IntuiKey Series

Security Systems

EN | Instruction Manual
Digital Keyboard

BOSCH

Important Safeguards

1. **Read, Follow, and Retain Instructions** - All safety and operating instructions should be read and followed before operating the unit. Retain instructions for future reference.
2. **Heed Warnings** - Adhere to all warnings on the unit and in the operating instructions.
3. **Attachments** - Attachments not recommended by the product manufacturer should not be used, as they may cause hazards.
4. **Installation Cautions** - Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to a person and serious damage to the unit. Use only manufacturer-recommended accessories, or those sold with the product. Mount the unit per the manufacturer's instructions. Appliance and cart combination should be moved with care. Quick stops, excessive force, or uneven surfaces may cause the appliance and cart combination to overturn.
5. **Cleaning** - Unplug the unit from the outlet before cleaning. Follow any instructions provided with the unit. Generally, using a damp cloth for cleaning is sufficient. Do not use liquid cleaners or aerosol cleaners.
6. **Servicing** - Do not attempt to service this unit yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
7. **Damage Requiring Service** - Unplug the unit from the main AC power source and refer servicing to qualified service personnel under the following conditions:
   - When the power supply cord or plug is damaged.
   - If liquid has been spilled or an object has fallen into the unit.
   - If the unit has been exposed to water and/or inclement weather (rain, snow, etc.).
   - If the unit does not operate normally, when following the operating instructions. Adjust only those controls specified in the operating instructions. Improper adjustment of other controls may result in damage, and require extensive work by a qualified technician to restore the unit to normal operation.
   - If the unit has been dropped or the cabinet damaged.
   - If the unit exhibits a distinct change in performance, this indicates that service is needed.
8. **Replacement Parts** - When replacement parts are required, the service technician should use replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electrical shock or other hazards.
9. **Safety Check** - Upon completion of servicing or repairs to the unit, ask the service technician to perform safety checks to ensure proper operating condition.
10. **Power Sources** - Operate the unit only from the type of power source indicated on the label. If unsure of the type of power supply to use, contact your dealer or local power company.
    - For units intended to operate from battery power, refer to the operating instructions.
    - For units intended to operate **with External Power Supplies**, use only the recommended approved power supplies.
    - For units intended to operate with a limited power source, this power source must comply with EN60950. Substitutions may damage the unit or cause fire or shock.
    - For units intended to operate at 24VAC, normal input voltage is **24VAC**. Voltage applied to the unit's power input should not exceed 30VAC. User-supplied wiring, from the 24VAC supply to unit, must be in compliance with electrical codes (Class 2 power levels). Do not ground the 24VAC supply at the terminals or at the unit's power supply terminals.
11. **Coax Grounding** - If an outside cable system is connected to the unit, ensure that the cable system is grounded. U.S.A. models only - Section 810 of the National Electrical Code, ANSI/NFPA No.70, provides information regarding proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
12. **Grounding** - This unit may be equipped with a 3-wire grounding plug (a plug with a third pin, for grounding). This safety feature allows the plug to fit into a grounding power outlet only. If unable to insert the plug into the outlet, contact an electrician to arrange replacement of the obsolete outlet. Do not defeat the safety purpose of the grounding plug.
    - Outdoor equipment should only be connected to the unit's inputs after this unit has had its grounding plug connected to a grounded outlet or its ground terminal properly connected to a ground source.
    - The unit's input connectors must be disconnected from outdoor equipment before disconnecting the grounding plug or grounding terminal.
    - Proper safety precautions such as grounding should be followed for any outdoor device connected to this unit.
13. **Lightning** - For added protection during a lightning storm, or when this unit is left unattended and unused for long periods of time, unplug the unit from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power line surges.

For Indoor Product

1. **Water and Moisture** - Do not use this unit near water - for example, in a wet basement, in an unprotected outdoor installation or in any area classified as a wet location.
2. **Object and Liquid Entry** - Never push objects of any kind into this unit through openings, as they might touch dangerous voltage points or create short circuits, resulting in a fire or electrical shock. Never spill liquid of any kind on the unit.
3. **Power Cord and Power Cord Protection** - For units intended to operate with 230VAC, 50Hz, the input and output power cord must comply with the latest versions of IEC Publication 227 or IEC Publication 245.
   Power supply cords should be routed so they are not likely to be walked on or pinched. Pay particular attention to location of cords and plugs, convenience receptacles, and the point of exit from the appliance.
4. **Overloading** - Do not overload outlets and extension cords; this can result in a risk of fire or electrical shock.

For Outdoor Product

Power Lines - An outdoor system should not be located in the vicinity of overhead power lines, electric lights or power circuits, or where it may contact such power lines or circuits. When installing an outdoor system, extreme care should be taken to keep from touching power lines or circuits, as this contact might be fatal. U.S.A. models only - refer to the National Electrical Code Article 820 regarding installation of CATV systems.

For Rack-mount Product

1. **Ventilation** - Do not place this equipment in a built-in installation or rack, unless proper ventilation is provided, or the manufacturer's instructions were followed. The equipment must not exceed its maximum operating temperature requirements.
2. **Mechanical Loading** - When rack-mounting the equipment, ensure that a hazardous condition is not created by uneven mechanical loading.

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN!

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol indicates the presence of uninsulated “dangerous voltage” within the product’s enclosure that can cause an electric shock.

This symbol indicates the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is in the ON position. The power cord is the main power disconnect for all units.

FCC & ICES INFORMATION

(U.S.A. and Canadian Models Only)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules and ICES-003 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and radiates radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case, the user will be required to correct the interference at his expense.

Intentional or unintentional changes or modifications, not expressly approved by the party responsible for compliance, shall not be made. Any such changes or modifications could void the user's authority to operate the equipment. If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: How to Identify and Resolve Radio-TV Interference Problems. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402,
Stock No. 004-000-00345-4.

WARNING: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take adequate measures.

Sécurité

ATTENTION : POUR ÉVITER TOUT RISQUE D'ÉLECTROCUTION, N'ESSAYEZ PAS DE RETIRER LE CAPOT (OU LE PANNEAU ARRIÈRE). CET APPAREIL NE CONTIENT AUCUN COMPOSANT SUSCEPTIBLE D'ÊTRE RÉPARÉ PAR L'UTILISATEUR. CONFIEZ LA RÉPARATION DE L'APPAREIL À DU PERSONNEL QUALIFIÉ.

Ce symbole signale que le produit renferme une « tension potentiellement dangereuse » non isolée susceptible de provoquer une électrocution.

Ce symbole invite l'utilisateur à consulter les instructions d'utilisation et d'entretien (dépannage) reprises dans la documentation qui accompagne l'appareil.

Attention : l'installation doit exclusivement être réalisée par du personnel qualifié, conformément au code national d'électricité américain (NEC) ou au code d'électricité local en vigueur.

Coupure de l'alimentation. Qu'ils soient pourvus ou non d'un commutateur ON/OFF, tous les appareils reçoivent de l'énergie une fois le cordon branché sur la source d'alimentation. Toutefois, l'appareil ne fonctionne réellement que lorsque le commutateur est réglé sur ON. Le débranchement du cordon d'alimentation permet de couper l'alimentation des appareils.

Sicherheitshinweise

VORSICHT: UM EINEN ELEKTRISCHEN SCHLAG ZU VERMEIDEN, IST DIE ABDECKUNG (ODER RÜCKSEITE) NICHT ZU ENTFERNEN. ES BEFINDEN SICH KEINE TEILE IN DIESEM BEREICH, DIE VOM BENUTZER GEWARTET WERDEN KÖNNEN. LASSEN SIE WARTUNGSARBEITEN NUR VON QUALIFIZIERTEM WARTUNGSPERSONAL AUSFÜHREN.

Das Symbol macht auf nicht isolierte „gefährliche Spannung" im Gehäuse aufmerksam. Dies kann zu einem elektrischen Schlag führen.

Der Benutzer sollte sich ausführlich über Anweisungen für die Bedienung und Instandhaltung (Wartung) in den begleitenden Unterlagen informieren.

Achtung! Die Installation sollte nur von qualifiziertem Kundendienstpersonal gemäß jeweils zutreffender Elektrovorschriften ausgeführt werden.

Unterbrechung des Netzanschlusses. Geräte mit oder ohne Netzschalter haben Spannung am Gerät anliegen, sobald der Netzstecker in die Steckdose gesteckt wird. Das Gerät ist jedoch nur betriebsbereit, wenn der Netzschalter (EIN/AUS) auf EIN steht. Wenn das Netzkabel aus der Steckdose gezogen wird, ist die Spannungszuführung zum Gerät vollkommen unterbrochen.

Precauciones de Seguridad

PRECAUCIÓN: PARA DISMINUIR EL RIESGO DE DESCARGA ELÉCTRICA, NO RETIRE LA CUBIERTA (NI LA PARTE POSTERIOR). NO EXISTEN PIEZAS DE RECAMBIO EN EL INTERIOR DEL EQUIPO. EL PERSONAL DE SERVICIO CUALIFICADO SE ENCARGA DE REALIZAR LAS REPARACIONES.

Este símbolo indica que existen puntos de tensión peligrosos sin aislamiento dentro de la cubierta de la unidad. Estos puntos pueden constituir un riesgo de descarga eléctrica.

El usuario debe consultar las instrucciones de funcionamiento y mantenimiento (reparación) en la documentación que se suministra con el aparato.

Atención: la instalación la debe realizar únicamente personal cualificado de conformidad con el National Electric Code o las normas aplicables en su país.

Desconexión de la alimentación. Las unidades con o sin interruptores de encendido/apagado reciben alimentación eléctrica siempre que el cable de alimentación esté conectado a la fuente de alimentación. Sin embargo, la unidad sólo funciona cuando el interruptor está en la posición de encendido. El cable de alimentación es la principal fuente de desconexión de todas las unidades.

Veiligheidsmaatregelen

VOORZICHTIG

GEVAAR VOOR ELEKTRISCHE SCHOK. NIET OPENEN!

VOORZICHTIG: OPEN DE BEHUIZING OF DE ACHTERKANT VAN HET APPARAAT NIET. ZO VERMINDERT U HET RISICO OP ELEKTRISCHE SCHOKKEN. IN HET APPARAAT BEVINDEN ZICH GEEN ONDERDELEN DIE U ZELF KUNT REPAREREN. LAAT SERVICE EN ONDERHOUD UITVOEREN DOOR GEKWALIFICEERD PERSONEEL.

Dit symbool geeft aan dat er binnen in het apparaat ongeïsoleerde, gevaarlijke spanning aanwezig is die mogelijk elektrische schokken kan veroorzaken.

De gebruiker dient de bedienings- en onderhoudsvoorschriften te raadplegen in de documentatie die werd meegeleverd met het apparaat.

Attentie: het apparaat mag alleen door gekwalificeerd personeel worden geïnstalleerd. De installatie dient in overeenstemming met de nationale elektrische richtlijnen of de van toepassing zijnde lokale richtlijnen te worden uitgevoerd.

Spanning uitschakelen. Apparatuur met of zonder aan-uitschakelaar staat onder spanning zolang de stekker is aangesloten op de wandcontactdoos. De apparatuur is uitsluitend in werking als de aan-uitschakelaar aan staat. Het netsnoer is de "hoofdschakelaar" voor alle apparatuur.

Medidas de Segurança

CUIDADO

RISCO DE CHOQUE ELÉCTRICO. NÃO ABRIR!

CUIDADO: PARA REDUZIR O RISCO DE CHOQUE ELÉCTRICO, NÃO RETIRE A TAMPA (OU A PARTE POSTERIOR). NO INTERIOR, NÃO EXISTEM PEÇAS QUE POSSAM SER REPARADAS PELO UTILIZADOR. REMETA A ASSISTÊNCIA PARA OS TÉCNICOS QUALIFICADOS.

Este símbolo indica a presença de "tensão perigosa" não isolada dentro da estrutura do produto, o que pode constituir risco de choque eléctrico.

O utilizador deve consultar as instruções de funcionamento e manutenção (assistência) nos documentos que acompanham o aparelho.

Atenção: a instalação deve ser executada apenas por técnicos qualificados da assistência, de acordo com o código eléctrico nacional ou os códigos locais aplicáveis.

Corte de corrente. As unidades com ou sem interruptores ON-OFF (ligar/desligar) recebem corrente sempre que o fio de alimentação está introduzido na fonte de alimentação; contudo, a unidade apenas está operacional quando o interruptor ON-OFF está na posição ON. O fio de alimentação destina-se a desligar a corrente em todas as unidades.

Sicurezza

ATTENZIONE

PERICOLO DI SCOSSA ELETTRICA. NON APRIRE.

ATTENZIONE: PER RIDURRE IL RISCHIO DI SCOSSE ELETTRICHE NON RIMUOVERE LA COPERTURA (O IL PANNELLO POSTERIORE). L'UNITÀ NON CONTIENE COMPONENTI INTERNI RIPARABILI DALL'UTENTE. PER QUALSIASI INTERVENTO, RIVOLGERSI A PERSONALE TECNICO QUALIFICATO.

Questo simbolo indica la presenza di "tensione pericolosa" non isolata all'interno del contenitore del prodotto. Ciò comporta un potenziale rischio di scosse elettriche.

Si consiglia di consultare le istruzioni operative e di manutenzione (interventi tecnici) contenute nella documentazione fornita con il dispositivo.

Attenzione: l'installazione deve essere effettuata esclusivamente da personale tecnico qualificato in conformità con il National Electrical Code o con le normative locali vigenti.

Scollegamento dell'alimentazione. Le unità dotate o sprovviste di interruttori ON-OFF vengono alimentate quando si inserisce il cavo nella presa dell'alimentazione. L'unità è tuttavia in funzione solo quando l'interruttore ON-OFF si trova nella posizione ON. Il cavo di alimentazione costituisce il dispositivo di scollegamento dell'alimentazione principale per tutte le unità.

安全预防措施

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN!

注意：为避免受到电击，不要拆除机盖（或后盖）。用户不得擅自维修里面的部件。有关维修事项，请咨询合格的维修人员。

此符号表示产品机壳内存在未绝缘的“危险电压”。这可能导致电击。

用户应参照设备附带的操作和维护（维修）说明。

注意：安装须由合格的维修人员遵照美国国家电工标准或相关电气规则进行。

断开电源。在电源线插入电源时，配备或未配备 ON-OFF 开关的设备都已通电；但设备只有在 ON-OFF 开关处于 ON 位置时才能工作。对于所有设备，电源线是断开电源的主要方式。

Table of Contents

1 INTRODUCTION TO THE INTUIKEY DIGITAL KEYBOARD SERIES

1.1 Guide to this Manual

This manual contains all the information necessary to safely install and operate the IntuiKey Digital Keyboard. Consult the Table of Contents for a detailed list of topics covered. Step-by-step procedures, illustrations, and sample menus guide you through each phase of IntuiKey setup and operation.

Throughout the manual, you will see sample drawings of each menu as they appear on the keyboard. These drawings display the softkey text in relation to the *Softkey*. For the purposes of this manual, each key is numbered from 1 to 14, using the convention found in FIGURE 1-1.

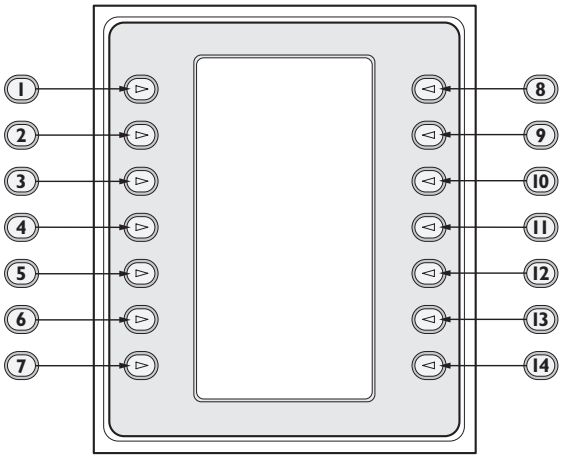


FIGURE 1-1 Softkey Numbering Guide

Following the menu diagram, the function of each key is described in a paragraph indicated with an Icon such as " ① " clearly identifying the particular softkey.

Installation of the IntuiKey includes mounting and connecting the unit to other system components. The *plug and play* design makes installation and setup of the unit quick and easy.

Operating instructions are provided in several sections of the manual. SECTION 3 covers basic keyboard *navigation*, while SECTIONS 4 through 6 are devoted specifically to keyboard control of the products. *Be aware that some instructions are model-specific; be sure to read the appropriate information for your IntuiKey model.*

The Appendices of this manual contain a complete listing of the IntuiKey System Control menus.

1.2 Unpacking

Unpack carefully. This electronic equipment should be handled with care to prevent damage to the unit. Check for the following items:

- IntuiKey Keyboard with Integral Joystick
- Instructions for Use (manual)
- 10 ft (3 m) power cable(s)
- 390 Ω Terminator (p/n 303-2728-001)

If any items appear to have been damaged in shipment, replace the item(s) properly in the shipping carton and notify the shipping company. If any items are missing, notify your Bosch Security Systems Sales Representative or Customer Service Representative.

NOTE: The shipping carton is the safest container in which to transport the unit. Save it and all packing materials for future use.

1.3 Service

If the unit needs servicing, contact the nearest Bosch Security Systems Service Center for authorization to return and shipping instructions.

Service Centers

USA
Phone: 800-366-2283 or 717-735-6638
Fax: 800-366-1329 or 717-735-6639
CCTV Spare Parts
Phone: 800-894-5215 or 408-956-3853 or 3854
Fax: 408-957-3198
E-mail: BoschCCTVparts@ca.slr.com
Canada
Phone: 514-738-2434
Europe, Middle East & Asia Pacific Region
Phone: 32-1-440-0711
For additional information, see www.boschsecurity.com.

1.4 Understanding the IntuiKey

The IntuiKey provides easy, full-function system control and programming of a variety of BoschCSI security products including Allegiant Switchers, Divar Series digital video recorders, System4® Multiplexers, VCRs and the ADIM integrated Allegiant/Hi-Q™ digital recording system. System cameras can be controlled through any of these devices linked to the keyboard. *Backwards compatibility* with existing Bosch products enables the IntuiKey's integration into almost any system configuration (no additional devices/interfaces necessary).

The IntuiKey user interface simplifies system programming by providing intuitive menus, allowing easy and flexible system control navigation. Using the optional KBD-SFTCFG software package (sold separately), customized menu screens can be programmed to activate Allegiant Command Script macro functions. In addition, this PC-based software supports individualized labeling of the softkey text displays.

The IntuiKey is available in two models, each with an integral, variable speed pan/tilt/zoom joystick. The KBD-Universal provides control of any combination of system components, including Allegiant Switchers, Divar DVRs, and System4 Multiplexers. The KBD-Universal model also supports the ability to operate in a Terminal mode. In Terminal mode, the operation of the keyboard is completely controlled by third-party software via an RS-232 interface. The KBD-Digital provides control of Divar digital video recorders and System4 Multiplexers. Optional equipment available from Bosch for use with the IntuiKey Keyboards includes an external power supply, rack mount kit, and keyboard extenders.

The following chart provides basic operating specifications:

SPECIFICATIONS

Electrical

Operating

Voltage: 12 – 15 VDC (supplied by any one or combination of Allegiant switcher, Divar digital video recorder, System4 Multiplexer, and/or optional power supply).

Power: 5 Watts Nominal.

