

# The Evolution Multitrap Claymate.

## Covering the Handset in this section.



Born from development of the Junior version, the Evolution Claymate is a full blown Clay Counting, auditing and trap detecting unit designed with as much functionality as possible with a view for future expansion and diversification of control systems... (Alternative handsets)

### The Evolution Claymate Offers...

#### *Handset*

- 4 line, 16 character Liquid Crystal Display.
- Simple menu structure for easy, intuitive operation
- Sporting, 'Fitasc' and 5-Stand support (which can also be used for programmed Fitasc)
- Compact Sporting with up to 6 shooters and 5 stands.
- Pre programmed NSSA 5-Stand sequences which can be shot as a Compact Sporting Sequence.
- Program up to 6 of your own sequences, independent of the NSSA sequences.
- Shoot these as 5-Stand or Compact Sporting
- Send 'out of sequence' targets at any time without upsetting the sequence.
- 6 preset Flurry sequences designed by Pete Munn of Clay Snooker.
- 6 programmable sequences for custom flurries.
- Automatic or manual flurry release with correct 'No Bird' handling.
- A target audit with a capacity of one short of 10 million targets.
- Tough weather proof enclosures

#### *Controller*

- Large 4 line, 20 character display
- Credit button, the value of which 'tracks' target numbers of greater than 25 birds.
- Solo Shooter button.
- OPTION. Remote, 2 button control of launch and No Bird functions.
- OPTION. Stand mountable launch control with shooter indication for squad control.
- OPTION. Acoustic input to allow acoustic launching (button No Bird)

## Connecting Up...

The Evolution Multitrap is supplied as two component parts.  
The HANDSET and the RELEASE CONTROLLER.

### The Release Controller.

The Release Controller houses the trap detection circuitry, the Clay Counter interface and the Release Electronics.

There are 8 wires that should be connected, using suitable connectors, to your traps.

You do not have to connect all 8 traps but note that some programmed sequences may not work properly if a needed trap is not fitted.

The white power lead needs only a 12 volt source from either a battery or a mains adapter.  
Do not exceed 24 volts DC or 12 volts AC.

The unit is polarity protected.

The Orange cable is a 3 core Claymate standard type and connects to the Handset using the waterproof connectors supplied. The maximum cable length is unknown but has been tested to over 300 metres.  
The Controller Section of the manual will deal with controller features in greater detail.

### The Handset.

The Handset houses all the user buttons, the LCD and part of the processing brains of the System.  
The tough orange rubber boot is designed to protect the unit against accidental knocks and bumps.  
It is not recommended that you allow operation without the boot.

## Powering Up...

```
Serial Multimode
S/N 3456 V5.52
Audit 19275
1234 678
```

When power is first applied, the LCD will display the Serial number of the unit, the current audit and a display of the traps Claymate has detected. In this example, trap 5 is missing (Turned off).  
The text "**No Traps**" will appear if no traps can be seen.

```
^more^
1 Sporting
2 'FITASC'
3 5-Stand
```

The display will remain static until you press any of the 9 control buttons, or either of the two top mounted "soft" buttons.  
Claymate will then display the "TOP MENU" thus...  
Pressing the associated trap buttons will jump to the relevant menu.

Pressing ^more^ button will display the second page thus...

```
^more^
4 Compact Sport
5 Flurry
6 SETUP
```

Option 4 is for Compact Sporting.  
Option 5 is the Flurry mode.  
Option 6 is for recording sequences and housekeeping functions.

Note that in the "Top Menu" you can select, say, option 5 (Flurry) when options 1 to 3 are displayed.  
This is an intended feature.

## The Options Explained...

### (1) Sporting

```

      ^menu^
Instant Launches

Sporting

```

Selecting Sporting by pressing '1', offers you this display.

```

      ^menu^
Instant Launches
   345
Sporting

```

You can now press any trap button and send immediate targets.

In this example, three traps are fired by pressing buttons 3,4 & 5 together. They could also have been fired one after the other if the delay between button presses was required.

**NOTE: You can have the traps displayed as A, B, C. See "Memory"**

Whilst the traps are cycling (recocking) the trap numbers will remain displayed. Attempts to launch a trap that is still cycling will be ignored.

To return to the Top Menu, press the 'soft' menu button and from the Top Menu, select 'option 2, 'Fitasc'

### (2) 'Fitasc'

```

      ^menu^
Select & Fire

'Fitasc'

```

This mode differs slightly from Sporting in that you must pre-select your targets, using the trap buttons.

```

      ^menu^
Select & Fire
 12 5 78
'Fitasc'

```

For illustrative purposes only, we have selected 5 traps.

If we decide trap 5 is not wanted, we can deselect trap 5 by simply pressing the relevant trap button.

When the shooter calls for the target(s) the 'Fire' button is pressed and all selected traps are launched simultaneously.

As before, the trap selection will remain displayed until the traps are all re-cocked, at which time the selected trap numbers will disappear ready for you to make your next selections.

We make use of the **^menu^** soft button to return to the Top Menu where we will select 5-Stand and continue this discussion over the page.

```

^menu^
1 NSCA Levels
2 Custom Levels
    
```

Note the button that would return us to the Top Menu has now moved to the left of the display.

We can learn more by discussing the custom levels.

The NSCA levels are pre programmed and cannot be changed.

Operating the NSCA levels only differ in that you do not get the menu options to **erase** these levels.

