# Tweener Installation Instructions TWEENER® SYSTEM v6.0 (UL)

# (Single and Double version)

IMPORTANT REMINDERS: ALL TYPES OF ELECTRIC OR BATTERY MACHINES ARE FORBIDDEN It is the installer's responsibility to check the wind resistance of the screen structure. The electrical connection of TWEENER® must be carried out by a qualified electrician. Assemble part LONG BAR TWEENER® and SMALL BAR TWEENER® only with part TWEENER® POWER BOX.

Contact 10-S Tennis Supply for additional help: www.tweenerusa.com 800-247-3907

#### **SUMMARY**

I. RECOMMENDED TOOLS
II. COMPONENTS
A. FASTENERS
B. ELECTRICAL CONNECTIONS
C. LED LINEAR BARS
III. DISPOSITION OF A COURT
A. STANDARD COURT
B. COURT WITH LIGHT EXTENSION
IV. ASSEMBLY STEPS
A. DETERMINE THE INSTALLATION HEIGHT
B. NOTE THE INSTALLATION HEIGHT ON EACH POLE
C. ATTACH THE FASTENING BRACKETS TO THE POLES
D. MAKE SURE FASTENING BRACKET ARE LEVELED
E. MAKE A BLANK INSTALLATION ON GROUND
INSTALL BARS AND JUNCTION PLATES ON EACH SIDE OF THE COURT9
INSERT SCREWS IN BARS
PRE-SET THE PLATE FOR SMALL BAR IN LONG BARS
PRE-SET SCREWS ON ILINCTION PLATE 10

INSTALL POWER SUPPLY BOX AND ELECTRIC EXTENSION	11
F. INSTALL BARS	12
INSTALL LONG BARS ON FASTENING BRACKETS	12
PLACE JUNCTION PLATES BETWEEN EACH LONG BARS	13
FASTEN SMALL BARS TO LONG BARS	14
CONNECT BARS ELECTRICALLY	14
G. FASTEN POWER SUPPLY BOX	15
INSTALL BOX ON EACH SIDE OF THE COURT	15
CONNECT LONG BARS TO THE SUPPLY BOX	15
CONNECT GROUND WIRE ON COVER	17

# **I. RECOMMENDED TOOLS (NOT SUPPLIED)**

- 1 spirit level
- 2 ratchet spanners ½"
- 1 ratchet socket wrench with extension ½"
- 1 PZ 2 screwdriver
- 1 spanner set
- 1 one-meter level
- 1 decameter
- 2 ladders
- 1 floor protection for the tennis court surface
- 1 pair of gloves per person
- 1 marker
- 1 line (40 m 131' 2.8")

# **II. COMPONENTS**

### A. FASTENERS

- o LONG SCREW x 52
  - **4** 1/3"; 4 ½"; 5 ½"; 6"; 6 1/3"; 7"





- o SHORT SCREW x 170
- o LOCKNUT x 222
  - **5/16**"



- o SCREW x 66
  - 8.32 UNC x 1.18"





FASTENING BRACKET FOR POWER SUPPLY BOX x 4





o JUNCTION PLATE x 14



O PLATE FOR SMALL BARS x 8



#### **B. ELECTRICAL CONNECTIONS**

- o ELECTRICAL EXTENSION x 2
  - **■** 98′





- o with SCREWS pre-installed x 12
  - 8.32 UNC x ½

#### \*LIGHT EXTENSION KIT OPTION:

- o SHORT SCREW x 220
- o LOCKNUT x 270
- O JUNCTION PLATE x 22
- o ELECTRIC EXTENSION 98' x 2"
- o ELECTRIC EXTENSION 13' x 2"

#### \*SUPPORT BAR KIT OPTION

- o LONG SCREW x 54
- o SHORT SCREW x 178
- o SCREW X 54
  - 8.32 UNC
- o LOCKNUT x 232
- o FASTENING BRACKET for bar x 15
- O JUNCTION PLATE x 15

