CIDETRAK® CM

MATING DISRUPTANT

Less *Insecticide* **- Less** *Residue* **- Less** *Labor* - **Less** *Damage*

TRÉCÉ INCORPORATED

INSECT PHEROMONE & KAIROMONE SYSTEMS

CIDETRAK® CM
MATING DISRUPTANT

TRÉCÉ INCORPORATED

The **Best** *Solution* *for Codling Moth Management.*

MONITORING
PHEROCON®
CM DA COMBO™ LURE

+

MATING *Disruptant*
CIDETRAK® CM

=

Less *Insecticide*
Less *Residue*
Less *Labor*
Less *Damage*

=

HIGHEST *Quality*

CIDETRAK® CM *is the* ***BEST MD Product, BEST MD Solution****, and the* ***absolute BEST MD Protection*** *for Codling Moth management on the market today.*

CIDETRAK® CM *has consistently reduced damaged fruit compared to the market leader in university and government trials. After two years of use, growers report that* ***CIDETRAK® CM*** *reduced insecticide applications up to 75% versus previous practices and was up to 50% faster to hang. The net effect is a much "softer" approach but with greater Codling Moth control, less damage, lower perceptible residues and safer working conditions for employees.*

Codling Moth adult

Codling Moth damage

Made in the USA

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM
MATING DISRUPTANT

TRÉCÉ INCORPORATED

Made to **Withstand the Elements.**

The **Best** *Protection.*

CIDETRAK® CM dispenser in use

The Science Behind the Success.

*The result of five years of lab and field research, the **CIDETRAK® CM** High Performance Dispenser puts the **BEST** Codling Moth mating disruptant protection in the palm of your hand. Its small, simple design is easy to install, damage resistant and keeps your orchards looking great. And the best piece of the puzzle? The **CIDETRAK® CM** is the only pheromone formulation designed from the molecular level up for semiochemical applications. **The result is long-lasting protection – and peace of mind.***

INTELLIGENT PROTECTION

Made in the USA

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

*"CIDETRAK® CM Has Helped to **Significantly Reduce** Our Insecticide and **Labor Costs**."*

CIDETRAK® MD Dispenser Technology

- ***Novel Formulation: Two-Way Protection***
  - ***Internal:*** *Restricts O_2, light and heat decomposition.*
  - ***Surface:*** *Eliminates "Free radical zones".*
- ***Unique "Puzzle Piece" Design: One-Step Application***
  - *Faster hanging*
  - *Smaller target from harmful elements*
  - *"No girdling"*
  - *Visibility minimized*
  - *Seasonal identification mark*
- ***More Active Ingredient:***
  - *Longer lasting*
  - *More effective*
- ***Unique Applicator Packaging***
  - *Novel design for application*
  - *Speeds field use*
  - *Enhances inventory management*
  - *Excellent protection from elements*

*"We have been using **CIDETRAK® CM** at Washington Fruit & Produce Company the past two seasons with tremendous success. The recommended rate of 320 **CIDETRAK® CM** dispensers per acre can be applied up to 50% faster and is more efficient than the nearest competitor. Compared to other products, this significantly reduces our labor costs and as a very large scale farming operation, that is important to us. **CIDETRAK® CM** has also helped us reduce the number of insecticide applications in our most problematic orchards—going from 8–10 pest control sprays, down to only 2–4. Our net effect has been a much "softer" approach with greater Codling Moth control, fewer sprays, less pest cullage, lower perceptible residues and safer working conditions for employees."*

Jeff Leonardini,
Washington Fruit & Produce Company
Yakima, WA

Made in the USA

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CODLING MOTH *Cydia pomonella*

CODLING MOTH Identification, Biology and Phenology

Insect Description:

Adults: *Gray mottled moths with a coppery band at the tips of the wings.*

Eggs: *Pinhead sized, disc-shaped and transparent white when first laid. As they mature they become opaque white and develop a red ring. Just before hatching the black head of the larva becomes visible.*

Larvae: *Newly hatched larvae are pinkish white with a black head. Mature larvae are about 0.75 in. or 19 mm long and pinkish white with a mottled brown head. In walnuts, Codling Moth larvae look similar to those of the navel orange worm. However, they do not have the crescent-shaped marks on the second segment that distinguish navel orange worm larvae.*

Host:

Apples, pears, walnuts, plums.

