G³ AutoDome®
Instruction Book

EnviroDome™
Indoor Pendant
In-ceiling Model

Let's make things better.

PHILIPS

IMPORTANT SAFEGUARDS

1. Read Instructions - All the safety and operating instructions should be read before the unit is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the unit and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
6. Accessories - 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 with a stand, tripod, bracket, or mount recommended by the manufacturer or sold with the product. Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
7. Power Sources - This unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply you plan to use, consult your appliance dealer or local power company. For units intended to operate from battery power or other sources, refer to the operating instructions. This equipment is to be isolated from the mains supply by a limited power source as specified in EN60950:1992 Clause 2.11. The LTC 5401 or LTC 9540 are examples of such power sources.
8. Power Lines - An outdoor power system should not be located in the vicinity of overhead power lines or other electric light or power circuits or where it can fall into such power lines or circuits. When installing an outdoor system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal. U.S.A. models only - refer to the National Electrical Code Article 820 regarding installation of CATV systems.
9. Servicing - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
10. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
11. Safety Check - Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
12. Coax Grounding - If an outside cable system is connected to the unit, be sure the cable system is grounded. U.S.A. models only--Section 810 of the National Electrical Code, ANSI/NFPA No.70-1981, provides information with respect to 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.

FCC & ICES INFORMATION (U.S.A. AND CANADIAN MODELS ONLY)

WARNING - 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 residential installation. This equipment generates, uses, and radiates radio frequency energy and, if not installed and used in accordance with the instructions, 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 own expense. Intensional or unintensional 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.

SAFETY PRECAUTIONS

CAUTION
RISK OF ELECTRIC SHOCK. DO NOT OPEN!

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This label may appear on the bottom of the unit due to space limitations.

The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS NOT SPECIFICALLY DESIGNED FOR OUTDOOR USE TO RAIN OR MOISTURE.

Attention: 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.

1

COVER REMOVAL

⚠	**WARNING:** **REMOVAL OF THE COVER SHOULD ONLY BE PERFORMED BY QUALIFIED SERVICE PERSONNEL - NOT USER SERVICEABLE. THE UNIT SHOULD ALWAYS BE UNPLUGGED BEFORE REMOVING THE COVER AND REMAIN UNPLUGGED WHILE THE COVER IS REMOVED.**

24 VAC Units

Do Not Exceed 30 VAC Input. Voltage applied to the unit's power input should not exceed 30 VAC. Normal input voltage is 24 VAC. User supplied wiring from 24 VAC supply to unit must be in compliance with electrical codes (Class 2 power levels). Do not ground 24 VAC supply at power supply terminals or at unit's power supply terminals.

⚠ This equipment is to be isolated from the mains supply by a limited power source as specified in EN60950:1992 Clause 2.11. The LTC 5401 or LTC 9540 are examples of such power sources.

220-240 V, 50 Hz Power Cords

220-240 V, 50 Hz power cords, input and output, must comply with the latest versions of IEC Publication 227 or IEC Publication 245.

SECURITE

⚡	**ATTENTION** RISQUE D' OCUTION. NE PAS OUVRIR	⚠

DANGER: POUR ÉVITER TOUT RISQUE D'ÉLECTROCUTION, NE PAS OUVRIR LE BOÎTIER. IL N'Y A PAS DE PIÈCES REMPLAÇABLES À L'INTÉRIEUR. POUR TOUTE RÉVISION, S'ADRESSER À UN TECHNICIEN SPÉCIALISÉ.

En raison de limitation de place, cette étiquette peut être placée sur le dessous de l'appareil.

⚡ L'éclair fléché dans un triangle équilatéral, avertit l'utilisateur de la présence d'une "tension dangereuse" non isolée à l'intérieur de l'appareil et d'une valeur suffisante pour constituer un risque d'électrocution.

⚠ Le point d'exclamation contenu dans un triangle équilatéral, avertit l'utilisateur de la présence, dans la documentation qui accompagne l'appareil, de consignes d'utilisation et de maintenance importantes.

ATTENTION
POUR ÉVITER LE RISQUE D'ÉLECTROCUTION OU D'INCENDIE, NE PAS EXPOSER À LA PLUIE OU À L'HUMIDITÉ UN APPAREIL NON CONÇU POUR UNE UTILISATION EXTÉRIEURE.

⚠ Attention: L'installation doit être effectuée uniquement par du personnel de service qualifié conformément à la réglementation du Code Electrique National ou à la réglementation locale.

⚠ Disjonction de l'alimentation. Les appareils avec ou sans commutateurs ON-OFF sont alimentés à chaque fois que le cordon d'alimentation est branché à la source d'alimentation; toutefois, les appareils disposant de commutateurs ON-OFF ne fonctionnnent que lorsque le commutateur ON-OFF est sur la position ON. Le cordon d'alimentation est la disjonction d'alimentation principale pour tous les appareils.

SOURCES D'ALIMENTATION EXTÉRIEURES

⚠	**UTILISER UNIQUEMENT LES SOURCES D'ALIMENTATION RECOMMANDÉES. LES SOURCES D'ALIMENTATION DOIVENT ÊTRE CONFORMES AUX RÉGLEMENTATIONS DE LA DERNIÈRE VERSION IEC 65/VDE 0860. TOUTE MODIFICATION PEUT ENDOMMAGER L'APPAREIL OU PROVOQUER UN INCENDIE OU UN CHOC ÉLECTRIQUE.**

Appareils 24 VCA

Ne pas excéder 30 VCA. La tension appliquée à l'entrée d'alimentation de l'appareil ne devrait pas excéder 30 VCA. Toute installation électrique fournissant du 24 Volts courant alternatif doit être conforme aux codes électriques. (Niveaux d'alimentation de la Classe 2). Ne pas brancher une prise de terre sur les bornes d'alimentation 24 Volts ou aux bornes d'alimentation de l'appareil.

Les cordons secteur 220-240 V, 50 Hz

Les cordons secteur 220-240 V, 50 Hz, entrée et sortie, doivent êtro conformes aux versions les plus récentes de la publication 227 de la C.I.E. ou à la publication 245 de la C.I.E.

SICHERHEITSVORKEHRUNGEN

⚡	**VORSICHT** STROMSCHLAGGEFAHR! BITTE NICHT ÖFFNEN!	⚠

VORSICHT: UM EINEN ELEKTRISCHEN SCHLAG ZU VERMEIDEN, ABDECKUNG NICHT ENTFERNEN. WARTUNGEN ALLER ART QUALIFIZIERTEM PERSONAL ÜBERLASSEN.

Aus Platzgründen kann diese Warnung auf der Unterseite des Gerätes angebracht sein.

⚡ Das Blitzsymbol im gleichseitigen Dreieck soll den Benutzer auf nicht isolierte "Hochspannung" im Gehäuse aufmerksam machen, die eventuell stark genug ist, um einen elektrischen Schlag zu verursachen.

⚠ Das Ausrufezeichen im gleichseitigen Dreieck soll den Benutzer auf wichtige Bedienungs- und Wartungsanleitungen in der dem Gerät beigefügten Literatur aufmerksam machen.

WARNUNG
UM FEUER ODER ELEKTRISCHE SCHLÄGE ZU VERMEIDEN, SETZEN SIE DAS GERÄT NIEMALS REGEN ODER FEUCHTIGKEIT AUS.

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

⚠ Netzanschluß. 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 man das Netzkabel aus der Steckdose zieht, dann ist die Spannungszuführung zum Gerät vollkommen unterbrochen.

EXTERNE NETZGERÄTE

<table>
<tr>
<td>⚠</td>
<td>**NUR VOM HERSTELLER EMPFOHLENE NETZGERÄTE VERWENDEN! DIE NETZGERÄTE MÜSSEN DER JEWEILS GÜLTIGEN VERSION DER IEC 65/VDE 0860 BESTIMMUNGEN ENTSPRECHEN. ANDERE ERSATZNETZGERÄTE KÖNNEN DAS VORLIEGENDE GERÄT BESCHÄDIGEN UND FEUER ODER ELEKTROSCHLAG BEWIRKEN.**</td>
</tr>
</table>

24 VAC Geräte

Achtung! 30 Volt Eingangswechselspannung darf für 24 VAC Modelle nicht überschritten werden. Normal-betrieb findet bei 24 Volt Wechselspannung statt. Die Kabel- bzw. Drahtverbindung vom Netzgerät zu dem vor-liegenden Gerät muß die Bestimmungen der Schutz-klasse II erfüllen. Nicht die 24-Volt-Leitung erden weder am Netzgerät noch an den Anschlußklemmen des vorlie-genden Gerätes.

220-240 V, 50 Hz Netzkabel, Eingang und Ausgang

220-240 V, 50 Hz Netzkabel, Eingang und Ausgang, muß die neueste Version der IEC Vorschriften, Veröffentlichung 227 oder 245, erfüllen.

PRECAUCIONES DE SEGURIDAD

<table>
<tr>
<td>⚡</td>
<td>**PRECAUCION**
¡PELIGRO DE DESCARGAS ELÉCTRICAS, NO ABRIR!</td>
<td>⚠</td>
</tr>
</table>

PRECAUCION: PARA REDUCIR EL RIESGO DE CHOQUE ELÉCTRICO, FAVOR NO ABRIR LA CUBIERTA. ESTE EQUIPO NO CONSTA DE PIEZAS O PARTES QUE REQUIEREN SERVICIO O MANTENIMIENTO. PARA REPARACIONES FAVOR REFERIRSE A UN TÉCNICO CALIFICADO.

Debido a limitaciones de espacio, esta etiqueta puede aparecer en la parte inferior de la unidad.

⚡ El símbolo representado por un relámpago con punta de flecha dentro de un triángulo equilátero, se muestra con el objetivo de alertar al usuario que exis-ten "voltages peligrosos" sin aislamiento, dentro de la cubierta de la unidad. Dichos voltages pueden ser de tal magnitud que con-stituyen un riesgo de choque eléctrico a personas.

⚠ El símbolo de exclamación dentro de un triángulo equilátero, se muestra con el objetivo de alertar al ususario de que instrucciones de operación y manten-imiento importantes acompañan al equipo.

