OPERATING INSTRUCTIONS

SMART2

S M A R T R A N S M I T T E R

GENUINE SHURCO®

Wireless SMART2™ Remote (Version 10)

READ BEFORE INSTALLING

TRANSMITTER REMOTE

❶

❷

❸
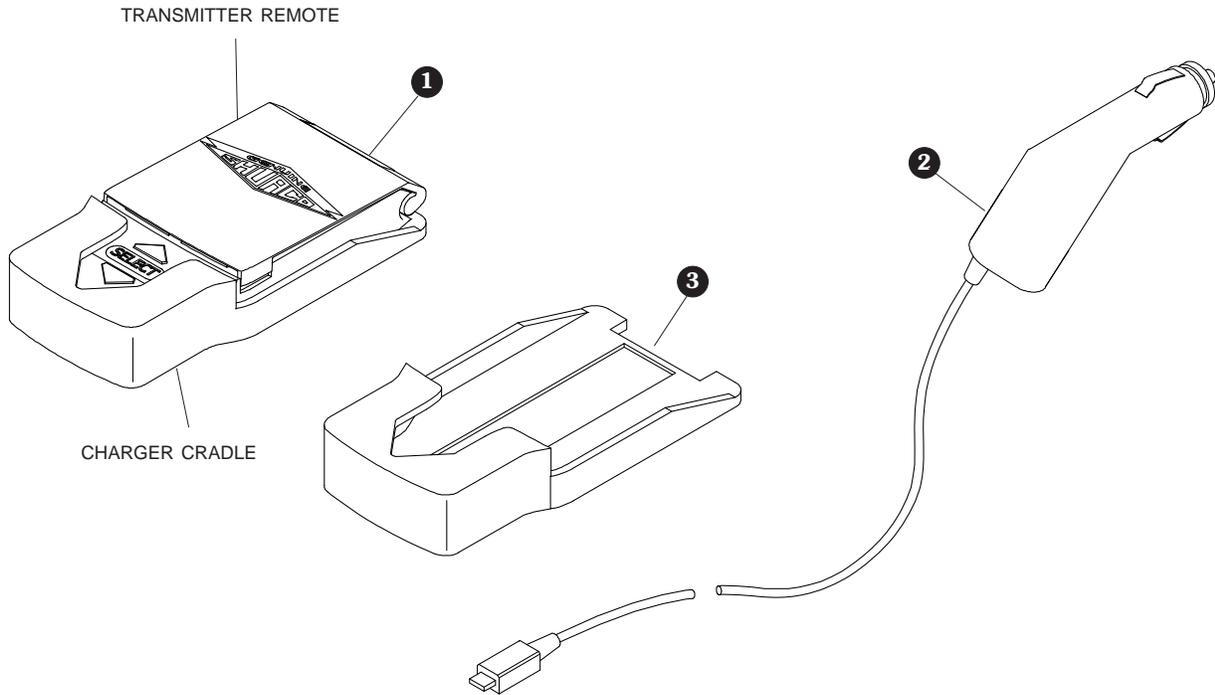
CHARGER CRADLE

Item	Part #	Description
	1122108	SMART2™ Transmitter Remote Kit
		(includes remote, cradle and charging cable)
1.	1122231	SMART2™ Replacement Transmitter Remote w/Cradle
2.	1704958	SMART2™ Transmitter Charger Cable
3.	1704957	SMART2™ Replacement Cradle

⚠ NOTICE

Do not power SMART2™ or any Shur-Co® wireless system with battery charger alone, as this will likely cause system abnormalities and/or system malfunction. Instead, use a 12-volt truck/automobile battery to provide power to trailer.

Power-up/down:
Remote will power up when cover is opened. If cover is already open and remote is off, power up remote by pressing either operational button.

Remote will power down when cover is closed or when cover is left open for three minutes after last button is pushed.
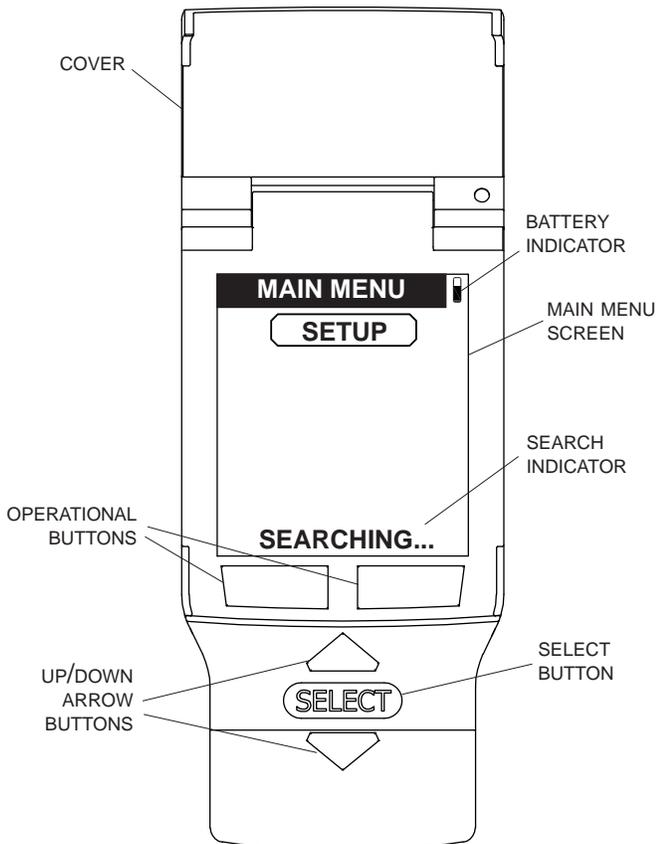
COVER

BATTERY INDICATOR

MAIN MENU
SETUP

MAIN MENU SCREEN

SEARCH INDICATOR

SEARCHING...

OPERATIONAL BUTTONS

UP/DOWN ARROW BUTTONS

SELECT

SELECT BUTTON

FIGURE 1

Standard operation:
When cover is opened, remote will default to *Main Menu* screen. *Setup* option will always be available on *Main Menu* screen. Any paired (introduced) devices will appear on **MAIN MENU** screen within a few seconds if connected to power and within range (see Figure 2).

While **SETUP** is highlighted, a search indicator, **SEARCHING...**, will be displayed at bottom of **MAIN MENU** screen until all paired devices have been found.

NOTE: If you ordered an upgrade kit, remote may not be paired with device yet. See section on pairing (introducing) devices.

NOTE: First time transmitter is used, devices on trailer will show up with default names like TARP00000093. Rename each device as you choose (example: TRLR4 TARP or FRNT HOPPER) by using Setup menu on remote. See section on renaming devices.
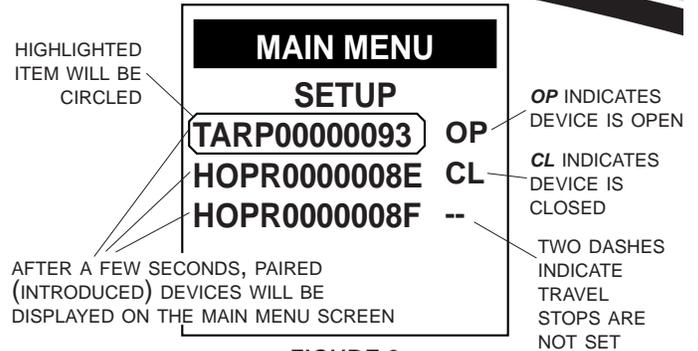
HIGHLIGHTED ITEM WILL BE CIRCLED

MAIN MENU
SETUP
TARP00000093 **OP**
HOPR0000008E **CL**
HOPR0000008F **--**

OP INDICATES DEVICE IS OPEN

CL INDICATES DEVICE IS CLOSED

TWO DASHES INDICATE TRAVEL STOPS ARE NOT SET

AFTER A FEW SECONDS, PAIRED (INTRODUCED) DEVICES WILL BE DISPLAYED ON THE MAIN MENU SCREEN

FIGURE 2

NOTE: Devices must be connected to power and close by in order for remote to find them.

Use up/down arrow buttons to highlight device you wish to operate. In Figure 2, tarp system is highlighted. Press **SELECT** to get to control screen for this device.

NOTE: First time in use, remote will default to Main Menu. If desired, choose a default device. This causes remote to skip Main Menu and jump directly to desired device for immediate operation. See section on setting a default device.

You can operate motorized devices, like tarp or trap door, in two different modes: In *Manual Mode*, hold operational button now designated **OPEN** or **CLOSE** down as long as you want motor to run. Motor stops when button is released. In *Express Mode*, motor runs automatically until it reaches end of travel or until you press any button on remote to stop it.

Standard operation (Manual Mode - motorized devices):
Selected device can be operated from *Manual Mode* screen by pressing and holding operational buttons typically designated **OPEN** or **CLOSE**.

If travel stops have been set, current position of device will be displayed on screen. Once motor reaches end of travel, screen will show tarp or trap fully open or closed.