Signal:
A: Allegiant; 2 wire RS-485, 9600 Baud, 8 bits, No parity, 1 Stop bit.
B: Mux/DVR; 2 wire RS-485, 19,200 Baud, 8 bits, No parity, 1 Stop bit.
C: RS-232 Serial Port; RS-232 RTS/CTS Handshaking, 9600/19,200 Baud, 8 bits, No parity, 1 Stop bit.

Mechanical

Construction

Finish:	Charcoal	
Width:	12.00 in	327.66 mm
Depth:	7.518 in	190.95 mm
Height:	2.969 in	75.41 mm
Weight:	2.62 lb	1.19 kg

Connectors:
A: Allegiant RJ-11 Data/Power.
B: MUX/DVR RJ/11 Data/Power.
C: Aux Power (Optional) 12 VDC Bayonet Plug.
D: RS-232 Serial Port; Male Null Modem 9-pin Dsub. Data Only.

Compatibility Backwards compatible with all Allegiant systems utilizing variable speed protocol (CPU Firmware 5.3 and higher, released 6/94). Compatible with all Divar Series of digital video recorders. Backwards compatible with all System4 Multiplexers.

2 INSTALLING THE INTUIKEY DIGITAL KEYBOARD

2.1 Determining the IntuiKey System Configuration

Before the IntuiKey is mounted or connected to other system components, system configuration must be determined.

The IntuiKey is capable of controlling up to thirty (30) multiplexers/DVRs and one (1) video switcher simultaneously. FIGURE 2-1 illustrates basic IntuiKey system configuration with these devices. If more than one IntuiKey is to be connected to a single multiplexer or group of daisy-chained multiplexers, a keyboard port expander must be added. The Allegiant Series of video switchers have a varying number of keyboard ports depending on model number. If more than eight keyboards are required on one of the larger Allegiant Series Switchers, an Allegiant keyboard expander must be added.

NOTE: Bosch offers the following Keyboard Expanders:

- For Use with Allegiant Series Switchers:

  LTC 8714 – Keyboard Port Expander

  LTC 8715 – Keyboard Expander

- For Use with Divar Series DVRs, or System4 Video Multiplexers:

  LTC 2604 – Keyboard Port Expander

Please contact your Bosch Security Systems Sales Representative for more information.

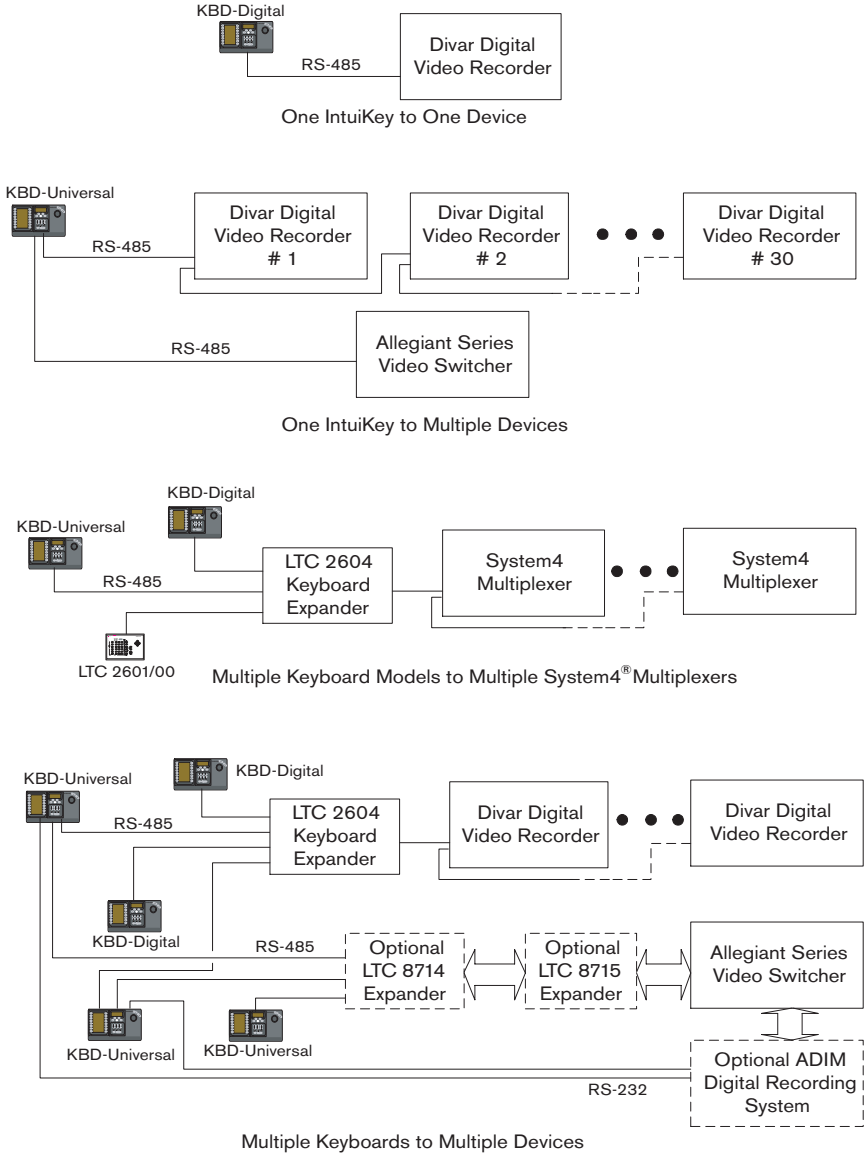


FIGURE 2-1 Basic IntuiKey System Configurations

System power connections must also be considered. Depending on the distance between the keyboard and devices under control, an external power supply may be needed according to the following specifications:

Distance from Keyboard to Device under Control*	Optional Equipment Needed
Less than 10 ft (3.5 m)	NONE
Between 10 ft (3.5 m) and 100 ft (30 m)	KBD-120PS/KBD-220PS External Power Supply
Greater than 100 ft (30 m)	LTC 8557/60(50) Keyboard Extender

*NOTE: Distances may vary depending on the number of keyboards connected.

2.2 Mounting the IntuiKey

The IntuiKey LCD displays are readable in all but direct sunlight conditions. Locate the keyboard on a flat horizontal surface, with an optimal LCD viewing angle of 0 to 20 degrees from vertical. Display contrast levels are software-controlled and may be adjusted via the *Keyboard Control* Menu (as described in SECTION 3.4). An optional rack mount kit may also be used.

2.3 Connecting to the IntuiKey

1. Refer to FIGURE 2-2 for details on the input/output connections supplied by the IntuiKey Keyboard. Four connectors are located on the IntuiKey rear panel: (2) RJ-11 connectors, (1) female 9-pin sub-D connector, and a DC power jack. The RJ-11 connectors are labeled as Allegiant and MUX/DVR, and the 9-pin sub-D is labeled **RS-232 Serial Port.**

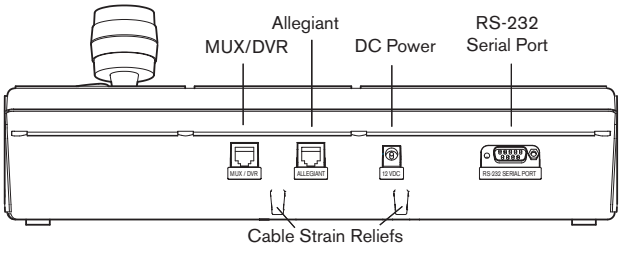


FIGURE 2-2 Back Panel Connections of IntuiKey

ATTENTION: To ensure proper system functioning and to prevent damage to the unit, it is critical that only Allegiant devices be connected to the Allegiant connector, and Multiplexer/DVR devices be connected to the MUX/DVR connector.

2. If desired, the data/power cables can be looped through either of the two tabs found at the bottom of the rear panel to increase strain relief capabilities.

3. Review the configuration options shown in FIGURE 2-4. Make the necessary keyboard data and power connections that are best suited to your system requirements based on these diagrams. When connecting to Divar DVRs or System4 Multiplexers, attach the supplied 390 Ohm terminator to the **Out** connector on the last device.

NOTE: In systems having multiple Divar DVRs or multiple System4 Multiplexers, use the front panel controls on the video devices to assign appropriate address numbers and starting camera numbers. The IntuiKey will not properly recognize the video devices if there are conflicting addresses in the system.

4. After power is applied, the keyboard initializes and displays the following:

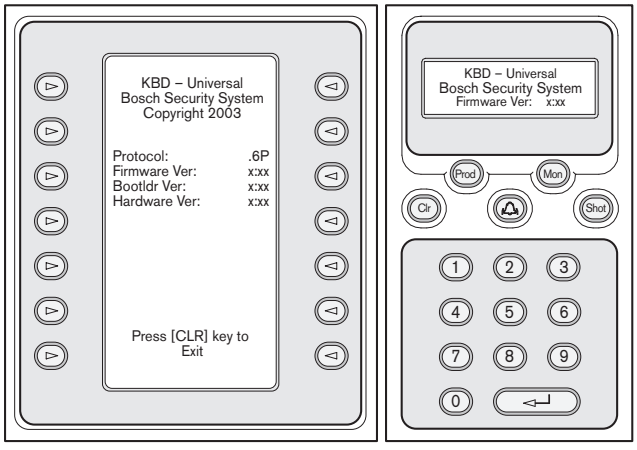
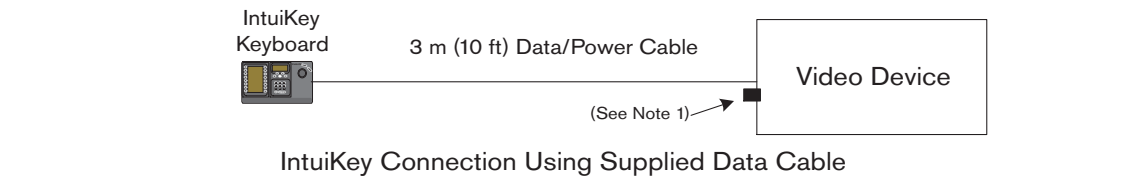


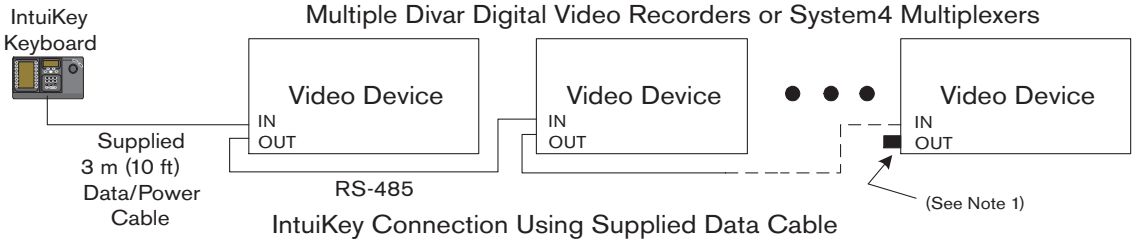
FIGURE 2-3 Initial Power-up Display

5. After a brief pause (or immediately after the **CLR** button is pressed), the keyboard will perform a brief search for connected devices.

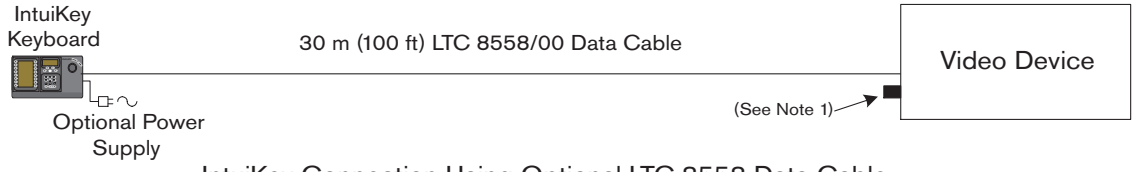
NOTE: On initial power-up, factory reset, or firmware upgrade, the IntuiKey displays a *Language* Menu. Select the desired language by pressing the softkey next to the language title. If additional languages are available, the arrow softkeys at the bottom of the screen can be used to scroll to a second menu screen.



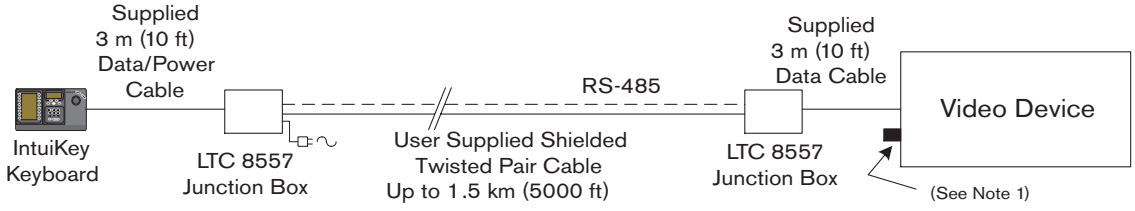
IntuiKey Connection Using Supplied Data Cable



IntuiKey Connection Using Supplied Data Cable



IntuiKey Connection Using Optional LTC 8558 Data Cable



IntuiKey Connection Using Optional LTC 8557 Remote Hookup Kit

FIGURE 2-4 Typical Intuikey Connection Options

NOTE 1: Attach the supplied 390 Ohm terminator to the **Out** connector when using Divar Digital Video Recorders or System4 Multiplexers.

2.4 KBD-Universal (RS-232 Protocol) Installation

2.4.1 General

The KBD-Universal keyboard can be connected to either an Allegiant LTC 8712 Series Console Port Expander accessory unit, or the 9-pin Console or Printer (if equipped) RS-232 port on the back of the Allegiant system. The keyboard may be connected via hardwired cable, dial-up modem, or using another type of communication system conforming to standard RS-232 transmission.

For each keyboard being installed, a user-supplied 9-pin mating connector, and user-supplied cable suitable for use with RS-232 signals is required.

NOTE: To configure the IntuiKey to operate using Allegiant RS-232 protocol, enter the *Keyboard Control* menu and press the **protocol** button. Enter the password (see APPENDIX C) to change the protocol mode from RS-485 to RS-232.

Refer to the most applicable configuration diagram.

2.4.2 Keyboard Number Assignments When Using RS-232 Model Keyboards

Use of RS-232 protocol keyboards does not increase the total number of keyboards that can be connected to an Allegiant switcher. When an RS-232 keyboard is connected in the system, a standard keyboard port will automatically become disabled. The disabled keyboard port number will be based on the interface connection type of the RS-232 keyboard. Keeping track of these keyboard numbers is necessary when priority-based restrictions, or other keyboard related lockouts, are assigned and used in the system.

The table below indicates which keyboard number will be assigned, based on the connection being used.

Keyboard Connection Type	Keyboard Number
Direct to Console port	1
Direct to Printer port	5
Port 1 of Expander, when Expander is connected to Console port	1
Port 2 of Expander, when Expander is connected to Console port	2
Port 3 of Expander, when Expander is connected to Console port	3
Port 4 of Expander, when Expander is connected to Console port	4
Port 1 of Expander, when Expander is connected to Printer port	5
Port 2 of Expander, when Expander is connected to Printer port	6
Port 3 of Expander, when Expander is connected to Printer port	7
Port 4 of Expander, when Expander is connected to Printer port	8

2.4.3 Allegiant System Command Scripts for RS-232 Model Keyboards

When a keyboard is being connected to an Allegiant's Console port, or an Allegiant Printer port configured to operate in the Console mode, the Allegiant must be preprogrammed so the port will operate in the RS-232 keyboard mode.

The mode of the Allegiant's Console port can be changed either by a manually entered ASCII text command, or preprogramming the Allegiant CPU with an Allegiant Command Script. The Command Script method is preferred since the appropriate settings are automatically restored after a system power loss or reset. Manually entered commands remain valid only until the system is reset or powered off/on, so typically they should be used only for temporary or test purposes.

To manually configure an Allegiant's Console port to operate in the keyboard mode, it is necessary to connect to the system via Windows® HyperTerminal or another dumb terminal emulator.

NOTE: Allegiant Console and Printer RS-232 ports do not use a standard RS-232 pinout. Use of an Allegiant Console cable LTC 8506/00 is recommended as seen in the below pinout diagram.

9-Pin Male (CONSOLE)	Allegiant Designation	9-Pin Female (PC)
1	Chassis GND	None
2	RX	3
3	TX	2
4	CTS	1
5	RTS	8
6	No Connection	None
7	Data GND	5
8	No connection	None
9	No connection	None
		Pins 4 & 6 are Jumped
		Pins 1 & 7 are Jumped

The Allegiant RS-232 settings are user-programmable, but the default settings are:

- Baud 19,200
- Stop bits 1
- Data bits 8
- Parity None
- Handshake None

Once online with the system, an Allegiant prompt appears each time Enter is pressed. The prompt will look as follows:

TC8x00 >

where x is a digit from one to nine (varies based on the Allegiant model being interfaced)

At the system prompt, manually enter the appropriate command, based on the Allegiant port in use, and type of keyboard interface. Refer to the table below to determine the correct command. Enter the command exactly as shown below, then press ENTER.

Keyboard interface connection type
Direct to Console port (except LTC 8900) **Command:** SET-PORT-RS232 0 4 8 0 1 0;_SET_KBD_MODE 0 1
Direct to Printer port (except LTC 8900) **Command:** SET-PORT-RS232 4 4 8 0 1 0;_SET_KBD_MODE 4 1
Modem connected to Console port (except LTC 8900) **Command:** SET-PORT-RS232 0 4 8 0 1 1;_SET_KBD_MODE 0 1
Modem connected to Printer port (except LTC 8900) **Command:** SET-PORT-RS232 4 4 8 0 1 1;_SET_KBD_MODE 4 1
Direct to Controller port (LTC 8900 only) **Command:** SET-PORT-RS232 0 4 8 0 1 0;_SET_KBD_MODE 0 1
Direct to Console port (LTC 8900 only) **Command:** SET-PORT-RS232 4 4 8 0 1 0;_SET_KBD_MODE 4 1
Modem connected to Controller port (LTC 8900 only) **Command:** SET-PORT-RS232 0 4 8 0 1 1;_SET_KBD_MODE 0 1
Modem connected to Console port (LTC 8900 only) **Command:** SET-PORT-RS232 4 4 8 0 1 1;_SET_KBD_MODE 4 1

After entering the command, the port will immediately begin to operate in the keyboard mode. The port will generate a series of constantly repeating codes. The setting remains in effect until the system is reset, powered off/on, or manually cancelled by entering **Ctrl**-**C** several times, using Windows HyperTerminal program operating at 9600 baud.

If using the LTC 8059 Master Control Software, while online, select the Command Script tab and enter the script for your connection type exactly as it appears in the next table:

Keyboard interface connection type	Command Script
Direct to Console port (except LTC 8900)	Begin @boot SET-PORT-RS232 0 4 8 0 1 0 _SET_KBD_MODE 0 1 break
Direct to Printer port (except LTC 8900)	Begin @boot SET-PORT-RS232 4 4 8 0 1 0 _SET_KBD_MODE 4 1 break
Modem connected to Console port (except LTC 8900)	Begin @boot SET-PORT-RS232 0 4 8 0 1 1 _SET_KBD_MODE 0 1 break
Modem connected to Printer port (except LTC 8900)	Begin @boot SET-PORT-RS232 4 4 8 0 1 1 _SET_KBD_MODE 4 1 break
Direct to Controller port (LTC 8900 only)	Begin @boot SET-PORT-RS232 0 4 8 0 1 0 _SET_KBD_MODE 0 1 break
Direct to Console port (LTC 8900 only)	Begin @boot SET-PORT-RS232 4 4 8 0 1 0 _SET_KBD_MODE 4 1 break
Modem connected to Controller port (LTC 8900 only)	Begin @boot SET-PORT-RS232 0 4 8 0 1 1 _SET_KBD_MODE 0 1 break
Modem connected to Console port (LTC 8900 only)	Begin @boot SET-PORT-RS232 4 4 8 0 1 1 _SET_KBD_MODE 4 1 break

After the script has been entered, download the script into the Allegiant CPU. Reset the system by powering the CPU off/on, or by entering **Keyboard User Function 15** on an operating keyboard. The specified port will begin to operate in the keyboard mode. The port will remain in the keyboard mode unless manually cancelled by entering **Ctrl**-**C** several times using Windows HyperTerminal program, operating at 9600 baud.