PELIGRO
PARA EVITAR EL PELIGRO DE INCENDIO Ó CHOQUE ELÉCTRI-CO, NO EXPONGA A LA LLUVIA Ó HUMEDAD, EQUIPOS QUE NO HAN SIDO DISEÑADOS PARA USO EXTERIOR.

⚠ Atención: La instalación de este equipo debe ser real-izada por personal capacitado, solo en acuerdo, y en cumplimiento de normas del "National Electric Code" (Código Eléctrico Nacional) ó las normas del Gobierno Nacional Local.

⚠ Para Desconectar la Alimentación: Unidades no equipadas con interruptores ON/OFF, son alimen-tadas cuando el cable de alimentación es conectado a la corriente eléctrica. Las unidades equipadas con interruptores son alimentadas de igual forma, pero adicionalmente requieren que el interruptor esté posicionado en ON. El cable de ali-mentación es el medio principal de desconexión del equipo.

<table>
<tr>
<td>⚠</td>
<td>**USAR SOLO LAS FUENTES DE ALIMENTACIÓN RECOMENDADAS. LAS FUENTES DE ALIMENTACIÓN DEBEN CUMPLIR CON LOS REQUISITOS DE LA VERSIÓN MÁS RECIENTE DE LA IEC 65/VDE 0860. EL USO DE SUBSTITUTOS PUEDE DAÑAR LA UNIDAD, Ó CREAR PELIGRO DE INCENDIO O CHOQUE ELÉCTRICO.**</td>
</tr>
</table>

FUENTES DE ALIMENTACIÓN EXTERNAS

Unidades de 24 VCA: No exceder 30 VCA de entrada. Voltage suplido a la unidad no debe exceder 30 VCA. Voltage de entrada normal es de 24 VCA. El cableado de 24 VCA provisto por el usuario debe cumplir con las normas eléctricas (Clase 2 de niveles de alimentación). No conectar los 24 VCA a tierra en las terminales de la alimentación ó a las ter-minales de la fuente de alimentación de la unidad.

220-240 V, los cables eléctricos de 50 Hz: 220-240 V, los cables eléctricos de 50 Hz, de entrada y de salida, deben cumplir con las versiones mas recientes de la publicación IEC 227 ó la Publicación IEC 245.

<table>
<tr>
<td>**For additional information or to speak to a representative, please contact the Philips Communication, Security & Imaging location nearest you:**

The Americas: 1 800 326 3270
Europe & Middle East: 31 40 278 1222
Asia Pacific Region: 65 350 1859

or visit our Web site at www.philipscsi.com.</td>
</tr>
</table>

G^3 AutoDome
Instruction Book

*EnviroDome
Indoor Pendant
In-ceiling Model*

CONTENTS:

AutoDome Instruction Book

AutoDome User Manual (Insert)

NOTE: BEFORE BEGINNING INSTALLATION, PLEASE REMOVE THE USER MANUAL IN THE CENTER OF THIS BOOKLET.

NOTE: Section A applies to the EnviroDome & Indoor Pendant. Photos show the EnviroDome.

Carefully remove the G3 AutoDome® from the box. The unit is shipped with the lower and upper housings connected only by the safety cable. **DO NOT STRESS THE CABLE WHEN UNPACKING THE AutoDome**. Save all packing material, as it can be used for setting up the camera and for transporting the dome.

STEP
A1

Place the upper half of the G3 AutoDome into the star shaped foam and remove all packing material. Make sure to remove all debris that may interfere with the camera.

If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper. If any items are missing, notify your Philips Communication, Security & Imaging Sales Representative or Customer Service Representative.

STEP
A2

STEP
A3

Remove the camera's plastic lens cover.

If installing the EnviroDome model, a desiccant bag and holder are included to reduce exposure to moisture. Ensure that the desiccant bag is securely tucked into the ring of the lower housing, as shown in the photo inset at right.

Align the ball studs in the lower half with the clips in the connector end of the upper half. The safety cable should prevent misalignment.

STEP
A4

Press firmly on the edge of the lower half until you feel the lower half mate with the upper half. When properly mated, there should be approximately 1/8 in (32 mm) gap all around the Dome.

If you need to remove the lower half, a plastic Dome key is provided.

STEP
**A5**

CAMERA ADDRESSING

To use FastAddress, skip to step A10.
Otherwise, to manually set the switch address,
flip the dome into the star shaped foam so the
bubble side is down.

Remove the 4 top screws as shown and lift the
top plate carefully off the dome. The cable is
approximately 5 cm (2 in) long, so remove
carefully from the PCB.

Remove the top plate cable (if necessary) from
the dome to access the address switch. Set
the address switch (as in **Step A7**) and make a
note of it.

STEP
A6
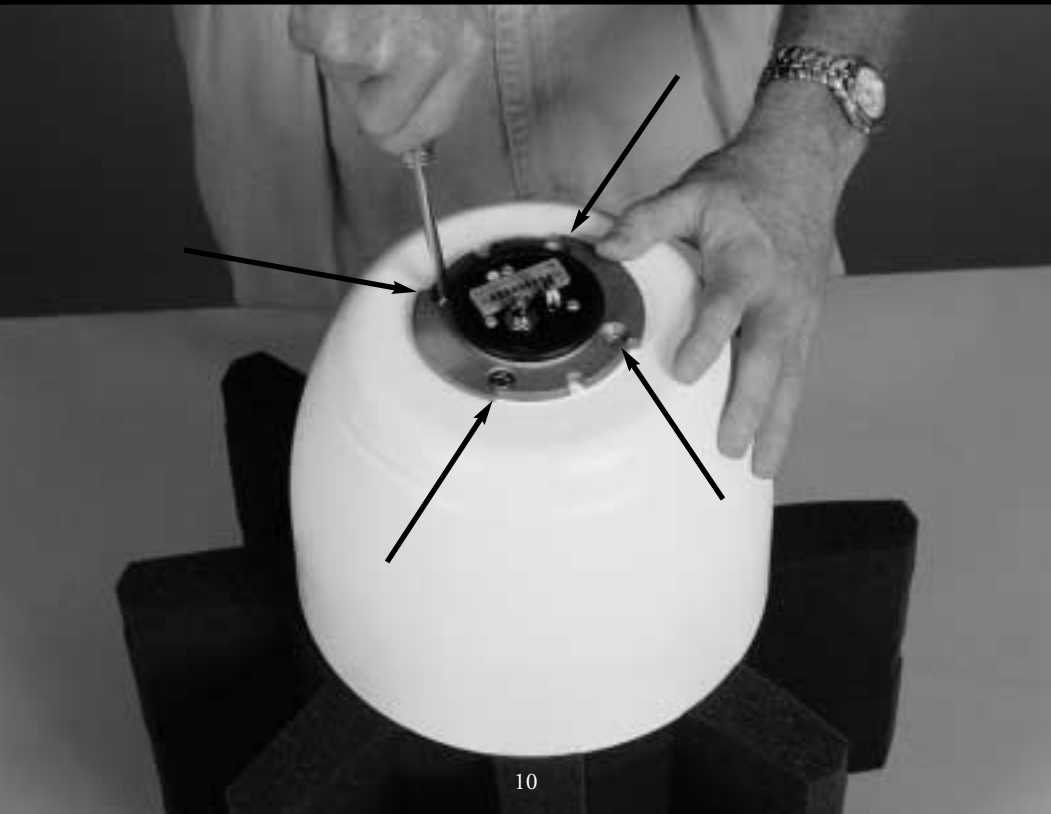
If you are using RS-232 Communications:

The unit is shipped with the RS-232 Baud Rate set to 9600. With the connector plate removed, the baud rate can be changed with the dip switch.
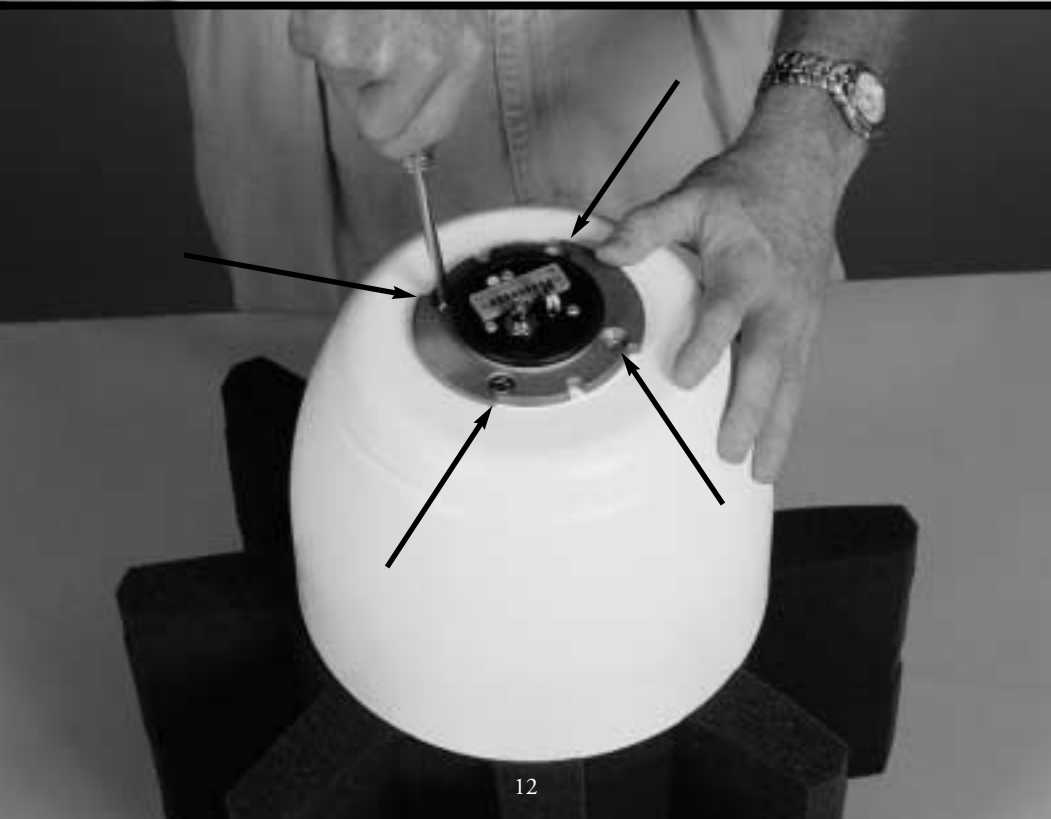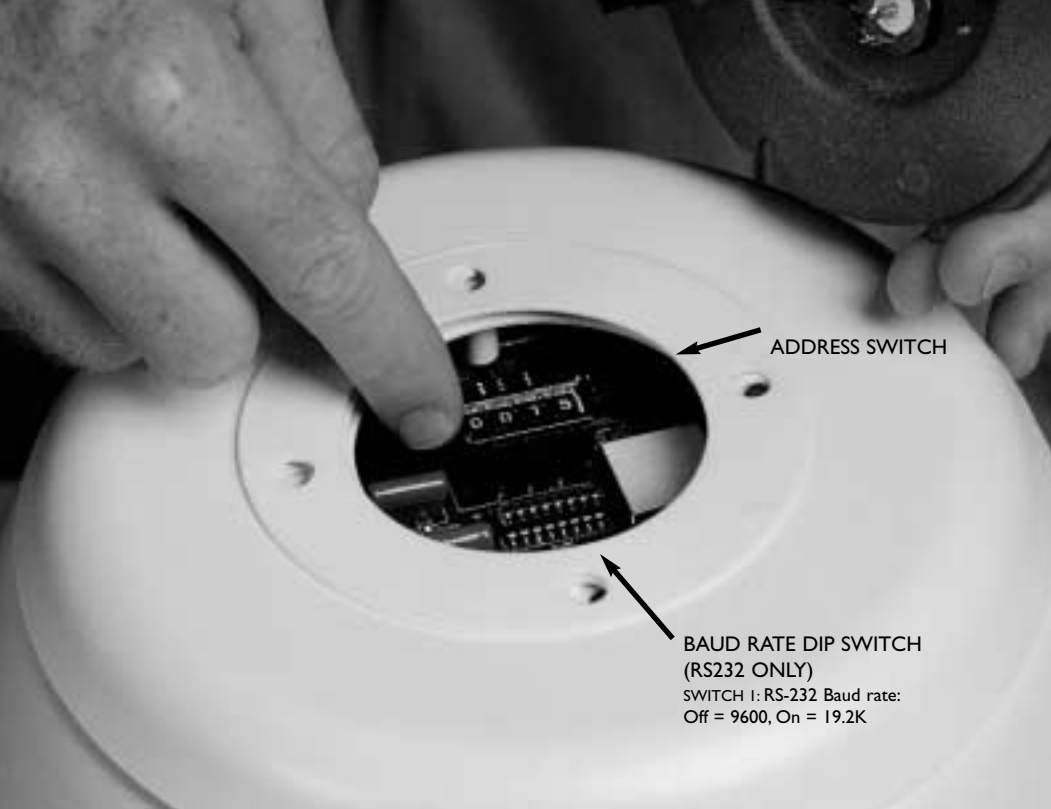
Switch 1: RS-232 Baud rate: Off = 9600, On = 19.2K