Damage:

Pome and Stone Fruits

- *Codling Moth larvae mainly damage fruit with deep entries and stings.*
- *In deep entries, larvae bore to the core and feed in the seed cavity area.*
- *Strings occur primarily when a stomach poison is used and larvae enter the fruit a short way before dying. Affected areas heal leaving a small scar.*
- *Larvae may enter through the sides, stem end, or calyx end of the fruit.*

Walnuts

- *Damage caused by Codling Moth is different with each generation.*
- *First generation larvae reduce yield directly by causing nutlets to drop from tree. They also serve as breeding site for navel orangeworm. Damaged nutlets have frass at the blossom end.*
- *Nuts attacked by second generation remain on trees but are unmarketable because of feeding damage on kernel. Feeding damage can also be detected by looking for frass produced by larvae at the point of entry into the husk. Also serves as breeding site for NOW.*

Phenology:

- *Two to four generations per year depending on weather and location.*
- *Overwinters as full-grown diapausing larvae.*
- *Emerges March or April in California; emerges in late April or May in Washington.*

Life Stages / Degree-Days

Life Stages	*Average D˚ F*	*Average D˚ C*
Preoviposition period:	*58˚*	*32.2˚*
Egg hatch begins:	*158˚*	*87.7˚*
Larval development:	*471˚*	*261.4˚*
Pupal development:	*431˚*	*239.2˚*
Generation time (first):	*1060˚*	*588.3˚*
Generation time (second and third/CA):	*1320˚*	*732.6˚*

(Threshold temps: 53˚ F or 11.7˚ C)

Made in the USA

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

BEST MONITORING on the Market Today!

PHEROCON® CM DA COMBO Lure

PHEROCON® VI Trap

PHEROCON® IIB Trap

*The patented **PHEROCON CM DA COMBO** lure combined with the patented **PHEROCON IIB** trap or the ready-to-use **PHEROCON VI** trap are the most popular monitoring systems in the market today. The **PHEROCON** lure featuring an ultra pure CM pheromone plus the DA CM kairomone provides the highest consistent capture of Codling Moth adults available in mating disrupted orchards.*

PHEROCON CM DA COMBO Monitoring Guidelines for Use.

Trap Design:

- *PHEROCON® VI and PHEROCON® IIB Trap.*

Placement Time:

- *Before spring emergence or at bud break for pome fruit or pre-catkins for walnuts.*

Placement Pattern:

- *Conventional and mating disrupted orchards.*
- *Within orchard in a grid pattern and 10–20 m apart (30–60 ft).*
- *In orchards, also place traps to accommodate for differences due to tree spacing, age, size or cultivar, and problem "hot spots" or borders.*
- *In apples, pears and walnuts place traps within the upper third of the canopy. Or, place trap high in tree that are at heights > 12 ft (>4 m). Use an extension pole or rope line for higher trap placement.*
- *Position trap on outer canopy, on a limb unobstructed by leaves or developing fruit.*
- *If COMBO and pheromone-only lures are both used, put each in a separate trap station.*

Trap Density: APPLES & PEARS

NUMBER OF TRAPS	ACRES	HECTARES
Minimum of 2	≤10	≤4
One trap per 5 acres or 2 ha	11–100	4 – 40
One trap per 15 acres or 6 ha	>100	>40

Trap Density: WALNUTS

NUMBER OF TRAPS	ACRES	HECTARES
Minimum of 2	≤10	≤4
One trap per 15 acres or 6 ha	>100	>40

Capture Record:

- *Record dates of trap placement and all lure replacements.*
- *Record important flight event dates, such as first capture, Biofix-sustained capture, and flight peak.*
- *Check traps daily until Biofix, and at least weekly thereafter.*
- *At each check date, record date and number captured.*

