

ODIN Installation Instructions

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Introduction

The ODIN Digital Intercom is a highly scalable intercom system in a 1RU (Rack Unit) package. Up to a maximum of eight ODIN units can be interconnected via optical Inter-Frame Links creating a single matrix with up to 1024 ports.

Use this document to configure and connect an ODIN device to keypanels. For more advanced operations, please see the ODIN Technical Manual found at www.rtsintercoms.com.

CAUTION:

- If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than the room ambient temperature. Therefore, special consideration should be given to installing the equipment in an environment compatible with the specified maximum ambient operating temperature.
- Minimum 6" clearance on left and right sides of ODIN is required to keep the fan area unobstructed and ensure proper ventilation.
- ODIN is to be connected to mains socket outlet with a protective earth connection. Particular attention should be given to power supply connections other than direct connection to the mains socket. This includes using power strips with earth grounding.
- Consideration should be taken to ensure the mains power supply current and voltage meet the ratings specified on the equipment name plate.

Navigating the Menu

The ODIN menu structure is separated into four logical sections *Status, Configuration, Intercom Setup,* and *Alarms*. The menu is accessible using the keypad, the shaft encoder knobs, or a combination of both. Use Table 1 and Table 2 to view the various keypad and shaft encoder operations.

Keypad Operation



TABLE 1. Keypad Operation

Keypad Character/ Mode	Home	Menu	Form (navigating)
1/STATUS	Go to STATUS Menu	Go to STATUS	
2/UP	Scroll info up	Move to previous sibling in menu	
3/CONFIG	Go to CONFIG menu		
4/LEFT	Rotate icon highlight CCW	Move icon highlight left	Move to prev field (left)
5/HOME	Go to STATUS overview	Go to HOME screen	Go to field (top/left)
6/RIGHT	Rotate icon highlight CW	Move icon highlight right	Move to next field (right)
7/ALARMS	Go to ALARM menu	Go to ALARM menu	
8/DOWN	Scroll info down	Move to the next sibling menu	Move to next field (down)
9/SETUP	Go to SETUP menu	Go to SETUP menu	
0/SHIFT	Toggle SHIFT state	Toggle SHIFT state	Toggle SHIFT state
*/CLR	Move to info top	Move up one menu level	Exit form (prompt, if changes)
#/SEL	Invoke highlighted icon	Invoke highlighted icon	Initiate edit on selected field

Shaft Encoder Operation



 TABLE 2. Shaft Encoder Operation

	Action/Mode	Home	Menu	Form (navigating)
ler	Click	Go to STATUS overview	Move up one level	Exit form (prompt with changes)
1000	Double Click	Move to info top	Go to HOME screen	Exit form (abort changes)
ît En	Press + Hold	Activate screensaver / Logout	Activate screensaver / Logout	Activate screensaver / Logout
Lef	Rotate	Scroll info up / down	Move to next / prev sibling	Scroll form up / down
	Press + Rotate			
er	Click	Invoke highlighted icon	Invoke highlighted icon	Initiate edit on selected field
cod	Double Click	Move to info top	Move up one menu level	Exit form (save changes)
En	Press + Hold	Help	Help	Help
ight	Rotate	Rotate icon highlight	Move icon highlight left / right	Move to next / prev field
R	Press + Rotate			

Network Port Cabling

To cable ODIN to the network, do the following:



- 1. On the rear panel of ODIN, connect an Ethernet cable to the CONTROL port (J8).
- 2. If using OMNEO over Ethernet, connect an RJ-45 cable to the OMNEO PRI connector (J10).
- 3. If using OMNEO over fiber, connect a SFP fiber connector to the PRI connector (J11).

Network Port Configuration

To access the ODIN Network menu, do the following:

- 1. On the rear panel of ODIN, connect a power cord to PS1, PS2 or both.
- 2. On the front panel of ODIN, press the **PS1**, **PS2** or **both buttons**. *The unit powers on and the display turns on and the Home screen appears.*

Intercom Ver: ODIN Intercom V0.1.0	*	Ļ
Name: ODIN Frame: 1 Ports: 1-128	((_))	Ś

- **3.** Rotating the right encoder knob, navigate to the **Configuration icon**.
- **4.** Click the **right encoder knob**. *The Configuration menu appears.*

Configura	ation: Syst	tem		

- 5. Rotating the right encoder knob, navigate to the Network icon.
- 6. Click the right encoder knob. *The Network menu appears.*

Configure the Control Port Connection

To configure the control port connection, do the following:

- 1. Rotating the right encoder knob, navigate to the **Control Port icon**.
- Click the right encoder knob. The Control Port Configuration screen appears.



