

UDL – Overview and Troubleshooting



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1. Basic Information

1.1 Definition

Remote Upload-Download or “UDL” is a functionality which allows you to access the programming of a panel remotely. That functionality is used to program the panel, without going to the premises. The programming can be done with the help of a computer and the respective Upload-Download software.

For UDL to be established, the following conditions must be met:

- The panel must be supported for UDL and must be programmed appropriately.
- The alarm communicator must have been wired properly.
- There should be a functioning 5530UDM.
- On the same computer there should be installed the respective Upload-Download software.
- The Upload-Download software must be configured appropriately, and com ports established between it and the modem.

- ❖ The list with the supported panels, can be found in the Uplink Compatibility Chart:
<https://www.uplink.com/panel-compatibility-chart/>
- ❖ Below you can find the respective UDL software for the supported panels:
 - DSC panels > DLS 5 / DLS 2002 software**
 - Honeywell panels > Compass software**
 - Interlogix panels > DLX900 / DL900 software**
- ❖ More on the necessary panel programming and the wiring can be found at the link below: <https://www.uplink.com/partner-resources/manuals/>

1.2 Basic Parameters

5530UDM



Figure 1. (5530UDM)

The 5530UDM is an additional hardware necessary for UDL connection if you have an 5530M alarm communicator. The device dials the telephone line of the panel, and all the datagoes through the 5530UDM. It is wired between the alarm communicator and the panel.

The 5530UDM is shown in Figure 1.

When wiring the 5530UDM with the 5530M device all 6 wires must be connected to the 5530UDM as shown in Figure 2.

