



*Operating manual for  
Rotation target system 25 m*

**(3 x 400V)**

*Operating manual also as download available*

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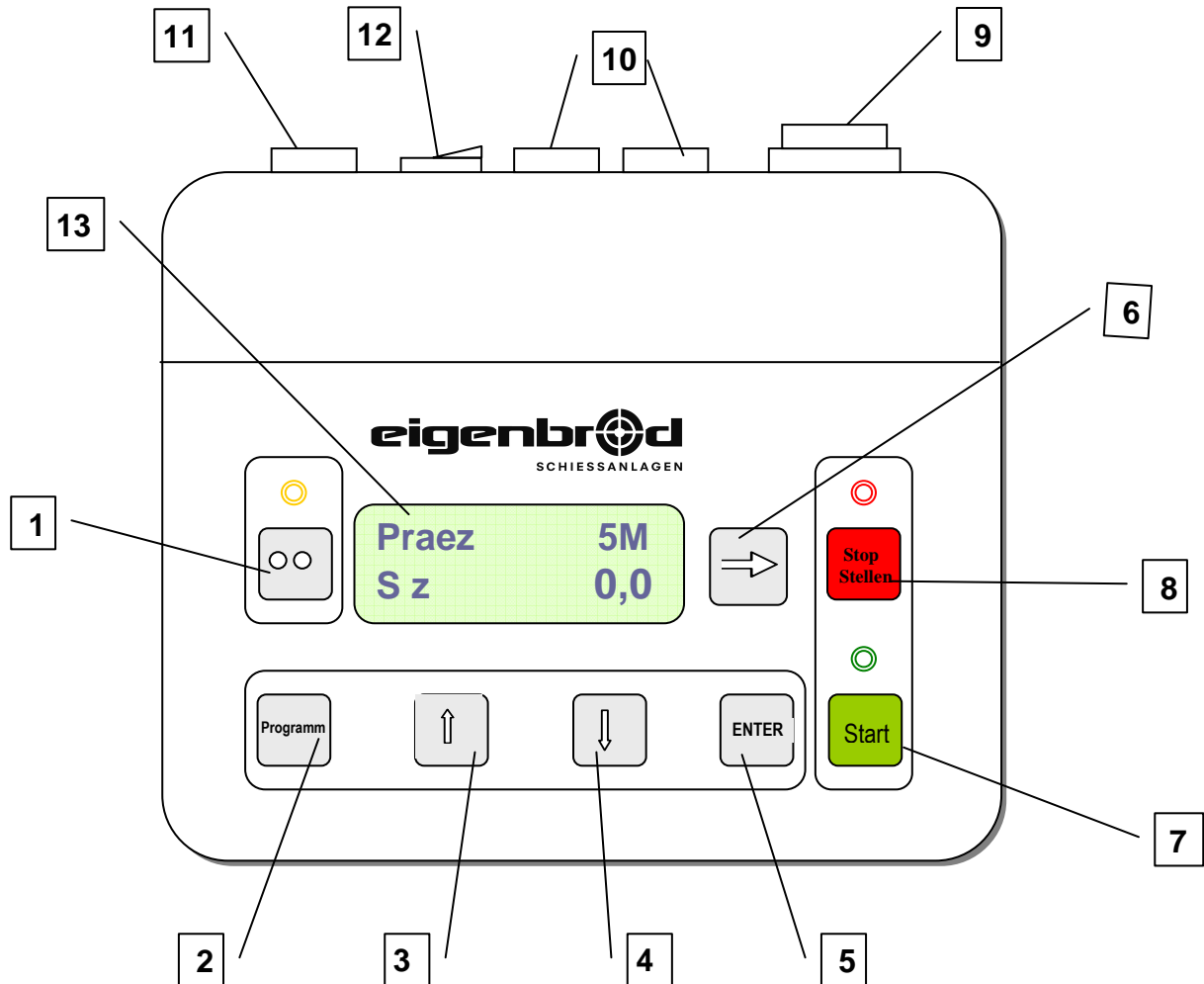
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radio remote control  
optional integrated  
either in the control unit, or as  
Retrofit kit available!

## System installation

### Instructions for use of the TP 2 pistol programme control unit

#### **Pkt. 1 Installing the control unit**

Connect the programme control unit to the shooting range system. Insert control line plug into the socket provided (**position 9**) on the back of the unit.

Plug the remote control into the connecting socket (**position11**) on the unit.

#### **Note:**

When you plug in the control unit the targets on the swivel mechanism are automatically turned into the visible position (starting position) if they were not in that position already.

#### **Pkt. 2 Switch the system on**

Switch the TP2 programme control unit on via the 'On/Off' button (**position 1**). The indicator light above the button comes on. The system is ready.

**Whenever you switch the unit on, the 'Precision programme' appears automatically as the default option.**

### Reading the LCD display

#### Legend:

DG	=	Round
Halt	=	Stop
Sfeuer	=	Rapid-fire programme
St.	=	Standard programme
Fr.	=	Free programme
Fz.	=	Set time
Pr.	=	Programme
Takte	=	Number of repeats
VZ.	=	Lead-in time
Vz	=	Lead-in time
T 5	=	5 repeats



## brief instruction for TP2 Control unit

### sportpistol

#### Precision:

#### Switch on control unit

press **Start**

Praez.	5M
Sz	0,0

(with **Stop/Stellen** you can break the series and turn the target at any time)

### duel

#### Switch on control unit

**Programm** 1 x press

Programm	
Praez.	5M

**↓** 1 x press

Programm	
Duell	

**ENTER** 1 x press

**Programm** 1 x press

Duell	D1
S0	Vz 0,0

press **Start** to start the series

(with **Stop/Stellen** you can break the series and turn the target at any time)

