SECTION 28 13 00

AUDIO/VIDEO DOOR ENTRY SYSTEMS

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Comelit USA; intercoms and video entry products.
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This section is based on the products of Comelit USA, which is located at:
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Web: [www.comelitusa.com](http://www.comelitusa.com)
 [ [Click Here](http://www.arcat.com/arcatcos/cos49/arc49655.html) ] for additional information.
Comelit Group S.p.A. is an Italian intercom manufacturer with over 55 years' experience in the field of audio and video door entry systems. Comelit is one of the top 10 intercom manufacturers in the world, present in 19 branch offices. With hard work and dedication we have become one of the front-runners in developing IP Video Intercom solutions for residential, commercial, and industrial applications.
Comelit USA was founded in 2007 in Monrovia, CA to become the base of operations for the North American Market. We have grown over the years from a small sales office to a full operations center, handling not only sales activities but also, technical support, customer service, marketing and distribution. Comelit products can now be seen in a myriad of projects from custom single-family homes to large-scale multi-tenant projects and even commercial applications. We are proud to be one of the few nationally distributed video door entry companies throughout the United States, Canada and Mexico.
Comelit has a network of services to aid the Owner, Architect and Contractor to help confirm the best solutions to satisfy the needs of your client. Comelit also offers technical support from design through installation. For custom applications jobsite assistance is also available.
This specification includes Video Door Entry Kits Systems for 2 wire connection style- HFX Series, Entry Level Kits; and IP/network connection style VIP Kit Series- Residential and Commercial starter kits

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Wired Connection Style Audio/Video Door Entry Systems
		2. IP Style Wireless Audio/Video Door Entry Systems
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section - .
		2. Section 26 05 00 - Common Work Results for Electrical.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. American National Standards Institute (ANSI/TIA/EIA) 568 - Commercial Building Telecommunications Cabling Standard.
		2. International Organization for Standards (ISO) 9001:2000 - Quality Management Systems - Requirements.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation requirements.
		3. Shop Drawings:
			1. Wiring Diagrams: Indicate wiring for each item of equipment and interconnections between items of equipment.
			2. Include manufacturer's names, model numbers, ratings, power requirements, equipment layout, device arrangement, complete wiring point-to-point diagrams, and conduit layouts.
		4. Installation and Operation Manuals:
			1. Submit manufacturer's installation and operation manual, including operation instructions and component wiring diagrams.
			2. Provide detailed information required for Owner to properly operate equipment.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and finishes.
		2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and finish.
		3. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
		4. Warranty: Submit manufacturer's standard warranty.
	1. QUALITY ASSURANCE
		1. Manufacturer Qualifications: ISO 9001:2008 certified and ISO 14001 certified.
		2. Installer Qualifications: Installer experienced with system installations of scope and size required for the Project.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
			1. Finish areas designated by Architect.
			2. Do not proceed with remaining work until workmanship, color, and functions are approved by Architect.
			3. Refinish mock-up area as required to produce acceptable work.
	1. DELIVERY, STORAGE, AND HANDLING
		1. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
		2. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
		3. Handling: Protect materials during handling and installation to prevent damage.
	2. SEQUENCING
		1. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress.
		2. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
	4. WARRANTY
		1. Comelit products are warrantied for up to 2 years from dealers date of purchase. This includes replacement from the factory for any defective products under warranty due to manufacturers defect or error.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Comelit USA, which is located at: 2021 S. Myrtle Ave.; Monrovia, CA 91016; Toll Free Tel: 888-692-9739; Tel: 626-930-0388; Fax: 626-930-0488; Email: [request info (info@comelitusa.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Comelit+USA&coid=49655&rep=&fax=626-930-0488&message=RE:%20Spec%20Question%20(13712com):%20%20&mf=); Web: [www.comelitusa.com](http://www.comelitusa.com)

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

\*\* NOTE TO SPECIFIER \*\* The following paragraphs included wired and wireless IP Audio/Visual Door Entry Systems. Select the door entry system required and delete those not required. Contact the manufacturer for more detailed assistance.

* 1. WIRED CONNECTION STYLE AUDIO/VIDEO DOOR ENTRY SYSTEMS

\*\* NOTE TO SPECIFIER \*\* The Audio Series Style Kit 5 is the "ideal" door entry phone kit which uses 5 wires and is available in the single-family, two-family, three family or four family versions. Simply by adding a station or an additional bell allows easy expansion and an elegant desk base ensures flexibility for all requirements. System is suitable for Single Family Residential homes, 2, 3, or 4 User small apartment or town homes, Small businesses with up to 4 users, and any facility with a locked door which needs the most basic audio only communications and door release.

