Brief user manual – Trimble M3

<u>Switch-on</u>

GREEN BUTTON

<u>Mode of basic measurement</u>

GENERAL SURVEY → INSTRUMENT → SURVEY BASIC → Level the total station → ACCEPT → Enter atmospheric corrections (pressure, temperature) → ACCEPT

Displayed values (1st display)

HA: …………. horizontal direction
VA: …………… zenith angle
SD: …………… slope distance

Displayed values (2nd display)

HA: ……….. horizontal direction
HD: ……….. horizontal distance
VD: ……….. height difference

Displayed values (3rd display)

Y: ………… point coordinate
X: ………… point coordinate
Z: ……….… point coordinate

Change of the display is performed by GREY BUTTON WITH BLACK ARROW (on the left side of display)

Zero setting

Button ZERO

Setting of an arbitrary value to the choosen direction

Button SET → Enter value „Horizontal angle" → ENTER → ACCEPT

Change of prism/non prism mode

Press SYMBOL OF TOTAL STATION → DR → active mode of the distancemeter is indicated by the red symbol (non prism mode) or by the black symbol of prism (prism mode) below symbol of the total station

Prism constant setting

Red or black symbol of prism (it depends on the mode of the distancemeter) → Press „?.??? m" → Enter Prism constant → ENTER → AKCEPTOVAT

Distance measurement

Button MEASURE

Measurement of points

Job creation

GENERAL SURVEY → JOBS → NEW JOB → Enter Job name * → Choose the template SG01 →
ACCEPT

Insertion of survey station and orientation coordinates

KEY IN → POINTS → Enter Point name, Y, X, Z (survey station) → tick off Control point →
STORE → Enter Point name, Y, X, Z (orientation) → tick off Control point → STORE → ESC

Survey station and orientation setting

MEASURE → STATION SETUP → Enter atmospheric corrections (pressure, temperature) →
ACCEPT → Button ARROW on the right side of Instrument point name → LIST→ Select point
(survey station) → Enter Instrument height → ENTER → ACCEPT → Button ARROW on the right
side of Backsight point name→ LIST→ Select point (orientation) → Enter Backsight height →
ENTER → Point with the total station at the direction of the orientation point → Choose method
„Angles and distance" → MEASURE → STORE

Detail survey

MEASURE→ MEASURE TOPO → Enter Point name → Choose method „Angles and distance"→
Enter Target height → ENTER → Point at measured point → MEASURE → STORE

Angle offset

Choose Method „Angle offset" → Point at prism → MEASURE → Point at the centre of the subject
→ Meas H,V → STORE

Measurement end and coordinate export

ESC → MEASURE → END CONV. SURVEY → JOBS → Button 1/2 → IMPORT/ EXPORT →
EXPORT CUSTOM FORMAT→ Select File format „Measured points –YXZ–TXT TS → Choose
Rounding „cm" → Set Use points into RRRRMMDD (set actual date e.g. 24.1.2015 as 20150124) →
ENTER → ACCEPT

Switch-off

GREEN BUTTON → OPTIONS → SHUTDOWN → YES

* *Keyboard switch-on*

Button CTRL → button 7

Electronic level and optical plummet initiation

SYMBOL OF TOTAL STATION → LEVEL → Level the total station → ACCEPT