The keyboard can now be physically connected to the Allegiant according to details shown in FIGURE 2-5.

Once the keyboard is in communication with the Allegiant, camera and monitor numbers will appear in the LED displays.

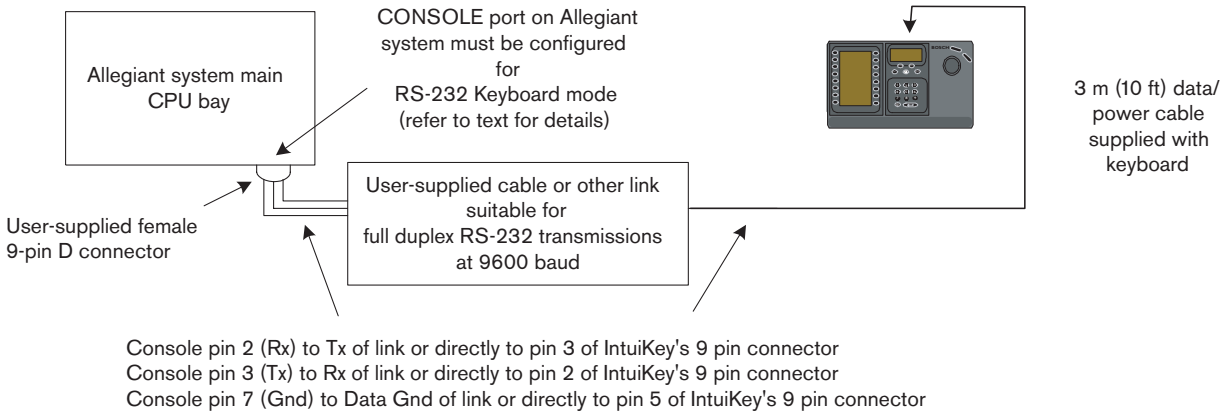


FIGURE 2-5: Direct Connection to Allegiant's Console/Printer Port

The modem on the Allegiant side must be set to an *auto answer* mode, and the modem on the keyboard side must be set to an *originate* mode. The modem must also be programmed to dial the phone number or otherwise initiate the connection to the other modem. In some cases, modem settings are configured via dipswitches found on the back of the modem. In other cases, the modem must be connected to a PC for configuration. The below settings represent the dipswitch configuration required for US Robotics Sportster modems.

Allegiant side Modem			Keyboard side Modem	
Dip Switch	Setting	Modem Function	Dip Switch	Setting
1	DOWN	DTR Override	1	DOWN
2	UP	Verbal Result Codes	2	UP
3	DOWN	Display Result Codes	3	DOWN
4	UP	Echo Offline Commands	4	UP
5	DOWN	Suppress Auto Answer	5	UP
6	DOWN	Carrier Detect Override	6	UP
7	DOWN	Load Factory Defaults	7	DOWN
8	DOWN	Smart Mode	8	DOWN

2.4.4 Console Expander Configuration When Using RS-232 Model Keyboards

RS-232 model keyboards may be connected to an Allegiant system using the LTC 8712 Series Console Port Expander, as shown in FIGURE 2-6. An LTC 8712 Series Console Port Expander can be configured to support up to four RS-232 Keyboard connections. Other devices, such as a PC running the Allegiant Master Control software, can be connected to the unused ports of the Port Expander. Because the Port Expander supports only a single baud rate for the external connections, and the RS-232 keyboards require 9600 baud, all external devices connecting to the Port Expander must be configured to for operation at this setting.

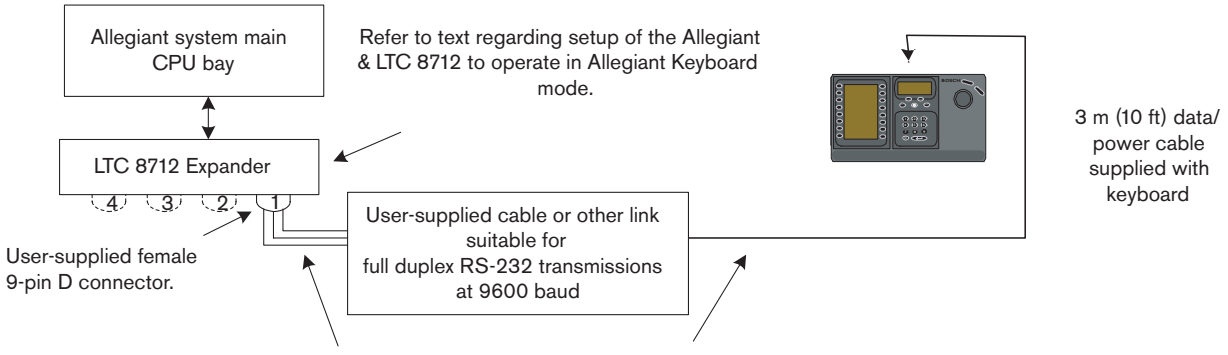


FIGURE 2-6: Configuration using LTC 8712 Series Console Port Expander

On Allegiant systems with a Printer port, up to two Console Port Expanders can be connected, supporting a total of eight RS-232 model keyboards.

To configure an Allegiant system to operate with an LTC 8712 Console Port Expander, you must have access to the Allegiant CPU's dipswitches, the PC-based LTC 8059 Master Control Software, and possibly an Allegiant keyboard.

To convert an Allegiant Console port using a CPU dipswitch method, set dipswitches 3 and 4 to the ON position on CPU dipswitch S100, S1001, or S0201 (the switch number depends on the Allegiant model being used). After a system reset (power off/on, for example), the Allegiant's Console port is forced into the Port Expander mode, and the RS-232 data rate is automatically set to 57,600 baud. To convert an Allegiant Console port via the Master Control Software, connect to the Allegiant and go online. Select the Parameter tab, and then the Options tab. Check the box labeled Set Console Port to Port-Expander mode. Download the table into the Allegiant.

To convert an Allegiant Printer port to operate in the Port Expander mode, first configure the Printer port to operate as a Console port. This is done by setting dipswitch 4 to the ON position on CPU dipswitch S101, S1002, or S0202 (the switch number depends on the Allegiant model being used). After a system reset (power off/on, for example), the Printer port will begin to operate as a Console port. Next, use either the Allegiant Keyboard User Function 38 or the Master Control Software to change the port to the Port Expander mode. If using the Master Control Software, connect to the Allegiant and go online. Select the Parameter tab, and then the Options tab. Check the box labeled Set Printer Port to Port-Expander mode. Download the table into the Allegiant.

Set the internal dipswitches of the LTC 8712 Console Port Expander as follows:

Dip Switch	Position	Comment
401.1	ON (Down)	57,600 baud for System communication
401.2	ON	Handshaking enabled for System communication
401.3	OFF	Reserved
401.4	OFF	Reserved
401.5	ON	To enable Port 1 for RS-232 Keyboard mode
401.6	ON	To enable Port 2 for RS-232 Keyboard mode
401.7	ON	To enable Port 3 for RS-232 Keyboard mode
401.8	ON	To enable Port 4 for RS-232 Keyboard mode
402.1	OFF	9600 Baud for external communications
402.2	ON	9600 Baud for external communications
402.3	OFF	Handshake disabled for external communications
402.4	OFF	1 Stop Bit for external communications
402.5	OFF	No parity for external communications
402.6	OFF	No parity for external communications
402.7	OFF	8 data Bits for external communications
402.8	OFF	Reserved

Remember to power the Console Port Expander off/on whenever any changes are made to its internal dipswitches.

Connect the data cable supplied with the LTC 8712 Console Port Expander between the unit and the appropriately configured port on the Allegiant. For further details refer to the instructions supplied with the LTC 8712 Port Expander unit.

The RS-232 keyboard can now be connected to the appropriate port of the Port Expander, as shown in FIGURE 2-6.

2.4.5 Login Feature When Using RS-232 Model Keyboards

The Allegiant's keyboard login feature is not affected by use of RS-232 keyboards. If desired, this feature can be enabled to provide additional security to the system. Note that it is not possible to use the Allegiant's Console port login feature. The RS-232 keyboards must have unrestricted access to the Allegiant's RS-232 ports.

2.5 IntuiKey Terminal Mode

When the IntuiKey KBD-Universal is operating in Terminal mode, its behavior is completely determined by the third-party software running on a PC. All communication between the KBD-Universal Series keyboard and the third-party PC is performed through an RS-232 interface. The following diagram illustrates this configuration:

FIGURE 2-7 Terminal Mode

This connection requires a standard Null modem RS-232 link. If desired, the Bosch Security Systems cable S1385 can be used. Connect one end of the RS-232 interface cable to the 9-pin RS-232 Serial Port located on the far right side of the rear of the KBD-Universal keyboard. Connect the other end of the RS-232 interface cable to a COM port on the PC.

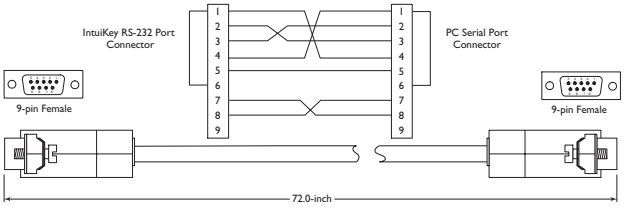


FIGURE 2-8 S1385 Cable Pinout

3 OPERATING THE INTUIKEY DIGITAL KEYBOARD

3.1 Learning the IntuiKey Components

Learning the IntuiKey Keyboard components is accomplished easily by dividing the keyboard into four separate functional areas as shown in FIGURE 3-1:

- The Status Display
- The Keypad
- The Softkeys and Softkey Display
- The Joystick

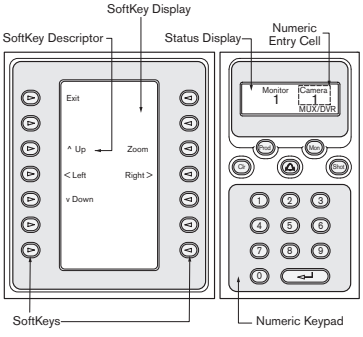


FIGURE 3-1 IntuiKey Components

3.1.1 The Status Display

The Status Display changes dynamically to display pertinent information about the keyboard's present mode of operation. Typically, its information conveys one of two keyboard operating modes: *Normal Mode* or *Error Code*.

In *Normal Mode*, the status display provides data pertaining to the present device under control (e.g. monitor number, camera number, device under control status, etc.). Common elements in the display for all devices are a product indicator centered on the bottom line of the display and one or more numeric entry cells. Each numeric entry cell has a title that describes what the number represents.

When a user operation results in an error, the status display changes to *Error Code* (see SECTION 4.3 for Allegiant Error Messages, SECTION 4.4 for ADIM Error Messages, SECTION 5.3 for Divar Error Messages, and SECTION 6.3 for MUX Error Messages). The display shows the error number, a short description of the error, and the present device under control.

The display reverts to *Normal Mode* either automatically in two seconds (on its own) or when CLR is pressed.

In *Terminal Mode*, the third-party software application determines the displayed text via the IntuiKey display screen.

3.1.2 The Keypad

The **Keypad** includes the five function buttons (located directly below the status display), as well as the numeric keypad.

PROD displays the keyboard's *Product Selection* menu. This function key (in conjunction with the Softkeys/Softkey Display) selects the device under the control of the keyboard. The *Product Selection* menu also provides access to the *Keyboard Control* menu.

MON functioning depends on the IntuiKey Model and device under control. For KBD-Universal keyboards, **MON** allows entry of a Monitor Number when controlling an Allegiant Switcher. When controlling a DVR or multiplexer, **MON** toggles between monitors A and B.

CLR clears any numeric entry and the display reverts to *Normal Mode*.

provides acknowledgement of an external alarm/alert/action condition. When this condition is detected, an audible alarm is enabled, and the key flashes red. The key then functions differently depending on the device presently under keyboard control.

NOTE: Refer to SECTION 3.3 for additional information on alarm/alert/action indication and acknowledgement.

SHOT allows selection of camera pre-positions and is also used to assign softkey display screen numbers. Pressing **SHOT** twice enters the preposition programming entry mode. If **SHOT** is pressed twice inadvertently, press **SHOT** again to return to the pre-position selection mode.

To avoid inadvertent mode changes, hold the **SHOT** button down for 2 seconds so it does not become **SET**.

The **Numeric Keypad** allows numeric entry (shown in the status display) as required by the present function. Note that the *default state* of the Keypad is camera entry (i.e. pressing a numeric key places that number in the status display under the camera title).

In *Terminal Mode*, the third-party software application will determine the IntuiKey's behavior.

3.1.3 The Softkeys and the Softkey Display

The Softkeys and Softkey Display allow easy and flexible control and programming of system devices under keyboard control.

The **Softkey Buttons** are located on either side of the softkey display. Each softkey may have a special descriptor associated with it that consists of up to three lines of ten characters. Pressing a softkey initiates the action described by the associated text. The actual on-screen display may vary depending on the model being controlled.

The **Softkey Display** associates commands with the softkey buttons. The commands shown in the display changes depending on the operational mode of the keyboard and previous softkey selections. Note that the softkey display initially shows a default menu tailored to the device under control. This initial menu contains softkey functions that represent commonly used commands, as well as keys that represent links to other command menus.

In *Terminal Mode*, the third-party software application determines the displayed text via the IntuiKey display screen.

3.1.4 The Joystick

The **IntuiKey Joystick** provides three levels of system functionality: control of pan/tilt/zoom for an external camera, navigating the on-screen programming menus of the Allegiant Video Switchers, AutoDome® Series Cameras and other devices, and playback control when operating DVR devices. Use of the joystick to control playback of DVR devices is covered later in this manual.

Moving the joystick in one of eight directions provides pan/tilt control of appropriately equipped cameras. Rotating the knob in either a clockwise or counterclockwise direction provides lens zoom control.

Focus and **Iris Control,** located above and to the right of the joystick, are rocker-style buttons that provide keyboard control of camera lens focus (near/far) and camera iris function (open/close).

In *Terminal Mode*, operating of the Joystick will send an event to the 3rd party software application which will determine the action.

3.2 Navigating the System with the IntuiKey Keyboard

Learning basic navigation techniques with the IntuiKey ensures readiness for control of the system devices. The following procedures are general in nature and may be applied to the control of various system devices/operating modes.

3.2.1 General Guidelines for Navigating the IntuiKey Menus

The following keys are important for entering and exiting the IntuiKey programming/control menus:

- EXIT – This softkey command is located in the upper left corner of each softkey menu. Use this key to move *back* one level in the menu structure (complete menu diagrams are provided in APPENDIX A at the back of this manual).
- PROD – Press **PROD** at any time to return directly to the *Main Product Selection* menu.
- CLR – Press **CLR** to clear any numeric entry and revert the display to *Normal Mode.*

3.2.2 The Product Selection Menu

The *Product Selection* menu lists the devices that are in communication with the IntuiKey. Up to 12 devices can be shown on a single screen. If more than 12 devices are connected, the arrow softkeys at the bottom of the screen can be used to scroll through the additional menu(s).

The softkey to enter the *Keyboard Control* menu can always be found at the very end of the device listings.

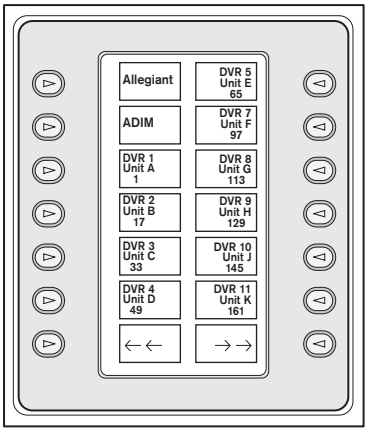


FIGURE 3-2 Main Product Selection Menu

IMPORTANT: When the IntuiKey is first connected up to a device, or whenever a new video device is added to an existing system, enter the *Product Selection* menu and press the **PROD** key. The keyboard will initiate a scan of the communication lines and update the list of devices connected to it.

If communication is ever lost with an existing device, the product name display will indicate an **Off_Line** condition. After communication with the device is restored, this message will disappear.

For multiplexers, the device address number will be shown. For DVRs, the DVR address number, its name, and the starting camera offset number will be displayed.

3.2.3 Selecting a Device for Control

1. Press the **PROD** button to put the keyboard in the *Product Selection Mode.* The softkey display shows the *Product Selection* menu (refer to FIGURE 3-2).
2. Press the desired softkey button adjacent to the desired product name in the display. Upon selection of a system device to be controlled, the keyboard indicates what product it is controlling by displaying its name (up to 10 characters maximum) at the bottom of the status display. The softkey display menu also changes to the top level menu associated with the selected device.

3.2.4 Easy Switching Between Devices

Pressing and holding the **PROD** key for longer than 1 second while using a DVR or multiplexer enters the device address selection mode. Entering the address of a device will cause the keyboard to switch to that device's main menu. If the device address does not exist, an error message will result, and no change will occur.

3.2.5 Using the Keypad for Numeric Entry (Camera Control)

1. Press a desired numeric key to place the number in the status display under the camera title.
2. Note that additional key entries add digits to the RIGHT side of the camera number. If more than the maximum number of digits allowed for the specific entry is entered, the leftmost digit is lost, and all other digits promoted.
3. Leading zeros may be entered but are not required.
4. Press **ENTER** to complete numeric entry.

3.2.6 Using the Quick Selection Softscreen Feature

The IntuiKey softkey display screens can be assigned a reference number which can then be recalled to quickly return to the desired screen.

1. To assign a number to a softkey display screen, first navigate to the desired screen. Simultaneously press the digit **0** and **ENTER** to enter the softkey screen programming mode. Press **SHOT** followed by the single digit (0 to 9) that you want to assign to this screen.
2. To quickly jump to a previously programmed softkey display screen, simultaneously press the digit **0** and **ENTER.** Press the desired softkey display screen number.

NOTE: Ten (10) softkey numbers are available within a single product category. Softkey screen numbers can only jump between screens within the same product category. If an existing softkey screen number is assigned to a new softkey screen, the old one is no longer valid. Assignments remain even if power is lost.

3.3 Alarm/Alert/Action Indication

When the IntuiKey detects that an alarm/alert/action condition has occurred on the presently controlled device, the key flashes red and an audible tone is heard. During alarm responses, Divar DVRs and System4 multiplexers will also show special icons to represent the different types of alarm conditions. Contact type alarm conditions will be represented by a icon, and action alarm conditions will be represented by a icon. To silence an alarm, press the Alarm/Alert/Action key.

If the alert occurs on a device that is not presently under control, the product indicator (in the status display) alternates between the present product designator and the alarmed product, with the text **ALERT** added. The present product is displayed for two seconds, while the alarmed product is displayed for 0.5 seconds.