NOTE: Travel stops must be set before position indicator will be displayed. See section on setting travel stops.

TARP SYSTEM SELECTED

TARP
MANUAL MODE
TO MAIN MENU
TO EXPRESS MODE
TARP   V010
100% OPEN

OPEN   **CLOSE**

MANUAL MODE SCREEN

POSITION INDICATOR WILL APPEAR AFTER TRAVEL STOPS HAVE BEEN SET
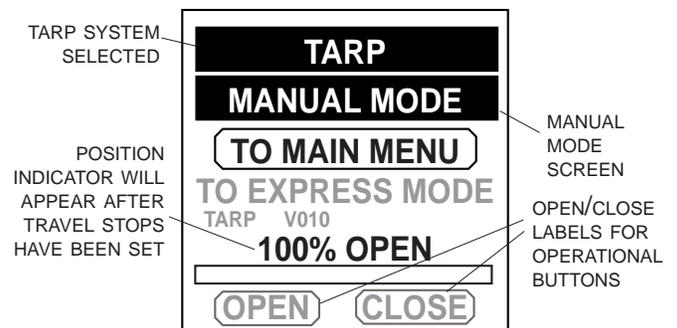
OPEN/CLOSE LABELS FOR OPERATIONAL BUTTONS

FIGURE 3

Standard operation (Express Mode - motorized devices):
To switch to *Express Mode*, use down arrow button to highlight **TO EXPRESS MODE** and press **SELECT**.

HIGHLIGHT **TO EXPRESS MODE** & *PRESS* **SELECT**

```
┌─────────────────────────┐
│        TARP             │
│     MANUAL MODE         │
│     TO MAIN MENU        │
│   TO EXPRESS MODE       │
│   TARP   V010           │
│        CLOSED           │
│   ▭▭▭▭▭▭▭▭▭▭▭           │
│  (OPEN)    (CLOSE)      │
└─────────────────────────┘
```
FIGURE 4

NOTE: *Set travel stops before Express Mode can be used. Once travel stops are set, remote can also display whether system is fully open, closed or in between with a percentage-open indicator.*

In *Express Mode*, simply press and release operational button labeled **OPEN** or **CLOSE**. If you need to stop operation before it reaches travel stop, just press any button or close cover.

TARP SYSTEM SELECTED

EXPRESS MODE SCREEN

```
┌─────────────────────────┐
│        TARP             │
│     EXPRESS MODE        │
│    TO MAIN MENU         │
│    TO MANUAL MODE       │
│        CLOSED           │
│   ▭▭▭▭▭▭▭▭▭▭▭           │
│  (OPEN)    (CLOSE)      │
└─────────────────────────┘
```

OPEN/CLOSE LABELS FOR OPERATIONAL BUTTONS
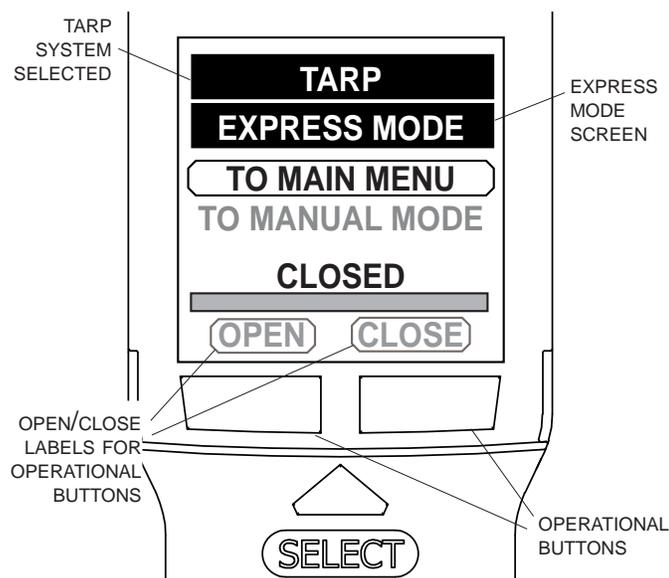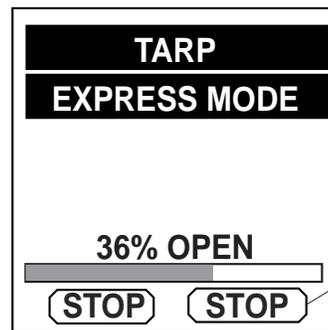
OPERATIONAL BUTTONS

(SELECT)

FIGURE 5

NOTE: *If you always use Express Mode, you can select it as default operating mode. Default operating mode can be set individually for each system (tarp, front hopper, back hopper, etc.). See section on setting default operating mode.*

While motorized device is operating, current position of device will be displayed on screen. Once motor reaches end of travel, screen will show tarp or device being controlled fully open or closed.

```
┌─────────────────────────┐
│        TARP             │
│     EXPRESS MODE        │
│                         │
│      36% OPEN           │
│   ▭▭▭▭▭▭▭               │
│  (STOP)    (STOP)       │
└─────────────────────────┘
```
FIGURE 6

PRESS ANY BUTTON OR CLOSE COVER TO STOP MOTOR IN EXPRESS MODE

NOTE: *Many devices (including tarp and standard hopper controllers) expect system to tighten (or partially "stall") on closed side before remote will display CLOSED status.*

NOTE: *If motor cannot travel to full open or closed position (due to a heaped load or other obstruction), motor will travel as far as it can and stop automatically. Display will then show system partially open.*

Standard operation (LiteALL™ style dual-output devices):
For lights and other dual-output latching devices, press operational button labeled **ON/OFF** to turn output on and off.

Display on remote will indicate whether output is currently on or off. Refer to device manual for additional information.

For dual-output momentary devices, press and hold operational button labeled **ON/OFF** to keep device on. Release button and device will turn off.

> **NOTE:** *For dual-out hybrid devices, **OUTPUT A** will be latching and **OUTPUT B** will be momentary.*

DEVICE TYPE
INDICATED
HERE
● LIGHT HAS
TWO LATCHING
OUTPUTS
● MOMENTARY
HAS TWO
MOMENTARY
OUTPUTS
● HYBRID HAS
ONE LATCHING
OUTPUT AND
ONE MOMEN‐
TARY OUTPUT

LIGHTS

TO MAIN MENU

LIGHT   V010

OUT A | **OUT B**
IS | **IS**
ON | **ON**

ON/OFF | **ON/OFF**

ON/OFF
LABELS FOR
OPERATIONAL
BUTTONS

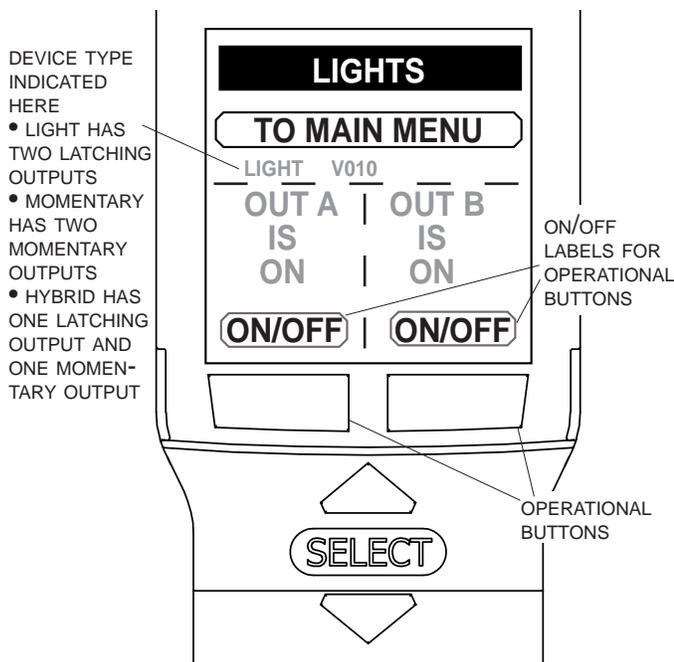OPERATIONAL
BUTTONS

SELECT

FIGURE 7

Setting travel stops (end stops) for motorized devices:
The Smart2™ system can learn and remember where you want each motorized device to stop on open side. After installing system, installer can teach motor controller where travel stops are. Unless something changes on your trailer, you will only need to do this once.