3. In the IP Address field, enter the IP Address of the Control Port.

NOTE: The default IP Address is 192.168.0.10.

- 4. In the Netmask field, enter the Netmask, if different than what is shown.
- 5. In the Gateway field, enter the Gateway Address, if applicable.
- 6. In the DNS Server field, enter the DNS Server Address, if applicable.

 Click the left encoder knob to exit the Control Port Screen. A confirmation to save or discard changes appears.



- 8. Rotate the **right encoder knob** to the desired action.
- 9. Click the right encoder knob to confirm the selection.
- **10.** Click the left encoder knob to exit the **Control Port Screen**. *The Control Port screen closes and the Network Menu appears.*

Configure the OMNEO Connection

To configure the OMNEO connection from the front panel, do the following:

- 1. Rotating the right encoder knob, navigate to the OMNEO icon.
- 2. Click the right encoder knob. The OMNEO Configuration Screen appears.
 - **NOTE:** By default, the OMNEO interfaces has a link local address. If there is a DHCP server available, the IP Address is provided by the DHCP server. This configuration should be done only if the user wants to set Static IP for OMNEO interfaces.



3. Select the Use Static check box to enable Static IP Addressing.

NOTE: If the Use Static check box is not selected, DHCP/Link-local is used. Some of the remaining fields are automatically populated.

4. In the Audio IP field, enter the IP Address used to transmit and receive audio across the network.

NOTE: The Audio IP Address and Control IP Address should be in the same subnet.

- 5. In the Control field, enter the IP Address used by the OMNEO controller to access the network.
- 6. In the Netmask field, enter the Netmask Address for the OMNEO interfaces.
- 7. In the Gateway field, enter the Gateway Address for the OMNEO interfaces, if applicable.
- 8. In the DNS Server field, enter the DNS (Domain Name Server) Server address to which OMNEO has access.
- 9. In the Device field, enter a recognizable name for the OMNEO Network Connection.
- 10. Rotating the right encoder knob, scroll to the first character of the device name.
- 11. Tap the right encoder knob to advance to the next character.
- 12. Repeat step 9 and step 10 until the Device Name is entered.
- When finished entering the Device Name, double-click the right encoder knob. The Device field turns yellow (modification made).
- 14. In the Domain field, enter the domain to which OMNEO belongs. By default, the domain is set to Local.
- **15.** Click the **left encoder knob** to exit the OMNEO screen. *The Network Menu Icons appear.*

Configure the Management Port (Front Panel Connector)

To configure the management port, do the following:

- 1. Rotating the right encoder knob, navigate to the **Management Port icon**.
- 2. Click the right encoder knob. The Management Port Screen appears.

Configuration: Network: Management Port					
IP Address:	192.168.0.40	Device:	ODIN-ffff92-MGMT		
Netmask:	255.255.0.0	Domain:			
Gateway:	0.0.0.0	Use Static:	~		
DNS Server:	0.0.0.0				

3. Select the Use Static check box to enable Static IP Addressing.

NOTE: If the Use Static check box is not selected, DHCP/Link-local is used. Some of the remaining fields are automatically populated.

- 4. In the IP Address field, enter the IP Address used by the port to access the network.
- 5. In the Netmask field, enter the Netmask Address for the management port.
- 6. In the Gateway field, enter the Gateway Address for the management port, if applicable.
- 7. In the DNS Server field, enter the DNS (Domain Name Server) Server address the management port has access.
- 8. In the Device field, enter a recognizable name for the Management Port Network Connection.

Intercom Configuration

Intercom Port Allocation

The **Port Allocation Table** is used to manage and allocate the different types of intercom port assignments across the intercom system. Analog port devices, such as AIO and 2-wire devices, and network port devices, such as OMNEO, can be mapped to any port in the intercom.