NOTE: This functionality is not supported when the IntuiKey is operating in Terminal Mode.

3.4 Configuring the IntuiKey Keyboard

The IntuiKey Keyboard *plug and play* design allows operation to begin as soon as the keyboard is connected to system components. However, if you desire to review the default settings, or wish to change any of these settings, refer to the following information and procedures for the *Keyboard Control Mode.*

3.4.1 Accessing the Keyboard Control Menu

1. Press **PROD** to view the *Product Selection* menu (see FIGURE 3-2).
2. Press the softkey labeled **Keyboard Control.** The **Keyboard Control** softkey can always be found at the very end of the device listings.
3. The Softkey Display shows the **Keyboard Control** main menu (see FIGURE 3-3). A review of the *Keyboard Control* menu options follows.

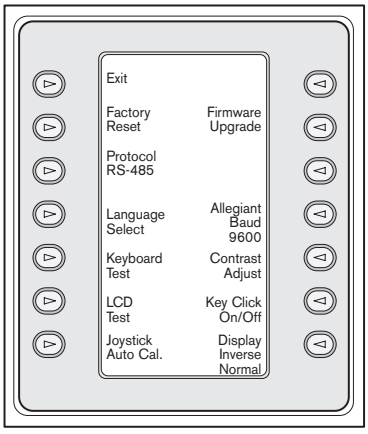


FIGURE 3-3 Keyboard Control Menu

3.4.2 Keyboard Control Menu Options

① Exit

Reverts to the *Product Selection* menu.

② Factory Reset

Resets the keyboard to the following states:

Product Selected	NONE
Key Click	ON
Display Inverse	Normal (black on white)
MUX Destination	Addr 1
Softkey Contrast	9
Status Display Contrast	6
MUX User Level	No Access
Language	NONE
Allegiant Baud	9600

③ Protocol

This password-protected option is used to set the Allegiant communication protocol. Default is RS-485. See APPENDIX C for details on entering passwords.

④ Language Select

For selection of the display language. Choose from the following languages: English, Spanish, French, German, Dutch, Italian, Polish, and Portuguese. Pressing the next or previous arrow jumps between this menu and the *Polish* and *Portuguese option* menu. Additional languages can be downloaded from the IntuiKey section of www.boschsecurity.us. The additional languages are: Czech, Russian, Slovak, Simplified Chinese, Traditional Chinese, and Korean.

Additional information is shown below the language, including its version number, the font table number that it utilizes for its characters, and a schema number that is used for internal control purposes.

⑤ Keyboard Test

Displays a keyboard test screen on the softkey display. Press **ENTER** to exit the keyboard test mode. As each key is pressed, an indicator displays on the screen. If the joystick is moved, its present variable speed value is displayed. Pan and Tilt ranges from 0 to 15; Zoom ranges from 0 to 7.

⑥ LCD Test

Different patterns are displayed on the softkey display, and the alarm LED flashes. Each pattern displays for approximately two (2) seconds.

⑦ Joystick Autocal

Auto-calibrates the joystick (allow the joystick to self-center, then press **ENTER**). The softkey display then indicates **New Values Saved.**

⑧ Not Used

⑨ Firmware Upgrade

Places the keyboard into a password-protected mode that allows upgrade of the internal software via serial connection to a host computer. See APPENDIX C for details on entering passwords.

⑩ Not Used

⑪ Allegiant Baud

This password-protected option is used to set the baud rate of the keyboard's Allegiant port. In most cases, this setting should not be changed unless directed by the factory. The settings must match in both the keyboard and the Allegiant. Two rates are available, 9600 (default) and 19,200. The current setting is displayed on the menu screen.

⑫ **Contrast Adjust**
Displays the *Contrast Adjust* menu which provides two adjustment *scales:* one for the softkey display, and one for the status display. Control each adjustment scale with the adjacent softkey buttons (as indicated by the arrows in the menu). Generally, the buttons to the right of each *scale* decrease the contrast (make the display lighter), while the buttons to the left increase the contrast (make the display darker). The indicator on the scale is incremented (moved) one step for each press of the softkey. The indicator *wraps around* when either limit is reached. When the desired contrast level is reached, press **ENTER** to exit the submenu and store the values. Press **CLR** at any time to reset the contrast to the presently stored value. Pressing **MON** + **CLR** (simultaneously, at any time while using the keyboard) resets the contrast to the center position of the *scale*.

NOTE: It is possible to adjust the contrast to a level where the text cannot be seen. If this happens, simply continue pressing the softkey until the text reappears OR press **CLR** to restore the display to the presently stored values.

⑬ **Key Click On/Off**
Toggles between audible sound at each key click and no sound at each click. Upon pressing the key, the softkey descriptor indicates whether key click is on or off.

⑭ **Display Inverse**
Toggles the display between black-on-white display or white-on-black display. Upon pressing the key, the softkey descriptor indicates whether display inverse is on or off.

4 CONTROLLING ALLEGIANT SERIES VIDEO SWITCHERS

NOTE: This section applies to KBD-Universal Model ONLY.

4.1 The Allegiant Main Control Menu

4.1.1 Accessing the Allegiant Main Control Menu

1. Press **PROD** to put the keyboard in *Product Selection Mode*. The *Product Selection* menu appears in the softkey display.
2. Press the **Allegiant** or **ADIM** softkey button, and observe that the status display shows the Allegiant mode.
3. While in Allegiant mode, keyboard operators can use a convenient "Go Back" feature. To go back to the previously selected camera, simply press and hold the "CLR" key for more than 1 second.

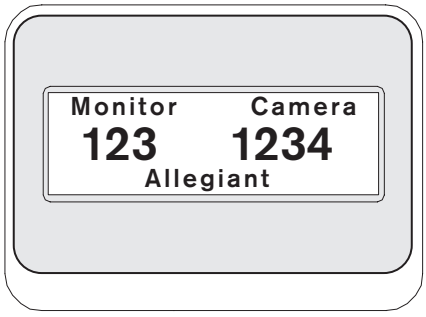


FIGURE 4-1 Status Display in Allegiant Mode

IMPORTANT NOTE REGARDING USER LOG-ON: Depending on the setting of the Allegiant Switcher, it may be necessary to perform a log-on procedure to gain control of the switcher (i.e. to gain access to the *Allegiant Main Control* menu).

- If log-on information is required, the status display requests a **USER NUMBER**. Enter the number using the keypad, and press **ENTER**.
- The status display requests a **PASSWORD**. Enter the password using the keypad, and press **ENTER**.
- If an invalid user number or password is entered, the request for log-on is redisplayed.
- Following successful user log-on, the softkey display shows the *Allegiant Main Control* menu as in FIGURE 4-2.
- If user log-on is NOT required, the softkey display shows **USER LOGGED ON** (briefly), and then displays the *Allegiant Main Control* menu.

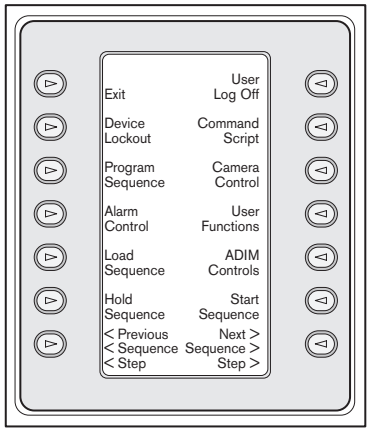


FIGURE 4-2 Allegiant Main Control Menu

4.2 Programming/Controlling Allegiant Functions

4.2.1 Allegiant Main Control Menu Command Descriptions

The *Allegiant Main Control* menu, displayed on the softkey display, uses the softkey buttons to execute commands or to gain access to other submenus for additional programming/configuration. Detailed command descriptions follow. Refer to the **Allegiant Switcher Instruction Book** for additional information.

① **Exit**
Exits one menu and reverts to the *main* menu for the particular function being programmed/controlled.

② **Device Lockout**
Accesses a softkey menu, allowing the locking/unlocking of specified cameras and monitors.

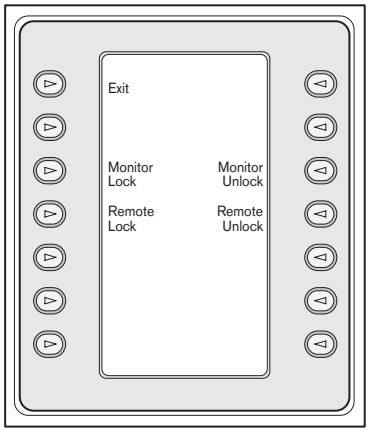


FIGURE 4-3 Device Lockout Menu

a. Monitor Lock/Unlock:

- If the monitor to be locked/unlocked is not the present monitor, press **MON** on the keypad. Then enter the monitor number, followed by **ENTER**.
- Press the monitor **Lock/Unlock** softkey.
- If the monitor is locked, the display shows an **ML** on the monitor's on-screen status display, indicating that the monitor is locked. If the monitor is unlocked, **ML** is removed.

b. Remote Lock/Unlock:

- If the Camera to be locked/unlocked is not the present camera, enter the camera number followed by **ENTER.**
- Press the **Remote Lock/Unlock** softkey.
- If the camera is locked, the display shows an **RL** in the monitor's on-screen status display, indicating that the remote device is locked. If the camera is unlocked, **RL** is removed.

To leave the *device lockout* menu, press **EXIT.**

③ **Alarm Control**
Alarm commands control the system's automatic video switching capabilities in response to alarm signals activated in the Allegiant system. The camera activated by an alarm is normally the same as the alarm number, but this relationship can be changed using the optional LTC 8059/00 Master Control Software for Windows® or the optional LTC 8850/00 Graphical User Interface software package. These optional software packages even permit up to four (4) cameras to be alarmed by a single alarm input.

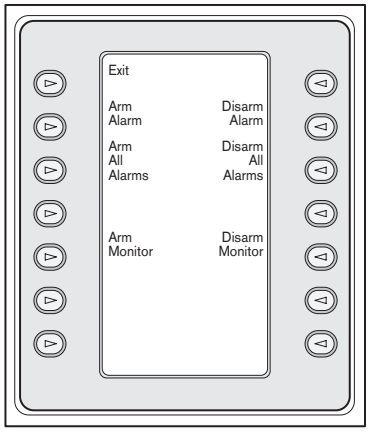


FIGURE 4-4 Alarm Control Menu

a. Arm/Disarm Alarm:
To arm/disarm an individual alarm on the monitor currently controlled by the keyboard:

- Press the **Arm/Disarm Alarm** softkey. The status display changes to the following:

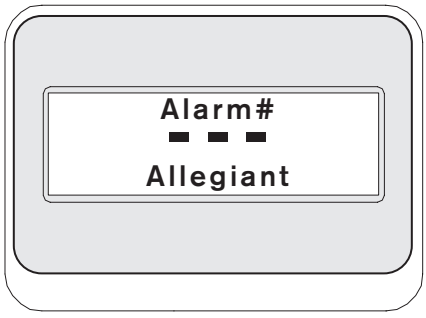


FIGURE 4-5

- Enter the alarm number to be armed/disarmed, using the numeric keypad.
- Press **ENTER.**

b. Arm/Disarm All Alarms:
To arm/disarm all alarms on the currently controlled monitor, simply press the **Arm/Disarm All Alarms** softkey.

c. Arm Monitor:
Press the **Arm Monitor** softkey to arm the monitor currently controlled by the keyboard, permitting cameras for armed alarms to automatically display when an alarm occurs.

NOTE: Alarm video appears on a given monitor only if the monitor is armed and the alarm is armed for that monitor. The on-screen monitor status display shows **MA** (Monitor Armed).

d. Disarm Monitor:
Pressing the **Disarm Monitor** softkey disarms the monitor currently controlled by the keyboard, thus prohibiting the monitor from responding to alarms.

④ Program Sequence
Changes the softkey display and requests entry of a sequence number to program. The status display shows the following:

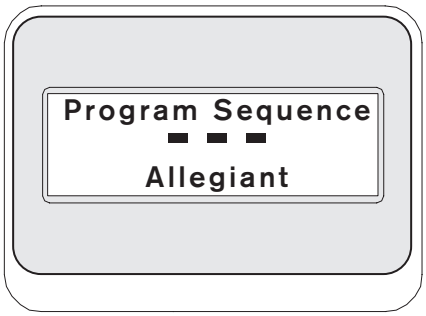


FIGURE 4-6

Upon entry of a sequence number followed by **ENTER**, the softkey display changes to the following menu to support sequence programming:

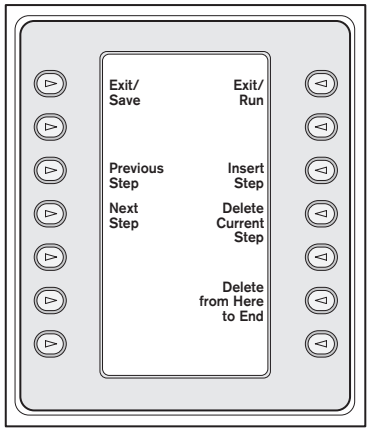


FIGURE 4-7 Program Sequence Menu

Sequence programming is displayed on the controlled monitor screen.

a. Exit/Save
Saves the present sequence and exits the *Program Sequence* menu.

b. Previous Step
Displays the previous sequence step on the OSD (on-screen display) and allows editing.

c. Next Step
Displays the next sequence step on the OSD and allows editing.

d. Exit/Run
Saves the present sequence, loads it, runs it, and exits the *Program Sequence* menu.

e. Insert Step
Inserts a step before the sequence step presently displayed on the OSD.

f. Delete Current Step
Deletes the current step. Note that if this is done on the first step of a single-step sequence, the sequence is erased, and the programming mode is automatically exited.

g. Delete from Here to End
Deletes all remaining steps after the step presently displayed on the OSD.

⑤ **Load Sequence**
Enables the loading of a previously programmed sequence.

- Press the **Load Sequence** softkey. The status display shows the following:

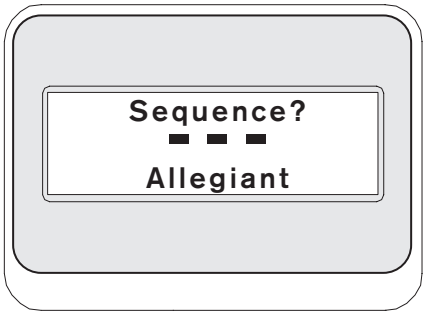


FIGURE 4-8

- Enter the sequence number, then press **ENTER**.
- To unload a sequence, stop the sequence (if necessary), press the **Load Sequence** softkey, then press **ENTER**.
- Use **CLR** to clear an incorrectly entered number.

⑥ **Hold Sequence**
Stops a running sequence.

⑦ **Previous Sequence Step**
Sets the sequence direction to run in reverse. If the sequence is already running in reverse, pressing this button executes the previous sequence step immediately. Holding the key causes the sequence to run in fast reverse mode, at approximately two steps per second.

⑧ **User Log-off**
Used to **LOG OFF** the Allegiant Switcher.

- Press the **User Log OFF** softkey.
- The softkey display shows the following:

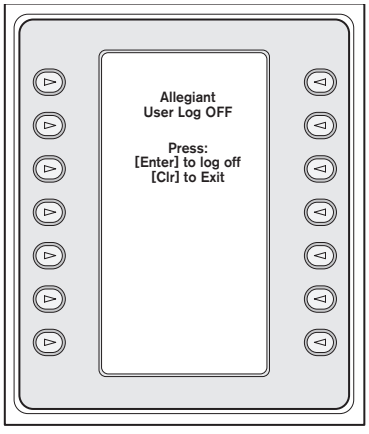


FIGURE 4-9

- Press **CLR** to clear the pending log-off. Press **ENTER** to complete the log-off process. The softkey display reverts to displaying only **USER LOG ON**, and the status display changes back to the default mode (i.e. camera and monitor numbers replaced with dashes). This mode times out in approximately two seconds and reverts to the previous menu.

⑨ **Command Script**

Accesses a series of menus, allowing execution of Allegiant script commands. Refer to the **Allegiant Instruction Manual** for additional information.

a. Run Command Script:

This function allows the user to execute ***STAR** commands from the keyboard. The Allegiant supports over 150,000 commands. Press the **Command Script** softkey to display the following softkey menu:

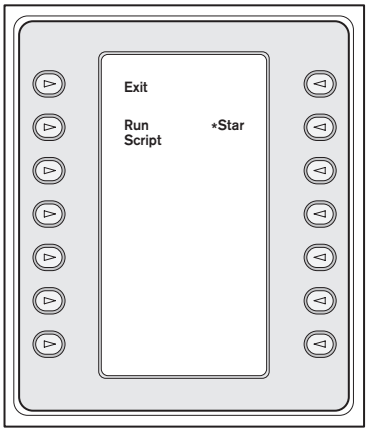


FIGURE 4-10

b. Executing Command Scripts:

Run a Command Script in one of two ways. Either press the **Run Script** softkey (and enter the script number on the keypad) OR press the * key for the **STAR** only command (i.e. Allegiant command script, **0000**).

NOTE: The *Command Script* menu can be customized with specific scripts and submenus using the optional IntuiKey PC software package. Refer to the documentation included with the software for more specific instructions.

⑩ **Camera Control**

Displays the *camera control* softkey menu, allowing the entry of various camera control commands. Refer to APPENDIX B at the back of this manual for details on the camera commands. Access to certain *AutoDome* menus and commands may be prohibited by security features within the camera. Refer to APPENDIX C for more information.

⑪ **User Functions**

Accesses a series of 5 menus (**User Function Menu A** through **User Function Menu E**, see FIGURE 4-11), allowing single-key selection of all available Allegiant user functions. Each of the 5 menus contain the following common softkeys:

a. Exit (upper left):

Completes any pending user function and exits to the *Allegiant Main Control* menu.

b. Previous Menu (lower left):

Displays the previous menu in this series of 5. If the current display is the first menu, **Previous Menu** displays the last menu.

c. Enter User Command (upper right):

This function alleviates scrolling through menus. When pressed, this key prompts for the 2 digit *Allegiant User Command* number. Familiarity with Allegiant User Commands and the 2 digit command number is required. Refer to FIGURE 4-12 for a cross-reference of all Allegiant User Commands and their respective two (2) digit function numbers. These function numbers can also be found in your **Allegiant User Manual** or on the **Allegiant Quick Reference** card.

d. Next Menu (lower right):

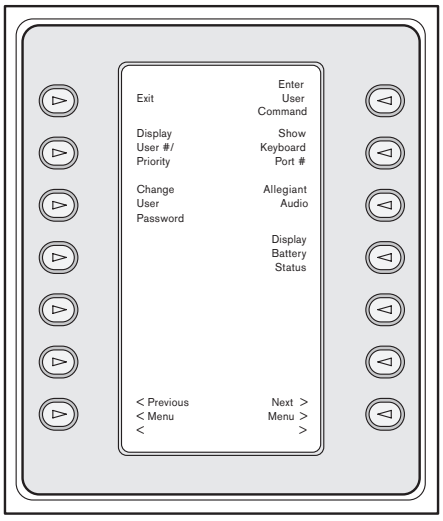
Displays the next menu in this series of 5. If the current display is the last menu, **Next Menu** displays the first menu.

