



DEPENDABLE EMERGENCY COMMUNICATIONS

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A
HALMA GROUP
COMPANY

ACS-1/2 & ACS-3/4/5

SMALL TELEPHONE EXCHANGE SYSTEM

Installation and Operation

ACS-1/2 INSTALLATION AND OPERATION

The ACS-1/2 is a small telephone exchange system capable of connecting 8 or 16 Emergency/Assistance Telephones to a local Master Station Phone and/or to a Remote Answering Phone using up to 6 Central Office Lines (outside lines).

Items that make up an ACS-1 installation:

- (1) ACS 3x8 Control Unit
- (1) Lucent, 18 button, handset, Master Station Phone (Optional)
- (1) Document package with Lucent Partner instructions and VPP product information and instructions.

Items that make up an ACS-2 installation:

- (1) ACS 3x8 Control module, ACS 3x8 Expansion module, ACS 2 Slot Connector Module
- (1) Lucent, 18 button, handset, Master Station Phone (Optional)
- (1) Document package with Lucent Partner instructions and VPP product information and instructions.

Overall system (see drawing SD0605-1)

This system consists of 3 major components. They are the remotely located Emergency/Assistance Telephones, the Master Station Phone, and the centrally located ACS-1/2 Control Unit. The overall system acts as a small telephone exchange. Calls placed by pressing the push button on an Emergency/Assistance telephone can be programmed to automatically ring the extension of the Master Station Phone or to dial to a Remote Answering Phone. The Master Station Phone and/or a Remote Answering Phone can be used to dial the extension of each Emergency/Assistance Telephone.

The extensions of the telephone exchange are identified as: 10 through 17 for the ACS-1 and as 10 through 25 for the ACS-2. All the extensions can be connected to the Emergency/Assistance Telephones. If a Master Station Phone is being used, it must be connected with extension 15.

All wiring to each Emergency/Assistance Telephone and to the Master Station Phone is directly from the Lucent Partner Switch modular Jacks labeled extensions. If you are connecting a Central Office Line connect the line directly to the Lucent Partner Switch CO Lines Modular Jacks.

Interconnect Wiring

All interconnection wiring between each Emergency/Assistance Telephone, and the ACS-1/2 control unit should be 2 pair, 22AWG or larger and should be no longer than 1000 feet. All interconnection wiring between the Master Station Phone and the ACS-1/2 Control Unit should also be 2 pair, 22AWG or larger and should be no longer than 1000 feet. Please refer to your local codes for appropriate wiring specifications.

The wiring should be color coded so that each wire and each pair can be identified. The two wires in pair 1 that connect to each Emergency/Assistance Telephone should be identified as **(T)** and **(R)**. The two wires in pair 2 that connect to each Emergency/Assistance Telephone should be identified as **(+)** and **(-)**. **NOTE: Polarity Counts!** The two wires in pair 1 to the Master Station Phone should be identified as red and green. The two wires in pair 2 to the Master Station Phone should be identified as yellow and black.

Wiring to the Emergency/Assistance Telephones

1. **Incoming wire** - Typically, a mounting enclosure and an adhesive backed modular wall jack with a power pigtail along with a modular cord have been provided with each Emergency/Assistance Telephone. Fasten the modular wall jack to the back of the wall box with the modular connector facing to the left. Take the incoming pair previously designated **T** and **R** and wire the **T** wire to the **grn** screw terminal. Wire the **R** wire to the **red** screw terminal. Take the incoming pair previously designated **+ -** and wire the **+** wire to the screw terminal designated **yel**. Wire the **-** wire to the **blk** screw terminal. **NOTE: Polarity Counts!**
2. **Wires to the Emergency/Assistance Telephone** – Connect the supplied modular cord between the modular wall jack and the modular jack on the back of the telephone. Connect the three prong power pigtail from the modular wall jack to the mating connector on the back of the telephone. Leave the battery switch on the back of the telephone turned off. This is only used in special situations. Secure the telephone to its mounting case while making sure that no wires are crushed.

Installing the ACS-1/2

Locate the unit in a dry place with access to 110-120VAC. Provide enough room around the unit for incoming wiring. There are 2 mounting holes on the unit, use them as a template for marking the wall..