Selecting option 2, the Custom levels, the screen will display something like this...

```

^menu^      ^more^
1 {25} 123 678
2 {40} 12345678
3 Empty
    
```

Note a second 'soft' menu option appears **^more^**. This option gets you to the second set of levels numbered 4,5 & 6.

Pressing **^more^** cycles between these two menus.

Pressing **^menu^** will send you to the NSCA/Custom menu above.

### The Display Explained...

**1 {25} 123 678**

**1** is the button you press to select this sequence

**{25}** tells you there are 25 targets per shooter.

**123 678** tells you which traps are used for this sequence.

Note that there is a space where traps 4 & 5 would be.

This format makes for easier reading of used traps.

**2 {40} 12345678**

**2** is the button you press to select this sequence

**{40}** tells you there are 40 targets per shooter

**12345678** tells you which traps are used for this sequence.

**3 Empty**

This location is Empty and is available for a new sequence.

The second page, displayed by pressing the 'soft' button **^more^** will show sequences 4,5 & 6.

If we were to select option 3 from the above, or any other Empty sequence, we would see...

```

Empty
    
```

Pressing any button will offer us sequences 1,2 & 3 again

```

^menu^
Shooters 1-5 ?
5-Stand
    
```

Selecting a valid option from the sequence menu will then show us...

HOWEVER... Selecting a sequence that calls for traps that Claymate cannot detect will display a MISSING page showing the traps that cannot be detected.

**You will not be allowed to engage a sequence with missing traps.**

The **^menu^** options moves to reduce the chance of stepping back too far if you press the button twice in error, demonstrating the care that has gone into this software.

At the **Shooters 1-5 ?** display, we use the trap buttons to select from 1 to 5 shooters.

```
5 Shooters
```

For illustrative purposes we will press button 5 (five shooters) to see...

Pressing any button now will move us to the main 5-Stand display...

```
^menu^
Stand1 Shooter1
Single 1
Fire when ready
```

In a real situation it may be necessary to show the assembled shooters one of each target prior to beginning to shoot in earnest.

At ANY TIME in the sequence, a 'wild' target, such as those required for show birds, can be sent simply by pressing the required trap buttons.

**IMPORTANT NOTE:** Show birds will be counted by Claymate and will either be added to the connected counter or deducted from the stored credits. If the credit feature is used by a number of shooters it is important to accept that SOMEONE will have to pay for the show birds (Over and above any 'free' targets offered by the ground using the **Bonus Bird** setup explained on page 9

### The Display Explained...

- ^menu^** Pressing this 'soft' button returns you to the NSCA/Custom selection.
- Stand1 Shooter1** Stand 1 is the active station and Shooter 1 should be awake.
- Single 1** A single target from trap one is lined up to launch.
- Fire when ready** Press the 'Fire' button to send this target off.

We will now fire this target and for illustrative purposes jump ahead in the sequence to explain more about the Multitrap operation.

```
^menu^ ^NoBird^
Stand2 Shooter5
O/R Pr 4,5
Fire when ready
```

Here we see the **^NoBird^** soft button.

It became active as soon as the first target of the sequence was launched.

We can see Stand 2 is active with Shooter 5 in the frame to shoot.

The targets in this case are an On-report pair from trap 4 and then 5.

Pressing the 'Fire' button launches the first target from trap 4.

Whilst we are waiting for the report to send off the second target, the text **Fire when ready** is replaced by **<report is next>**

This ensures that no confusion occurs if attention is distracted away from the controller for any reason.

### No Birds...

In the case of a broken target out of the trap, pressing **^NoBird^** will step the sequence back a shooter or, in the case of a pair, allow you to send the first bird again.

Repeated pressing of the **^NoBird^** button will step back further ultimately to the first target of the sequence.

*Stepping forward through a sequence requires the launching of targets. If you press the 'Fire' button fast enough, you can step on faster than the traps can cycle thus reducing the number of targets thrown to reach a specific point.*

*This is an indication of sloppy operation if you have to do it.*

The sequence continues until all the shooters have shot in all the stands following the rules of 5-Stand in that shooter 1 shoots first after a station shuffle.

```
^Restart^NoBird^
<Finished>
```

When the last target has been launched, the display gives us...  
The **^NoBird^** button allows us to re send the last target or targets in the sequence.

The text **<Finished>** simply tells us the sequence is over.  
The 'Fire' button is disabled. And no 'Wild Targets' can be thrown.

```
^menu^
1 Preset Levels
2 Custom Levels
  Flush/Flurry
```

The **^Restart^** button returns us to the page asking us for the number of shooters for this current sequence we have just shot.

### Wild Targets...

**During a 5-Stand sequence it is possible to send off targets out of sequence without upsetting the current sequence or your position within that sequence.**

It is expected that show targets will be thrown for the benefit of the shooters. Simply pressing the required trap button will send the desired target.

It is also possible to send off "Wild Pairs" by pressing 2 (or more) buttons simultaneously.

Note you cannot HOLD the button as Claymate will not allow this. You must release buttons before they can be pressed again.

### (4) Compact Sporting

```
^menu^
Shooters 1-6 ?
  Compact Sport
```

Compact Sporting is almost identical to the 5-Stand player above.  
The only changes are...

The number of allowed shooters is 6

The Sub text indicates this is a Compact Sporting selection.

The rules of Compact Sporting are programmed thus:

Starting with shooter 1 in stand 1 and subsequent shooters occupying as many stands as required up to and including a floating shooter no' 6, targets are released for each populated stand in turn.

