



MS-812A Front View

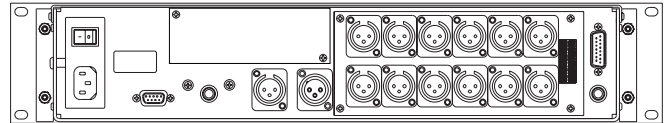
FEATURES

- **Superior contoured audio ensures excellent voice intelligibility**
- **LCD display simplifies station programming**
- **Four “set-up” memories store four complete button configurations**
- **12 party-line intercom channels for maximum communication flexibility**
- **Separate listen volume controls for each channel**
- **Optional: Up to 8 channels intercom and 8 IFB assigns**
- **Four preset buttons provide one-touch control of multiple keys**
- **Assignable program audio can be sent to all channels**
- **Program interrupt makes talent cueing easy**
- **Dual action control buttons are momentary or latching**
- **Visual or audible call signaling alerts users to incoming calls**
- **Variable lamp brightness for different lighting conditions**
- **Talent cueing directly controls external Clear-Com IFB system**
- **9" or 18" plug-in gooseneck mic optionally available**
- **Two programmable relays for control of external devices**
- **Button check instantly identifies functions of all front-panel controls on LCD screen**

DESCRIPTION

The MS-812A is our premier party-line intercom station, giving pushbutton access to 12 intercom channels. This programmable station is widely used in director and control positions with larger systems. For broadcast and similar applications, IFB control modules may be substituted for the standard channel modules, adding even greater flexibility.

The station offers extensive microprocessor-based, menu-driven programming capabilities, allowing individual stations to be customized. It is exceptionally flexible and easy to program and operate. The MS-812A features separate Talk and Listen buttons, individual channel listen-level controls, programmable relays, and program input with selectable program interrupt.



MS-812A Rear View

SPECIAL CAPABILITIES

A powerful feature of the MS-812A is its ability to store four setup memories. These different station setups, which include all presets, programmable features, and functions, can be instantly recalled. This allows quick, easy switching between rehearsal and performance, or among setups customized for specific shows and events.

Another special feature is the LCD display screen. When programming the station, messages prompt the operator through the programming sequence, simplifying station set-up. During normal operation, the display indicates the current memory set-up.

Another feature of this station is the ability to pre-assign any of the front panel buttons to a Preset button. There are four Preset buttons which can be accessed at any time for quick communications. The four Preset buttons can be programmed to activate any combination of the Listen, Talk, and SA buttons with a single touch.

The station has the ability to add a program signal to any of the intercom channels. Additionally, the “Program Interrupt” feature will interrupt the program when the Talk button is pressed, allowing talent on the set or backstage to receive their cues from production personnel.

FRONT PANEL CONTROLS AND FUNCTIONS FOR EACH CHANNEL

The station provides separate Listen and Talk buttons, and a Listen Trim level control for each channel. Call signals can be selectively sent to and received from all channels. The station automatically detects if a headset is connected. If no headset is plugged in, the unit defaults to Speaker/Mic operation.



PROFESSIONAL INTERCOM PRODUCTS

by Clear-Com

SPECIFICATIONS

GENERAL SYSTEM

Maximum Intercom Line Length for <-50 dB crosstalk: 1,000 ft
Signal-to-Noise: > 60 dB

OVERALL STATION AUDIO

Bandwidth: 150 Hz - 15 kHz
Signal-to-Noise: >75 dB
Channel Separation: > 50 dB
Line Impedance: Terminating (200 Ohms)

CONTROL SYSTEM

Microprocessor-controlled switching with EEPROM memory. CMOS digital logic and signal switching.
Number of Memories: 4

MIC PREAMP

Input Level: -55 dBv nominal, -10 dBv max
Impedance: 200 Ohms nominal
Frequency Response: 150 Hz - 15 kHz
(contoured for maximum intelligibility)
Limiter Range: 25 dB
Gain Adjust: ± 5 dB
Gain to Intercom Line: +41 dB

HEADPHONE AMPLIFIER

Load Impedance: 50 - 2,000 Ohms
Output Level: >+20 dBv across 600 Ohms
Distortion: <0.2% THD at 1 kHz
Frequency Response: 150 Hz - 18 kHz, ± 2 dB
Gain From Intercom Line: +37 dB

SPEAKER AMPLIFIER

Load Impedance: 8 - 50 Ohms
Output Level: 4 watts into 8 Ohms
Distortion: <0.5% THD at 1 kHz