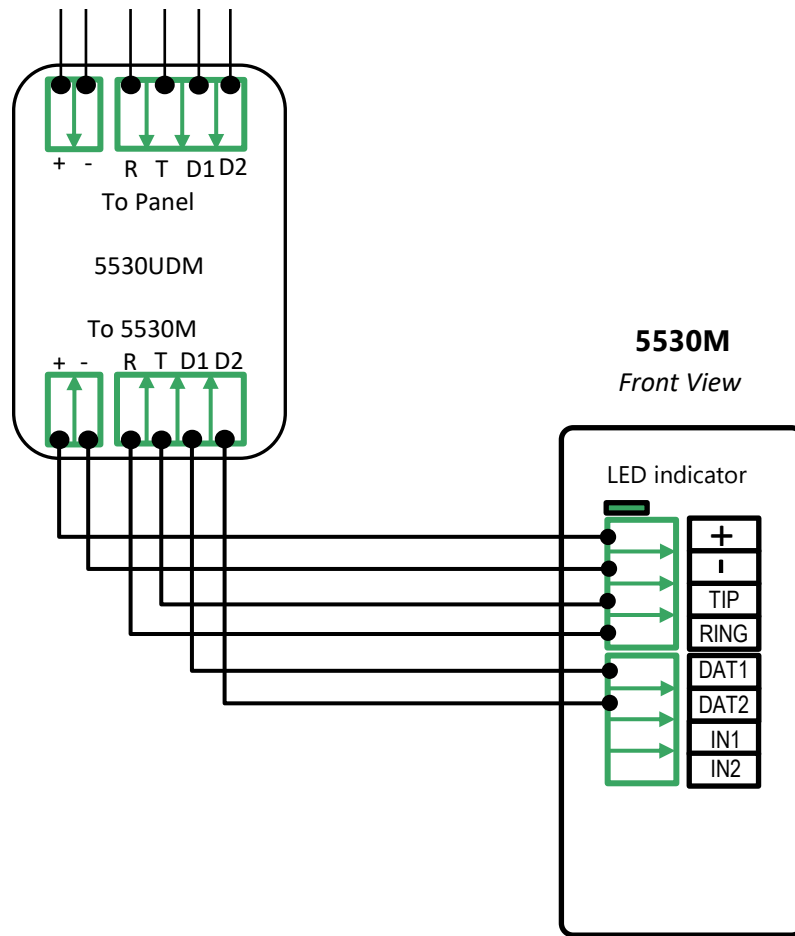


Figure 2. Ringer wiring diagram

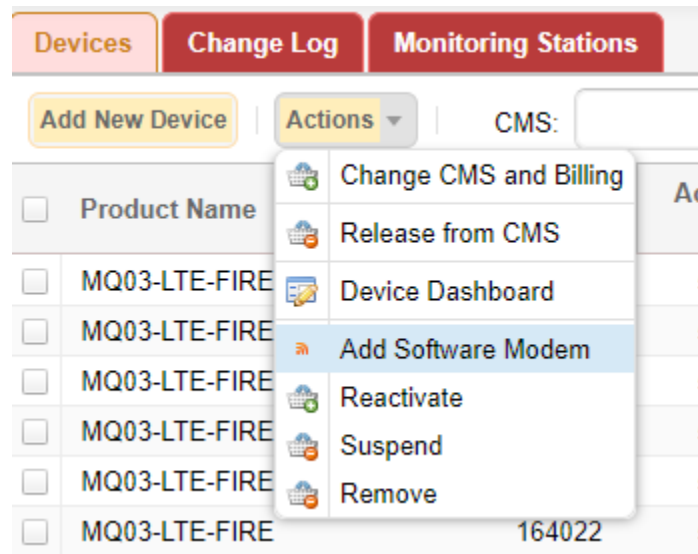
Between the 5530UDM and the Alarm panel not all wires are required. For UDL connection only the RING & TIP are necessary to be connected.

If the remote arm/disarm functionality (keyswitch/keybus) needs to be used the DAT1 and DAT2 from the 5530UDM needs to be wired appropriately. The DAT1 and DAT2 of the 5530UDM must be wired the same way as you would wire for Keyswitch/Keybus of an 5530M alarm communicator.

- **Software Modem**

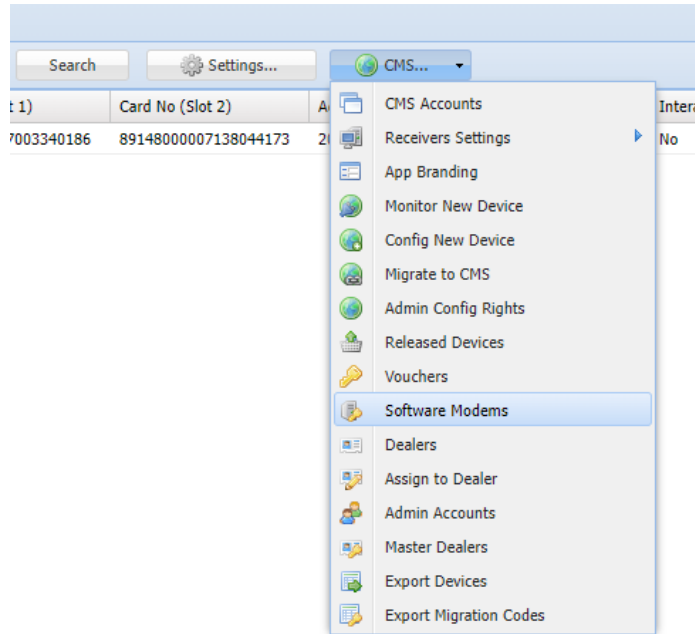
Once the software modem is installed it requires a software license to be purchased. There are two ways of obtaining a software license:

- Dealers Portal: when a dealer is registered successfully on the portal, they can purchase a software license from “Actions” -> “Add Software Modem”