The default port allocations are:

Ports 1 – 14 are AIO Ports 15 & 16 are 2-Wire Ports 17 and higher (if licensed) are OMNEO

Allocate Ports from the Front Panel of ODIN

To allocate ports from the front panel of ODIN, do the following:

- 1. Rotating the right encoder knob, navigate to the **Configuration icon**.
- 2. Click the **right encoder knob**. *The Configuration Menu appears.*
- 3. Rotating the right knob, navigate to the System menu icon.
- **4.** Click the **right encoder knob**. *The System menu appears*.
- 5. Rotating the right encoder knob, navigate to the Port Allocation Table menu icon.
- **6.** Click the **right encoder knob**. *The Port Allocation Table screen appears.*

Configura	Configuration: System: Port Allocation Table					
Frame:	1	Filter:	<none></none>			
Port:	1	Alpha:	N001			
Type:	<none></none>	Channel:	1			
Warning:						

NOTE: To move from field to field, rotate the right encoder knob. To scroll the screen up and down, rotate the left encoder knob. To modify a field click the right encoder knob. To exit a screen click the left encoder knob.

- 7. Rotating the right encoder knob, move the focus to the Filter field.
- 8. Click the right encoder knob.

The Filter field becomes active.

Configura	tion: Syste			
Frame:	1	Filter:	<none> 🔶</none>	
Port:	1	Alpha:	N001	
Type:	<none></none>	Channel:	1	

9. Rotating the right encoder knob, scroll to the **desired filter** (for example, AIO, 2W, OMNEO, or <none>) to filter the ports.

NOTE: The Filter field is used to find certain types of ports quickly to either modify or delete assignments.

 Click the right encoder knob to confirm the selection. All the ports with the selected filter are scrollable.

- 11. Rotating the right encoder knob, move the focus to the Port field.
- Click the right encoder knob. The Port field becomes active.
- **13.** Rotating the right encoder knob, scroll to the **port** to assign the desired allocation.
- Click the right encoder knob to confirm the selection. The Alpha field changes to display the default alpha. This field is read only. Changes this field can be made on the Ports screen (Intercom Setup | Alphas | Port).
- 15. Rotating the right encoder knob, move the focus to the Type field.
- **16.** Click the **right encoder knob**. *The Type field becomes active.*
- 17. Rotating the right encoder knob, select the desired assignment type (for example, AIO, 2W, OMNEO, or <none>).
- **18.** Click the **right encoder knob** to confirm the selection.
- **19.** Rotating the right encoder knob, move the **focus to the Channel field**.
- **20.** Click the **right encoder knob**. *The Channel field becomes active.*
- **21.** Rotating the right encoder knob, scroll to the **desired channel**.
- 22. Click the encoder knob to confirm the selection.
- **23.** Click the **left encoder knob** to exit the screen. *A Changes Made confirmation message appears.*

Configuration: Frame: 1	Changes have been made:
Port: 16 Type: OMN	Save Discard

24. Click the right encoder knob to Save.

OR

Rotating the right encoder knob, move the focus to Discard, and then click the encoder knob to confirm the Discard.

Allocate Ports in AZedit

To allocate ports using AZedit, do the following:

1. From the Options menu, select **Port Allocation Table**. *The Port Allocation Table window appears.*

rt Allocation Table	1			
irame: 1	•			
Port	Alpha	Туре	Channel	Warnin
3	N003	AIO	3	
4	N004	AIO	4	
5	N005	AIO	5	
6	DIX	AIO	6	
7	X	AIO	7	
8	N008	AIO	8	
9	N009	AIO	9	
10	N010	AIO	16	
11	N011	AIO	15	
12	N012	AIO	12	
13	N013	AIO	13	
14	N014	AIO	14	
15	N015	2W	CH A	
16	N016	2W	CH B	
17	N017	OMNEO	17	
18	N018	OMNEO	18	Port is unlicensed.

Warning: Port allocation warnings exist for frames: 1-5.

- **NOTE:** When *Port is unlicensed* is seen in the port allocation table, it means the port is not licensed for use and cannot be configured. For more on licenses, please refer to the ODIN Technical Manual which can be found at www.rtsintercoms.com.
- 2. From the Type column drop down menu, select the **device type** assigned to the port (i.e., OMNEO, AIO, 2W, or <none>).
- **3.** Once finished allocating the ports, click **Apply**. *The Send Port Allocation Table to Intercom window appears.*
- **4.** Click **Proceed**. *The Port Allocation Table is sent to the intercom.*
- **NOTE:** Duplicating channel assignments displays a highlighted warning that Duplicate Channel Allocation has occurred. This must be fixed before proceeding.