Trap Labeling:

- *Label traps to identify them as "CM-DA COMBO™ Lure" – baited traps and label the date that the lure was placed/replaced. (To prevent fading, use a blue-colored crayon or permanent marker, and label on the bottom of the trap.)*

Trap Maintenance:

- *Remove insects and stir glue when checking.*
- *Replace CM-DA COMBO™ lures every 8 weeks, avoid cross-contamination with other pheromone lures.*
- *Replace traps or liners every 4 weeks or when fouled with dust or insect debris (trap efficiency goes down after 50 or more moths have been caught).*

Lure Storage:

- *Keep unopened factory-sealed packages in a cool place (<75° F or 24° C) for short periods until used.*
- *Refrigerate or freeze unopened packages to carry over for annual storage.*
- *When keeping lures in vehicle, store in a small cooler to prevent exposure to high temperatures.*

Always:

- *Use only one lure per trap.*
- *Label traps to identify the lure used and date placed.*
- *Record trap counts and dates.*
- *Record Biofix and sustained captures.*
- *Change lures as recommended.*
- *Label traps with date of lure changes.*
- *Discard lures and packaging in proper manner away from orchards.*
- *Keep trap openings clear of branches, leaves, or fruit.*
- *Avoid cross-contamination of traps and lures.*
- *Follow product recommendations.*

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM Mating Disruptant *Guidelines for Use.*

CIDETRAK® CM Application and Use

Dispenser Application

- *Attach dispensers securely to lateral branches in upper one-third of tree canopy. Best if placed within 12-18 inches (30.5 cm-45 cm) from the top of the tree.* ***Do not worry about CIDETRAK® CM exposure, it is designed for the sun.***
- *Attach the dispensers from the ground using a pole applicator (see instructions) or from a moving trailer.*

Dispenser Rate

- *Minimum of 320 dispensers per acre (800 dispensers per hectare) or 38 grams of active ingredient per acre per application.*
- *Maximum of 800 dispensers per acre (2,000 dispensers per hectare) or 96 grams of active ingredient per acre per application.*
- *Apply 10-20% of the total per acre rate to all orchard borders, to orchards that are moderately to heavily infested with CM, or adjacent to an untreated orchard.*
- *Do not exceed 150 grams of active ingredient per acre per year.*

Dispenser Maintenance

- *Depending on temperature, CIDETRAK® CM dispensers will release pheromone for 120-140 days.*
- *In areas with long field season (i.e. more than 120 days) a second application may be necessary, based on monitoring results, prior to subsequent CM flights.*

Timing

- *Apply prior to moth emergence in early spring.*
- *Monitor moth activity using PHEROCON® VI or PHEROCON®IIB traps and lures.*
- *Begin monitoring in early spring and continue throughout the season to assess treatment effectiveness.*

Note: *CIDETRAK® CM will not prevent crop damage from immigration of mated female moths into treated orchards. Nearby (500 yards) untreated Codling Moth hosts, such as apple, walnut, pear, quince, crabapple, plum and others, can be a source of these mated females. Treatment with pheromone is recommended only when all host crops within or near treated blocks have been treated with CIDETRAK® CM.*

Treatment Tips

- *CIDETRAK CM suppresses mating of Codling Moth and Hickory Shuckworm. Immigration of mated female moths from adjacent, infested orchards can reduce the level of control.*
- *Reinforce high risk borders by concentrating more dispensers moved from the center of the orchard to the borders.*
- *Area-wide treatment of the entire host plant block is the most effective strategy.*
- *To supplement CIDETRAK CM, use insecticides to control high populations. Monitor all pest populations to determine timely use of insecticides.*
- *To manage immigration and high population pressures, consider:*
    1. ***Treatment of external sources of infestation with CIDETRAK CM.***
    2. ***Treatment of external sources of infestation with an insecticide.***
    3. ***Treatment of pheromone treated orchard with insecticide.***
- *Consult your local extension specialist, certified crop advisor, or Trécé representative for local field condition management strategies.*

Made in the USA

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM
MATING DISRUPTANT

TRÉCÉ INCORPORATED

Apply in a Snap.