STEP
A7

Reconnect the top plate cable. Replace the top plate and gasket. Align the yellow dot on the connector top with the dimple on the housing and firmly tighten the four screws. Do not overtighten.
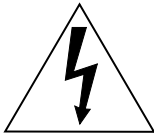
STEP
A8

ADDRESS SWITCH

BAUD RATE DIP SWITCH
(RS232 ONLY)
SWITCH 1: RS-232 Baud rate:
Off = 9600, On = 19.2K

Writing the address on masking tape and sticking it to the dome will help avoid confusion when installing the dome.

The dome is now ready to be installed using an appropriate G3 mount!

ATTENTION: Installation should be performed by qualified service personnel only, in accordance with the National Electrical Code or applicable local codes. Refer to applicable installation section.

The G3 AutoDome can be mounted to a wall, mast (pole), roof, pipe, or a corner mount. You must have installed the appropriate mount before installing the AutoDome. Each mount includes its own mounting instructions.

⚠ **CAUTION:** Mounts must be properly and securely mounted to a supporting structure capable of sustaining the unit weight.* Use care when selecting mounting hardware (not supplied) for installation. The mounting surface and unit's weight should be carefully considered.

The following instructions reference a 120/230 VAC Pendant wall plate installation mounted to an existing structure. The instructions assume the safety cable, power, video, and control cables have already been properly installed.
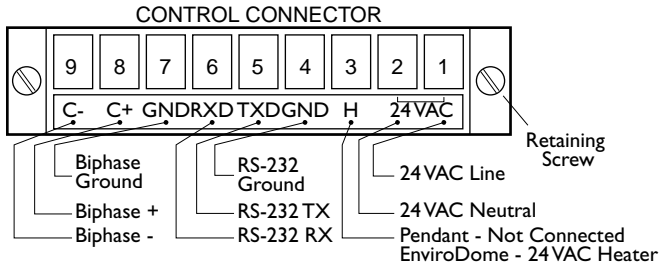
*Refer to mounting instructions.

Attach the installation-assist cable* to the eye-hook on the top of the dome and close the safety cable.

* For pipe mounting, user must provide a cable. See mounting guide for instructions.

When using a pipe or roof mount, make the following connections.

CONTROL CONNECTOR

9	8	7	6	5	4	3	2	1
C-	C+	GND	RXD	TXD	GND	H		24 VAC

Retaining Screw

- Biphase Ground
- Biphase +
- Biphase -
- RS-232 Ground
- RS-232 TX
- RS-232 RX
- 24 VAC Line
- 24 VAC Neutral
- Pendant - Not Connected
  EnviroDome - 24 VAC Heater

Use either Biphase or RS-232, not both.

Connect Video (BNC) cable and the CONTROL connector. Tighten screws on control connector.

A dome in a star configuration or the last dome on a daisy chain requires a 110 Ω terminating resistor across pin 8 (C+) and pin 9 (C-).

NOTE: Daisy chain configuration is not possible if fiber optic accessory is used.

G3 EnviroDome 24 VAC INSTRUCTIONS
ENVX2450X and ENVX2460X Kits

User must supply a Philips LTC 5401 transformer (24 VAC, 50 VA or equivalent). Check for the following:

1. LINE VOLTAGE into transformer is between 105 to 132 VAC for 120 VAC systems or 195 to 253 VAC for 230 VAC systems.

2. Transformer can supply between 21 and 32 VAC to the EnviroDome under load.

3. 24 VAC wiring is adequate for powering. The following are recommended wire run lengths at 68°F (20°C). For installations below 0°F (-20°C), reduce the run lengths by 10%.

> **Maximum Wiring Distance**
> **16 AWG wire - 120 ft/37 m**
> **18 AWG wire - 90 ft/23 m**

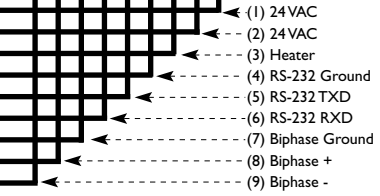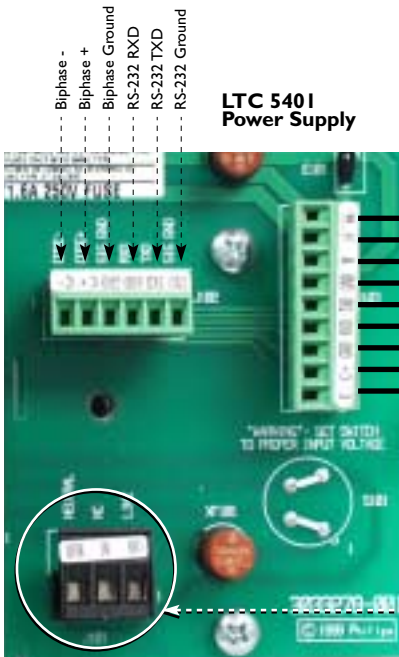Align the notch on the G3 AutoDome with the notch on the **FRONT** of the Pendant Arm.

NOTE: newer models use a slotted screw instead of an allen screw.

Lift the G3 AutoDome into the Pendant Arm and twist clockwise until the notch on the AutoDome is aligned with the notch on the **SIDE** of the pendant arm.

Input Connector *(from Control System)*

Biphase -
Biphase +
Biphase Ground
RS-232 RXD
RS-232 TXD
RS-232 Ground

**LTC 5401
Power Supply**

- (1) 24 VAC
- (2) 24 VAC
- (3) Heater
- (4) RS-232 Ground
- (5) RS-232 TXD
- (6) RS-232 RXD
- (7) Biphase Ground
- (8) Biphase +
- (9) Biphase -

"WARNING" - SET SWITCH
TO PROPER INPUT VOLTAGE

**if you are not using an LTC 5401,
you should jumper Pin (1) 24 VAC
and Pin (3) Heater.**

Mains Voltage Input

120 VAC = 105 to 132
230 VAC = 195 to 253

ALIGN NOTCHES

ROTATE
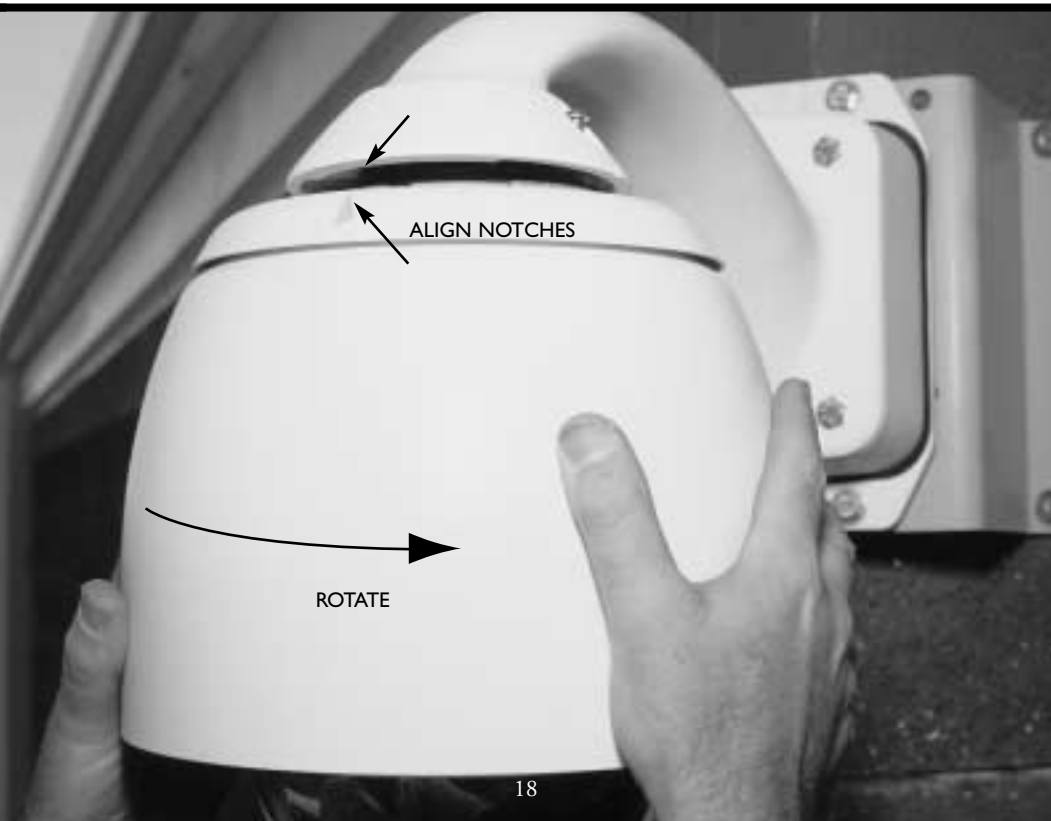
Tighten the two screws on the top of the pendant arm until snug. **Do not overtighten**.