NOTE: *Travel stops can only be set on Shur-Co® motors that have an encoder cable, such as 4500 Series HD and Protrap® motors.*

STEP 1: From main menu, make sure **SETUP** is circled and press **SELECT**.
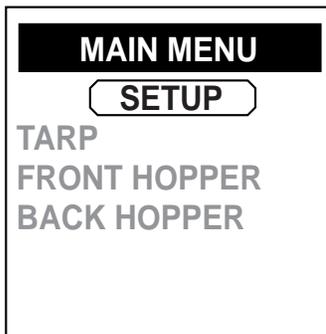
```
┌─────────────────────────┐
│      MAIN MENU          │
│    ( SETUP )            │
│  TARP                   │
│  FRONT HOPPER           │
│  BACK HOPPER            │
│                         │
└─────────────────────────┘
```

FIGURE 8

STEP 2: Arrow to **EDIT DEVICE** and press **SELECT**.

```
┌─────────────────────────┐
│      SETUP MENU         │
│   TO MAIN MENU          │
│   DEFAULT DEVICE        │
│   DEVICE ORDER          │
│   ADD DEVICE            │
│   ( EDIT DEVICE )       │
│   DELETE DEVICE         │
│   MAIN MENU MODE        │
└─────────────────────────┘
```
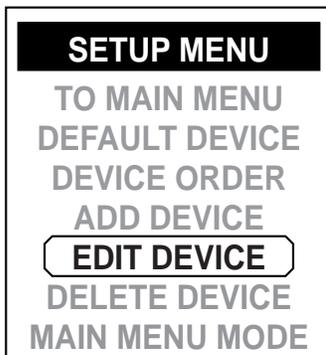
FIGURE 9

STEP 3: Arrow to highlight desired device and press **SELECT**.

```
┌─────────────────────────┐
│      EDIT DEVICE        │
│  BACK TO SETUP          │
│  (TARP)                 │
│  FRONT HOPPER           │
│  BACK HOPPER            │
│                         │
└─────────────────────────┘
```
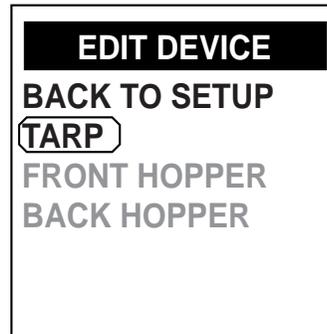
FIGURE 10

STEP 4: Arrow to **SET STOPS** and press **SELECT**.

```
┌─────────────────────────┐
│      EDIT DEVICE        │
│       TARP              │
│   BACK TO SETUP         │
│   CHANGE NAME           │
│   ( SET STOPS )         │
│   DEFAULT MODE          │
│   SET TO LEARN          │
│   DELETE DEVICE         │
└─────────────────────────┘
```
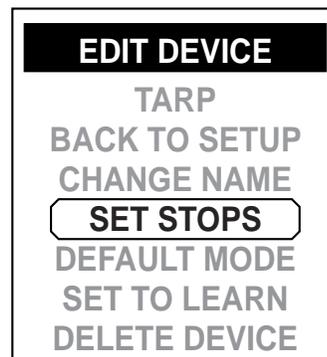
FIGURE 11

STEP 5: Select **SET END STOPS** option.

```
┌─────────────────────────┐
│   SELECT STOP TYPE      │
│        TARP             │
│   BACK TO SETUP         │
│  ( SET END STOPS )      │
│   SET MID STOPS         │
│  (Mid Stops Optional)   │
└─────────────────────────┘
```
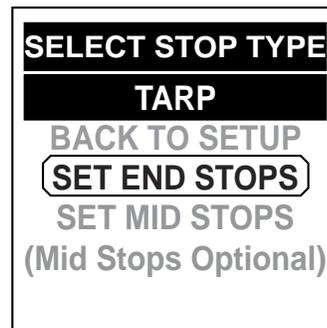
FIGURE 12

STEP 6: Select **ACCEPT** option.

```
┌─────────────────────────┐
│    SET STOPS MENU       │
│      CANCEL             │
│    ( ACCEPT )           │
│  SELECTING ACCEPT       │
│  AND PROCEEDING         │
│  WILL CLEAR ALL         │
│  TRAVEL STOPS           │
└─────────────────────────┘
```

FIGURE 13

STEP 7:   Setting travel stops (end stops) for motorized
devices - *continued*:
Press operational button labeled **CLOSE** to move
device (tarp, hopper door, etc.) to fully closed position.
Continue holding button until motor automatically turns
off. Make sure there are no abnormal conditions that
might stop device from fully closing, like a heaped
load or ice buildup on trap door. Verify device (tarp,
hopper door, etc.) is fully closed. Press **SELECT** to
save this position.

*NOTE: System will automatically turn off within approximately
one second of tightening on closed side. Do not attempt to set
closed side stop just before point where system tightens up.
During operation, control module will always look for system
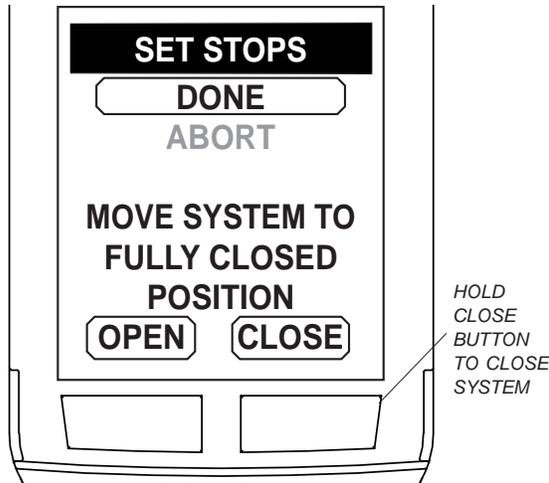to tighten up (partially "stall") before system will turn off and
display CLOSED.*

STEP 9:   Press **SELECT** after confirmation screen is displayed.

**TRAVEL STOPS
SET SUCCESSFULLY**

SELECT CONTINUE

FIGURE 16

SET STOPS

DONE

ABORT

**MOVE SYSTEM TO
FULLY CLOSED
POSITION**

OPEN   CLOSE

*HOLD
CLOSE
BUTTON
TO CLOSE
SYSTEM*

FIGURE 14

Clearing Travel Stops:
If you do not plan to operate system in *Express Mode,* clear
travel stops by selecting **ABORT** in step 7 above.

STEP 8:   Press **OPEN** to move device to desired open side
location. Open side travel stop should be set so device
will stop prior to making contact with any mechanical
stop (tarp stops, hopper door stop, etc.). This will save
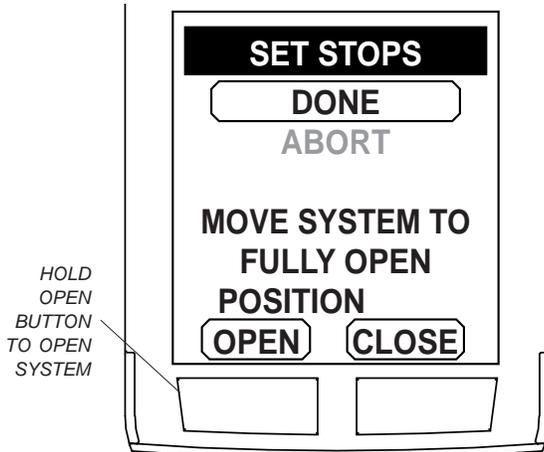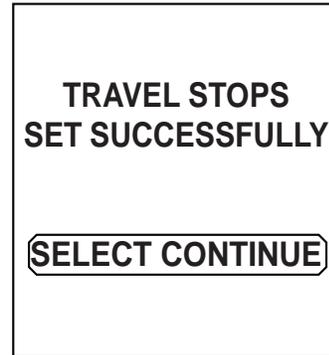on system wear and tear. Press **SELECT** to save this
position.

SET STOPS

DONE

ABORT

**MOVE SYSTEM TO
FULLY OPEN
POSITION**

*HOLD
OPEN
BUTTON
TO OPEN
SYSTEM*

OPEN   CLOSE

FIGURE 15

Pairing your devices (introducing remote to receivers):
Each remote and receiver has a unique security code to prevent unauthorized operation. Before a remote can operate a receiver module, they must be paired, or introduced. This is typically done at factory before shipping. If remote must be introduced to a receiver, or if a second remote is being added to system, follow instructions below.

Method 1:
For motor control receivers (tarp, hopper, etc.) remove fasteners holding gray cover on receiver assembly. Pull gently on cover to prevent damage to wires that are connected to cover. Make sure power is supplied to receiver.

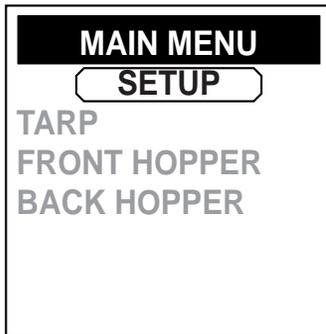**STEP 1:** From **MAIN MENU** on remote, make sure **SETUP** is circled and press **SELECT**.

> **MAIN MENU**
> (SETUP)
> TARP
> FRONT HOPPER
> BACK HOPPER

FIGURE 17

STEP 2: Arrow to **ADD DEVICE** and press **SELECT**.

> **SETUP MENU**
> TO MAIN MENU
> DEFAULT DEVICE
> DEVICE ORDER
> (ADD DEVICE)
> EDIT DEVICE
> DELETE DEVICE
> MAIN MENU MODE
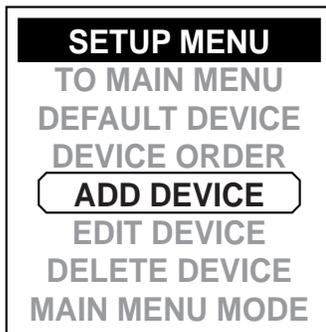
FIGURE 18

STEP 3: Remote will now be waiting for a receiver to enter pairing mode.