FIGURE 4-12, on page 24, shows the menu location and the associated 2 digit cross reference. For details on the functionality of these user functions, refer to the **Allegiant Matrix Switcher User Manual.**

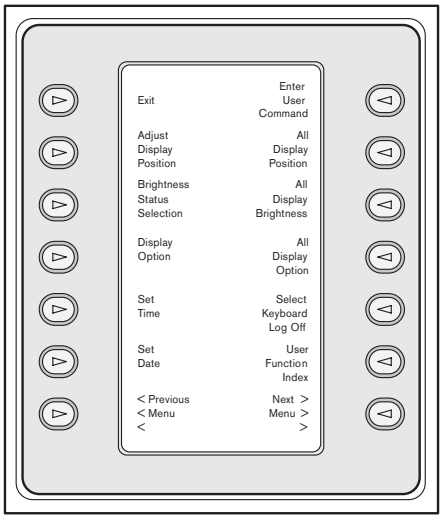
⑫ **ADIM Controls**

(Visible only when keyboard is being used with the ADIM integrated Allegiant digital recording system).

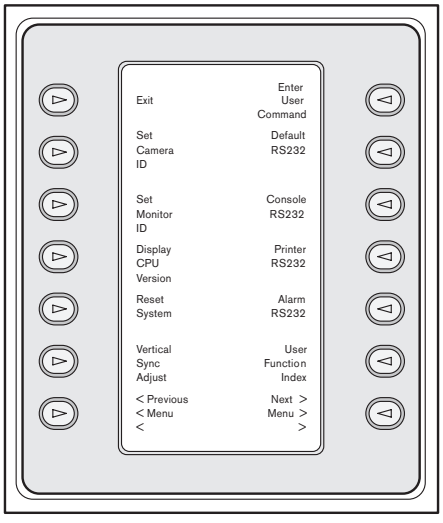
When the keyboard is in the *ADIM* mode, the joystick is used to control DVR playback and navigate DVR on-screen menus rather than controlling PTZ cameras. If desired, extended DVR playback reviews can be simplified using a joystick *locking* function. Enable the *lock* function by pressing the top portion of the **IRIS** key while the joystick is in the desired rotated or deflected position. The joystick may then be released, but the



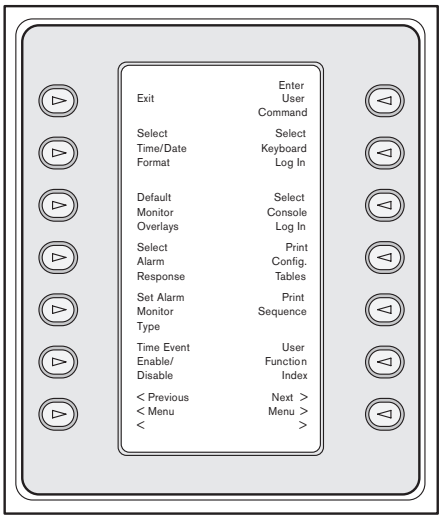
A



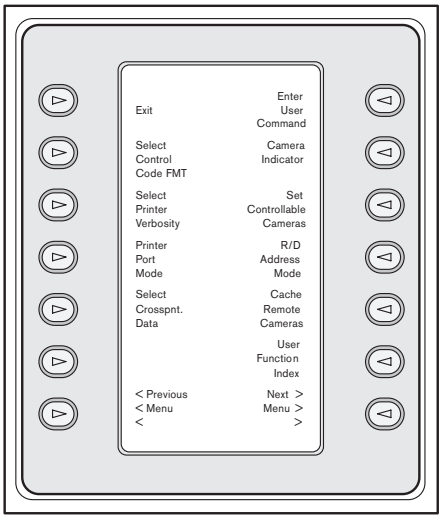
B



C



D



E

FIGURE 4-11 Allegiant User Functions Menu

Menu Softkey	Function Description	Allegiant User Function #	Access Level
A2	Display User #/Priority	33	Any
A3	Change User Password	10	Any[2]
A9	Show Keyboard Port #	2	Any
A10	Keyboard Audio	3	Any
A11	Display Battery Status	43	Any
B2	Adjust Display Position	4	1 – 7[1]
B3	Brightness/Status Selection	5	1 – 7[1]
B4	Display Options	6	1 – 7[1]
B5	Set Time	7	1 – 7[1]
B6	Set Date	8	1 – 7[1]
B9	All Display Position	24	1 – 7[1]
B10	All Display Brightness/Status	25	1 – 7[1]
B11	All Display Option	26	1 – 7[1]
B12	Select Keyboard Logoff	42	1[2]
B13	User Function Index	99	Any
C2	Set Camera ID Title	9	1
C3	Set Monitor ID Title	17	1
C4	Display CPU Version	23	Any
C5	Reset System	15	1[2]
C6	Vertical Sync Adjust	40	1[2]
C9	Default RS-232	29	1[2]
C10	Console RS-232 (Select Controller RS-232 - 8900)	30	1[2]
C11	Printer RS-232 (Select Console RS-232 - 8900)	31	1[2]
C12	Alarm RS-232	32	1[2]
C13	User Function Index	99	Any
D2	Select Time/Date Format	11	1
D3	Default Monitor Overlays	12	1
D4	Select Alarm Response	19	1[2]
D5	Set Alarm Monitor Type	21	1[2]
D6	Time Event Enable/Disable	16	1
D9	Select Keyboard Login	27	1[2]
D10	Select Console Login	28	1[2]
D11	Print Configuration Tables	13	1
D12	Print Sequence Tables	18	1
D13	User Function Index	99	Any
E2	Select Control Code Format	22	1[2]
E3	Select Printer Verbosity	20	1[2]
E4	Printer Port Mode	38	1[2]
E5	Select Crosspoint Data	36	1
E9	Camera Indicator	34	1
E10	Set Controllable Cameras	35	1
E11	R/D Address Mode	37	1[2]
E12	Cache Remote Cameras	41	1[2]
E13	User Function Index	99	Any

FIGURE 4-12 Softkey to User Function Cross-reference

NOTES:

[1]When using LTC 8900 systems, the access levels required for this are 1 to 63.

[2]Password is required to change this setting.

keyboard will continue to act as though the joystick is still being held. Any subsequent movement of the joystick releases the *lock* state. During this mode, the **IRIS** key is unavailable, but all other keys function normally.

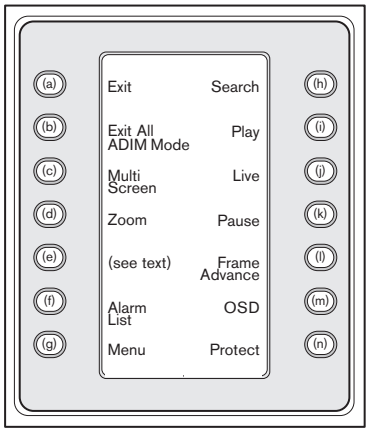
This softkey accesses the ADIM DVR control softkey menu:

FIGURE 4-13

Refer to instructions provided with the ADIM system for additional details on these functions, but in general, these keys function as follows:

a. Exit (upper left)
Completes any pending user function and exits to the *Allegiant Main Control* menu.

b. Exit All ADIM Mode
This button is similar to the **Exit** button, except it ends DVR playback sessions initiated by an



operator on multiple monitors, and returns the keyboard to the previous menu. If only ending a playback session on the monitor that's currently under control (while leaving other monitors in a *playback* mode), use the standard **Exit** button.

c. Multi Screen
Activates the DVR's multi-screen displays. The capabilities and user setup of the DVR model under control determine the available configurations.

NOTE: Pressing the **multi-screen** softkey multiple times cycles through the possible selections on applicable DVR models.

d. Zoom
Press the **Zoom** softkey to enlarge the active camera display. Different levels of the zoom function (e.g. x2, x4, normal) are available on applicable DVR models by repeatedly pressing the **Zoom** softkey.

e. Button "e"
This button has two designations that dynamically change depending on the type of DVR currently used. When controlling certain DVR models, a **Frame Reverse** button is displayed. With other DVR models, a **Manual Alarm** button is displayed.

When pressed while in a *pause* mode, **Frame Reverse** reverses a DVR one frame. **Manual Alarm** *tags* the current video display as an alarm event, for ease of identification later.

f. Alarm List
Activates the DVR's on-screen alarm display list. On non-compatible DVR models, this button will be blank.

g. Menu
This button accesses the DVR's on-screen menu. Navigation through the menu and selection of items is done using a combination of the keyboard's joystick, the **Enter** button, and when controlling applicable DVR models, the Menu Control screen described below.

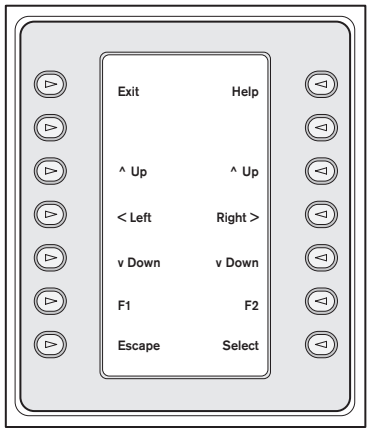


FIGURE 4-14 Divar DVR Menu Control

1. **Exit**
   Exits the present menu, reverting to the previous menu.
2. **^ Up**
   Moves UP through the on-screen menu items or values.
3. **< Left**
   Moves LEFT through the on-screen menu items or values.
4. **v Down**
   Moves DOWN through the on-screen menu items or values.
5. **F1**
   Restores defaults in the active on-screen menu.
6. **Select**
   Selects an on-screen menu or submenu item and saves selections made in menus.
7. **Help**
   Accesses the DVR's on-screen *HELP* menu.
8. **^ Up**
   Moves UP through the on-screen menu items or values.
9. **Right >**
   Moves RIGHT through the on-screen menu items or values.
10. **v Down**
    Moves DOWN through the on-screen menu items or values.
11. **F2**
    Used to select a specific function associated with an on- screen menu option.
12. **Escape**
    Press this button to return to the previous level, exit the **Help** screen, or to exit the on-screen menu completely without saving.

h. Search
Activates the DVR's on-screen *search* menu. Navigation through the menu and selection of items is done using a combination of the keyboard's joystick, the **Enter** button, and when controlling applicable DVR models, the Menu Control screen described in item "g" above.

i. Play
Activates the playback mode of the DVR, starting at one (1) minute in the past. When in *playback* mode, use the joystick to control direction and speed of the display.

j. Live
Press to enter the live *display* mode.

k. Pause
Press to stop and freeze the display while in *playback* mode, or pause the image during *live* mode.

l. Frame Advance
When pressed while in a *pause* mode, the DVR advances one frame in the forward direction.

m. OSD
Press to toggle the DVR's on-screen text display off/on.

n. Protect
On non-compatible DVR models, this button will be blank. On compatible DVR's, use the Protect feature to mark a video recording so it cannot be overwritten in the following manner:

1. During playback, press the **Protect** key to mark the beginning of a protected recording. Playback will pause and a dialog window will appear, showing the time and date of this selection.
2. Navigation through the menu options is done using the Menu Control screen described in item "g" above. Press the **Select** key to continue playing the video that you wish to protect. The **Escape** key cancels and exits this mode.
3. To mark the end of the protected recording, press the **Protect** key a second time. The playback will pause and a dialog window will appear showing the time and date of both the start and end times of the protected recording.
4. Press the **Select** key to protect the marked video from deletion. Press **Escape** to cancel.

⑬ **Start Sequence**
Starts a sequence.

⑭ **Next Sequence Step**
Sets the sequence direction to run forward. If a sequence is already running forward, pressing this button executes the next sequence step immediately. Holding the key causes the sequence to run in fast forward mode at approximately two (2) steps per second.

4.3 Allegiant Error Messages

Error	Name	Description
Error 01	Invalid Camera Request	The camera number entered from the keyboard does not exist. If using the optional **LTC 8059/00 Master Control Software or the LTC 8850/00 Graphical User Interface Software**, ensure that the number exists in the *Camera Identification* table. Download the table to be sure.
Error 02	Invalid Monitor Request	The monitor number entered from the keyboard does not exist.
Error 03	Remote Device Locked by User#	The remote device requested cannot be controlled, because it is locked by a user with equal or higher priority. Check with the other users or request that a higher priority user unlock the remote device.
Error 04	Monitor Locked by User#	The monitor requested cannot be accessed, because it is locked by a user with equal or higher priority. Check with the other users or request that a higher priority user unlock the monitor.
Error 05	Remote Device Access Restricted	Remote locked out by *Remote Lock Out* table.
Error 06	Monitor Access Restricted	Monitor locked out by *Monitor Lock Out* table.
Error 10	Access Denied	A function was requested for which the user priority is too low. Only a **Priority 2** user or a supervisor with **Priority 1** may access this function.
Error 11	Access Denied	A function was requested for which the user priority is too low. Only a supervisor with **Priority 1** may access this function.
Error 15	Invalid User Function	The function number requested from the keyboard is invalid. Refer to the **User Function** table for a listing of valid user function numbers.
Error 20	Acknowledge Denied	The **ACKNOWLEDGE** button was pressed by a user without the authority to acknowledge alarms.
Error 21	Incorrect Acknowledge	In order to properly acknowledge an alarm event, the keyboard must be switched to a monitor that is displaying the alarms.
Error 22	Acknowledge Disabled	Alarms on this monitor cannot be acknowledged, because that capability has been disabled by the system programmer.
Error 23	Camera Not in Alarm	The camera displayed on the monitor is not an alarm video; only alarm-generated video can be acknowledged.
Error 24	Keyboard Not Enabled for Acknowledge	This keyboard may not acknowledge alarm video on this monitor; it has been disabled by the system programmer.
Error 25	Alarm Switcher Running	Alarm video may only be acknowledged if the alarm switcher is not running; press **HOLD** to stop the switcher.
Error 50	SEQUENCE Not Available	The user attempted to load a switcher sequence that does not exist. This is a good way to determine, from the keyboard, which sequence numbers are unused when desiring to add one. A request was made to load an ABSOLUTE type sequence, without the keyboard being on one of the monitors in that sequence. Because inadvertent loading of monitors should be avoided, the user is required to switch his keyboard to one of the monitors used by the sequence. The *PROGRAM* mode may be used to review which monitors are used in the sequence.
Error 52	SEQUENCE Request	A request was made to load a RELATIVE type sequence on a monitor number that is too high; the monitors used by the sequence would extend past the highest monitor. Try switching to a lower monitor number before loading the sequence.

Error	Name	Description
Error 53	Switcher Empty	The user has attempted to control a sequence using the **NEXT**, **PREV**, **RUN**, or **HOLD** keys, without there being a sequence loaded.
Error 55	SEQUENCE Priority	The switcher sequence being requested or cleared requires monitors that are in use by a user of equal or higher priority. Contact a user with higher priority or have the system administrator clear the monitors in question.
Error 56	SEQUENCE Request	The user has attempted to load a sequence that is being edited in the *PROGRAM* mode. Once editing is complete, the sequence may be loaded.
Error 58	SEQUENCE Request	The sequence being requested is a relative sequence, and the user is only permitted access to absolute sequences.
Error 60	PROGRAM Request	The user has attempted to program a sequence that is currently running. The sequence must first be stopped before any editing can be performed.
Error 62	PROGRAM Request	The user has attempted to program a new sequence when the sequence memory space has been depleted. Delete unused sequences, then program the new sequence.
Error 63	PROGRAM Request	Another user is already programming a sequence on this monitor.
Error 70	Monitor Not Allocated to Group	This monitor cannot be used for alarm operations; it has not been designated as alarm-capable by the system programmer.
Error 71	Step Monitor Required	A group of alarm monitors may not have an armed Review (display) monitor without having armed Step (sequence) monitors.
Error 78	Must Enter Alarm Number	A specific alarm number must be entered when arming or disarming an alarm.
Error 80	Trunk Not Available	An attempt was made to access a remote camera connected to a satellite system, but no unused trunk lines are currently available.
Error 81	Satellite Trunk Seized	The camera currently viewed has changed because an operator with a higher priority has selected a different camera that seized the trunk line from the satellite.
Error 89	Internal Stack Error	A stack overflow within the system has occurred. Report this to the manufacturer.
Error 90	Keyboard Entry Undefined	The keyboard entry is not defined. Check the appropriate section of the instruction manual for the desired operation and try again.
Error 92	Keyboard Entry Out of Range	The data entered for a valid command was not in the permissible range. Check the appropriate section of the instruction manual for acceptable ranges for the command in question and try again.
Error 94	Keyboard Entry Invalid	An invalid character was received from the keyboard. Usually this indicates a communications error. Verify that the keyboard-to-system cable is not producing an intermittent connection.
Error 95	Keyboard Entry Incomplete	The control sequence sent from the keyboard was incomplete. Usually this indicates a communications error. Verify that the keyboard-to-system cable is not producing an intermittent connection.
Error 96	* (STAR) Undefined	The * key has been pressed, but there is no definition for this button.
Error 128	No Communications	The keyboard cannot communicate with the Allegiant.

4.4 ADIM Error Messages

Error	Name	Description
Error 100	DVR in Use	The DVR is not available because it is currently in use by another operator.
Error 101	Requested Device Not Found	The selected device is not configured for use on the ADIM system.
Error 102	ADIM Communication Error	The IntuiKey keyboard is unable to communicate with the ADIM system software. Verify that the ADIM software is configured correctly and that cable connections are intact.
Error 103	ADIM General Error	The IntuiKey keyboard has received an error notification from the ADIM system software. Please review the log files on the ADIM PC to determine the exact nature of the problem.
Error 104	ADIM Mode Conflict Error	The IntuiKey keyboard has received conflicting status information from the ADIM system. Power the keyboard off/on to correct.
Error 105	Access denied – DVR in use by User nnn	The DVR is not available because it is currently in use by another operator.
Error 106	Control of DVR taken by User nnn	Control of the DVR has been taken over by a user with a higher priority.
Error 107	ADIM software incompatible	The IntuiKey keyboard is connected to an ADIM system having an incompatible software version.
Error 108	ADIM connection failed on DVR nnn	The ADIM software has lost communication with the DVR due to a device failure.
Error 109	ADIM connection cancelled on DVR nnn	The ADIM software has lost communication with the DVR due to a DVR Administrator action.
Error 110	Monitor in use	The monitor is not available; it is currently in use by another operator.
Error 128	No Communications	The keyboard cannot communicate with the Allegiant.

5 CONTROLLING DIVAR SERIES DIGITAL VIDEO RECORDERS

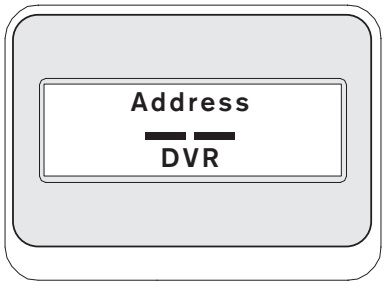
NOTE: This section applies to KBD-Universal and KBD-Digital Models.

5.1 The Divar Main Control Menu

5.1.1 Accessing the Divar Main Control Menu

1. Press PROD to put the keyboard in the *Product Selection Mode*. The softkey display shows the *Product Selection* Menu. Depending on the number of DVRs that are connected to the IntuiKey, the list may show a single device name or up to 32 device names spanning three (3) menu screens.
2. Press the softkey button adjacent to the desired DVR device name in the display. The softkey display menu will change to the top level menu associated with the device.

NOTE: If you are already in a product sub-menu, and multiple products are connected to the IntuiKey, the keyboard provides a means for easy switching between the devices. Press and hold the **PROD** key for longer than one (1) second to enter the device address selection mode. The status display will change to display the following:



Enter the address of the desired device to make the keyboard immediately switch to that device's main menu.

