

DS3 Series Door Station Installation Manual DSS3/DSC3/DSF3

Getting Help

You can get support via the Internet at www.elanhomesystems.com, or call Tech Support at (800) 622-3526

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Part Number 9900826 Rev A

Introduction

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ELAN's new DS3 Series Door Station and the COM2 Communications Controller provide you with full two-way communications and door latch control from your touch-tone telephones. A simple #-D (for Door) from any touch-tone phone allows you to speak with visitors at the door. Another simple button press ("0") activates the door latch to let them in. The door latch must be installed and is not included. The DSC3, with its on-board color camera, gives you the option of seeing who's there before you even pick up the phone. The door stations must be utilized with ELAN's COM2 Communications Controller.

Door Station Models

ELAN's two-wire door station models include the DSS3 Surface Mount Door Station, the DSF3 Flush Mount Door Station, and DSC3 Flush Mount Door Station with Color Camera. Designed to be installed in a variety of locations, each door station allows custom installation in areas such as the front door, back door, guest house, or gates. Each model allows independent conversation with visitors at up to four locations. With the Door Latch Activation feature, you can remotely unlock a door or gate and let the visitor enter, if desired (a third-party door latch must be installed and is not included with ELAN door stations)

NOTE: The new DS3 Series Door Stations are only compatible with ELAN's COM2 Communications Controller and will not work with the Z•600 Communications Controller or HDC1050/HDC2050 Telephone Interface Cards used with ELAN HD systems.

Specifications

Specifications

Item	Description
Door Station Speaker	8 ohm, sealed back mylar cone
Microphone	Hi-gain omni-directional condenser
Door Latch Relay	12VDC coil, 2A contact rating
Wiring Requirements	Cat-5, 1000 ft. max
Dimensions (H/W/D)	5 3/8" X 3 7/8" X 3/8" (1" D for DSS3)
DSC3 Color Camera Specifications	
Imager	1/3 in. CCD
Auto Iris	1/50-1/100,000 sec.
Lux	.05 min.
Resolution	480 TV lines
Horiz. Viewing Angle	120°
Vert. Viewing Angle	100°
Swivel	+15°/-15° left to right
Video Output	1V peak-to-peak
Video Output Impedance	75 Ohms
Power Requirements	12VDC @ 130 mA (included)

PreWiring

PreWiring

The DSF3 and DSS3 Door Stations require two conductors to achieve full functionality. The DSC3 requires six conductors in order to utilize the camera functionality (eight for long runs over 500 feet). Cat-5 network cable is recommended in each instance. Route Cat-5 from the head-end location to each Door Station location.

To mount DSF3 and DSC3 Door Stations, use an ELAN DBK1000 Rough-In Bracket during construction. The DSS3 Door Station is designed to be surface mounted and utilizes four wall anchors and screws, (included).

For best aesthetics and audio quality, (and viewing angle when positioning the DSC3), mount the unit approximately 4-1/2 to 5-1/2 feet from the ground. It is strongly recommended to test the view from the camera before finalizing installation!

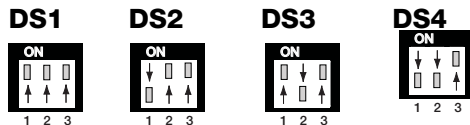
NOTE: See the back page of this instruction for door station pinouts.

DIP Switch Settings

Each door station has DIP switches that must be set to allow the COM2 to differentiate between door stations, and assign unique door chimes (see Figure 1). Locate and adjust the DIP switches to indicate the desired door station for your location (see Figure 2), i.e., front door = Door Station 1, back door = Door Station 2 etc. (see Figure 2).

WARNING: The COM2 must be powered down during DIP switch adjustments to ensure proper operation and implementation of the new switch settings..

