

RANGE REAPER

MT5

USER MANUAL

Eleven markets · One chart · One portfolio

Version 1.0 · **tradewithwim.com**

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How to read this manual

Every setting is printed exactly as it appears in the **Inputs** tab of MetaTrader 5, in `this typeface`. If you can see the name in this manual, you can find it in the EA. Nothing in here refers to anything hidden.

If you have never run an Expert Advisor before, read chapters 1 to 5 in order and simply leave everything else at its default. The defaults are the settings the portfolio was built and tested with.

1. What Range Reaper does

Range Reaper trades eleven markets as a single portfolio, from a single chart, using one strategy per market.

Most Expert Advisors trade one instrument and need one chart each. Range Reaper does not. You attach it to **one chart only** and it trades all eleven markets from there. Each market has its own strategy settings built into the EA — you do not have to load set files, tune indicators, or decide which parameters suit gold versus the Dow. That work is already done and fixed inside the product.

What all eleven have in common is the method: the EA identifies a price **range** — a period where the market has gone quiet and is trading inside a defined high and low — and positions itself for the move out of that range. Where the range forms, how wide it is allowed to be, what time of day it is measured, and how the exit is managed differ from market to market. Those differences are what makes it a portfolio rather than one idea copied eleven times.

What you control

Deliberately little, and all of it about **risk and operation** rather than strategy:

- Which of the eleven markets to trade, and what each is called at your broker
- How much drawdown you are prepared to accept — one number for the whole portfolio
- Optional profit and loss targets that close everything at once
- Optional prop-firm limits, news filters and trade comments

You cannot change entry logic, stop distances or exit rules, and there is no set file to load. That is intentional: the eleven strategies are calibrated against each other, and the balance between them is what the drawdown figure in chapter 5 relies on.

The eleven markets

Market	Type	Market	Type	Market	Type
XAUUSD	Gold	**EURUSD**	Forex	**US500**	Index
BTCUSD	Crypto	**GBPUSD**	Forex	**US30**	Index
ETHUSD	Crypto	**USDJPY**	Forex	**USTEC**	Index
		EURJPY	Forex	**DE40**	Index

2. What you need before you start

Requirement	Detail
MetaTrader 5	MetaTrader 4 is not supported. The EA is an `.ex5` file.
A broker offering all eleven markets	Gold, two crypto pairs, four forex pairs and four indices. If your broker is missing one, you can switch that market off and run the rest.
A hedging account	Several strategies can hold positions in both directions. On a netting account they would cancel each other out. Most MT5 brokers offer hedging; check with yours if unsure.
A VPS or a machine left on	The EA must be running to manage open trades. A laptop that sleeps overnight will miss exits.
Sufficient balance	Eleven markets opening positions at the same time need margin. See the note on small accounts in chapter 5.

> **Run one copy only**
>
> Attach Range Reaper to **one chart**. If you attach it to a second chart, two copies will trade the same eleven markets at the same time and you will take double the intended risk.

3. Installing the EA

1. **Open the data folder.** In MetaTrader 5, choose **File → Open Data Folder**. A Windows folder opens. Inside it, go to **MQL5 → Experts**.
2. **Copy the EA in.** Put the Range Reaper `.ex5` file into that **Experts** folder. Close the folder window.
3. **Refresh the Navigator.** Back in MetaTrader, find the **Navigator** panel on the left (**View → Navigator** if it is hidden). Right-click **Expert Advisors** and choose **Refresh**. Range Reaper now appears in the list.
4. **Allow automated trading.** Click the **Algo Trading** button in the top toolbar so it turns green. If it is red, nothing will trade.
5. **Allow the licence address.** Go to **Tools → Options → Expert Advisors**, tick **Allow WebRequest for listed URL**, and add `https://www.worldtimeserver.com/` as well as the address shown in the EA's own `URL to Add` field. Without this the licence check cannot complete and the EA will not trade.
   The EA repeats this address in two information-only fields near the top of its inputs, so you can copy it straight from there.
6. **Open the eleven symbols in Market Watch.** Right-click the **Market Watch** panel, choose **Symbols**, and make sure all eleven markets you intend to trade are shown. The EA can only trade a symbol that is visible there.
7. **Attach it to one chart.** Open a **EURUSD** chart and drag Range Reaper onto it from the Navigator. The chart's symbol and timeframe do not decide what the EA trades; each market carries its own settings. The chart is simply where the EA lives — but EURUSD is the one to use, because the EA reads the chart symbol's own history when it works out your broker's GMT offset, and a major forex pair gives it the longest and cleanest history to read.
8. **Tick "Allow Algo Trading"** in the dialog that opens, then press **OK**.
9. **Check the panel.** A panel appears on the chart. If it lists your markets and a balance, the EA is running. A smiling face in the top-right corner of the chart confirms it is active.