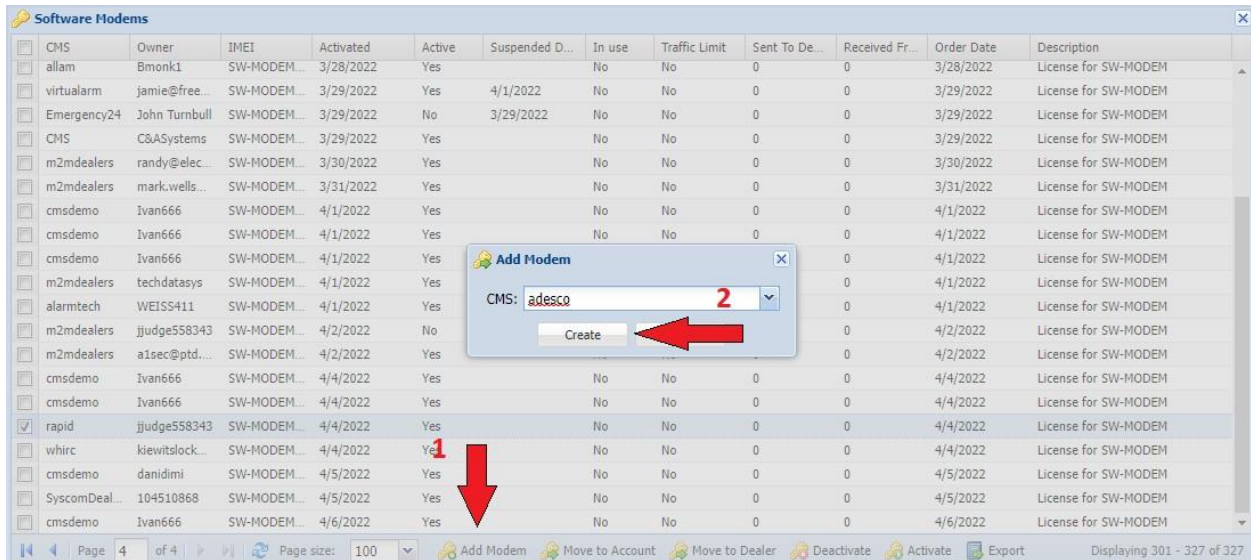


This action will add a device **SW-MODEM** to the list of the devices that the dealer has.

- Admin Portal: the monitoring station can add a license to a dealer account. The monitoring station needs the permission “UDL Licenses” to do so. The license can be added from “CMS” -> “Software Modems.”



The next step would be to click on “Add Modem” and create it under the central station the dealer works with.



Select the monitoring station and click on “Move to Dealer”.

The screenshot shows a table of software modems with columns for Owner, IMEI, Activated, Active, Suspended, In use, Traffic Limit, Sent To Dealer, Received From, Order Date, and Description. A 'Move to Dealer' dialog box is open over the table, showing a dropdown menu for selecting a dealer. The selected dealer is 'knightsecurity'.

Owner	IMEI	Activated	Active	Suspended D...	In use	Traffic Limit	Sent To De...	Received Fr...	Order Date	Description	
allam	Bmonk1	SW-MODEM...	3/28/2022	Yes	No	No	0	0	3/28/2022	License for SW-MODEM	
virtualarm	jamie@free...	SW-MODEM...	3/29/2022	Yes	4/1/2022	No	No	0	0	3/29/2022	License for SW-MODEM
Emergency24	John Turnbull	SW-MODEM...	3/29/2022	No	3/29/2022	No	No	0	0	3/29/2022	License for SW-MODEM
CMS	C&ASystems	SW-MODEM...	3/29/2022	Yes	No	No	0	0	3/29/2022	License for SW-MODEM	
m2mdealers	randy@elec...	SW-MODEM...	3/30/2022	Yes	No	No	0	0	3/30/2022	License for SW-MODEM	
m2mdealers	mark.wells...	SW-MODEM...	3/31/2022	Yes	No	No	0	0	3/31/2022	License for SW-MODEM	
cmsdemo	Ivan666	SW-MODEM...	4/1/2022	Yes	No	No	0	0	4/1/2022	License for SW-MODEM	
cmsdemo	Ivan666	SW-MODEM...	4/1/2022	Yes	No	No	0	0	4/1/2022	License for SW-MODEM	
cmsdemo	Ivan666	SW-MODEM...	4/1/2022	Yes	No	No	0	0	4/1/2022	License for SW-MODEM	
m2mdealers	techdatasys	SW-MODEM...	4/1/2022	Yes	No	No	0	0	4/1/2022	License for SW-MODEM	
alarmtech	WEISS411	SW-MODEM...	4/1/2022	Yes	No	No	0	0	4/1/2022	License for SW-MODEM	
m2mdealers	jjudge558343	SW-MODEM...	4/2/2022	No	No	No	0	0	4/2/2022	License for SW-MODEM	
m2mdealers	a1sec@ptd...	SW-MODEM...	4/2/2022	Yes	No	No	0	0	4/2/2022	License for SW-MODEM	
cmsdemo	Ivan666	SW-MODEM...	4/4/2022	Yes	No	No	0	0	4/4/2022	License for SW-MODEM	
cmsdemo	Ivan666	SW-MODEM...	4/4/2022	Yes	No	No	0	0	4/4/2022	License for SW-MODEM	
rapid	jjudge558343	SW-MODEM...	4/4/2022	Yes	No	No	0	0	4/4/2022	License for SW-MODEM	
whirc	kiewitslock...	SW-MODEM...	4/4/2022	Yes	No	No	0	0	4/4/2022	License for SW-MODEM	
cmsdemo	danidimi	SW-MODEM...	4/5/2022	Yes	No	No	0	0	4/5/2022	License for SW-MODEM	
SyscomDeal...	104510868	SW-MODEM...	4/5/2022	Yes	No	No	0	0	4/5/2022	License for SW-MODEM	
cmsdemo	Ivan666	SW-MODEM...	4/6/2022	Yes	No	No	0	0	4/6/2022	License for SW-MODEM	

