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.

## CONTENTS:

| 1 | Light Head |
| :--- | :--- |
| 1 | Gasket |
| 2 | M4×25 Sheet metal screws |

## Wire: ED3701

RED: Positive(need to add 2A Fuse)
BLACK: Negative
BLUE: Pattern Switch
YELLOW: Synchronized Function
(Up to 8 units can be Synchronized)

## Wire: ED3702

RED: Positive, Colors 1 \& 3 (need to add 5A Fuse) WHITE: Positive, Colors 2 \& 4 (need to add 5A Fuse) BLACK: Negative
BLUE: Pattern Select to negative
YELLOW: Synchronized Function
(Up to 8 units can be Synchronized)

## Operation Environment:

Ambient Temperature: -30 to $50^{\circ} \mathrm{C}$

## Mounting:

1. The ED3700 series directionals should be mounted to a flat surface or one with the least amount of curvature. The mounting location should allow the maximum visibility ofthe warning device to other road users, while allowing for sufficient wire access.
2. Mark drill hole locations on the mounting surface using the directional as a template.
3. Drill mounting holes using a \#31[0.120"] drill bit.
4. Drill a $25 / 64^{\prime \prime}[10 \mathrm{~mm}]$ hole for the wires protruding from the rear of the unit at the location. Remove any sharp edges from this hole.
5. Mount the directional along with the mounting gasket, routing the wires through the 10 mm hole and use additional grommets or cable protection as necessary to protect the wiring from any sharp edges. Secure the directional to the surface using the \#6 self-tapping screws.


ED3701 Series Flash Pattern Chart
Diagrama de patrones de intermitencia de la Serie ED3701
Tableau des modes de clignotement de la série ED3701

| SINGLE COLOR Flash Pattern Chart/DE UN SOLO COLOR Tabla de patrones de destello/COULEUR UNIQUE Tableau des effets clignotants |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pattern | MODE | PATTERNS | Mark | SYNC. | SAE J595 |  |  |  | CA T13 |  |  | ECE R65 |  |  |
| Pattern |  |  |  |  | RED | AMBER | BLUE | WHITE | RED | AMBER | BLUE | RED | AMBER | BLUE |
| 1 | 1 | Single Flash 75FPM sim. Phasel | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | N/C | N/C | N/C |
|  | 2 | Single Flash 75FPM sim. Phase2 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | N/C | N/C | N/C |
|  | 3 | Single Flash 75FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 2 | 4 | Single Flash 120FPM sim. Phasel | B | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | Class 1 | Class 1 | Class 1 |
|  | 5 | Single Flash 120FPM sim. phase2 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | Class 1 | Class 1 | Class 1 |
|  | 6 | Single Flash 120FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 3 | 7 | Double Flash 75FPM sim. Phase 1 | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | N/C | N/C | N/C |
|  | 8 | Double Flash 75FPM sim. phase2 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | N/C | N/C | N/C |
|  | 9 | Double Flash 75FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 4 | 10 | Double Flash 120FPM sim. Phasel | B | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | Class 1 | Class 1 | Class 1 |
|  | 11 | Double Flash 120FPM sim. phase2 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | Class 1 | Class 1 | Class 1 |
|  | 12 | Double Flash 120FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 5 | 13-Default | Quad Flash 75FPM sim. Phase1 | A | yes | Class 1 | Class 1 | Class 1 | Class 2 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 14 | Quad Flash 75FPM sim. Phase2 |  | yes | Class 1 | Class 1 | Class 1 | Class 2 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 15 | Quad Flash 75FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 6 | 16 | Quad Flash 150FPM sim. Phase1 | C | yes | Class 1 | Class 1 | Class 2 | Class 2 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 17 | Quad Flash 150FPM sim. Phase2 |  | yes | Class 1 | Class 1 | Class 2 | Class 2 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 18 | Quad Flash 150FPM Alt |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 7 | 19 | Triple 75FPM sim. Phase 1 | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 20 | Triple 75FPM sim. Phase2 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 21 | Triple 75FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 8 | 22 | Quint Flash 150FPM sim. Phase 1 | C | yes | Class 1 | Class 1 | Class 2 | Class 2 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 23 | Quint Flash 150FPM sim. Phase2 |  | yes | Class 1 | Class 1 | Class 2 | Class 2 | N/C | N/C | N/C | N/C | N/C | N/C |
|  | 24 | Quint Flash 150FPM Alt. |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 9 | 25 | Steady - Single | N/A | NO | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 10 | 26 | Steady Burn |  | NO | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 11 | 27 | Modulation |  | NO | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 12 | 28 | 2 Double Flash,2 Triple Alt. |  | NO | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |
| 13 | 29 | 4 Single Flash , 2 Quad Flash Alt. |  | NO | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C | N/C |


