



Myanmar Small Arms and Light Weapons Identification Guide

Version 1.0

Myanmar Witness

23 November 2022







Executive Summary

This guide has analysed open sources of information, ranging from leaked military documentation to user-generated content (UGC) across social and broadcast media platforms, to identify and verify specific small arms and light weapons present across the conflict in Myanmar post February 2021 Coup. Particular focus has been applied to those small arms utilised by military and police forces under the command of the State Administration Council (SAC). The armaments considered as small arms and light weapons are consistent with those listed by the United Nations Register of Conventional Arms.¹

Very few analysts have published articles focusing on the weapons documented in this guide, with such pieces lacking the specificity and breadth present within the report. These pre-existing contributions have been duly verified and credited in this guide, which categorises and expands the array of models to allow this analysis to be more comprehensive for identification purposes. The lack of information about weapons in Myanmar necessitates this guide and makes it a logical step in ongoing efforts to improve accountability for the conduct of the Myanmar military, police and other armed forces within the country.

By focusing on the small arms and light weapons identified and verified as being in use throughout the conflict in post February 2021 Coup Myanmar, this guide serves as a valuable resource for journalists, academics, those working toward accountability for international crimes and an array of other fields. This guide has been developed with the belief that it will provide greater clarity on the tools and techniques used across this conflict.

¹ https://www.unroca.org/about





About

This guide was produced by Leone Hadavi, Team Leader of the Myanmar Witness Arms Unit.

Myanmar Witness uses open-source investigative techniques to identify, analyse, verify, document and report on instances of alleged human rights abuses and violence in post February 2021 Coup Myanmar. It is managed by the Centre for Information Resilience (CIR) in close partnership with a network of civil society and media actors from Myanmar and the surrounding region. Myanmar Witness is funded by the UK Foreign, Commonwealth and Development Office (FCDO), and the Australian Department of Foreign Affairs and Trade (DFAT).

This guide is not definitive nor complete. Many other small arm types and makes are still being reviewed and analysed. This guide, Part 1, explores the majority of small arms commonly fielded by Myanmar's police and military. Subsequent editions will analyse additional small arms models, ammunition and other types of ordnance, as well as military and police vehicles, alongside other key assets often used in connection with human rights violations.

Version History

This guide is subject to change based on the evolving information environment and potentially new, more authoritative sources emerging.

Refer to the latest version available at: myanmarwitness.org

Version	Date	Description and notable changes/additions
1.0	23 November 2022	Initial public release





Table of Contents

	Executive Summary	2
	About	3
	Version History	3
	Table of Contents	4
	Objective	5
	Methodology	6
	Glossary of Key Terms	10
	Weapons in Myanmar	11
1.	H&K (Heckler & Koch)-styled	11
	Name/Model: BA-63	11
	Name/Model: BA-64	13
	Name/Model: BA-72	14
	Name/Model: BA-100	15
	Name/Model: MA-11	16
	Name/Model: MA-12	18
2.	Uzi-styled	20
	Name/Model: MA-13/BA-93	20
	Name/Model: BA-94	22
3.	AK-styled	24
	Name/Model: MA-1 (data for Mk. I model)	24
	Name/Model: MA-2 (data for Mk. I model)	27
	Name/Model: MA-3 (data for Mk. I model)	31
	Name/Model: MA-4 (data for Mk. I model)	35
	Name/Model: MA-S Mk. I	40
	Name/Model: MA-S Mk. II	41
	Name/Model: M16	43
4.	General-Purpose Machine-Guns and Heavy Machine-Guns	47
	Name/Model: MA-15	47
	Name/Model: M-2 Browning	48
5.	Grenade Launchers	49
	Name/Model: MA-10	49
	Name/Model: 40MM Single Grenade Launcher	52
	Name/Model: SJ-104	54





6. Grenades and Rocket-Propelled Grenades	57
Name/Model: MG-1	57
Name/Model: MG-2	58
Name/Model: MG-3	62
Name/Model: MG-4	63
7. Rocket-Propelled Grenades	65
Name/Model: MR-1	65
Name/Model: MR-2	67
Bibliography	70

Objective

This identification guide is designed to provide investigators, analysts, and other professionals documenting alleged violations of international law in Myanmar with a simple yet functional tool to identify the weapons used in the conflict. This identification guide applies a granular level of analysis on weapons used within Myanmar, drawn from the investigative work of Myanmar Witness, which can be exploited to enable greater accountability for alleged violations. Correct identification of weapons can assist in the attribution of alleged events to specific parties, allowing historical use of a specific arm by a specific group to provide insight into ongoing and future investigations.

This guide is not intended to describe the historical/industrial processes behind weapons programmes, their production and/or procurement. Nor does it present and describe the entirety of the arsenals available to the forces involved.

Due to the complexities of Myanmar's governmental-military relationship, alongside the presence of multiple de-facto authorities and armed groups currently operating across the country, information about the arms used by both the military and armed groups is disparate, disjointed, and largely obscured. International sanctions and isolation have driven the Myanmar defence and security sector to pursue greater self-reliance, resulting in the domestic manufacture² of a wide array of small arms and light weapons. The Myanmar military and police forces are largely equipped with these domestically produced weapons, and their use has continued to be widely documented since the 1 February 2021 coup, as detailed in this guide. These models are the main focus of this guide (Part 1).

As Myanmar Witness continues to proactively monitor and investigate the events unfolding in Myanmar, it is expected that additional parts to this guide will be released.