> **NEW DEVICE**
> WAITING. . .
> HOLD BUTTON ON
> TARGET RECEIVER
> FOR 5 SECONDS
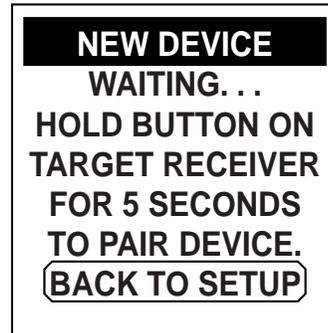> TO PAIR DEVICE.
> (BACK TO SETUP)

FIGURE 19

STEP 4A: For motor control receivers (tarp, hopper, etc.) there is a blue button inside gray cover you will need to reach. Press and hold blue button for approximately five seconds. Release after red LED starts flashing.

WIRES CONNECTED TO SOLENOID
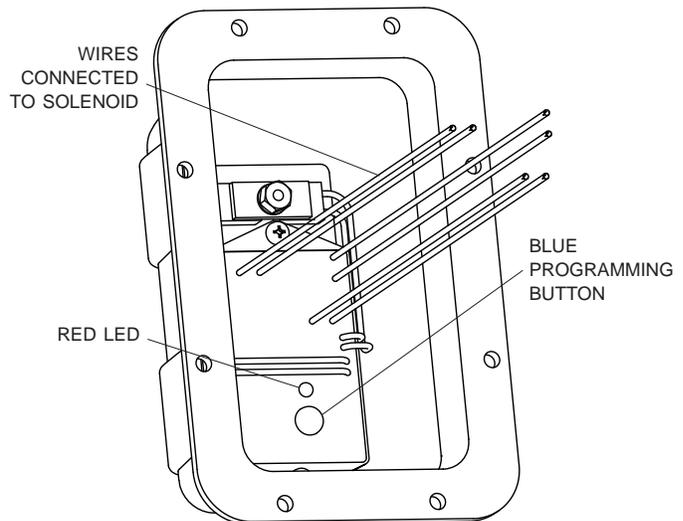
BLUE PROGRAMMING BUTTON

RED LED

FIGURE 20

STEP 4B: For LiteALL™ control module, press and hold **OUTPUT A** button for approximately five seconds. Release button after green LED starts flashing.

STEP 4C: For momentary control modules, press and hold both **OUTPUT A** and **OUTPUT B** buttons for approximately five seconds. Release buttons after green LED starts flashing.

STEP 5:   Remote will confirm it has detected receiver. Verify that device type (tarp, hopper, etc.) is correct and press **SELECT**.
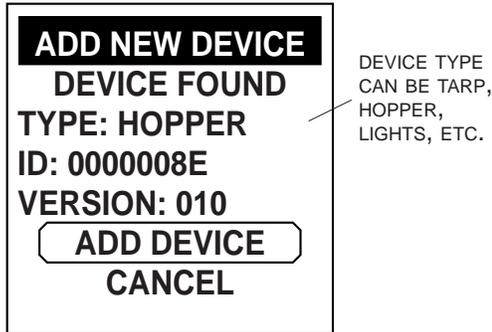
```
ADD NEW DEVICE
  DEVICE FOUND
TYPE: HOPPER
ID: 0000008E
VERSION: 010
  ( ADD DEVICE )
   CANCEL
```
DEVICE TYPE CAN BE TARP, HOPPER, LIGHTS, ETC.

FIGURE 21

⚠ **NOTICE**

If device type is incorrect, call Shur-Co® Help Line. You can damage your system if you operate wrong device-type receiver on your system.

NOTE: ENDSTOP device type will be displayed for hopper system utilizing a proximity sensor. Refer to installation manual for proximity sensor when setting travel stops for ENDSTOP device type.

STEP 6:   You can rename device at this time. If you choose, see section on renaming your device. This can be done later, if desired. If current name is acceptable, highlight **ACCEPT** and press **SELECT** button to continue.

```
CHANGE NAME
(HOPR0000008E)
  (ACCEPT)
   CANCEL
ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0123456789<_
```

FIGURE 22

STEP 7:   For motor control receivers (tarp, hopper, etc.) press **SELECT** button to confirm and add device. You will see a message confirming information has been saved.

```
ADD NEW DEVICE
  DEVICE ADDED:
TYPE: TARP
ID: 00000093
VERSION: 010
  ( SELECT - OK )
   SET STOPS
```

FIGURE 23

STEP 8:   If you have additional Smart2™ devices on your trailer that need to be paired, repeat process for remaining devices. Remember to press blue button on each new receiver. When you are done, all new devices should show up on home screen within a few seconds after opening cover.

STEP 9:   Refasten gray cover onto receiver assembly.

Method #2:
If you already have a remote that is paired to a device, and you want to introduce a second remote, there is an alternate method to put device into *Learn* mode.

Instead of pressing blue button on *Module* in step 4, use old remote that is already paired to module and select **SET TO LEARN** from **EDIT DEVICE** menu.

Renaming devices:
Name of each device displayed on remote can be changed by following this procedure.

NOTE: *On LiteALL™ module, both outputs can be given a custom name also (see LiteALL™ Owner's Manual).*

STEP 1: From **MAIN MENU**, make sure **SETUP** is circled and press **SELECT**.
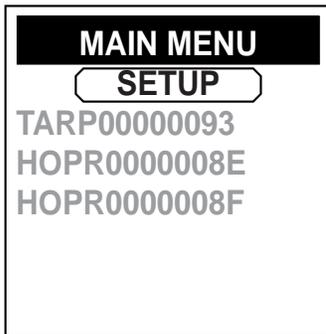
```
┌──────────────────────────┐
│      MAIN MENU           │
│      ( SETUP )           │
│  TARP00000093            │
│  HOPR0000008E            │
│  HOPR0000008F            │
│                          │
└──────────────────────────┘
```
FIGURE 24

STEP 2: Arrow down to **EDIT DEVICE** and press **SELECT**.
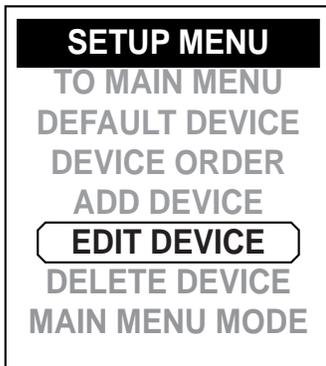
```
┌──────────────────────────┐
│      SETUP MENU          │
│     TO MAIN MENU         │
│   DEFAULT DEVICE         │
│   DEVICE ORDER           │
│     ADD DEVICE           │
│   ( EDIT DEVICE )        │
│   DELETE DEVICE          │
│  MAIN MENU MODE          │
└──────────────────────────┘
```
FIGURE 25

STEP 3: Press arrow buttons to highlight device you wish to rename, then press **SELECT**.

ALL PAIRED DEVICES ARE LISTED ON EDIT MENU EVEN IF DEVICE IS NOT NEARBY OR NOT CONNECTED TO POWER
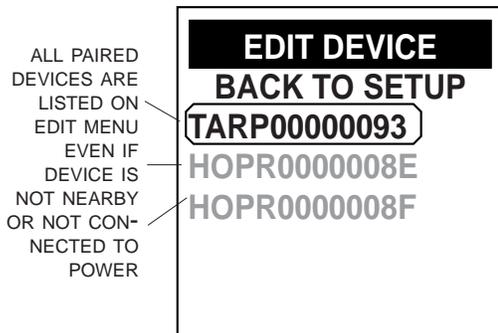
```
┌──────────────────────────┐
│      EDIT DEVICE         │
│    BACK TO SETUP         │
│  ( TARP00000093 )        │
│  HOPR0000008E            │
│  HOPR0000008F            │
│                          │
└──────────────────────────┘
```
FIGURE 26

STEP 4: Highlight **CHANGE NAME** and press **SELECT**.
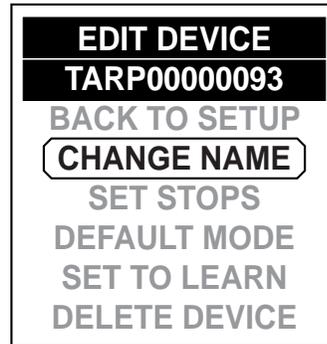
```
┌──────────────────────────┐
│      EDIT DEVICE         │
│    TARP00000093          │
│   BACK TO SETUP          │
│  ( CHANGE NAME )         │
│    SET STOPS             │
│   DEFAULT MODE           │
│   SET TO LEARN           │
│   DELETE DEVICE          │
└──────────────────────────┘
```
FIGURE 27