* + 1. Audio Series: Style Kit 5 Audio Door Entry Intercom Kit allows for basic functions of communication between an entrance panel and an indoor audio only station. Must allow for remote door release capability.
			1. Feature Highlights:
				1. 5 wire Installation
				2. Audio only communication
				3. Includes station, doorbell and power supply
				4. Door release availability
				5. All inside stations have a handset
			2. System Description:

\*\* NOTE TO SPECIFIER \*\* Select the Kit for the number of units required from the following paragraphs and delete those not required.

* + - * 1. 8271U Style Kit 5: 1 User
				2. 8272U Style Kit 5: 2 User/Tenant
				3. 8273U Style Kit 5: 3 User/Tenant
				4. 8274U Style Kit 5: 4 User/Tenant
			1. Expandability:

\*\* NOTE TO SPECIFIER \*\* Inside Unit expandable up to 1 additional unit (total 2 per user). Select the expansion required from the following paragraphs and delete if not required. Door bell unit is not expandable.

* + - * 1. Add 1 inside unit for user(s) only (2 units total).
				2. Add 1 inside unit for user(s) and Tenant(s) (Total 2 units per user)

\*\* NOTE TO SPECIFIER \*\* The Comelit Standard series kits are made to perform under everyday conditions and do so with style and reliability. These kits offer more features and functions than you come to expect from a standard door entry system. The kits are expandable and offer different styles for most residential and light commercial applications. System is suitable for Single Family Residential homes, Small businesses or commercial applications like schools or churches, and any facility with a locked door which needs an economical Audio/Video door entry system with door release.

* + 1. Standard Series: Video Intercom Kit HFX 700M. Color hands free video intercom kit with striking 3.5 inch LCD Monitor, which allows for the basic functions of audio/video communication between an entrance panel and an indoor station, including remote door release. Kit includes master monitor, doorbell and power supply. Must be able to expand to 2 outdoor stations and 4 inside stations.
			1. Feature Highlights:
				1. Simple 2 wire installation (CAT5 to 18AWG), maximum distance 300 foot 3.5 inch LCD color monitor
				2. All monitors must use its own power supply, unless using a central power hub (model: EX-PHUB)
				3. Wiring must be daisy chained between monitors, unless using a central power hub (model: EX-PHUB), then it can be home run
				4. "All-page" communication between internal monitors
				5. 1/3 inch CCD chipset, 700TVL camera resolution
				6. Camera angle vertically adjustable - Manual adjustment
				7. White LED illuminator for low lighting condition
				8. Weather resistant plastic door bell housing
				9. Remote door release ability (12VDC wet contact or N.O. dry contact)
				10. Adjustable speaker, microphone and chime volume
				11. Power supply: 24VDC 650mA
			2. System Description: Provide system including the following

\*\* NOTE TO SPECIFIER \*\* Video Intercom Kit is provided with 1 Master monitor, 1 outside doorbell camera and power supply and is expandable up to 2 doorbell cameras and 4 inside monitors total. Insert number of units required in the following paragraphs.

* + - * 1. Doorbell Cameras: \_\_\_\_
				2. Inside Monitors: \_\_\_\_
				3. Inside Hands Free Audio Stations: \_\_\_\_
			1. Expandability:

\*\* NOTE TO SPECIFIER \*\* Select the expansion units required from the following paragraphs and delete those not required.

* + - * 1. EX-700D Hands free color expansion door bell camera
				2. EX-700H Hands free color expansion indoor monitor
				3. EX-700A Hands free audio station
			1. Optional Accessories:

\*\* NOTE TO SPECIFIER \*\* Select the accessories required from the following paragraphs and delete those not required

* + - * 1. EX-700V Flush mount metal vandal/weather resistant door bell cover
				2. EX-700VS Surface mount metal vandal/weather resistant door bell cover
				3. EX-VIN Video input module for use with all HFX series kits
				4. EX-AGL Angle mount box for hfx-700 series door stations
				5. CDSK Desk mount stand for the 700M/H series monitors

\*\* NOTE TO SPECIFIER \*\* The Quadra 2 wire Video door entry kit system is suitable for Single Family Residential homes, Bigger custom homes, Small businesses or commercial applications like schools or churches, Small multi-tenant residential up to 4 tenants and any facility with a locked door which needs an full featured Audio/Video door entry system with door release and recording.

* + 1. Standard Series: Quadra 2 wire Video door entry kits- New designed Quadra Door Camera entrance panel with the choice of 3 monitor styles. Kit includes master monitor, outside doorbell camera and power supply.
			1. Feature Highlights:
				1. New Modern Design- architectural focused
				2. Simple 2-wire installation (CAT5 to 18AWG)
				3. Built in door release (N.O dry contact, or 12V AC 1A)
				4. All Page intercom between inside stations
				5. Entrance panel can be converted to a 2 or 4 user small multi-tenant system out of the box
				6. Versatile system for single or mutli-tenant use
			2. System Description:

\*\* NOTE TO SPECIFIER \*\* Select the Kit required from the following paragraphs and delete those not required.

