

CODE 3 Installation and Operation Instructions


Matrix[®] Splitter

IMPORTANT! Read all instructions before installing and using. Installer: This manual must be delivered to the end user.



WARNING!

Failure to install or use this product according to manufacturer's recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!

 **Do not install and/or operate this safety product unless you have read and understood the safety information contained in this manual.**

1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working with live electrical connections.
3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4. Proper placement and installation is vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that they can operate the system without losing eye contact with the roadway.
5. Do not install this product or route any wires in the deployment area of an air bag. Equipment mounted or located in an air bag deployment area may reduce the effectiveness of the air bag or become a projectile that could cause serious personal injury or death. Refer to the vehicle owner's manual for the air bag deployment area. It is the responsibility of the user/operator to determine a suitable mounting location ensuring the safety of all passengers inside the vehicle particularly avoiding areas of potential head impact.
6. It is the responsibility of the vehicle operator to ensure daily that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles or other obstructions.
7. The use of this or any other warning device does not ensure all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is the vehicle operator's responsibility to be sure they can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk on or around traffic lanes.
8. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding emergency warning devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

Specifications:

Size: 4.2" X 2.1" X 1.0"

Weight: 0.2 lbs.

Temp. Range: -40°C to 65°C
(-40°F to 149°F)

Overview:

The Matrix network is designed to conveniently accommodate a large number of devices connected with CAT5 cables. The Central Node, such as a Z3 Siren or SIB, will always have (2) ports available. These (2) ports can connect to any (2) end nodes, as well as any future “daisy chain” compatible nodes in line. An End Node is simply any Matrix compatible device with only (1) CAT5 connection. Examples include the Matrix-enabled light bar, SuperVisor, WingMan, Citadel, etc. Please note, for CAT5 connections the PRI-1 port must always be utilized first, before additional devices can be connected to the SEC-2 port. See Figure 1.