Configure ODIN to System Devices

Configure an Analog Keypanel Connection

To configure ODIN to an analog keypanel, do the following:

- 1. Using the Port Allocation table, assign the **device (connection) type** to the AIO. "Allocate Ports from the Front Panel of ODIN" on page 9.
- 2. On the back of ODIN, connect the keypanel to the AIO port on the rear panel of ODIN.

IMPORTANT: The AIO port assigned in the Port Allocation Table must match the AIO port on the rear panel of ODIN.

Configure an OMNEO Keypanel from the Front Panel

To configure an OMNEO keypanel from the front panel, do the following:

- 1. Using the Port Allocation table, assign an **OMNEO device type** to the desired port. "Allocate Ports from the Front Panel of ODIN" on page 9.
- 2. Return to the Home page.



- 1. Rotating the right encoder knob, navigate to the Configuration icon.
- 2. Click the **right encoder knob**. *The Configuration Menu appears.*
- 3. Rotating the right knob, navigate to the **Ports menu icon**.
- 4. Click the **right encoder knob**. *The System menu appears*.
- 5. Rotating the right encoder knob, navigate to the OMNEO menu icon.
- 6. Click the right encoder knob. *The OMNEO Channels screen appears.*

Configuration	Configuration: Ports: OMNEO Channels					
Frame:	1	Port:	N017			
Device Name:						
IP Address:	0.0.0.0	RX Latency:	1 ms			
Device Type:	OKP-2	Channel:	1			
Description:						

- 7. Rotating the right encoder knob, navigate to the **Port field**.
- 8. Click the right encoder knob. *The Port field becomes active.*
- 9. Rotating the right encoder knob, scroll to the **desired port**.
- **10.** Click the **right encoder knob**. *The Port field is changed.*
- 11. Rotating the right encoder knob, navigate to the Device Nam field.
- **12.** Click the **right encoder knob**. *The Device Name field becomes active.*

- **13.** Rotating the right encoder knob, enter the **Device Name of the device to which to connect**.
- 14. Tap the right encoder knob to advance to the next octet.
- **15.** Repeat **step 13** and **step 14** until the IP Address is entered.
- When finished entering the IP Address, click the right encoder knob. The IP Address field turns yellow (modification made).
- 17. Rotating the right encoder knob, navigate to the Device Type field.
- 18. Click the right encoder knob. The Device Type field becomes active.
- **19.** Rotating the right encoder knob, scroll to the **OMNEO device type**.
- **20.** Click the **right encoder knob**. *The Device Type field turns yellow.*
- 21. Rotating the right encoder knob, navigate to the channel field.
- **22.** Click the **right encoder knob**. *The Channel field becomes active.*
- 23. Rotating the right encoder knob, scroll to the keypanel channel.
- 24. Click the right encoder knob. *The Channel field turns yellow.*
- **25.** Click the **left encoder knob** to exit the screen. *A Changes Made confirmation message appears.*

Configuration: Frame: 1	Changes have been made:	
Port: <mark>16</mark> Type: OMN	Save Discard	

26. Click the **right encoder knob** to Save.

OR

Rotating the right encoder knob, move the focus to Discard, and then click the encoder knob to confirm the Discard.

Add the ODIN to the Device Catalog in IPedit

To add the ODIN to IPedit, do the following:

- 1. Open IPedit.
- From the Device menu, select Add. The Add Devices Window appears, open to the Search tab.
- 3. Select ODIN.

The Add button becomes active.

Add Devices			?	\times
Add Search				
Available Devices	Device Informat	ion		
192.168.0.39	Device Name:	ODIN-ffff92		
	IP Address:	192.168.0.38		-
	Description:			
	Type:	ODIN		
	Sessions:	16/16 Available		
		Add	Dor	ne

4. Click the Add button.

ODIN appears in the device catalog in the left panel.

5. Click the **Done button**. *The Add Devices window closes.*

Configure the ODIN using IPedit

To configure the ODIN using IPedit, do the following:

NOTE: The Destination Type does not need to be selected if using the Browse window to select the device. It fills the type and IP Address automatically. The type can be OKP, OKI, OEI, OAP, OMI, or another ODIN.

