S.A.D.

Seek and Destroy

A Real-Time Strategy and Real-Time Tactics Game for TI-83+ and TI-84+ Calculators

PLAYING THE GAME

The Basics

The game cursor is used to select buildings (also referred to in this manual as structures), air units, and ground units. Represented by a cross, the cursor can be moved on your screen using the arrow keys. If the cursor is placed over anything that can be selected, it will flash. Select the object by pressing **2nd.** If a building or unit is selected, a black circle will appear around the bottom of it. Selecting another unit or structure, or pressing **2nd** on the previously selected building will de-select said building.

Depending on what you select, some basic information will be available by pressing **Mode** on you calculator. The information you will receive depends on what you select (described later).

Scrolling through the map/playing area can be done in several different ways. The most basic, and most common, way of viewing the area is by using the cursor. By moving the cursor to an edge of the screen and continuing to move in that direction, the map will shift, allowing you to see more.

If you move the cursor while pressing **Math**, the cursor will stay fixed in the center, and the map will scroll every time an arrow key is pressed, returning to your original position as soon as the **Math** key is released. This allows you to see the map and return instantly to where your original view was.

Using the mini-map allows you to view the game area in a smaller view. You use the same keys to view this map as you do to view the normal playing area: arrow keys to view the map, and holding down/releasing the **Math** key to view the map and return to the point where the cursor was located. Use **Y=** to switch between the mini-map and the main screen.

Unit Movement

When you select a unit with the cursor, you can move it around the map, or deselect it using **2nd**. There are three different ways you can move a selected unit. Pressing **Alpha** will change your cursor to a circle, and then pressing **2nd** on the map will cause the unit to automatically move there, using the quickest and most efficient path possible. This process can be done both on the main screen and the mini-map.

Another method used to move your unit is to move it manually using the arrow keys.

This is the best method of unit movement available for scouting, and *absolutely must* be used for unit-to-unit battles (described later). However, it cannot be used on the mini-map, unlike using the **Alpha** key method.

The third method, described later, is, in the case of a scouter, ordering it to construct a building.

The Start of the Game

When the game starts, each player in the game starts in his/her own position on the desired map. Every player starts out with a Operation Center, a Scouter and the allowed starting amount of Belthium Crystals.

Your Operation Center is your most important building: if all a player's Operation Centers are destroyed, the player loses the game.

Your Scouter is your most basic unit, and the absolute best unit for starting the game. With it, you can build up your base, scout the area, and attack your enemy if you are aggressive enough.

At the start of the game, the whole map around your units is covered in a black fog. You are not able to see underneath the fog, so you must explore and scout your surroundings to find out what the map beyond your starting point looks like. Your mini-map will also display a black fog in unexplored areas. Any area covered in fog will immediately become visible as you explore it, whether with a scouter or another unit. When you leave said area, the fog returns. Any buildings or terrain scouted and revealed by the exploration will appear white on your screen and the mini-map, revealing their position; because you scouted the area, you know where everything is. Ground units and air units discovered during exploration cannot be seen once the fog has returned. Re-entering the area covered by fog will provide an update, and when the fog returns, this updated information will also be revealed through the fog

Tutorial: Starting up a base, and finding out about your enemy

If you are going to win the game, you have to destroy your enemy's Operation Centers, and you need a descent base to accomplish this. So your goal at the start of the game is to build up enough structures to get you started.

Your source of money is in the form of Belthium Crystals. Although you start out with a set amount of Belthium Crystals at the beginning of the game, it is not enough to get you through the game. You need to build Mines to supply you with more Belthium Crystals.   Mines can be built anywhere immediately next to a Belthium Crystal deposit. The following picture shows a deposit of crystals, along with a Mine next to it.

To build a mine, select your scouter (the only unit that can construct buildings) and press **X,T,Theta,n**. A box with several icons appears next to the scouter. Notice that there is a miniature picture of a Miner in the second box on the top row. Press the **Mode** button to select this item. The box will disappear, and an image of the Miner will appear as your cursor. Use your arrow keys to direct the Miner, allowing you to decide where you want to place it. If you try to place the miner away from a crystal deposit, or if you try to build on unstable terrain, the image of the Mine will change into inverse colors, meaning you cannot build on the desired location. Once you find a proper location, where the Mine is in its normal colors, press **2nd** to place the building. Immediately, your Scouter will begin construction of the Mine. You can switch to the mini-map to place the building, and you can press **Alpha** any time, even before placing the Mine, to cancel construction. Canceling construction will give you a "full refund," and the building, however much of it has been built, will self-destruct.