#### C. LED LINEAR BARS

- o LONG BARS x 16 (12' 5.6")
  - BAR A1 x 2
    - 9' 10" + male | 13.78" + female
  - BAR B1 x 2
    - 13.78" + female | 9'10" + male
  - BAR A2 x 4
    - 13.78" + male | 13.78" + female

- BAR B2 x 4
  - 13.78" + female | 13.78" + male
- BAR A3 x 2
  - 13.78" + male | 16.4" + female
- BAR B3 x 2
  - 16.4' + female | 13.78" + male

# D. SMALL BARS

- o BARCx2
  - 13.78" + male
- - o BAR D x 2
    - 13.78" + female

#### **E. LIGHT EXTENSION OPTION**

- EXTENSION BAR x 4 (6' 6.7")
  - BAR Aext x 2
    - 13.78" + female | 13.78" + male
- BAR bext x 2
  - 13.78" + female | 13.78" + male

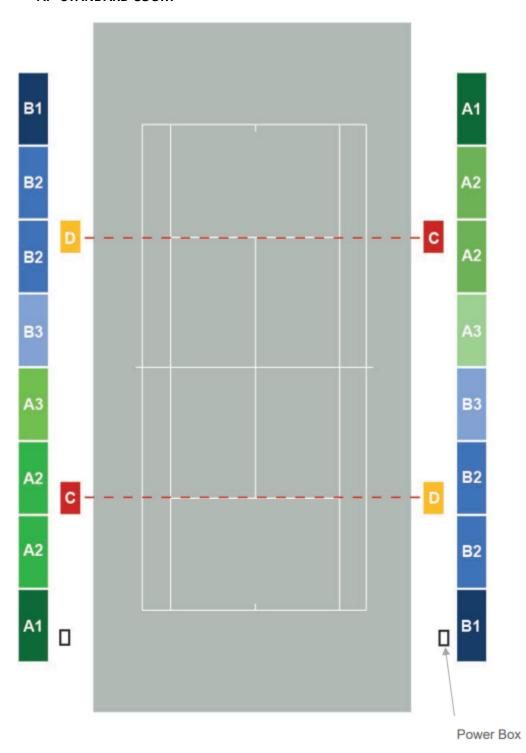
#### F. SUPPORT BAR OPTION x 1

O Variable Lengths: 3' 4.3" | 12' 5.6" or custom length

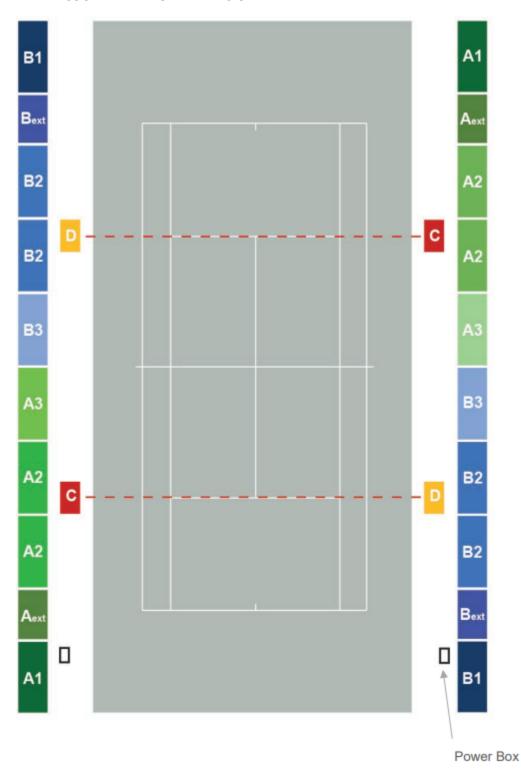
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# **III. DISPOSITION OF A COURT**