NOTE: Refer to the system manuals for more detailed instructions

Installing the Master Station Phone (if used)

Mounting the telephone:

The Master Station phone may be either wall mounted (see instructions included with phone) or may be placed on a desk. In either case extension 15 should be used to connect that phone to the ACS-1/2 unit.

Installation of the Central Office Line (if used)

Connecting the phone – Take the Central Office Line (outside line) and connect it directly to modular connector CO1 on the Lucent Switch.

ACS-3/4/5 INSTALLATION AND OPERATION

The ACS-3/4/5 is a small telephone exchange system capable of connecting 24, 32, or 40 Emergency/Assistance Telephones to a local Master Station Phone and/or to a Remote Answering Phone using up to 15 Central Office Lines (outside lines).

Items that make up an installation:

- (1) ACS-3/4/5 control unit chassis containing a master and up to 3 slave Lucent Partner Switches mounted in an AVAYA CARRIER.
- (1) Lucent, 18 button, handset, Master Station Phone (Optional)
- (1) Document package with Lucent Partner instructions and VPP product information and instructions.

Overall system (see drawing SD0210-2)

This system consists of 3 major components. They are the remotely located Emergency/Assistance Telephones, the Master Station Phone, and the centrally located ACS-3/4/5 Control Unit. The overall system acts as a small telephone exchange. Calls placed by pressing the push button on an Emergency/Assistance telephone can be programmed to automatically ring the extension of the Master Station Phone or to dial to a Remote Answering Phone. The Master Station Phone and/or a Remote Answering Phone can be used to dial the extension of each Emergency/Assistance Telephone.

The extensions of the telephone exchanges are identified as: 10 through 33 for the ACS-3, as 10 through 41 for the ACS-4, and as 10 through 49 for the ACS-5. All of the extensions can be connected to the Emergency/Assistance Telephones. If a Master Station Phone is being used, it must be connected with extension 15.

All wiring to each Emergency/Assistance Telephone and to the Master Station Phone is directly from the Lucent Partner Switch modular Jacks labeled extensions. If you are connecting a Central Office Line connect the line directly to the Lucent Partner Switch CO Lines Modular Jacks.

Interconnect Wiring

All interconnection wiring between each Emergency/Assistance Telephone, and the ACS-3/4/5 control unit should be 2 pair, 22AWG or larger and should be no longer than 1000 feet. All interconnection wiring between the Master Station Phone and the ACS-3/4/5 Control Unit should also be 2 pair, 22AWG or larger and should be no longer than 1000 feet. Please refer to your local codes for appropriate wiring specifications.

The wiring should be color coded so that each wire and each pair can be identified. The two wires in pair 1 that connect to each Emergency/Assistance Telephone should be identified as **(T)** and **(R)**. The two wires in pair 2 that connect to each Emergency/Assistance Telephone should be identified as **(+)** and **(-)**. **NOTE: Polarity Counts!** The two wires in pair 1 to the Master Station Phone should be identified as red and green. The two wires in pair 2 to the Master Station Phone should be identified as yellow and black.

Wiring to the Emergency/Assistance Telephones

2. **Incoming wire** - Typically, a mounting enclosure and an adhesive backed modular wall jack with a power pigtail along with a modular cord have been provided with each Emergency/Assistance Telephone. Fasten the modular wall jack to the back of the wall box with the modular connector facing to the left. Take the incoming pair previously designated **T** and **R** and wire the **T** wire to the **grn** screw terminal. Wire the **R** wire to the **red** screw terminal. Take the incoming pair previously designated **+ -** and wire the **+** wire to the screw terminal designated **yel**. Wire the **-** wire to the **blk** screw terminal. **NOTE: Polarity Counts!**
2. **Wires to the Emergency/Assistance Telephone** – Connect the supplied modular cord between the modular wall jack and the modular jack on the back of the telephone. Connect the three prong power pigtail from the modular wall jack to the mating connector on the back of the telephone. Leave the battery switch on the back of the telephone turned off. This is only used in special situations. Secure the telephone to its mounting case while making sure that no wires are crushed.