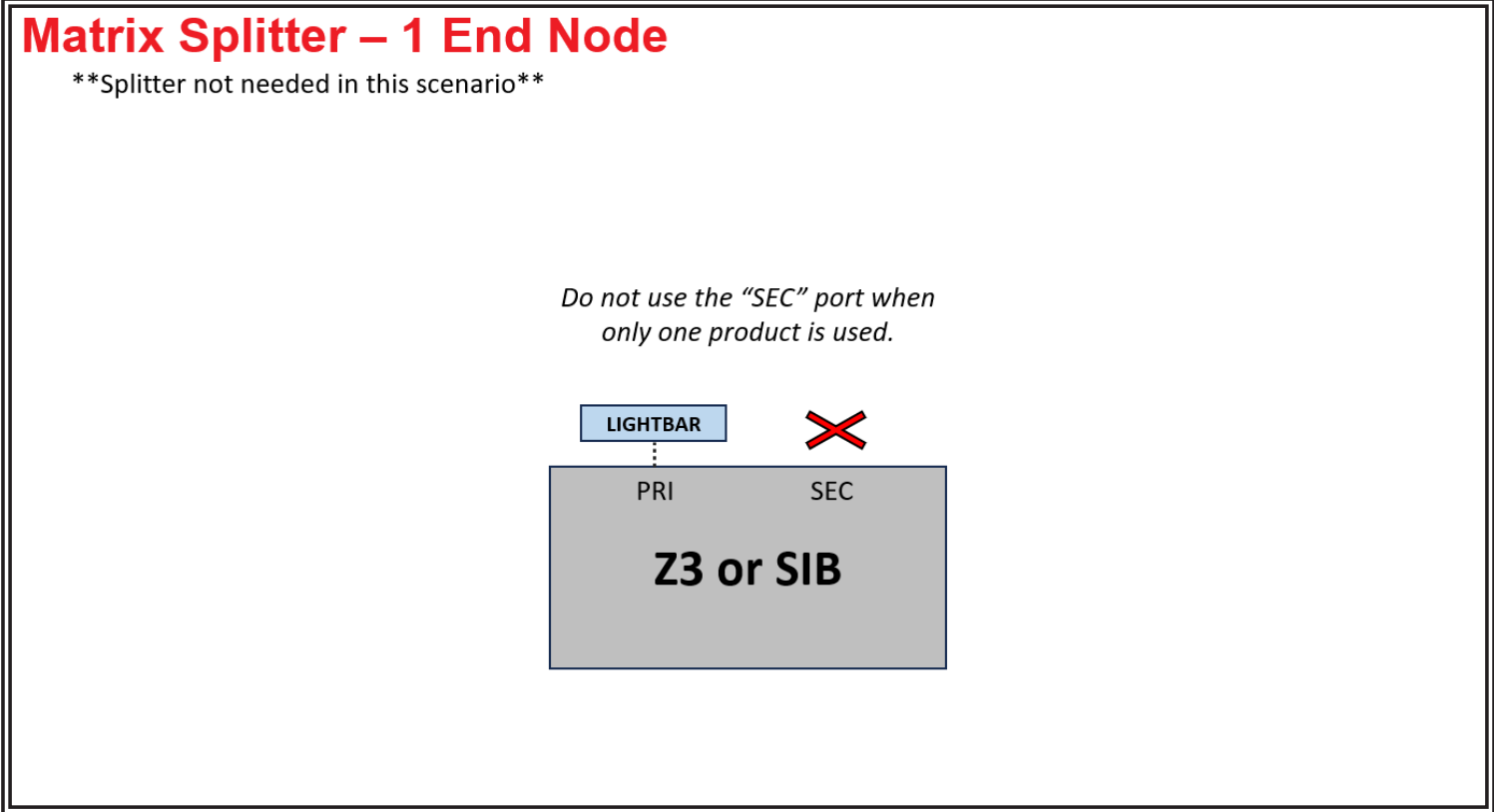


Figure 1

Wiring Instructions:

If a system requires more than (2) End Nodes, a Matrix Splitter can be used. The Matrix Splitter will allow (2) End Nodes to be connected to (1) CAT5 jack on the Central Node. Please note that the splitter must always be placed after any future “daisy chain” compatible nodes in line. See Figures 2-8. Also, please note that the splitter does not support using only one output of an output pair. If an input is used, both outputs must have End Nodes connected.