Hangs up to 50% faster than the market leader.

Made in the USA

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM
MATING DISRUPTANT

TRÉCÉ INCORPORATED

Up to 50% Improvement *in Application Efficiency.*

HOW TO GAIN THE MOST EFFECTIVENESS

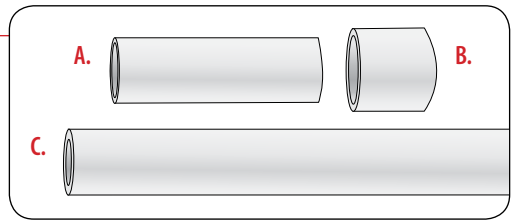
Pole applicator assembly instructions

__NOTE:__ Pole applicator tip can be made separately and attached to a pole with a coupler (Version 1), or, the applicator tip can be created as part of the pole with no additional tip or coupler required (Version 2).

Version 1 — MANUFACTURING APPLICATOR TIP WITH COUPLER:

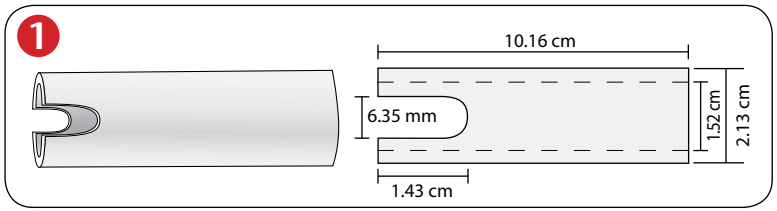
Materials Needed:

- **A.** One 10.16 cm long PVC pipe(Schedule 40: 12.7mm PVC material)
- **B.** 1.91cm Coupler
- **C.** One 1.22 - 1.52 m long PVC pipe(Schedule 40: 12.7mm PVC material)

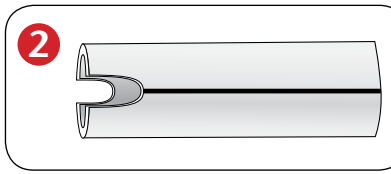


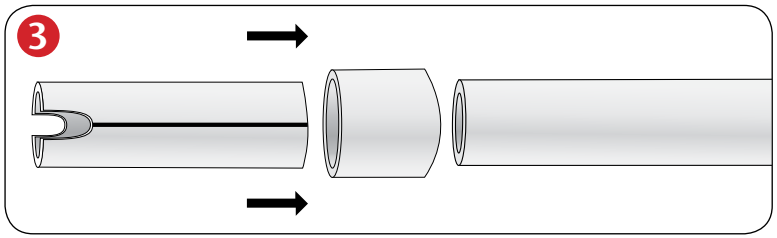
Assembly Instructions:

1. Grind or cut a notch 6.35 mm wide and 1.43cm long into 10.16 cm long PVC pipe.



2. Mark a line under each notch using permanent ink in order to make rotation or turning of the pole more visible for dispenser application.
3. Attach notched PVC applicator to coupler, then attach coupler to end of 1.22 - 1.52 m PVC pipe.

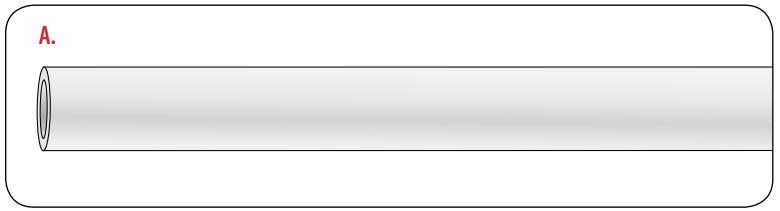




Version 2 — MANUFACTURING APPLICATOR TIP WITHOUT COUPLER:

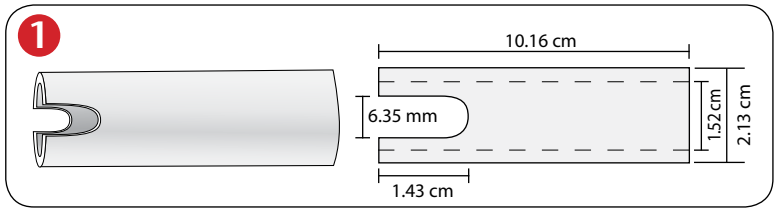
Materials Needed:

- **A.** One 1.22 - 1.52 m long PVC pipe (Schedule 40: 12.7 mm PVC material)

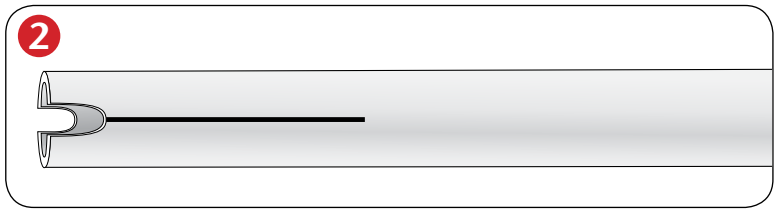


Assembly Instructions:

1. Grind or cut a notch 6.35 mm wide and 1.43 cm long into PVC.



2. Mark a 20 cm line under each notch using permanent ink in order to make rotation or turning of the pole more visible for dispenser application.



© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM
MATING DISRUPTANT

TRÉCÉ INCORPORATED

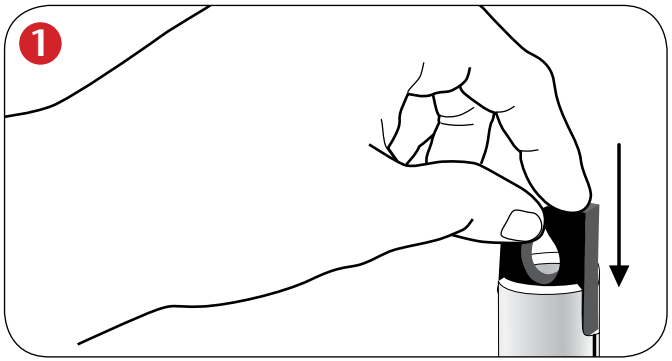
Up to 50% Improvement *in Application Efficiency.*

HOW TO GAIN THE MOST EFFECTIVENESS

Pole applicator and dispenser instructions

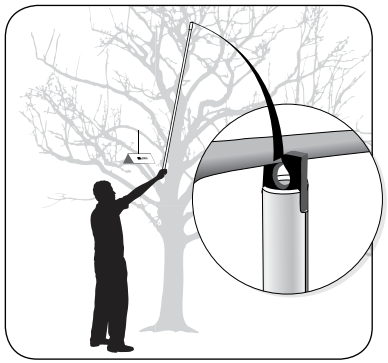
Dispenser Instructions:

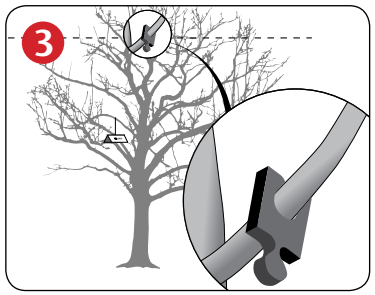
1. Insert dispenser into the top of the PVC applicator and push down.