3. The status display shows the DVR mode display.

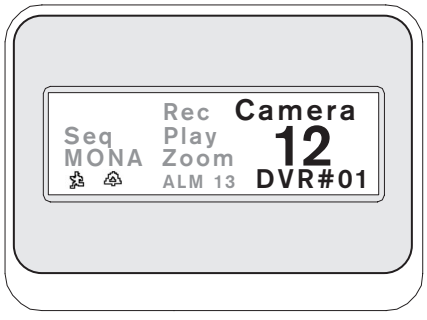


FIGURE 5-1 Status Display in Divar Mode

The DVR mode is shown on the keyboard status display and provides the following indicators:

- **SEQ** – Indicates that the DVR is running a sequence.
- **MONA/B** – Indicates which DVR monitor is currently under control. It toggles between MONA and MONB for each press of the **MON** key.

NOTE: Keyboard access to MONB must be enabled within the Divar menus. See Divar manual for details.

- Indicates that the DVR is in an ACTION alarm mode.
- Indicates that the DVR is in a contact activated alarm mode.
- **REC** – Indicates that the DVR is currently recording.
- **PLAY** – Indicates that the DVR is in a replay mode.
- **ZOOM** – Indicates that the DVR is displaying a zoomed image.
- **ALM xx** – Indicates that a device connected to the IntuiKey with address number **xx** is currently in alarm. The IntuiKey's alarm button will light and the keyboard will begin to beep.

NOTE: While in *DVR Control Code*, the product title continuously displays the programmed device name. The numeric entry field is used to enter numeric values needed to control the DVR (i.e. camera number, DVR number, shot number, etc.). Above the numeric entry field is a title displaying the DVR's current mode (i.e. cameo, camera entry, menu mode, or numeric entry).

4. The softkey display shows the *DVR Main Control* menu.

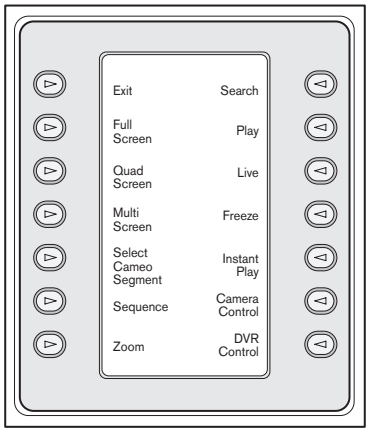


FIGURE 5-2 Divar DVR Main Control Menu

5.2 Programming/Controlling DVR Functions

5.2.1 The DVR Main Control Menu

The *DVR Main Control* menu uses softkey buttons to execute commands or to gain access to other submenus for additional programming/configuration.

Detailed command descriptions follow. Refer to the **Divar Instruction Book** for additional information.

1. **Exit**
   Exits one menu and returns to the main menu for the particular function being programmed.
2. **Full**
   Select *Full Screen Camera Mode* by pressing the **Full Screen** softkey. The camera currently selected by the keyboard will be displayed in full screen on the monitor.
3. **Quad Screen**
   Divides the screen into four separate areas. Enable *Quad Screen Mode* by pressing the **Quad Screen** key once. Pressing the key additional times cycles through available viewing configurations.
4. **Multi Screen**
   Enables multiscreen displays. The capabilities and user setup of the DVR model under control determine the available configurations.

NOTE: Pressing the **Multiscreen** softkey multiple times cycles through the possible selections.

5. **Select Cameo Segment**
   When in *Multi* or *Quad Mode*, the screen area where a camera is displayed is called a cameo. Press the **Cameo** softkey to enter the cameo selection mode. In this mode, the joystick is used to select which *cameo window* will be under control of the keyboard. Entering a number into the keyboard while in this mode will cause the camera to appear in the currently selected cameo window. Cameras may be assigned to any selected cameo, and may be changed as often as required. The IntuiKey's numeric entry field title will change to *cameo* while the DVR is in this mode. Press the **cameo** softkey again to exit the mode.
6. **Sequence**
   Runs a previously programmed camera sequence.
7. **Zoom**
   Press the **Zoom** softkey to enlarge the active camera display. The keyboard will change to the following submenu for control of the zoom functions:

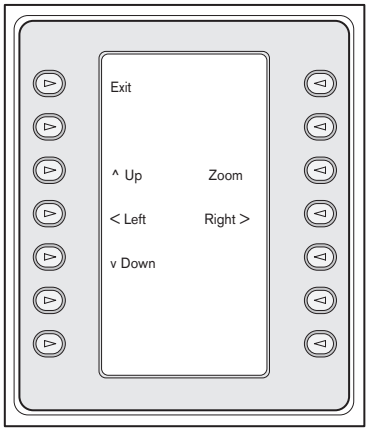


FIGURE 5-3 Zoom Menu

NOTE: Different levels of the zoom function (e.g. X2, X4, normal) are available by repeatedly pressing the **Zoom** softkey.

If **Zoom** softkey is pressed while in multi-screen mode, the currently selected camera will be changed to full screen view.

8. **Search**
   Places the DVR into the on-screen search mode and accesses a DVR softscreen menu allowing selection of various search criteria. Refer to SECTION 5.2.2 for details on menu functions and controls.

9. **Play**
   Activates DVR playback mode and displays the **PLAY** indicator in the IntuiKey status display. Press the softkey again to cancel the playback mode.

   While in the Playback mode, the joystick will function as follows:

   a. Move joystick forward or rotate the joystick knob in the clockwise direction to put the DVR into forward playback mode. The further the joystick is moved or rotated, the faster the playback will occur.

   b. Move joystick backwards (towards operator) to place DVR in freeze mode.

   c. If paused, move the joystick to the right or rotate the joystick knob in the clockwise direction to frame advance the image. Move the joystick to the left or rotate the joystick in the counterclockwise direction to frame reverse the image. The further the joystick is rotated or moved to the right or left, the faster the image will change.

10. **Live**
    Pressing the Live softkey will place the DVR into the live viewing mode.

11. **Freeze**
    Freezes the currently selected camera image. Press **FREEZE** again to release the freeze mode. Changing the display screen mode releases the freeze mode.

12. **Instant Play**
    Activates DVR playback of the last minute recording for the selected camera.

13. **Camera Control**
    Displays the *Camera Control* softkey menu, allowing entry of various camera control commands. Refer to APPENDIX B at the back of this manual for details of the Camera Commands.

14. **DVR Control**
    Accesses the *DVR Control* menu allowing selection of DVR devices and controls for navigation of device on-screen menus. Refer to SECTION 5.2.3 for details on menu functions.

5.2.2 DVR On-Screen Menu Controls

This *softkey* menu provides various controls for navigating DVR on-screen menus. Detailed command descriptions follow.

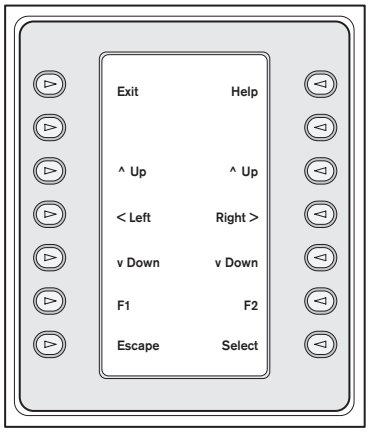


FIGURE 5-4 Divar DVR Menu Control

1. **Exit**
   Exits the present menu, reverting to the previous menu.

2. **^ Up**
   Moves UP through the on-screen menu items or values.

3. **< Left**
   Moves LEFT through the on-screen menu items or values.

4. **v Down**
   Moves DOWN through the on-screen menu items or values.

5. **F1**
   Restores defaults in the active on-screen menu.

6. **Select**
   Selects an on-screen menu or submenu item and saves selections made in menus.

7. **Help**
   Accesses the DVR's on-screen *HELP* menu.

8. **^ Up**
   Moves UP through the on-screen menu items or values.

9. **Right >**
   Moves RIGHT through the on-screen menu items or values.

10. **v Down**
    Moves DOWN through the on-screen menu items or values.

11. **F2**
    Used to select a specific function associated with an on-screen menu option.

12. **Escape**
    Press this button to return to the previous level, exit the **Help** screen, or to exit the on-screen menu completely without saving.

5.2.3 DVR Control Menu

This softkey menu provides controls for selecting devices and protecting recordings. It also provides access to the on-screen *Help* menu and the softscreen menu for accessing and navigating the DVR's on-screen configuration menu.

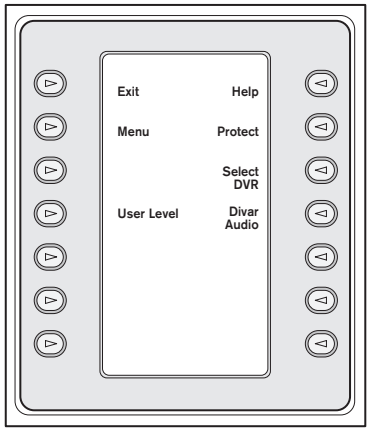


FIGURE 5-5 Divar DVR Control

1. **Exit**
   Exits the present menu, reverting to the previous menu.

2. **Menu**
   Accesses the *DVR Menu Control* screen for selection and navigating within the DVR's main configuration menu. Refer to SECTION 5.2.2 for details on menu functions and controls.

NOTE: Access to this menu is available only when the User Level is set to FULL ACCESS. If the current access level must be changed, refer to the User Level softkey explained below.

3. **User Level**
   This softkey is used to change the current User Level. (The current setting is displayed on the softkey.) User Levels can be used to limit access to certain DVR features, including access to the on-screen configuration menu.

To change the current User Level, press the softkey to enter the password entry mode. Enter the keyboard password (refer to APPENDIX C) within 2 seconds. Select the desired User Level as listed on the softkey menu.

NOTE: The selected User Level applies to all DVR devices connected to the IntuiKey.

4. **Help**
   Accesses the DVR's on-screen *HELP* menu.

5. **Protect**
   It is possible to mark a video recording so it cannot be overwritten.

   a. During playback, press the **Protect** key to mark the beginning of a protected recording. Playback will pause and a dialog window will appear, showing the time and date of this selection.

   b. Press the **Select** key to continue playing the video that you wish to protect. The **Escape** key cancels and exits this mode.

   c. To mark the end of the protected recording, press the **Product** key a second time. The playback will pause and a dialog window will appear showing the time and date of both the start and end times of the protected recording.

   d. Press the **Select** key to protect the marked video from deletion. Press **Escape** to cancel.

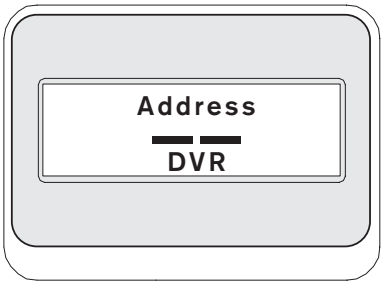


FIGURE 5-6

6. **Select DVR**
   Press this button to select another device to control. The status display will change to display the following: Enter the address of the desired device to make the keyboard immediately switch to that device's main menu.

   This softkey provides the same function as pressing and holding the **PROD** key for longer than 1 second.

7. **Divar Audio**
   This toggle button is used to enable or disable the keyboard audio beeper that sounds in response to DVR error messages or alarm/action events. Enabling or disabling this option affects all DVRs connected to the keyboard.

5.3 DVR Error Messages

Error	Name	Description
Error 1	No Communication	The keyboard cannot communicate with the DVR.
Error 2	Invalid Keyboard Entry	An invalid number has been entered on the keyboard.
Error 3	Invalid DVR Number	A DVR number less than 1 or greater than 30 was entered.
Error 4	DVR Not Found	No DVRs were found during search.

6 CONTROLLING System4 VIDEO MULTIPLEXERS

NOTE: This section applies to **KBD-Universal** and **KBD-Digital** Models.

6.1 The MUX Main Control Menu

6.1.1 Accessing the Mux Main Control Menu

1. Press **PROD** to put the keyboard in the *Product Selection Mode.* The softkey display shows the *Product Selection* menu. Depending on the number of devices that are connected to the IntuiKey, the list may show up to 32 total devices spanning 3 menu screens.
2. Press the softkey button adjacent to the desired multiplexer in the display. The softkey display menu will change to the top level menu associated with the device.

NOTE: If you are already in a product sub-menu, and multiple products are connected to the IntuiKey, the keyboard provides a means for *easy switching* between the devices. Press and hold the **PROD** key for longer than 1 second to enter the device address selection mode. Enter the address of the desired device to make the keyboard immediately switch to that device's main menu.

3. The status display shows the MUX mode display.

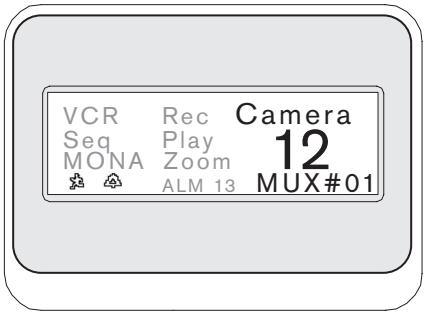


FIGURE 6-1 Status Display in System4 Mode

The MUX mode display shown on the keyboard status display provides the following indicators:

- **VCR** – Indicates that the multiplexer is in a VCR test mode (routing the VCR video being recorded to the monitor).
- **SEQ** – Indicates that the multiplexer is running a sequence.
- **MONA/B** – Indicates which multiplexer monitor is currently under control. It toggles between MONA and MONB for each press of the **MON** key.
- – Indicates that the multiplexer is in an action alarm mode.
- – Indicates that the multiplexer is in a contact activated alarm mode.
- **REC** – Indicates that the VCR is currently recording.
- **PLAY** – Indicates that the multiplexer is displaying a videotape replay.
- **ZOOM** – Indicates that the multiplexer is displaying a zoomed image.
- **ALM xx** – Indicates that a device connected to the IntuiKey, with address number **xx** is currently in alarm. The IntuiKey's **ALARM** button will light and the keyboard will begin to beep.

NOTE: While in multiplexer control mode, the product title continuously displays **MUX** #– (where the dash represents the multiplexer number). The numeric entry cell is used to enter numeric values needed to control the multiplexer (i.e. camera number, allplex number, shot number, etc.). Above the numeric entry cell is a title displaying the multiplexer's current mode (i.e. cameo, camera entry, or menu mode).

4. The softkey display shows the *MUX Main Control* menu.

6.2 Programming/Controlling MUX Functions

6.2.1 Password Entry

If a password is required by the multiplexer on-screen display, *you must press* **ENTER** *after each number entered for the password* (e.g. if the password is 1-2-3-4, you then press **1**, then **ENTER**, **2**, then **ENTER**, etc.).

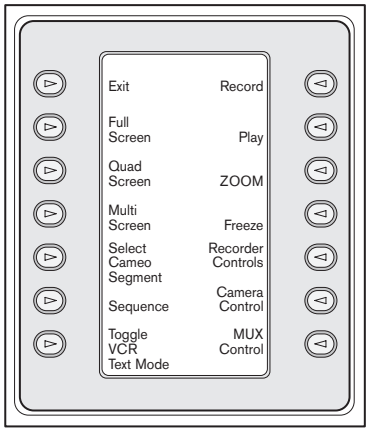


FIGURE 6-2 System4 Mux Main Control Menu

6.2.2 MUX Main Control Menu Command Descriptions

The *MUX Main Control* menu, displayed on the softkey display, uses the softkey buttons to execute commands or to gain access to other submenus for additional programming/configuration. Detailed command descriptions follow. Refer to the **Multiplexer Instruction Book** for additional information.

① **Exit**
Exits one menu and returns to the main menu for the particular function being programmed.

② **Full Screen**
Select *Full Screen Camera Mode* by pressing the **Full Screen** softkey. The camera currently selected by the keyboard will be displayed in full screen on the monitor.

③ **Quad Screen**
Divides the screen into four separate areas. Enable *Quad Screen Mode* by pressing the **Quad Screen** key once. Pressing the key additional times cycles through different viewing configurations.

④ **Multiscreen**
Enables **multiscreen** displays. The capabilities of the multiplexer model under control determine the available configurations.

- 6-channel: 5+1
- 9-channel: 4+3, 3x3
- 16-channel: 4+3, 8+2, 12+1, 3x3, and 4x4

NOTE: Pressing the **multiscreen** softkey multiple times cycles through the possible selections.

⑤ **Select Cameo Segment**
When in *Multi* or *Quad Mode*, the screen area where a camera is displayed is called a cameo. Press the **Cameo** softkey to enter the cameo selection mode. In this mode, joystick is used to select which *cameo window* will be under control of the keyboard. Entering a number into the keyboard while in this mode will cause the camera to appear in the currently selected cameo window. Cameras may be assigned to any selected cameo, and may be changed as often as required. The Intuikey's numeric entry field title will change to *Cameo* while the DVR is in this Mode. Press the *Cameo* softkey again to exit the mode.

NOTE: The multiplexer function of **Assigning All Cameras** is provided by an additional softkey on the *MUX Main Control* menu. Press this key to activate this function.

⑥ **Sequence**
Runs a previously programmed camera sequence.

⑦ **Toggle VCR Test Mode**
Enables/disables the multiplexer's VCR *test* mode. When in VCR *test* mode, the IntuiKey status display shows the VCR icon.

⑧ **Record**
Activates VCR *record* mode and displays the **REC** indicator in the IntuiKey status display. Press the softkey again to disable the *record* mode.

⑨ **Play**
Activates VCR *play* mode and displays the **PLAY** indicator in the IntuiKey status display. Press the softkey again to disable the *play* mode.

⑩ **Zoom**

Enlarges the active camera display. Selection of any other camera displays that camera in full screen enlarged mode. Press the **Zoom** softkey to show the following submenu for control of the zoom function.

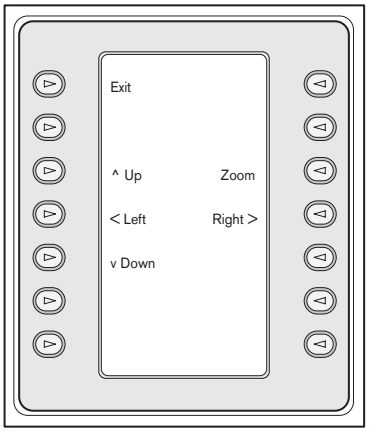


FIGURE 6-3 MUX Zoom Menu

Different levels of the zoom function (e.g. x2, x4) may be available depending on the multiplexer model.

⑪ **Freeze**

Holds the selected camera picture on either full screen or cameo. The currently selected camera image freezes, and **FREEZE** is displayed on the monitor screen. Press **FREEZE** again to release the freeze mode. Freeze a different camera image by selecting another camera with the camera keys and pressing **FREEZE** again. Changing the display *screen* mode releases the *freeze* mode from all cameos.

⑫ **Recorder Controls**

Accesses the **DVR1/VCR Control** softkey menu, allowing selections for control of either a DVR1 Series digital recorder or a conventional VCR. Additional menus are displayed for control of the selected device.

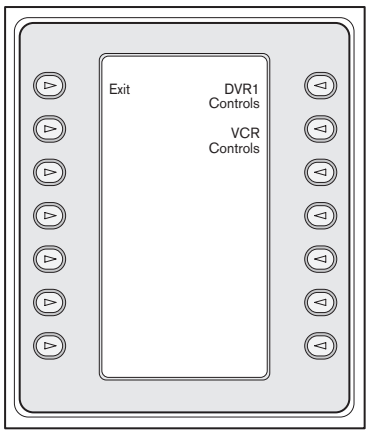


FIGURE 6-4 Recorder Controls

⑬ **Camera Control**

Displays the *Camera Control* softkey menu, allowing entry of various camera control commands. Refer to APPENDIX B at the back of this manual for details on the Camera Commands.