When a stand is 'shot out' all shooters move one stand to their right to either replace the floating shooter, if there is one, or to leave stand 5 and enter stand 1.

In all cases after a shuffle, the shooter in the left most populated stand will shoot first.

This differs from 5-Stand where shooter 1 always shoots first from whichever stand they end up in.

This is possibly the best flurry control System you will ever see.

Selecting a Flurry from the menu offers us 2 further options.

Option 1 offers 6 sequences designed by Pete Munn of Clay Snooker and will be described here.

Option 2 is the programmable flurry sequences that you can design for yourself.

Selecting option 1 and using the **^more^** button in order to show a more interesting display will show us the following sequences...

```

^menu^    ^more^
4 3/50 12345
5 3/75 123456
6 4/100 12345678
    
```

Memory 4 holds a 3 shooter, 50 bird flurry using traps 1 to 5

Memory 5 holds a 3 shooter, 75 bird flurry using traps 1 to 6

Memory 6 holds a 4 shooter, 100 bird flurry using all 8 traps.

The trap numbers are the actual traps used, not a trap count.

```

^Auto^    ^Manual^
    
```

Selecting sequence 6 in this example then shows us a page asking if we want to launch Manually or Automatically.

```

Repeats 1-8 ?
    
```

Having selected the chosen operating mode, we then see...

We must enter a repeat number from 1 to 8.

This governs the total targets for the flurry.

A repeat of 8 for a 100 bird flurry will offer 800 targets!... Like this...

```

^menu^    ^Start^
800  Targets
For 4 guns
    
```

If we decide that we really didn't want a 4 gun, 800 bird flurry, use the **^Menu^** key to abandon this attempt. Alternatively, use the **^Start^** button to begin.

The screens for Automatic and Manual Launches differ slightly.

**AUTOMATIC**

**MANUAL**

```

^Pause^  ^NoBird^
                0
Send 12 4 6
In 6 Seconds
    
```

Here we see that the first targets will be launched in 6 seconds.

This value counts down to a release at '0'.

```

^menu^    ^NoBird^
                0
Send 12 4 6
Press Fire...
    
```

Here we see the Claymate waiting for you to fire the selected targets by pressing the 'Fire' button.

Even though the sequence has programmed delay times. These are ignored in a manually launched Flurry.

```

^Resume^  ^Menu^
                0
Send 12 4 6
In 0 Seconds
    
```

If we **^PAUSE^** the launching, the count down will continue and stop at 0 seconds.

**^Resume^** continues with the sequence and **^Menu^** allows you to abandon the Flurry.

## No Bird Handling.

```

^Pause^ ^NoBird^
          8
Send    456
In 13 Seconds
    
```

During a Flurry, be it manually or automatically controlled, some broken targets may occur.

Here we see that eight 'No Birds' have been accumulated.

When the flurry has launched all the sequenced targets, the No Bird Handler takes over to present the shooters with whole targets to compensate for the broken ones.

```

^Menu^ ^NoBird^
No Birds ... 8
Send    456
In 13 Seconds
    
```

Starting at the top of the flurry, the System uses the targets that are scheduled to be launched and decides whether to launch them all, or to thin them down to match the targets needed.

In this example, there are 3 targets to launch and 8 No Birds.

The three targets are launched to leave 5 No Birds left to launch.

The calculations are done again at each subsequent step in the sequence.

```

^Menu^ ^NoBird^
No Birds ... 2
Send    45
In 13 Seconds
    
```

Using the identical conditions as above but now with only 2 No Birds, the System has removed one of the three programmed targets to only allow 2 targets to be released.

In the event that the very last target is a No Bird, the system will launch just one target as required.

As always, compromises have to be made.

If we are holding a serious competition and the shooters are competing for some expensive prize, the way any No Birds are handled may affect the outcome.

The Evolution Claymate handles 'No Birds' in the fairest way possible in that 'No Birds' are taken from the very start of the Flurry and in this way, ALL 'No Bird' targets are logical.

In a scenario where 2 teams both have 5 No Birds, they would both be presented with identical sequences of replacement targets.

The only variable that cannot be allowed for is whether the broken targets from the trap could be regarded as 'easy' or 'hard' compared to the replacement targets.

Fortunately, that decision is not one that can be programmed into the Junior Software!

## End of Flurry Indication.

When the flurry is over, the text "**Flurry Over**" will be displayed.

In addition, the sounder will emit a continuous tone to warn that the flurry has indeed ended.

Pressing any button will silence the sounder, which includes the **^No Bird^** soft key.

If the **^No Bird^** button is pressed, the sounder will activate again when any additional 'No Birds' have been sent.

From the "Top Menu" we had 6 choices and number 6 was the SETUP & House Keeping option. Selecting option 6 shows a display thus...

```
^menu^

Key ?
```

Claymate is asking for the CONFIGURATION KEY. As any shooter may select the SETUP option, just to see what happens, the display offers the **^menu^** option as the only valid action other than to apply a configuration key.

```
^menu^    ^more^
1 = Traps 1234..
2 = User Memory
3 = Show Audit
```

When the key is applied, the display changes to offer 3 options and a **^more^** option.