# A. STANDARD COURT



# **B. COURT WITH LIGHT EXTENSION**



#### **IV. ASSEMBLY STEPS**

#### A. DETERMINE THE INSTALLATION HEIGHT

 The installation height of the system varies depending on the DISTANCE between the fence and the court:

#### **SINGLE TWEENER - TWS**

Distance: Installation Height:

10': 8'2"-8'6"

11'6" 8'2"-9'2"

13'-14'9" 8'2"-10'

#### **DOUBLE TWEENER - TWD UL6.0**

Distance: Installation Height:

11'6" 10'

#### **B. NOTE THE INSTALLATION HEIGHT ON EACH POLE**

o Mark all pole with a marker or a line at the recommended height (Step A).

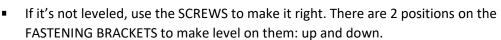
#### C. ATTACH THE FASTENING BRACKETS TO THE POLES

 FASTENING BRACKETS for bar, LONG SCREWS and LOCKNUTS Fix the FASTENING BRACKETS on the pole at the recommended height (Step A).

The top of the FASTENING BRACKET should be on your mark (Step B) and leveled. Screw head pointed towards the outside of the court.

#### D. MAKE SURE FASTENING BRACKET ARE LEVELED

o 8.32 UNC x 1.18" SCREWS



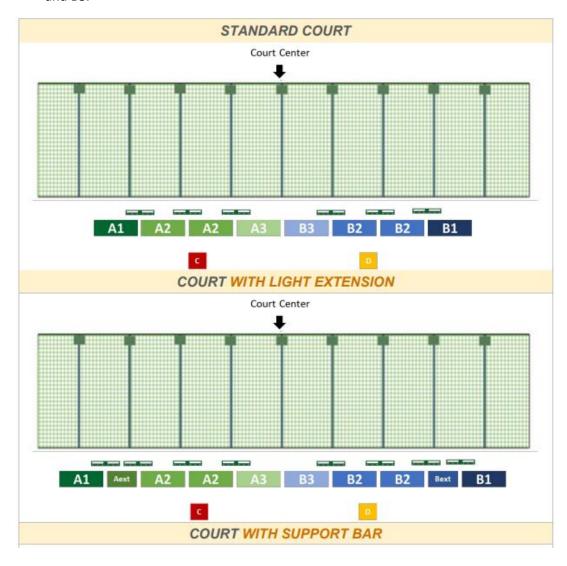






#### E. MAKE A BLANK INSTALLATION ON GROUND

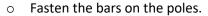
- 1. INSTALL BARS AND JUNCTION PLATES ON EACH SIDE OF THE COURT
  - o JUNCTION PLATE, LONG BARS and SMALL BARS
    - Lay the bars on ground as shown in the diagram below.
    - o Check that:
      - LONG BARS A1 and B1 have a 9'10" cable at one end and 16.4" cable at the other end
      - LONG BARS A3 and B3 have a 9'10" cable at one end and 16.4" cable at the other end
      - SMALL BARS C and D have a 16.4" cable at one end
      - EXTENSION BARS Aext et Bext have a 16.4" cable at both ends (For Light Extension option)
  - o Lay a JUNCTION PLATE at each interval between 2 BARS.
  - Note: if there is no pole at the center of the court, it will have a junction plate between A3 and B3.





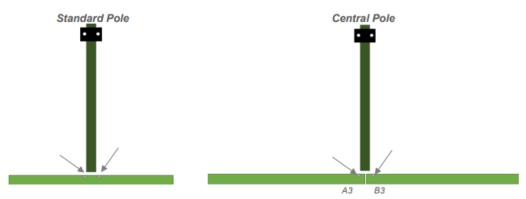
#### 2. INSERT SCREWS IN BARS

o Insert SHORT SCREWS in LONG bars so that they are facing a pole



o Standard pole: 2 screws per bar

o Central pole: 1 screw per bar



o Insert 2 SHORT SCREWS in the groove on the first A2 bar and the first B2 bar (starting from the center).