⑭ **MUX Control**

Accesses a menu allowing control of additional multiplexer functions.

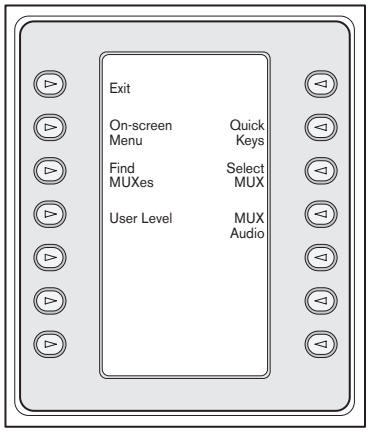


FIGURE 6-5 MUX Control Submenu

a. Exit

Exits the present menu, reverting to the previous menu.

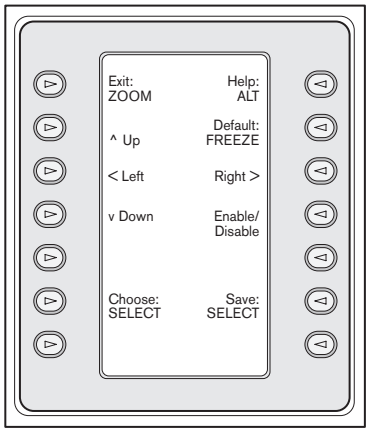


FIGURE 6-6 On-screen Control Menu

b. On-screen Control Menu

Provides access to the multiplexer's on-screen display (OSD), if the access level has been enabled to **FULL ACCESS** (otherwise, the softkey display indicates that the present user level is not high enough for this level of access). If the current user level does not allow the operation, a warning message is displayed, and control reverts to the *MUX Control* submenu. The warning message clears and reverts to the MUX main control menu in approximately two (2) seconds or after pressing CLR.

NOTE: To change the access level, refer to **(d) User Level.**

The on-screen control menu provides softkey access to the following multiplexer functions:

- **Exit: ZOOM**
  Exits to one level higher when in menu mode.
- **Choose: SELECT**
  Used when the OSD prompts to choose a selection.
- **Save: SELECT**
  Used when the OSD prompts to save the current selections.
- **Default: FREEZE**
  Changes an entry to its default state.
- **Help**
  Displays the MUX's internal help file associated with the present OSD selection.
- **Up ^**
  Moves the OSD cursor up one line.
- **Down v**
  Moves the OSD cursor down one line.
- **< Left**
  Moves the OSD cursor to the left one position.
- **Right >**
  Moves the OSD cursor to the right one position.
- **Enable/Disable**
  Used in Set Action Zones in Action Setup menu.

c. Find Muxes

Polls each mux address for a response. If a response is found, an ON indicator is displayed next to the mux address. Exit by pressing any key.

d. User Level

This softkey is used to change the current User Level. (The current setting is displayed on the softkey.) User Levels can be used to limit access to certain multiplexer features, including access to the on-screen configuration menu. To change the current User Level, press the softkey to enter the password entry mode. Enter the keyboard password (refer to APPENDIX C) within two (2) seconds. Select the desired User Level, as listed on the softkey menu.

NOTE: The selected User Level applies to all multiplexer devices connected to the IntuiKey.

e. Quick Keys

Allows access to the multiplexer's quick key commands. If the current user level does not allow the operation, a warning message is displayed, then clears and reverts to the MUX main control menu (approximately two (2) seconds or after pressing CLR). Refer to the **Multiplexer Instruction Book** for additional information on the quick key functions.

f. Select MUX

Pressing this softkey displays a short message on the softkey display indicating that entry of a multiplexer address is required. The IntuiKey status display changes to the display in FIGURE 6-7.

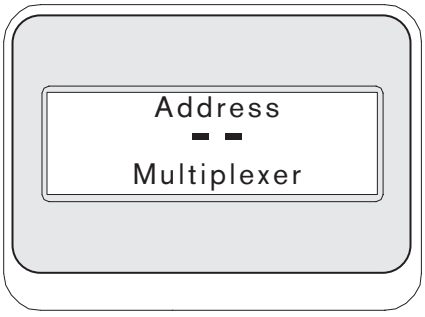


FIGURE 6-7

Upon entering an Allplex number, press **ENTER**. The keyboard determines whether the selected multiplexer is present. If it is not, an error is displayed, and the keyboard reverts to the last known acceptable Allplex number.

g. MUX Audio

This toggle button is used to enable or disable the keyboard audio beeper that sounds in response to MUX error messages or alarm/action events. Enabling or disabling this option affects all MUX's connected to the keyboard.

6.3 MUX Error Messages

Error	Name	Description
Error 1	No Communication	The keyboard cannot communicate with the multiplexer.
Error 2	Invalid Keyboard Entry	An invalid number has been entered on the keyboard
Error 3	Invalid Multiplexer Number	A multiplexer number less than 1 or greater than 30 was entered.
Error 4	Multiplexer Not Found	No multiplexers were found during search.

7 TROUBLESHOOTING

7.1 System

1. No text on displays:
   - Ensure that power is applied to the keyboard through at least one of the following:
     - MUX RJ-11 Cable
     - Allegiant RJ-11 Cable
     - DC Power Supply Jack
   - It is possible that the LCD contrast has been adjusted to a point that makes the displays unreadable. Pressing **MON** and **CLR** simultaneously resets the contrast to a central position for readability. Once the contrast is reset, select **KEYBOARD CONTROL** from the *Product* menu, then the **CONTRAST ADJUST** softkey and set the LCD contrast for optimal viewability.
2. No LCD or keyboard backlight:
   - KBD Backlighting is provided at a low level, which may not be apparent in bright lighting conditions.
3. LCD appears to have *bad* pixels:
   - To verify LCD operation, from the *Product* menu, select **KEYBOARD CONTROL**; then, select **LCD Test** to cycle the LCDs through a number of tests.

7.2 Keyboard

1. When in the *Product* menu, DVR or Multiplexer is missing:
   - Unique address has not been set in the video devices. Use the front panel controls to access the appropriate on-screen menu to assign address and starting camera numbers. The IntuiKey will not properly recognize video devices if there are conflicting addresses in the system.
   - Check all interconnect cables for cut or broken wires between the keyboard and other devices.

2. When in the product menu, the Allegiant product is not shown:
   - Verify that you are using a KBD-Universal. By removing power from the keyboard and reapplying it, a *sign-on* banner is displayed on the keyboard. The top line of both the softkey display and status display states the type of keyboard in use (only KBD-Universal is capable of controlling Allegiant Series Video Switchers).
   - Check all interconnect cables for cut or broken wires between the keyboard and other devices.
   - The KBD only supports ".6P" keyboard protocol.
3. Limited key and joystick operation:
   - To verify the operation of the keyboard, from the *Product* menu, select **KEYBOARD CONTROL**, then press the softkey associated with **KEYBOARD TEST**. This allows the verification of the operation of all keys and the joystick.

7.3 Camera Control

1. Pressing a softkey associated with a camera command does not return the expected response:
   - Some camera functions are lockable. No softkey is associated with camera command unlock; therefore, unlock the camera commands manually.
   - The keyboard lists camera commands. Some commands may not be supported by the presently selected camera—see the manual associated with the camera for specific camera function information.
2. Camera function not found in menus:
   - As of Gen3A Dome Version 2.0, all camera functions are accessible via the AutoDome's Advanced Menu. Select **Camera Controls** and press the **Advanced Menu** softkey.
3. The joystick doesn't appear to work:
   - Ensure that you are controlling a movable camera.
   - Ensure that all cabling is correct.
   - It is possible that the joystick needs to be recentered. From the *Product* menu, select **KEYBOARD CONTROL** and press the **JOYSTICK AUTOCAL** softkey, then follow the on-screen instructions.

7.4 Miscellaneous

1. Upon powering up the keyboard, the bootloader screen appears with the message **Bootloader User Requested:**
   - The keyboard was placed in firmware upgrade mode. If you do not wish to load new firmware, press **CLR.**
2. Upon powering up the keyboard, the bootloader screen appears with the message **Bootloader BAD CHECKSUM**:
   - An error has been detected in the firmware. Reloading the firmware should solve the problem. Refer to the Software Update section of www.boschsecurity.com for details on upgrading keyboard firmware. If this does not resolve the problem, contact Customer Support.

APPENDIX A: INTUIKEY MENU REFERENCE

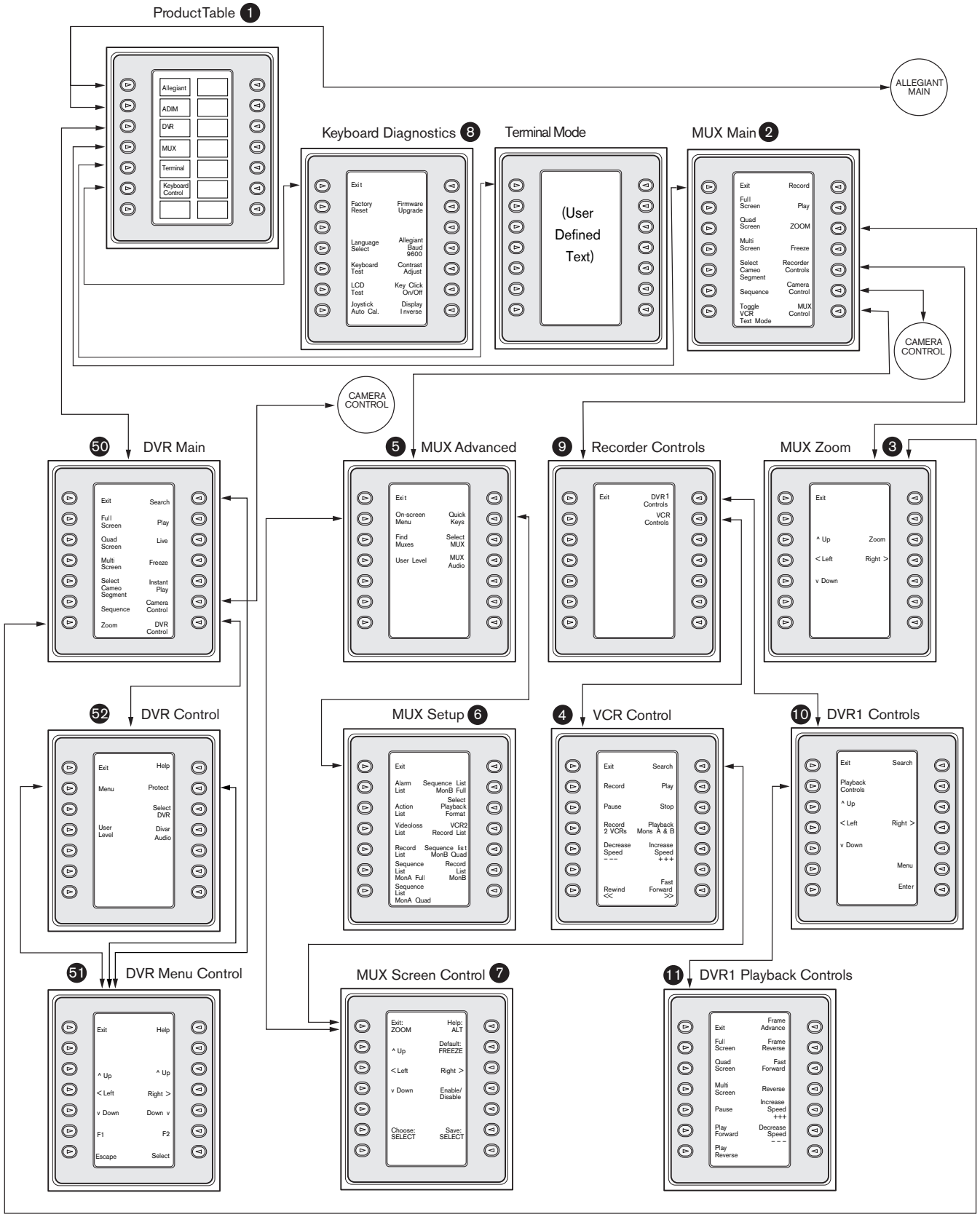


FIGURE A-1 Keyboard Menu Structure

APPENDIX A: INTUIKEY MENU REFERENCE (Continued)

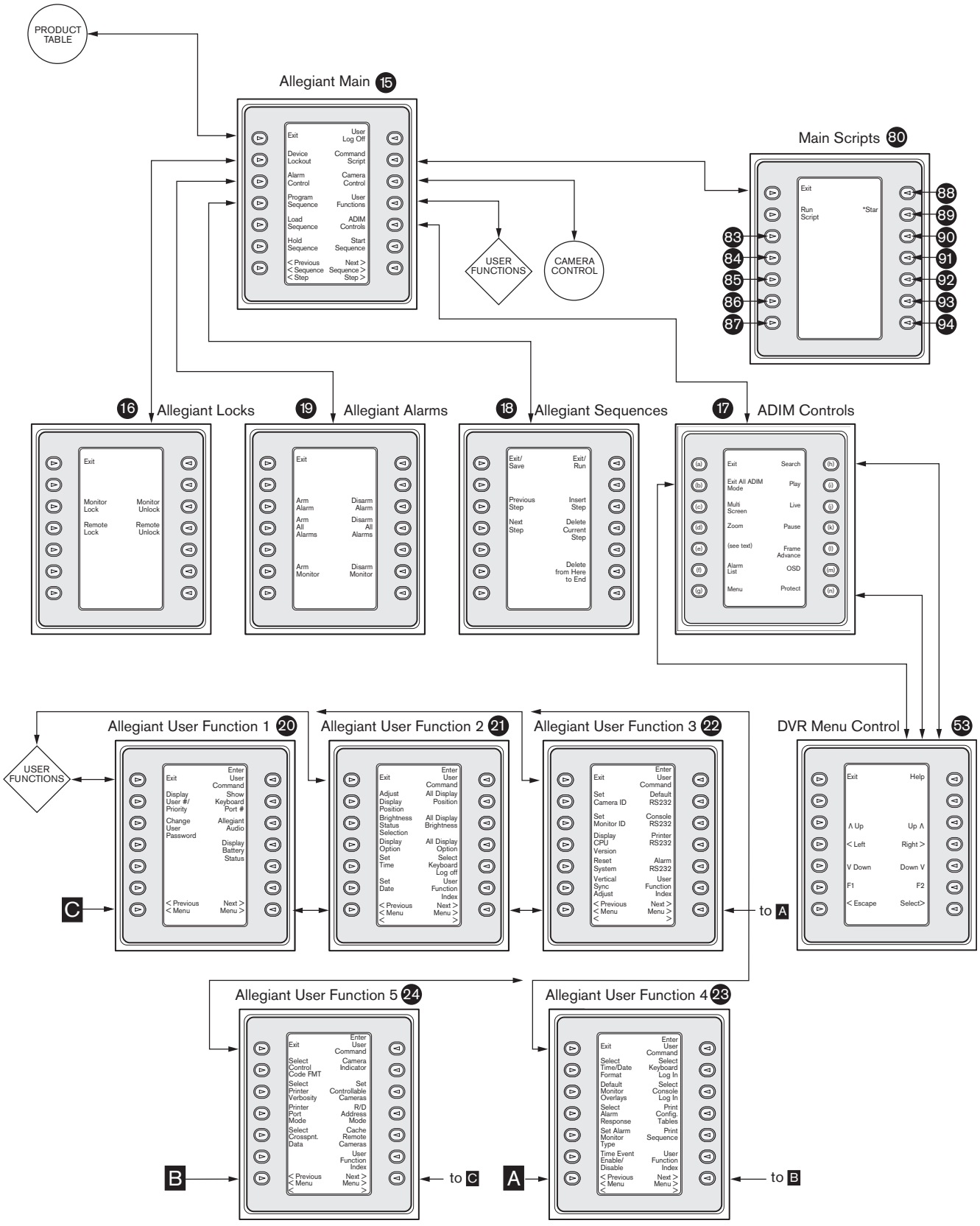


FIGURE A-2

APPENDIX A: INTUIKEY MENU REFERENCE (Continued)

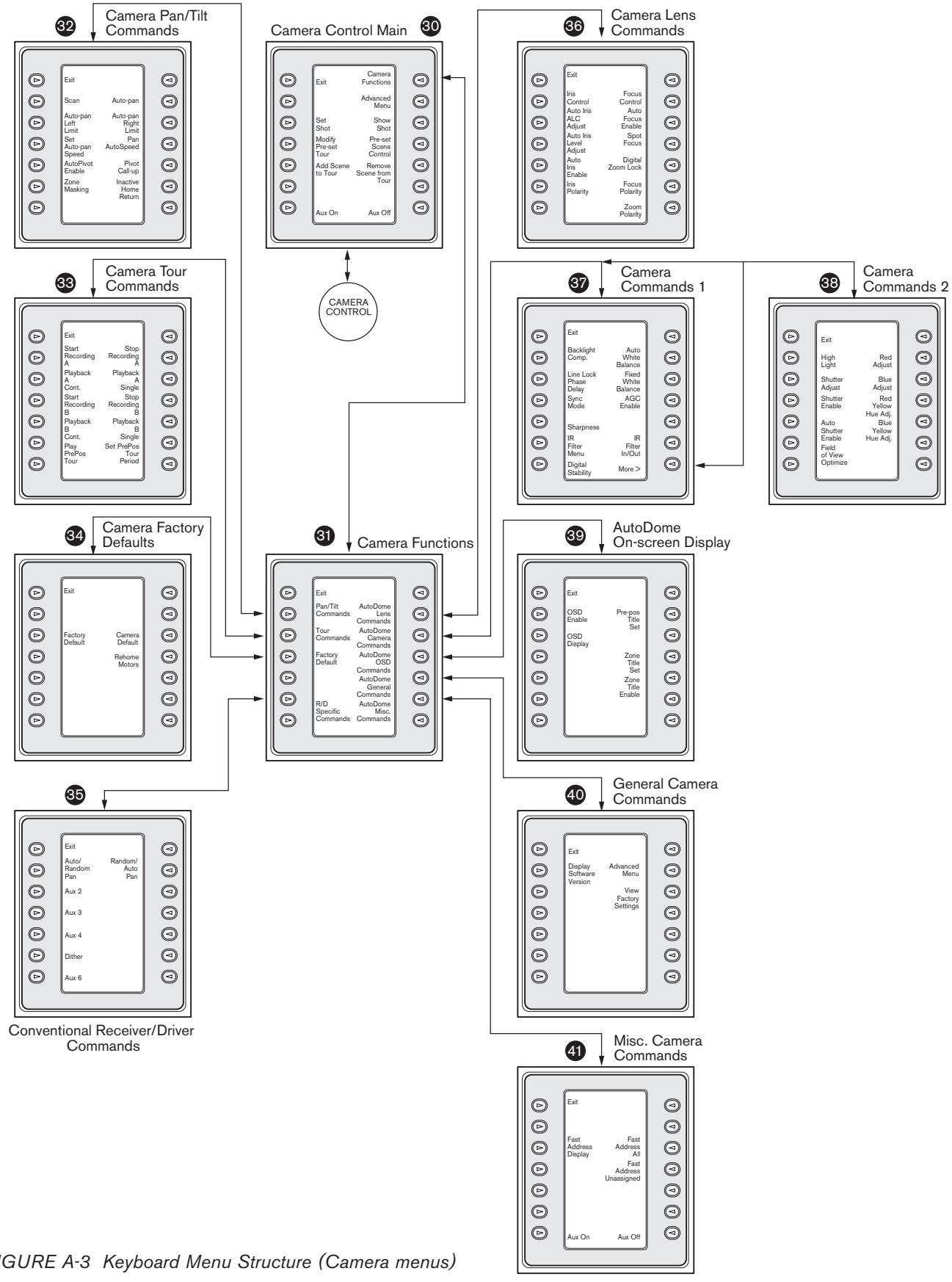


FIGURE A-3 Keyboard Menu Structure (Camera menus)

APPENDIX B: CAMERA CONTROL COMMAND REFERENCE

The IntuiKey Keyboard provides access to the camera control functions for applicable system devices. Certain features may be restricted by the AutoDome security feature. Refer to APPENDIX C for additional details. The Camera Control Main menu is shown below. The command descriptions follow.