## standard

### Switch on control unit

		<b>Praez.</b> 5M <b>Sz</b> 0,0
<b>Programm</b>	1 x press	<b>Programm</b> <b>Praez.</b> 5M
<b>↓</b>	4 x press	<b>Programm</b> <b>Standard</b> Fz
<b>ENTER</b>	1 x press	<b>Programm</b> <b>Standard</b> 150
<b>↑</b> / <b>↓</b>	- choose the desired shooting time (150 – 20 – 10)	
<b>ENTER</b>	1 x press	
<b>Programm</b>	1 x press	<b>St Fz</b> 150 (bzw.20/10) <b>Vz</b> 0,0

press **Start** to start the series

## changing the shootingtime:

<b>Programm</b>	1 x press	<b>Programm</b> <b>Standard</b> Fz
<b>ENTER</b>	1 x press	<b>Programm</b> <b>Standard</b> 150
<b>↑</b> / <b>↓</b>	- choose the desired shooting time!	
<b>ENTER</b>	1 x press	
<b>Programm</b>	1 x press	

press **Start** to start the series

(with **Stop/Stellen** you can break the series and turn the target at any time)

## Precision programme

### *Precision programme – Firing time: 5 minutes*

#### Pkt. 3 Programme adjustment

Switch on the TP 2 programme control unit via the „On/Off“ button (**position 1**). Whenever you switch the unit on, the “Precision programme” appears automatically as the default option. This is shown by the following text on the LCD display (**position 12**).

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

#### Pkt. 3.1 Starting the „Precision programme“

If the target disks are not visible, use the ‘Stop/Position’ button (**position 8**) to move them into the visible position.

The green indicator light within the ‘Start button’ (**position 7**) now comes on. When you press the ‘Start button’ the firing time begins. This is shown on the LCD display (**position 12**) by the firing time starting to run down from 300 seconds (5 minutes).

When the end of the firing time of 5 minutes has been reached, the target disks swivel into the non-visible position. The following appears on the LCD display:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>300,0</b>

The red indicator light within the ‘Stop/Position’ button (**position 8**) will now be on. Pressing this button turns the targets back into the visible position. The green indicator light within the ‘Start’ button (**position 7**) comes on. The LCD display, however, remains unchanged.

You can start the firing time anew by pressing the ‘Start’ button.

**Note:** If the ‘Start’ button (**position 7**) is pressed while the target disks are not visible, the targets immediately turn into the visible position and the “Precision programme” starts there and then!

#### Pkt. 4 Aborting

If you want to abort any target rotation cycle, press the ‘Stop/Position’ button (**position 8**). The following then appears on the LCD display:

<b>Praez</b>	<b>D 1</b>
<b>DG</b>	<b>Halt</b>

You start another cycle as described at 3.1.

**Duel programme**

**Duel programme**

**Pkt. 5 Switching programme to „Duel“**

Switch on the TP 2 programme control unit via the „On/Off“ button (**position 1**).  
 The display now shows:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

Press the „Programme“ button (**position 2**) once. The LCD display now shows:

<b>Programm</b>	
<b>Praez</b>	<b>5M</b>

You select the „Duel programme“ by pressing the “Down arrow” button (**position 4**) once. The display now shows:

<b>Programm</b>	
<b>Duell</b>	

However, before going into the „Duel programme“ you need to press the „Enter“ button (**position 5**) and then the “Programme” button (**position 2**) again. The display then shows:

<b>D u e l l</b>	<b>D 1</b>
<b>S 0</b>	<b>V Z. 0.0</b>

**Pkt. 5.1 Starting the „Duel programme“**

The green indicator light in the ‘Start’ button will now be on.  
 Pressing the ‘Start’ button turns the targets into the non-visible position.  
 After 7 seconds the disks get swivelled back into sight. After being visible for 3 seconds, the targets again turn back into the non-visible position.  
 This process repeats itself five times.  
 The ongoing rotation of the targets is shown on the LCD display as follows:

<b>D u e l l</b>	<b>D 1</b>	<b>D u e l l</b>	<b>D 1</b>
<b>S 2</b>	<b>V Z. 5.4</b>	<b>S 2</b>	<b>S Z. 2.4</b>



## Duel programme

After the final switch, the targets stay in the non-visible position. The programme has run its course and the following now appears on the display:

<b>D u e l l</b>	<b>D 2</b>
<b>S 0</b>	<b>V Z. 0.0</b>

The red indicator light within the 'Stop/Position' button (**position 8**) will now be on. Pressing this same button turns the targets back into the visible position. The green indicator light within the 'Start' button now comes on.

### Pkt. 6 Aborting

If you want to abort any target rotation cycle, press the 'Stop/Position' button (**position 8**). The following then appears on the LCD display:

<b>D u e l l</b>	<b>D 1</b>
<b>DG</b>	<b>Halt</b>

Pressing the 'Stop/Position' button (**position 8**) turns the targets back into the starting position and the green indicator light comes on in the 'Start' button (**position 7**). The system is again ready to go.

### Pkt. 7 Displaying the individual rounds

The individual rounds are shown on the LCD display as follows:

<b>D u e l l</b>	<b>D 1 - 6</b>	<b>D u e l l</b>	<b>D 1 - 6</b>
<b>S 1 - 5</b>	<b>V Z. 5.4</b>	<b>S 1 - 5</b>	<b>S Z. 2.4</b>

After the 6th round, the display switches back to **D 1** and the counting process commences again at **D 1**.

### Pkt. 8 Reset button

By pressing the 'Right arrow' button (**position 6**), you can reset any completed round, shown on the display as **D 1 - 6**, in order to repeat the last round shown on the display. Each press of the button sets the controls back by another rotation cycle.