NOTE: Newer models use a slotted screw instead of an Allen screw.

You may now power the G3 AutoDome.

STEP

A14

If you are using the FastAddress feature, go to **Page 31** for additional information.

Congratulations! You've installed the G3 AutoDome.

STEP

A15

NOTE: Section B applies to the In-Ceiling AutoDome.

Carefully remove the G3 AutoDome® from the box. Save all packing material, as it can be used for setting up the camera and for transporting the dome.

If the item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper. If any items are missing, notify your Philips Communication, Security & Imaging Sales Representative or Customer Service Representative at the location nearest you:

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Europe & Middle East: 31 40 278 1222
Asia Pacific Region: 65 350 1859

or visit our Web site at www.philipscsi.com.

STEP
B1

To use FastAddress, skip to **Step B3**. Otherwise, set the address switch as shown. Setting address selector to 0000 (***Not Recommended***), responds to all messages regardless of address; otherwise, the unit will only respond to commands issued for that address.

If you are using RS-232 Communications:

The unit is shipped with the RS-232 Baud Rate set to 9600. This rate can be changed with dip switch.

The following settings pertain to AutoDome versions 2.00 and newer:

Switch 1 ON: RS-232 Baud rate = 19.2 K
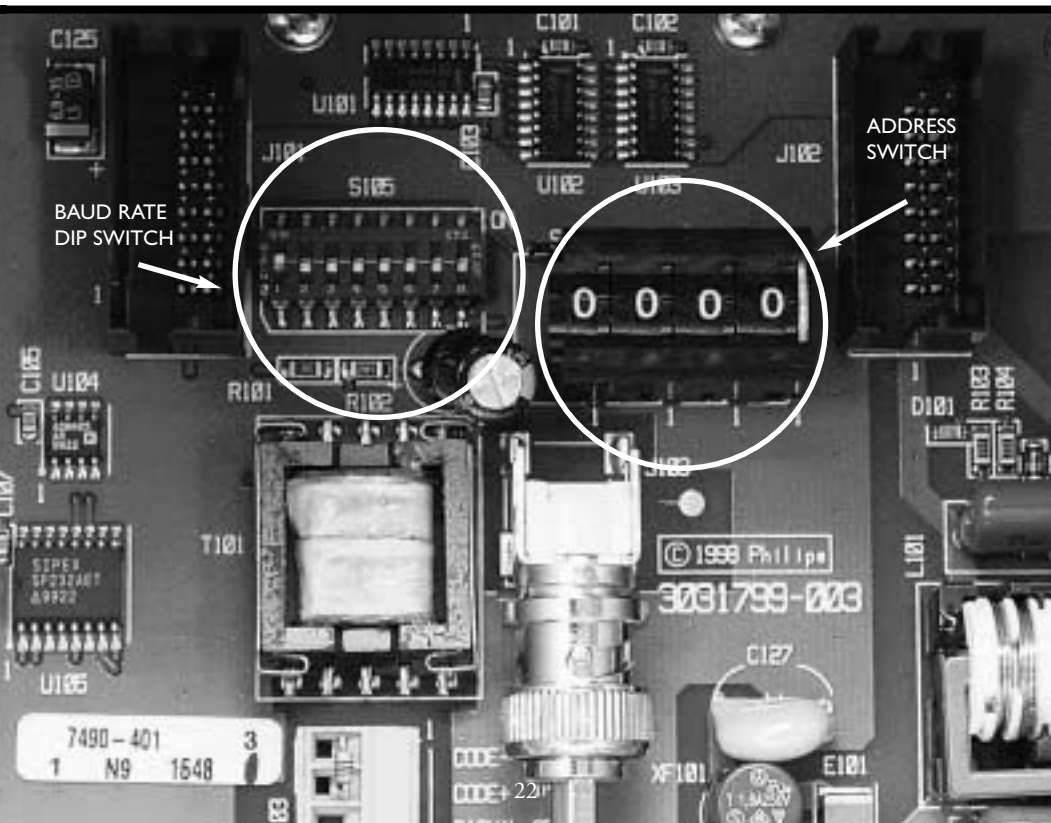Switch 2 OFF: RS-232 Baud rate = 9600

For versions prior to 2.00, use the following settings:

Switch 1 ON: RS-232 Baud rate = 9600
Switch 2 OFF: RS-232 Baud rate = 19.2 K

STEP
B2

BAUD RATE
DIP SWITCH

ADDRESS
SWITCH

Attach the dome window to the camera module by aligning the blue *Lock* labels.

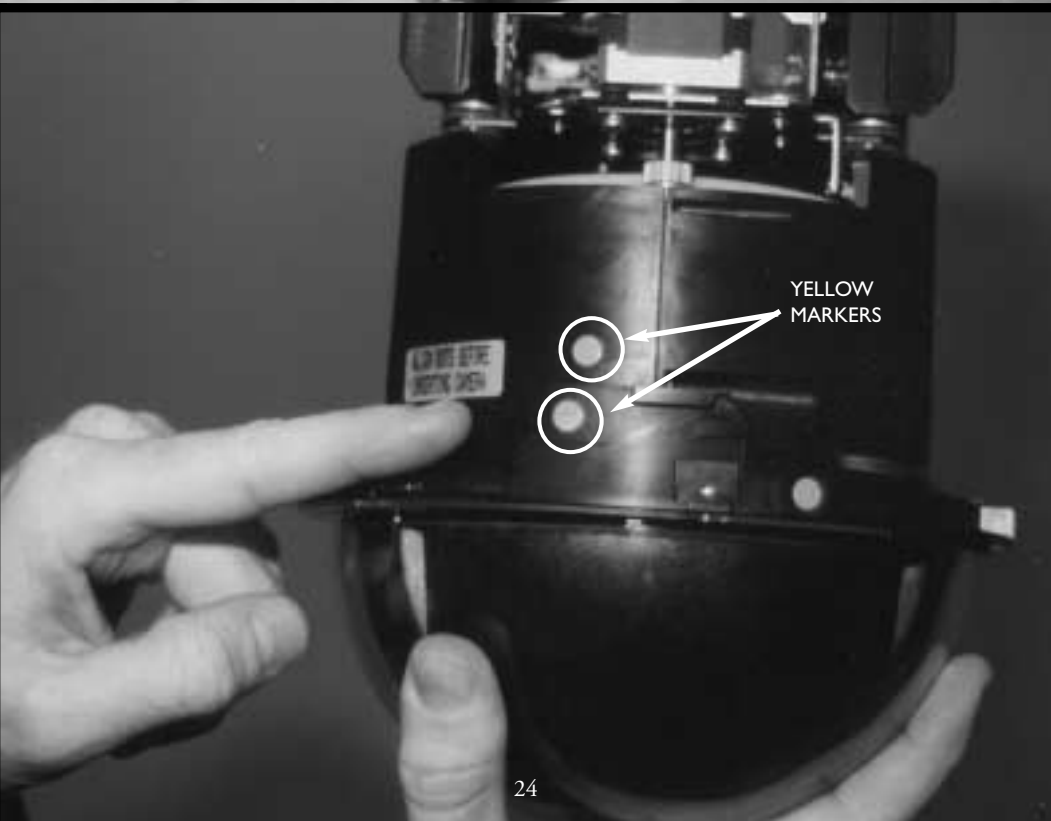Snap the dome cover into position by pressing gently on the dome 90° from the blue labels.

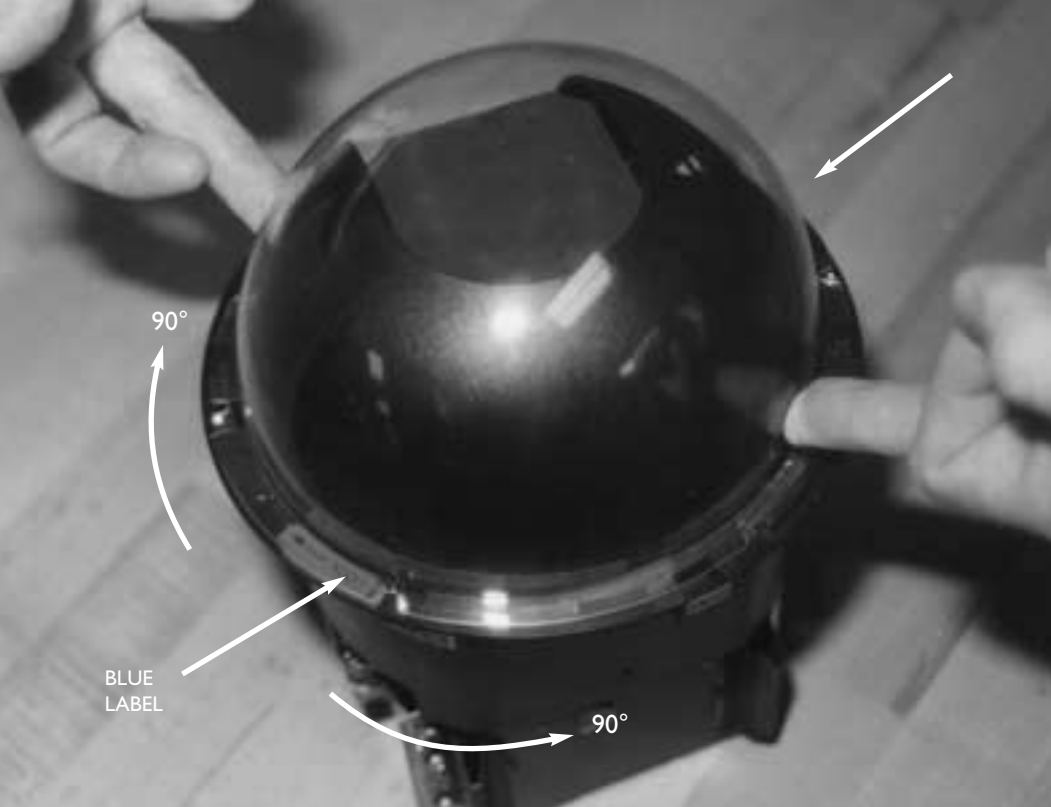While holding the top of the camera, rotate the lower portion and align the camera dome yellow markers.