*Please note that a software modem license can be added only to dealer accounts. In addition, the software modem requires login credentials. The dealer should use their dealer's portal login credentials to access the software modem. Based on the dealer's credentials the software will determine if the dealer has a license and what devices they have access to.

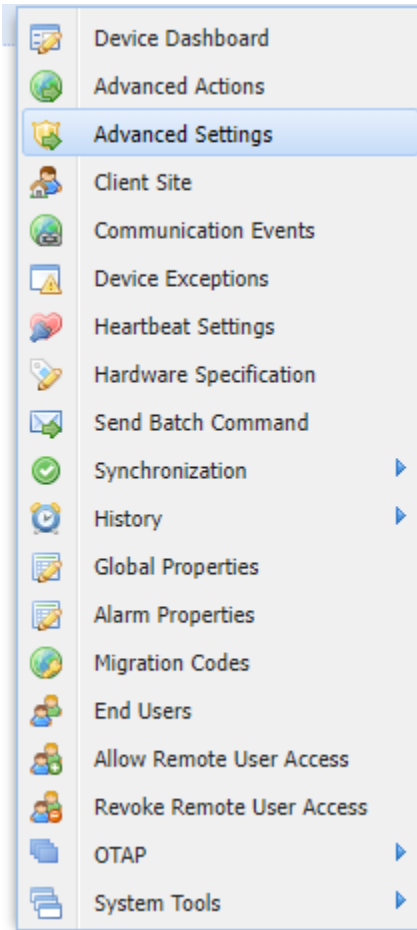
1.3 Troubleshooting Process

- (1) Ask the customer about the panel brand, model, and revision (if he knows it).
Check in the compatibility list if we support that panel.

<https://www.uplink.com/panel-compatibility-chart/>

*The revision of the panel might be useful when you escalate the case to the engineers. If you are the one that tests the panel in the office, you can see the revision on the panel itself.

- (2) If the panel is supported, select the device, and click on Advanced Settings menu



- After we ask the customer for the serial number of the device, we need to make sure we enable the online settings on the top left corner and get current settings.
- Then check the "Tunnel" type under COM2, it should be marked as UDL in order to use the successfully connect the Upload-Download.

