## **Universal Target Controller**



## **UTC Manual**

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## Setup

Located under Config in main menu. The main setup screen will appear in a new window.

🛱 Setup	×
Target 1	Icons
Top Left	C Small
C Bottom Left	<ul> <li>Medium</li> <li>Large</li> </ul>
Program	
C Groups	<ul> <li>Target Numbers</li> </ul>
Target Type	
C 1/0 Box	C ADR1000
PT Series	
Radio	
E PTX	USB
ViFi	
Interface	
<ul> <li>Left-click</li> </ul>	C Right-click
Number of Targets (1-	200) 10 +
Number of Target Per Row	5 +
<u> </u>	Cancel

Target 1

This is where you want target 1 to display on the screen. Used in live mode and running a program.

### Icons

What size Icon you want displayed on screen. Used in live mode and running a program

### Program

Program can either be by target number or targets can be grouped together. Grouping targets done elsewhere.

### Target Type

Currently there are three different types of target control configurations the program works with. Only one option can be picked. Choose the one that matches your target system.

### I/O Box:

This is for ATS wireless I/O box in a gray box.

### ADR1000:

This is used for ATS older style I/O Box Cream color with black face. (hard wired, not wireless)

#### PT Series:

This is for ATS PT Series of target (PT61A & B, PT66)

#### Radio

If used with a radio transmitter, (such as the PTX200), you may select both.

### PTX:

If you are using with a PTX transmitter (PTX200, PTX600, and PTX2000)

USB:

If you are using a radio plugged into the USB port.

#### WiFi:

If you are using a WiFi-to-900MHz adapter or similar.

### Interface

Left-click

Left-click interface specialized for touch-screen computers.

### Right-click

Standard interface for desktop PCs and non-touch-screen laptops

#### Number of Targets

Number of target in your range setup.

### Number of Target Per Row

Number of Target Per Row in your range. Used in live mode and running a program. (this will determine the screen layout on the computer for your targets)

## **Comm Ports**

Located under "Config" in main menu. The Comm Port display will show up in a new window. At first it will say, "Searching for Comm Ports Please Wait." This will display well the program is searching for available Comm Ports and checking for a Radio. If a radio or PTX is found on the bottom of the window it will say, Radio/PTX found on Comm Port #. A USB Radio will show as a Comm Port. Select the appropriate Comm Port and press OK

🖻 Com Ports		
Com Ports C Com 1 C Com 2 C Com 3 C Com 4 C Com 5 C Com 6 C Com 7 C Com 8	C Com 9 C Com 10 C Com 11 C Com 12 C Com 13 C Com 14 C Com 15 C Com 16	Cancel
Radio Found o	n Com Port 3	

## Wi-Fi Setup

Note: see WiFi-to-900MHz manual for instructions on how to set up the wireless network.

Located under "Config" in main menu (only if Wi-Fi is enabled in Setup menu). The Wi-Fi Setup display will show up in a new window. The "Server IP Address" and "Server Port" fields should contain the IP address and port of the WiFi-to-900MHz adapter or similar, respectively. The "Connect"/"Disconnect" button can be used to connect and disconnect to and from the WiFi-to-900MHz device to check the connection. If the connection was successful, "\*ATS\_CONN\*" should be displayed in the text window and "Ethernet Status" will show "Connected."

Note that under normal operation, the user does not need to press the "Connect" button to control the targets. It is only required for troubleshooting. The program will automatically connect as needed.

Also note that only one UTC program can be connected to the WiFi-to-900MHz adapter at a time.

🛱 Ethernet Setup	
Server IP Address	169.254.1.1
Server Port	31689
Discor	mect
Ethernet Status:	Connected
*ATS_CONN*	
1	

## Programming

Programming is done is a Spreadsheet format with time down the left side and target number across the top.

