



Communication Module

Installation & Operations Manual

PR&E 71-1133

Revision B • 1/01



Installation



The Communication Module features 20 individual momentary buttons.

The first 16 buttons (counting from the top down) are used to communicate with as many as 15 other independent locations (the calling station occupies one of the 16 positions leaving 15 available). It is not required that all 16 positions be used.

INSTALLATION

The Communication Module must be installed into the slot to the right of the Monitor Module on AirWave Digital. The Communication Module can be installed in any location on *AirWave*.

NOTE: Installation into an existing AirWave Digital console requires a motherboard modification. Therefore, the console must be powered down. A motherboard modification is **not** necessary for *AirWave* consoles.

INSTALLATION PRECAUTIONS

It is strongly recommended that the installer take the necessary precautions to prevent discharging static electricity into any part of the console while performing this installation.

MOTHERBOARD MODIFICATION

If the Communication Module is being installed in an existing AirWave Digital console (manufactured prior to April 2000), a motherboard modification is necessary for the installation to be successful.

Please refer to the PR&E Online Technical Support portion of the Harris web site located at <http://www.broadcast.harris.com/customer-service/pre> and search for Technical Support Bulletin #1022.

NOTE: This motherboard modification is not necessary if the Communication Module is being installed into an existing *AirWave* console.

FIELD INSTALLATION KIT

The Field Installation Kit for the Communication Module contains the following items:

Qty.	Part#	Description
1	71-1133	Manual
1	99-986	Comm Module
1	76-38	Connector Kit

ICM-16 CONTROLLER

Via the Broadcast Tools ICM-16 Controller interface, the Communication Module can talk to other Communication Modules installed in other consoles or Broadcast Tools Studio Intercom Stations.

The Communication Module is connected to the Broadcast Tools ICM-16 Controller using category 5 UTP cabling. One end is connected to the RJ-45 jack at the top of the Communication Module. The opposite end connects to any of the available RJ-45 ports on the ICM-16 Controller. Specific configurations must be determined by the installer.

MAKING ROOM

In order to install the Communication Module into an existing console, a space must be cleared.

On AirWave Digital, the Communication Module must be installed to the right of the Monitor Module. Therefore, whatever is in that space must be removed. The Communication Module can be installed in almost any position on the *AirWave*.

To remove a blank panel or module, loosen the captive thumbscrew at the top of the module and then remove the Allen screw at the bottom of the module. Grip the captive thumbscrew and lift the module straight up and off of the motherboard connector. If a blank panel occupies the space, it can be lifted off more easily because it is not connected to the motherboard.

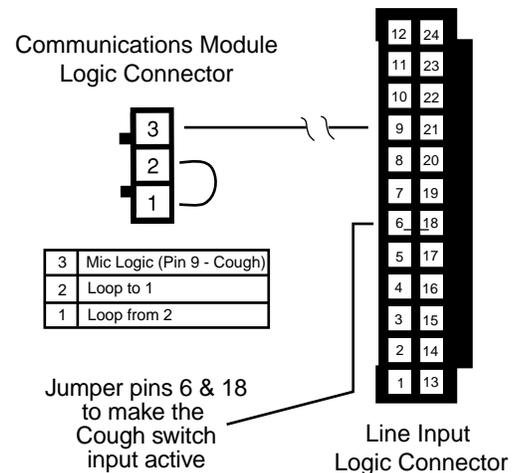
INSTALLING THE MODULE

While gripping the captive thumbscrew, lower the Communication Module into place and push it down onto the motherboard connector. Make sure the module is seated firmly on the connector. When properly installed, the module's control surface should be flush with neighboring surfaces.

Once the module is in position, replace the Allen screw at the bottom of the module and tighten the captive thumbscrew at the top of the module.

LOGIC

The logic connector is used to mute the board microphone when a talkback button is depressed on the Communication Module. Connecting this logic interface is optional. The pin configuration for this connection is as follows:



Logic Pin Configuration
(Contact Insertion View Shown)

Operation

The Communication Module features 20 individual momentary buttons. The first 16 buttons (counting from the top down) are used to communicate with as many as 15 other independent locations (the calling station occupies one of the 16 positions leaving 15 available). It is not required that all 16 positions be used.

DESCRIPTION

Via the Broadcast Tools ICM-16 Controller interface, the Communication Module can talk to other Communication Modules installed in other consoles or Broadcast Tools Studio Intercom Stations.

ICM-16 CONTROLLER

Each ICM-16 Controller handles 8 positions. Therefore, in order to utilize all 16 positions available on the Communication Module, a second ICM-16 Controller is needed.

The 16 positions on the Communication Module are in addition to the one position that is available through the Monitor Module Talk

To Studio circuitry that came standard with the console.

NOTE: Even though audio can be received by a variety of different devices including other consoles and Broadcast Tools' Studio Intercom Stations, this manual will refer to all devices as either calling or receiving "stations."

TRIM POTS

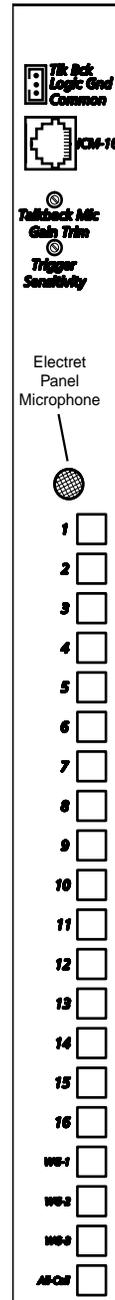
Talkback Mic Gain Trim

There are two trim pots on the Communication Module. The trim pot closest to the top of the Communication Module controls the output level of the module's Talkback Mic.

If the receiving station is not hearing a very strong audio signal, the Talkback Trim pot should be turned up (clockwise) on the calling station's module. If the receiving station is complaining of distortion, the Talkback Trim on the calling station's module should be turned down (counterclockwise).

Trigger Sensitivity

The second trim pot is for Trigger Sensitivity. This pot is used to set the level at which sound will activate the receiving console's cue



Communication Module

circuitry. Because this setting is relative to the receiving console, the adjustment must be made on the receiving console's Communication Module.

If the receiving console is not hearing other stations when they call, it may be because the Trigger Sensitivity is set too low. In this case, the Trigger Sensitivity on the receiving console should be raised by turning the pot clockwise.

On the other hand, if the cue circuitry is continuously being activated by a ground hum or some other source of noise, the receiving console's Trigger Sensitivity should be lowered by turning the pot counterclockwise.

WORKGROUPS

The four buttons closest to the bottom of the Communication Module are Workgroups as follows: Workgroup 1 activates buttons 1 through 5 simultaneously; Workgroup 2 activates buttons 6 through 10 simultaneously; Workgroup 3 activates buttons 11 through 16 simultaneously; and Workgroup 4 acts as an "All Call" button activating buttons 1 through 16 simultaneously.

When a workgroup button is depressed, the group of buttons that are being activated will illuminate. When the workgroup button is released, the lamps will turn off.

NOTE: To prevent feedback, the calling station is not included when its own workgroup is activated.

CALLING

When one of the Communication Module buttons is depressed, the calling station's Control Room Monitor speaker and Cue speaker are muted and the electret microphone on the face of the Communication Module is activated. Also, if the logic interface is connected, the talent microphone will be momentarily muted.

RECEIVING

Audio passes through to the selected receiving console's Cue bus and is heard in the headphones or the Cue speaker. Whether the Cue speaker or headphones receive the audio is determined by the console's current Cue bus configuration.

The audio can also be sent directly to a Broadcast Tools Studio Intercom Station.