90°

BLUE
LABEL

90°

YELLOW
MARKERS

With the red dot on the camera module facing the red dot on the backbox, slide the camera module into the backbox module using the guides. Note that the camera is shown turned 180 degrees to illustrate red markers.
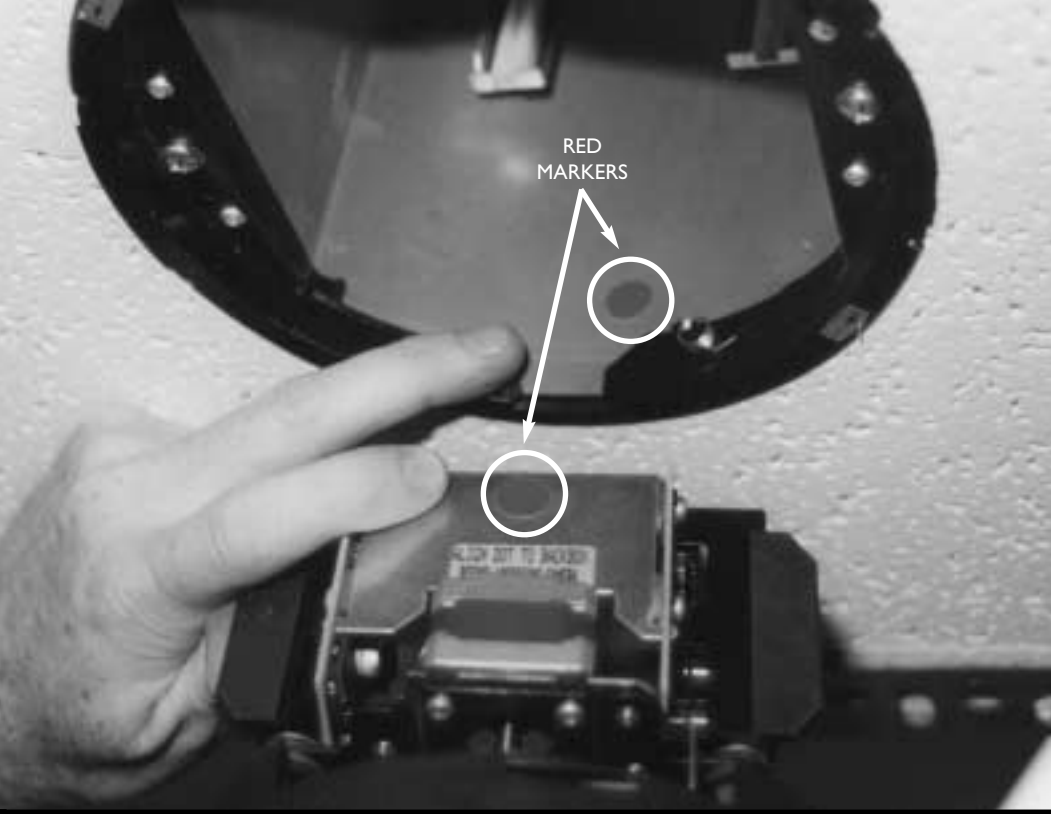
While grasping the unit by the dome window, insert the camera module, making sure that the unit is vertical.

RED
MARKERS

RED DOTS
FACING EACH
OTHER

While pressing up, twist the dome window/locking ring clockwise approximately 1/4 turn. Verify that the arrowheads on the green labels have mated. The camera will initialize 10 seconds after it is properly installed.

An optional tamper clip is provided to prevent the dome from being removed. To install, locate blue label, orient the tamper clip with the 2 tabs pointing up, and press the tamper clip into the locking ring just to the right of either blue label. A straight blade screwdriver will help push the clip in place.

GREEN LABELS

TURN TO LOCK
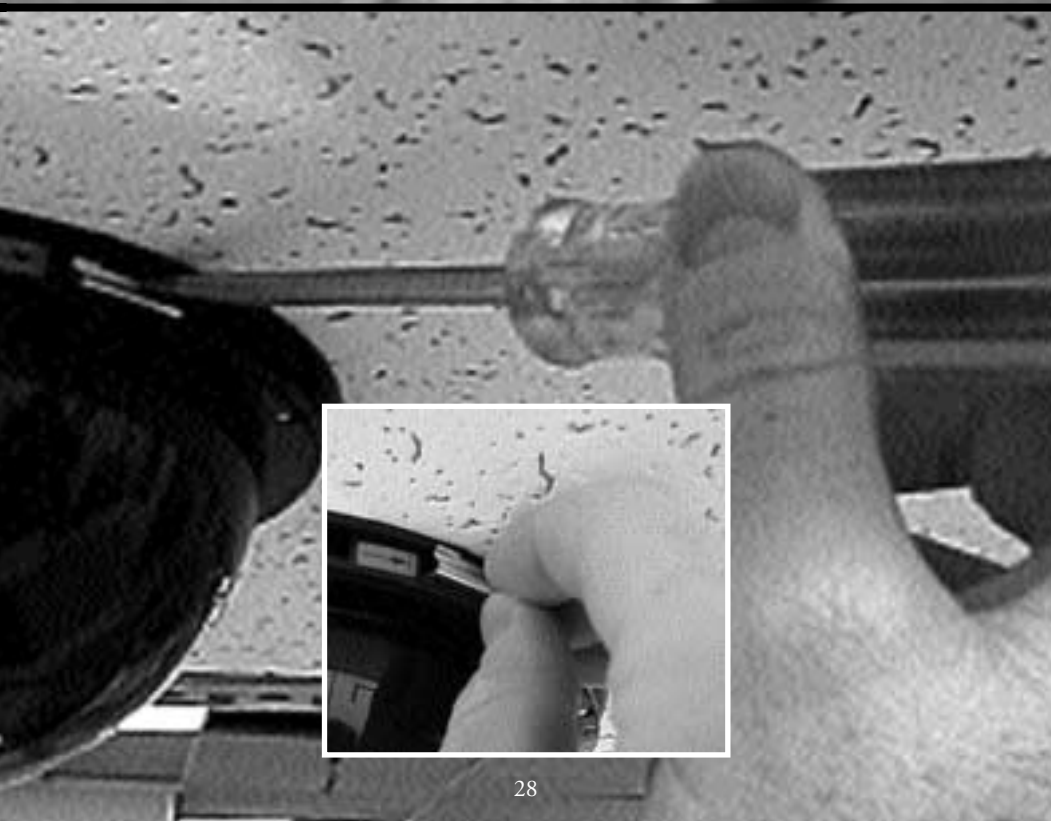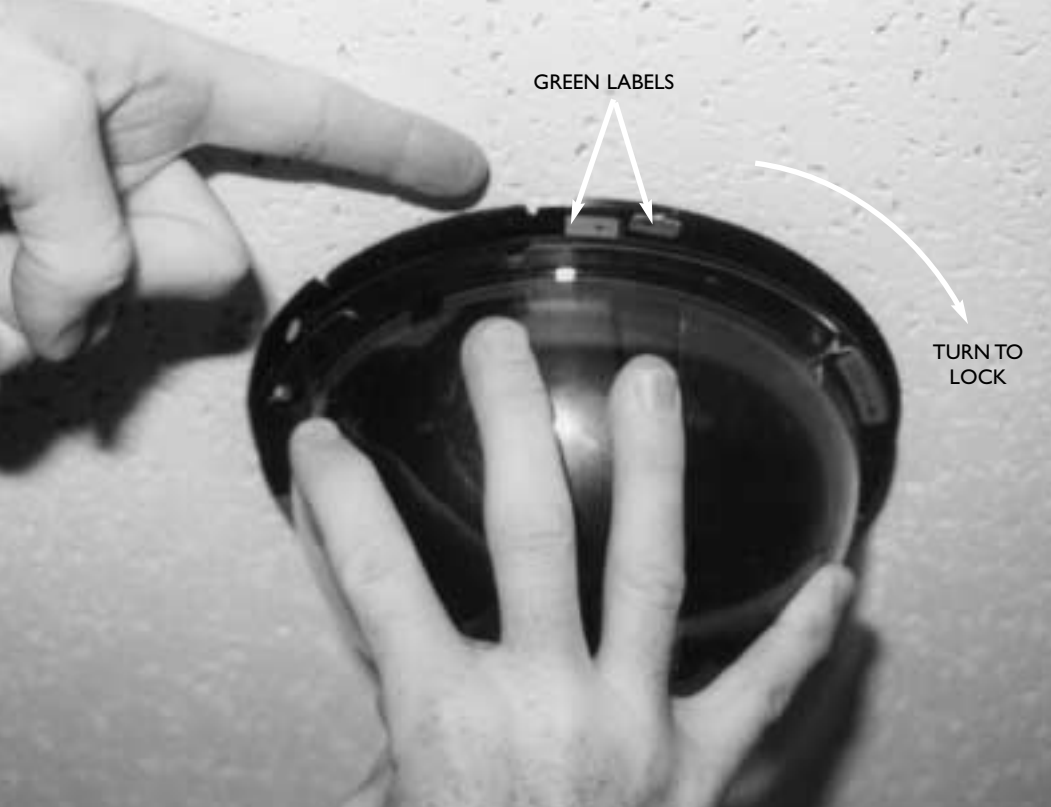
To install the trim ring, align the yellow dots on the inside of the trim ring with the yellow dots on the locking ring. To ensure proper installation, push on the trim ring vertically until a click is felt. Installation is now complete.