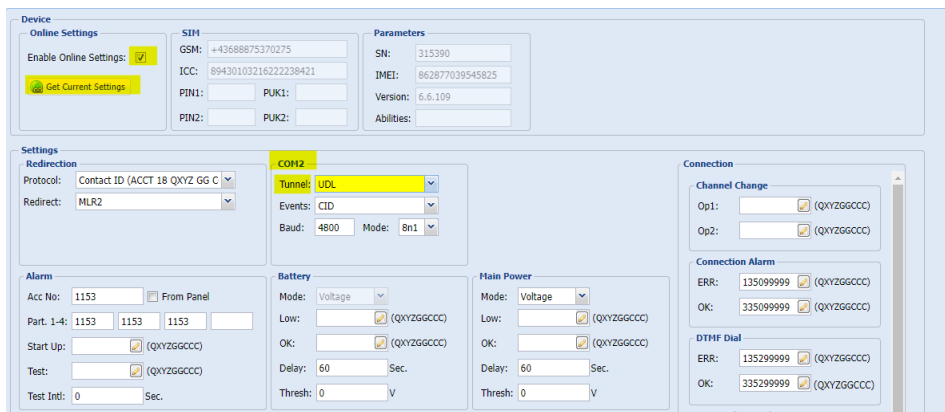
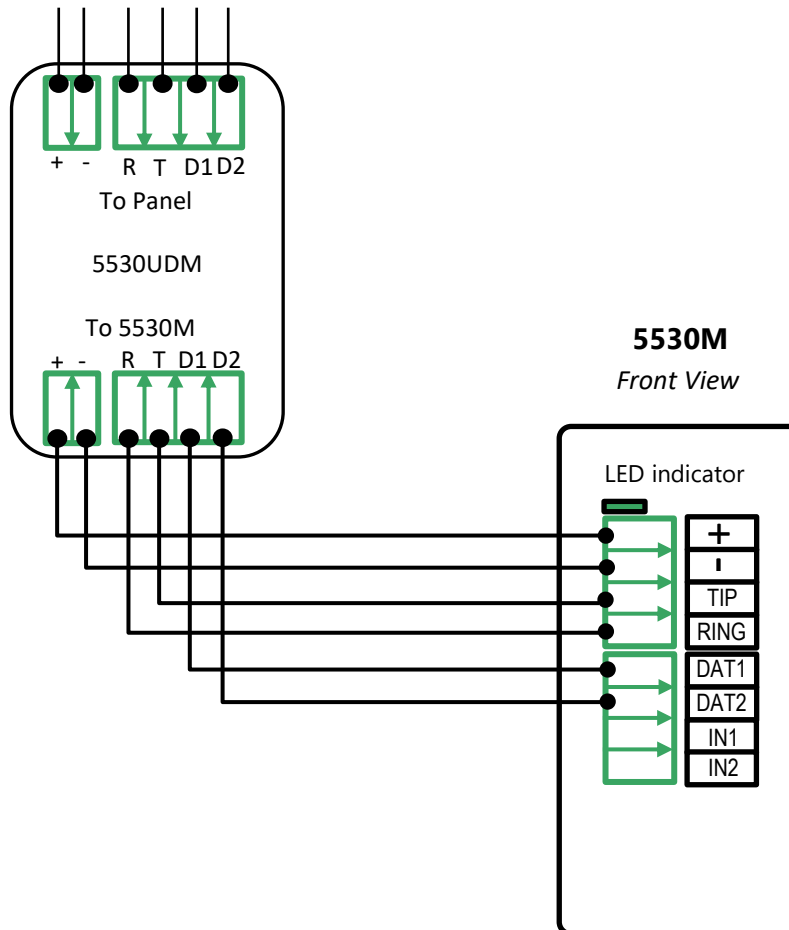


Figure 3. Advanced Settings

(3) Wiring schematic

- Double check the wiring wires.
- With the 5530M device, you need to make sure the UDM is wired correctly as it's shown on Figure 2. All the 6 wires must be wired between the device and the 5530UDM, between the 5530UDM and the panel you need only 4 (+, -, Ring, Tip).



(4) Programming

- Depending on the panel the customer has, we need to always check if the UDL section is programmed. If we need to program the panel, follow the link below and select the desired panel and see what sections need programming:
 - <https://www.uplink.com/partner-resources/manuals/>
- Example: UDL programming for vista 15P

Programming the Honeywell Vista 15P/ 20P/ 48LA Alarm Panel via the Keypad for remote Upload/Download (UDL)

Program the Panel for Upload/Download (UDL):

Display	Keypad Entry	Action Description
Disarmed	4112,8,00	To enter the programming menu
Installer code	*95, 1	To set "Number of rings to answer" to 1
Pager 1 Phn No.	*99	To save and quit

NOTE: If the software says that the CSID doesn't match, *96 while in programming mode initializes CSID and account number (assigns them their default values).

- Double check if the Access Code matches the Panel ID Code.
- Example for DSC 1616 – The codes need to match the one on the UDL software. (DSL5)

[403] Downloading Access Code

Program the 6-digit Downloading Access Code. Upon connection, the system will only connect to the downloading computer if the Downloading Access Code matches the Downloading Access Code programmed in the computer file.

[404] Panel Identification Code

Program the 6-digit Panel Identification Code. This code is used by the downloading computer to verify the correct account is calling back (Call Back feature) or to identify which customer account file should be used (User Initiated DLS and Auto Event Buffer Upload features).

(5) How to check if the 5530UDM is working?

