

Encore™ Partyline System IF4W4 4-Wire Interface

Quick Start Guide

IF4W4 is a 4-channel 4-wire 1RU interface that enables an Encore intercom system to connect to 4-wire communication systems, such as TV cameras, 2-way radios and fiber circuits. This Quick Start Guide provides basic installation and operating instructions, and a quick reference to system topologies and cables.

Note: For more detailed information about the IF4W4 Interface, see the **IF4W4 4-Wire Interface User Guide**, and the **Encore System Installation Guide**.

Before installing

- Review the cable specifications for the venue or application before installing.
- Unpack the unit and inspect for any damage that may have occurred in shipping.
- Locate the device away from other equipment that generates excessive amounts of heat.

Powering the Interface

Interfaces require adequate power from the partyline system's power source, normally a Main Station or Power Supply, to guarantee optimal system performance. Power reserves are shared between the system's user stations and channels and are drawn dynamically. Power consumption depends on system levels.

IF4W4 Power Consumption (each of the four interfaces)	
Idle/Continuous	<=40mA
Max/Peak	<=50mA

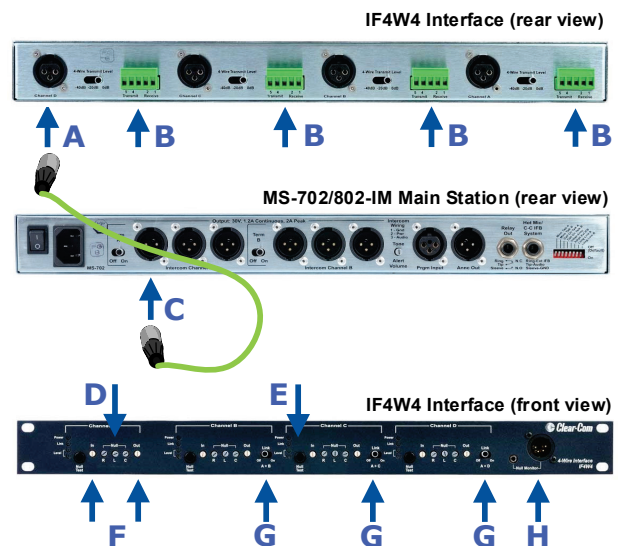
Note: System power requirements can easily be estimated using the Clear-Com Power Calculator, <https://clearcom.me/encore-calc>. Consult system manuals for different strategies to expand system power capability beyond a single power source.

Installing the Interface

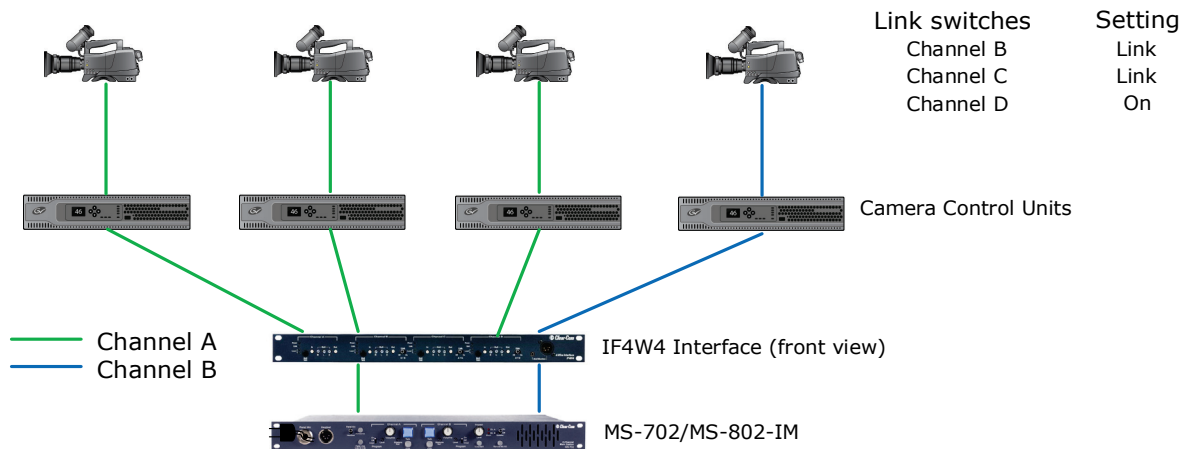
1. Connect a shielded cable from one channel of the Main Station (C) to an XLR-3 port on the IF4W4 Interface (A).
2. Verify that the 2-wire partyline intercom system is properly terminated.
3. Set the Link switches (G) to **Off** or **On** to determine how many 4-wire systems are on the partyline.
4. Connect the IF4W4 Interface terminal block connector to the 4-wire device. (B).