* + - * 1. HFX-7000M Kit: 1 Mini-HF Master monitor, 1 outside doorbell camera and power supply
				2. HFX-8000M Kit: Comes with 1 Icona Master monitor, 1 outside doorbell camera and power supply
				3. HFX-9000M Kit: Comes with 1 Maxi Master monitor, 1 outside doorbell camera and power supply
			1. Expandability:

\*\* NOTE TO SPECIFIER \*\* Expandability for Inside Monitors (up to 3 additional monitors for 7000 and 8000 series and up to 7 additional monitors for 9000 series)

* + - * 1. Add \_\_ color expansion monitor(s)

\*\* NOTE TO SPECIFIER \*\* Expandability for Door bell Camera and parts (up to 1 additional monitor for 7000 and 8000 series and up to 3 for 9000 series) Select and add the number of expansion units required from the following paragraphs and delete if not required.

* + - * 1. Add \_\_ EX-DSQ Hands free color expansion door bell camera(s)

\*\* NOTE TO SPECIFIER \*\* The Comelit Advanced series kits are the pinnacle of design and function. They offer a myriad of features such as video recording, call forwarding, and are fully expandable for bigger residential and commercial applications. When you are looking for the top of the line video door entry kits and do not want to compromise, this series is it. System is suitable for Single Family Residential homes, Small businesses or commercial applications like schools or churches, and any facility with a locked door which needs an full featured Audio/Video door entry system with door release.

* + 1. Advanced Series: 7 inch Touch-Screen Video Intercom Kit With Video Recording - HFX-900RS: Kit includes 1 Master monitor, 1 outside doorbell camera and power supply
			1. Feature Highlights:
				1. Video recording on micro SD card
				2. 7 inch Touch-screen monitor
				3. Simple 2-wire installation (CAT5 to 18AWG)
				4. Built in door release (N.O dry contact, or 12V DC 300MA)
				5. All Page intercom between inside stations
				6. Call forwarding to mobile or land line based phone (standard telephone line required)
				7. Both flush and surface mount boxes included for indoor monitor
			2. System Description: Provide system including the following

\*\* NOTE TO SPECIFIER \*\* Advanced Series is expandable up to 4 door cameras and up to 8 inside stations, all on a 7 inch touch screen, with call forwarding, and video memory functionality. Insert number of units required in the following paragraphs.

* + - * 1. Door cameras: \_\_\_
				2. Inside Stations: \_\_\_
			1. Accessories:

\*\* NOTE TO SPECIFIER \*\* Select the accessories required from the following paragraphs and delete those not required

* + - * 1. CDSK-9 Desk mount stand for 900L/M/H monitors
				2. EX-VIN Video input module
				3. EX-PHUB Home run hub for home run cabling and expansion over 4 monitors (2 hubs needed)
	1. IP STYLE WIRELESS AUDIO/VIDEO DOOR ENTRY SYSTEMS

\*\* NOTE TO SPECIFIER \*\* Comelit IP range of kits is the direct response to market needs of a true IP Intercom kit to be used in dedicated networks or even shared networks. Kits come in a variety of configurations from easy commercial based kits using a PC monitor to a full service residential solution with the ability to use a remote app. The kits are able to use any and all VIP intercom system parts, which open up the door to endless possibilities in the world of door entry.
\*\* NOTE TO SPECIFIER \*\* The following System is suitable for Businesses or commercial applications like offices, schools or churches and any facility with a locked door which needs a full featured Audio/Video door entry system to a PC, with door release.

* + 1. IP Kit With Intercom and PC Software: Single User Commercial Applications. To be used in a commercial applications with an existing network with a PC which runs the Software intercom which can speak to the Entrance panel with full video and audio communication with door release capability
			1. System:

\*\* NOTE TO SPECIFIER \*\* Select the unit required from the following paragraphs and delete those not required.

* + - * 1. 8501IM Kit: Single user with Ikall metal Entrance panel and software monitor
				2. 8504 Kit: Single user with Vandalcom Entrance panel and software monitor
			1. System Description:
				1. Entrance panel must be on the same network as the computer running the software.
				2. Unlimited number of entrance panels and users can be added to the system
				3. Up to 16 devices can be added for a single user
				4. Devices can be a combination of PC software monitors, hardware monitors or apps
			2. Accessories:

\*\* NOTE TO SPECIFIER \*\* Select the accessories required from the following paragraphs and delete those not required

* + - * 1. 1454K Expansion software monitor on a USB stick for additional monitors
				2. Network relays can be added to the system for custom contact releases or controls
				3. Video input modules can be used to add CCTV cameras
				4. Video output modules can be used to send video signals from the entrance panel to DVRs or NVRs
				5. Gateways can be added to the system to add remote apps to the system to be used on mobile devices

\*\* NOTE TO SPECIFIER \*\* The following System is Single Family residential applications, Bigger custom homes with home automation integration, businesses or commercial applications like offices, schools or churches and any facility with a locked door which needs a full featured Audio/Video door entry system to a PC, with door release.