Using the Channel Configuration and Status Section:

1. In the Destination Device Name field, click the **... button**. *The Discovered Devices Window appears*.

- **a.** Expand the **tree** to view the destination devices available.
- **b.** From the expanded tree, select the **device** you want for your destination device.
- c. Click OK.

OR

If manually configuring:

In the Destination Device Name field, enter the name of the device to which the channel will connect.

- **a.** From the Destination Type drop down menu, select the **type of device** to which to connect (for example OKP, OKI, OEI, OMI, or another ODIN).
- 2. From the Destination Channel drop down menu, select the channel to which ODIN connects.
- **3.** (Optional) In the Channel Description field, enter a **channel description**.

Using the Device Configuration and Status Pane

- 4. (Optional) In the Description field, enter a description for ODIN.
- 5. Send the changes to ODIN.

Configure An OMNEO Keypanel to ODIN

To configure an OMNEO keypanel to ODIN, do the following:

- 1. On the OMNEO keypanel, navigate to the OMNEO Offers | Keypanel menu, select OKP.
- 2. Press the SEL button. A list of available OMNEO connections appears.
- **3.** Using the AUX/MENU shaft encoder, select the **OMNEO connection** you want to use. *An arrow appears next to the device.*
- 4. Press CLR to exit menu mode.

Add the KP-Series Keypanels to the Device Catalog in IPedit

NOTE: The following is an example of connecting an OKP to ODIN.

To add the keypanel to IPedit, do the following:

- 1. Open IPedit.
- From the Device menu, select Add. The Add Devices Window appears, open to the Search tab.
- **3.** Select the **keypanel**. *The Add button becomes active.*
- 4. Click the Add button. *The OKP-2/8 appears in the device catalog in the left panel.*
- Click the Done button. The Add Devices window closes.

Configure the KP-Series Panels using IPedit

To configure the keypanel using IPedit, do the following:

Using the Device Configuration and Status Pane

1. In the Description field, enter a description for the keypanel, if desired.

Using the Channel Configuration and Status Section:

- 2. In the Channel Description field, enter a channel description, if applicable.
- 3. From the Destination Type drop down menu, select **ODIN**.

NOTE: The Destination Type does not need to be selected if using the Browse window to select the device. It fills the type and IP Address automatically.

4. In the Destination Device Name field, enter the **name of the device** to which the channel will connect. OR

Click the ... button.

The Discovered Devices Window appears.

- a. Expand the tree to view the destination devices available.
- **b.** From the expanded tree, select the **device** to which you want to connect this keypanel.
- c. Click OK.
- 5. From the Destination Channel drop down menu, select the channel to which the keypanel will connect.
- 6. Send the changes to the keypanel.

Frame Mapping (Multi-Frame Only)

Frame Mapping is used to assign the positional the order of each frame in a multiframe intercom system. The frame order determines the port range assigned. For example, when mapping a 2 frame system, with each frame having 128 ports, the first frame is given ports 1 through 128. The second frame is assigned ports 129 through 256.

To map frames in a system, a frame mapping table must be configured. Frame Mapping can be done from either the front panel of ODIN or by using the AZedit configuration software.

NOTE: For more information, see the ODIN Technical Manual which can be found at www.rtsintercoms.com.

Frame Mapping (Front Panel)

To map frames from ODIN front panel, to the following:

- 1. Rotating the right encoder knob, navigate to the **Configuration icon**.
- 2. Click the right encoder knob. The Configuration Menu appears.
- 3. Rotating the right knob, navigate to the System menu icon.
- **4.** Click the **right encoder knob**. *The System menu appears*.
- 5. Rotating the right encoder knob, navigate to the **Frame Mapping Table menu icon**.
- 6. Click the right encoder knob. *The Frame Mapping Table appears.*

Configura	ation: System: Fra	ame Mapping Table	
	——IP Address ——	——MAC Address——	
Frame 1:	192.168.0.10	00:0b:7c:ff:ff:a2	
Frame 2:	192.168.0.20	00:0b:7c:ff:ff:9a	
Frame 3:	192.168.0.30	00:0b:7c:ff:ff:96	
Frame 4:	192.168.0.40	00:1c:44:0b:a0:00	
Frame 5:	192.168.0.50	00:1c:44:0b:a0:0e	
Frame 6:	192.168.0.60	00:1c:44:0b:a0:0d	
Frame 7:	192.168.0.70	00:1c:44:0b:a0:07	
Frame 8:	192.168.0.80	00:00:00:00:00:00	