Operating the Interface

1. Set all input and output level controls to the center position (12 o'clock).
2. Listen to the intercom and adjust the input / receive levels (F) to each interface to balance the interfaced device with the level of talkers on the intercom stations.
3. Listen to the interfaced device and adjust the output / transmit levels (F) from each interface for optimal listen levels on the interfaced device.
4. For each channel, adjust the null control as follows:
 - a. Connect an earphone or a 4-pin XLR headset to the Null Monitor connector (H) on the front panel.
 - b. Push the appropriate test null button. (E).
 - c. Adjust the R, L and C null controls (D) to minimize the audible tone.
 - d. Repeat steps 2-4 to make fine adjustments.



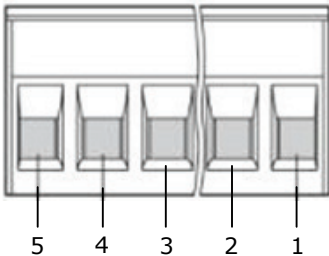
Example configuration



Terminal block connector

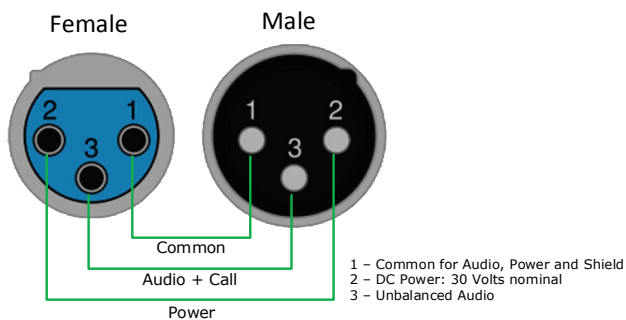
The terminal block connector on the rear panel is a 5-position connector for 4-wire devices.

5-position, 5mm/0.197 inch pitch



Pin	Function
1	Receive + (audio into the IF4W4 and passed into the partyline)
2	Receive -
3	Ground
4	Transmit + (audio from the IF4W4 to the 4-wire device)
5	Transmit -

Cabling and power recommendations



Analog Partyline systems use standard shielded 3-pin XLR cables to interconnect intercom stations. The cable carries +30V DC system power, unbalanced audio and a +15V DC call signal. The performance of analog partyline systems is highly dependent on the quality of the systems cabling infrastructure. Clear-Com recommends using high-quality cabling, selected with the following in mind:

- Cable Resistance: Low cable resistance for optimal power distribution. Look for 22-18 AWG (lower is better) wire gauge depending on system size.
- Cable Capacitance: Low cable capacitance for best audio and call signal performance.
- Cable Shielding: Use cables with quality shielding to minimize crosstalk and external interference.
- System Power: Ensure appropriate system power reserves using the Clear-Com power calculator.

Useful links

IF4W4 links	General Encore links	Support links
IF4W4 Interface User Guide https://clearcom.me/if4w4-manual	Encore Installation Guide https://clearcom.me/pl-install-manual	Solution Finder https://clearcom.me/solfinder
IF4W4 Interface Datasheet https://clearcom.me/if4w4-datasheet	Comprehensive Guide to Partyline Systems https://clearcom.me/pl-ebook	Email Preferences https://clearcom.me/emailpref
	Power Calculator https://clearcom.me/encore-calc	Support Requests https://clearcom.me/support-repair