

# TL-XPRESS

**COMPLETE PACKAGE  
PASSIVE INFRARED DETECTOR**  
*Includes Swivel Mounting Bracket !*



## TALON SERIES

**INSTALLATION INSTRUCTIONS**  
**P/N 7111242**

### TL-XPRESS FEATURES

- Includes a perfect swivel bracket for ceiling, wall mounting and hidden wires.
- Hard shell "attack-proof" lens with MicroPRISM™ technology.
- No vertical calibration or adjustment necessary when mounted between 5' to 12' (1.6 m to 3.6 m).
- Temperature compensation.
- Total environmental immunity.
- SMD technology.
- Sensitivity adjustment.
- Maximum RFI & EMI immunity.

### INTRODUCTION

The TL-XPRESS is dual-element passive infrared intrusion detector for use in electronic security systems.

The TL-XPRESS reduces false alarms to an unprecedented minimal level due to its effective elimination of background noises and nuisance stimuli.  
The TL-XPRESS employs variable pulse count adjustment making it extremely adaptable to various environments.  
The TL-XPRESS has interchangeable lenses which gives the installer maximum flexibility for a variety of installation needs.  
You will obtain optimum performance from your TL-XPRESS PIR detector following this manual.

**THE TL-XPRESS HAS A MICROPRISM LENS THAT PROVIDES FOR AN UNPRECEDENTED LEVEL OF CATCH BOTH ACROSS THE ZONES AND TOWARDS THE DETECTOR.**

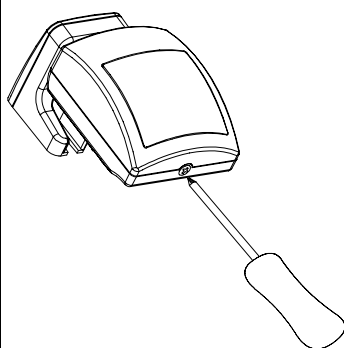
### SELECTING MOUNTING LOCATION

Choose a location most likely to intercept an intruder. See detection patterns in figures 6,7. The MicroPRISM™ technology lens and the dual element high quality sensor detects motion across the beam as well as the motion towards the detector. The TL-XPRESS performs best when provided with a constant and stable environment.

#### Avoid the following locations:

- Facing direct sunlight
- Facing areas which may change temperature rapidly
- Areas where there are air ducts or substantial air flows

**FIG. 1 - REMOVAL OF FRONT COVER**

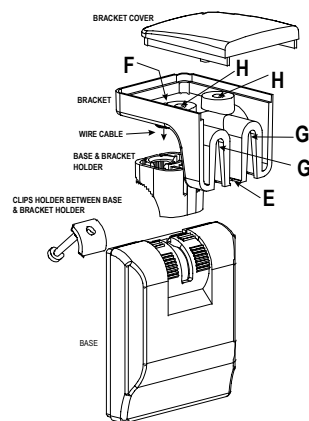


### MOUNTING THE DETECTOR

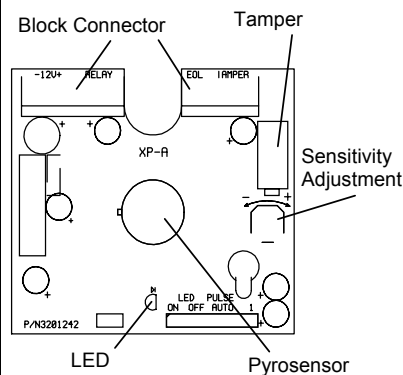
1. TL-XPRESS can be installed by the bracket to the wall or to the ceiling. The bracket cover is used for wall mounting only (remove it for ceiling mounting).
  - 1.1 For ceiling mounting - holes H (fig.2), for wall mounting - slots G (fig.2).
  - 1.2 Insert the wire through hole E,F (fig.2) or through the wire access hole A (fig.4)
  - 1.3 Attach the bracket to the wall or to the ceiling (fig.2)
2. To remove the front cover, unscrew the holding screw (Fig. 1) and gently open the cover.
3. To remove the PC board, carefully unscrew the holding screw located on the PC board (fig.3).

4. Connect the base to the bracket holder by the clip holder (fig.2). Tighten the clip to the bracket holder through the base by screw (see fig.9 step 4,5,6)
5. Place the PC board in its place and remove it to the small hole and tighten the screw.
6. Access for wiring connections is easy via the terminal block located on the PCB. See fig. 5.
7. Replace the detector cover by inserting it back in the appropriate closing pin until the closing click is heard.