Frame Mapping (AZedit)

To map frames from AZedit, do the following:

1. From the Options menu, select **Frame Mapping**. *The Frame Mapping window appears*.

Fr	rame Mapping Tab	le		?	×
	Frame	IP Address	MAC Address		
	1	192.168.0.10	00:0b:7c:ff:ff:92		
	2	192.168.0.20	00:0b:7c:ff:ff:93		
	3	192.168.0.30	00:0b:7c:ff:ff:94		
	4	192.168.0.40	00:0b:7c:ff:ff:95		
	5	192.168.0.50	00:0b:7c:ff:ff:96		
		-			
	Maualla				
	move op	Accept frame mapping table from o	ther frames Apply <u>T</u> est	Dor	<u>i</u> e
	Move Down				

2. Click the **Browse icon** to select frame to add to the table.

Fr	ame Mapping Tal	ble
	Frame	IP Address
	1	192.168.0.10
	2	-
	3	-



Se	elect Frame			
	IP Address 1	MAC Address 1	IP Address 2	MAC Address 2
	192.168.0.80	00:0b:7c:ff:ff:93		
	192.168.0.60	00:0b:7c:ff:ff:94		
	192.168.0.40	00:0b:7c:ff:ff:95		

3. Select the **frame** to add to the Frame Mapping table.

4. Click the **OK button**. *The Select Frame window closes and the frame information is added to the Frame Mapping table.*

5. Click the **Test button** to validate the table. A valid or not valid message appears.

6. Click OK.

The message closes.

 Click Apply. The modifications are applied to the Frame Mapping table.

8.	Click Done . <i>The Frame Mapping Table window cl</i>	oses.
	Move Up/Move Down Button	The Move Up and Move Down button is used to set the frame position of the system down in the frame hierarchy. Frame 1 is the master frame. If frame 1 fails, then frame 2 becomes the master frame.
	Accept frame mapping table from other frames check box	The Accept Frame Mapping Table from Other Frames check box is used to allow other frames to send their frame mapping information to the selected frame.
		IMPORTANT: This check box does not remain selected once the frame has been tested and accepted.
		NOTE: Each frame in a valid system must be defined in a table map to be able to communicate with the other frames in the system.

IFL Inter-Frame Linking (Multi-Frame Only)

IFL (Inter-Frame Linking) is a system configuration in which multiple ODIN units operate as a single intercom matrix. Using fiber optical IFL cables, up to eight ODIN units can be inter-connected. The IFL cables use either a separately sold single mode or multimode SFP (Small Form-Factor Pluggable) Transceiver. ODIN can operate using either mode, but for long distances, single mode is recommended.

ODIN units can also be set up for redundancy This means if one link fails, audio is still passes. ODIN has Primary and Secondary IFL connector sets located on the back panel of the unit that are used to set up connection redundancy. This means the IFL connection has failover protection if one IFL connection becomes unresponsive or inactive.

TIP:	In order to edit the port allocation table of another frame, it must be linked to the current frame and
	communicating via the control port.

IMPORTANT:	IFL connection redundancy does not mean the frame and its setup is redundant. Only the connection
	between frames is protected from cable failure.

Cabling ODIN for IFL

Cabling IFL Between Two ODIN Units

To set up a 2-frame IFL system, do the following:

- On the rear panel of an ODIN unit, connect one end of an IFL cable to the PRI DOWNLINK connector.
- 2. Connect the other end of the IFL cable to the PRI UPLINK on the rear panel of a second ODIN unit.



For a redundant connection

- On the rear panel of the first ODIN unit, connect one end of a second IFL cable to the SEC DOWNLINK connector on the first ODIN unit.
- 4. Connect the other end of the IFL cable to the SEC UPLINK connector on the second ODIN unit.



Frame 2

Cabling IFL Between Three Or More ODIN Units

Ring architecture is used when connecting three or more (maximum of eight) ODIN units via IFL. In a ring-wiring architecture, each frame has links to two other frames. These links are bi-directional¹, meaning audio is passed two different ways; thus the system can be viewed as having two unidirectional rings. In one ring, the audio is sent clockwise from frame to frame, and in the other ring, the audio is sent counterclockwise.