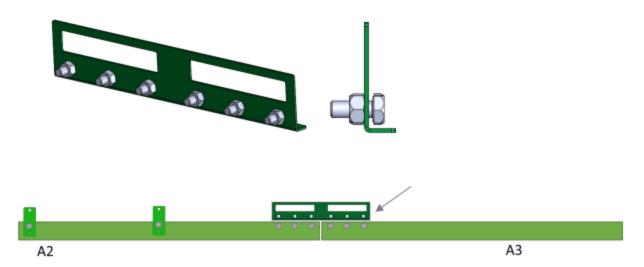
#### 3. PRE-SET THE PLATE FOR SMALL BAR IN LONG BARS

 Put the PLATES for SMALL bar on the SHORT SCREWS you have just put on the first A2 and B2 bars

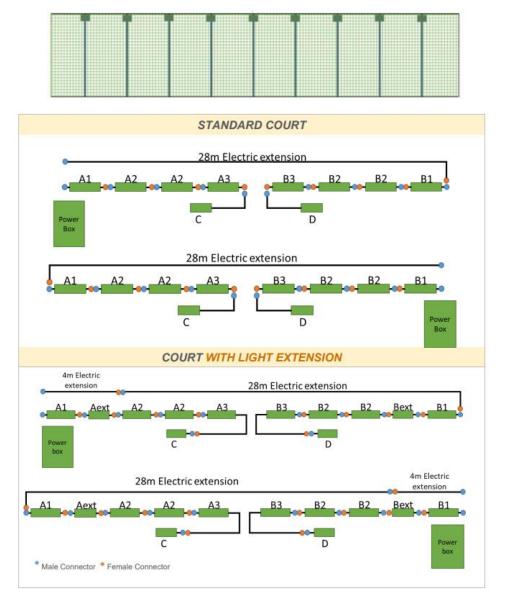


#### 4. PRE-SET SCREWS ON JUNCTION PLATE

- o Insert 6 SCREWS and 6 LOCKNUTS into the JUNCTION PLATE holes
- Head SCREW inside the "L" plate
- o Pre lock the nuts (by hand only)



# 5. INSTALL POWER SUPPLY BOX AND ELECTRIC EXTENSION



- o Drivers box shall be installed on last pole at the end of the court near to power source.
- o Male connector of electric extension shall be next to power supply box.

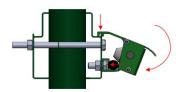
#### F. INSTALL BARS

#### 1. INSTALL LONG BARS ON FASTENING BRACKETS

- Start with bars in the center of the court (net line) on the opposite side of the power supply. Example: If the power supply is on the left side, start with bars on the right side
- As the installation progresses: Place the ELECTRIC EXTENSION in the groove behind the BARS especially when fastening on BRACKETS and when positioning JUNCTION PLATES.

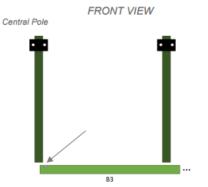


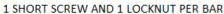
- o Set profile ON TOP of the BRACKET
- o Insert screws inside the BOTTOM holes of the BRACKET
- o Fix with LOCKNUT