LOCAL PROGRAM INPUT

Input Impedance: 10 kOhms
Input Level: -10 dBv
Frequency Response: 150 Hz - 15 kHz
Type: Electronically balanced and bridging

AUX PROGRAM INPUT (DB 15)

Type: Electronically balanced
Nominal Input Level: -10 dBv

STUDIO ANNOUNCE

Type: Transformer balanced output
Level: 0 dB
Relay: SPDT
Contact Rating: 24 Volts DC @ 1 amp

ELECTRET MICROPHONE (Optional)

Connection: Proprietary plug-in locking connector
Pattern: Cardioid
Length: 9" or 18" gooseneck
Frequency Response: 100 Hz - 20 kHz

TALK REMOTE CONTROL

Two logic inputs

POWER REQUIREMENTS

Station: 115/230 V, 50 - 60 Hz, 30 VA
System: Supply an external Clear-Com power supply

DIMENSIONS

3.5" H x 19" W x 10" D (89 x 483 x 254 mm)

WEIGHT

12 lb (5.5 kg)

CONNECTORS

Headset: 4-pin male XLR
Intercom Lines: Twelve 3-pin male XLR
Program Input: 3-pin female XLR
SA Output: 3-pin male XLR
Auxiliary: DB-15 connector
External Speaker: 1/4" phono jack
Relay/Footswitch: DB-9 connector
Optional IFB Connectors: Two XLR-6 M and one 1/4" phone jack

** dBv is referenced to 0.775 volts rms.*

All specifications are subject to change without notice.

SUPERIOR "CONTOURED" AUDIO

Compatible with all PL-Pro and Clear-Com party-line intercoms, the MS-812A accepts a wide range of dynamic headsets, with a choice of headset connectors. Optional plug-in noise-cancelling electret gooseneck microphones are available in 9" and 18" lengths. An adjustable mic-gain control and sophisticated "proximity-compensation" circuitry keeps voice levels constant over a wide range of mouth-to-microphone distances. A variable "speaker-dipping" circuit provides additional acoustic muting to help eliminate feedback when an external speaker is used. Monitoring activity is possible through a headset or speaker. The station contains a sidetone control that allows the operator to vary the level of his/her own voice as heard in the headset.

AUXILIARY CIRCUITS

Two local relays may be programmed to any button on the front panel. Two program feeds on the rear panel allow program inputs for two different purposes. One directly feeds the speaker or headphone through a front-panel level control. The other is used to selectively feed the twelve intercom channels. A rear-panel input allows the control of any front-panel function via a footswitch or other logic input. The Stage Announce button will route the microphone output to a line-level, transformer-balanced XLR connector on the rear panel. Separate earphone outputs are available for monitoring a program source and intercom in a dual-ear headset.

Rear-panel connectors provide access to all auxiliary circuits including Local Program Input, SA Output, Programmable Relays, Split-Ear Headset Output, Footswitch Connection, External Speaker, and Hot Mic Output.

PROGRAMMING

The MS-812A features extensive programming capabilities that allow individual stations to be customized to the needs of specific operators, operating locations, shows, or events. These local programming functions greatly enhance the capabilities of the station, and actually can make the operation of the station easier and simpler.

The station provides two levels of programming functions. The first level includes a number of simple functions that may frequently be changed by the operator. The second level provides access to all of the station's programmable functions, which enables very sophisticated configurations to be set up.

A "Button Check" feature instantly identifies a button's basic function and displays all of its currently programmed functions.

PROGRAMMABLE FUNCTIONS

The following major functions can be programmed into memory on a button-by-button basis:

- "Preset" button assignments
- Enable "preset" button for interlocking or additive
- Enable call signaling and tone
- Enable program feed and interrupt
- Enable Stage Announce interrupt
- Footswitch assignment
- Relay assignment
- Enable auto-call, auto-listen, auto-talk

OPTIONAL FEATURES

The MS-812A can be supplied with the ability to control an external Clear-Com IFB system. Up to eight buttons on the station can be assigned as IFB buttons controlling the PIC-4000 IFB system. Contact factory for details and ordering information.

Lower-cost versions of the station can also be ordered with four or eight intercom channels instead of the standard twelve, allowing future expansion.

SYSTEM INTERCONNECT

The standard configuration contains twelve 3-pin XLR connectors, accessing each of the 12 intercom channels. This panel also includes selectable termination circuits required for single Master Station operation.