- Go to the Advanced Actions menu.
- Send command **#ringerversion** (see Figure 4).
- The command must return **RNG U0022**

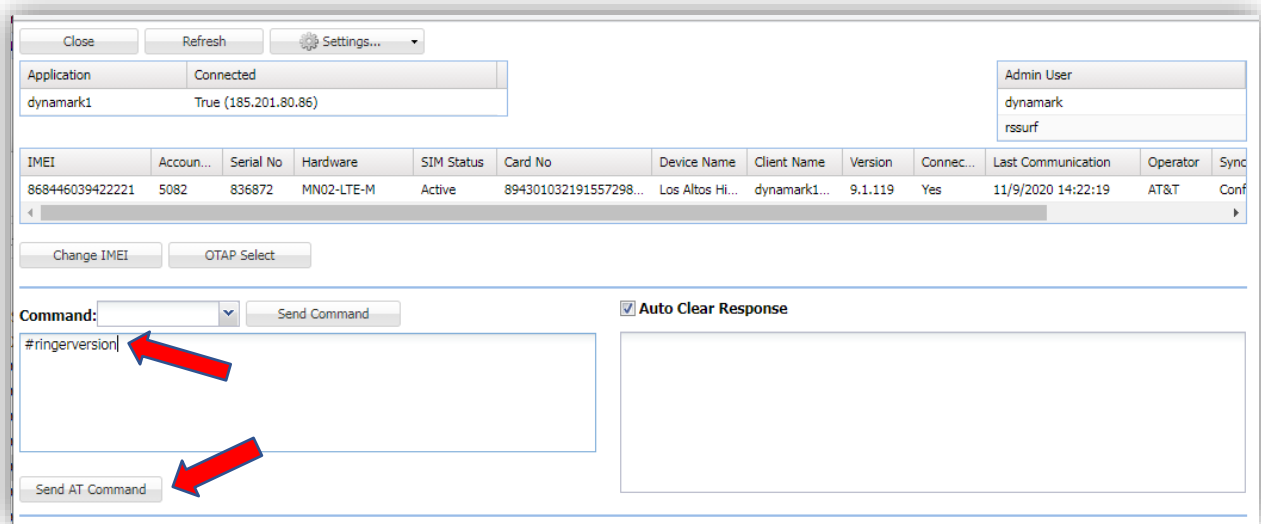


Figure 4. Ringer version

*If you get an error message, then we need to double check if all the 6 wires are wired from the device to the 5530UDM.

**If all the wires are good, then we can consider the 5530UDM as defective. The RMA for the 5530UDM is the same as for the other devices. The difference is that we don't have a serial number for the 5530UDM, *and we need to ask the customer for the number*?, so we can issue the RMA for manufacturing.

(6) What is the modem used by the customer?

- Customers use the software modem as it is universal.
 - o Serial number – it's a 7-digit number, which can be checked in the Admin Portal. Is the modem connected? If not, we can troubleshoot like it is a typical connectivity issue.
- If the customer uses a software modem, we need to check the COM ports on from the Device Manager (See Figure 6).
- License – if the client cannot login to the Uplink Modem, that means he does have license for it. If that's the case, we need to ask Jivko to add it for the username the client provided. The credentials for the Software Modem are the same as for the Admin Portal.