PT61 Programer												×
File Add Time Live Mod	le Run Trai	nsmitter Cor	ifig Help									
Seconds Target #1	Target # 2	Target # 3	Target # 4	Target # 5	Target #6	Target # 7	Target # 8	Target # 9	Target #10	Target #11	Target #12	^
0												
1												-
2												Ļ
3												ł
4												ł
C												ł
7												ł
8												t
9												t
10												t
11												Ī
12												I
13												1
14												Ļ
15												ł
16												ł
10												ł
19												ł
20												ŧ
21												t
22												t
23												t
24												t
25												Ī
26												ļ
27												1
28												
291	1	I	I	I	I	1	I	I	1	1	>	:

When you first start a new program a window will pop and ask for the duration of the program in seconds. This is changeable at any time with the Add Time menu function.

### Face Time

Left-click interface:

With the left-click interface enabled, left clicking on any box will open a Face Time window. You can also select multiple boxes by holding the Control key when clicking on boxes, then right-click to show the Face Time window.

Right-click interface:

With the right-click interface enabled, right clicking on any box will open a Face Time window. You can also select multiple boxes by holding the Control key when clicking on boxes.

🔜 Face Time	1	
Action	Time	Action
C Friend C Edge C Foe C Down	1 .	Sec. C Friend C Edge C Foe C Down
	K	Cancel

There are three perimeters in the Face Time window. You do not need to fill in all three if you wish not to. The first Action is the action you want the target to perform. If you want the target to perform a second action after a give time then you will use the time and second Action boxes. Example

Friend for three seconds then down.

You would check the Friend on first Action then Time of three seconds and check Down in the second Action.

🔜 Face Time		
Action	Time	Action
Friend	3 + 3	Sec.
C Edge		C Edge
C Foe		C Foe
C Down		Down
1		
	ок	Cancel

After selecting OK on Face Time the spreadsheet will fill in the information. Spreadsheet below is from the example above (Friend for three seconds then down.)

air P	PT61 P	rogramer						
File	Add Tir	me Live Mod	e Run Tra	nsmitter Hit :	Scores Confi	g Help		
Sec	onds	Target #1	Target # 2	Target # 3	Target # 4	Target # 5	Target #6	Targ
	0							
	1	Friend						
	2	Friend						
	3	Friend						
	4	Down						
	5							
	6							
	7							
	8							
	9							
	10							
	12							
	12							
	1.0							
	14							
	16							
	17							
	18							
	19							
	20							

## **Clearing Cells**

Delete key will clear out any or all boxes selected.

## Pause

A Pause can also be inserted into the program by clicking on the number of seconds where you want the pause placed. Pause used to pause the program in run mode or in the PTX.

🔜 РТ61 Р	rogramer							×
File Add Tir	me Live Mod	e Run Tra	nsmitter Cor	ifig Help				
Seconds	Target #1	Target # 2	Target # 3	Target #4	Target # 5	Target #6	Target # 7	^
0								
1								
2								
3								
4								
5								
6								
7								
8								
9	*****							1
				Pause				
Inse	ert Pause							
12								
13								•
14								•
15								•
17								
18								•
19								•
20								1
20								•

## Add Time

This can be used to change the total length of the program.

## Live Mode

Live Mode option will be available if you have a USB radio, Wi-Fi, or a hard wired I/O box.

When Live Mode is selected, a new window will appear with a graphical representation of your range.



## All Targets

The Friend, Edge, Foe, and Down button across the top of the screens will control all targets.

## Individual Targets

Left-click interface:

To control individual targets left-click on the target you want to control. A popup window will appear with Friend, Edge, Foe, and Down options. When one of these options is selected the target and the target on the screen will change position to match the desired command.

Right-click interface:

To control individual targets right-click on the target you want to control. A popup window will appear with Friend, Edge, Foe, and Down options. When one of these options is selected the target and the target on the screen will change position to match the desired command.

### **Multiple Targets**

Left-click interface:

To control multiple targets, press and hold the control key and click on the targets you want to control. After you have all the targets you want to controlled selected while still holding the control key right kick the mouse and the Friend, Edge, Foe, and Down menu will appear. When one of these options is selected the selected targets and the targets on the screen will change position to match the desired command.