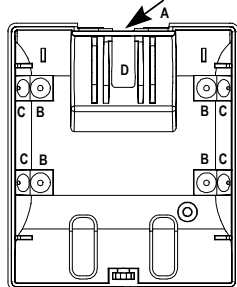
**FIG. 2 - BRACKET**



**FIG. 3 - PCB LAYOUT**

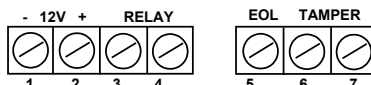


**FIG. 4 - KNOCKOUT HOLES**



A - WIRE ACCESS HOLE  
B - USE FOR FLAT WALL MOUNTING - WITHOUT BRACKET  
C - USE FOR CORNER MOUNTING - WITHOUT BRACKET  
D - FOR BRACKET MOUNTING

**FIG. 5 - TERMINAL BLOCK**



### TERMINAL BLOCK CONNECTIONS

Run the cable through the cable entry hole and connect the wires in accordance with Fig. -5 and the following instructions:

**Terminal 1** - marked " - " ( GND )  
Connect to ground of the control panel.

**Terminal 2** - marked " + " ( +12V )  
Connect to a positive Voltage output of 8.2 – 16 Vdc source (usually from the alarm control unit).

**Terminals 3 & 4** - marked " RELAY "  
These are the output relay contacts of the detector. Connect to a normally closed

zone in the control panel.

**Terminals 5 - Marked " EOL "**  
End of line option.

**Terminals 6 & 7 - marked " TAMPER "**  
If a Tamper switch is required connect these terminals to a 24 hours normally closed protective zone in the control unit. If the front cover of the detector is opened, an immediate alarm signal will be sent to the control unit.

### SENSITIVITY ADJUSTMENT

The sensitivity potentiometer should be adjusted according to the security risk level at the installation site.

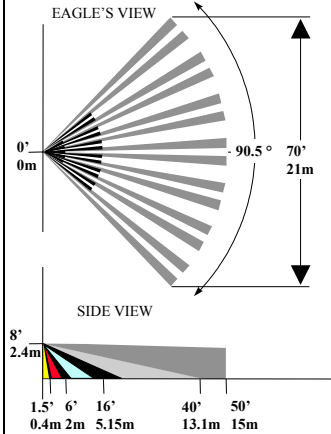
For high-risk locations, the sensitivity should be adjusted close to MIN (9%). In low risk situations, the sensitivity should be adjusted closer to MAX (100%) factory set to 54%. Always walk test and re-adjust if required.

### WIRE SIZE REQUIREMENTS

Use #22 AWG or wires with a larger diameter. The maximum length of wire between the detector and the control panel depends on the number of detectors connected and on the wire gauge. Use the following table to determine required wire gauge and length. Divide the length by the number of detectors connected in parallel in order to determine wire gauge and maximum wire length permitted.

Wiring Gauge	#	22	20	18	16
Wiring Length	m	205	310	510	870
	ft.	800	1200	2000	3400

### FIG. 6 - WIDE ANGLE LENS



### LENS REPLACING

1. Remove the front cover by inserting a flat screw driver in the appropriate slot (fig.1).
2. Using a small flat screw driver, press on left, right and middle snaps of the lens and pull the lens out from its place (front cover side) (fig.8).
3. Replace a new WA or LR lens.
4. Push the lens to its place by pressing again from outside of the front cover until a click is heard (fig.8).
5. Replace front cover.

### TECHNICAL SPECIFICATIONS

Pyrosensor	Dual element type.
Power Input	8.2 - 16 Vdc
Current Consumption	8 mA @ 12 Vdc
Temperature Compensation	Yes
Alarm Period	2sec (± 5sec)
Alarm Output	N.C. 100 mA @ 28 Vdc (10 Ω in line resistor Form "A")
Tamper Switch	N.C. 100 mA @ 28 Vdc (10 Ω in line resistor Form "A")-open when cover is removed
Operating ambient temperature range	-20°C to +60°C (-4°F to +140°F)
Operating humidity range	Up to 95% (non-condensing)
Storage temperature range	-40°C to +80°C (-40°F to +176°F)
RFI protection	≥30 V/m @ 10-1000 MHz
EMI immunity	50,000 V electrical interference
Dimensions	97mm x 63mm x 46.5mm (3.8" x 1.8" x 2.5")
Weight	85 gr (3 oz)

**CROW reserves the rights to change specifications without prior notice.**

### JUMPER PIN SELECTIONS

#### PULSE COUNT JUMPER (JP1) - Marked "PULSE".

Jumper in position **1** - this setting is for a stable environment without air drafts.