If you are using the FastAddress feature, go to **Page 31** for additional information.

INSTALLATION

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

The G3 AutoDome® system is suitable for use in environmental air spaces or in an air handling plenum of a nonfire-resistant ceiling.

CAUTION: Do not remove camera from pan/tilt. Remove the entire receiver/driver, pan/tilt, and camera assembly from the AutoDome system to prevent damage to the flexible cable and connector.

MAINTENANCE/COMPONENT REPLACEMENT
No special maintenance is required.

Occasionally, dust may accumulate inside the housing and coat the transparent dome/trim ring. In this case, power off the unit and remove the dome so that it is away from the camera. While using proper eye protection, clean the dome by using clean compressed air from a spray can and microwave safe paper towels, and reseat the dome.

In instances of high humidity, the EnviroDome model may require a replacement desiccant bag. To order, contact Philips CSI and specify part number 303 3804 003.

FastAddress

The G3 FastAddress feature allows the AutoDome's cameras to be addressed (or the address may be changed) using a keyboard and on-screen menus instead of using the switch address (thumbwheel). If FastAddress is not used, the camera's address defaults to the address indicated by the thumbwheel switches. Conversely, if FastAddress has been programmed, the thumbwheel switches are ignored.

There are two commands used to address the AutoDome using the FastAddress feature:

1. All domes that have not already been configured using FastAddress will respond to the "On-999-Enter" command. Additionally, if the address of a previously configured dome matches the camera number at the keyboard, that dome will also respond to the command.

2. All domes respond to the "On-998-Enter" command, regardless of their FastAddress status.

NOTE: In systems with multiple monitors, other domes may also enter the FastAddress mode. As commands (which are unique for each dome) are entered, the other domes automatically exit the FastAdress mode, and only the target dome remains active. Following are some instances when FastAddress would be used:

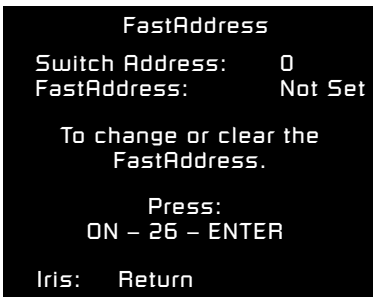1. New or existing installation of an AutoDome(s):

   a. Set the keyboard to display the camera, for example, "Camera-3-Enter" (where **3** is the camera whose address you're changing/identifying).

   b. Press "On-999-Enter," and follow the instructions on the screen (see **Figure FA1**).

REMINDER: All domes that have not already been configured using FastAddress will respond to "On-999-Enter."
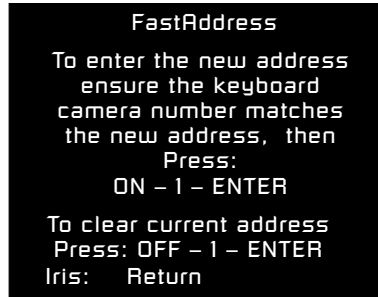
c. In the scenario where a camera is being moved, the dome may already have an address, therefore it will not respond to the "On-999-Enter" command. In this case, you must use the "On-998-Enter" command to readdress the camera, then follow the instructions on the screen.

d. There will be a visual confirmation that the address was set.

2. Clearing the address of a camera (causing the address of the camera to revert back to the address set by the thumbwheel):

a. Enter the FastAddress mode using either method as described above and follow the instructions on the screen (see **Figure FA2**).

b. At the end of the FastAdress mode, press "Off-1-Enter" to clear the address.

c. There will be a visual confirmation that the address was cleared. Use the "On-997-Enter" command to check/confirm camera addresses. For example, if referring to Camera 3, press "Camera-3-Enter," then "On-997-Enter." This will cause all cameras to briefly display their addresses.

FastAddress is stored to nonvolatile memory and will not change if power is removed or factory defaults are restored ("Set-899-Enter").

```
         FastAddress

Switch Address:      0
FastAddress:         Not Set

   To change or clear the
       FastAddress.

         Press:
      ON – 26 – ENTER

Iris:   Return
```

Figure FA1

```
         FastAddress

To enter the new address
   ensure the keyboard
 camera number matches
  the new address,  then
         Press:
      ON – 1 – ENTER

To clear current address
 Press: OFF – 1 – ENTER
Iris:   Return
```

Figure FA2

AutoDome Security
The AutoDome has password protection capability for Advanced Menu access and "On/Off-90-Enter" commands.

To set a password, after entering the "Off-90-Enter" command, enter "Set-802-Enter" and follow the instructions on the screen to set or change the password. Passwords are four (4) digits in length and are selected using the joystick.

The **0000** password <four zeros> is the AutoDome's default password and allows "Off-90-Enter" to directly unlock the Advanced Menu commands.

If the **9999** password is used, the AutoDome is totally unlocked so that all AutoDome commands can be executed (no "Off-90-Enter" is required to use Advanced Commands).

If any other 4-digit password is set, the AutoDome will prompt for the entry of a password when the unlock command, "Off-90-Enter," is entered.

TROUBLESHOOTING GUIDE

G3 Pendants and EnviroDomes include a diagnostic board. To access, you must remove the lower half of the dome. Remove the lower bubble with the plastic tool provided. This board allows you to check video (BNC), confirm input power (red LED), confirm internal power (green LED), and cycle the dome (test button), all without removing the dome or disconnecting power or video.

Problem: No Video.
Make sure the AutoDome is properly powered, and that all cables are connected properly.

Problem: No Camera Control.
• Make sure the address is set properly.
• Make sure the biphase or RS-232 is connected.
• Make sure other cameras can be controlled; if not, check the control system.

Problem: Camera moves when moving other cameras.
• Make sure the address is set properly. If an address is set to 0000, it will respond to commands for any address.

Problem: Picture Dark.
• Make sure the Gain Control is set to AUTO (On-43-Enter).
• Make sure Iris level has not changed; if so, adjust using IRIS control on keyboard. To permanently adjust, use "On-11-Enter."
• Check to ensure proper termination.

Problem: Cannot access user settings.
• Unlock commands (Off-90-Enter; may require password). **NOTE:** Commands will automatically lock 30 minutes after being unlocked.

Problem: Colors are not correct.
1. Try resetting factory defaults (On-40-Enter).
2. Position camera so the entire view is white (piece of paper or white wall).

3. Turn on white balance (Off-30-Enter). Move joystick until "one push W.G." is selected. Wait 10 seconds. Press the Iris button to return.
4. If this does not work, restore factory defaults (Set-899-Enter). Note that this will erase all presets and settings.
5. Once you have restored the proper settings, it is recommended to store them in Preset #1 (Set-1-Enter) so that they are recalled each time the Preset is called.

Problem: Periodic loss of control.
• Check that a 110 ohm resistor is across the +/− biphase code terminals at the last dome being controlled.

Problem: Background is too bright to see subject.
• Turn on backlight compensation (On-20-Enter).

Problem: Picture is rolling, noisy, or distorted.
• Electronic AC power line noise may distort the picture and cause loss of Sync. If the picture is distorted, try switching to Internal Crystal (Off-42-enter). If this corrects the picture problems, there may be excessive line noise on the power supply.

Problem: Day/Night camera will not automatically switch when image is dark.
• Set Gain Control to AUTO to enable this feature.

Problem: Moisture/dampness on the lower housing of the EnviroDome.
• If the lower housing is equipped with desiccant bags, they may need to be replaced (Philips part #303 3804 003).
• For an older EnviroDome, you should obtain the waterproofing kit, Philips part #ENV-WPKIT.

ℊ³ AUTODOME
LOCKED COMMANDS

Access to the AutoDome may be password protected. See **AutoDome Security** for details. To use Locked Commands, you must first unlock the AutoDome by entering "Off-90-Enter." All locked settings, except FastAddress, can then be changed via "On-46-Enter." Disallow these commands by pressing "On-90-Enter."

SETUP

Commands	Keystrokes	Description
FastAddress	On-999-Enter	Sets/changes the dome address using the keyboard and on-screen menus.
Display FastAddress	On-997-Enter	Briefly display all dome addresses.
Auto Iris	On/Off-3-Enter	Camera (iris) adjusts automatically/manually (On/Off) to light conditions.
Auto Focus	On/Off-4-Enter	Camera will automatically/manually (On/Off) focus.
Gain Control	On/Off-43-Enter	Turns gain control to Automatic or Off. This is useful with dark scenes.
On-screen Display	On/Off-60-Enter	Turns On/Off the On-screen Display. When off, there is no On-screen feed back.
On-screen Display Adjust	On/Off-61-Enter	Changes the characters and position of the display. On-screen instructions are provided.
Zone Title Edit	On/Off-63-Enter	Edits the current Zone name. On-screen instructions are provided.
Zone Masking	On-86-Enter	Masks video from being displayed in selected zones.
Lock/Unlock Commands	On/Off-90-Enter	Allows/Disallows locked commands to be accessed.

GENERAL

Commands	Keystrokes	Description
Password	Set-802-Enter	Sets or displays password. See the **AutoDome Security** section for details.
Factory Home Position	Set/-110-Enter	SET recalibrates camera and returns it to "home" position.
Restore Defaults	On-40-Enter	Restores Factory Defaults.

PTZ

Commands	Keystrokes	Description
Left Limit	Set-101-Enter	Sets the current position as the left limit of Auto Pan. Default is 0 degrees.
Right Limit	Set-102-Enter	Sets the current position as the right limit of Auto Pan. Default is 359.9 degrees.
Inactivity	On/Off-9-Enter	Selects the mode that the dome will revert to after a duration without operator activity. Default is OFF.
Preset Tour Period	On/Off-15-Enter	Increase/Decrease (On/Off) the time between Presets during Preset Tour.
AutoPivot	On/Off-18-Enter	Lets you follow a subject travelling beneath the camera without inverting the picture. Default is ON.