Installing the ACS-3/4/5

Locate the unit in a dry place with access to 110-120VAC. Provide enough room around the unit for incoming wiring. There are 4 mounting holes on the panel, use them as a template for marking the wall. After mounting, remove the cover from the Lucent Unit and confirm that the modules are firmly seated and then replace the cover.

NOTE: Refer to the system manuals for more detailed instructions

Installing the Master Station Phone (if used)

Mounting the telephone:

The Master Station phone may be either wall mounted (see instructions included with phone) or may be placed on a desk. In either case extension 15 should be used to connect that phone to the ACS-3/4/5 unit.

Installation of the Central Office Line (if used)

Connecting the phone – Take the Central Office Line (outside line) and connect it directly to modular connector CO1 on the Lucent Switch.

DISCLAIMER: EMS takes no responsibility for interpretation of safety codes for any given region, nor assumes any liability for mis-interpretation of those codes by any separate party.

OPERATION

This page should be given to the facility's manager or supervisor responsible for the system operation.

SYSTEM CONFIGURATION

This system consists of 3 major components. They are the remotely located Emergency/Assistance Telephones, the Master Station Phone and the centrally located ACS unit (Either an ACS-1/2 or ACS-3/4/5).

The ACS-1/2 or ACS3/4/5 unit has connector banks to distribute wiring and a telephone switch to interconnect the Emergency/Assistance Telephones and the Master Station Phone or the Remote Answering Phone. The ACS-1 telephone switch consists of a control/switch module. The ACS-2 consists of a control/switch module with module connector and one slave module. The ACS-3/4/5 consists of a control/switch module with module carrier and 2, 3, or 4 slave modules respectively.

Each module contains modular jack connections for three Central Office lines and eight extension lines. The eight extension lines on the control/switch module (center module) are designated extensions 10 through 17. The extensions of the first slave module are designated 18 through 25, and so on. See the sales drawings (SD0605-1 and SD0210-2) at the end of this document for details. The ACS is wired so that the Master Station Phone, if used, is connected to extension 15.

The overall system acts as a small telephone exchange. Calls placed by pressing the pushbutton on an Emergency/Assistance Telephone can be programmed to automatically ring extension 15, which is the Master Station Phone or if configured, seize an outside line and dial a Remote Answering Phone. The Master Station Phone or Remote Answering Phone both can be used to dial directly to each Emergency/Assistance Telephone by entering the Emergency/Assistance Telephone's extension.

NOTE: If your using a Central Office Phone you need to call into the system first and at the tone, immediately press the number 9, then the extension you want, followed by the pound key (#).

SYSTEM OPERATION

When a call is placed from an Emergency/Assistance Telephone the caller immediately hears a dial tone and then the two-digit dialing to extension 15 or the multi-digit dialing to the outside, Remote Answering Phone. The ACS unit immediately routes the call to the designated phone. Either phone that is used will ring once it receives the signal from the ACS unit. Communication is established the moment the phone is answered. Two-way conversations can take place immediately, in full-duplex, with no danger of chopped or interrupted speech.

The Master Station Phone can call directly to any Emergency/Assistance Telephone by entering the 2-digit extension for the Emergency/Assistance Telephone. The called Emergency/Assistance Telephone will answer and emit a beep and within 5 seconds will open up for full-duplex communication. The 5-second delay is there to allow entering a code to perform Monitoring or Programming. If you wish to go into monitor mode, at the beep press the number 1 followed by the pound key (#). Monitor mode allows you to listen on the Emergency/Assistance Telephone without the knowledge of the surrounding people. If you wish to go into program mode, at the beep press the number 2 followed by the pound key (#), you should then hear three beeps letting you know your in program mode. Operations of these functions are described in the instructions provided with the Emergency/Assistance Telephone.

The same functions as above can be performed from any Remote Phone if a Central Office line is connected to the Lucent Switch. When calling from an outside line the system will answer and you will hear a beep. After the beep you will press 9 then enter the two digit extension number you would like followed by the pound key (#). The extension you called will answer and beep. If you want to perform a certain function then

enter the number for that function (you would enter the function number the same way you would have if you called from the Master Station Phone). If you don't enter a number within 5 seconds the Emergency/Assistance Telephone will open up for full-duplex conversation.