Jumper in position **AUTO** - this setting is for operation within a harsh environment.

#### LED SELECTION JUMPER (JP2) - Marked "LED"

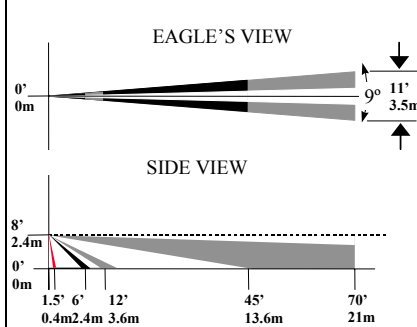
Jumper in position **ON** - LED ENABLE  
The LED will light when the TL-XPRESS is in alarm condition.

Jumper in position **OFF** - LED DISABLE  
The LED is disabled

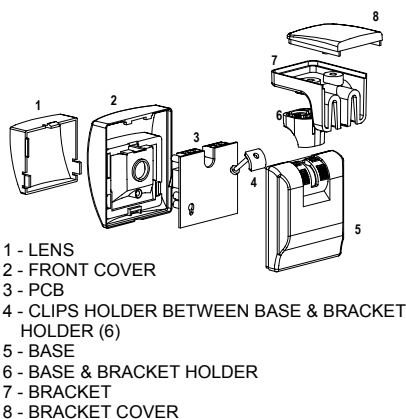
#### NOTE:

The state of the Jumper "LED" does not affect the operation of the relay.

### FIG. 7 - LONG RANGE CURTAIN LENS



### FIG. 9 - TL-XPRESS PARTS ASSEMBLY



### FULL 7 YEAR WARRANTY

CROW warrants this product to be free from defects in materials and workmanship under normal use and service for period of seven years from the last day of the week and year whose numbers are printed on the printed circuit board inside this product.

CROW's obligation is limited to repairing or replacing this product, at its option, free of charge for materials or labor, if it is proved to be defective in materials or workmanship under normal use and service. CROW shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than CROW.

There are no warranties, expressed or implied, of merchantability or fitness for a particular purpose or otherwise, which extend beyond the description on the face hereof. In no case shall CROW be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever, even if the loss or damage is caused by CROW's own negligence or fault.

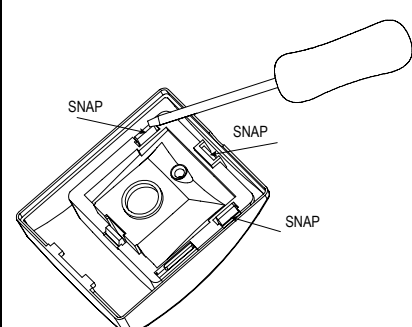
CROW does not represent that this product can not be compromised or circumvented; that this product will prevent any person injury or property loss or damage by burglary, robbery, fire or otherwise; or that this product will in all cases provide adequate warning or protection. Purchaser understands that a properly installed and maintained product can only reduce the risk of burglary, robbery or other events occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss or damage as a result. Consequently, CROW shall have no liability for any personal injury, property damage or any other loss based on a claim that this product failed to give any warning. However, if CROW is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, CROW's maximum liability shall not in any case exceed the purchase price of this product, which shall be the complete and exclusive remedy against CROW.

### DETECTOR LENSES

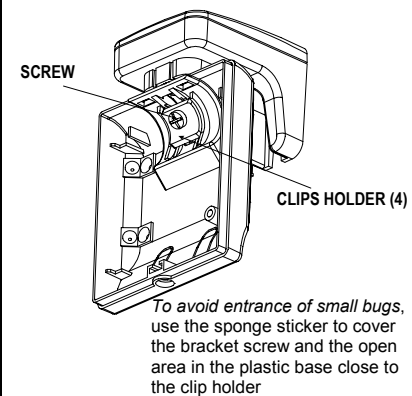
COVERAGE	Standard	Options
	WIDE ANGLE 90.5° 15m x 21m (50ft x 70ft)	LONG RANGE CURTAIN 9° 21m x 3.5m (70ft x 11ft)
TOTAL DETECTION ZONES	36*	10

\* 14 long range, 10 intermediate, 12 short range.

### FIG. 8 - LENS REPLACING



### FIG. 10 - CONNECTION OF TL-XPRESS BASE AND BRACKET



To avoid entrance of small bugs, use the sponge sticker to cover the bracket screw and the open area in the plastic base close to the clip holder

## TALON

Series  
"It's All About Catch"  
**TL-XPRESS**  
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These instructions supersede all previous issues in circulation prior to Jan. 2001.