**^more^** displays the second screen thus >>>

```
^menu^    ^more^
4 = Terminal
```

Describing the four options from the beginning...

```
^menu^    ^more^
1 = Traps 1234..
2 = User Memory
3 = Show Audit
```

Line 1 shows the CURRENT trap display format, i.e. 123. Pressing button 1 will toggle the display to "1 = Traps ABCD.. " Button 2 gives access to the 5-Stand and Flurry sequence memories explained in later pages. Button 3 restarts Claymate to show the initial power up screen.

Pressing the **^menu^** button will transport us to the Top Menu.

```
^menu^
4 Sounder ON
5 Mode Lock OFF
6 Bonus Birds 0
```

Button 4 (Terminal) extracts data from the controller itself. Until now, all the information has been stored in the handset memory. The Terminal option extracts and displays this data thus...

```
^menu^
4 Sounder ON
5 Mode Lock OFF
6 Bonus Birds 0
```

Button 4 toggles the Controller sounder ON or OFF. Button 5 allows you to lock the controller in the following modes...

NOTE...  
 'Terminal' Settings are stored in the controller NOT the handset.  
 When swapping out an Evolution Handset for a non LCD equipped version such as a dedicated Sporting one, be aware that the controller may be LOCKED in an incompatible mode.

Mode Lock 2 = Locked in Fitasc.  
 Mode Lock 3 = Locked in 5-Stand.  
 Mode Lock 4 = Locked in Compact Sporting.  
 Mode Lock 5 = Locked in Flurry.  
 Mode Lock 1/2 = Locked in Sporting and Fitasc.  
 Mode Lock 3/4 = Locked in 5-Stand and Compact Sporting.  
 Mode Lock OFF allows free access to all available shooting disciplines.

Button 6 cycles through the available bonus options being 1,2,3 or NO Bonus birds.  
 Bonus targets are added to the credit cache in the controller once a full credit count has been completed.  
 If a counter is removed during a crediting process, only the number of credits that could be recorded on the counter will be stored in the credit cache.

When the settings as just explained are complete, pressing **^menu^** restarts both the controller and the handset as each needs to communicate data to the other to accurately reflect any changes made.

**Setup options, continued...**

**Item 2 USER MEMORY**

```

^menu^      ^more^
1 = Traps 1234..
2 = User Memory
3 = Show Audit
    
```

```

^menu^
4 = Sequences
5 = Flurries
    
```

Here we see the two memories accessible to us, The 5-Stand (and Compact Sporting) Sequence memories and the Flurry memories.

**(5) Flurry Sequence Memory ... The Recording process.**

Selecting the Flurry option, button 5, might show us a display similar to this.

```

^menu^      ^More^
1 3/25 123456
2 1/20 234 6
3 Empty
    
```

We see a 3 gun, 25 bird flurry using traps 1,2,3,4,5 & 6 and a 1 gun flurry of 30 birds using traps 2,3,4 & 6 and an EMPTY slot.

Unlike the 5-Stand recording process, which follows in later pages, in the case of flurries, we are allowed to overwrite already programmed slots.

5-Stand memories must be selectively erased before recording.

In this example we will select '2' and overwrite the flurry in memory slot 2.

```

^menu^

Guns 1 - 4
    
```

We can abort at this point by pressing **^Menu^** which will take us back to the memory selection screen

Press any button other than **^Menu^** to continue.

This screen is asking for the number of guns the flurry is designed for.

The number you enter is solely used for the summary line shown when you look at which flurries are available. It is wise to enter a sensible number here though anything from 1 to 8 is valid.

For this example, we will enter part of the flurry Sequence as designed by Pete Munn of Clay Snooker.

The flurry is designed on paper initially and may look like that shown here. The format is basically, "Wait and Launch".

From the screen above, we will enter '1' for a single Gun.

```

1 Man 30 Bird using 4 traps.

Wait 5 and Launch 1 3
Wait 6 and Launch 12
Wait 6 and Launch 4

(selection from a real flurry)
    
```

```

Memory 2
Record
For 1 Gun
    
```

This is now a one way trip. You can only leave the recording process by completing the data entry or turning Claymate OFF..

Press any button to begin the data entry.

```

^.....^      ^Ok^
-End Of Flurry-
Total Time 0:00
Total So Far 00

```

This screen has many important features which will become apparent as we enter the trap data.

As we have yet to input any trap data, the System offers us the **-End Of Flurry-** option and the **^Ok^** button.

At this point we will begin by entering the traps by simply pressing the relevant trap button. In this case, 1 and 3.

```

^Delay^      ^Ok^
Wait 05 Seconds
& send 1 3
Fire To Preview

```

Once any trap is selected, we are shown the screen here.

Note the **^Delay^** option appears and we are offered a 5 second delay.

Pressing **^Delay^** will decrement the delay time past 1 second to 15 seconds and round until we find a delay that suits us.

Pressing the FIRE button gives as a preview of the targets only.

```

^.....^      ^Ok^
-End Of Flurry-
Total Time 0:05
Total So Far 02

```

Pressing **^Ok^** from the above screen returns us to **-End Of Flurry-**

We can see the total targets are 2 and the total time is 5 seconds.

We can now input the next set of targets, in this case traps 1 & 2

```

^Delay^      ^Ok^
Wait 05 Seconds
& send 12
Fire To Preview

```

Note we are offered the same delay as the last entry which in our case needs to be run through, past 15 and back to stop at 6 seconds.

Having set the new timer delay value, we can **^Ok^** the data and carry on

until we reach the end of our list of traps and delay times.