Matrix Splitter – 2 End Nodes

Products can swap ports, not limited to what is shown below

****Splitter not needed in this scenario****

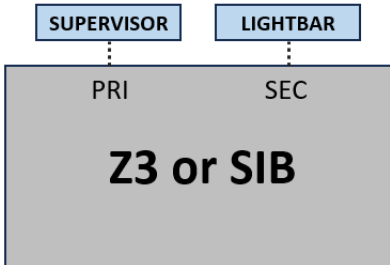


Figure 2

Matrix Splitter – 3 End Nodes

Products can be placed in any order, not limited to what is shown below

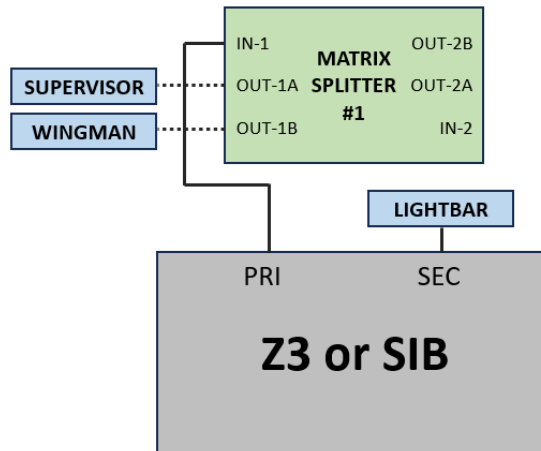


Figure 3

Matrix Splitter – 4 End Nodes

Products can be placed in any order, not limited to what is shown below

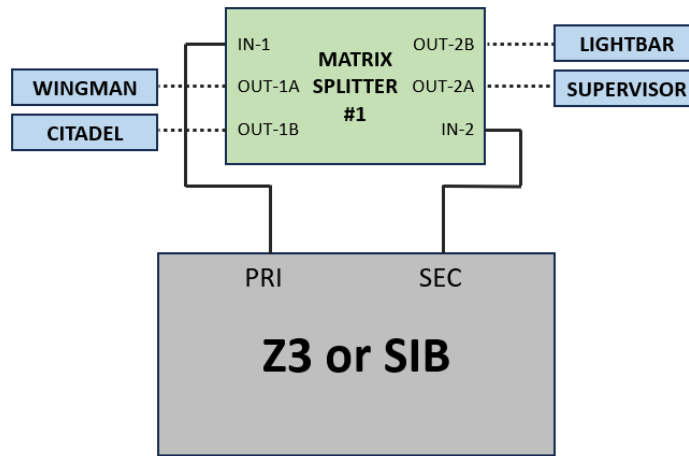


Figure 4

Matrix Splitter – 5 End Nodes