> **If you have a licence key**
>
> Customers who bought outside the MQL5 Market paste their key into `License Key (for non MQL5 version)`, at the very top of the inputs. If you bought through the MQL5 Market, leave it empty — your purchase is verified automatically.

4. Setting the eleven symbol names

This is the one configuration step that nearly every new user has to make, and the most common reason a market does not trade.

Brokers do not agree on symbol names. Gold may be `XAUUSD`, `XAUUSD.r`, `GOLD` or `XAUUSDm`. The German index may be `DE40`, `GER40` or `DAX40`. The EA cannot guess, so each market has a field where you type the name exactly as your broker spells it.

In the **Portfolio - markets** group, every market has the same five settings:

Setting as you see it	What it does
`XAUUSD - trade this market`	Switch this market on or off. Turn it off if your broker does not offer it.
`XAUUSD - symbol name at your broker`	**Type your broker's exact spelling here**, including any suffix such as `.r` or `m`.
`XAUUSD - lotsize method`	How this market's position size is decided. See chapter 6. Leave on **balanced** unless you have a reason.
`XAUUSD - fixed lotsize (manual lots)`	Only used when the method above is **manual lots**.
`XAUUSD - risk per trade % (risk per trade)`	Only used when the method above is **risk per trade**.

The same five repeat for each of the eleven markets, so the group is long. You only need to look at the second line of each block unless you are changing how a market is sized.

> **How to find your broker's exact name**
>
> Right-click **Market Watch → Symbols**, find the instrument, and copy the name shown there character for character. Capitalisation matters. If the EA cannot find a symbol it will tell you so in the **Experts** tab at the bottom of the terminal when it starts.

> **A market your broker does not offer**
>
> Set its `- trade this market` switch to **false**. The remaining markets carry on as normal. Be aware that the portfolio was calibrated with all eleven working together, so removing one changes the balance of the whole — usually by reducing both return and drawdown.

Finally, `Comment on every trade (the market name is appended)` sets the text attached to each order, so your account history reads `RangeReaper_XAUUSD` rather than something cryptic. Change it only if you run several EAs and want to tell them apart.

5. Choosing your risk

One number controls the risk of the entire portfolio.

Max allowed TOTAL drawdown (%)

This is the single most important setting in the EA, and for most users it is the **only** one they ever change. The default is **10**.

Each of the eleven strategies has a calibrated risk level of its own, set so that the eleven work together as a balanced portfolio rather than eleven separate bets. When you enter a figure here, the EA scales all eleven by the same factor so that the portfolio as a whole targets roughly that much drawdown.

- Enter **5** and every position is roughly half the default size.
- Enter **20** and every position is roughly double.
- The ratio between the markets never changes — only the overall scale.

> **This is a target, not a guarantee**
>
> The figure is derived from historical testing. Live markets produce conditions that no test contains, and a real drawdown can exceed the number you enter. Treat it as a dial that makes the portfolio proportionally larger or smaller, not as a hard limit. If you want a hard stop, use **Group Close** (chapter 7) or the prop-firm limits (chapter 8).

Balance to size from (0 = real account balance)

Leave this at **0** and the EA sizes from your actual account balance, growing positions as the account grows.

Enter a figure and the EA sizes as though the account held exactly that much, whatever the real balance is. This is useful in two situations: trading a fixed notional size on an account you also use for other things, and keeping position sizes steady while you evaluate the EA. Note that a pinned balance does not grow, so profits will not compound.