Setting DIP Switches



Door Station	DIP Switch Setting
1	1 - ON, 2 - ON, 3 - ON
2	1 - OFF, 2 - ON, 3 - ON
3	1 - ON, 2 - OFF, 3 - ON

Figure 1: Door Station DIP Switch Settings

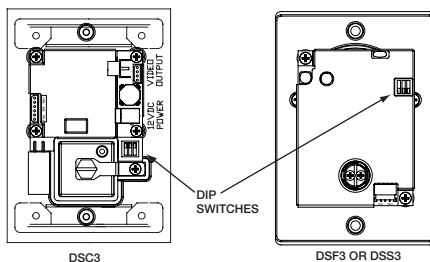


Figure 2: DIP Switch Locations

Video Balun Connections

VBRM Video Balun

The DSC3 Door Station with color camera requires a video balance/unbalance (balun) to properly pass video thru Cat-5 network cable at any significant distances. Figure 3 shows the wiring connections using Cat-5 network cable and the VBRM Video Balun (included).

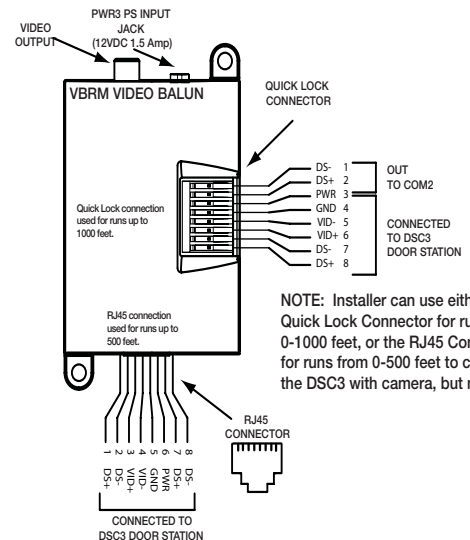


Figure 3: VBRM Video Balun

Non Balun Application

Non VBRM Applications

In the rare instance that an ELAN VBRM Video Balun is not used, the installer can still connect the DSC3 Door Station and camera using Cat-5 for the door station, RG59/RG6 for the camera and 18/2 AWG stranded wire for power. ELAN recommends using Cat-5 wire for the DS+ and DS- connections from the door station to the COM2 Door Station Bus.

To connect the camera:

1. Unplug the power connector and RCA video connector from the video balun on the DSC3 circuit board.
 2. Remove the camera power connector, then strip back the insulation on the red and black camera power wires and connect the corresponding red and black conductors of the 18/2 AWG wire as shown in Figure 4.
- NOTE:** DO NOT remove the DSC3's yellow (video) RCA jack connector!
3. Remove the connector from the PWR3 Power Supply. Figure 4.
 4. Tie the red wire of the 18/2 AWG to the black/white wire of the PWR3. Tie the black wire of the 18/2 AWG to the black wire of PWR3 Power Supply (see Figure 4.)
 5. Splice camera power to PWR3 using 18/2 wire.
 6. Connect "F-to-RCA" barrel connector (included) between the RG-6 or RG-59 coax cable and the DSC3 RCA composite video connector (yellow).

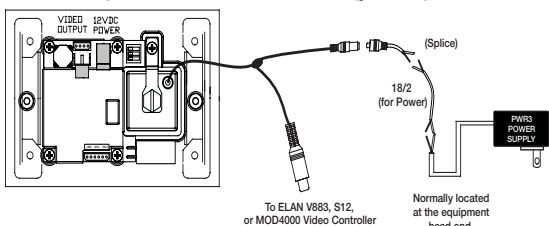


Figure 4: DSC3 Without VBRM

DSF3 or DSC3 Installation

DSF3 & DSC3 Installation

Both the DSF3 and DSC3 Door Stations are installed using the DBK1000 Door Station/Camera Rough-In Bracket (sold separately).

In order to install the DSC3 or DSF3 Door Station in the DBK1000 the door station trim brackets must be mounted to the front of the DBK1000, (see Figure 5). Note the orientation of the trim bracket's inner flanges.