| DUAL COLOR Flash Pattern Chart/COLOR DOBLE Tabla de patrones de destello/BICOLORE Tableau des effets clignotants |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pattem | $\begin{array}{\|c\|} \hline \text { LED Color } 1 \& \text { Color } \\ 3 \text { Red line } \\ \hline \end{array}$ | LED Color 2 \& Color 4 White line | LED Color 1 \& Color 3LED Color 2 \& Color 4 Red \& White line | PATTERNS | max | sxwc. | SAE S 599 |  |  |  | cati3 |  |  | ECERGS |  |  |
|  |  |  |  |  |  |  | RED | AMBER | hlue | WHITE | RED | AMBER | BLUE | RED | AMBER | BLUE |
| 1 | 1.Dectanalt |  | - | Singrle 7 3FPM Phi Colar 1 Syychronosas Color 3 | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | $\mathrm{N} / \mathrm{C}$ | N/C |
|  | 2 |  | 2 | Singre 7 7.FPM Ph2 Colar 1 Syychronoss Caloer 3 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | N/C | N/C | N/C |
|  |  |  | 3 | Single 7 7.PM Phl Colorr 1 Ahemately Coler 4 |  | yes | N/C | N/C | NC | N/C | N/C | N/ | N/C | NC | N/C | N/C |
|  |  |  | 4 |  |  | yes | N/C | N/C | NC | N/C | N/C | N/C | N/C | N/C | NC | N/C |
|  |  | 1.-Defalut | 5 | Single 73FPM Phl Colar 2 Syychronoss Calor 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | N/C | N/C |
|  |  | 2 | 6 | Singrge 73.PM Ph2 Color 2 Syychronuas Caler 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | N/C | N/C |
|  | 3 | 3 | 7 |  | E | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | N/C | N/C | N/C |
|  | 4 | 4 | 8 |  |  | yes | N/C | N/C | N/C | N/C | N/C | NC | $\mathrm{N} / \mathrm{C}$ | NC | N/C | N/C |
|  | 5 | 5 | 9 |  |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | N/C | N/C |
| 2 | 6 |  | 10 |  | D | yes | N/C | N/C | NC | N/C | N/C | N/ | N/C | NC | N/C | N/C |
|  | 7 |  | 11 | Single 375PMAPM Ph2 Colar 1 Synctronus Coler 3 |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | NC | N/C |
|  |  |  | 12 |  |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  |  |  | 13 |  |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | NC | $\mathrm{N} / \mathrm{C}$ |
|  |  | 6 | 14 | Single 37SFPMPM Phi Colar 2 Syuctronas Colecs 4 |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | NC | N/C |
|  |  | 7 | 15 | Single 375.PMPMM Ph2 Cdar 2 Synchronosas Coler 4 |  | yes | N/C | N/C | N/C | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  | 8 | 8 | 16 |  | H | yes | N/C | N/C | N/C | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  | 9 | 9 | 17 |  |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | NC | N/C |
|  | 10 | 10 | 18 |  |  | yes | N/C | N/C | N/C | N/C | N/C | N/C | N/C | NC | N/C | N/C |
| 3 | 11 |  | 19 |  | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | N/C | $\mathrm{N} / \mathrm{C}$ |
|  | 12 |  | ${ }^{20}$ |  |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | N/C | N/C |
|  |  |  | 21 | Double 7 SPPM Pbl Coler 1 Altematly Colar 4 |  | yes | N/C | N/C | N/C | N/C | N/C | N/ | N/C | NC | N/C | N/C |
|  |  |  | 22 | Double 7 SPPM Ph2 Color 1 Alematly Coler 4 |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | N/C | N/C | N/C |