**Standard programme**

**Standard programme**

**Pkt. 9 Switching programme to „Standard“ (60 shots)**

Switch on the TP 2 programme control unit via the „On/Off“ button (**position 1**).

The display now shows:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

Press the ‘Programme’ button (position 2) once. The LCD display now shows:

<b>Programm</b>	
<b>Praez</b>	<b>5M</b>

Pressing the ‘Down arrow’ button (**position 4**) twice brings up the following on the display:

<b>Programm</b>	
<b>Stan .</b>	<b>x 4</b>

This indicates that the ‘Standard’ programme will be repeated in 150, 20 and 10-second settings, in each case 4 times.

However, before going into the ‘Standard’ programme you need to press the ‘Enter’ button (**position 5**) and then the ‘Programme’ button (**position 2**) again.

The display then shows:

<b>S 4</b>	<b>1</b>	<b>150</b>
<b>V z.</b>		<b>0.0</b>

**Pkt. 10 Starting the „Standard programme“ (60 shots)**

Pressing the ‘Start’ button (position 7) turns the target disks into the non-visible position and the lead-in time starts to run. After 7 seconds, the targets swivel into the visible position and the display shows:

<b>S 4</b>	<b>1</b>	<b>150</b>
<b>S z.</b>		<b>1.5</b>

After 150 seconds has passed, the targets turn back into the non-visible position and the display then shows:

<b>S 4</b>	<b>2</b>	<b>150</b>
<b>V z.</b>		<b>0.0</b>

## Standard programme

After pressing the ‘Stop/Position’ button (**position 8**) again, the targets get turned back into the visible position. The green indicator light comes on in the ‘Start’ button, which is now ready for a new start.  
 The process runs as shown below:

<b>S 4</b>	<b>2</b>	<b>150</b>
<b>V z.</b>		<b>0.0</b>

You can repeat this process 4 times. After the 4<sup>th</sup> cycle in the 150-second setting has finished, the display is shown for the 20-second cycle:

<b>S 4</b>	<b>1</b>	<b>20</b>
<b>V z.</b>		<b>0.0</b>

The red indicator light within the ‘Stop/Position’ button (**position 8**) will now be on. Pressing this button turns the targets into the visible position. The green indicator light now comes on in the ‘Start’ button and the system is ready to start the 1<sup>st</sup> round in the 20-second cycle.

You repeat this process 4 times as described for the 150-second cycle.  
 After the 4<sup>th</sup> cycle in the 20-second setting has finished, the display is shown for the 10-second cycle:

<b>S 4</b>	<b>1</b>	<b>10</b>
<b>V z.</b>		<b>0.0</b>

### Pkt. 11 Aborting

You can abort in the middle of any cycle by pressing the ‘Stop/Position’ button (**position 8**). The display then shows:

<b>S 4</b>	<b>1</b>	<b>20</b>
<b>DG</b>		<b>Halt</b>

After the ‘Stop/Position’ button (**position 8**) is pressed again, the target disks put themselves back into the starting position. Pressing the ‘Start’ button (**position 7**) restarts the programme in the round that was interrupted.

## Standard programme

### Pkt. 12 The end of the 4th cycle in the 10-second setting

After the 4<sup>th</sup> cycle in the 10-second setting has finished, the unit automatically reverts in the 'Standard' programme to the 150-second cycle and the processes repeat themselves as described above on page 6 at point 10.

### Pkt. 13 Switching programme to „Standard“ (30 shots“

Switch on the TP2 programme control unit via the 'On/Off' button (**position 1**).  
 The display now shows:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

Press the 'Programme' button (position 2) once. The LCD display now shows:

<b>Programm</b>	
<b>Praez</b>	<b>5M</b>

Pressing the 'Down arrow' button (**position 4**) three times brings up the following on the display:

<b>Programm</b>	
<b>Stan .</b>	<b>x 2</b>

This indicates that the 'Standard' programme will be repeated in 150, 20 and 10-second settings, in each case 2 times.

However, before going into the 'Standard' programme you need to press the 'Enter' button (**position 5**) and then the 'Programme' button (**position 2**) again.

The display then shows:

<b>S 2</b>	<b>1</b>	<b>150</b>
<b>V z.</b>		<b>0.0</b>

## Standard programme

### Pkt. 14 Starting the „Standard programme“ (30 shots)

Pressing the ‘Start’ button (**position 7**) turns the target disks into the non-visible position and the lead-in time starts to run. After 7 seconds, the targets swivel into the visible position and the display shows:

<b>S 2</b>	<b>1</b>	<b>150</b>
<b>S z.</b>		<b>1.5</b>

For all other processes, please see the previous description from the ‘Standard’ programme with 4 cycles in each instance (page 6, point 10).  
 In the case of this setting the individual cycles are only repeated twice.

### Pkt. 15 Reset button

By pressing the ‘Right arrow’ button (**position 6**), you can reset any completed round, shown on the display as **D 1 - 6** (where D = round), in order to repeat the last round shown on the display.

Each press of the button sets the controls back by another rotation cycle.

### Pkt. 16 Switching programme to „Standard“ 150 seconds

Switch on the TP2 programme control unit via the ‘On/Off’ button (**position 1**).  
 The display now shows:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

Press the ‘Programme’ button (**position 2**) once. The LCD display now shows

<b>Programm</b>	
<b>Praez</b>	<b>5M</b>

Pressing the ‘Down arrow’ button (**position 4**) four times brings up the following on the display:

<b>Programm</b>	
<b>Stan.</b>	<b>Fz.</b>

## Standard programme

This display indicates that you are in the 'Standard' programme.  
Now press the 'Enter' button (**position 5**). The display then shows:

<b>Programm</b>	
<b>Stan.</b>	<b>150</b>

Press the 'Enter' button (**position 5**) again. The display then shows:

<b>Programm</b>	
<b>Stan.</b>	<b>Fz.</b>

Now press the 'Programme' button (**position 2**). The display shows:

<b>St.</b>	<b>Fz</b>	<b>150</b>
<b>Vz</b>		<b>0.0</b>

### Pkt. 16.1 Starting the „Standard“ 150-second programme

The green indicator light will now be on in the 'Start' button. The system is ready to start.