2. Place dispenser into top of tree. (Illustration of proper height of application.)

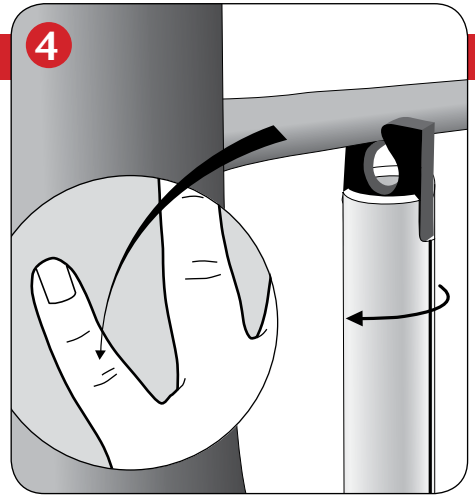
VERY IMPORTANT – PLACEMENT IN THE TREE





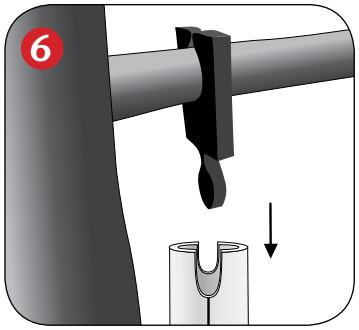
3. To gain optimum effectiveness – place CIDETRAK® in highest part of tree canopy. Best if placed within 12 - 18 inches (30 - 45 cm) from the top of tree.

***NOTE:** Do not worry about CIDETRAK® exposure; it is designed for the sun!*

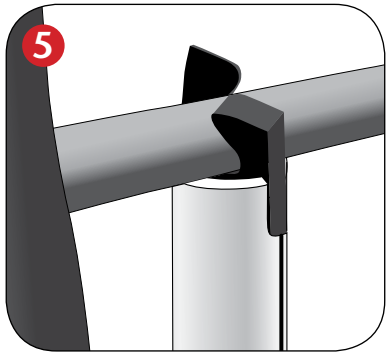


4. Touch branch at dispenser center and twist slightly (1/8th or 45˚ turn) while pushing upward.

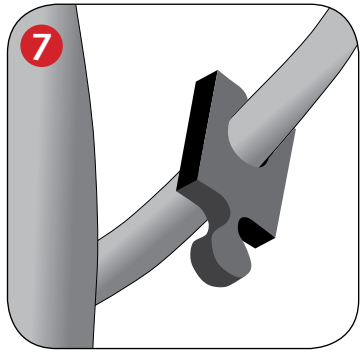
VERY IMPORTANT – BRANCH SIZE FOR PLACEMENT – The branch size should be no smaller than your pinky finger.



6. Pull PVC applicator straight down to leave dispenser on branch.



5. Dispenser attaches onto branch.



7. Dispenser on branch.

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM
MATING DISRUPTANT

TRÉCÉ INCORPORATED

Unique Applicator Packaging:
Helps inventory management and reduces labor costs

Open, Strap It On and Go!

- ***Ready-to-use package, ready-to-hang dispenser.***

  - *Fast-hanging design = Fast application.*
  - *Snaps easily and securely onto branches.*
  - *Eliminates lateral branch scarring.*

- ***Convenient Carrier Package.***
  - *Packaging helps reduce labor costs and inventory management.*

CIDETRAK® CM *4-pack easy tear zipper makes opening the carrier package simple.*

Opening Foil Pack. *Tear open foil pack at notch.*

Separates easily *into two 2-pack carrier packages.*

Carrier Pack Assembly. *Strap the carrier package on and go!*

Fruitful Growing Seasons Start with

CIDETRAK® CM
MATING DISRUPTANT

If you're ready for intelligent protection for your orchards, Think Fast!

Think CIDETRAK® CM *High Performance Dispensers.*
The ***BEST*** *Codling Moth mating disruptant.*

Contact Your Supplier and Order NOW!

Visit our website: ***www.trece.com*** *or call* ***1-866-785-1313****.*

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

CIDETRAK® CM

MATING DISRUPTANT

Less *Insecticide* **- Less** *Residue* **- Less** *Labor* - **Less** *Damage*

TRÉCÉ® INCORPORATED

INSECT PHEROMONE & KAIROMONE SYSTEMS

Your Edge – And Ours – Is Knowledge.

© 2013, Trécé Inc., Adair, OK USA
TRECE, PHEROCON, STORGARD, CIDETRAK and IPM PARTNER are registered trademarks of Trece, Inc., Adair, OK USA

TRE-0525