|  |  | 11 | 23 | Double 7 SPPM Pbl Color 2 Sypchrowaus Color 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | N/C | N/C |
|  |  | 12 | 24 | Double 75 PPM Ph2 Color 2 Sypchrocous Color 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | Class B | Class B | Class B | NC | N/C | N/C |
|  | 13 | 13 | 25 |  | E | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | N/C | N/C | N/C |
|  | 14 | 14 | 26 |  |  | yes | N/C | NC | N/C | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  | 15 | 15 | 27 |  |  | yes | N/C | N/C | NC | N/C | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | N/C | N/C |
| 4 | 16 |  | ${ }^{28}$ | Double 120FPM Pal Color 1 Syxathonous Color 3 | B | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | $\mathrm{N} / \mathrm{C}$ | Class 1 | Class 1 | Class 1 |
|  | ${ }^{17}$ |  | ${ }^{29}$ |  |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/ | N/C | Class 1 | Class 1 | Class 1 |
|  |  |  | ${ }^{30}$ | Double 120FPM Pal Coler 1 Nliemately Color 4 |  | yes | N/C | N/C | NC | N/C | N/C | NC | $\mathrm{N} / \mathrm{C}$ | N/C | N/C | $\mathrm{N} / \mathrm{C}$ |
|  |  |  | 31 | Double 120FPM Ph2 Coler 1 Nlumater Color 4 |  | yes | N/C | N/C | N/C | N/C | N/C | N C | $\mathrm{N} / \mathrm{C}$ | NC | N/C | N/C |
|  |  | 16 | 32 | Double 121FPM Pal Color 2 Symethonous Codor 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | Class 1 | Class 1 | Class 1 |
|  |  | 17 | ${ }^{33}$ |  |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | Class 1 | Class 1 | Class 1 |
|  | 18 | 18 | 34 |  | F | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | N/C | N/C | N/C |
|  | 19 | 19 | ${ }^{35}$ |  |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  | 20 | 20 | ${ }^{36}$ |  |  | yes | N/C | N/C | NC | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | $\mathrm{N} / \mathrm{C}$ | NC | N/C | $\mathrm{N} / \mathrm{C}$ |
| 5 | 21 |  | ${ }^{37}$ | Triple 7 75PM Phil Coder 1 Synctruwas Caler 3 | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | NC | N/C | $\mathrm{N} / \mathrm{C}$ |
|  | 22 |  | ${ }_{38}$ | Trinle 7 SPPM Ph2 Coder 1 Syychrowesas Color 3 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | NC | N/C | $\mathrm{N} / \mathrm{C}$ |
|  |  |  | 39 | Tiple 7 7.PPM Phl Codor 1 Alerrately Coler 4 |  | yes | N/C | N/C | N/C | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | $\mathrm{N} / \mathrm{C}$ | NC | N/C | N/C |
|  |  |  | ${ }^{40}$ | Tiple 3 3PPM Ph2 Codor 1 Aherately Coler 4 |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  |  | 21 | 41 | Trinle 7 SPPM Phl Cdor 2 Symetrowas Calor 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | NC | N/C | N/C |
|  |  | 22 | 42 |  |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | NC | NC | $\mathrm{N} / \mathrm{C}$ |
|  | 23 | 23 | 43 |  | E | yes | N/C | N/C | NC | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | N/C | NC | N/C |
|  | 24 | 24 | 44 |  |  | yes | N/C | N/C | N/C | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  | 25 | 25 | 45 |  |  | yes | N/C | N/C | N/C | N/C | N/C | NC | N/C | NC | N/C | N/C |