After you press the 'Start' button (**position 7**), the target disks swivel into the non-visible position and the lead-in time of 7 seconds starts to run. After the lead-in time has run down, the targets get turned into the visible position and the display then shows:

<b>St.</b>	<b>Fz</b>	<b>150</b>
<b>Sz</b>		<b>2.5</b>

After expiry of the 150-second firing period, the targets remain set in the non-visible position. If the 'Stop/Position' button (**position 8**) is now pressed again, the target disks put themselves back into the visible starting position.

Pressing the 'Start' button starts the programme sequence anew, as described above.

### Pkt. 17 Switching programme to „Standard“ 20 seconds or 10 seconds

Press the 'Programme' button (**position 2**). The display now shows:

<b>Programm</b>	
<b>Stan.</b>	<b>Fz.</b>

**Standard programme**

Now press the 'Enter' button (**position 5**). The display then shows:

<b>Programm</b>	
<b>Stan.</b>	<b>150</b>

Press the 'Down arrow' button (**position 4**) and instead of 150 on the display you will see **20 or 10 seconds**.

Now press the 'Enter' button (**position 5**). The display then shows:

<b>Programm</b>	
<b>Stan.</b>	<b>Fz.</b>

Next, press the 'Programme' button (**position 2**). The display shows:

<b>St.</b>	<b>Fz</b>	<b>20</b>
<b>Vz</b>		<b>0.0</b>

The 'Standard' programme with the 20-second setting is now selected and you can start it as described above for the 150-second cycle.

See 16.1, 'Starting the programme'.

You proceed in the same way for the 10-second programme.

Press the 'Down arrow' button (**position 4**) and instead of 150 on the display you will see **20 or 10 seconds**.

Now press the 'Enter' button (**position 5**). The display then shows:

<b>Programm</b>	
<b>Stan.</b>	<b>Fz.</b>

Next, press the 'Programme' button (**position 2**). The display shows:

<b>St.</b>	<b>Fz</b>	<b>20</b>
<b>Vz</b>		<b>0.0</b>

The 'Standard' programme with the 20-second setting is now selected and you can start it as described above for the 150-second cycle (see 16.1).

You proceed in the same way for the 10-second programme.

**Pkt. 18 Reset button**

Using the 'Right arrow' button (**position 6**), you are able to reset any series, as described in detail on **page 9, point 15**.

RFP rapid-fire programme

**RFP rapid-fire programme**

**Pkt. 19 Switching programme to RFP rapid-fire (30 shots)**

Switch on the TP2 programme control unit via the ‘On/Off’ button (**position 1**).  
 The display now shows:

Praez	5M
S z	0,0

Press the ‘Programme’ button (**position 2**) once. The LCD display now shows:

Programm	
Praez	5M

Pressing the ‘Down arrow’ button (**position 4**) five times brings up the following on the display:

Programm	
Sfeuer	x 2

This indicates that the 8, 6 and 4-second rapid-fire programmes will each be repeated twice.

However, before going into the ‘Rapid-fire’ programme you need to press the ‘Enter’ button (**position 5**) and then the ‘Programme’ button (**position 2**) again. The display then shows:

S F 2	1	8
V z.		0.0

**Pkt. 20 Starting the RFP rapid-fire programme (30 shots)**

You are now in the rapid-fire programme, the target disks are in the visible position and there are no indicator lights on in the ‘Stop/Position’ or ‘Start’ buttons. Press the ‘Stop/Position’ button. The targets are now turned into the non-visible position and the indicator lights come on in both buttons (**positions 7 and 8**). The system is ready to start.

Now press the ‘Start’ button (**position 7**). The lead-in time starts to run down and after 3 seconds the targets are swivelled into sight for 8 seconds. Thereafter the target disks swivel back into the non-visible position and the display shows:

S F 2	2	8
V z.		0.0



**RFP rapid-fire programme**

The indicator lights are now on in both buttons (**positions 7 and 8**). To record the hits, move the targets into the visible position using the ‘Stop/Position’ button. To restart the programme, press the ‘Stop/Position’ button to rotate the targets into the non-visible position. The indicator lights are now on in both buttons (**positions 7 and 8**) and the system can be started via the ‘Start’ button. If the second round in the 8-second setting has finished, the unit automatically switches to the 6-second programme. The display then shows:

<b>S F 2</b>	<b>1</b>	<b>6</b>
<b>V z.</b>		<b>0.0</b>

The 6 and 4-second cycles run precisely as described above for the 8-second cycle. After the 4-second cycle has run though twice, the programme switches back again to the 8-second time.

**Pkt. 21 Reset button**

Using the ‘Right arrow’ button (**position 6**), you are able to reset any cycle, as described in detail on **page 9, point 15**.