CAMERA

Commands	Keystrokes	Description
Select White Balance	On/Off-35-Enter or On/Off-30-Enter	Adjusts camera color (white balance) for specific settings.
Sharpness	On/Off-44-Enter	Picture (vertical aperture) will sharpen/soften.
Auto Iris ALC Detector	On/Off-10-Enter	Adjusts the light levels for brightest/average (On/Off) parts of the scene. N/A on Day/Night.
Iris Adjust	On/Off-11-Enter	Edits the Auto Iris level.
Sync Mode	On/Off-42-Enter	Sets camera sync for external-line/internal-crystal (On/Off).
Adjust Line Lock Phase	On/Off-41-Enter	Change the phase delay of the camera when in external line lock mode.
Switch Polarity	On-91-Enter	Switch the polarity of the Zoom, Focus and Iris controls.
Night Threshold Adj.	On-58-Enter	Selects the video level at which the camera will switch to night mode (Day/Night only).
QuickSet Select	On-59-Enter	Lets you pick one of several modes where multiple camera settings are set according to the chart below (Day/Night only).

QuickSet Mode Name	Gain Control	IRIS	Slow Shutter	IR Filter
Low Light Color	Auto	Auto	Auto	In
Full Auto w/ Slow Shutter	Auto	Auto	Auto	Auto
Full Auto w/o Slow Shutter	Auto	Auto	1/60	Auto
Night w/ Slow Shutter	Auto	Auto	Auto	Out
Night w/o Slow Shutter	Auto	Auto	1/60	Out

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ADVANCED MENU

Main Menu
Depending on the AutoDome password security that has been set for your system, you may be prompted for a password in order to access the Advanced Menu. This enhanced software makes programming and customizing your G3 Basic AutoDome easy. All settings can be edited using the Main Menu. To enter the Main Menu, press "On 46 Enter." If no menu is displayed, the system may be locked. To unlock the AutoDome, press "Off-90-Enter," then follow the on-screen commands to edit the settings.

CAMERA SETUP
(See **Figure AM1** for an illustration of the **Camera Setup** menu hierarchy).

White Balance – Controls the way the camera reproduces color.
　　　　　　　The factory default* setting is EXTENDED.
Choices:
　*Extended Auto WB . .Camera adjusts color using extended range (Day/Night models only).
　Automatic WB . . . . .Camera constantly adjusts the color.
　Indoor WB . . . . .Camera optimizes color for typical indoor conditions.
　Outdoor WB . . . . . .Camera optimizes color for typical outdoor conditions.
　One Push WB . . . . . .This sets the camera's color settings for the current scene. You should zoom on a well lit, white object (i.e. paper) before activating.

Gain Control – Electronically brightens darker scenes which may cause graininess in low light scenes. The factory default* setting is AUTO.
　Choices:
　Fixed . . . . . . .Select *Fixed*, then program under next menu option.
　Off . . . . .Camera uses only the IRIS to adjust to low light.
　*Auto . . . . . . .Camera will add electronic gain (must be set for auto-night mode in Day/Night models).

Fixed Gain Level – Adjusts the fixed gain level. The factory default* is 4.
　Choices: . . . .Sliding Scale from 1 to 6 (in 3 decibel gain steps).

Sharpness – Adjusts the sharpness/detail of the picture. The factory default* setting is at 6 on the sliding scale of about 16.
　Choices: . . . .Sliding Scale from –(soft) to +(sharp).

Synch Mode – Sets the synch mode of the camera. The factory default* setting is LINE LOCK.
　Choices:
　Crystal . . . . . .Camera is synchronized to an internal crystal (recommended if there is noise on the power line)
　*Line Lock . . .Camera is synchronized to AC power. This eliminates picture roll in multicamera systems.

Line Lock Delay – Optimizes LINE LOCK mode to eliminate picture roll in multiphase power applications. The factory default* setting is 0.
　Choices: . . . .Sliding Scale (–120° to 110°).

Slow Shutter – Sets slow shutter speed (frame integration) to a specific frame rate or auto, which slows down to compensate for lower light levels.
　Choices: . . . .1/60–1/4 (NTSC), 1/50–1/3 (PAL), Auto.

ADVANCED MENU (Continued)

NOTE: The following four (4) **Camera Setup** options refer to Day/Night models only and will not appear on the screen otherwise.

Night Mode – Selects night mode (B/W) operation (Day/Night models only).
Choices: . . . .On, Off, Auto (AGC must be ON for auto-night mode to work properly. **Note:** Manual iris control is not possible while in Night mode).

Night Mode Threshold – Adjusts the level of light at which the camera will automatically switch to night mode (B/W) operation (Day/Night models only).
Choices: . . . .Sliding Scale from 0 to 20.

Night Mode Color – Determines if color processing remains in effect while in night mode (Day/Night models only).
Choices:
On . . . . .Color burst remains in video signal. Picture will have a greenish shade of B/W.
Off . . . . .Video is true B/W without color burst in video signal.

QuickSet Mode – Selects one of several modes where camera settings are set according to the preceding **AutoDome Locked Commands** chart (Day/Night models only).

LENS SETUP
(See **Figure AM2** for an illustration of the **Lens Setup** menu hierarchy).

Auto Focus – G3 AutoDome automatically focuses on the subject in the center of the screen. The factory default* setting is SPOT.
Choices:
Constant . . . . .Auto Focus is always active, even while moving.
Manual . . . . . . .Auto Focus is inactive, manual focus must be used.
*Spot . . . . .Auto Focus activates after the camera stops movement, once focused, Auto Focus is inactive until camera is moved again

Auto Iris – G3 AutoDome automatically adjusts to varying light conditions. The factory default* setting is CONSTANT.
Choices:
*Constant . . .Auto Iris is constantly active.
Manual . . . . .Iris must be manually adjusted.

Auto Iris Level – Reduces the camera's Iris reference level for proper exposure. The factory default* setting is midpoint.
Choices: . . . .Sliding scale from – (reduce brightness) to + (increase brightness).

Focus Speed – Adjusts the manual focus speed. The factory default* setting is 2.
Choices: . . . .Sliding Scale from 1 (normal) to 10 (fast).

Iris Speed – Adjusts the manual iris speed. The factory default* setting is 5.
Choices: . . . .Sliding Scale from 1 (normal) to 10 (fast).

Max Zoom Speed – Adjusts the manual zoom speed. The factory default* setting is FAST.
Choices: . . . .Fast*, Medium, and Slow.

Digital Zoom – Enables digital zoom (not available in Mono version). The factory default* setting is ON.
Choices:
*On . . . . .When the camera reaches maximum optical zoom, after a pause the image will be electronically zoomed (up to 6.25 times).
Off . . . . .When the camera reaches maximum optical zoom it will not electronically zoom.

PTZ SETUP

(See **Figure AM3** for an illustration of the **PTZ Setup** menu hierarchy).

Autopan Speed – Adjusts how fast the camera moves during Auto Pan/ Auto Scan. The factory default* setting is 30°/second.
Choices: . . . .Sliding Scale from 1°/second to 60°/second.

Tour Period – Changes the dwell time between Presets during a Preset Tour. The factory default* setting is 5 seconds.
Choices: . . . .Sliding Scale from 3 seconds to 10 minutes.

PTZ Fixed Speed – Sets the Pan/Tilt speed when controlled by a fixed speed controller. The factory default* setting is 4.
Choices: . . . .Sliding Scale from 1 (slow) to 15 (fast).

Inactivity – Selects the mode that the dome will revert to after the period of time specified in the ***Inactivity Period*** (next menu option) without operator activity.
Choices:
Off . . . . .remains on current scene indefinitely.
Scene 1 . . . . .returns to preset 1.
Prev Aux . . . .returns to previous activity (previous activities include Aux commands 1, 2, 8, 50, 52).

Inactivity Period – The time period of inactivity before the above action will occur.
Choices: . . . .Sliding Scale from 3 seconds to 10 minutes.

AutoPivot – AutoPivot automatically rotates the camera 180° when following a subject travelling directly beneath the camera. The factory default* setting is ON.
Choices:
*On . . . . .Camera will automatically pivot.
Off . . . . .Camera stops tilting when it is looking straight down.

DISPLAY SETUP

(See **Figure AM4** for an illustration of the **Display Setup** menu hierarchy).

Display Adjust – Adjusts location and brightness of on-screen display. See on-screen display for instructions.

On-screen Display – Controls on-screen display for preset and sector titling. The factory default* setting is ON.
Choices:
*On . . . . .titles are displayed.
Off . . . . .titles are hidden.

Zone Masking – Selects zones for privacy masking (video blanking). The Zones available are 1 to 16.

Language – Selects the language to be displayed.
Choices: English, Spanish, French, German
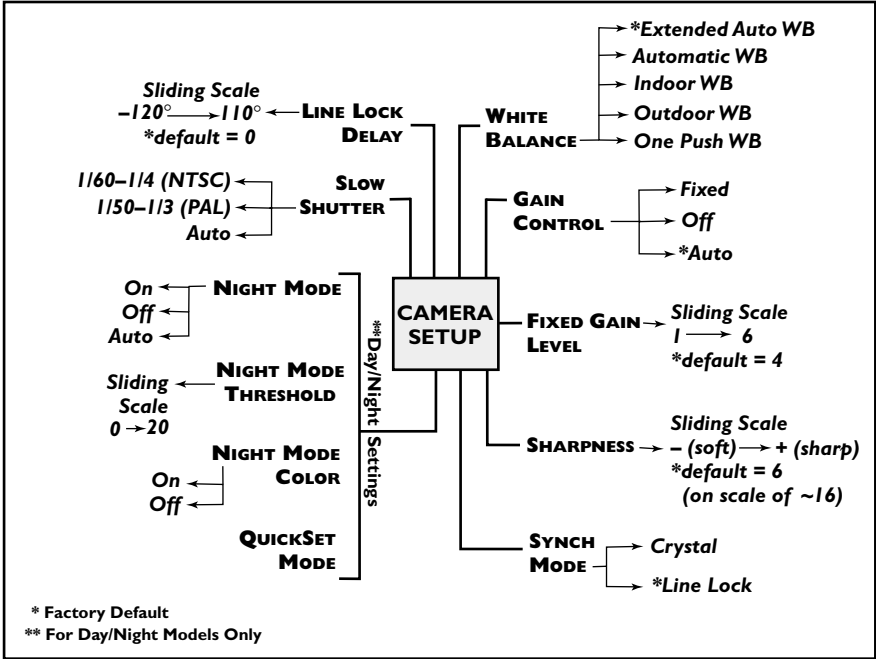
Figure AM1 Camera Setup