| 6 | 26 |  | 46 | Oaud 7 SFPM Phi Coler 1 Symhtronus Calor 3 | A | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | NC | N/C | N/C |
|  | ${ }^{27}$ |  | 47 | Quad 7 FFPM Ph2 Coler 1 Symhtronus Color 3 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | NC | N/C | N/C |
|  |  |  | 48 | Quad 73.FPM Phi Coler 1 Alecrantely Color 4 |  | yes | N/C | NC | NC | N/C | N/C | NC | N/C | N/C | N/C | N/C |
|  |  |  | 49 | Quad 75.FPM Ph2 Coler 1 Alermately Color 4 |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C |
|  |  | ${ }^{26}$ | 50 |  |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | NC | NC | N/C | NC | N/C | N/C |
|  |  | 27 | 51 | Oaud 7 FFPM Ph2 Color 2 Symhanonus Color 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | $\mathrm{N} / \mathrm{C}$ | NC | N/C | N/C | N/C |
|  | 28 | 28 | 52.Defarat |  | E | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | N/C | N/C |
|  | 29 | 29 | 53 |  |  | yes | N/C | N/C | NC | N/C | N/C | NC | N/C | N/C | NC | N/C |
|  | 30 | 30 | 54 |  |  | yes | N/C | N/C | N/C | N/C | N/C | NC | N/C | N/C | N/C | N/C |
| 7 | 31 |  | 55 |  | B | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | NC | N/C | N/C |
|  | 32 |  | 56 | Oaxd 120FPM Ph2 Colar 1 Syychronox Colex 3 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | N/C | N/C | N/ | NIC | N/C |
|  |  |  | ${ }^{57}$ | Quad 60. PM Phi Color 1 Alemanty Color 4 |  | yes | N/C | N/C | N/C | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | N/C | N/C | N/C |
|  |  |  | 58 | (aud 120FPM Ph2 Colorr 1 Alemately Color 4 |  | yes | N/C | N/C | N/C | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | NC | $\mathrm{N} / \mathrm{C}$ | N/C |
|  |  | 31 | 59 |  |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | N/C | N/C | N/C |
|  |  | ${ }^{32}$ | 60 | (aus 120fPM Ph2 Color 2 Symhtromex Colec 4 |  | yes | Class 1 | Class 1 | Class 1 | Class 1 | N/C | NC | N/C | NC | NC | N/C |
|  | 33 | 33 | 61 |  | F | yes | N/C | N/C | NC | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | NC | N/C | N/C |
|  | ${ }^{34}$ | ${ }^{34}$ | 62 |  |  | yes | N/C | N/C | NC | $\mathrm{N} / \mathrm{C}$ | N/C | N/C | N/C | NC | N/C | N/C |
|  | ${ }^{35}$ | ${ }^{35}$ | 63 |  |  | yes | N/C | N/C | N/C | N/C | N/C | NC | N/C | N/C | N/C | N/C |
| 8 |  |  | 64 |  | N/A | no | N/C | N/C | NC | N/C | N/C | NC | N/C | NC | N/C | N/C |
| 9 |  |  | 65 |  |  | no | N/C | N/C | NC | N/C | N/C | N/C | N/C | NC | N/C | N/C |
| 10 |  |  | 66 |  |  | no | N/C | N/C | N/C | N/C | N/C | N/C | N/C | NC | N/C | N/C |
| 11 |  |  | 67 |  |  | no | N/C | N/C | NC | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | NC | N/C | $\mathrm{N} / \mathrm{C}$ |
| 12 | 36 |  | 68 | Steady bum Colar 183 |  | no | N/C | NC | NC | NC | NC | NC | N/C | NC | N/C | N/C |
|  |  | ${ }^{36}$ | 69 | Steady bamm.Color $2,4.4$ |  | no | N/C | N/C | NC | N/C | N/C | N/C | $\mathrm{N} / \mathrm{C}$ | N/C | N/C | N/C |