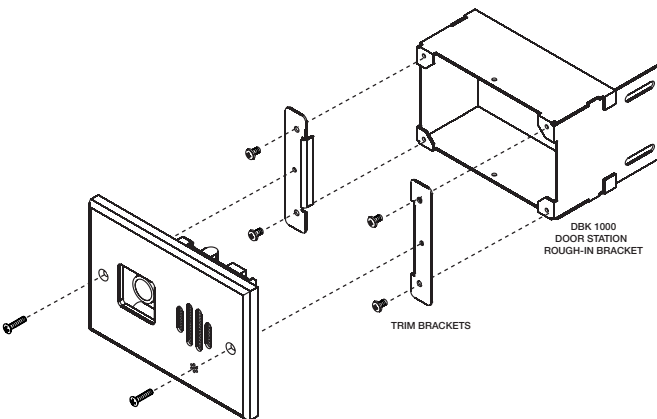


Figure 5: DSC3 or DSF3 Trim Brackets

The DSC3 ships ready for horizontal installation. Should you choose to mount the DSC3 vertically, the DBK1000 must also be mounted vertically and the camera module must be rotated 90 degrees to orientate the camera display (see Figure 6).

Whether mounted horizontally or vertically, the camera wire should always protrude from the UPPER-RIGHT corner of the camera module when the DSC3 is viewed from the rear (see Figure 6). To rotate the camera:

1. Use a 7/16 wrench to loosen the Screw and rotate the camera.
2. Make sure the Camera Wire is located in the upper right corner of the camera module when the DSC3 is viewed from the rear.
3. Adjust the viewing angle by carefully twisting the Camera Bracket.

4. Once the camera has been repositioned, tighten the bracket screw to secure the camera at the desired position.

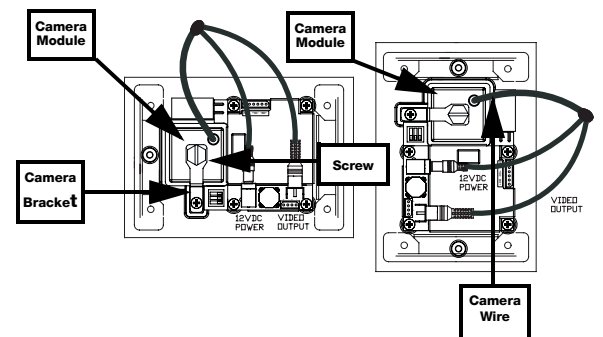


Figure 6: Camera Orientation

NOTE: Regardless of the DSC3's orientation, always make sure the wire protruding from the rear of the camera module is located in the UPPER-RIGHT corner when viewed from the rear.

DSC3 Doorbell Button

DSC3 Doorbell Button Installation

The DSC3 Door Station is designed with a separate matching doorbell button from the door station assembly. This enables the button to be installed in a conventional doorbell location, and the door station mounted higher up for optimum camera viewing.

NOTE: ELAN recommends using the provided doorbell only. A non ELAN doorbell button has not been tested and is not covered under ELAN's Door Station Warranty.

For best viewing angle when positioning the DSC3, mount the unit approximately 4-1/2 to 5-1/2 feet from the ground. ELAN strongly recommends testing the view from the camera before finalizing installation.

Additionally, ELAN provides a matching doorbell button with each DSC3 Door Station. Please be advised that all ELAN DSC3 Door Station pre-wires should be wired for remote placement of the doorbell button.

NOTE: Be sure to pull the doorbell push button wires through the back of the DBK1000 Doorstation Rough-in Box.

NOTE: If the doorbell push button does not light after connecting the db+ and db- leads from the door station, reverse the leads, proper polarity must be maintained in order for the doorbell light to function properly.