STEP 5: Arrow to highlight back arrow symbol and press **SELECT** to delete unwanted characters.

```
┌──────────────────────────┐
│     CHANGE NAME          │
│   ( TARP00000093 )       │
│      ACCEPT              │
│      CANCEL              │
│   ABCDEFGHIJKLM          │
│   NOPQRSTUVWXYZ          │
│    0123456789<_          │
└──────────────────────────┘
```
DELETE UNWANTED CHARACTERS WITH BACK ARROW SYMBOL

FIGURE 28

STEP 6: Arrow up or down to highlight desired characters and enter by pressing **SELECT**. When done, arrow to **ACCEPT** and press **SELECT**.

```
┌──────────────────────────┐
│     CHANGE NAME          │
│  ( TARP )                │
│     ( ACCEPT )           │
│      CANCEL              │
│   ABCDEFGHOJKLM          │
│   NOPQRSTUVWXYZ          │
│    0123456789<_          │
└──────────────────────────┘
```
FIGURE 29

STEP 7: Remote will confirm name has been changed. Press **SELECT** button to finish.

```
┌──────────────────────────┐
│  TARP                    │
│    NAME CHANGED          │
│                          │
│                          │
│  ( SELECT CONTINUE )     │
└──────────────────────────┘
```
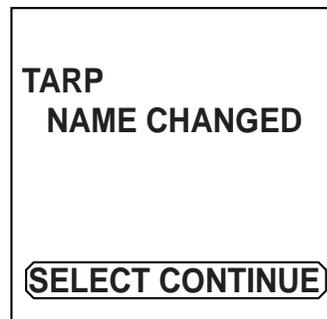FIGURE 30

Setting a default device:

From factory, remote defaults to *Main Menu* when lid is opened. If desired, a default device can be selected so remote jumps directly to that device for immediate operation when lid is opened.

NOTE: A default device will only be ready for immediate operation if receiver on trailer is connected to power and within range.

Setting a default device can save time by eliminating unnecessary button presses in these situations:

• There is only one SMART2™ device being used with remote.

• A particular SMART2™ device is always used first when remote lid is opened.

• A particular SMART2™ device is used more frequently than other devices.

Follow instructions below to set a default device on SMART2™ remote.

STEP 1: From **MAIN MENU**, make sure **SETUP** is circled and press **SELECT**.
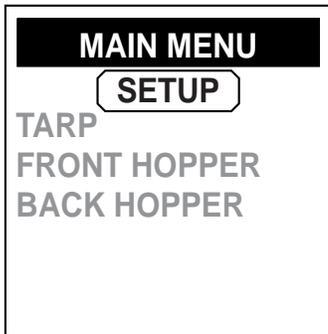
```
MAIN MENU
  ( SETUP )
TARP
FRONT HOPPER
BACK HOPPER
```

FIGURE 31

STEP 2: Highlight **DEFAULT DEVICE** and press **SELECT**.

```
SETUP MENU
  TO MAIN MENU
( DEFAULT DEVICE )
  DEVICE ORDER
  ADD DEVICE
  EDIT DEVICE
  DELETE DEVICE
  MAIN MENU MODE
```
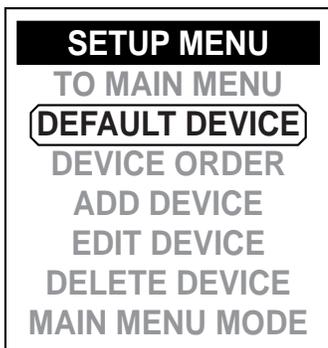
FIGURE 32

STEP 3: Highlight desired default device and press **SELECT**.

```
SELECT DEFAULT
  CLEAR DEFAULT
( TARP )
FRONT HOPPER
BACK HOPPER
```
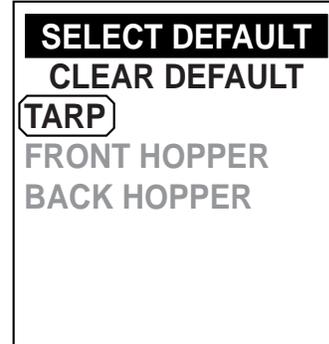
FIGURE 33

STEP 4: Remote will confirm default device has been changed. Press **SELECT** to finish.
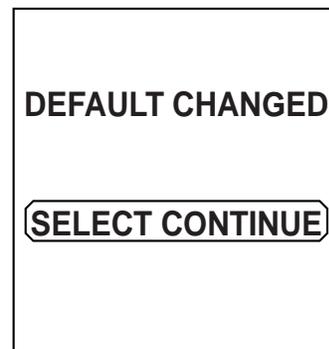
```
DEFAULT CHANGED


( SELECT CONTINUE )
```

FIGURE 34

STEP 5: Close remote cover and re-open. Remote will jump to *Operational* page of default device.

Setting default operating mode (for any motorized device):
After pairing a device to remote, remote will automatically set default operating mode to *Manual Mode*. At any time, default operating mode can be set to either *Express Mode* or *Manual Mode*.

NOTE: See section on Standard Operation for details on Express Mode and Manual Mode.

NOTE: For Express Mode to function, travel stops must first be set. See section on setting travel stops.

Setting default operating mode to *Express Mode* can save time by eliminating unnecessary button presses in these situations:

• A particular device will typically be operated in *Express Mode*.

• The operator is comfortable running device in *Express Mode*.

Follow instructions below to change default operating mode of a device using SMART2™ remote.

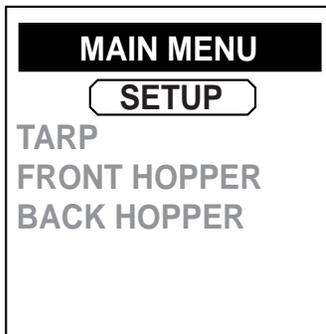**STEP 1:** From main menu, make sure **SETUP** is circled and press **SELECT**.

```
         MAIN MENU
        ( SETUP )
    TARP
    FRONT HOPPER
    BACK HOPPER
```

FIGURE 35

STEP 2: Highlight **EDIT DEVICE** and press **SELECT**.

```
         SETUP MENU
        TO MAIN MENU
        DEFAULT DEVICE
        DEVICE ORDER
        ADD DEVICE
      ( EDIT DEVICE )
        DELETE DEVICE
        INFORMATION
```
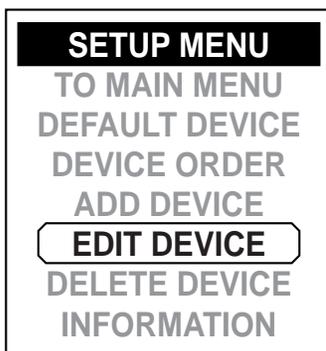
FIGURE 36

STEP 3: Select device for which default operating mode will be changed.

ALL PAIRED DEVICES ARE LISTED…

```
         EDIT DEVICE
        BACK TO SETUP
      (TARP)
        FRONT HOPPER
        BACK HOPPER
```
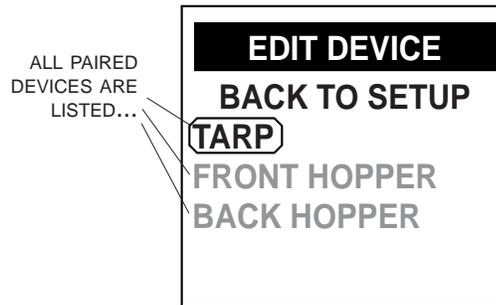
FIGURE 37

STEP 4: Highlight **DEFAULT MODE** and press **SELECT**.

```
         EDIT DEVICE
            TARP
        BACK TO SETUP
        CHANGE NAME
        SET STOPS
      ( DEFAULT MODE )
        SET TO LEARN
        DELETE DEVICE
```

THIS LINE INDICATES DEVICE BEING EDITED
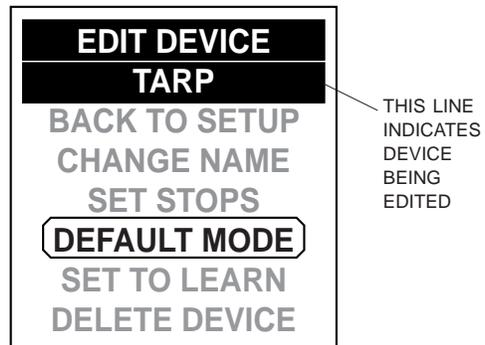
FIGURE 38

STEP 5: Highlight desired default operating mode, **MANUAL MODE** or **EXPRESS MODE**, then press **SELECT**.

```
       SELECT DEFAULT
      OPERATION MODE
            TARP
        CANCEL
        MANUAL MODE
      ( EXPRESS MODE )
```
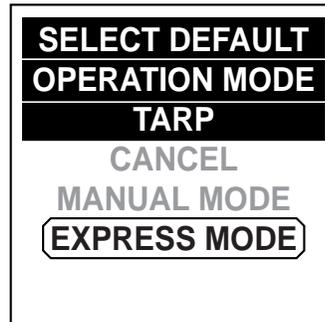
FIGURE 39

STEP 6: Remote will confirm default has been changed. Press **SELECT** to finish.

```
       DEFAULT CHANGED



      ( SELECT CONTINUE )
```

FIGURE 40

Changing device order on Main Menu:
If you have more than one device, it is possible to change order in which devices will be listed on *Main Menu* screen.
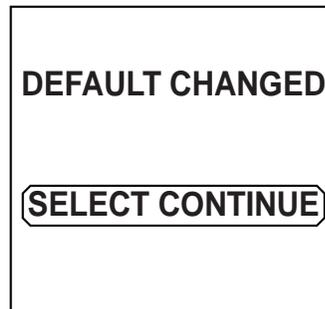
Changing default device order can save time by eliminating unnecessary button presses in these situations:

• A particular SMART2™ device is used more frequently than other devices.