**Pkt. 22 Switching programme to RFP rapid-fire (set times)**

Switch on the TP2 programme control unit via the ‘On/Off’ button (**position 1**). The display now shows:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

Press the ‘Programme’ button (position 2) once. The LCD display now shows:

<b>Programm</b>	
<b>Praez</b>	<b>5M</b>

Pressing the ‘Down arrow’ button (**position 4**) six times brings up the following on the display:

<b>Programm</b>	
<b>Sfeuer</b>	<b>Fz.</b>

This display indicates that you are in the ‘Rapid-fire’ programme. Now press the ‘Enter’ button (**position 5**). The display then shows:

<b>Programm</b>	
<b>Sfeuer</b>	<b>10</b>

## RFP rapid-fire programme

Press the 'Enter' button (**position 5**) again. The display then shows:

<b>Programm</b>	
<b>Sfeuer</b>	<b>Fz.</b>

Now press the 'Programme' button (**position 2**). The display shows:

<b>S F.</b>	<b>Fz</b>	<b>10</b>
<b>V z.</b>		<b>0.0</b>

### Pkt. 22.1 Starting the RFP rapid-fire programme (set times)

You are in the rapid-fire programme, the target disks are in the visible position and there are no indicator lights on in the 'Stop/Position' or 'Start' buttons.

Press the 'Stop/Position' button. The targets are now turned into the non-visible position and the indicator lights come on in both buttons (**positions 7 and 8**). The system is ready to start.

Now press the 'Start' button (**position 7**). The lead-in time starts to run down and after 3 seconds the targets are swivelled into sight for 8 seconds. The targets then swivel back into the non-visible position. The cycle has finished and the display once again looks the same as above.

If the rapid-fire cycle is to be shot in 8, 6 or 4 seconds, you use the same procedure. The number top right indicates the firing time in each instance.

### Pkt. 23 Aborting

If you want to abort any target rotation cycle, press the 'Stop/Position' button to do this. The programme is then aborted and the following appears on the display:

<b>S F.</b>	<b>Fz</b>	<b>10</b>
<b>D G</b>		<b>Halt</b>

Using the 'Stop/Position' button you can put the system back into its starting position and start again.

All other functions have already been described in the previous programmes.

## Free programme

### General explanation:

The 'Free programme' enables user to save up to 10 different 'free programmes' under the programme numbers **1 to 10**.

These are saved in the unit's memory even after it is switched off and can be run again later.

You can make and store the following settings independently of each other in each of the 10 free programmes:

- **Rotation rate:** Number of target rotations per cycle
  - Value 1 to 9 = 1 to 9 rotations
  - Value 0 = non-stop
- **Lead-in time:**
  - Target not visible
  - for 1.0 seconds up to max. 199.9 seconds
- **Firing time:** Target visible
  - for 1.0 seconds up to max. 199.9 seconds

You can keep a written record of the figures you set in the table on page 18.

### Free programme

#### **Pkt. 24 Switching to the free programme:**

Switch on the TP2 programme control unit via the 'On/Off' button (**position 1**).  
The display now shows:

<b>Praez</b>	<b>5M</b>
<b>S z</b>	<b>0,0</b>

Press the 'Programme' button (position 2) once. The LCD display now shows:

<b>Programm</b>	
<b>Praez</b>	<b>5M</b>

Pressing the 'Down arrow' button (**position 4**) 7 times brings up the following on the display:

<b>Programm</b>	
<b>Fr.</b>	<b>Prog .</b>

## Free programme

### Pkt. 25 Selecting another programme number

Press the 'Enter' button (**position 5**). The display now shows that the current programme is, for example, free programme 'No. 1' and the following appears:

<b>Programm</b>		
<b>Pr.</b>	<b>Nr.</b>	<b>1</b>

By pressing the 'Up arrow' button (**position 3**) repeatedly, you select the individual free programmes by the numbers '1 to 10'. The display now shows, for example:

<b>Programm</b>		
<b>Pr.</b>	<b>Nr.</b>	<b>4</b>

### Pkt. 26 Setting the target rotation rate for the selected „free programme“

Now press the 'Enter' button (**position 5**). The rotation rate that is currently set now appears on the display. Here, for example, the rate = 0.

<b>Programm</b>	
<b>Takte:</b>	<b>0</b>

**Non-stop mode:** if the rotation rate is set to zero, the system is in non-stop mode and after being started continues to rotate the targets indefinitely.

Using the 'Up arrow' button (**position 3**), you set the rotation rate you want from 1 to 9.

We will set it for this example to 5. The display now appears as follows:

<b>Programm</b>	
<b>Takte:</b>	<b>5</b>

### Pkt. 27 Setting the lead-in time for the selected „free programme“

Now press the 'Enter' button (**position 5**). The display then shows, for example:

<b>Programm</b>	
<b>Vz.</b>	<b>1,0</b>

Using the 'Up arrow' button (**position 3**), you can set the lead-in time (during which the target is not visible) to any period from 1.0 to max. 199.9 seconds. If you hold the arrow button down, the time display initially scrolls forward slowly and then at a faster pace. If you go past the time you want, you can move your setting back again using the 'Down arrow' (**position 4**).

## Free programme

### Pkt. 28 Setting the firing time for the selected „free programme“

Now press the ‘Enter’ button (**position 5**). The display then shows, for example:

<b>Programm</b>	
<b>S z.</b>	<b>1,0</b>

Using the ‘Up arrow’ button (**position 3**), you can set the firing time (target visible) to any period from 1.0 to max. 199.9 seconds.

If you hold the arrow button down, the time display initially scrolls forward slowly and then at a faster pace. If you go past the time you want, you can move your setting back again using the ‘Down arrow’ (**position 4**).