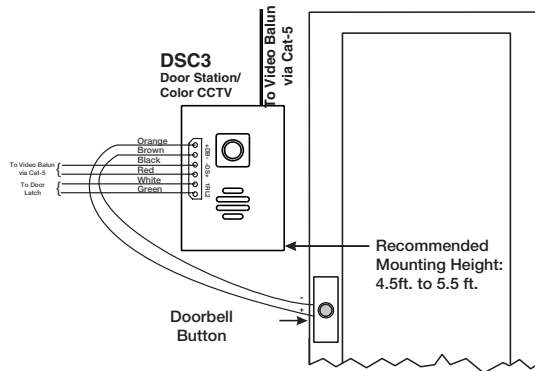


Figure 7: Recommended Camera Height

3. Connect DS+ and DS- using a butt splice or some other appropriate connector.
4. Mount the door station to the surface bracket, as illustrated in Figure 8. Note the orientation of the Mounting Plate flanges.

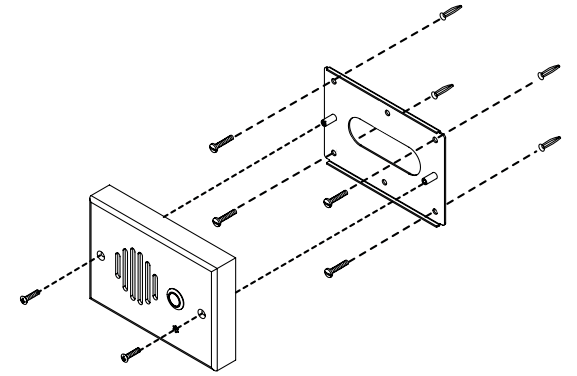


Figure 8: DSS3 Mounting Plate

DSS3 Door Station Installation

The DSS3 Door Station is a surface mount door station designed to work with the COM2, ELAN's next-generation in-home communications controller. Connect the DSS3 Door Station using Cat-5 network cable as shown in the COM2-To-Door Stations Wiring Diagrams below.