To set up a 3-to 8-frame IFL system, do the following:

For Non-Redundant Connection

- On the rear panel of an ODIN unit, connect one end of an IFL cable to the PRI DOWNLINK connector.
- 2. Connect the other end of the IFL cable to the PRI UPLINK on the rear panel of a second ODIN unit.
- 3. Using a second IFL cable, connect one end of the IFL cable to the PRI DOWNLINK connector on the second ODIN unit.
- 4. Connect the other end of the second IFL cable to the PRI UPLINK connector on third ODIN unit.
- 5. Repeat step 3 and step 4 for additional ODIN units (maximum eight frames).
- 6. On the last ODIN frame, connect one end of an IFL cable to the PRI DOWNLINK connector.
- 7. Connect the other end of the IFL cable to the PRI UPLINK connector on the first ODIN unit.



^{1.} One IFL cable provides bi-directional audio.

For a redundant connection

- On the rear panel of an ODIN unit, connect one end of an IFL cable to the PRI DOWNLINK connector.
- Connect the other end of the IFL cable to the PRI UPLINK connector on the rear panel of a second ODIN unit.
- 3. Using a second IFL cable, connect one end of the IFL cable to the SEC DOWNLINK connector on the first ODIN unit.
- 4. Connect the other end of the IFL cable to the SEC UPLINK connector on the second ODIN unit.
- Using a third IFL cable, connect one end of the IFL cable to the PRI DOWNLINK connector on the second ODIN unit.
- 6. Connect the other end of the second IFL cable to the PRI UPLINK connector on third ODIN unit.
- Using a fourth IFL cable, connect one end of the IFL cable to the SEC DOWNLINK connector on the second ODIN unit.
- 8. Connect the other end of the IFL cable to the SEC UPLINK connector on the third ODIN unit.
- **9.** Repeat **steps 5 through 8** for additional ODIN units (maximum eight frames.
- **10.** On the last ODIN unit, connect **one end of an IFL cable to the PRI DOWNLINK connector**.
- Connect the other end of the IFL cable to the PRI UPLINK connector on the first ODIN unit.
- 12. On the last ODIN unit, connect one end of an IFL cable to the SEC DOWNLINK connector.
- **13.** Connect the other end of the IFL cable to the PRI UPLINK connector on the first ODIN unit.



Checking the IFL Status (Front Panel)

To display the IFL connection status from the front panel, do the following:

- 1. Rotating the right encoder knob, navigate to the Status icon.
- 2. Click the **right encoder knob**. *The Status Menu appears.*
- **3.** Rotating the right knob, navigate to the **Intercom menu icon**.
- **4.** Click the **right encoder knob**. *The Intercom menu appears*.
- 5. Rotating the right encoder knob, navigate to the IFL icon.
- 6. Click the right encoder knob. *The IFL screen appears.*

Status: Intercom: IFL				
Frame:	4			
	Primar	y Uplink——		
Connected:	 ✓ 	Fault:		
To Frame:	3	Tx Messages:	542	
To Link:	Primary Downlink	Rx Messages:	536	
IP Address:	192.168.0.30	Rx Errors:		
SFP Installed:	 ✓ 	SFP Tx Fault:		
Tx Power:	0.282 mW	Rx Power:	0.396 mW	
	Seconda	ary Uplink ——		
Connected:	 ✓ 	Fault:		
To Frame:	3	Tx Messages:	769	
To Link:	Secondary Downlink	Rx Messages:	762	
IP Address:	192.168.0.30	Rx Errors:		
SFP Installed:	Installed: 🖌		-	
Tx Power:	0.285 mW	Rx Power:	0.634 mW	
Primary Downlink				
Connected:	 ✓ 	Fault:		
To Frame:	5	Tx Messages:	758	
To Link:	Primary Uplink	Rx Messages:	662	
IP Address:	192.168.0.50	Rx Errors:		
SFP Installed:	 ✓ 	SFP Tx Fault:		
Tx Power:	0.278 mW	Rx Power:	0.588 mW	
	Secondar	y Downlink ——		
Connected:	×	Fault:		
To Frame:		Tx Messages:		
To Link:		Rx Messages:	1358	
IP Address:		Rx Errors:		
SFP Installed:	✓	SFP Tx Fault:		
Tx Power:	0.285 mW	Rx Power:	0.849 mW	