If, at any time, you get distracted and cannot remember where you are in a data entry, the Total targets and the total time values will allow you to calculate where you are in your list.

```

Memory 2
Record
Completed

```

Note that the total time figure is not stored or used by the program.

It is displayed for your information only

Having reached the end of the data entry, we can now **^Ok^** the **-End Of Flurry-**. Note that selecting any trap clears the 'end' text. Deselecting all traps will re-establish the 'end' text.

The screen shows we have completed memory slot 2.

Press any button to restart the Claymate.

One 'featurette' of the software is when a flurry for 100+ birds is entered. At the 100<sup>th</sup> bird, the Total So Far figure will appear to show 00 when it is actually 100.

The incorrect display is solely because there is not enough space on the display to show 3 digits in the available space.

The correct target count will appear in the menu selection.

Obscenely high target counts are achievable without programming them all by using the 'repeat' option when selecting a flurry for launching.

This allows for any flurry to be repeated up to 8 times without interruption with no action other than to record any broken targets.

### (4) 5-Stand Memory

From the "Top Menu" we have 6 choices and number 6 is the Setup & House Keeping option. Selecting option 6 gives us a list of three items.

The second option gives access to the programmable memories for Flurries, already explained and additionally to the 5-Stand (Compact Sporting) 'Sequence' memories.

```
^menu^      ^more^
```

```
^menu^
4 = Sequences
5 = Flurries
```

From this page we will select option 4, the Sequence Memories.

```
^menu^      ^more^
1 {25} 123 678
2 {40} 12345678
3 Empty
```

Here we see a list of the memory locations. Pressing **^More^** will show us memory locations 4,5 & 6.

```
^menu^
Memory 1

7 Erase
```

Selecting a used slot will show this screen. It is necessary to ERASE a memory slot before you can overwrite it. Pressing 7 will erase the slot.

Selecting an Empty slot will bypass the need to erase the slot.

```
^menu^      ^more^
1 {25} 123 678
2 {40} 12345678
3 Empty
```

For now, we will select an EMPTY memory slot. 3 in this case.

```
^menu^
Memory 3
Record
```

We are now about to record a brand new sequence into Custom Level 3.

If we pressed **^menu^** now, we get back to the above page above.

Pressing ANY other button starts us on the Recording path from which there is **no way out other than to turn the Claymate OFF.**

Recording is explained on the next page.

## The Recording Process...

As we are to record a sequence, let us first set one out as an illustration.  
 Be aware that the following procedure is valid for either 5-Stand or Compact Sporting.  
 The rules of the specific discipline merely determine how the sequence is played out to the shooters.

	Stands					
	1	2	3	4	5	
<b>Single targets</b>	1	2	3	4	5	<b>Row 1</b>
<b>Simultaneous pairs</b>	3+4	5+6	1+2	3+4	5+6	<b>Row 2</b>
<b>On report pairs</b>	1,2	3,4	5,6	1,2	3,4	<b>Row 3</b>

Hardly an imaginative sequence but for our purposes it is a good as any.

Note the numbering of the rows, 1 to 3.

*There is an upper limit of around 60 rows that actually equates to a sequence of up to 1800 targets!*

*Be aware that you can use this method to record a 'FITASC' sequence. (Old Style)  
 Provided your Fitasc sequence can be broken down into 5 'stands' and you pad out stand 5 to complete rows with, say, single targets, you can replay the sequence for just one shooter and simply use the No Bird option to reset back to the top of each Fitasc stand in use. There is NO LIMIT to the number of Fitasc shooters you have as they each shoot the same station before moving on to the next one.  
 NOTE that the Claymate display of Stand X and Shooter Y will be meaningless for Fitasc but the mode is perfectly valid and useable.*

Ok, so we now have a 5-Stand sequence written down.

When we start our recording process, by selecting an Empty sequence from the Memory page, we see this display...

The recording process is extremely easy to perform and in fact will take far longer to describe on paper than to get down and do it for real.

Having a powered Claymate in front of you (No traps needed) will help.

## The Display Explained...

^Type^            ^   ^ Single 0 Stand 1 Row 1
--

Note the blank ^ ^. All will be revealed!  
 Pressing ^Type^ cycles through the target types being...  
**Single 0**      0 is displayed until a trap number is entered  
**Sim Pr 0+0**   Simultaneous pairs  
**O/R PR 0,0**   On Report Pairs  
**FolPair 0/0**   Following pairs (Fixed delay of 3 secs.)  
                   A delay range from 1 to 15 seconds is planned.  
**End of Stand One**  
 You can cycle though the trap types as often as you want.

And ONLY during stand 1...

The text **Stand 1 Row 1** lets you keep track of where you are in the process.

In our example, we are to set targets for Stand 1 from our data on Row 1. We now enter a trap number to launch. In the example, that is trap 1.

```
^Type^      ^OK^
Single 1
Stand 1 Row 1
Fire to preview
```

Note ^ ^ has become ^OK^ and you can preview the target.

For illustrative purposes, you may care to cycle through the ^Type^ options and see that the PAIRS may have a 'zero' target if you did not

select two traps.

Claymate cannot allow pairs where there is no valid second target.

^OK^ disappears when there is an incomplete target selection.

You can only PREVIEW a valid combination of Target Type and Trap.

WITHOUT pressing ^OK^ you can press trap buttons as you wish and then cycle through the target types OR you can select the target type and THEN select the trap.

There is no need to set the trap or the target type, in any particular order.