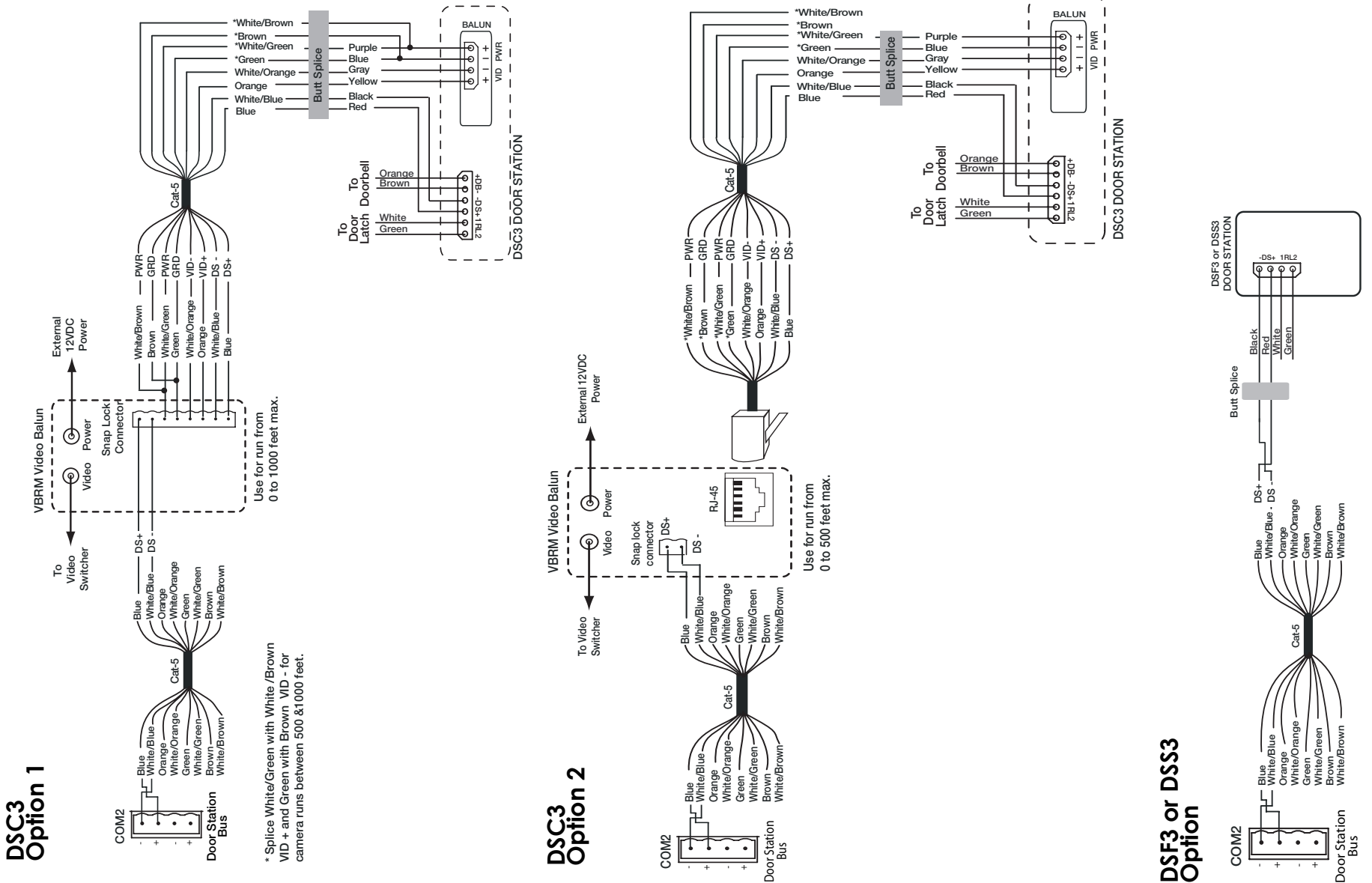
The DSS3 has a surface mounting plate that attaches to most surfaces with 4 wall anchors (included). Attach the door station and surface bracket as shown in Figure 8.

To install the DSS3 Door Station:

1. Using the surface bracket as a template, mark and drill the four corner holes. Insert a wall anchor in to each hole
2. Attach the surface bracket using the four surface mounting screws.

NOTE: Make sure to make your electrical connections prior to mounting the door station.

COM2 To Door Stations Wiring Diagrams



Limited Warranty

ELAN HOME SYSTEMS L.L.C. ("ELAN") warrants the DSS3/DSF3/DSC3 Door Stations to be free from defects in materials and workmanship for the period of two years (2 years) from date of purchase. The CCTV Color Camera in the DSC3 Door Station is warranted to be free from defects in materials and workmanship for the period of one year (1 year) from date of purchase. If within the applicable warranty period above purchaser discovers that such item/s was not as warranted above and promptly notifies ELAN in writing, ELAN shall repair or replace the item at the company's option. This warranty shall not apply (a) to equipment not manufactured by ELAN, (b) to equipment which shall have been installed by other than an ELAN authorized installer, (c) to installed equipment which is not installed to ELAN's specifications, (d) to equipment which shall have been repaired or altered by others than ELAN, (e) to equipment which shall have been subjected to negligence, accident, or damage by circumstances beyond ELAN's control, including, but not limited to, lightning, flood, electrical surge, tornado, earthquake, or other catastrophic events beyond ELAN's control, or to improper operation, maintenance or storage, or to other than normal use of service. With respect to equipment sold by, but not manufactured by ELAN, the warranty obligations of ELAN shall in all respects conform to the warranty actually extended to ELAN by its supplier. The foregoing warranties do not cover reimbursement for labor, transportation, removal, installation or other expenses which may be incurred in connection with repair or replacement.

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