### Right-click interface:

To control multiple targets left click on the target you want to control. Then press and hold the control key and click on the other targets you want to control. After you have all the targets you want to controlled selected while still holding the control key right kick the mouse and the Friend, Edge, Foe, and Down menu will appear. When one of these options is selected the selected targets and the targets on the screen will change position to match the desired command.

### Row

To control all the targets on a row click on the Row # you want to control and the Friend, Edge, Foe, and Down menu will appear. When one of these options is selected the all the targets in the row and the targets on the screen will change position to match the desired command.

### Get Hit Scores

This button will get the current hit scores of the targets, similar to the "Download" button in the hit scores in the Hit Scores window. Only available for PT targets.

#### Clear Hit Scores

This button will clear all hit scores of all targets, similar to the "Clear Scores" button in the Hit Scores window. Only available for PT targets.

### Exit

Exit is used to exit the Live Mode screen.

## **Running Program**

When Run is select a new window will appear with a graphical representation of your range.



Connect

The Connect button will only be available if you have a USB radio or a hardwired I/O box.

This feature is used to connect the computer with the Radio or I/O box. Once "connect" has been selected, the button will change to

"Disconnect." While you are not connected you will be in dry run mode. This is used to test you program and see a graphical representation of what you target will be doing.

### Start

Start is used to start your program running. Or restart your program if paused.

#### Pause

Is used to pause you program. Use the Start button to resume the program. Button will change to Stop when program is paused. The Stop button will end the program and rewind it.

#### Seconds

You can change the time were the program will start by entering a time in this box. When the program is paused you can also enter a time in this box. This can be used to rewind a program or jump forward.

### Get Hit Scores

This button will get the current hit scores of the targets, similar to the "Download" button in the hit scores in the Hit Scores window. Only available for PT targets.

### **Clear Hit Scores**

This button will clear all hit scores of all targets, similar to the "Clear Scores" button in the Hit Scores window. Only available for PT targets.

### Exit

Exits the Run mode window

## Transmitter

Transmitter menu will only appear if you have a PTX transmitter.

## Send

Will upload the current program to the PTX. A popup window will appear asking what program number in the PTX you wish to use. The PTX is capable of holding ten programs. After you select what program number you want to use another window will appear saying to please wait. The amount of this is displayed depends on the length of the program. After the program is uploaded correctly a window will popup and let you know.

## Download

Will download a program from the PTX . A popup window will appear asking what program number in the PTX you wish to download. After you select what program number you want to use another window will appear saying to please wait. The amount of this is displayed depends on the length of the program. After the program is download correctly a window will popup and let you know.

## **Hit Scores**

Hit Scores menu will only appear if you have PT Series targets

🛢 Re	ad Hit	Scores				<
File						
Dow	vnload	Print	Save	Cle Sco	ear pres	
	Targ	et Num	Hit Score			
		1		1		
		2		D		
		3		 3		
		4		 4		
		<u>с</u>		 2		
		7				
		8				
		9				
		10				

Download

Will download hit scores from the PTX or directly from PT61 with the USB radio. If you have both a PTX and USB radio a popup menu will appear and ask were you want to download from. If you only have 1 PTX or USB Radio it will automatically use the right device. If you are downloading from the PTX you must first retrieve hit scores with the PTX using the PTX menu system.

### Print

Is used to print hit scores

🖻 Print		
Header		
	Print Range	
	1-201	
	0.1-	
	,	
	OK Cancel	

You can enter a page header and select the range of target you want to print.

### Save

Is used to save the hit scores to you computer. There are three option to save the file as. Comma Delimited (\*.csv), Tab Delimited (\*.txt) and Excel (\*.xls)

# **PT Setup**

PT Setup menu will only appear if you have PT series target and USB Radio or Wi-Fi.

1	PT Setup
	SN
ſ	Utility Hit Setting Target Control
	Data Port Target Version Battery Voltage Load Defaults
	Read From Target Save To Target

When selected a new Popup window will appear.