PROGRAMMING THE TELEPHONE SWITCH

The switch in the ACS unit is preprogrammed at the factory for proper operation (Automatic line selection on intercoms first and line ringing on extension 10 only). The memory within the switch retains the programming information for 45 days to 6 months depending upon freshness of batteries. The programming information is also stored in a PCMCIA memory card that is included with the documentation. In the event that the programmed information is lost, the switch programming must be restored from the memory card. Consult the switch documentation for instructions on how to do this.

The programming for the ACS may be modified if desired. The Master Station Phone is used to do this. Connect the Master Station phone to the telephone switch jack designated extension 10 (temporarily remove the modular cord connection that is there). The connection must be made with a 4 wire modular cord. The switch documentation provides information on the many programming options.

Program as follows:

Automatic line selection: (reference Partner Installation and User Manual)

Press the buttons on the phone as follows:

1. Press **Feature** and then **0** and then **0** again.
The phone beeps once and the light next to the spkr button is green flutter.
2. Press **left Intercom** button twice.
The light next to the left Intercom button is green steady.
3. Press the **right Intercom** button.
4. Dial **10** the two-digit number of the extension to change.
5. Press * and then * again.
6. Press the **left Intercom** then the **right Intercom** button and then the **line 1** button.
7. Press * and the * again.
8. Go back to step 3 to program each of the extensions in the same way. At step 4 enter the extension numbers **11, 12, 13, 14, 15**, and so on until all of the extensions have been programmed.
9. When all extensions have been programmed press **Feature** and then **0** and then **0** again.

Line Ringing (reference Partner Installation and User Manual)

Press the buttons on the phone as follows:

1. Press **Feature** and then **0** and then **0** again.
The phone beeps once and the light next to Spkr is green flutter.
2. Press **left Intercom** button twice.
The light next to the left Intercom button is green steady.
3. Press the **right Intercom** button.
4. Dial **10**, the extension to be changed.
Four line lights will illuminate and will either be on steady or will flutter.
5. Press the button next to each light until all of the lights are green flutter.
6. Press the **right Intercom** button.
7. Dial **11**, the next extension to be changed.
Four line lights will illuminate and will either be on steady or will flutter.
8. Press the button next to each light until all of the lights are green steady.
9. Press the **right Intercom** button.

10. Dial **12**, the next extension to be changed.
Four line lights will illuminate and will either be on steady or will flutter.
11. Press the button next to each light until all of the lights are green flutter.
12. Go back to step 9 and repeat the procedure for extensions **13, 14, 15**, and so on until all of the extensions have been programmed.
13. When you are finished, press **Feature** and then **0** and then **0** again.
14. The objective is to have all lights for extension 11 green steady and all lights for all other extensions green flutter.

Outgoing Call Restriction for Master Station (reference Partner Installation and User Manual)

1. Press **Feature** and then **0** and then **0** again.
The phone beeps once and the light next to spkr button is green flutter.
2. Press **left Intercom** button twice.
The light next to the left Intercom button is green steady.
3. Press **#401**.
4. Dial the two-digit number (**15**) of the Master Station.
5. Press **2** and the red Message light will flash.
6. Press **Feature** and then **0** and then **0** again.

PROGRAMMING THE EMERGENCY/ASSISTANCE TELEPHONE

The Emergency/Assistance Telephone stores all of its information in non-volatile memory and once it is programmed for the desired function, it need never be programmed again. In its simplest configuration for the above system, the unit need only be programmed to dial one number, extension 15, the extension of the Master Station phone. The programming of the Emergency/Assistance Telephone is fully discussed in the included documentation.

WARRANTY STATEMENT

Janus Elevator Products Inc/EMS warrants that this product was delivered to the original purchaser in good working order at the date of purchase. The ACS units carry a two- (2) year warranty on parts and labor from the date of purchase from Janus/EMS. Janus/EMS shall not be responsible for any damage to the unit incurred during installation.

Except as specifically set forth above, Janus/EMS, its affiliates, suppliers, and dealers make no warranties, express or implied, and specifically disclaim any warranties of merchantability or fitness for a particular purpose. Ongoing periodic inspections and management of the system is the sole responsibility of the final owner, and any liabilities, which occur as a result of neglect, will be accountable to the final owner. Contact Janus/EMS at 800-527-9156 for return/repair authorization.