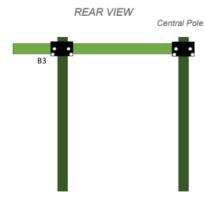




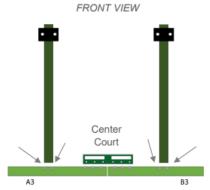
### CASE 1: CENTRAL POLE





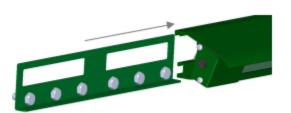


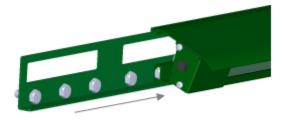
#### CASE 2 : NO CENTRAL POLE

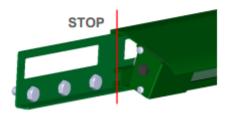


2 SHORT SCREWS AND 2 LOCKNUTS PER BAR

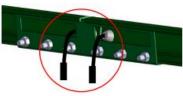
- Note: During installation, if a bar finish on a FASTENING BRACKET and the next one start on that same FASTENING BRACKET, there is no need to put a JUNCTION PLATE.
- One screw of FASTENING BRACKET will be on one bar and the other screw on the next bar (same configuration like the CASE 1 : Central pole)
- 2. PLACE JUNCTION PLATES BETWEEN EACH OF THE LONG BARS
  - Slide JUNCTION PLATE into the installed bar. STOP sliding when reaching the middle of the JUNCTION PLATE





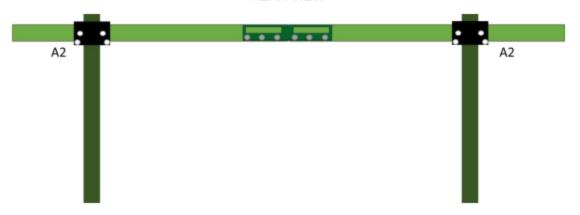


Don't forget the ELECTRIC EXTENSION



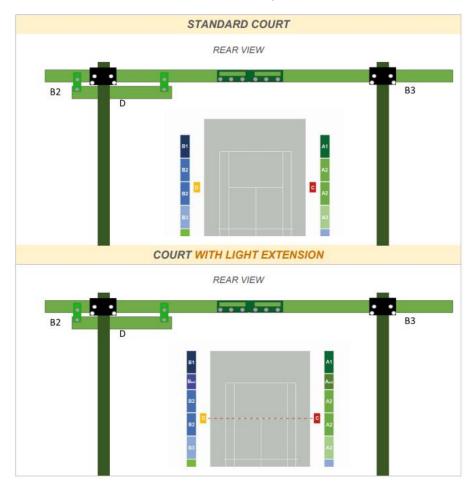
- o Put the connector of the bar inside the hole of the JUNCTION PLATE
- o Lock the 3 LOCKNUTS on the JUNCTION PLATE
- o Add the next bar
- Lock the last 3 LOCKNUTS

# REAR VIEW



# 3. FASTEN SMALL BARS TO LONG BARS

o Middle of SMALL BARS are placed face of the service line.



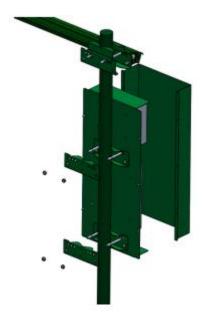
# 4. CONNECT BARS ELECTRICALLY

o Connect male connector to female connector



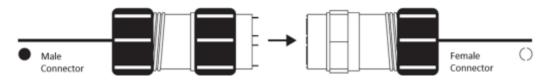
# **G. FASTEN POWER SUPPLY BOX**

- 1. INSTALL BOX ON EACH SIDE OF THE COURT
  - o For each drivers box :
    - Remove the cover
      - Beware keeping apart 8.32 UNC x 1/2 SCREWS
    - Install supply box plate 1" to 1.2" below the last bar
    - Fasten the PLATE to pole with the 2 pre-fasten BRACKETS and 2 additional FASTENING BRACKETS placed behind the pole (with LONG SCREWS)



2. CONNECT LONG BARS TO THE SUPPLY BOX

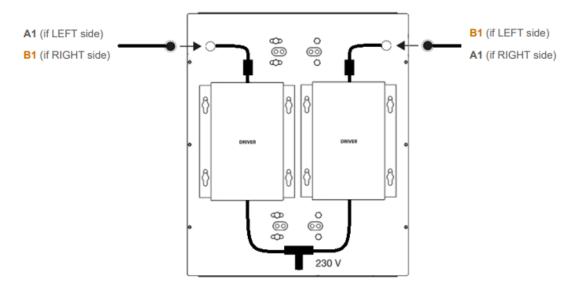
# **CONNECTOR CONNECTION**



- Connect male and female connectors
- o Note: Lock connectors after the connection Screw connectors