• A particular SMART2™ device is typically used first when remote cover is opened.

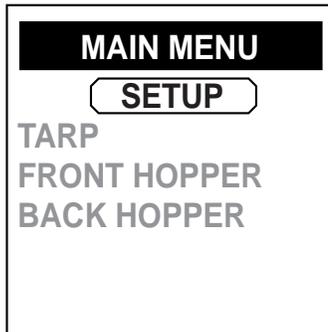STEP 1: From **MAIN MENU**, select **SETUP**.

```
┌─────────────────────────────┐
│        MAIN MENU            │
│      ┌─────────────┐        │
│      │   SETUP     │        │
│      └─────────────┘        │
│   TARP                      │
│   FRONT HOPPER              │
│   BACK HOPPER               │
│                             │
│                             │
└─────────────────────────────┘
```

FIGURE 41

STEP 2: Arrow down to **DEVICE ORDER** and press **SELECT**.

```
┌─────────────────────────────┐
│        SETUP MENU          │
│   TO MAIN MENU             │
│   DEFAULT DEVICE           │
│  ┌──────────────────┐      │
│  │  DEVICE ORDER    │      │
│  └──────────────────┘      │
│    ADD DEVICE              │
│    EDIT DEVICE             │
│    DELETE DEVICE           │
│    INFORMATION             │
└─────────────────────────────┘
```
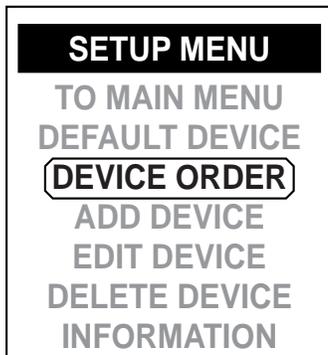
FIGURE 42

STEP 3: Arrow to device you want to move on list. Press **SELECT**. Selected device will be highlighted.

```
┌──────────────────────┐  ┌──────────────────────┐
│  REORDER DEVICES     │  │  REORDER DEVICES     │
│  BACK TO SETUP       │  │  BACK TO SETUP       │
│ ┌──────┐             │  │ ┌──────┐             │
│ │ TARP │             │  │ │ TARP │             │
│ └──────┘             │  │ └──────┘             │
│  FRONT HOPPER        │  │  FRONT HOPPER        │
│  BACK HOPPER         │  │  BACK HOPPER         │
└──────────────────────┘  └──────────────────────┘
```
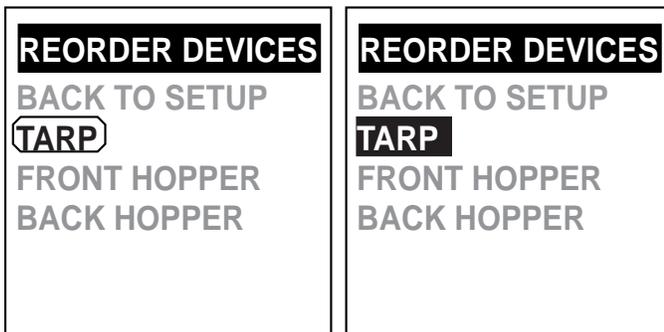
FIGURE 43

STEP 4: Use arrow buttons to move device up or down list. When you have highlighted device in desired place, press **SELECT** to set and save new order.
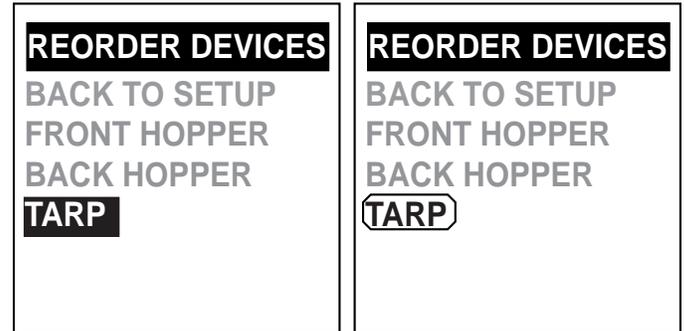
```
┌──────────────────────┐  ┌──────────────────────┐
│  REORDER DEVICES     │  │  REORDER DEVICES     │
│  BACK TO SETUP       │  │  BACK TO SETUP       │
│  FRONT HOPPER        │  │  FRONT HOPPER        │
│  BACK HOPPER         │  │  BACK HOPPER         │
│ ┌──────┐             │  │ ┌──────┐             │
│ │ TARP │             │  │ │ TARP │             │
│ └──────┘             │  │ └──────┘             │
└──────────────────────┘  └──────────────────────┘
```

FIGURE 44

STEP 5: Repeat process if desired for any other devices. When finished, highlight **BACK TO SETUP** and press **SELECT**.

```
┌─────────────────────────────┐
│   REORDER DEVICES          │
│ ┌──────────────────┐        │
│ │  BACK TO SETUP   │        │
│ └──────────────────┘        │
│   FRONT HOPPER             │
│   BACK HOPPER              │
│   TARP                     │
│                            │
└─────────────────────────────┘
```
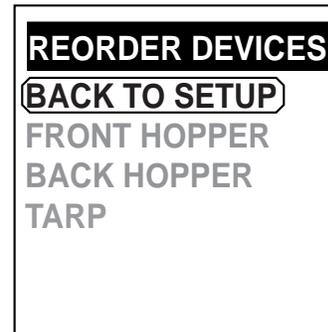
FIGURE 45

STEP 6: Close and then open remote cover. Your devices should be listed in updated order after remote finds them. Device must be connected to power and within range.

Deleting device:
Any paired device on a remote can be deleted, or erased, from remote's memory.

STEP 1: From **MAIN MENU**, highlight **SETUP** and press **SELECT**.

STEP 2: Arrow to **DELETE DEVICE** and press **SELECT**.

STEP 3: Arrow down to highlight device you want to delete and press **SELECT**.

STEP 4: Arrow down to highlight **YES** and press **SELECT** to confirm. You will see a message confirming information has been saved.

MANUAL OVERRIDE (motorized devices only):
SMART2™ system automatically shuts off if an error is detected or at travel stops. These conditions can be bypassed in **MANUAL OVERRIDE**.
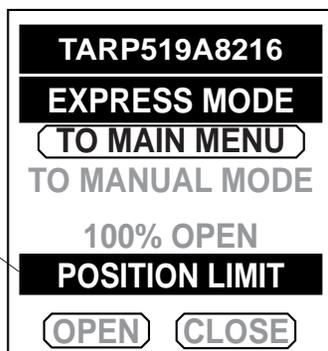
NOTE: All travel stops are ignored in Override Mode in addition to low motor RPM and low system voltage. Do not operate system in Override Mode unless absolutely necessary as system damage may result.

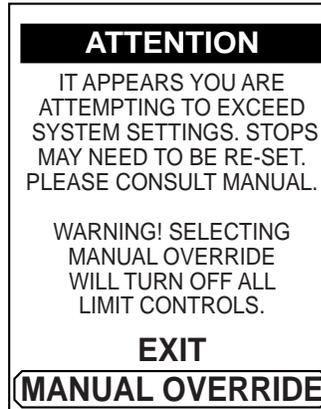Situations where *Override Mode* will be prompted on remote include:
• You attempt to open your tarp or hopper system past open side travel stop.
• Your hopper was overloaded and system shuts off due to low motor RPM.
• Truck battery is almost dead and system detects low voltage and turns off.