Products can be placed in any order, not limited to what is shown below

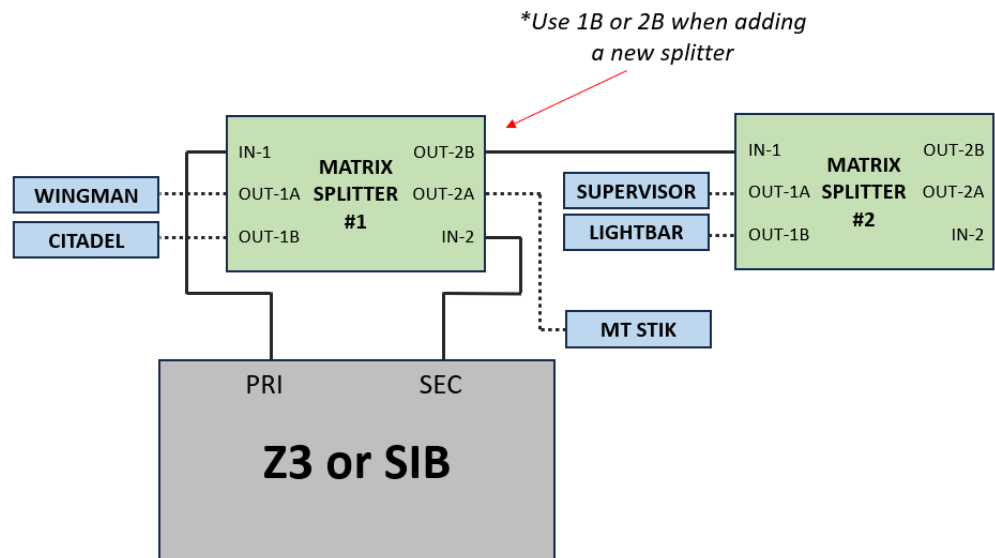


Figure 5

Matrix Splitter – 6 End Nodes

Products can be placed in any order, not limited to what is shown below

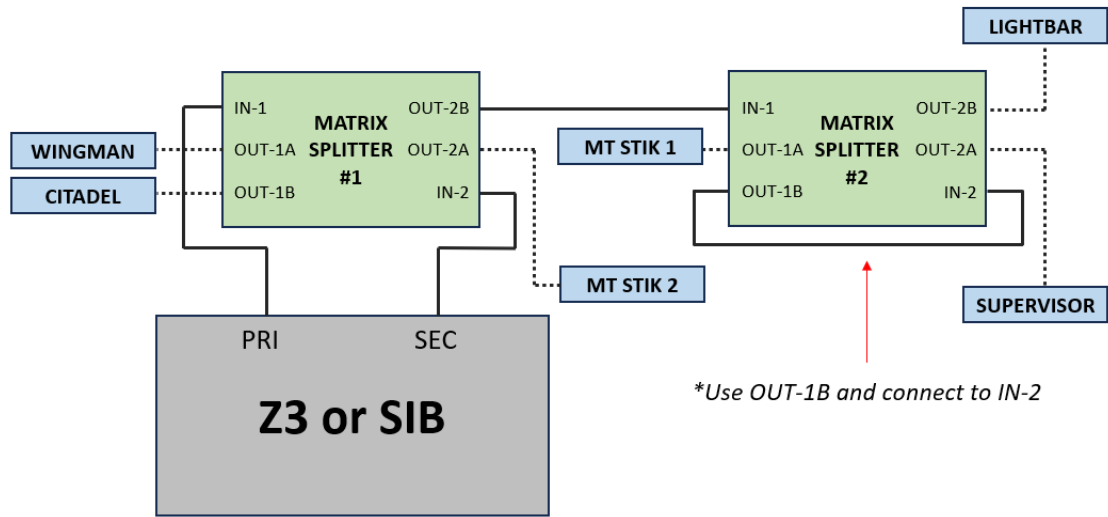
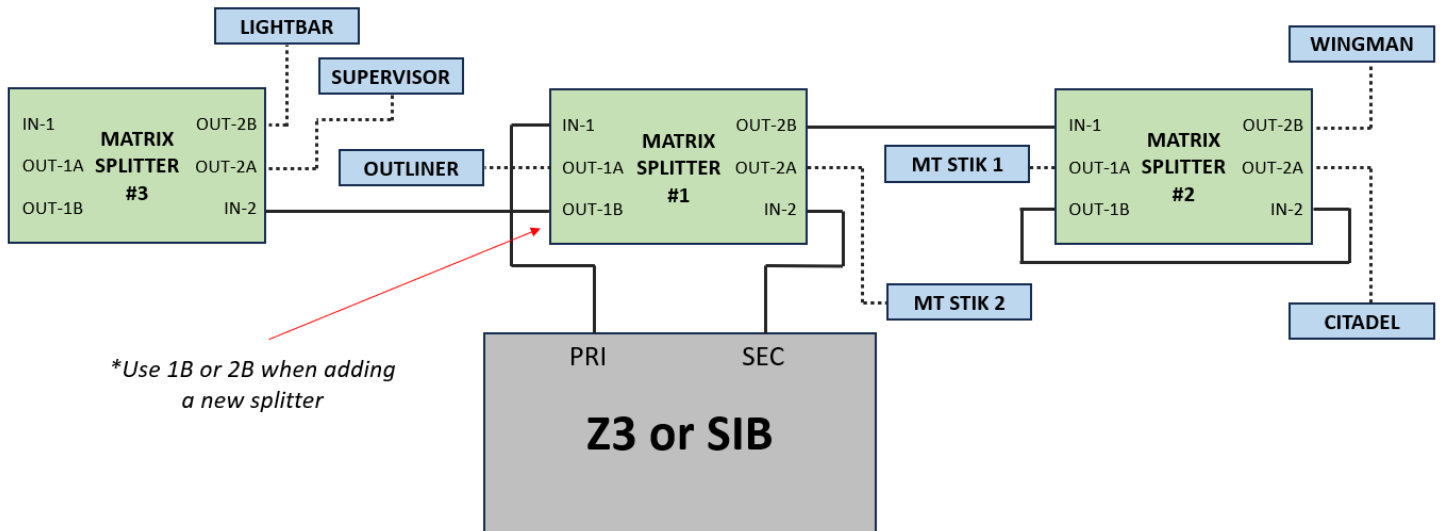


Figure 6

Matrix Splitter – 7 End Nodes

Products can be placed in any order, not limited to what is shown below



Best practice: Evenly distribute the load across PRI and SEC ports. The 3rd splitter is added onto the PRI port instead of building off the 2nd splitter.