Checking the IFL Status (AZedit)

To check the IFL Status from AZedit, do the following:

1. From the Status menu, select Inter-Frame Link. *The IFL Status window appears.*

AZedit - [ONLINE] - IFL Status

<u>File Online Authentication Edit View System Alphas Status Options Logging Help</u>

```
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```

From Frame:Link	Status	To Frame:Link	IP Address	Tx Messages	Rx Messages	Rx Errors	Fault Info
1:Primary uplink	-	-	-	-	-	-	-
1:Secondary uplink	-	-	-	-	-	-	-
1:Primary downlink	-		-	-	-	-	-
1:Secondary downlink	-	-	-	-	-	-	-
2:Primary uplink	-	-	-	-	-	-	-
2:Secondary uplink	-	-	-	-	-	-	-
2:Primary downlink	-	-	-	-	-	-	-
2:Secondary downlink	-		-	-	-	-	-
3:Primary uplink	-	-	-	-	-	-	-
3:Secondary uplink	-	-	-	-	-	-	-
3:Primary downlink	-	-	-	-	-	-	-
3:Secondary downlink	-	-	-	-	-	-	-
4:Primary uplink	-		-	-	-	-	-
4:Secondary uplink	-	-	-	-	-	-	-
4:Primary downlink	-	-	-	-	-	-	-
4:Secondary downlink	-	-	-	-	-	-	-
5:Primary uplink	-	-	-	-	-	-	-
5:Secondary uplink	-		-	-	-	-	-
5:Primary downlink	OK	6:Primary uplink	192.168.0.60	5459	16766	0	-
5:Secondary downlink	OK	6:Secondary u	192.168.0.60	5439	16773	0	-
6:Primary uplink	OK	5:Primary down	192.168.0.50	64909	41616	0	-
6:Secondary uplink	OK	5:Secondary do	192.168.0.50	64852	41312	0	-
6:Primary downlink	OK	7:Primary uplink	-	70057	70004	0	-
6:Secondary downlink	OK	7:Secondary u	-	69859	69492	0	-
7:Primary uplink	-	-	-	-	-	-	
7:Secondary uplink	-	-	-	-	-	-	
7:Primary downlink	OK	8:Primary uplink	192.168.0.80	126829	119657	0	

Rack Mounting Instructions

CAUTION: Ensure the unit is securely mounted to avoid uneven mechanical loading. Use all fasteners, as defined in the installation instructions.

Rack Mounting (without Rear Supports)

To mount ODIN in a rack, do the following:

> Using four rack screws (not supplied), secure **ODIN** into the rack.



Rack Mounting (with Optional Rear Supports)

Rear Rack Mounting Components

IMPORTANT:	The rear support brackets are an optional piece of equipment. It is recommended to use these support
	brackets in high vibration environments, such as trucks.

TABLE 3. Mounting Components

Component Descriptions

- 8 Pan head screw M3 x 6mm
- 8 Flat-head screw M3 x 6mm
- 0
- 8 Internal tool lock washer M3
- 0
- 2 Matrix side brackets

2 - Rear side brackets

To mount ODIN in a rack using the optional rear brackets, do the following:

1. Using the supplied countersunk screws (four on each side), secure the matrix side brackets to each side of ODIN.

NOTE: Take care to verify the guide pins on the side brackets face inward.

8 - Flat washer 3.2mm ID x 7mm OD x 0.5mm thick



IMPORTANT:Alternately, attaching the rear side brackets before putting ODIN in the rack is possible. The unit may
need to be slightly tilted for the rear side bracket to clear the back of the rack before securing it to the
rack.
The screws that attach the rear side bracket to the matrix side brackets may should be slightly loosened
to allow for the bracket to slide smoothly into position. Once in position, the screws can be tightened to
keep the bracket in place.

2. Using four rack screws (not supplied), secure **ODIN** into the rack.



3. On both sides, pass the rear side brackets through the keyhole stand-off.



4. Slide the rear side brackets until they reach the rear rack posts.



5. Using four rack screws (not supplied), secure the rear side brackets to the rear rack posts.



6. Using the supplied pan head screws, internal tooth washers and flat washers, secure the rear side brackets to the matrix side brackets.

IMPORTANT: Layer the screw, the tooth lock washer and the flat washer in this order to attach the rear side bracket to the matrix side bracket.

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