The other sizing settings

Setting	What it does
`maximum lotsize per trade (broker max still applies)`	A ceiling on any single position. The default of 999 effectively means no ceiling. Your broker's own maximum always applies as well.
`Use Equity Instead of Balance`	Sizes from equity rather than balance, so open profit and loss affect new positions. Default is off.
`OnlyUp`	When on, the sizing balance only ever ratchets upward: a drawdown does not shrink your position sizes. Default is on.
`Reset Highest Balance for OnlyUp`	Clears that high-water mark once, so sizing restarts from today's balance. Set it to true, let the EA start, then set it back to false.

`Reset Highest Balance on a withdrawal`	Automatically lowers the high-water mark when you withdraw funds, so sizing follows the smaller account. Default is on.
`CheckMargin`	Refuses a trade the account cannot support. Leave it on.

> **Small accounts**
>
> Every broker has a minimum position size, usually 0.01 lots. If your chosen risk works out smaller than that minimum, the EA has two choices: trade nothing, or trade the minimum and accept more risk than you asked for. On a small account this can mean the real risk is several times the figure you entered — and with eleven markets that adds up. If you are starting small, begin with fewer markets rather than a smaller `Max allowed TOTAL drawdown (%)`.

6. The three lotsize methods

Each market's `- lotsize method` offers three choices. They apply to that one market only, so you can leave ten markets on the default and change one.

Method	What it does
balanced (portfolio risk - recommended)	The default, and the one the portfolio was designed around. This market uses its own calibrated risk, scaled by your `Max allowed TOTAL drawdown (%)`. The market stays in proportion with the other ten. The `- fixed lotsize (manual lots)` and `- risk per trade % (risk per trade)` fields are ignored.
manual lots (uses Fixed lotsize)	Every trade on this market uses exactly the lot size in `- fixed lotsize (manual lots)`. It does not scale with your balance, your drawdown setting, or anything else. Useful for testing, or for holding one market at a deliberately fixed size.
risk per trade (uses Risk per trade)	Position size is calculated so that the distance to the stop loss costs the percentage of balance in `- risk per trade % (risk per trade)`. The figure is used exactly as you type it and is **not** rescaled by the drawdown setting.

> **The defaults in the risk per trade fields**
>
> Each market ships with a percentage already filled in — for example `0.22` for gold and `0.62` for ETHUSD. These are starting points that reflect how volatile each market is relative to the others. They are **only used if you switch that market to risk per trade**; on the default **balanced** method they sit unused.

Default risk per trade values

Market	%	Market	%	Market	%
ETHUSD	0.62	XAUUSD	0.22	EURJPY	0.12
USDJPY	0.36	GBPUSD	0.18	US500	0.09
BTCUSD	0.27	DE40	0.18	USTEC	0.09
		EURUSD	0.16	US30	0.16

> **Mixing methods changes the portfolio**
>
> The balance between the eleven markets is what `Max allowed TOTAL drawdown (%)` depends on. Switching a market to **manual lots** or **risk per trade** takes it out of that calculation, so the portfolio no longer targets the drawdown you set. Change one market and you are running your own portfolio, not the tested one.

7. Group Close

Close every open trade at once when the portfolio as a whole reaches a profit or a loss you choose.

Group Close looks at the combined open profit or loss of all Range Reaper trades across all eleven markets — not one market, and not one trade. It is off by default. All of its settings sit in the **Group Close - whole portfolio** group.

Setting	What it does
`Group Close: unit of the three values above`	**Set this first.** It decides whether the three figures below are read as money (**Currency**) or as a percentage of the balance being used (**% of balance used**).
`Group Close: combined open PROFIT that closes all (0=off)`	When total open profit reaches this, everything is closed. `0` disables it.
`Group Close: trail the profit target by this give-back (0=off, closes at target)`	Instead of closing at the target, start following the profit upward and close only when it falls back by this much from its best point. `0` means close at the target.
`Group Close: combined open LOSS that closes all (0=off, enter positive)`	When total open loss reaches this, everything is closed. **Enter a positive number** — write `300`, not `-300`. `0` disables it.
`Group Close: also delete all pending orders`	Pending orders are left in place by default, so the EA can re-enter straight away. Set this true to clear them as well.
`Group Close: stop trading after a group close`	By default the EA carries on trading after a group close. Set this true if a group close should be the end of the session.