²https://web.archive.org/web/2/https://www.griffith.edu.au/ data/assets/pdf_file/0017/118313/Regional-Outlook-Paper-49-Selth-web.pdf





Methodology

This guide has drawn on a wide array of sources, non-exhaustively including social media posts, user-generated content (UGC), blogs, and photographic/video material obtained via direct submissions. These sources were analysed to evaluate weapon presence and use in Myanmar, then cross-referenced with pre-existing documentation of weapons in other contexts. Ultimately, the inclusion of a specific arm in this guide required it to have been observed and independently verified in analysis conducted by Myanmar Witness (vis-à-vis collected open-source evidence depicting conflict related events within Myanmar).

In some cases, official documentation has been utilised to support the production of this guide, namely two updated .pdf files:

- "Myanmar Army Small Arms" guide; and
- "List of Equipment of the Myanmar Army"

Additionally, a document labelled as "Confidential, For Internal Use Only":

- "2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9)"

This documentation was obtained by Myanmar Witness through trusted media partners and contains precise information on arms models and ammunition types used by the Myanmar military and police force.

Images, translations and copies of the aforementioned documents can, for research purposes, be provided. Please contact Myanmar Witness via Investigations@info-res.org for more information.

The mentioned official documentation has provided extensive detail for some of the models included in said reports. This guide is as exhaustive as possible, but complete specifications were not available for every model. Some of that data – which may be very precise for some models and completely absent for others – includes measurements, weight, effective and maximum ranges.





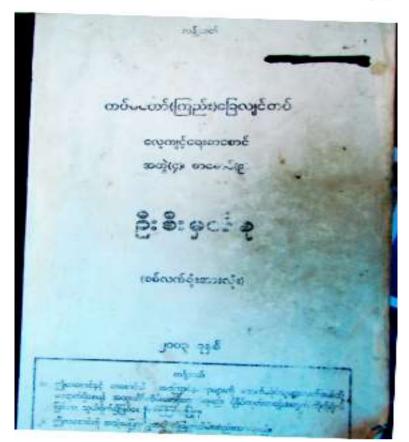


Fig 1: The first page of: '2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9); Confidential, For Internal Use Only'

Even though no unverified content subject to independent analysis and observation has been included in this guide, the specific details provided by the official documentation mentioned above is sometimes conflicting to the point of being incompatible and impossible to verify with precision. Therefore, this guide will use the "Myanmar Army Small Arms" guide as its primary source, given that it is an original .pdf file which has not gone through a translation process. The data contained in the other two sources will be mentioned nevertheless, and where inconsistencies arise, outlined in the footnotes.

Each model included in this document is described in relation to aspects which can assist in its correct identification, alongside photographic material highlighting its key components. In this regard, the author has grouped similar models – and provided analogies throughout the guide – according to the more well-known (and searchable) weapons that the domestically produced weapons resemble.

Each model's Distinguishing Features and Additional Details will highlight the key aspects to identify a particular weapon and distinguish it from others. Such analytical description will focus primarily on the key components of each firearm, following the **ReStHanBa** acronym, which will guide the reader's focus on the main key components: **Receiver**, **Stock**, **Handguard**, and **Barrel** (which will be applicable to most, but not all models present in this guide).

ReStHanBa can be used to remember the key identifying features of a weapon.





Fig 2: Extract from 'Inside the UK's unknown arms trade', Sky News

- The Receiver is the key functioning component of a rifle. It contains the firing mechanism and hosts the trigger, magazine slot and ammunition ejector for spent casings;
- The Stock is the part of the gun that sits on the shooter's shoulder when firing;
- The Handguard is a large component encasing most of the barrel. It is often threaded with holes or employs materials which allow the barrel not to overheat ro the shooter's hand not to be burnt;
- The Barrel is the final component, which ejects and impresses speed and trajectory to the bullet.

Additionally, this guide provides information about the ammunition used by each model, since:

- i) a non-standardised and independent small arms production sector inspired by different foreign models and, at times, foreign support, has employed inconsistent and non-harmonious ammunition policies; and
- ii) the identification of ammunition from possible crime scenes / locations of alleged violations provides significant information about the weapon employed, hence, the probable culprit.





Where several variants of the same weapon are described, details and specifications pertain to the first, basic model, unless otherwise indicated. Where sources differ on specifications, this will also be highlighted as a footnote.

Due to reasons of space within this document, and in order to obtain the best and most complete view over the different sides and components of each weapon, the photographs used in this guide have often been optimally cropped and rotated.

Additional sources have been used to support and further verify information in this document as well as to provide additional images. Much of this content comes from social media, some of which was deemed too sensitive to cite due to personal information becoming identifiable. Where this applies, sources have been redacted from the document.





Glossary of Key Terms

Acronym	Term
ВМС	Browning Machine Gun
DDI (or KaPaSa)	Directorate of Defence Industries
EAO	Ethnic Armed Organisation
GPMG	General-Purpose Machine-Gun
HE	High Explosive
HEAT	High Explosive Anti-Tank
HEDP	High Explosive Dual-Purpose
нмс	Heavy Machine-Gun
KNDF	Karenni Nationalities Defence Forces
LMG	Light Machine-Gun
RPG	Rocket-Propelled Grenade
SOF	Special Operation Forces
STANAG	NATO Standard Agreement
UBGL	Under-Barrel Grenade Launcher





Weapons in Myanmar

1. H&K (Heckler & Koch)-styled

Due to design patterns replicating those of German arms manufacturer Heckler & Koch, including weapons based on the G3 and HK33.

Name/Model: BA-63 ³		
Ammunition/Calibre:	7.62x51mm	
Weight:	4.38kg, with loaded magazine 4.64kg	
Length:	1018mm	
Range:	300m (effective)	
Magazine:	20 rounds	
Manufacturer:	DDI / Ka Pa Sa (Myanmar)	
Distinguishing Features:	 Local copy of G3 rifle Furniture: wood (light or dark) or black polymer (A2 version) 3+3x2 dots pattern on handgrip 	
User:	Standard issue rifle for police forces	
Additional Details:	Early models display the German "S", "E", and "F" markings on the fire selector. The right side of the trigger house typically has markings in Burmese. Rear sights differ from G3, BA-63 uses simple flip-up sights set to 100m and 300m	
Sources:	1, 2, 3, 4, 5	
Example Images		

³ Main reference for BA model statistics derives from **2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9),** with notes that another source, **List of Equipment of the Myanmar Army**, does have some differing statistics on BA models that appear to be inconsistent. The statistics state: Weight: 4.33kg, with loaded magazine 4.94kg, Length: 1020mm, Range: 300m, and Magazine: 20 rounds.







[BA-63 with dark wood furniture]



[BA-63 with light wood furniture]



[BA-63s]



[BA-63 A-2 version, with black polymer furniture]





Name/Model: BA-64 ⁴		
Ammunition/Calibre:	7.62x51mm	
Weight:	5.7kg, with loaded magazine 5.95kg	
Length:	1020mm	
Range:	600m (effective), 1200 (maximum)	
Magazine:	20 rounds	
Manufacturer:	DDI / Ka Pa Sa (Myanmar)	
Distinguishing Features:	 LMG model derivative of BA-63, but with heavier barrel rearwards-collapsible bipod attached below front sights extendable rear sights Top pivoting carrying handle, which can be mounted to both right and left sides 	
User:	Police, possibly not exclusively	
Additional Details:	Dark steel perforated handguard	
Sources:	1, 3, 4, 5	



⁴ Main reference for BA model statistics derives from **2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9)**, with notes that another source,: **List of Equipment of the Myanmar Army**, do have some differing statistics on BA models that appear to be inconsistent. The statistics state: Weight: 5.8kg, Range: 1200m, Magazine: 20 rounds.







Name/Model: BA-72 ⁵	
Ammunition/Calibre:	7.62x51mm
Weight:	3.85 kg, with loaded magazine 4.62 kg
Length:	902mm
Range:	300m (effective)
Magazine:	20 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Carbine version Shorter barrel compared to the BA-63 Shortened handguards Same 3+3x2 dotted pattern
User:	Police
Additional Details:	N/A
Sources:	4, 5, 6, 7

⁵ Main reference for BA model statistics derives from **2003 Edition**, **Military Infantry**, **Training Bulletin**, **Volume (4)/Bulletin(9)**.







BA-72



BA-72

Ammunition/Calibre:	7.62x51mm
Weight:	N/A
Length:	N/A
Range:	N/A
Magazine:	20 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	Designated marksman rifleBasically a BA-63 with optics
User:	Police
Additional Details:	N/A
Sources:	2, 4, 5, 6, 8

 $^{^{\}rm 6}\,$ No given reference statistics for the BA-100.







MA-11



MA-11

Name/Model: MA-11		
Ammunition/Calibre:	5.56x45mm	
Weight:	4.2kg, with loaded magazine 4.94kg	
Length:	987mm	
Range:	400m (effective) ⁷	
Magazine:	35 rounds	
Manufacturer:	DDI / Ka Pa Sa (Myanmar)	
Distinguishing Features:	 Local copy of HK33 rifle Mounts black or brown polymer Handguard perforated with 5-dot line pattern Limited numbers of actual Heckler and Koch-produced HK33 have been observed with the Tatmadaw: some of the components are plausibly 	

⁷ List of Equipment of the Myanmar Army stated the effective range for the MA-11 was 300m.





	locally produced but these models can be recognized by their peculiar pistol grip, shorter barrel and "birdcage" muzzle brake	
User:	Army	
Additional Details:	Single shot or full-automatic fire selector	
Sources:	4, 6, 9, 10	



MA-11



MA-11







MA-11



Name/Model: MA-12		
Ammunition/Calibre:	5.56x45mm	
Weight:	5.2kg, with loaded magazine 5.92kg	
Length:	1060mm	
Range:	500m (effective)	
Magazine:	35 rounds	
Manufacturer:	DDI / Ka Pa Sa (Myanmar)	
Distinguishing Features:	LMG version of the MA-11 rifle, hence it sports a longer barrel, a folding bipod mounted below the front sights and a carrying handle on its left side	





	Two different handgrip patterns observed: one with perforated dots and another one in solid polymer
User:	Army
Additional Details:	 The bipod may be mounted close to the muzzle brake Single shot or full-automatic fire selector
Sources:	6, 11



MA-12 with solid handguard and bipod mounted close to front sights



MA-12 with solid handguard and bipod mounted close to front sights







MA-12 with perforated dotted handguard and bipod mounted close to muzzle brake

2. Uzi-styled

Ammunition/Calibre:	9x19mm
Weight:	3.65kg, with loaded magazine 4.15kg
Length:	714mm
Range:	250m (effective)
Magazine:	25 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Submachine gun Charging handle on top of receiver Front and rear iron sights are rounded and open Brown furniture on the weapon's black metal sheets
User:	Army, mostly
Additional Details:	Single shot or full-automatic fire selector
Sources:	5, 12, 13, 14, 15, 16

 $^{\rm 8}$ The MA-13 and BA-93 are identical weapons with the same statistics.

_







BA-93 or MA-13



BA-93 or MA-13



BA-93 or MA-13





Name/Model: BA-949	
Ammunition/Calibre:	9x19mm
Weight:	Information Not Available
Length:	Information Not Available
Range:	Information Not Available
Magazine:	25 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Different submachine gun variant of the BA-93 Charging handle on right side of the receiver, generally Front sights are hooded while rear sights are open and squared Black furniture on the weapon's black or brown metal sheets
User:	Police, mostly
Additional Details:	Some analysts label this model as the MA-
Sources:	5, 17, 18, 19, 20



⁹ No given reference statistics for the BA-94.











23







3. AK-styled

Due to design patterns inspired by those of the AK-47, its variants and derivatives

Name/Model: MA-1 (data for Mk. I model) ¹⁰	
Ammunition/Calibre:	5.56x45mm
Weight:	4kg, with loaded magazine 4.66kg
Length:	978mm
Range:	400m (effective)
Magazine:	35 rounds

¹⁰ List of Equipment of the Myanmar Army states different or incorrect statistics for the MA-1. The stats are listed as: Weight: 3.8kg, with loaded magazine 2.42kg (incorrect), Length: 987mm, Magazine: 30 rounds.





Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	Assault rifle of the MA-series, designed after the Israeli Galil or Soviet AK rifle pattern
User:	Standard issue rifle for Army forces (along with 3 other models of this series, described below)
Additional Details:	 Mk. I Short rear sights Curved stock 3+4 dotted handguard pattern Most recent versions have transitioned from brown toward black polymer
	 Mk. II Taller rear sights Straight stock Retracted gas block which makes the barrel look longer
	Heavily modelled after the Chinese-manufactured QBZ-97, thus following a bullpup design
Sources:	4, 12, 21, 22









MA-1 Mk. I



MA-1 Mk. I



MA-1 Mk. II







MA-1 Mk. III

Name/Model: MA-2 (data for Mk. I model)	
Ammunition/Calibre:	5.56x45mm
Weight:	4.85kg, with loaded magazine 5.53kg ¹¹ (35 rounds) or loaded magazine 6.59kg (70 rounds)
Length:	1060mm
Range:	500m (effective)
Magazine:	35 rounds, or 70-round drum ¹²
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 LMG version of the same series of rifles: sports a longer barrel and occasionally telescopic sights Mount rearwards-collapsing M-60-styled bipod (with perforated metal vertical sheets) mounted after the front iron sights or, alternatively, a thinner-legged bipod mounted

¹¹This value is disputed from the **List of Equipment of the Myanmar Army**, claiming the weight is 4.5 kg, with loaded magazine 5.15 kg.
¹² **List of Equipment of the Myanmar Army** states the magazine holds 30 rounds.





	 between the end of the gas tube and the muzzle brake 4+8 dotted pattern on handguard Occasionally sports a carrying handle on its right side Employs brown or black polymer Single shot or full-automatic fire selector
User:	Army
Additional Details:	Mk. I Short rear sights Curved stock
	Mk. II Tall rear sights Straight stock
	 MA-2 A1 Straight stock 3+4 handguard pattern (like the MA-1 model) Bipod Adjustable rear sight on the dust cover (like a standard AK) Retains the carrying handle;
	LMG version of the rifle styled after the QBZ-97 design, hence it sports a long barrel and a bipod
Sources:	4, 6, 12, 23, 24, 25, 26, 27, 28



MA-2 Mk. I







MA-2 Mk. I



MA-2 Mk. I



MA-2 Mk. II







MA-2 Mk. II with a thin-legged bipod mounted close to muzzle brake



MA-2 Mk. II with drum magazine and M-60-styled bipod mounted close to front sights



MA-2 Mk. II with polymer magazine and M-60-styled bipod mounted close to front sights







MA-2 A1



MA-2 Mk. III

Name/Model: MA-3 (data for Mk. I model) ¹³	
Ammunition/Calibre:	5.56x45mm
Weight:	3.5kg, with loaded magazine 4.12kg
Length:	375mm
Range:	400m (effective)
Magazine:	35 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)

¹³ There are two mentions of the MA-3 in **List of Equipment of the Myanmar Army**, with both stating different statistics. The first gives the statistics of: Weight: 3.5kg, with loaded magazine 4.82kg, Length: 8.62mm, Range: 200m, Magazine: 35 rounds

The second mention gives the statistics of: Weight: 3.5kg, with loaded magazine 4.22kg, Length: 862mm, and Range: 400m.





Distinguishing Features:	Carbine version of the series derived from the basic MA-1 model: more compact and lighter; it mounts a shorter barrel and a skeletonised iron side-folding stock
User:	Army, often SOF units
Additional Details:	Mk. I • Short rear sights
	Mk. II Taller rear sights Shorter gas block
	 Mk. III Carbine version of the QBZ bullpup, hence with a shorter barrel compared to previous QBZ-97-inspired Mk. III models
	Recent footage shows SOF personnel armed with what appears to be MA-3 Mk IIIs with: • More rectangular-shaped carrying handle • More ergonomic front handgrips with rectangular vents These components make the design resemble the QBZ-97 original even more, and could belong to an upgraded version of the MA-3 Mk III
Sources:	23, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39









MA-3 Mk. II



MA-3 Mk. II







MA-3 Mk. III



Possibly upgraded MA-3 Mk. III







Possibly upgraded MA-3 Mk. III



Possibly upgraded MA-3 Mk. III

Name/Model: MA-4 (data for Mk. I model) ¹⁴	
Ammunition/Calibre:	5.56x45mm
Weight:	5.98kg with loaded magazine and UBGL
Length:	898mm
Range:	400m (effective); (UBGL: 350m)

List of Equipment of the Myanmar Army shows the MA-4 with different statistics: Weight: 6.54kg with loaded magazine and UBGL, Length: 976mm, and Range: 350m.
2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9) includes varied statistics: Weight: 5.09kg, with loaded magazine and UBGL 5.75kg, Range: 400m; (UBGL: 350m), and Magazine: 35 rounds.





Magazine:	35 rounds ¹⁵
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 More compact version of the MA-1 assault rifle Armed with an integrated 40mm UBGL (called BA-203) Folding front sights for UBGL 3 ovals+7 dots patterned handguard Single shot or full-automatic fire selector
User:	Army
Additional Details:	Mk. I Short rear sights Curved stock
	 Mk. II Taller sights—to better aim its UBGL Straight stock Slightly longer barrel
	Same QBZ-97-inspired design with the same integrated UBGL as the Mk. I and II versions
Sources:	4, 21, 23, 40, 41, 42, 43, 44
	Evample Images

 $^{\rm 15}$ 2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9).

_







MA-4 Mk. I



MA-4 Mk. I



MA-4 Mk. I







MA-4 Mk. I



MA-4 Mk. II







MA-4 Mk. II



MA-4 Mk. III



MA-4 Mk. III with blanks-firing device





Name/Model: MA-S Mk. I ¹⁶	
Ammunition/Calibre:	7.62x51mm
Weight:	Information Not Available
Length:	Information Not Available
Range:	Information Not Available
Magazine:	10 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Sniper rifle of the MA-series, hence designed following the AK or Galil pattern for sniper rifles, thus resembling the Dragunov Barrel is much longer compared to previous MA-series rifles Mounts telescopic sights
User:	Army
Additional Details:	Often referred to as "MAS" or simply as "7,62mm Sniper Gun"
Sources:	6, 45



 $^{^{\}rm 16}$ No given reference statistics for the MA-S Mk.





Name/Model: MA-S Mk. II ¹⁷	
Ammunition/Calibre:	7.62x51mm
Weight:	Information Not Available
Length:	Information Not Available
Range:	Information Not Available
Magazine:	20 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Upgraded version of the Mk. I model, it resembles the more modern Zastava-patterned series of sniper rifles Equipped with removable telescopic sights mounted on a rail on the receiver's left side Bottom Picatinny rail under gas block to mount optional short bipod Comes in two colours: green or black furniture for stock and pistol grip The black version has a smooth stock while the green version has a partially grained stock
User:	Army, SWAT
Additional Details:	 Often referred to as "MAS 2" A camo version of this model has been showcased at the Defence and Security arms fair in 2019
Sources:	6, 45, 46, 47, 48, 49, 50, 51, 52
Exar	mple Images

¹⁷ No given reference statistics for the MA-S Mk. II, however, has been seen in the conflict by Myanmar Witness.







MA-S Mk. II, green and black versions



MA-S Mk. II



MA-S Mk. II



MA-S Mk. II







Name/Model: M16 ¹⁸	
Ammunition/Calibre:	5.56x45mm
Weight:	3.1kg, with fully loaded magazine 4kg
Length:	N/A
Range:	300m (effective)
Magazine:	30 or 20 rounds, STANAG ¹⁹
Manufacturer:	Multiple (USA)
Distinguishing Features:	 Originating from copious US stockpiles in the area, especially the M16A1 version In the case of EAOs it sometimes sports wooden, possibly handmade, handguards and is the result of recent acquisitions
User:	Police, EAOs
Additional Details:	 M16A2 Ribbed handguard–thinner than the M16A1's Adjustable rear sights Norinco's Type CQ (or CQ5,56) Pistol-shaped trigger handgrip
	 Peculiar shape of the stock's lower part More visibly ribbed handguards

¹⁸ List of Equipment of the Myanmar Army.

¹⁹ STANAG, in this case, refers to <u>a standard model of magazine for 5.56x45mm NATO ammunition</u>, proposed to be adopted among NATO countries.





Sources: 53, 54, 55, 56, 57, 58, 59, 60, 61









M16A1s: the top one has a 30-round magazine, while the bottom one has a, 20-round magazine and wooden handguard



M16A1



M16A2



Type CQ







Three M16A1s with 20-round magazines and one Type CQ with 30-round magazine





4. General-Purpose Machine-Guns and Heavy Machine-Guns

Name/Model: MA-15	
Ammunition/Calibre:	7.62x51mm
Weight:	11.9kg with bipod
Length:	1225mm
Range:	1200m (effective), 4000m (maximum)
Magazine:	Belt-fed
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	Locally-manufactured copy of the German- designed MG-3 GPMG
User:	Army
Additional Details:	Often original denomination used: MG-3
Sources:	5, 62, 63, 64

Example Images



MA-15



MA-15







MA-15 with bipod

Ammunition/Calibre:	12.7x99mm (or .50 BMG)
Weight:	38.15kg (tripod weights 20kg)
Length:	1656mm
Range:	1500m (effective), 6765m (maximum)
Magazine:	Belt-fed, each box of ammunition holds 100 rounds
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Copy of the US-manufactured HMG bearing the same name Possibly used along former US stockpiles of the same model
User:	Army
Additional Details:	It can employ also incendiary, armour- piercing incendiary, tracer ammunition
Sources:	65, 66, 67

 $^{^{\}rm 20}$ 2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9).







5. Grenade Launchers

Name/Model: MA-10	
Ammunition/Calibre:	40mm
Weight:	7kg
Length:	910mm
Range:	1000m with HE projectiles, 300m (running target) and 500m (stationary target) with HEAT projectiles
Magazine:	N/A
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Copied from the Soviet-made RPG-7 Retains some characteristics of the Chinese copy (Type 69), like the bipod The crude quality of the components, their black colour and three triangular pieces on the top right part of the tube allow to identify this locally-made version
User:	Army
Additional Details:	It employs a 73 mm Anti-Personnel rocket (MR-1) or a 75 mm Anti-Tank rocket (MR-2) (these correspond to





	the HE and HEAT type of ammunition); ²¹ • A newer version has appeared, with newer and lighter-coloured plastic furniture covering both hand grips
Sources:	68, 69, 70, 71, 72



MA-10



MA-10

²¹ Official 2003 Tatmadaw Manual for Infantry Weapons reports both types measuring 73mm, possibly a mistake.







MA-10



MA-10



MA-10 with newer plastic furniture and bipod







Name/Model: 40MM Single Grenade Launcher ²²	
Ammunition/Calibre:	40mm
Weight:	2.33kg, with loaded grenade 2.56kg
Length:	699mm
Range:	400m
Magazine:	N/A
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 Considered the evolution of the US- made M-79 design (stock and sights are very similar)

 $^{^{22}}$ According to the name stamped on the receiver's right side; also called "40MM SINGLE LAUNCHER."





	So far it was seemingly only used for riot control
User:	Army, police
Additional Details:	N/A
Sources:	73, 74, 75, 76, 77



Grenade Launcher



Grenade Launcher



Grenade Launcher







Grenade Launcher, close-up

Name/Model: SJ-104 ²³	
Ammunition/Calibre:	40mm
Weight:	1.8kg
Length:	695mm
Range:	Information Not Available
Magazine:	N/A
Manufacturer:	SIPJA TECHNOLOGY LTD (ROK), multiple (ROK)
Distinguishing Features:	Skeletonised side-folding stockErgonomic pistol gripVertical front grip
User:	Police
Additional Details:	It can fire CS gas cartridges, rubber bullets and sponge bullets
Sources:	78, 79, 80, 81, 82, 83, 84, 85

²³ Maine reference for the SJ-104: http://www.okcrich.com/contents.php?contents=p_gaslauncher







SJ-104



SJ-104











SJ-104



SJ-104









6. Grenades and Rocket-Propelled Grenades

Name/Model: MG-1 ²⁴	
Ammunition/Calibre:	53mm
Weight:	310g
Length:	102.5mm
Range:	10m radius
Magazine:	N/A
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	Plastic hand grenade
User:	Army
Additional Details:	N/A
Sources:	4, 86
	,
Example Images	

²⁴ **List of Equipment of the Myanmar Army** lists differing statistics, stating: Ammunition: 54mm, weight: 300g, length: 68mm, and range: 5/10m radius.









MG-1 grenades

Name/Model: MG-2	
Ammunition/Calibre:	40mm
Weight:	290g ²⁵
Length:	223mm ²⁶
Range:	(of the rifle) 350m; 5m radius
Magazine:	N/A
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 HEDP rifle grenade Designed to be fired from barrel of MA-series rifles—in one observed case fired by an M16A2 by KNDF fighters, unclear if following adaptation Locally called "Inaga" (ສື່ຊາດါ), or "Inaga bombs" (ສື່ຊາດໃຕໍ່: ນື່: ສສາ:), a

 $^{^{\}rm 25}$ List of Equipment of the Myanmar Army lists the weight to be 265g.

²⁶ List of Equipment of the Myanmar Army lists the length to be 212mm.





	term encompassing all rifle-launched grenades models
User:	Army; spotted in use with KNDF
Additional Details:	63mm penetration (metal)
Sources:	87, 88, 89, 90, 91, 92



MG-2



MG-2 on MA-4 Mk. I assault rifle







MG-2, left; PRAC most certainly stands for "practice rounds", hence the blue colour



MG-2 grenades, left; MG-2 mounted on MA-1 assault rifle, right



MG-2 mounted on M16A2 assault rifle







MG-2, possibly out of its storage tube





MG-2 grenades, possibly with their storage tubes – reads "43MMRIFLE(...)"

Name/Model: MG-3	
Ammunition/Calibre:	40mm
Weight:	230g
Length:	103.8mm
Range:	(of the launcher) 400m; 5m radius
Magazine:	N/A
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 HE grenade It can be fired from the UBGL of the MA-4 assault rifle or from a stand- alone launcher
User:	Army
Additional Details:	Shape and writing are more indicative than colours, which can change with time: this type has a rounded charge
Sources:	23, 93, 94









MG-3, CARTRIDGE 40 mm (HE)



MG-3

Name/Model: MG-4	
Ammunition/Calibre:	40mm
Weight:	230g
Length:	1038mm
Range:	(of the launcher) 400m; 5 mt radius ²⁷
Magazine:	N/A
Manufacturer:	DDI / Ka Pa Sa (Myanmar)
Distinguishing Features:	 HEDP grenade It can be fired from the UBGL of the MA-4 assault rifle or from a stand- alone launcher
User:	Army
Additional Details:	63mm penetration (metal)

²⁷ **2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9)** differs with range, stating it is 2000m, a large inconsistency with the primary source statistic.





	This type has a distinctive rounded charge stamped on its tip
Sources:	95, 96, 97



MG-4 grenades







7. Rocket-Propelled Grenades

Name/Model: MR-1		
Ammunition/Calibre:	73mm	
Weight:	2.82kg	
Length:	805mm	
Range:	2000m ²⁸ ; 5m radius ²⁹	
Magazine:	N/A	
Manufacturer:	DDI (Myanmar)	
Distinguishing Features:	73mm Anti-Personnel rocket (HE)	
User:	Army	
Additional Details:	N/A	
Sources:	68, 69, 70, 71	

Example Images



MR-1 on MA-10 RPG launcher

 ²⁸ 2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9) differs with range, stating it is 500m, a large inconsistency with the primary source statistic.
 ²⁹ 2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9).







MA-10 and its ammunition



Grenades for MA-10: on top is the MR-1 type, with HE written on, corresponding to the shape and size of the Anti-Personnel grenade in the picture above







Name/Model: MR-2	
Ammunition/Calibre:	73mm
Weight:	2.25kg
Length:	967mm
Range:	500m; 5m radius ³⁰
Magazine:	N/A
Manufacturer:	DDI (Myanmar)
Distinguishing Features:	73mm Anti-Tank rocket (HEAT)
User:	Army
Additional Details:	N/A
Sources:	68, 69, 71
	•

 $^{^{\}rm 30}$ 2003 Edition, Military Infantry, Training Bulletin, Volume (4)/Bulletin(9).







MA-10 and its ammunition



Grenades for MA-10: on the bottom is the MR-2 type, with HEAT written on, corresponding





to the shape and size of the Anti-Tank grenade in the picture above





Bibliography

- 1. https://www.nytimes.com/2018/11/26/world/asia/myanmar-rohingya-military-museum.html
- 2. https://kknews.cc/military/8xr48ml.html
- 3. https://www.facebook.com/khitthitnews/photos/a.386800725090613/1256089768161700/
- 4. www.researchgate.net/profile/Maung_Myoe/publication/272092747 Building the Tatmadaw/links/54dac5d50cf2ba8 8a68de69a/Building-the-Tatmadaw.pdf
- 5. https://www.youtube.com/watch?v=uSL5fqQK6m4
- https://www.thefirearmblog.com/blog/2018/08/30/the-ma-sniper-early-burmese-army-designated-marksman-rifledevelopment/
- 7. https://myanmar.liveuamap.com/en/2021/23-september-insurgents-in-myanmarburma-are-assassinating
- 8. https://t.me/infocommitteeyesagyo/583?single
- 9. https://www.facebook.com/khitthitnews/photos/a.386800725090613/1342353392868670/
- 10. https://twitter.com/war_noir/status/1453406042377883670?s=20&t=yEpMd0zViUVET1t2HgI6Iw
- 11. https://guns.fandom.com/wiki/MA-11
- https://smallarmssurvey.medium.com/seeking-supplies-developments-of-small-arms-production-and-industry-in-myanmar-e2fb72daccd7
- 13. https://twitter.com/war_noir/status/1367223363463241730?s=20
- 14. https://twitter.com/war_noir/status/1367459798837587969?s=20
- 15. https://twitter.com/CalibreObscura/status/1489278896705052677?s=20&t=OWrG_-uQK-ei_pmlG1L3bA
- 16. https://twitter.com/CalibreObscura/status/1487453976857649160?s=20&t=jASAN2xVrc9FgC9N8Fx6zw
- 17. https://www.facebook.com/photo?fbid=123872198807347&set=g.1065316060327864
- 18. https://www.facebook.com/photo?fbid=200753071452198&set=g.1065316060327864
- 19. https://www.defseca.com/national-security/myanmar-supplies-insurgents-in-bangladesh-with-weapons/
- 20. https://www.thefirearmblog.com/blog/2018/07/20/the-ma-13-mk-ii-myanmars-steyr-micro-uzi-knock-off/
- 21. <a href="http://mmmilitary.blogspot.com/search/label/%E1%80%BB%E1%80%99%E1%80%94%E1%80%B9%E1%80%99%E1%80%99%E1%80%99%E1%80%99%E1%80%B9





- 22. https://twitter.com/whim_watch/status/1484578333807550468?s=20&t=D8rNNVvIBmSAKILF8pXh-Q
- 23. http://www.military-today.com/firearms/ma1.htm
- 24. https://enacademic.com/dic.nsf/enwiki/5048121
- 25. https://riflescollection.blogspot.com/2014/07/news-models.html
- 26. https://twitter.com/TNA_Myanmar/status/1488034989316796418?s=20&t=axascNm6PyU16enkgWEYmQ
- 27. https://www.reddit.com/r/ForgottenWeapons/comments/pcl6sk/ma1_myanmar_lycensed_clone_of_galil/
- 28. https://twitter.com/whim_watch/status/1478370126634364932
- 29. https://www.pothashang.in/2021/05/03/arms-recovered-at-indo-myanmar-border-moreh/
- 30. https://www.eurasiareview.com/22062021-myanmar-military-wages-war-against-christian-ethnic-minorities/
- 31. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/1071000856289217/
- **32.** https://www.gettyimages.co.uk/detail/news-photo/myanmars-military-stand-guard-at-around-of-the-sin-bin-news-photo/1230944486
- 33. http://mmmilitary.blogspot.com/2011/10/blog-post 25.html
- 34. https://postimg.cc/ZBSq1Cdb
- 35. https://davdavnews.cc/en/military/869793.html
- 36. https://www.youtube.com/watch?v=6RONLdq0cFo
- 37. https://postimg.cc/LYFK2xrM
- 38. https://postimg.cc/dZJbTLsH
- 39. https://postima.cc/CRRWDv0a
- 40. https://www.thefirearmblog.com/blog/2018/08/17/burmese-rifle-grenades-of-the-infantry-ma-series-of-rifles/
- 41. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/3024508427605107/
- **42.** https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/427313880657921/
- 43. https://kknews.cc/military/bkb2zgm.html
- 44. https://postimg.cc/ygy5BsmF
- 45. http://www.military-today.com/firearms/mas.htm