Let us now get back to a Single target from trap 1 and press ^OK^.

```
^Type^      ^ ^
Single 0
Stand 1 Row 2
```

The display changes to...

In our list, row 2 of stand 1 is a Simultaneous Pair of traps 3 and 4. We can EITHER...

Press 3 and then 4 and then cycle the Type until we see "Sim Pr"

Or...

Cycle the trap type to "Sim Pr" and THEN select traps 3 and 4.

In either case we will see...

```
^Type^      ^OK^
Sim Pr 3+4
Stand 1 Row 2
Fire to preview
```

We may preview and change as often as we wish. In the case of report Pairs, previewing these will cause <report is next> to be displayed at the appropriate time to help us, or, in the case of a Following Pair, the text "Wait..." will be displayed. When we are happy, we can press ^OK^ and step on to Row 3.

```
^Type^      ^ ^
Single 0
Stand 1 Row 3
```

Our next display shows...

This is the last of our rows as listed so we enter the data for this, being an On Report Pair from traps 1 followed by trap 2.

The 'pull' bird is always first in the text. If you get it wrong, keep pressing trap buttons until you get it right.

```
^Type^      ^OK^
O/R Pr 1,2
Stand 1 Row 3
Fire to preview
```

```

^Type^      ^  ^
Single 0
Stand 1 Row 4
    
```

When the display agrees with our desired sequence as written down, we press **^OK^** and see...

As we do not have a row 4 in our sequence, we use the **^Type^** soft button to cycle through the target types until we see...

```

^Type^      ^OK^
End of Stand One
    
```

This is how we tell Claymate how many 3 rows there are per stand.

All Claymate needs now are the rest of the targets to be entered as before and Claymate will display the Stand and Row numbers of the trap data it is expecting.

**Claymate does NOT insist that the target types on one stand match those in another.**

```

^Type^      ^  ^
Single 0
Stand 2 Row 1
    
```

Here we see Claymate waiting for trap data for Stand 2, Row 1.

You will not see **End of Stand One** displayed because stand one was used to determine the number of rows and the remaining targets are expected to fit in the same number of rows.

```

^Menu^
Memory 3
Record
Completed
    
```

As you enter data, Claymate knows when to expect the next stand and when the last row of the last stand is entered.

On completing the data entry this page is displayed and all we need do now is to press **^Menu^**

```

^menu^      ^more^
1 {25} 123 678
2 {40} 12345678
3 {25} 123456
    
```

Claymate will immediately restart (as if power had been applied for the first time) and display the Serial Number and the current Audit. Press any button to display the Top Menu.

Selecting "5-Stand" from the Top Menu and then "Custom levels" we now see our new sequence 3 as we have just input.

We did not use traps 7 or 8, so they do not appear in the trap list. There were 25 targets in our sequence and that is verified correct. You have now successfully recorded a new sequence.

The recording process has been carefully written to be as clear and easy to use as possible.

***It has also been designed to allow for any target type in any position so you CAN program a 'Fitasc' sequence of single and double targets and use it perfectly. You must, however, remember that a particular sequence is written for 'Fitasc and not 5-Stand or Compact Sporting.***

A dedicated Fitasc Handset for OLD and NEW styles is currently being designed and will be available late 2003 to early 2004.

Claymate Trap Controllers deliver the goods. If you agree tell everyone. If not, tell ME.

Rick Fornalski on [sales@claymate.co.uk](mailto:sales@claymate.co.uk)

## **GUARANTEE & POLICY STATEMENT**

**Claymate Trap Control Systems** is wholly owned and operated by **BLN Technical Services**.

BLN Technical Services guarantees the Claymate product described to be free of manufacturing defects for the purpose of clay trap launcher control for a period of one year from date of purchase in the UK. Non UK countries may be subject to a different warranty period at the discretion of local dealers.

This guarantee specifically does not cover wear and tear to cables or enclosures, faults caused by wear and tear, misuse, abuse or application of excessive or inappropriate voltages, including lightning strikes.

The owner shall at all times be responsible for the care of the product and shall take steps to ensure that the product is protected from the damaging effects of wind, rain or snow.

BLN Technical Services reserve the right to change or amend the specification or software without notice. Software changes as requested by customers become the copyright of BLN technical Services and such changes may be included in future software releases, or may be offered to existing customers as an option or an upgrade.

The software supplied at any time has been thoroughly tested and is believed to be free from bugs or anomalies.

Software upgrades may or not be chargeable at the discretion of BLN.

**Neither Claymate Trap Control Systems, BLN Technical Services or agents of BLN will be responsible for accidents or injury or loss caused by operation of traps or associated equipment under the control of any Claymate System whether the operation of such equipment is desirable or not; is caused by operation of any equipment when it is unsafe to do so, or under any fault condition of any equipment howsoever caused including 'acts of God', or man.**

### **Repair policy, and care of the Equipment**

Suspected problems can usually be rectified or explained after a few minutes on the telephone. If in doubt... Read the instructions.

If Claymate is returned for warranty work, a copy of the original invoice may be required.

The printed board has no user serviceable parts apart from the processor which can be changed to implement a software upgrade or special change.

Do not remove or replace the processor or short processor pins on powered equipment. That path can lead to large repair bills.

The Handset will stand rain but it is a valuable piece of kit. Do not leave out when not in use. The Release Controller IS waterproof yet it too should be treated with some respect. Warranty does not include stupidity or neglect.

