could not be programmed due to high DSC bus traffic.	Wait and retry programming or reduce traffic on the DSC bus, then retry programming.

#### Table 2: Programming Messages and Troubleshooting

## **STEP 5: REMOTE PROGRAMMING**

DSC panels allow a 6-hour interval for remote programming connections after the panel is initially powered up. After that interval expires, technicians can re-enable DLS connection for another 6 hours by disarming the panel and entering the following code combination: \*6 + [master code] + 5.

Refer to Figure 2 for remote programming connection.

#### **Retrieve Codes for DSC Connection**

Before attempting to program a DSC panel remotely, you will need to find and record the DSC panel's 6-digit Downloading Access Code and the Panel Identification Code (Device ID). You can retrieve this information at the panel's keypad from Section [403] and Section [404], respectively.

#### **Configure Remote Link**

- 1. Right-click Remote Link and select **Run as administrator**. If you already have Remote Link open and recently used ECP passthru, close and reopen Remote Link.
- 2. If necessary, create the communicator account.
- 3. In Panel Information, double-click the communicator account to open it.
- 4. Go to **Panel > Connect**. Ensure the account number is correct, then press **Connect**.
- 5. Go to Program > System Options.
- 6. In Keypad Input, select DSC.
- 7. Press **OK**.
- 8. Ensure the bottom right corner of the main Remote Link window displays **DSC ON**.

Remote Link : [1-10]	234] DualCom DS	C Passthru v211 Passthru – Languar	window Help			-	8	×
1 Panel Information	Close Panel	RR Connect	Disconnect	Diagnostics				
Miscellaneous Options Swinger Bypass Trips Zip Code Keypad Input Celsius Temperatu	DSC re	Carlor Ca	elays ithy Delay 1	30 60 0 1 >>				^
3/25/2021 8:45 AM	Receiver: FAIL	Host:			DualCom Ver 211		8	DSC ON

- 9. Go to **Panel > Disconnect**. Ensure the account number is correct, then press **Disconnect**. The panel must be disconnected in Remote Link before connecting in DLS.
- 10. Minimize the Remote Link window. Remote Link must remain open during remote DSC programming.

## **Configure DLS**

- 1. Open DLS5 and select **New Account**.
- 2. Enter an account name.
- 3. In **Panel Type**, select the model of the DSC panel.
- 4. In Connection Type, select IP (TLink).
- 5. Leave all other settings at their defaults and press **Create**.

DLS	Create New Account (Basic)	×
General Account Info		_
Account Name		
DSC Pass Thru		
Account Group		
🕿 Root		-
Panel Type		
PC1616 v4.6		×.
Connection Type:		
IP (TLink)		•
IP		
127. 0. 0. 1		
Encryption Key		
		3.12
(none)		
		19.00 - 10.
Automatically Open Account	Advanced Create	Cancel

#### **Connect to the DSC Panel and Complete Remote Programming**

- 1. Back in the DLS5 main window, open the account you just created by double-clicking it.
- 2. Press 📈 Connect.
- 3.<sup>•</sup> In **Access Code**, enter the 6-digit Downloading Access Code.
- 4. In **Device ID**, enter the Panel Identification Code.
- 5. Clear the following checkboxes: Automatically Hangup when Finished and Override default connection type with PC-Link.
- 6. Press **OK**.

DLS			Connect Only		×
Basic					
Panel	Connection Type:	Access Code	Device ID		
PC1616 v4.6	TLINK IP	161600	161600		
		3	4		
Comments					-
5					
Automatio	cally Hangup when F	inished			
Override o	default connection ty	pe with PC-Lin	c		
Show Tags				OK Cancel	
	2				.d

7. In the main DLS5 window, the Communication toolbar displays the connection status. **Efficiency** should ideally be green, indicating good connection. **State** should display **Online Idle**, indicating that the panel is connected and idle. To troubleshoot connectivity issues, select 2 Connection Log. In the connection log, errors are red.

M.			102.2.3 (1.0)	
File View Teols Window	r Help			
Start Page	Pass Three 🔯			
ti 🛛 🗙 😒 🔺	( 🚱 🕑 🕞 🕞 🐨 🗟 🔏 - 1	🚔 🔐 🕡		
Section Number Search	+ C Option Name Search	C Programmed Data Search	Q	
Communications Status Online	Connection TUPK IP 1278-0.1/3062 Prog	NII MICKNOY	State Owine Mie	
Ju. Staneture Graphic				

8. Edit programming as needed, then press 🚱 Upload Programming.

# REFERENCE

#### **Virtual Keypad**

Virtual Keypad enables users to manage their systems remotely, including arming, disarming, viewing zone status, bypassing zones, view history, manage users, and more.

To use Virtual Keypad for remote management, the configuration must meet the following conditions:

- DSC Panels must be programmed as Stay/Away for remote arming and disarming (No Partitions). ٠
- User code 40 must match in both the communicator and DSC panels. For more information, refer to ٠ "Configure the Master Code".

•	System Overview   Virtual Respect	< +	ē.		- 0 ×
	$\leftrightarrow$ $\Rightarrow$ $\mathbf{C}$ $\bullet$ virtuality	pad.com			
Business - 🗧	VOUR LOGO				% ADMIN
ARMING ZONE STATUS	SWITCH SYSTEM *				Ø
	BUSINESS	ARMING / HISTORY			
	型 VIDEO	Q Arming	ZONE STATUS	() History	VIEW ALL
	(5) HISTORY			C 7:59 AM ZONE 1 Unlocked by JOI	RDAN JONES
STAY AWAY	SA FAVORITES			J 7:46 AM All System Off - Disarme	a by JORDAN JONES
	DOORS	Stay	Away	T:45 AM ZONE 2 Locked	
Disarmed	8 THERMOSTATS			(1) 7:45 AM ZONE 2 Unlocked	IDAN IONES
	♀ LIGHTS	iou system is containing	assume.		
DRY VIEW ALL	SCHEDULES			+ GARAGE DOOR	+ LOCK () REFRESH
5, 2020	ACTIONS				
AN JONES	(j) STUTUO	DI ZONE 1	D ZONE 2		
AM All System Off - Disarmed by	2 USERS	6	6		
AN JONES	I PROFILES	[]t ACCESS	Et Al	CCESS	
AM ZONE 2 Locked	C REPORTS	Locked	Uni	ocked	
$\cap$				7	

## **DSC Panel Compatibility**

Panel Type	DSC	Remote User Management	Remote Arming/Disarming	Remote Zone Status	Compatible with DLS5
PC1616	Yes	Yes	Yes	Yes	Firmware version 4.1 and higher
PC1832	Yes	Yes	Yes	Yes	Firmware version 4.1 and higher
PC1864	Yes	Yes	Yes	Yes	Firmware version 4.1 and higher
PowerSeries Neo panels	Untested	Untested	Untested	Untested	Firmware version 1.0 and higher



Designed, engineered, and manufactured in Springfield, MO using U.S. and global components. LT-2208 21213

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