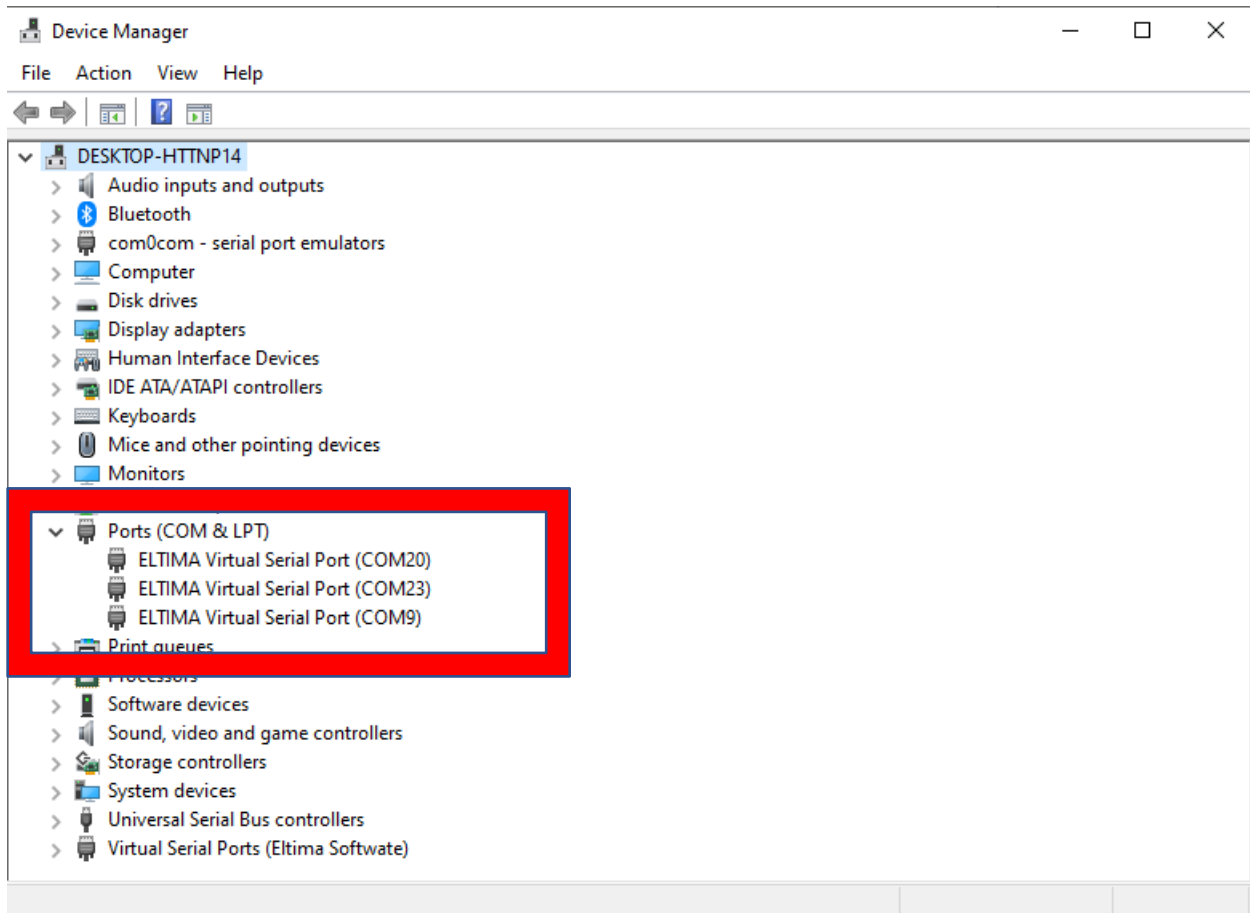


Figure 6. COM Ports

- (7) Check what is set up as a phone number in the UDL software (DLS 5, DLS 2002, DL900, DLX900, Compass)
 - As we use the device for dialing, the phone number must be the serial number of the device.
- (8) Connection Type and Dialing Method
 - Connection Type – must be PSTN.
 - Double Call must be disabled.
 - Dialing Method – must be DTMF.
- (9) Check if the panel answers the dialing.
 - When we dial the panel, you should hear the relay clicking.
- (10) Check the connectivity of the device.
 - If the device is not stable and it has connectivity issues or low signal level, we cannot establish UDL connection.

UTC Date	Event Type	Additional Info	Server	Time Until Reconnect
10/28/2020 11:25:53	Connection Dropped Gracef...	DroppedNow: False; Client disconnected	185.201.80.86	
10/28/2020 11:25:53	Connection Dropped By Ser...	Missing heartbeat	185.201.80.86	
10/27/2020 19:25:30	Connection Dropped Gracef...	DroppedNow: False; Client disconnected	185.201.80.86	
10/27/2020 19:25:30	Reconnect After Restart	310410 (SIM2) at 22	185.201.80.86	00.00:00:00
10/27/2020 19:25:30	Connection Dropped By Ser...	Duplicate connection	185.201.80.86	
10/27/2020 19:00:53	Reconnect After Drop	310410 (SIM2) at 24	185.201.80.86	00.00:00:00
10/27/2020 19:00:53	Connection Dropped Gracef...	DroppedNow: False; Client disconnected	185.201.80.86	
10/27/2020 19:00:53	Connection Dropped By Ser...	Duplicate connection	185.201.80.86	
10/27/2020 18:39:35	Reconnect After Drop	310260 (SIM2) at 20	185.201.80.86	00.00:00:30
10/27/2020 18:39:04	Connection Dropped Gracef...	Client disconnected	185.201.80.86	
10/27/2020 18:37:47	Reconnect After Drop	310260 (SIM2) at 10	185.201.80.86	00.00:00:10
10/27/2020 18:37:37	Connection Dropped Gracef...	Client disconnected	185.201.80.86	
10/27/2020 18:34:36	Reconnect After Drop	310260 (SIM2) at 7	185.201.80.86	00.00:00:00
10/27/2020 18:34:36	Connection Dropped Gracef...	DroppedNow: False; Client disconnected	185.201.80.86	
10/27/2020 18:34:36	Connection Dropped By Ser...	Duplicate connection	185.201.80.86	
10/27/2020 18:31:53	Reconnect After Restart	310260 (SIM2) at 19	185.201.80.86	