- 46. https://voi.id/en/news/46767/it-was-revealed-that-the-myanmar-military-internal-memo-ordered-its-troops-to-kill-protesters
- 47. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/1060858367303466/
- 48. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/1026143820774921/
- 49. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/801308399925132/
- 50. https://pantip.com/topic/40851474
- 51. https://postimg.cc/9zcKbw21
- 52. https://postimg.cc/jw6V5zbn
- 53. https://www.rfa.org/english/news/myanmar/violence-08262013183031.html
- 54. https://www.thefirearmblog.com/blog/2018/09/21/improvised-m16a1-wooden-handguards-in-myanmar/
- 55. https://web.archive.org/web/20070912175726/http://www.norincoequipment.cn/detail_product_English.jsp?productid=492&cssid=1
- 56. https://en.wikipedia.org/wiki/M16_rifle
- 57. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/610467699009204/
- 58. https://id.wikipedia.org/wiki/M-16_(senapan)
- 59. https://www.instagram.com/p/CIRP1P8phZe/
- 60. https://web.archive.org/web/20121201183951/http://www.dtic.mil/ndia/2008Intl/Arvidsson.pdf
- 61. https://postimg.cc/bsmhkH2Q
- 62. <a href="http://mmmilitary.blogspot.com/search/label/%E1%80%BB%E1%80%99%E1%80%994%E1%80%B9%E1%80%99%E1%80%B
- 63. https://twitter.com/war_noir/status/1373946107047333890?s=20
- 64. https://www.facebook.com/kachinwavesnews/posts/4650901131589629
- 65. http://mmmilitary.blogspot.com/search/label/Made%20in%20Myanmar?updated-max=2014-08-08T07:18:00-07:00&max-results=20&start=4&by-date=false
- 66. https://web.archive.org/web/20181025163434/http://mmmilitary.blogspot.com:80/2011/08/blog-post 14.html
- 67. https://www.facebook.com/Myanmar-Defence-Weapons-210114122377899/photos/1318677621521538/
- 68. https://aagth1.blogspot.com/2019/11/defense-security-2019-556mm-338.html?spref=tw
- 69. https://www.youtube.com/watch?v=ePXfXEcjzlM
- 70. https://kknews.cc/military/g5op938.html
- 71. <a href="http://mmmilitary.blogspot.com/search/label/%E1%80%BB%E1%80%99%E1%80%94%E1%80%B9%E1%80%99%E1%80%99%E1%80%B9
- 72. https://postimg.cc/wRxrjZ2n
- 73. http://www.smallarmsreview.com/display.article.cfm?idarticles=1154



- 74. https://www.thefirearmblog.com/blog/2018/07/26/the-tatmadaws-thumper-burmese-standalone-40mm-grenade-launcher/
- 75. https://www.gettyimages.nl/detail/nieuwsfoto%27s/soldiers-stand-guard-as-they-block-a-road-near-a-prison-nieuwsfotos/1231182381?adppopup=true
- https://www.gettyimages.nl/detail/nieuwsfoto%27s/riot-police-stand-guard-with-roses-given-to-them-by-nieuwsfotos/1300852076?adppopup=true#
- 77. https://postimg.cc/rdrXBBZJ
- 78. https://twitter.com/frontiermm/status/1359054490490470400
- https://www.gettyimages.nl/detail/nieuwsfoto%27s/police-face-off-with-protesters-during-a-demonstration-nieuwsfotos/1231470225?adppopup=true
- 80. https://www.gettyimages.nl/detail/nieuwsfoto%27s/police-drag-a-protester-on-the-ground-as-they-arrest-her-nieuwsfotos/1231057611?adppopup=true
- 81. https://www.gettyimages.nl/detail/nieuwsfoto%27s/police-officer-seen-holding-a-rose-given-by-the-nieuwsfotos/1231013723?adppopup=true
- 82. http://www.okcrich.com/contents.php?contents=p_gaslauncher
- 83. http://www.teargas.kr/launcher&rifle/SJ-104_40mm_tear_gas_launcher.html
- 84. http://sipja.com/eng/catalog.pdf
- 85. https://postimg.cc/JsgCdrx0
- 86. https://postimg.cc/Bts9zwTT
- 87. https://www.thefirearmblog.com/blog/2018/11/08/the-burmese-ba-93-a-modified-lee-enfield-rifle-grenade-launcher/
- 88. https://www.facebook.com/groups/430663398097489/permalink/521125455717949/
- 89. https://kknews.cc/military/5lar62k.html
- 90. https://postimg.cc/gn29zXBr
- 91. https://postimg.cc/RqG8DCVm
- 92. https://postimg.cc/Yj3KBfRJ
- 93. https://twitter.com/ThwinHtooNaing/status/1380823993171771394
- 94. https://postimg.cc/p984GDyc
- 95. https://postimg.cc/jLxTDkCx
- 96. https://postimg.cc/213fwb4g
- 97. https://postimg.cc/BXYrXSdp