Press the ‘Enter’ button and the display then shows:

<b>Programm</b>	
<b>Fr.</b>	<b>Progr .</b>

Now press the ‘Programme’ button (**position 2**). The display shows:

<b>Fr. 1</b>		<b>T 5</b>
<b>T 0</b>	<b>Vz.</b>	<b>0,0</b>

### Pkt. 29 Starting the selected „free programme“

The green indicator light in the ‘Start’ button comes on and the system can be started by pressing the ‘Start’ button. The display now shows:

<b>Fr. 1</b>		<b>T 5</b>	<b>Fr. 1</b>	<b>T 5</b>
<b>T 1</b>	<b>Vz.</b>	<b>1,3</b>	<b>T 1</b>	<b>S z.</b>
				<b>1,5</b>

The display in the left-hand field indicates that we are in selected memory cell 1 and that target rotation is set at 5 repeats.

T 1 means that it is the first rotation with a lead-in time (Vz.) of 1.3 seconds.

What is then shown in the right-hand field is the firing time (S z.), set at 1.5 seconds.

The system now rotates in this setting five times, as 5 repeats have been stipulated.

You now have these times and the rotation repeat setting stored in memory cell 1 and can use them for your next training session, without having to set them all over again.

The control unit has a total of 10 memory cells, in which you can store various settings in the manner described above.

Every change to any setting gets saved automatically as long as the process is confirmed by pressing ‘Enter’.

**Table for recording free programme settings**

**In order to provide a clearer overview the values set by users can be recorded in this table:**

<u>Free programme Memory cell</u>	<u>Number of rotations</u> <i>(0=non-stop mode)</i>	<u>Lead-in time: Target not visible</u>  (0 = <u>non-stop mode</u> )	<u>Firing time:</u> Target visible
<b>„ Pr. Nr. “</b>	<b>„ Takte “</b>	<b>„ Vz “</b>	<b>„ Sz “</b>
1		Secs.	Secs.
2		Secs.	Secs.
3		Secs.	Secs.
4		Secs.	Secs.
5		Secs.	Secs.
6		Secs.	Secs.
7		Secs.	Secs.
8		Secs.	Secs.
9		Secs.	Secs.
10		Secs.	Secs.

## Remote control / Radio control

### **Remote control**

#### **Pkt. 30 Remote control**

The remote control unit is plugged into the connection socket (**position 11**) on the back of the TP2 control unit.

The remote unit has a 'Start' (green) and a 'Stop/Position' (red) button.

Using these 2 buttons on the remote control, you can carry out the same functions as with the 'Start' and 'Stop/Position' buttons on the TP2 unit itself.

### **Radio control**

#### **Pkt. 31 Radio control (optional)**

The hand-held transmitter contains the button "Start" (green button) and the button "Stop" (red button) and you can use them like the buttons on the control unit itself.

The hand-held transmitter is connected with the radio receiver in the control box at factory and it is possible to install more transmitters which are available from our company.

By using more hand-held transmitters it must be secure that all transmitters use the same radio frequency .

- **Changing the radio frequency and setting the radio receiver in the TP2 control unit :**
  - Open the transmitter, then convert the slide switch and then close the transmitter again
  - Then open the TP2 control unit. The control unit has to be in a tensionless state. Opening the control unit is only allowed by authorized specialists from our company!
  - Push the button "Start" and then the setting starts as you can see by the flashing LED.
  - Then push the button "Start" on the hand-held transmitter until the LED is flashing fast.
  - The keycode and the radio frequency are now stored in the radio receiver. The LED keeps on flashing during this setting.
  - Now repeat this process with the button "Stop" (red button)
  - Test the efficient functionality by connection and switching on the control unit. Now start the "Prael" programme and check the key function by using this programme.

## Master device

### *Master device*

#### **Pkt. 32 Connection as master device – synchronised operation of multiple systems (optional)**

A prerequisite of master mode operation is the presence of at least two individual systems each with a separately connected TP2 control unit.

The only special accessory required is an additional TP2 connection cable.

The relevant connection socket (**position 10**) is on the back of the control unit.

Via this socket multiple TP2 control units of individual systems can be connected with each other by a special cable (accessory).

After being switched on, the unit, to which the remote control can be connected, automatically works as a master device. All of the programmes can be accessed and run as normal on the master device.

Using the 'On/Off' button (**position 1**), switch all other connected TP2 control units on. The green indicator light comes on.

The following appears on the LCD displays of the connected TP2 units:

**SLAVE**

The connected units now take on the programmes automatically from the master device. (See also in relation to the wiring diagram on the last page)