A worked example

You want the portfolio to bank 2% of balance, but to let a good run continue:

- `Group Close: unit of the three values above` → **% of balance used**
- `Group Close: combined open PROFIT that closes all (0=off)` → **2**
- `Group Close: trail the profit target by this give-back (0=off, closes at target)` → **0.5**

Open profit climbs through 2% and the EA begins following it. It reaches 3.4%, then slips to 2.9% — a give-back of 0.5% — and everything closes.

> **A close is a market order**
>
> When a limit is reached the EA closes at the current market price. Between the moment it decides and the moment the broker fills, the price keeps moving — more so in fast markets, on a slow connection, or with eleven positions closing one after another. The final figure will usually be slightly past the number you set. If you need to stay inside a hard limit, set yours a little tighter than the limit itself.

8. Prop firm settings

Three optional limits, all off by default, in the **Prop Firm Settings** group. They are useful on any account, not only a funded one.

Setting	What it does
`Close all trades/stop trading at min equity`	An equity floor. If equity falls to this value, everything is closed and trading stops. Enter the equity figure itself, not a percentage.
`Close all trades/stop trading at max equity`	An equity ceiling, for stopping once a profit target is met — a challenge objective, for instance.
`Max Daily Drawdown`	A daily loss limit. When the day's loss reaches it, the EA closes its trades and stops until the next day.

> **Check what your firm actually measures**
>
> Prop firms differ in how they define a daily limit: some measure from the balance at the start of the day, others from the highest equity reached. They also differ on when the day resets, which is often not your broker's midnight. Set your limit **tighter** than the firm's and confirm the two reset at the same time, or a breach can happen while the EA still believes it is within its limit.

9. News filters

The EA can stand aside around scheduled economic releases, using the economic calendar built into MetaTrader 5. Settings are in the **News Filter Settings** group.

`UseMQL5Calendar` switches the calendar on, and `number of days to search forward in MQL5 Calendar` sets how far ahead it looks. Three individual filters can then be enabled:

Filter	Switch	What it covers
Non-Farm Payrolls	`EnableNFP_Filter`	The monthly US employment report
Interest rates	`EnableIR_Filter`	Central bank rate decisions
Inflation	`EnableCPI_Filter`	Consumer price index releases

Each filter has the same four controls, with `NFP`, `IR` or `CPI` at the front of the name:

- `NFP_MinutesBefore` and `NFP_MinutesAfter` — how long the window lasts either side of the release
- `NFP_CloseOpenTrades` — close any open trades before the release
- `NFP_ClosePendingOrders` — remove pending orders before the release

> All three filters are **off** by default. The strategies were tested with news trading allowed, so switching a filter on changes results in both directions: it avoids some bad trades and misses some good ones.

10. GMT settings

Several strategies measure their range at a particular time of day, so the EA has to know how your broker's clock relates to GMT. Brokers differ, and most shift by an hour with daylight saving.

Setting	What it does
`Detect the broker GMT offset automatically`	On by default. The EA works out your broker's offset on its own. Leave it on for live trading.
`Fallback GMT offset - summer (US DST)`	Used when automatic detection is off or unavailable. Default **3**.
`Fallback GMT offset - winter`	The same, for the winter months. Default **2**.

The defaults of 3 and 2 suit most European brokers. If yours is different, ask their support what server time zone they use in summer and in winter, and enter those two numbers.

> **In the Strategy Tester, set the offsets by hand**
>
> MetaTrader does not allow an EA to reach the internet while backtesting, so automatic detection cannot work there and the EA falls back to the two figures above. Before backtesting, switch `Detect the broker GMT offset automatically` to **false** and make sure the summer and winter offsets match your broker. Any error about GMT detection in a backtest log is expected and harmless.

11. The info panel

The panel on the chart shows the balance being used, the open profit or loss, and a line for each market with its position and result. It is the quickest way to confirm the EA is alive and which markets are active.