Figure 6. Communication Events

1.4 Official Procedure

What we need in order to establish UDL connection?

1. **5530M**
 - you will also need a 5530UDM.
2. **Panel** – check for compatibility.
3. **Modem**
 - Software – you must have license for it in order to use it.
4. **Software** – DLS 5, DLS 2002, Compass, DLX900, DL9000

2. Exceptions

3. FAQ

1. **What do I need for upload and download on DSC Power832?**
 - We do not support DSC 5010 as we cannot guarantee the connectivity.

- 2. What is the phone number that is being dialed?**
 - The serial number of the Uplink Unit.

- 3. What wires I need to connect from the 5530M to the 5530UDM and from the 5530UDM to the panel?**
 - From the 5530M to the 5530UDM all 6 and from the 5530UDM to the panel the AUX +/- and ring and tip

- 4. What settings I need to change in DLS 5 to make a connection to my panel with your communicator?**
 - You need to create MD12 modem with disabled double call and to use PSTN dialing.

- 5. I have a good and stable signal of 10 in the device dashboard, but the UDL constantly disconnects?**
 - Signal level of below 12 may be considered inconsistent for a successful UDL session.

- 6. Do you have a manual for Compass? How to configure the modem there?**
- 7. My modem doesn't dial, I do not hear anything when I initiate UDL session. What could be the reason behind it?**
 - To check the programming if the sections from the manuals are programmed correctly. To check if the software is using tone dialing and if the modem has enough signal.

- 8. My modem cannot connect as we have poor cellular reception in the office. What are my other options?**
 - We will escalate to our administrators, and we will give you software modem if possible.

- 9. How does the modem connect to the panel? What is the connection type? Does it take internet from my laptop?**

- The modem uses a SIM card, and it dials the Uplink unit. It doesn't take internet from the PC.

10. What Modem should I choose in DLS 2002 in Modem Configuration? Is it Digital Security Controls MD12 v1.1 or DSC PC-Link Direct Connection?

- Digital Security Controls MD12 v1.1

11. What should be the Baud Rate for Outgoing and Incoming?

- 300 for both

12. In Modem Configuration -> Connection > Call Preferences should the "Dial and Busy tone detection" be disabled?

- Yes

13. What is the number of rings that we should configure in „Modem Configuration “> „Connection “?

- 1

14. In DLS2002 what you do when you see the following error "Communications Not Ready. The communication port is not responding. Please check that the hardware configuration for this port is correct."

- What we should do is to check, If the customer has a Uplink Modem that is connected, also what is the configuration of the modem with #sot in Advanced Settings, to be sure that the modem is for the right panel. What also we should check is the Modem Configuration menu, the ports, baud rate, etc.

15. What should you do, if you see error "Panel is not Responding"?

- What you should do is to verify the programming of the DLS Code and Panel ID Code and if they are matching in the programming and the DLS2002. What also you should check is in the "Advanced Settings" of the device if the UDL is set in COM1. Also, if the panel is still not responding to check the signal strength of the device and the "Device Exceptions" and search for IC2 responses and if the device is connecting to the panel. You also need to check Modem Configuration to verify if everything there is set correctly.

16. What steps should the customer perform, so he can connect with DLS2002?

- The steps he should perform is first "Initialize the Modem" and then File>Connect, so he can connect to the panel. If it's necessary, he should also put the DLS and Panel ID Codes in the DLS2002.

17. What is the specific configuration for the Interlogix that we should make?

- We should open the Device Manager > Action > Add legacy hardware and add the modem in order to work properly.

18. In Compass when trying to do UDL could you connect using the CSID?

- Yes, you can, and you can choose the default CSID from the panel.