# freETarget

Application Note: Tabata Training

**SUMMARY**

Tabata training gives you a set period of time to get on target and take the shot. In rifle it is used to train out of overholding, on pistol it simulates a rapid fire event.

**REQUIRED**

* freETarget V2.1 or higher
* Firmware V3.7.2 or higher

**INTRODUCTION**

The freETarget firmware supports Tabata training and Rapid Fire events. The two are fundamentally the same, but the Tabata training controls the LEDs, while Rapid fire controls a solenoid. This trains you to acquire the target and take the shot in a short period of time, or the shot doesn’t count.

When used with a pistol, it simulates a rapid fire event

**SETTINGS**

Three configuration settings are used;

TABATA\_ON How many 1/10’th seconds the LEDs will be turned ON (ex 55 = 5.5 seconds)

TABATA\_REST How long the target will be dark between shots

TABATA\_CYCLES How many shots in a training session. TABATA\_CYCLES = 0 🡺 Never ends

RAPID\_ON How many 1/10’th seconds the LEDs will be turned ON (ex 55 = 5.5 seconds)

RAPID\_REST How long the target will be dark between shots

RAPID\_CYCLES How many shots in a training session. RAPID\_CYCLES = 0 🡺 Never ends

RAPID\_TYPE Type of solenoid control.

MFS Multifunction switch, set to 6XX to enable the Tabata cycles

**USE**

On power up, the Tabata or Rapid cycles are turned off. To begin a session press both MFS switches to toggle the cycle on or off.

When enabled, the target will cycle between ON and OFF during the training. A two second warning is given to start a shot.

One second ON warning

One second OFF warning

TABATA\_ON, target is illuminated for TABATA\_ON seconds

TABATA\_REST, target is dark for TABATA\_REST seconds

Repeat back to the top

If TABATA\_CYCLES is non-zero, the target will stop recognizing shots and blink the target LEDs once every two seconds.

**START and RESET**

The cycles are started from scratch every time the PC connects to the target. To start a session, press both of the MFS switches. Disconnecting and connecting will disable the feature

Pressing both multifunction switches will toggle the Tabata cycles enable between ON and OFF. While the switches are held down, the status LEDs will indicate if the Tabata is on or off.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Tabata ON |  |  |  | Tabata OFF |  |
| RDY | X | Y |  | RDY | X | Y |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |