

88 Guide by slithy

Introduction

The 88 is the premier anti-tank weapon in WWIIOnline. In the hands of an expert, it can enforce local tactical superiority for the Axis and utterly reverse the flow of battle. This guide is intended to show you how to become such an expert.

Natural talent plays a part in every endeavour. The qualities important to an 88 gunner are these: patience; intelligence; planning, calmness. Of all these qualities, patience is the most important, although all play a part. Cultivate patience first and all else will follow.

Towing

Learning to tow is the first step a beginner should take. You will learn more from a week of towing than a month of gunnery. You will also build up a reservoir of goodwill that will help you when YOU need a tow.

When towing, you will meet gunners of varying quality. You can learn as much from the poor ones as the good ones - if you see the same individual asking for tows every 5-10 minutes, observing where he positions himself will teach you where *not* to setup, which is as important as where *to* setup. Good gunners will direct you to their favourite spots in an area - remember them (or better yet, write them down)! Don't be afraid to ask questions - you are doing them a favour by towing, and most people will respond in kind by doing you a favour in return, especially if it is as simple as answering your query.

You will quickly learn about the dangers that will confront the 88 gunner - planes will take especial delight in strafing you, tanks will ignore all other threats to shoot at you, and infantry will run through bullets to throw grenades at you. Nothing draws fire like an 88 in transit, and as the puller in that pair, this will teach you caution as no words I could say would do.

When you tow, your halftrack will start in one of two locations - the barn in an armybase in town, or a camouflaged tent at a forward base. It usually takes a few seconds for all nearby people to load into your view, so wait a few seconds before doing anything. Start your engine and then drop your windscreen - it does practically nothing to stop even small-arms fire, and merely gets in the way. (Note - practice driving OFFLINE first, and ensure you map your keys to something you are comfortable with. Mapping the keys is outside the scope of this document, but ensures that you do it for ALL the vehicles you intend to use, as well as infantrymen).

Look all around and above you before doing anything else, and listen to what is happening at the same time. If you see enemy aircraft buzzing around, or hear tanks firing continuously, it should affect how you intend to proceed. Read what people are saying, and once you are sure you know what the situation is, then you can proceed.



Sometimes you will spawn in right on top of an 88. Look for his tag, and ask him if he wants a tow. Otherwise, see if an 88 is waiting in another bay. Use your rearview key (DEL is the default, but you've mapped it, right?) to see directly behind you if you need to back up to get him hooked. Try to back straight in if you can - you will need to pull out straight, as if the 88 hits an obstacle, he will fall off your tow.

You hook up by simply pushing the rear of the halftrack into the front of the 88; the 88 gunner must put his weapon in "tow" mode, usually by pressing T (for tow). When a connection is made, you will see the 88 sway forward and back in an unmistakable and characteristic manner. Put your machine in gear, and slowly increase throttle, so as not to jerk your tow (not that you will usually lose him by doing so, but it is good practice nevertheless).

In an armybase (AB hereafter), there are often obstacles you must negotiate before you can leave. The slower you go, the more closely your tow follows, so delicate manoeuvres are best done in 1st gear at 1/2 throttle or less. Still, as you grow proficient you can pull off more skilful manoeuvres, so don't be afraid to speed up a bit as you get better and better.

CONSTANTLY check your six! You can lose your tow when he hits a patch of bad ground, or you drive too fast for the terrain, or lag causes one of you to lose packets, or you turn too sharply, or the slope is too great... You must always be aware of what is going on with your tow! Experience will teach you how to keep an 88 on your tail at the highest possible speed, and this will help you to separate the good towers from the bad when you are on the other end of the hitch.

As a rule of thumb, rough ground lets you go in first gear, rails (don't travel on these if you can help it!) can go between 1st and 2nd gear, normal ground can go in 2nd gear, and roads can go in 4th gear. Hills, depending on the steepness, can add or subtract a gear or two - and some hills cannot be climbed. Since you usually want to go UP hills to get to a good spot for your 88, this can present problems.

Climb steep hills slantwise if you can - pick a point where you want to go and approach it from a 45 degree angle across the slope. Severe slopes will sometimes cause you to lose your tow even if you are still progressing - if you are watching, you will see him lag back a bit, then jerk forward, and sooner or later he will lag and just fall off instead of jerking back. Drop your speed even more until you are either not progressing (in which case you'd best rethink your destination) or this behaviour ceases.

Once you get your 88 to the spot he'd like (or the spot he asked you to pick, if he doesn't have any idea of his own), make sure he looks around before you leave. Ask him to confirm that this is where he wants to go, and move him if necessary if it isn't. Then get out the area as fast as you can - you are much easier to see than he is, and you want to be nowhere nearby if an enemy happens to spot you.

Lastly, remember to ALWAYS choose a mission when you tow, and wait at least 10 minutes before despawning - mission successes as a tower add up quickly, and you *will* gain rank. As an example, my towing account "shabby" was a major after six weeks of almost exclusively towing me around!

Beginner

Ok, you've done your week of towing (although now you ALTERNATE - tow someone, then ask for a tow, etc) and you think you know a bit about where to situate yourself, how to avoid and evade the enemy enroute, and now you're ready to try to do some damage. Because you can't practice the 88 offline very well (can't push it out of the garage), you might as well jump in and get some kills (if you can).

From your experiences in towing, you should have a good idea of where the action is - so pick a likely town for defence, decide where you will want to be set up, and spawn in. Ask for a tow, be polite, but if you don't see any results within five minutes (remember: patience!), then spawn out and go somewhere else - that is, unless you have another 88 there, then tow him, and ask again and usually someone will oblige. Remember to tell your tower where you want to go, and guide him if it seems as if he needs it - but always remain polite, keep on building that goodwill that the 88 gunner relies upon!

Once in place, your first task is to learn to identify targets and shoot.

You have 2 members of your 88 crew - #1 (press 1 to choose) who is the observer, and #2 (press 2) who is the gunner. BOTH are important - you should be spending most of your time in the #1 position, only going to #2 when you either want to shoot something or you want to realign your gun in another direction.

#1 has very powerful binoculars. He turns very quickly (compared to #2, who is slaved to the barrel), and does not draw attention by moving the gun around. He can see almost 360 degrees, although the gun barrel will block his vision in one direction - which means you position the gunbarrel otherwise if it is a way you must see. Most importantly, he determines the range of your targets, which, coupled with #2's ability to elevate and lower the gun to precisely compensate for that range, makes your gun so deadly accurate.

When you zoom in and look thru his binoculars (you must be DEPLOYED (default D when in #1 position ONLY) to do so) you will see a cross-hair, which you want to place onto a target. Press R and wait a few seconds; the range will be determined and be printed in the chat window. You can move the view freely while this is going on, or even switch to #2 and align yourself to the same spot the observer was viewing. You can even press R again before the 1st calculation is done, and force a new calculation!

#2 fires the gun (again, only if deployed), and has a view through a gunsight which is also zoomed, although only about 1/2 the power of your observer. He also controls the elevation of the gun (press ~ to see the rangemeter in the top left corner of your screen), using the range up and range down keys (which, again, you have mapped to something that works for YOU). The rangemeter is very sensitive, and it will take some time to get reasonably accurate with it, so don't give up if it seems almost impossible at the beginning to get it right. Generally if you are within 20 meters it is good enough, and within 50 meters only a very slight adjustment of the crosshairs is necessary anyway. However, very small targets at long range, such as enemy AT guns, infantry, or hull-down tanks require you get it perfectly, so keep practicing.

Your gun will not shoot directly at the crosshair, as it is not boresighted. It will ALWAYS shoot off of the sight, all the way out to the end of the gun's range. You start out shooting well left of the sight, and past 1400 meters or so it drifts further and further right. Convergence is around the 1100-1300 meter range. At very close range the effect is most noticeable (making it very difficult to hit, for example, infantry at close range). Only experience will show you how far at each range this is; but if you do not understand this you will be endlessly frustrated with the "inaccuracy" of the gun.

Height has no effect on accuracy; the range is the range and will always be correct whether the target is above, below, or on a level with you. However, slope does have an effect - if you are canted in a certain direction relative to your target, your shell will fall some ways in this direction. At medium and long range, this can turn a direct hit into a near miss, so you must carefully observe the fall of your shot and correct your aim if this occurs.

Bearing all this in mind, let's go over the basic steps you should take for successful gunnery.

1. Acquire a target using #1 position.
2. Put your crosshairs on the target
3. Calculate the range.
4. Note the compass heading you are facing, then switch to #2 while the range is calculated
5. Move the gun to the facing you noted, and reacquire the target
6. Adjust the rangemeter to the correct range.
7. Switch to #1 and reacquire with #1
8. Switch to #2 and use the crosshairs to mark the target, taking into account possible slope sideslip of the shell, and the sight convergence of the barrel/optics.
9. Fire your shell
10. Quickly switch to #1 and observe the results
11. Repeat steps 8 - 11 until the enemy is dead or moves enough to force you back to step #1.

This seems very complex, but repetition will enable you to do perform the whole sequence in mere seconds once you have practiced enough. The most difficult part is reacquiring the target; which is why it is very important to precisely note the compass heading before switching positions.

If you are at ranges of 1000 meters or less, it may not be necessary to use #1 at all, except for the initial target acquisition and range determination. If you calculate the ranges to various likely killing grounds in advance, you may not even need to do that much, and may wish to simply move your gun around the expected killzone until someone wanders into it. However, this is the exception and not the norm - you generally want to engage targets from 1350-1750 meters if you can (far enough that they have little chance of seeing you by accident, yet close enough that you will make all your shots count), and you want to be in a position where you can see large areas of ground, not a narrow field.

After you are certain of your proficiency in hitting stationary targets, you may wish to try your luck at moving targets. Instead of calculating the range to the vehicle, pick a spot ahead of its path and range that, then wait for him to approach that spot. At long range, a fast target such as a S35 or Bedford may have time to go two or even three body-lengths while your shell travels, and certainly even the best gunner cannot hope to hit moving targets at such ranges every time. Still, there is nothing like tagging a zigzagging truck and watching it burst into flames with one shot, and certainly there are times when hitting a moving target may save yours or another's life.

Shoot for the main body of the enemy, not the turret. If you miss the turret, you miss completely. If you miss the exact part of the body you aim for, there is still a good chance you will hit another part of the tank. Save the precise shots for close range or when you are very experienced; your shells are extremely powerful and will do damage almost anywhere on your enemy, although some parts are better than others (see the APPENDIX to this document).

Once you become proficient at gunnery, you have mastered all the "twitch" skills you will ever need. However, there is much more to learn on the thinking side of the art.

Intermediate

You have only 40 armor-piercing and 15 high-explosive shells. Use them foolishly, and you will spend more time in transit, which equates to more deaths, more frustration, and more non-productive time. Use them wisely, and you will have the satisfaction of running out of targets before running out of shells.

Your mantra must be: ONE HIT, ONE KILL. Obviously this is almost impossible, but it is the ideal to strive for. Achieving it requires, again, patience above all else.

Overcome the natural desire to destroy everything you see as quickly as possible. You may see a target 1900 meters away, just peeping over a hill and surveying the situation before moving on. If his path will bring him closer - do not fire! You may see a charging tank that is quickly disappearing behind a ridge where you will not be able to shoot him - hold your fire! One shell wasted may not seem like much, but bad habits mean that you will waste many shells over one sortie, and prematurely end your expedition.

Further, every time you take a shot, you risk giving away your position. Very rarely does one shot give you away, except in general direction - the enemy has to be practically looking right at you to see you shooting (given that you are in some concealment, to be discussed shortly). Be assured that the sound of an 88 is familiar to your enemy, and when he hears it he looks for its source immediately. Even if you cannot see any enemy armor, an alert infantryman whom you have no chance of seeing may be able to give an approximate fix to all the nearby enemies, if you insist upon shooting at everything you see. The natural human inclination is to look around the area where you "thought" you saw the fire come from - if nothing else comes from that direction, the next natural inclination is to think you were wrong and start looking around elsewhere. This second inclination is the one you want to cultivate!

Remember - if they see you, it is only a matter of time before you are dead. If they don't see you, only luck (such as deciding to use your location as a staging area for an infantry assault!) will bring you down. One shot - one kill - always after deliberate calculation of the odds of getting a kill vs being spotted. If the odds don't come out heavily in your favour, hold your fire. A pilot's maxim (slightly modified) is appropriate here: "There are old gunners, and bold gunners, but there are no old bold gunners."

Camouflage is your ally in remaining an unseen and deadly threat. Your first consideration when choosing a spot to fire from should be, "how well am I concealed from enemy view?" Treelines are your best friend, with grasslines and bushes also being useful acquaintances. Trees with parallel grasslines are best of all.

If you can, sit directly in front of the trunk of a tree. The background breaks up your silhouette, and means that casual scans of the terrain will likely miss you even at medium ranges. Grass sometimes blocks your view, but if your tow is very good, you can sometimes sit with at least two of your wheels (the easiest part of you to spot) behind the grass, and hidden. Sitting in front of a bush, or even partially within it, is also excellent cover, however, you usually have to be on at least a moderate slope, as bushes come in fields and may block much of your vision around you..

There is always a compromise between how far you can see, and how far you can be seen. High up on a hilltop, you may see an entire valley laid out before you; conversely, anyone can see YOU at the same time. If you know the terrain well, often a good alternative is to sit so that you can see a limited area, and are screened from the direction that the enemy is likely to come. Ideally, you are set off to the side of the direction of travel from enemy forward base to your base, or on offense, you are looking from a direction that the enemy perceives as "safe" or "rear". Your targets present their side profile to you as they pass across your killing zone, and have no chance of seeing you until they enter this zone. If you have chosen your spot well, and overlook a high traffic area in this way, you can be very successful with very small risk.

Most difficult to pull off is the reverse ambush. This is where you are firing at the rear of enemy units as they pass by you. Usually this is a short-range tactic, and is dangerous if not done correctly. If you notice a pattern where enemies always travel through a chokepoint in the terrain (example - a road along a river, with a steep hill to the landward side where the road is the only practical route), there may be a place where you can sit and remain unseen until the enemy is well past your position. The corresponding disadvantage is that if you are hidden well, it is possible that someone may be trying to avoid the chokepoint route and comes

upon you from your rear, and you die before even knowing anyone is there. Still, it is worth keeping in mind and looking for such opportunities if they arise.

Expert

With gunnery, camouflage, and planning skills on your side, you can wreak devastation on the enemy armored units that oppose you. However, you can do even more damage with your binoculars than your gun.

Good reconnaissance divides the pretenders from the elite. Your eyes roam all over the battlefield, and see farther and more clearly than any other can. Get into the habit of calling out enemy threats, even before you go to engage them. Especially watch out for enemy infantry and trucks, and AT guns that are setting up to kill your panzers.

On offense, you can direct your forces to where the enemy defense is weak or non-existent. On defense, you are even more important, for you can give the information that is critical to dug-in defenders to anticipate attacks.

Be clear but brief in your communications. Use CAPITALS for people's names, and cities. For example:

"COUVIN bedford NW of AB inc to W gate!"

"LAUNOIS s35 S of town 1 KM out"

"WLDILLON char your ten o'clock hulldown 400 m away"

"SIGNY 4 ET 1 Bedford 1 AT approaching W road 2 km out"

"CHIMAY 2 AT spawned S garage GRAZI watch six!"



Alone you can only do so much. No one captures a town with his 88, nor does setting one up to defend a town stop determined infantry. Keep your allies informed!

Shooting bedfords is an art far more difficult than killing tanks. They move faster and pull quick evasive manoeuvres that tanks never do. They also do not stop until they get where they are going, which means if you shoot them then, it is usually too late, as they have dropped off their infantry already.

Your primary focus should be killing armor, but you have 15 HE rounds that do little against most allied armor (exceptions - HE to the char's grille or through the driver's slit on any tank, or the A13 which can be torched with HE to the side), but are ideal for bedford busting. As soon as you see the bedford, switch to your gunner and use your mapped key to change ammo type. If the bedford is moving towards a predetermined range point you have set up, you are lucky, but usually you have to make a guess at the range very quickly and adjust the gun on the fly.

Take two shots; your first with the AP and the second with HE (change ammo after the first shot so you do not have HE still loaded for the next tank!). Your AP round still has an HE filler, and a direct hit will flame the beddie, and even an indirect splash will damage it. Your HE round will obliterate it, if it hits, and probably kill it if you are close. Take your shots quickly, adjusting your 2nd shot after you see the first one hit - you want to be firing as soon as the reloading sound ends. Aim ahead and below the bedford - he is driving INTO your fire and usually is going fast enough for this to make a considerable difference in how much damage is done, and the lower you are, the better the chance the gastank will catch fire (it is under the truck on the side). Few sights are more satisfying than a bedford with flames shooting out of it as it careens into a tree!

Infantry are the toughest targets of all. Always use HE and shoot at their feet; unless you are in "sniper" mode looking into an AB, when it may be possible to range a static defender, and put AP thru his head (although this is more of a show-off move than anything, still it makes for amusing screenshots). At close

ranges where your target is dodging, you have little chance of hitting him, but keep firing once you commit, because your cover is blown in any event. Don't make the error of forgetting to change the gun's range before shooting at an attacking infantryman; it is easy to panic when you hear the pinging of bullets off your 88, but only thru keeping a cool head can you win this unequal contest.

Use your view keys to find attacking infantry, don't swing your gun around until you find them. (Usually this is mapped to the hat on your joystick). If you see infantry nearby that do not see you, sometimes it is better to let them go than draw attention - call out for friendly assistance instead.

Enemy AT guns are very small targets, however, essentially they can be treated as unarmored tanks. Either AP or HE works to kill them, punching right thru the gunshield easily. Take them out whenever you see them, for they are dangerous to our panzers, and their binoculars can seek you out as well if they are ignored.

Uber

2 accounts, one for towing, one for shooting. This is the only way to truly control where you are placed, how you will get there and how you will get back (although if you are within a km or so of a base, you often get a mission success and "rescued", so personally I never bother returning). With 2 accounts, you can travel from an uncontested town to a contested one for defence, or from an AB to an enemy city under attack in order to approach from an unexpected direction, or wherever you want to go limited only by your time.

Obviously this is not for everyone, but if you are truly dedicated to the art of 88 gunnery, it is the way to go. Your 2nd account is also good for checking the gamemap and seeing what is happening in towns around you, and especially for watching forward bases in the area you are working.

Although you cannot move the 88 without a tow normally, if you are on a steep enough slope it IS possible to roll to another position, if your wheels are pointed downslope. With some foresight, you can set up above a second line of trees, and roll there if you are spotted, thus perhaps evading notice from the returning enemy bent on vengeance.

Sitting behind trees is even better camouflage than sitting in front of them. Your view may be severely limited, but sometimes it can be worth it to be completely hidden; if there is grass on the other side of the trees, and your wheels are obscured, even your fire may not give you away unless someone comes right up close to where you are first. It is rarely that this is so, but is still useful to consider for the right occasion.

Placing your shots exactly is the pinnacle of gunnery. Screen resolution is the key to this; anything less than 1280X1024 is not enough at the ranges recommended for engagement. Unfortunately, like having 2 accounts, this option is not available to everyone. Using your binoculars, even at the end of the gun's range you can see the tiny black holes that mark where your shell has landed. Even with precise aim, there is a small amount of scatter you will see if you do this. Still, putting a round into the turret will kill the gunner 99% of the time, if you are good enough to guarantee a direct turret hit this is the place to shoot.

Shooting planes is far more difficult than you would think, given that the 88 was originally anti-aircraft artillery. However, you do not have the right shells for this work, and must score directly on an enemy plane to kill it (and if you DO hit it, it WILL die - an 88 shell knocks anything out of the sky). Usually your best shot is if a plane is coming directly at you - calculating range and deflection at the speeds of aircraft is almost impossible, especially when your gun slews around far too slowly to track any plane at short range. Often it is pointless to even try, but if the plane is coming to strafe you, you may be able to give him a surprise he won't much enjoy.

Use your view keys to identify the direction of strafing planes, and then swing the barrel of your gun into alignment. Drop your rangemeter down to the bottom (10) and aim very slightly above the enemy, as you shell doesn't drop much and he will be flying into it, in any event. Centre on his cockpit, and let fly when he gets to be around 3 or 4 times as wide as your crosshair. If you hit, he won't bother you anymore and if you're quick you can snap a very nice screenshot.

Sometimes a dogfighting plane will pass by very closely, and expose a huge profile to you. If you are very quick on the reflexes, a snap shot will bring him down, but remember to lead your target considerably and eyeball adjust for range. Again, these tactics (except for the strafing planes in extremity) are not really recommended for any but the best 88 gunners, and even then you will much more likely than not be wasting ammunition. Still, nothing impresses the troops more than a burning Blen!