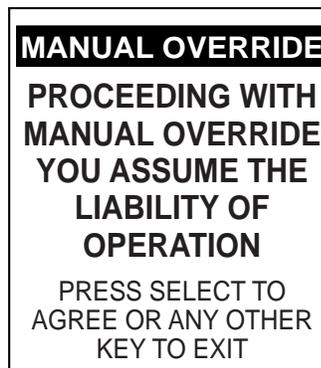Follow instructions below to operate in **MANUAL OVERRIDE**:

STEP 1: After automatic shutdown due to error detection, error will be displayed on remote. While error is displayed, press same button (**OPEN** or **CLOSE**) two more times.

```
┌─────────────────────────────┐
│       TARP519A8216          │
├─────────────────────────────┤
│        EXPRESS MODE         │
│   ┌───────────────────┐     │
│   │   TO MAIN MENU    │     │
│   └───────────────────┘     │
│       TO MANUAL MODE        │
│                             │
│         100% OPEN           │
├─────────────────────────────┤
│       POSITION LIMIT        │
├─────────────────────────────┤
│  ┌──────┐   ┌───────┐       │
│  │ OPEN │   │ CLOSE │       │
│  └──────┘   └───────┘       │
└─────────────────────────────┘
```
ERROR MESSAGE

STEP 2: You will be asked if you want to enter *Override Mode*. If you want to proceed, arrow down to **MANUAL OVERRIDE** and press **SELECT**.

```
┌─────────────────────────────┐
│  ┌───────────────────────┐  │
│  │      ATTENTION        │  │
│  └───────────────────────┘  │
│     IT APPEARS YOU ARE      │
│    ATTEMPTING TO EXCEED     │
│   SYSTEM SETTINGS. STOPS    │
│    MAY NEED TO BE RE-SET.   │
│   PLEASE CONSULT MANUAL.    │
│                             │
│     WARNING! SELECTING      │
│      MANUAL OVERRIDE        │
│      WILL TURN OFF ALL      │
│       LIMIT CONTROLS.       │
│                             │
│           EXIT              │
│  ┌───────────────────────┐  │
│  │   MANUAL OVERRIDE     │  │
│  └───────────────────────┘  │
└─────────────────────────────┘
```

STEP 3: You will see a notice page. Press **SELECT** to enter *Override Mode*, or press any other key to cancel.

```
┌─────────────────────────────┐
│ ┌─────────────────────────┐ │
│ │    MANUAL OVERRIDE      │ │
│ └─────────────────────────┘ │
│      PROCEEDING WITH        │
│      MANUAL OVERRIDE        │
│      YOU ASSUME THE         │
│        LIABILITY OF         │
│         OPERATION           │
│                             │
│      PRESS SELECT TO        │
│    AGREE OR ANY OTHER       │
│         KEY TO EXIT         │
└─────────────────────────────┘
```

STEP 4: Operate system as needed using operational buttons. System will only operate in a momentary fashion (press and hold button to operate) while in **MANUAL OVERRIDE**. When done moving system, press **SELECT** to exit override mode and service truck or trailer as needed.

```
┌─────────────────────────────┐
│ ┌─────────────────────────┐ │
│ │    MANUAL OVERRIDE      │ │
│ └─────────────────────────┘ │
│     WARNING: THERE          │
│      ARE NO LIMIT           │
│      RESTRICTIONS!          │
│  ┌───────────────────┐      │
│  │  SELECT TO EXIT   │      │
│  └───────────────────┘      │
│      POSITION LIMIT         │
│  ┌──────┐   ┌───────┐       │
│  │ OPEN │   │ CLOSE │       │
│  └──────┘   └───────┘       │
└─────────────────────────────┘
```
ERROR TYPE THAT PROMPTED OVERRIDE MODE WILL BE LISTED HERE

NOTE: Manual override can also be activated from receiver on trailer. After system turns off automatically, press same button (open or close) two more times. Solenoid in receiver box will click rapidly three times to indicate override mode.

Main menu mode:

Enabling *Main Menu Mode* allows you to control devices from *Main Menu*. *Main Menu Mode* can be enabled or disabled at any time. By default, this feature is disabled.

Enabling *Main Menu Mode* can save time by eliminating unnecessary button presses in these situations:

• Multiple devices are operated with remote within a short time of each other.

• The operator prefers operating from *Main Menu* and understands which mode (*Express Mode* or *Manual Mode*) a motorized device will operate in while using *Main Menu Mode*.

Follow instructions below to enable or disable *Main Menu Mode*:

STEP 1: From **MAIN MENU**, highlight **SETUP** and press **SELECT**.

STEP 2: From **SETUP MENU**, highlight **MAIN MENU MODE** and press **SELECT**.

```
┌─────────────────────────┐
│      SETUP MENU          │
│     TO MAIN MENU         │
│    DEFAULT DEVICE        │
│     DEVICE ORDER         │
│      ADD DEVICE          │
│      EDIT DEVICE         │
│    DELETE DEVICE         │
│  ( MAIN MENU MODE )      │
└─────────────────────────┘
```
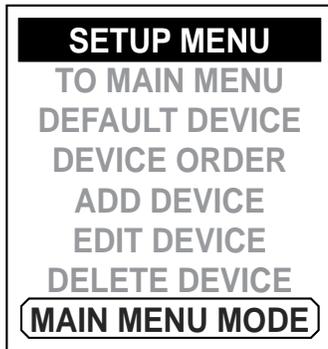
FIGURE 46

STEP 3: Arrow down and circle **ENABLE**, then press **SELECT** to enable **MAIN MENU MODE**. If you want to disable **MAIN MENU MODE**, highlight **DISABLE** and press **SELECT**.
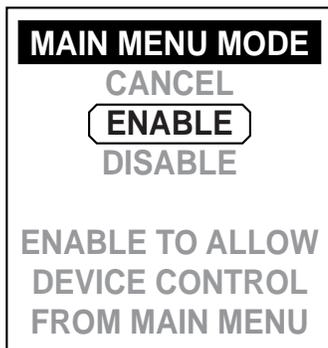
```
┌─────────────────────────┐
│    MAIN MENU MODE        │
│       CANCEL             │
│     ( ENABLE )           │
│       DISABLE            │
│                          │
│   ENABLE TO ALLOW        │
│   DEVICE CONTROL         │
│   FROM MAIN MENU         │
└─────────────────────────┘
```

FIGURE 47

STEP 4: You will see a confirmation screen. Press **SELECT**.

```
┌─────────────────────────┐
│    MAIN MENU MODE        │
│    DEVICE CONTROL        │
│    FROM MAIN MENU        │
│     NOW ENABLED          │
│                          │
│                          │
│   ( PRESS SELECT )       │
└─────────────────────────┘
```

FIGURE 48

STEP 5: You will see an **INFO SAVED** message flash briefly, then remote will jump to **SETUP MENU**. Go to **MAIN MENU**.

STEP 6: Arrow down to circle a device on **MAIN MENU**. It may take a few second for devices to pop up on **MAIN MENU**. Note there are now labels above operational buttons.
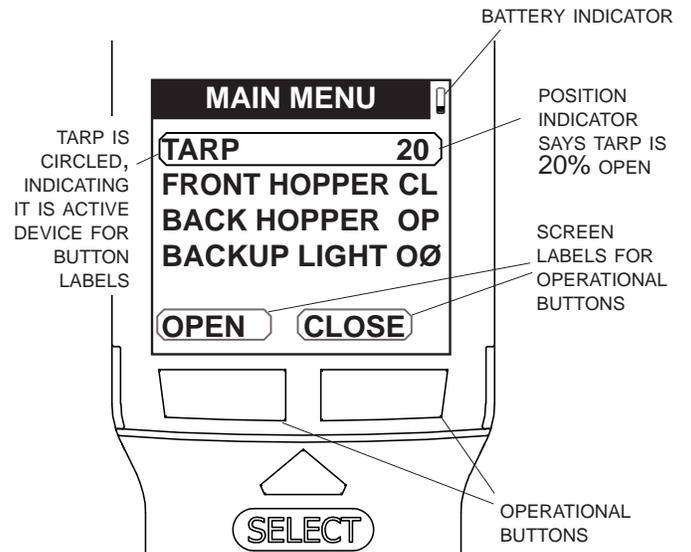

FIGURE 49

STEP 7: You may now use operational buttons to control highlighted device. For motorized devices, highlighted device will operate in whatever mode (*Manual Mode* or *Express Mode*) you have set as default mode. See section on setting default operating mode.

Adjusting shut-down torque of device:
Shut-down torque can be adjusted on certain devices, including ProTrap® and MaxxTrap™ electric hopper door openers.

• Decreasing shut-down torque will reduce force applied to system on closed side but may cause system to turn off and display error message under heavy loads (fertilizer loads on hopper device, for example).

• Increasing shut-down torque will allow motor to continue to operate under heavier loads without turning off and displaying error message. However, motor will also apply more force to system on closed side.