Setting	What it does
`ShowInfoPanel`	Show or hide the panel. On by default.
`update infopanel during testing`	Draw the panel during backtests too. Off by default, because drawing it slows a backtest considerably.
`Adjustment for Infopanel size`	Scales the panel. Use a value above 1 on a high-resolution screen where the panel looks small.
`Force Font Size (0=disabled)`	Overrides the automatic font size. Leave at 0 unless the text does not fit.

12. Backtesting

You can test Range Reaper in the MetaTrader 5 Strategy Tester, but a multi-market portfolio behaves differently from a single-pair EA and there are a few things to get right.

1. **Download the history first.** All eleven markets need price history, not just the chart symbol. Open each one in Market Watch and let the terminal download its data before you start.
2. **Set the GMT offsets by hand.** Turn `Detect the broker GMT offset automatically` off and enter your broker's summer and winter offsets, as explained in chapter 10.
3. **Choose "Every tick based on real ticks"** if your broker provides it. Lower-quality modelling gives optimistic results for strategies that work with ranges and pending orders.
4. **Expect it to be slow.** Eleven markets means eleven sets of data. The `Backtest Speed` setting offers **normal**, **efficient**, **fast** and **ultra fast** — the faster options trade some precision for speed. Start with **normal** for a result you intend to rely on.
5. **Leave the panel off.** Keep `update infopanel during testing` at false unless you specifically want to watch it.

> **Why your backtest will not match the published results exactly**
>
> Spreads, commission, swap rates, execution speed and symbol specifications all differ between brokers, and all of them affect the outcome. Expect your figures to differ. A test on your own broker's data tells you what the portfolio would have done **at that broker**, which is the number that matters to you.

13. Full parameter reference

Every setting, in the order it appears in the Inputs tab, exactly as MetaTrader shows it.

Licence

Setting	Default	Notes
`License Key (for non MQL5 version)`	empty	Leave empty for MQL5 Market purchases
`URL to Add`	tradewithwim.com	Add this to the allowed URL list
`- - -`	—	Two information lines reminding you where to add it

InfoPanel Settings

Setting	Default	Notes
`ShowInfoPanel`	true	Show the on-chart panel
`update infopanel during testing`	false	Slows backtests considerably
`Adjustment for Infopanel size`	1	Above 1 enlarges the panel
`Force Font Size (0=disabled)`	0	0 sizes the font automatically

Portfolio - markets

These five repeat for each of BTCUSD, EURJPY, GBPUSD, DE40, EURUSD, ETHUSD, US500, US30, USDJPY, USTEC and XAUUSD.

Setting	Default	Notes
`<market> - trade this market`	true	Switch the market on or off
`<market> - symbol name at your broker`	market name	Your broker's exact spelling, with any suffix
`<market> - lotsize method`	balanced	balanced / manual lots / risk per trade
`<market> - fixed lotsize (manual lots)`	0.01	Used only by the **manual lots** method
`<market> - risk per trade % (risk per trade)`	see ch. 6	Used only by the **risk per trade** method
`Comment on every trade (the market name is appended)`	RangeReaper	Appears in your trade history

Group Close - whole portfolio

Setting	Default	Notes

`Group Close: combined open PROFIT that closes all (0=off)`	0	Off at 0
`Group Close: trail the profit target by this give-back (0=off, closes at target)`	0	0 closes at the target
`Group Close: combined open LOSS that closes all (0=off, enter positive)`	0	Enter a positive number
`Group Close: unit of the three values above`	Currency	Currency or % of balance used
`Group Close: also delete all pending orders`	false	Pendings survive a group close by default
`Group Close: stop trading after a group close`	false	By default trading continues

Backtest Speed settings

Setting	Default	Notes
`Backtest Speed`	normal	normal / efficient / fast / ultra fast

Prop Firm Settings

Setting	Default	Notes
`Close all trades/stop trading at min equity`	0	Equity floor; 0 is off
`Close all trades/stop trading at max equity`	0	Equity ceiling; 0 is off
`Max Daily Drawdown`	0	Daily loss limit; 0 is off