**All connected systems now run fully synchronised.**



Application as "SLAVE – device" since 09.2017  
 Series no.: **245179 262**

**Master - Slave – device** (since 09.2017)

**Pkt. 33.1 Working as Master – Slave device – synchronised operation of multiple systems (optional)**

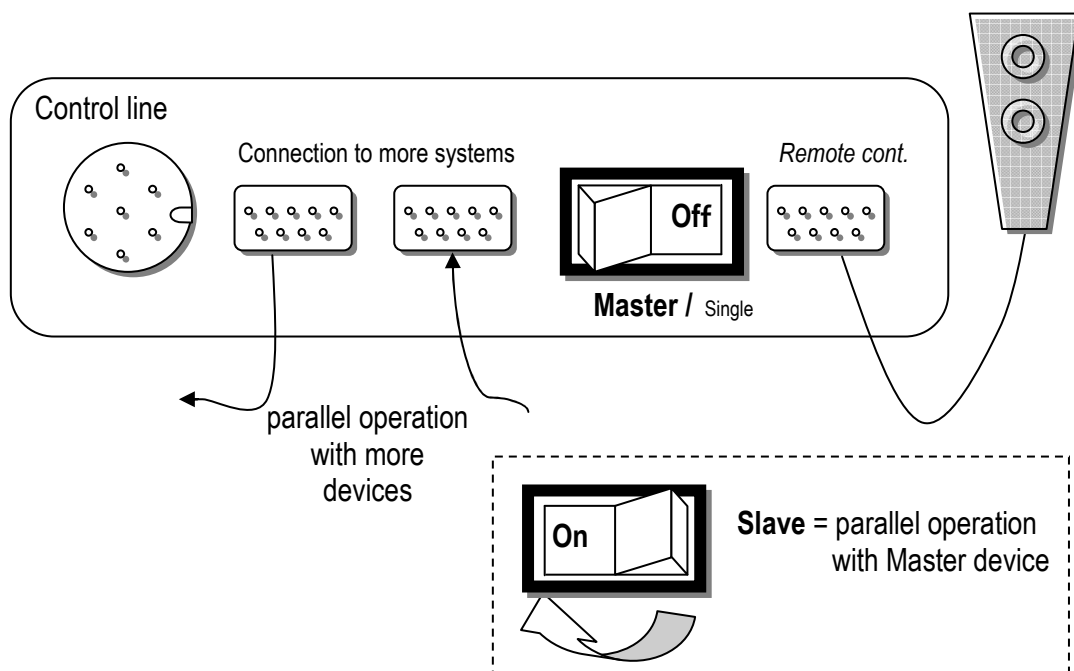
With newer devices each system can be used individually as master or slave device with the aid of the white toggle switch on the back.  
 In order to use the desired control unit in "slave" mode (parallel operation with the master device), switch the toggle switch on the back of the device to the left to "ON"

The display shows:



On the master device (toggle switch to the right "Off"), all programmes can continue to be called as usual.

The connected units now take on the programmes automatically from the master device! (See also in relation to the wiring diagram on the last page)



## Storage / Troubleshooting

### **Storing the TP 2 control unit**

#### **Pkt. 34 Safekeeping and storage:**

The TP2 programme control unit is not suited to being left outside for a long time in conditions of high air humidity. When not being used, it should therefore be kept inside.

It should be stored at a temperature between -5 and +50 degrees.

Operating temperature should be between 0 and +40 degrees.

If the operating temperature rises above 45 degrees, a safety switch automatically turns the unit off.

### **Troubleshooting**

#### **Pkt. 35 Checking the motor overload trip-switch in the control box on the rotator:**

This shooting range system is fitted as standard with a motor overload trip-switch (F1).

This is located in the control box on the rotator mechanism. If the system stops working, check whether this may have tripped by pressing the blue button on the overload switch (F1). This should then audibly re-engage.

If the motor overload switch trips repeatedly, the motor may be getting overloaded, there may be winding damage or a defect in the control system box.

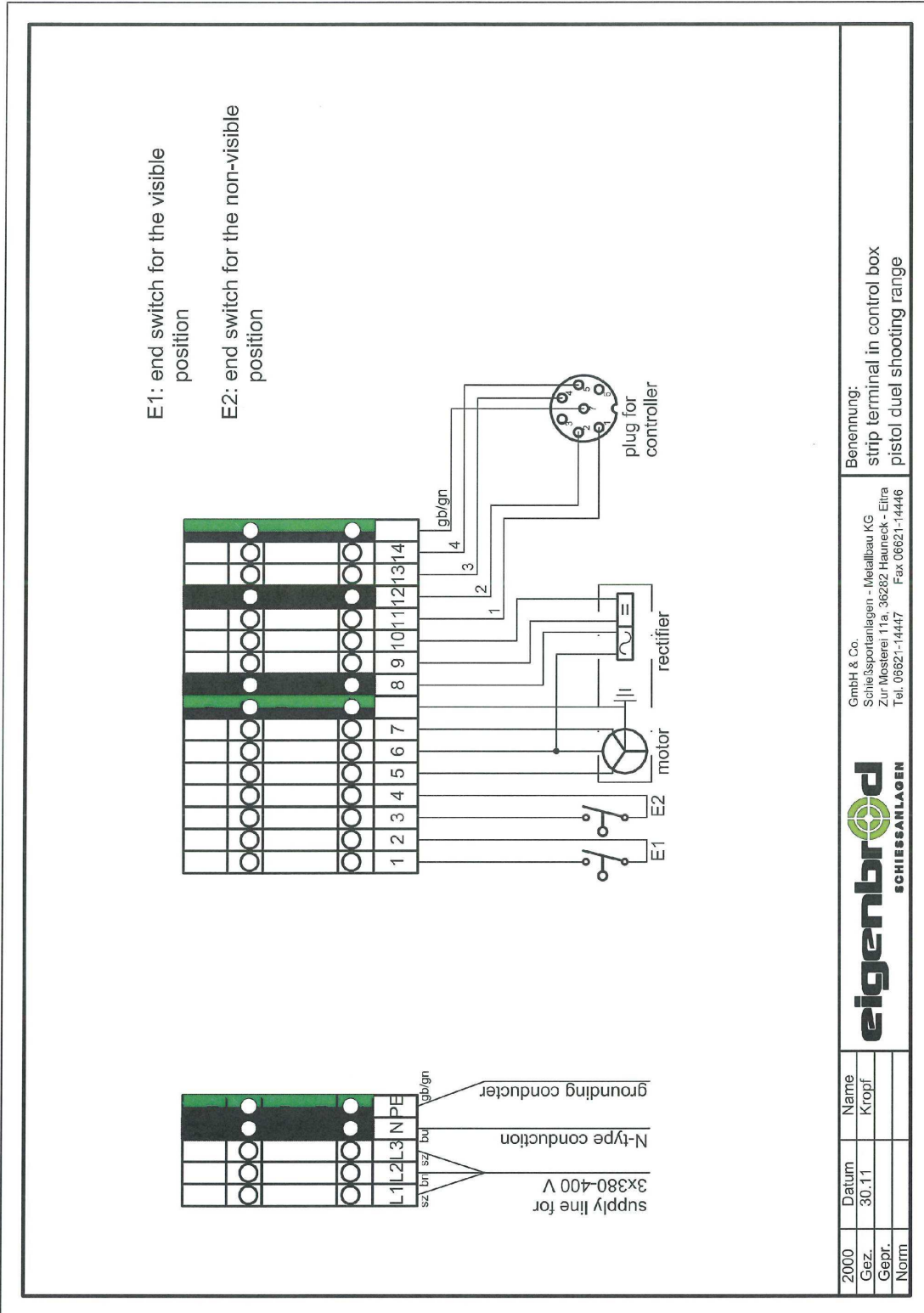
Have the system checked to avoid any consequential damage!