STEP 1:   From **MAIN MENU**, select **SETUP**.

```
┌─────────────────────────┐
│      MAIN MENU          │
│     ( SETUP )           │
│                         │
│  TARP                   │
│  FRONT HOPPER           │
│  BACK HOPPER            │
│                         │
└─────────────────────────┘
```
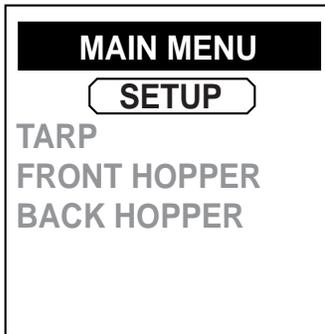
FIGURE 50

STEP 2:   From **SETUP MENU**, highlight **EDIT DEVICE** and press **SELECT**.

```
┌─────────────────────────┐
│      SETUP MENU         │
│   TO MAIN MENU          │
│   DEFAULT DEVICE        │
│   DEVICE ORDER          │
│   ADD DEVICE            │
│  ( EDIT DEVICE )        │
│   DELETE DEVICE         │
│   INFORMATION           │
└─────────────────────────┘
```
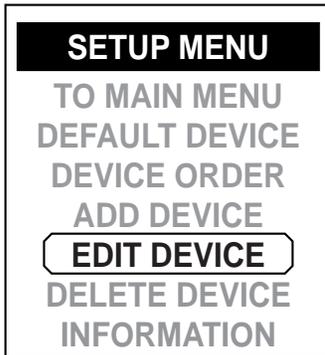
FIGURE 51

STEP 3:   From **EDIT MENU**, highlight device to be adjusted.

```
┌─────────────────────────┐
│      EDIT DEVICE        │
│   BACK TO SETUP         │
│  TARP                   │
│  (FRONT HOPPER)         │
│  BACK HOPPER            │
│                         │
└─────────────────────────┘
```
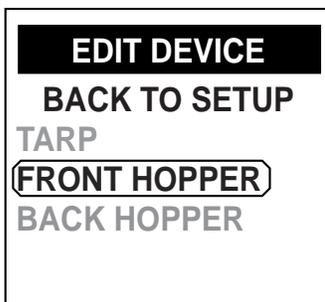
FIGURE 52

STEP 4:   From **EDIT DEVICE** menu for selected device, arrow down to **SET TORQUE** and press **SELECT**.

```
┌─────────────────────────┐
│      EDIT DEVICE        │
│     FRONT HOPPER        │
│   CHANGE NAME           │
│   SET STOPS             │
│   DEFAULT MODE          │
│   SET TO LEARN          │
│   DELETE DEVICE         │
│   ( SET TORQUE )        │
└─────────────────────────┘
```
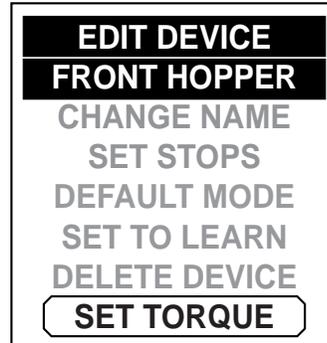
FIGURE 53

STEP 5:   From **SET TORQUE** menu, use up and down arrows to change setting. To cancel, close cover. To save, press **SELECT**.

```
┌─────────────────────────┐
│      SET TORQUE         │
│     FRONT HOPPER        │
│   THIS SETTING IS THE   │
│   MAX TORQUE BEFORE     │
│   AUTO MOTOR SHUT-DOWN  │
│                         │
│   TORQUE = MED          │
│                         │
│   UP/DN TO CHANGE       │
│  (SELECT TO SAVE)       │
└─────────────────────────┘
```
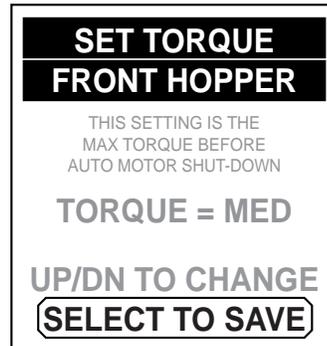
FIGURE 54

*NOTE: Factory default setting for hopper is **MED**.*

STEP 6:   You will get a confirmation screen. Press **SELECT** and repeat process for any other devices.
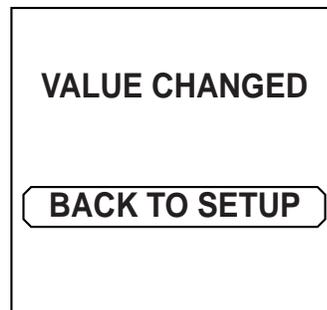
```
┌─────────────────────────┐
│                         │
│   VALUE CHANGED         │
│                         │
│                         │
│  ( BACK TO SETUP )      │
│                         │
└─────────────────────────┘
```

FIGURE 55

Our **Advanced Troubleshooting Guide** is available on our website: **http://www.shurco.com**, or call our Help Line: **1-866-748-7435**.

PROBLEM:	TRY THIS:
The SMART2™ remote is not working; the display is totally dead and is not displaying anything.	**1.** If the remote lid has been left open, the remote may have powered down. Wake the remote up by closing the lid and then re-opening it. Alternatively, you can wake the remote up by pressing an operational button (Open/Close). **2.** The battery may be dead. Place the remote in the charging cradle and open the lid. Make sure the charging cable is properly connected to the power source and to the cradle. If the remote works in the cradle, allow the remote to charge. **3.** The remote may be damaged. Call Shur-Co's Help Line.
The SMART2™ remote is not working; the display is working, but the device I want to control is not listed on the Main Menu screen. OR I have set a default device, but the device screen is displaying **Searching...**	**1.** For the device you are trying to control, bring the remote near the receiver. Make sure the SMART2™ receiver is connected to power. One way to verify that the receiver has power is to remove the grey cover on the trailer and check if the red LED turns on when you press the blue programming button. **2.** Close the lid on your remote for 15 seconds and re-open the lid, then try again. ***NOTE:*** *Waiting for 15 seconds with the lid closed will not always be necessary, but this allows the remote enough time to find the best possible communication channel.* **3.** Re-introduce the remote to the receiver. **4.** The remote or receiver may be damaged. Call Shur-Co's Help Line.
I have a motorized system, and it is running backwards.	**1.** Is the device running backwards when controlled with the remote and the buttons on the receiver box? Remove the gray cover from the receiver assembly. Swap the green and yellow wires. **2.** Is the device running backwards only with the buttons on the receiver box, and the remote is operating in the correct direction? Swap the positions of the push-button switches in the gray cover of the receiver assembly.
I have a motorized system, and it will run in one direction but not the other.	**1.** Remove the gray cover from the receiver assembly. Make sure the green and yellow wires are connected to the solenoid and are making good contact. **2.** Do the push buttons on the gray cover work in both directions? If so, the remote may be damaged. Call Shur-Co's Help Line. If not, go to next step. **3.** Clear travel stops (see page 6). Do not reset them. Does system operate in both directions? If so, travel stops were corrupted. Check encoder wire connections and reset travel stops. Call Shur-Co's Help Line if needed. If system still does not operate in one direction, receiver or solenoid my be damaged. Call Shur-Co's Help Line.

PROBLEM:	TRY THIS:
I have a motorized system and: The system will not run with the push-button switches on the gray receiver box; I **can** hear a click from the gray cover when I press the buttons on the box. OR The system is stuttering when I try to operate it.	1. There may be a bad battery or poor battery connection. Try hooking up power from a different 12-volt battery and re-test the system. 2. Is a battery charger or power supply being used to power the system? If so, hook the system/trailer to a truck battery and try again. Battery chargers alone will most likely cause the system to malfunction. 3. Remove the gray cover from the receiver assembly. Make sure the green and yellow wires are connected to the solenoid and are making good contact. 4. Check system wiring for corrosion, including any circuit breakers near the truck battery. If corrosion is present, you may get 12 volts to the receiver, but a motorized system may not function due to the resultant voltage drop in the wiring or circuit breaker when the open/close button is pressed. *NOTE: Bypass circuit breaker and test system to verify breaker is not corroded inside.* 5. Verify that you have 12 volts at the motor while an operational button is being held. If you have 12 volts and the motor is not running, there may be a problem with the motor. If the voltage at the motor drops below 12 volts, check the system wiring for corrosion. You may also have a bad truck battery. Start the truck and try again. Call Shur-Co's Help Line. 6. The receiver or solenoid may be damaged. Call Shur-Co's Help Line.
I have a motorized system, and it will not run with the push-button switches on the gray receiver box; I **can't** hear a click from the gray cover when I press the buttons on the box.	1. Remove the gray cover from the receiver assembly. Verify that 12V is being applied to the motor control module in the gray cover of the receiver box. *NOTE: Make sure voltmeter reads +12 volts and not -12 volts. Do this while red voltmeter lead is contacting red wire ring terminal from module and black voltmeter lead is contacting black wire ring terminal from module.* 2. The receiver may be damaged. Call Shur-Co's Help Line.
I have a motorized system, and it is displaying that it is still slightly open, but it is actually closed.	1. Make sure there is no obstruction to the system (heaped load, ice, etc.). *NOTE: For tarp systems, it is normal for remote to display that it is slightly open if there is a heaped load. Heaped loads will settle, so be sure to check for tarp tension after driving a short distance! After unloading trailer and closing tarp, remote should display that it is closed.* 2. Make sure you hold the close button long enough for system to tighten on the closed side. 3. Reprogram your travel stops. Make sure you do not program the stops while there are any obstructions in the way (heaped load, ice, etc.). If this problem occurs again, call Shur-Co's Help Line.

Our **Advanced Troubleshooting Guide** is available on our website: **http://www.shurco.com**, or call our Help Line: **1-866-748-7435**.

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