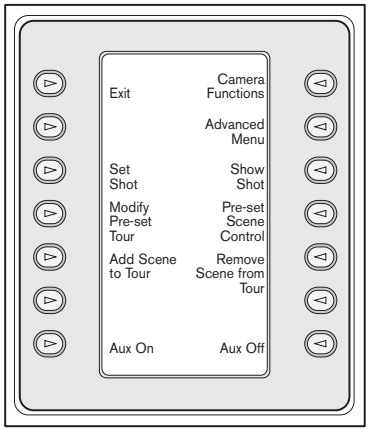


FIGURE B-1 Camera Control Main Menu

① **Exit**
Exits the *camera* menu and returns to the previous control/programming menu.

② **Not Used**

③ **Set Shot**
Camera pre-position scenes are programmed by pressing the **Set Shot** softkey. The status display changes to the following for input:

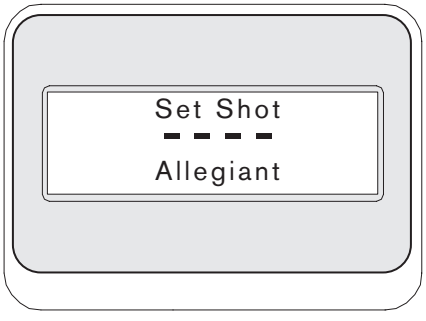


FIGURE B-2

Entering a two digit shot number followed by **ENTER**, programs the present camera position as the entered shot number. Four digit numbers are reserved for camera configuration commands.

NOTE: This function is also accomplished by pressing and holding the **SHOT** button (located next to the joystick) for more than two seconds.

④ **Modify Preset Tour**
This command is specific to G3 AutoDome® cameras. Pressing this softkey displays a camera on-screen display.

⑤ **Add Scene to Tour**
This softkey adds a shot to the camera's *tour*. Pressing the softkey changes the status display to the following.

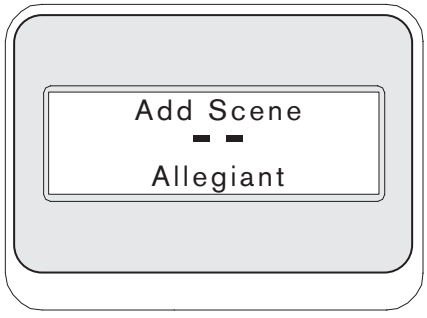


FIGURE B-3

⑥ **Not Used**

⑦ **Aux On**
Press this softkey to enter a number associated with an auxiliary command. The status display changes to an entry box.

NOTE: If **ENTER** is held down, the **Aux** command auto-repeats until the key is released.

⑧ **Camera Functions**
Displays a submenu with direct links to various *Camera Functions* menus (see FIGURE A-1).

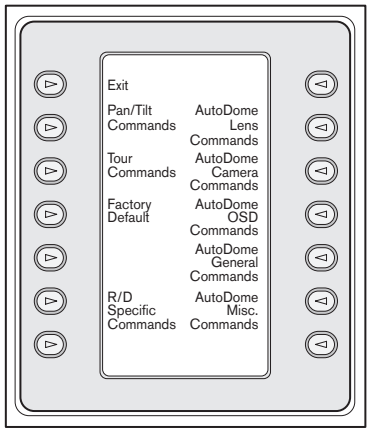


FIGURE B-4 Main Camera Functions Menu

Pressing any camera function softkey causes a second softkey menu to appear. If the function contains a user-selectable choice, the options are indicated as two buttons. The button text represents the options indicated on the display (e.g. increase/decrease, on/off, etc.). Upon command completion, or after a time-out of approximately ten (10) seconds, the softkey display reverts to the *Camera Functions* menu. See the table on the next page for a list of available camera commands as they apply to the various camera models.

⑨ **Advanced Menu**
Press this softkey to enter the main on-screen programming menu of G3 and Day/Night Series AutoDomes having firmware of 2.0 or higher.

⑩ **Show Shot**
Press **Keypad Shot**, and the status display changes for input as shown in FIGURE B-5.

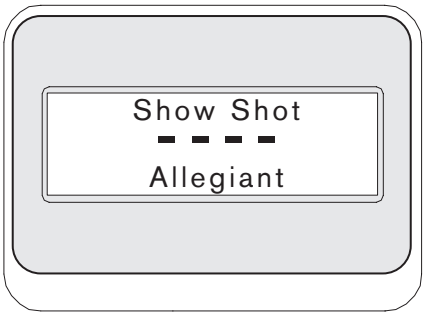


FIGURE B-5

Entering a two digit shot number followed by **ENTER** selects a previously programmed camera position for the currently controlled camera.

NOTE: This function is also accomplished by pressing the **SHOT** button (located next to the joystick).

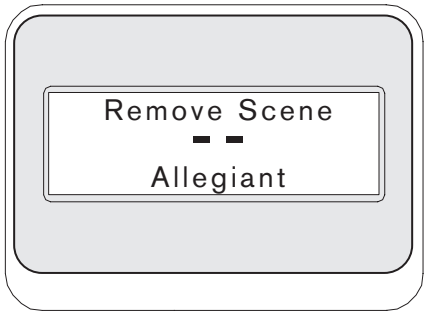


FIGURE B-6

⑪ **Preset Scene Control**
This command is specific to G3 AutoDome cameras; pressing this key displays a camera on-screen display.

⑫ **Remove Scene from Tour**
Press **Clear Shot**, and the status display changes to the display shown in FIGURE B-6.

⑬ **Not Used**

⑭ **Aux Off**
Press this softkey to enter a number associated with an auxiliary command. The status display changes to an entry box. See the individual device control section for details of the *Camera Functions* menu.

NOTE: If **ENTER** is held down, the **Aux** command auto-repeats until the key is released.

KEYBOARD CAMERA COMMANDS

KEYBOARD CAMERA COMMANDS	CAMERA COMMANDS	CAMERA DESCRIPTIONS	AUX COMMAND	
Camera Control				
Set Shot	Pre-position Programming	Store Shot to Camera Memory		
Show Shot	Pre-position Recall	Recall Shot from Camera Memory		
	Global Disable/Enable PP			
Modify Preset Tour				
Preset Scene Control				
	Enable/Disable PP			
Add Scene to Tour	Enable PP			
Remove Scene from Tour	Disable PP			
Pan/Tilt Commands				
Scan	Scan	Auto-pan without Limits	1	
Auto-pan	Auto-pan	Auto-pan between Limits	2	
Auto-pan Left Limit	Auto-pan Left Limit	Auto-pan Left Limit Set and Show		
Auto-pan Right Limit	Auto-pan Right Limit	Auto-pan Right Limit Set and Show		
Set Auto-pan Speed	Set Auto-pan and Scan Speed	Set Auto-pan Speed	14	
Inactive Home Return	Return Home (preset 1)	Return to Home upon Inactivity	9	
Pan AutoSpeed	Pan AutoSpeed	Ramp-up for Fixed Speed Control	16	
AutoPivot Enable	AutoPivot Enable	Enables/Disables AutoPivot	18	
Pivot Call-up	Pivot Call-up	Pan 180 Degrees		
Zone Masking	Zone Masking	Up to 16 Zones May be Blanked Out	86	
Tour Commands				
Playback A, Cont.	Playback A, Continuous	Playback A, Continuous	50	
Playback A, Single	Playback A, Single	Playback A, Single	51	
	Playback A, Resume	Playback A, Resume	52	
	Erase A Record to End	Erase A Record to End		
Playback B, Cont.	Playback B, Continuous	Playback B, Continuous	52	
Playback B, Single	Playback B, Single	Playback B, Single	53	
Start Record A	Record A	Record A	100	
Stop Record A	Record A	Record A	100	
	Resume A, Record	Resume A, Record	101	
Start Record B	Record B	Record B	101	
Stop Record B	Record B	Record B	101	
Play Pre-pos Tour	Play Pre-position Tour	Pre-position Tour	8	
Set Pre-pos Tour Period	Set pre-position Tour Period	Set Pause between Tour Call-ups	15	
Factory Defaults				
Factory Default	Reset Unit to Factory Defaults	All Customer Settings are Lost		
Camera Default	Resets Camera to Defaults	Camera Factory Default Settings	40	
Rehome Motors		Factory P/T Home Position		
R/D Specific Commands				
Auto/Random Pan	Auto-pan/Random Pan	Dip Selectable Panning Modes	1	
Random/Auto-pan	Random Pan/Auto-pan	Dip Selectable Panning Modes	7	
R/D Specific Commands (...cont.)				
Aux 2	Relay Output 2	Aux Relay Enable	2	
Aux 3	Relay Output 3	Aux Relay Enable	3	
Aux 4	Relay Output 4	Aux Relay Enable	4	
Dither	Dither Function	2-minute Delay Dither Function	5	
Aux 6	Auxiliary Relay (Triac) Control	Auxiliary Relay Function	6	

Chart continued on next page...

COMPATIBLE CAMERAS

	Aux on/off Number	Pre-pos Command	Pre-pos Set/Show Number	TC700	LTC 0709 LTC 0809	G3	Day/Night	Receiver/ Driver
		1-99	set	Y	Y	Y	Y	Y
		1-99	show	Y	Y	Y	Y	Y
		900	disable/enable	Y	Y	Y	Y	Y
		900	set	N	N	Y	Y	N
		100	set	N	N	Y	Y	N
		901-999	set/show	Y	Y	Y	Y	Y
		1-99	enable	N	N	Y	Y	N
		1-99	disable	N	N	Y	Y	N
	on/off			Y	Y	Y	Y	N
	on/off			Y	Y	Y	Y	N
		101	set/show	Y	Y	Y	Y	N
		102	set/show	Y	Y	Y	Y	N
	incr/decr			Y	Y	Y	Y	N
	on/off			Y	Y	Y	Y	Y
	on/off			Y	Y	Note [2]	Y	N
	on/off			Y	Y	Y	Y	N
		111/180	show	Y	Y	Note [2]	N	N
	on/off			N	N	Note [1]	Y	N
	on/off			Y	Y	Y	Y	N
	on/off			Y	Y	Y	Y	N
	on/--			Y	Y	Note [2]	N	N
		500	set	Y	Y	N	N	N
	on/off			N	N	Note [1]	Y	N
	on/off			N	N	Note [1]	Y	N
	on			Y	Y	Y	Y	N
	off			Y	Y	Y	Y	N
	on/off			Y	Y	N	N	N
	on			N	N	Note [1]	Y	N
	off			N	N	Note [1]	Y	N
	on			Y	Y	Y	Y	Y
	incr/decr			Y	Y	Y	Y	Y
		899	set	Y	Y	Y	Y	Y
	on			Y	Y	Y	Y	N
		110	recalibrate/show	Y	Y	Y	Y	
	on/off			N	N	N	N	Y
	on/off			N	N	N	N	Y
	on/off			N	N	N	N	Y
	on/off			N	N	N	N	Y
	on/off			N	N	N	N	Y
	on/off			N	N	N	N	Y
	on/off			N	N	N	N	Y

[1] Feature only applicable to G3 cameras having firmware equal to or greater than 2.00.
[2] Feature only applicable to G3 cameras having firmware less than 2.00.

Chart continued on next page...

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KEYBOARD CAMERA COMMANDS	CAMERA COMMANDS	CAMERA DESCRIPTIONS	AUX COMMAND NUMBER
AutoDome Lens Commands			
Iris Control	Iris Control	Auto/Manual	3
Auto-iris ALC Adjust	Auto-iris ALC Adj.	Peak/Ave	10
Auto-iris Level Adjust	Auto-iris Level Adj.	Auto-iris Level Adj	11
Auto-iris Enable	Auto-iris Activation	Activates AI upon Movement	13
Focus Control	Focus Control	Auto/Manual	4
Auto-focus Enable	Auto-focus Activation	Activates AF upon Movement	12
Spot Focus	Spot Focus	Activates Spot Auto-focus	17
	Zoom Range Limit	Limits Zoom Range for Tele	19
Digital Zoom Lock	Digital Zoom Lock	Turns DZ On and Off	80
Zoom Polarity	Zoom Polarity	Change Zoom Polarity	91
Focus Polarity	Focus Polarity	Change Focus Polarity	92
Iris Polarity	Iris Polarity	Change Iris Polarity	93
AutoDome Camera Commands			
Backlight Comp.	BL COMP	Backlight Compensation	20
High Light	HIGH LIGHT	High Light	21
Shutter Adjust	SHUTTER ADJ	Shutter Adj	22
Shutter Enable	SHUTTER	Shutter	23
Auto Shutter Enable	Auto-shutter	Auto-shutter Activation	24
IR Filter Menu	IR Filter Menu	In/Out/Auto	56
IR Filter In/Out	IR Filter In/Out	In/Out	57
Auto White Balance	WHITE BALANCE	White Balance	30
Red Adjust	RED	Red Adj	31
Blue Adjust	BLUE	Blue Adj	32
Red Yellow Hue Adj.	R Y HUE	R-Y Hue Adj	33
Blue Yellow Hue Adj.	B Y HUE	B-Y Hue Adj	34
Fixed White Balance	FIXED WB	Fixed White Balance	35
Line Lock Phase Delay	LL PHASE	Adj LL Phase Delay	41
Sync Mode	SYNC	Sync Mode	42
AGC Enable	AGC	AGC	43
Sharpness	VERT APT ADJ	Vertical Aperture Adj	44
Field of View Optimize	FOV OPT C	Field of View Optimize	45
Day/Night Level	Night Mode Threshold	Threshold Level Adj	58
AutoDome OSD Commands			
OSD Enable	OSD ENABLE	On-screen Display Enable	60
OSD Display	OSD DISPLAY	OSD Adj	61
Pre-pos Title Set	PP TITLE MENU	Pre-position Title Set	62
Zone Title Menu	ZONE TITLE MENU	Zone Title Set	63
Zone Tile Enable	ZONE TITLE C	Zone Title On/Off	64
AutoDome General Commands			
Display Software Version	Display Software Version	Display Software #	66
Advanced Menu	Advanced Menu	Advanced Menu	46
View Factory Settings	View Factory Settings	View Factory Settings	47
AutoDome Misc Commands			
	Command Lock On	Command Lock On	
	Command Unlock	Command Unlock	
	Command Lock/Unlock	Command Lock/Unlock	90
	Command Lock/Unlock	Command Lock/Unlock	55
Fast Address Display	Fast Address, Display	Fast Address, Display	997
Fast Address All	Fast Address, All Units	Fast Address, All Units	998
Fast Address UnAssigned	Fast Address, Unaddressed	Fast Address, Unaddressed	999

Chart continued on next page...

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	AUX ON/OFF	PRE-POS COMMAND NUMBER	PRE-POS SET/SHOW	TC700	LTC 0709 LTC 0809	G3	DAY/NIGHT	RECEIVER/ DRIVER
	auto/manual			Y	Y	Y	Y	N
	peak/ave			Y	Y	Y	N	N
	incr/decr			Y	Y	Y	Y	N
	on/off			Y	Y	Note [2]	N	N
	auto/manual			Y	Y	Y	Y	N
	on/off			Y	Y	Note [2]	Y	N
	on/off			Y	Y	Note [2]	Y	N
	on/off			Y	N	N	N	N
	on/off			N	Y	Note [1]	Y	N
	on/off			N	N	Note [3]	Y	N
	on/off			N	N	Note [3]	Y	N
	on/off			N	N	Note [3]	Y	N
	on/off			Y	Y	Y	Y	N
	on/off			Y	Y	N	N	N
	incr/decr			Y	N	N	N	N
	on/off			Y	Y	Note [1]	N	N
	on/off			Y	Y	N	N	N
	on/--			N	N	N	Y	N
	on/off			N	N	N	Y	N
	auto/manual			Y	Y	Y	Y	N
	incr/decr			Y	Y	N	N	N
	incr/decr			Y	Y	N	N	N
	incr/decr			Y	Y	N	N	N
	incr/decr			Y	Y	N	N	N
	indoor/outdoor			Y	Y	Note [1]	Y	N
	incr/decr			Y	Y	Y	Y	N
	ll/xtal			Y	Y	Y	Y	N
	on/off			Y	Y	Y	Y	N
	incr/decr			Y	Y	Y	Y	N
	on/off			N	Y	N	N	N
	on			N	N	N	Y	N
	on/off			N	Y	Y	Y	N
	on/menu			N	Y	Y	Y	N
	on/menu			N	Y	Y	Y	N
	on/menu			N	Y	Y	Y	N
	on/off			N	Y	N	N	N
	on/--			N	Y	Y	Y	N
	on/--			N	N	Note [1]	Y	N
	on/off			N	N	Note [1]	Y	N
		103	set/----	Y	Y	Y	Y	N
		104	set/----	Y	Y	Y	Y	N
	on/off			N	N	Note [1]	Y	N
	on/off			N	N	Note [3]	Y	N
	on			N	N	Note [3]	Y	N
	on			N	N	Note [3]	Y	N
	on			N	N	Note [3]	Y	N

[1] Feature only applicable to G3 cameras having firmware equal to or greater than 2.00.
[2] Feature only applicable to G3 cameras having firmware less than 2.00.
[3] Feature only applicable to G3 cameras having firmware greater than 2.00.

APPENDIX C: SECURITY INFORMATION

IntuiKey Security

Features that should not be changed unintentionally are protected by a general password. This password can be accessed by pressing 1 and 0 simultaneously. If the buttons are not pressed within one (1) second, the command times out.

AutoDome Security

The AutoDome contains security features to restrict access to its Advanced Menu.

To obtain access to the Advanced Menu, enter an Auxiliary Off 90 command. If no password has been set, the AutoDome's default password of 0000 (four zeros) allows the Auxiliary Off 90 command to directly unlock the security feature to the Advanced Menu commands.

After a period of thirty (30) minutes, the AutoDome will automatically lock access to its *Advanced* Menu.

If the AutoDome password feature is enabled, enter the appropriate password using the keyboard joystick.

Americas
Bosch Security Systems
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 (585) 223 4060
+1 800 289 0096
security.sales@us.bosch.com
http://www.boschsecurity.us

Europe, Middle East, Africa
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: +31 (0) 40 27 83955
Fax: +31 (0) 40 27 86668
emea.securitysystems@bosch.com
http://www.boschsecurity.com

Asia-Pacific
Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499
apr.securitysystems@bosch.com
http://www.boschsecurity.com

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