**If you have any further questions, we would be glad to help:**

**E-Mail: [info@eigenbrod-schiessanlagen.de](mailto:info@eigenbrod-schiessanlagen.de)**

**Tel.: +49 (0)6621 14447**

Connection diagram with terminal block for motor control

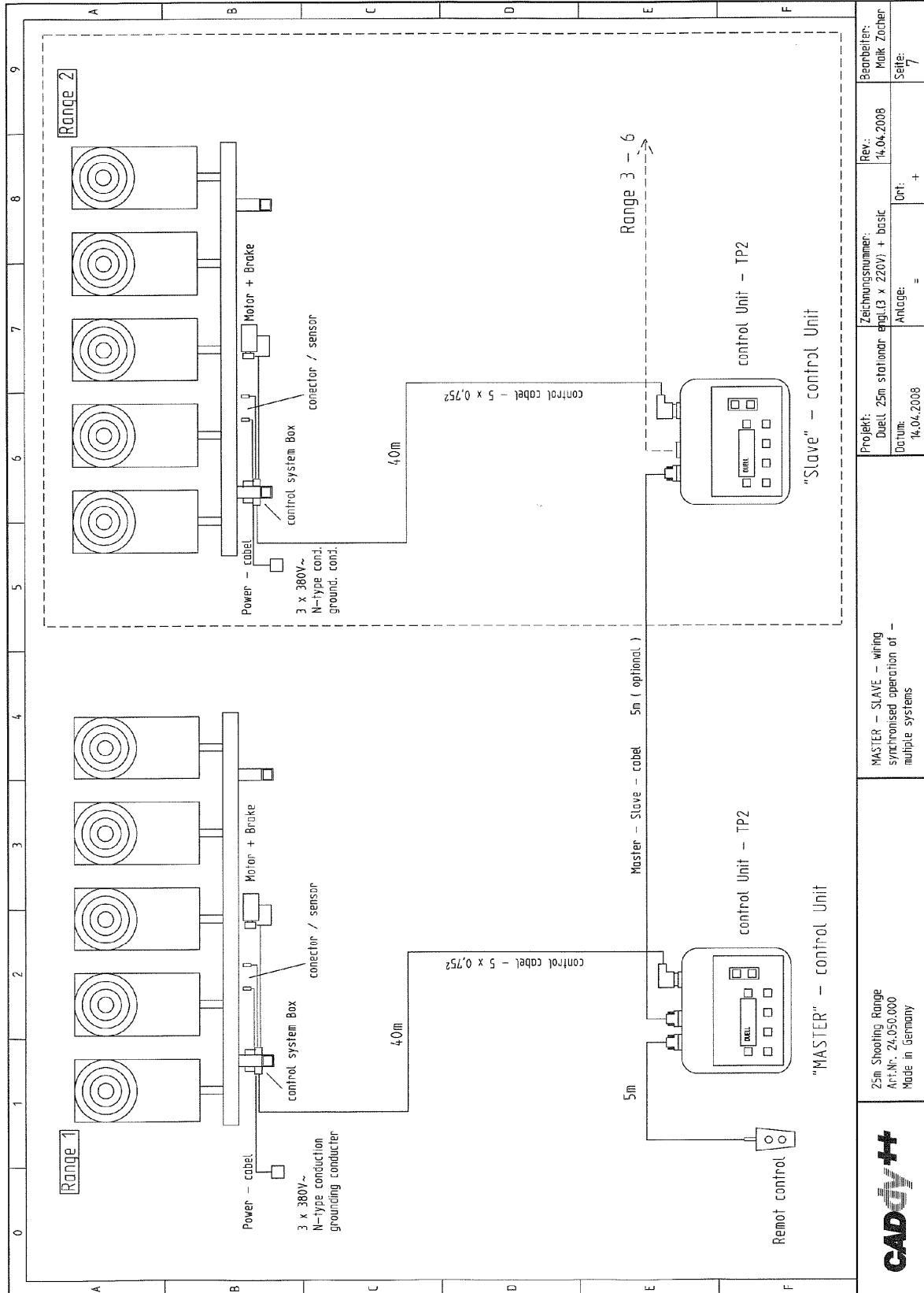


2000	Datum	Name
Gez.	30.11	Kropf
Gepr.		
Norm		

GmbH & Co.  
Schießsportanlagen - Metallbau KG  
Zur Mosterei 11a, 36282 Hauneck - Eitra  
Tel. 06621-14447 Fax 06621-14446

Benennung:  
strip terminal in control box  
pistol duel shooting range

**eigenbrod**  
SCHIESSANLAGEN



<b>CADdy++</b> 25m Shooting Range Art.Nr. 24.050.000 Made in Germany	MASTER – SLAVE – wiring synchronised operation of – multiple systems	Projekt: Duell 25m stationar egal.(3 x 220V) + basic	Zeichnungsnummer: egal.(3 x 220V) + basic	Rev.: 14.04.2008	Bearbeiter: Mark Zocher
		Datum: 14.04.2008	Anlage: = +	Ort: +	Seite: 7