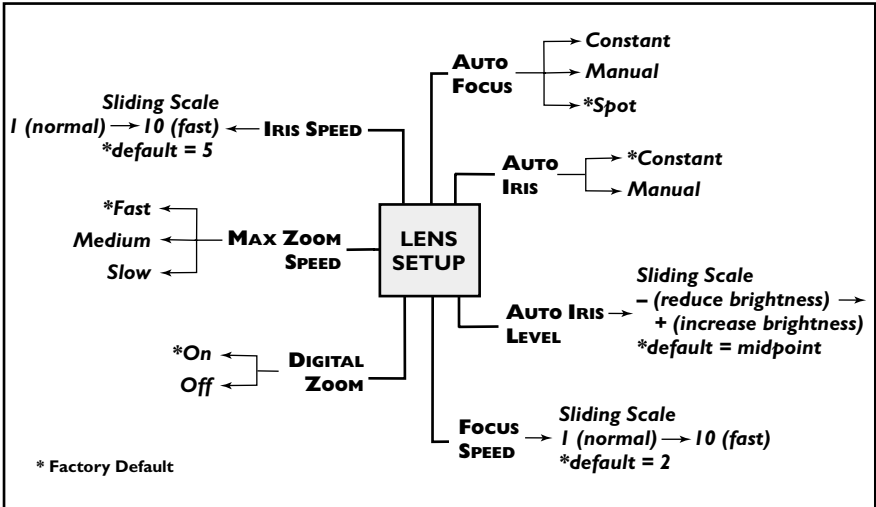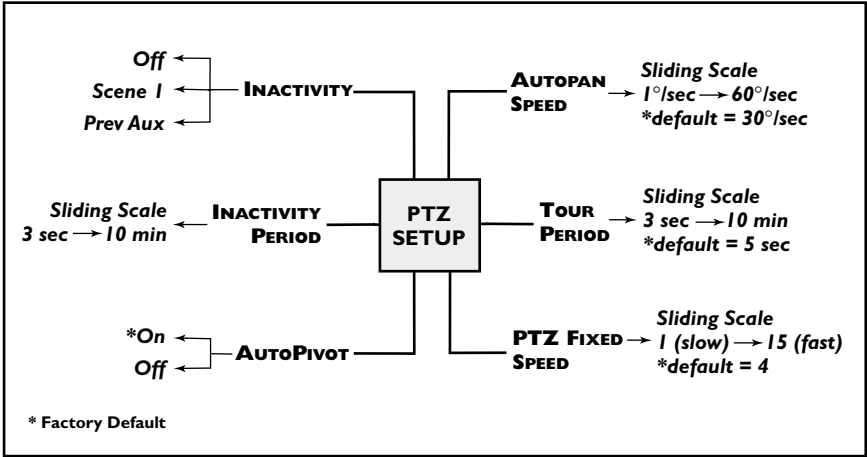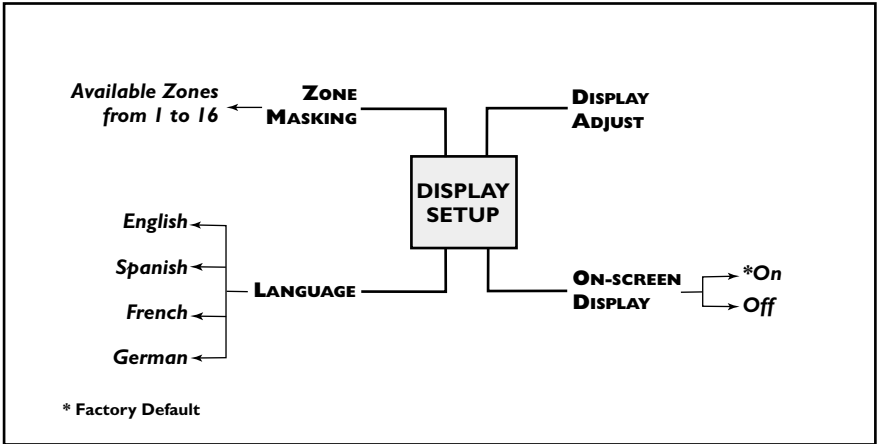**Figure AM2 Lens Setup**

Figure AM3 PTZ Setup

Figure AM4 Display Setup

NOTES

NOTES

AUTODOME USER COMMANDS (Unlocked Commands)

PTZ / PRESET

Commands	Keystrokes	Description
Scan	On/Off-1-Enter	Camera will continuously pan in the last direction in which the joystick was moved. Moving the joystick will stop the scan.
Auto Pan	On/Off-2-Enter	Camera will continuously pan back and forth between limits. Moving the joystick will stop the scan.
Preset Menu	Set 100 Enter	Allows modification of Preset scenes from an on-screen menu (recommended).
Preset Tour	On/Off-8-Enter	Camera will cycle through Preset Scenes. Moving the joystick will stop the tour.
Preset Tour Period	On/Off-15-Enter	On-screen menu changes the length of waiting time between presets.
Preset Save	Set-1-99-Enter	Stores the current scene and camera settings in memory. Preset 1 is shown when camera is initialized.
Preset Call	Shot-1-99-Enter	Recalls the scene and camera settings from memory.
Edit Preset Title	On/Off-62-Enter	Modifies the Preset names. On-screen instructions are provided.
Edit Preset Tour	Set/Shot-900-Enter	Presets can be removed/restored (On/Off) from the Preset tour using an on-screen menu. Presets can still be displayed manually.
Modify Preset Tour	Set/Shot-901-999-Enter	Presets can individually be removed/restored (On/Off) from the Preset tour. Example: [Set][915][Enter] will clear Preset 15 from the tour. Presets can still be displayed manually.

RECORD / SETUP

Commands	Keystrokes	Description
Record A	On/Off-100-Enter	Records "A" camera and PTZ controls that can be played back. Once the sequence is recorded, you must exit record in order to play back.
Record B	On/Off-101-Enter	Records "B" camera and PTZ controls that can be played back. Once the sequence is recorded you must exit record in order to play back.
Continuous Playback A	On/Off-50-Enter	Camera will "repeat "A" recorded sequence.
Playback A	On/Off-51-Enter	Camera will play the "A" recorded sequence once.
Continuous Playback B	On/Off-52-Enter	Camera will "repeat "B" recorded sequence.
Playback B	On/Off-53-Enter	Camera will play the "B" recorded sequence once.
Scan+Auto Pan Speed	On/Off-14-Enter	On-screen menu allows the setting of the Auto Pan and Auto Scan speeds. Default is 30 degrees/second.
Backlight Compensation	On/Off-20-Enter	Camera will adjust for a bright background.
View Factory Settings	On-47-Enter	Displays the factory default settings.
Software Version	On-66-Enter	Briefly displays the camera software versions.
Night Mode	On/Off-57-Enter	Switches from color to monochrome (Day/Night models only).
Day/Night Menu	On-56-Enter	On-screen menu changes Night Mode setting (On/Off/Auto; Day/Night only).

G^3 AutoDome®
Instruction Book

EnviroDome™
Indoor Pendant
In-ceiling Model

NOTE: Remove this user manual and supply to user.

Let's make things better.

PHILIPS

On-screen Programming

The new G3A software offers user-friendly On-screen programming. A few common commands are shown below. At the end of this section is a complete list of user commands for your reference.

Saving a scene (Preset)

The G3 AutoDome lets you save up to 99 different scenes and recall them instantly. A saved scene is called a Preset. When you save a Preset, the position, zoom, and most camera settings are stored.

Figure 1. Preset menu

The "Set 100 Enter" command displays the Preset menu (Fig. 1). From this menu, you can store, delete, name, or edit a Preset scene. You can save up to 99 scenes and the system will automatically select the next available number. Once you save a Preset, the system lets you name that Preset using the joystick, focus, and iris buttons (see Fig. 2). The name can be up to 16 characters long. This Preset can later be viewed with the "Shot # Enter" command, where # is 1-99.

Figure 2. Naming a scene (Preset)

Preset Tour

Figure 3. Preset tour menu

Once you have stored Presets, you can make the AutoDome cycle through all the Presets or selected Presets. This is called a Preset tour. To include or remove presets on a tour, type "Set 900 Enter." This will display the current presets and indicate if they are on the tour. You can follow the on-screen instructions to include/remove Presets from the tour (note: if you remove a Preset from the tour, you can still call it up manually). To activate the preset tour, type "On 8 Enter." If you want to change how long it waits between presets, type "On 15 Enter" and follow the on-screen instructions.

Figure 4. Preset tour period adjust

Setting the Preset Tour period

To change the length of time the AutoDome waits between Presets during a Preset Tour, type "On 15 Enter" and adjust using the joystick (Fig. 4).

Record/Playback Tours

You can record two independent macros (series of commands), A & B. These macros can last up to several hours each, although tours involving constant commands will only last for minutes. While recording, the On-

Figure 5. Recording

Screen display (Fig. 5) indicates how much memory is left. To begin recording on A, type "On 100 Enter." The G3 will now record all camera activities until you end the recording with "Off 100 Enter." Once you have recorded on A, B is available by using the "On/Off 101 Enter" command. Playback can be continuous (On 50 Enter) for A, (On 52 Enter) for B or "one shot" (On 51 Enter) for A, (On 53 Enter) for B.

Changing the Auto Pan and Auto Scan speeds

The Auto Pan and Auto Scan speeds (Fig. 6) can be adjusted using the "On 14 Enter" command. Use the joystick to adjust the speed. It is helpful for the Pan or Scan to be active when you enter the "adjust" mode, so you can see the speed change.

Figure 6. Auto Pan/Auto Speed adjust

For additional information or to speak to a representative, please contact the Philips Communication, Security & Imaging location nearest you:

The Americas: 1 800 326 3270
Europe & Middle East: 31 40 278 1222
Asia Pacific Region: 65 350 1859

or visit our Web site at www.philipscsi.com.