**Do not dry a damp unit out in a microwave oven.**

This will destroy the unit completely and BLN will not entertain anything other than a complete replacement at your expense.

In all cases, BLN reserves the right to repair or replace boards at the discretion of BLN. Replacement parts may be new or 'reworked' at the discretion of BLN.

The design of mechanical or electronic components may change without notice.

## Evolution Multitrap Claymate Technical Specification.

Supply voltage range.

- 12 volts DC
- 15 volts AC

Current requirements.

30mA total of which 10mA is the Handset, at 12v DC

Trap Release Specification. 2 build options.

- 12 to 48 volts AC/DC (standard UK build state)
- 'Volt free' relay contacts rated at 240v 3A max. (USA Option for Winchester traps)

Built in Trap Cycle Timer.

Timing is factory set in software at 2.5 seconds.

Controlling elements.

Arizona Microchip PIC.

Auditing.

To one target short of 10 million launches.

Printed Circuit Boards.

Conformal coating to high specifications.

All Claymate products have been tested and certified to exceed European EMC regulations and specifications including conducted and radiated emissions and susceptibility to external electromagnetic fields.

An independent EMC test house was employed to perform the certification.

The specifications achieved exceed FCC specifications.

BLN Technical Services reserve the right to change specifications in the pursuance of product improvement without notice.

Such changes are, however, usually announced on the web site.

If you have any good experiences whilst using the Claymate product, tell your friends.

If you have any bad experiences... Tell me!

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# NSCA 5-STAND LEVELS

<b>6 TRAP LEVEL 1</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	5	1	4	2	6
	2	4	3	6	5
	1	5	6	4	3
	6	3	1	5	2
	4	2	5	3	1

<b>8 TRAP LEVEL 1</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	5	6	2	1	3
	3	4	7	5	2
	1	2	8	6	7
	6	3	1	4	8
	8	5	4	7	1

<b>6 TRAP LEVEL 2</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	2	1	5	4	6
	1	4	6	3	2
	6	3	4	5	1
	4,5	2,6	1,3	2,4	3,5

<b>8 TRAP LEVEL 2</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	3	4	2	3	7
	6	8	1	4	5
	1	5	7	6	3
	2,7	3,6	4,8	1,5	2,8

<b>6 TRAP LEVEL 3</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	2	6	4	3	1
	1,5	3,4	2,5	5,6	2,6
	4,6	1,2	3,6	1,4	3,5

<b>8 TRAP LEVEL 3</b>					
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	1	3	5	7	2
	3,8	1,5	6,8	1,4	2,7
	2,6	4,7	2,3	5,6	4,8

# Flurry Sequences.

## Designed by Pete Munn of Clay Snooker.

© Pete Munn 2002

### Memory 1

1 Man 30 Bird using 4 traps.

Wait 5 and Launch	1 3
Wait 6 and Launch	12
Wait 6 and Launch	4
Wait 1 and Launch	3
Wait 6 and Launch	23
Wait 6 and Launch	4
Wait 2 and Launch	1
Wait 6 and Launch	12
Wait 6 and Launch	2
Wait 2 and Launch	4
Wait 6 and Launch	23
Wait 5 and Launch	34
Wait 6 and Launch	1
Wait 1 and Launch	4
Wait 6 and Launch	1 3
Wait 6 and Launch	2
Wait 2 and Launch	4
Wait 6 and Launch	3
Wait 1 and Launch	4
Wait 6 and Launch	1 3
Wait 6 and Launch	12

END

Stats	Trap 1 - 8 targets
	Trap 2 - 7 targets
	Trap 3 - 8 targets
	Trap 4 - 7 targets

### Memory 2

2 Man 30 Bird using 4 traps.

Wait 6 and Launch	1
Wait 1 and Launch	2
Wait 1 and Launch	34
Wait 5 and Launch	1
Wait 2 and Launch	2
Wait 2 and Launch	34
Wait 3 and Launch	1
Wait 3 and Launch	2
Wait 3 and Launch	34
Wait 1 and Launch	1
Wait 4 and Launch	2
Wait 3 and Launch	1
Wait 1 and Launch	34
Wait 4 and Launch	2
Wait 2 and Launch	1
Wait 3 and Launch	34
Wait 3 and Launch	2
Wait 1 and Launch	1
Wait 5 and Launch	34
Wait 2 and Launch	12
Wait 7 and Launch	34
Wait 1 and Launch	2

END

Stats	Trap 1 - 8 targets
	Trap 2 - 8 targets
	Trap 3 - 7 targets
	Trap 4 - 7 targets

# CLAY SNOOKER

18 Kings Close, Worminghall, Aylesbury, Bucks, HP18 9JW  
United Kingdom

Tel 01844-338905

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**Memory 3**

2 Man 50 Bird using 4 traps.

```

Wait 6 and Launch 12
Wait 1 and Launch 34
Wait 5 and Launch 1 3
Wait 2 and Launch 2
Wait 1 and Launch 4
Wait 3 and Launch 2
Wait 1 and Launch 1
Wait 1 and Launch 3
Wait 3 and Launch 3
Wait 2 and Launch 12 4
Wait 3 and Launch 2
Wait 3 and Launch 1 4
Wait 1 and Launch 2
Wait 2 and Launch 3
Wait 4 and Launch 1234
Wait 7 and Launch 23
Wait 2 and Launch 1 4
Wait 4 and Launch 12
Wait 2 and Launch 3
Wait 3 and Launch 2 4
Wait 3 and Launch 34
Wait 4 and Launch 12
Wait 2 and Launch 3
Wait 1 and Launch 4
Wait 4 and Launch 1 3
Wait 2 and Launch 2
Wait 1 and Launch 4
Wait 5 and Launch 1 3
Wait 3 and Launch 3
Wait 4 and Launch 1234
    
```