* + 1. IP Video Door Entry Kit: Single User system with full audio/video communication to IP monitors or to a mobile device through an APP for iOS and Android.
			1. Featured Highlights:
				1. Easy connection in a LAN network Pre-configured out of the box
				2. Kit comes with door station, power supply and various interior stations depending on the model
				3. No central server needed for scalablilty.
				4. Inside hardware monitors are POE, so POE injectors are needed if the switch doesn't provide the power.
				5. H.264 Video format for integration with third party devices like IP cameras and home automation systems
			2. System Description: Provide system including the following

\*\* NOTE TO SPECIFIER \*\* Select the unit required from the following paragraphs and delete those not required.

* + - * 1. 8521 Kit: Single user with Ikall metal Entrance panel with 1 button and 1 Icona Monitor.
				2. 8522 Kit: Two user with 1 Ikall metal Entrance panel with 2 buttons and 2 Icona Monitors
				3. 8531 Kit: Single user with 1 Ikall metal Entrance panel, 1 Icona Monitor, and 1 1456 Remote App gateway module
				4. 8513HIM Kit: Single user with 1 Ikall metal Entrance panel and 1 Master 1456 remote app module (no hardware monitor provided)
			1. Accessories:

\*\* NOTE TO SPECIFIER \*\* Select the accessories required from the following paragraphs and delete those not required

* + - * 1. 1454K Expansion software monitor on a USB stick for additional monitors
				2. Network relays can be added to the system for custom contact releases or controls
				3. Video input modules can be used to add CCTV cameras
				4. Video output modules can be used to send video signals from the entrance panel to DVRs or NVRs
				5. Gateways can be added to the system to add remote apps to the system to be used on mobile devices
1. EXECUTION
	1. EXAMINATION
		1. Examine areas to receive integrated audio/video door entry system.
		2. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
		3. Do not begin installation until unacceptable conditions are corrected.
	2. PREPARATION
		1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
		2. Verify the following compliance before starting installation.
			1. All door monitor units, except for the entrance stations, are designed for indoor use only. Do not use outdoors.
			2. In areas where broadcasting station antennas are close by, intercom system may be affected by radio frequency interference.
			3. Keep the intercom wires at least 1 foot (30 cm) away from strong electrical wiring (AC 100-240 V) including, in particular, wiring for inverter electrical appliances. Noise and malfunction could result.
			4. Keep the unit more than 3.3 feet (1 m) away from radio or TV set.
			5. If a strong light shines on the main unit screen, the picture will turn white or only silhouettes will be visible.
			6. Other manufacturer's devices (such as sensor, detectors, door releases) used with this system, comply with the manufacturer's installation requirements.
			7. LCD panel is manufactured with very high precision techniques, inevitably will have a very small portion of its picture elements always lit or not lit at all. This is not considered a unit malfunction. Please be aware of this in advance.
			8. Sensor of an entrance station (Integrated type) may activate due to moving shadows or moving tree branches, etc. and cause a message to display.
	3. INSTALLATION
		1. Install audio/video door entry system in accordance with manufacturer's instructions at locations indicated on the Drawings.
		2. Mount equipment plumb, level, square, and secure. For video entrance stations and video door stations, comply with manufacturer's design requirements to provide optimum picture quality of station monitoring.
	4. SET-UP AND ADJUSTING
		1. Adjust integrated security and communication system for proper operation in accordance with manufacturer's instructions.
	5. DEMONSTRATION AND TRAINING
		1. Demonstration:
			1. Demonstrate that integrated security and communication system functions properly.
			2. Perform demonstration at final system inspection by qualified representative of manufacturer.
		2. Instruction and Training:
			1. Provide instruction and training of Owner's personnel as required for operation of integrated security and communication system.
			2. Provide hands-on demonstration of operation of system components and complete system, including user-level program changes and functions.
			3. Provide instruction and training by qualified representative of manufacturer.
	6. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.
	7. SCHEDULES

\*\* NOTE TO SPECIFIER \*\* Retain Paragraph below if required to suit project requirements. Identify products by name on the Drawings or use this paragraph to define the location of each type of material to be used. The following are some examples of schedule references. Edit as required to suit project or delete and identify products on the Drawings.

* + 1. :
		2. :

END OF SECTION