Figure 7

Matrix Splitter – 8 End Nodes

Products can be placed in any order, not limited to what is shown below

**Use OUT-2B and connect to IN-2*

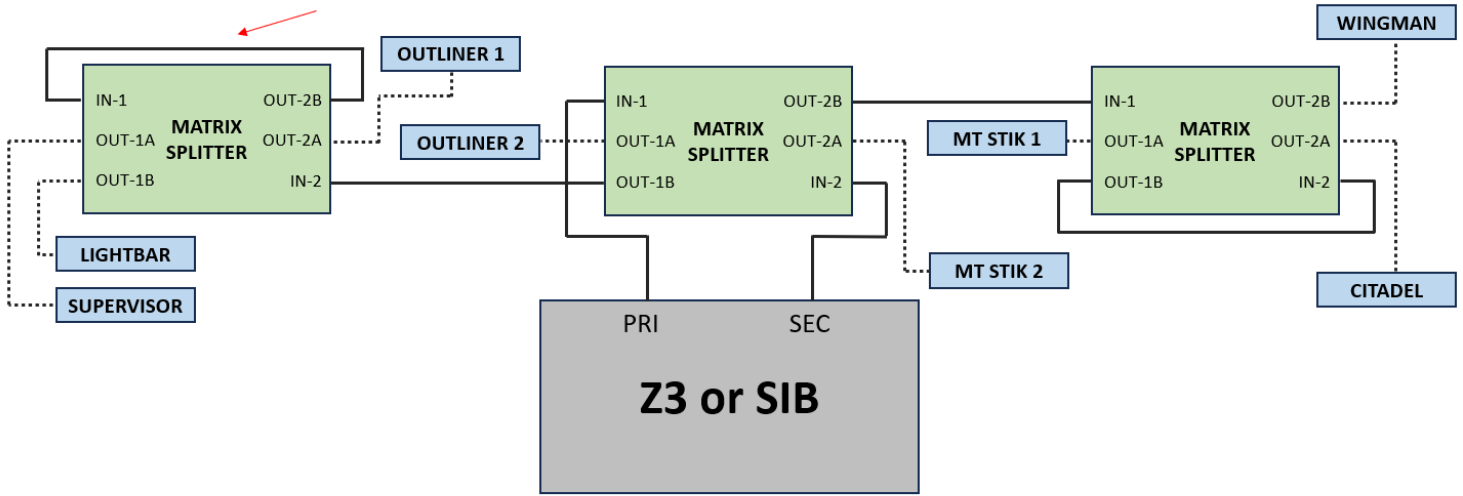


Figure 8

Troubleshooting:

Problem	Possible Causes(s)	Comments/Response
No Communication	Ignition Input	An ignition wire input is first required to bring the Central Node out of a sleep state. From that point, the Central Node controls communication with all other Matrix compatible devices. See the installation manual of the customer selected Central Node for further troubleshooting of the ignition input.
	Connectivity	Ensure that all CAT5 cables are securely connected and fully seated with positive lock in their respective ports. Remember that the PRI-1 jack at the Central Node must first be used, before the SEC-2 jack can be used. Ensure that if an input on the splitter is used, both outputs must have end nodes connected.

Notes:

Warranty:

Manufacturer Limited Warranty Policy:

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

Exclusion of Other Warranties:

MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

Remedies and Limitation of Liability:

MANUFACTURER'S SOLE LIABILITY AND BUYER'S EXCLUSIVE REMEDY IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR UNDER ANY OTHER THEORY AGAINST MANUFACTURER REGARDING THE PRODUCT AND ITS USE SHALL BE, AT MANUFACTURER'S DISCRETION, THE REPLACEMENT OR REPAIR OF THE PRODUCT, OR THE REFUND OF THE PURCHASE PRICE PAID BY BUYER FOR NON-CONFORMING PRODUCT. IN NO EVENT SHALL MANUFACTURER'S LIABILITY ARISING OUT OF THIS LIMITED WARRANTY OR ANY OTHER CLAIM RELATED TO THE MANUFACTURER'S PRODUCTS EXCEED THE AMOUNT PAID FOR THE PRODUCT BY BUYER AT THE TIME OF THE ORIGINAL PURCHASE. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LOST PROFITS, THE COST OF SUBSTITUTE EQUIPMENT OR LABOR, PROPERTY DAMAGE, OR OTHER SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES BASED UPON ANY CLAIM FOR BREACH OF CONTRACT, IMPROPER INSTALLATION, NEGLIGENCE, OR OTHER CLAIM, EVEN IF MANUFACTURER OR A MANUFACTURER'S REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. MANUFACTURER SHALL HAVE NO FURTHER OBLIGATION OR LIABILITY WITH RESPECT TO THE PRODUCT OR ITS SALE, OPERATION AND USE, AND MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES THE ASSUMPTION OF ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH PRODUCT.

This Limited Warranty defines specific legal rights. You may have other legal rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

Product Returns:

If a product must be returned for repair or replacement*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3®, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

*Code 3®, Inc. reserves the right to repair or replace at its discretion. Code 3®, Inc. assumes no responsibility or liability for expenses incurred for the removal and /or reinstallation of products requiring service and/or repair.; nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.



10986 North Warson Road, St. Louis, MO 63114 USA
Technical Service USA (314) 996-2800
c3_tech_support@code3esg.com
CODE3ESG.com

An ECCO SAFETY GROUP™ Brand
ECCOSAFETYGROUP.com