LotSize Settings

Setting	Default	Notes
`Max allowed TOTAL drawdown (%)`	10	**The main risk dial** — see chapter 5
`Balance to size from (0 = real account balance)`	0	0 follows the real balance
`maximum lotsize per trade (broker max still applies)`	999	Effectively no ceiling
`Use Equity Instead of Balance`	false	Size from equity rather than balance
`OnlyUp`	true	Sizing balance only ratchets upward
`Reset Highest Balance for OnlyUp`	false	One-off reset of the high-water mark
`Reset Highest Balance on a withdrawal`	true	Follows the account down after a withdrawal

CheckMargin	true	Refuse trades the account cannot support

GMT settings

Setting	Default	Notes
Detect the broker GMT offset automatically	true	Turn off for backtesting
Fallback GMT offset - summer (US DST)	3	Used when detection is off
Fallback GMT offset - winter	2	Used when detection is off

News Filter Settings

Setting	Default	Notes
UseMQL5Calendar	true	Use the built-in economic calendar
number of days to search forward in MQL5 Calendar	70	How far ahead to look
EnableNFP_Filter	false	Non-Farm Payrolls
NFP_CloseOpenTrades	true	Close open trades before the release
NFP_ClosePendingOrders	true	Remove pendings before the release
NFP_MinutesBefore	50	Minutes before
NFP_MinutesAfter	30	Minutes after
EnableIR_Filter	false	Interest rate decisions
IR_CloseOpenTrades	true	Close open trades before the release
IR_ClosePendingOrders	true	Remove pendings before the release
IR_MinutesBefore	60	Minutes before
IR_MinutesAfter	120	Minutes after
EnableCPI_Filter	false	Inflation releases
CPI_CloseOpenTrades	true	Close open trades before the release
CPI_ClosePendingOrders	true	Remove pendings before the release
CPI_MinutesBefore	60	Minutes before
CPI_MinutesAfter	120	Minutes after

14. Troubleshooting

When something is wrong, the first place to look is the **Experts** tab at the bottom of the terminal. The EA writes there when it starts, and that is where it reports a symbol it cannot find or a licence it cannot verify.

Nothing trades at all

- Is the **Algo Trading** button in the toolbar green?
- Is there a smiling face in the top-right corner of the chart? A sad face means the EA is not permitted to trade.
- Did you tick **Allow Algo Trading** when you attached it?
- Does the **Experts** tab mention the licence? If so, check `URL to Add` is in the allowed URL list.
- Range Reaper waits for a range to form and then for a breakout. Quiet days with no trades are normal.

One market never trades, the others do

- Check that market's `- symbol name at your broker` against the spelling in Market Watch, character for character.
- Make sure the symbol is actually visible in Market Watch, not merely available.
- Check that market's `- trade this market` is set to true.

Position sizes look too small

- Most often the account is small enough that the calculated size falls below the broker's 0.01 minimum. See the note in chapter 5.
- Check whether `Balance to size from (0 = real account balance)` has been left at a small figure.
- Check the market's `- lotsize method` has not been switched to **manual lots** with a small fixed size.

Position sizes look too large

- Check `Max allowed TOTAL drawdown (%)`. It is a percentage: 10 means 10, not 10 times.
- Check you have not attached the EA to two charts.

A GMT error in the log

- In a backtest this is expected — MetaTrader does not allow internet access while testing. Set the offsets by hand as in chapter 10.
- On a live chart, make sure the URL list under **Tools → Options → Expert Advisors** is correct. If detection still fails, the EA falls back to the summer and winter offsets you set, so trading continues correctly as long as those two figures are right for your broker.

The panel is too small or too large

- Adjust `Adjustment for Infopanel size`, and `Force Font Size (0=disabled)` if the text still does not fit.

Still stuck?

Send a screenshot of the **Experts** tab along with a screenshot of your **Inputs** tab. Those two together answer most questions immediately, and save a long exchange of messages.

Risk warning

Trading leveraged products carries a high level of risk and can result in the loss of all of your capital. Past performance, whether in live trading or in backtests, does not indicate future results. Never trade with money you cannot afford to lose, and make sure you understand the risks before using any automated system.