## Read From Target

Will read information from target. When selected you will be asked to enter a Serial Number or Target Number

🖻 PT Setup	×
Enter Serial or Target number to program	
Serial Number	
Target Number	
OK Cancel	

Save To Target

Will write all the changes to the PT none of the changes will be saved until this button is clicked. Utility Menu

📓 PT Setup
SN Utility Hit Setting Target Control Data Port Target Version Battery Voltage Load Defaults
Read From Target Save To Target

Data Port

This is a setting to allow the ports on the target unit to be used to control the target (through a custom RS485 network) instead of using a transmitter. You can select either port or both ports to be target control ports. The default value is "NONE" and it should be set that way when a transmitter controls it.

### Target Version

This is for information only. It displays the target's firmware version. This is important for future product upgrades.

### Battery Voltage

This is for information only. It displays the target's current battery voltage level.

### Load Defaults (Reset Function)

When this box is checked and Save To Target button is checked, will restore all of the target parameters to factory defaults.

### Hit Setting

👹 PT Setup	
SI	Ν
Utility F	Hit Setting Target Control
Hit Sense Hit Count Hit Mode Die Face Hit Position	
Read From Target	Save To Target

### Hit Sensitivity

Hit sensitivity can be adjusted to match the weapons being used. "HIT SENSE" determines how hard the target must be hit to detect a hit. The range of this number is 1-20. The lower the number, the more sensitive it will be. The factory default is 3, which will work for most weapons.

### Hit Count

Hit count can be set from 1 to 20 hits. This is the number of hits required to cause a BOB or a DIE to occur. Each time the target is cycled down and back up, the count in the unit is cleared to zero, that way each time the target is presented to the shooter, it will take the same number of hits. Do not confuse the hit count with the hit score.

### Hit Mode

Off

Turns Off hit sensing

### BOB Mode

When the target is up (in either FRND, EDGE or FOE positions), hits will be detected until the "HIT COUNT" number programmed into the unit is reached, then the target will go down and immediately "bob" back up. This gives an instant indication that the target has been hit.

Die Mode

When the target is up (in either FRND, EDGE or FOE positions), hits will be detected until the "HIT COUNT" number programmed into the unit is reached, then the target will go down and stay down until the target is commanded to go up by the transmitter.

Die Face

This mode is only useful when using a twister (or bidirectional) arm where the target could rotate when the hit sensor detects the correct number of hits. Always leave this set to DOWN when not using a twister target arm.

### Hit Position

It can be NORMAL, REVERSE, or NO EDGE. When set to NORMAL: FRND, EDGE and FOE commands will bring the target up. The DOWN command will bring it down, with the target arm nested into the housing. When set to REVERSE: FRND, EDGE and FOE commands will bring the target down, with the target arm nested into the housing. The DOWN command will bring it UP. The hit sensing will be active when the target arm is down. This mode is useful if you mount the target unit on a wall or ceiling, and have the target swing down into a doorway or window opening. NO EDGE is the same as REVERSE, except the edge face is disabled. This would be needed if you have a twister target arm and with the target arm in the down position, there is not enough clearance for the target to be in the edge position.

## Target Control

🕼 PT Setup
SN
Utility Hit Setting Target Control
Target Number Target Speed Group A Group B Group C Group D
Read From Target Save To Target

### Target Number

Used to assign a number to the target (1-200) to be used by the UTC software and PTX

### Target Speed

A you to select either high or low speed for the target motion. High is at 100% motor speed and low is at 75%.

### Groups

Every target can be a member of up to 4 different groups. When you are in the "ASSIGN GROUPS" menu there are 4 places to assign group numbers to the target. They are Groups A-D. They all do the same thing. They cause a specific target to respond to a group command. For example: Assume you have 10 targets arranged in 2 rows with 5 targets in each row. You could assign all 5 targets in row 1 to respond to group 1 and all 5 targets in row 2 to respond to group 2. When a group 1 command is sent, all the targets in row 1 will respond and when a group 2 command is sent, all the targets in row 2 will respond. This way you can quickly control all 5 targets in a given row with one transmitter command. You can still control the targets individually by their target number.