# **POWER BOX - ELECTRICAL CONNECTION**

# **DOUBLE TWEENER - TWD UL6.0**

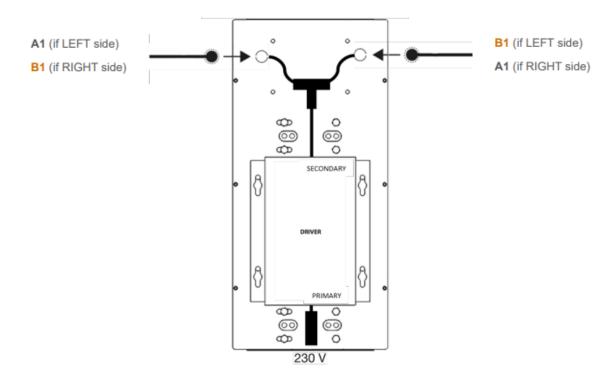




Connection to 220 VAC electrical source shall be performed by a professional electrician.

(Connector is included)

# SINGLE TWEENER - TWS UL6.0



# **RECOMMENDATIONS for electrical connection (220 VAC case)**

# SINGLE TWEENER - TWS\_UL6.0

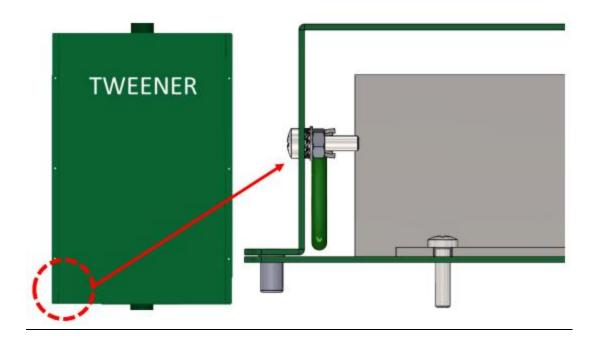
		BREAKER	
		2 electric lines (1 line per court side)	1 electric line (1 line for the court)
		2 BREAKERS C - 16 1 per line	1 BREAKER D - 20 For the court
CABLE SECTION	<b>2,5 mm²</b>   12-14 AWG	< 60 m per line   196' 10"	< <b>30 m</b>   98' 5"
	4 mm²   10-12 AWG	<b>60 &lt; x &lt; 100 m</b> per line 196' 10" < x < 328' 1"	<b>30 &lt; x &lt; 50 m</b>   98' 5" < x < 164'
	6 mm²   8-10 AWG	> 100 m per line   328' 1"	> <b>50 m</b>   164'

# **DOUBLE TWEENER - TWD UL6.0**

		BREAKER	
		2 electric lines (1 line per court side)	
		2 BREAKER D – 20 1 per line	
	<b>2,5 mm²</b>   12-14 AWG	< <b>30 m</b> <i>per line</i>   98' 5"	
CABLE SECTION	4 mm²   10-12 AWG	<b>30 &lt; x &lt; 50 m</b> per line   98' 5" < x < 164'	
	6 mm²   8-10 AWG	> 50 m per line   164'	

# 3. CONNECT GROUND WIRE ON COVER

- Fasten ground wire to the SUPPLY BOX COVER
- Place serrated tooth LOCK WASHER between ground wire connection and cover.



#### In order:

- nuts
- ground wire connection
- external serrated LOCK WASHER
- cover
- 8.32 UNC x 1.18" SCREWS
- Place cover with 6 x 8.32 UNC x 1/2 SCREWS previously removed (Step G.1)

# **END OF INSTALLATION**

# **Contact 10-S Tennis Supply for additional help:**

tweenerusa.com

800-247-3907