END

```

Stats   Trap 1 - 12 targets
        Trap 2 - 13 targets
        Trap 3 - 14 targets
        Trap 4 - 11 targets
    
```

**Memory 4**

3 Man 50 Bird using 5 traps.

```

Wait 6 and Launch 123
Wait 1 and Launch 45
Wait 5 and Launch 12 4
Wait 2 and Launch 3 5
Wait 4 and Launch 1 4
Wait 1 and Launch 2
Wait 1 and Launch 3 5
Wait 5 and Launch 12 4
Wait 1 and Launch 3
Wait 1 and Launch 5
Wait 4 and Launch 1 4
Wait 2 and Launch 3 5
Wait 1 and Launch 2
Wait 3 and Launch 1 4
Wait 4 and Launch 23 5
Wait 2 and Launch 1
Wait 4 and Launch 2 5
Wait 1 and Launch 1 4
Wait 4 and Launch 3 5
Wait 1 and Launch 12 4
Wait 5 and Launch 5
Wait 1 and Launch 23
Wait 1 and Launch 1 4
Wait 5 and Launch 3 5
Wait 1 and Launch 12 4
    
```

END

```

Stats   Trap 1 - 11 targets
        Trap 2 - 10 targets
        Trap 3 - 9 targets
        Trap 4 - 10 targets
        Trap 5 - 10 targets
    
```

**Memory 5**

3 Man 75 Bird using 6 traps.

```

Wait 6 and Launch      2 4 6
Wait 2 and Launch      1 3 5
Wait 3 and Launch     12 4 6
Wait 4 and Launch       3 5
Wait 2 and Launch      1 4 6
Wait 2 and Launch      23
Wait 3 and Launch      1
Wait 1 and Launch       3
Wait 1 and Launch     456
Wait 1 and Launch       2
Wait 3 and Launch      1
Wait 1 and Launch      3 5
Wait 1 and Launch       4
Wait 2 and Launch       5
Wait 3 and Launch     23 6
Wait 1 and Launch      1
Wait 1 and Launch     45
Wait 4 and Launch       6
Wait 1 and Launch     34
Wait 1 and Launch       2
Wait 1 and Launch       5
Wait 4 and Launch     1 3 6
Wait 1 and Launch      2
Wait 2 and Launch      6
Wait 1 and Launch      2
Wait 3 and Launch     345
Wait 2 and Launch     1 6
Wait 4 and Launch     12 5
Wait 1 and Launch      4
Wait 1 and Launch      3
Wait 4 and Launch      5
Wait 1 and Launch     2 4 6
Wait 1 and Launch      1
Wait 3 and Launch      5
Wait 1 and Launch     234 6
Wait 7 and Launch     1 6
Wait 1 and Launch      3 5
Wait 6 and Launch    123456
    
```

END

```

Stats      Trap 1 - 12 targets
           Trap 2 - 12 targets
           Trap 3 - 13 targets
           Trap 4 - 12 targets
           Trap 5 - 13 targets
           Trap 6 - 13 targets
    
```

**Memory 6**

4 Man 100 Bird using 8 traps.

```

Wait 6 and Launch     12 4 6
Wait 1 and Launch      78
Wait 3 and Launch      3 5
Wait 2 and Launch     2 4 78
Wait 1 and Launch      3 6
Wait 2 and Launch      5
Wait 2 and Launch     12 4 6 8
Wait 4 and Launch      3
Wait 2 and Launch     12 4 7
Wait 2 and Launch     56
Wait 2 and Launch      3
Wait 1 and Launch      4
Wait 1 and Launch     78
Wait 1 and Launch     12
Wait 1 and Launch      5
Wait 1 and Launch      6
Wait 2 and Launch     2 7
Wait 2 and Launch     1 3
Wait 1 and Launch     4 8
Wait 2 and Launch      5
Wait 2 and Launch     2 4 6
Wait 1 and Launch      5
Wait 2 and Launch     1 3
Wait 3 and Launch     12 78
Wait 4 and Launch     345
Wait 2 and Launch     2 6
Wait 3 and Launch     1 78
Wait 2 and Launch     3456
Wait 1 and Launch      1
Wait 2 and Launch     2 78
Wait 6 and Launch     12 45 7
Wait 3 and Launch     34 6
Wait 2 and Launch      8
Wait 1 and Launch      1
Wait 1 and Launch     2 5
Wait 1 and Launch      8
Wait 3 and Launch     34 6
Wait 1 and Launch      8
Wait 1 and Launch      7
Wait 1 and Launch      1
Wait 1 and Launch     2 5
Wait 3 and Launch     3 5678
Wait 5 and Launch     1 5 8
Wait 1 and Launch     3 67
    
```

END

```

Stats      Trap 1 - 13 targets
           Trap 2 - 13 targets
           Trap 3 - 12 targets
           Trap 4 - 12 targets
           Trap 5 - 13 targets
           Trap 6 - 12 targets
           Trap 7 - 12 targets
           Trap 8 - 13 targets
    
```