If you press **X,T,Theta,n** to build a Mine, you will notice, of course, that other buildings can be built as well. These will be described later in the manual.

The Basics of Units

Although your Scouter is the most important unit at the beginning of the game, it is not the only unit available. There are nine units available, five which travel on the ground, and four which travel via air. Every unit has a specific purpose and requires a different strategy for use. In addition, every unit has strengths and weaknesses, and can be countered by at least one kind of enemy unit. The trick and strategy of the game is deciding what unit to use at what time, and why.

All units require fuel to run. The only exception is Scouters, which run on solar power and therefore have an unlimited fuel source. Any section in this manual that describes fuel in conjunction with units does **not** apply to Scouters. As for units that do use fuel, it is required for both movement and weapon-firing. Fuel is also required for Deteriorating Upgrades, described later. It is important that your unit never runs out of fuel, because if it does, it will shut down and self-destruct.

Some units come equipped with a supply of Sephrane gas. This is used specifically for Deteriorating Upgrades, again, described later in this chapter.

Most of the time, you will be using your units for combat purposes. Using a unit in combat will be described in full detail later. When you use your unit to attack your enemy or defend from your enemy, you must move your unit manually.

Every unit has HP, hitpoints, that describes how much damage a unit can take before it

is destroyed. When under attack, a unit will slowly loses its HP every time an enemy's weapons hit. A small bar beneath your unit describes how much HP is left, although this bar is not displayed on the mini-map.

Tutorial: Using your Operation Center

Operation Centers are the key structures in determining the winner of the game, but they are also used in keeping your units in tip-top shape. In addition, an Operation Center is used to exchange your unit for another.

Move your Scouter right next to the Operation Center. You can do this manually, or by pressing Alpha, moving the cursor to your Operation Center, and then pressing 2nd. A menu with four boxes and two icons will appear. You can press Clear to back out of this menu, or any menu in the game for that matter. Notice that three icon boxes are empty. Two buttons are missing because you cannot use them with your Scouter. Another button is missing because although it allows you to repair your Scouter, your Scouter is in full health right now. The icon that is displayed is a picture of a warp. The warp button allows you to exchange your Scouter, or any other unit, for another unit.

For now, press 2nd to select the warp button. Another menu, with 9 boxes, appears close to the Operation Center. Notice that there is only one unit, called a Raptor, available to exchange for, the other boxes are blank. If a unit box is empty, it's for one of several reasons: you cannot exchange a unit for itself, you don't have enough Belthium Crystals to exchange for another unit, or you don't have the capabilities of receiving said unit yet. In this case, one box, the box pertaining to the Scouter, is empty, because you cannot exchange a Scouter for another Scouter. The other seven boxes are empty because you do not have the technology required to exchange for anything except for the Raptor, for the time being.

Press Mode to select the Raptor. You will then see your Scouter disappear and a Raptor appear in its place.

You can move your Raptor exactly the way you move a Scouter. You can also exchange it for another unit when need be.

Notice that although there was one bar beneath your Scouter, describing available hit points, there are now two bars beneath your Raptor. The top bar indicates available HP, and the other bar indicates available fuel.

This concludes the detailed section of the preview maunal. If production of this game proceeds, I hope every section will provide enough details to those who have never played this kind of game before. The rest of this manual contains summaries of what this game will be about, such as attacking and types of units.

Attacking

Unlike many RTS games, attacking is done manually, hence S.A.D. is a real-time tactics game as well as a real-time strategy game. You must enter attack mode to attack...this will enable you to use easy-to-reach keys that are normally used for other commands. Press Graph to enter attack mode, and Graph again to leave attack mode.

Commands:

2nd = Fire Weapon. Firing a weapon costs fuel. Holding down 2nd will continue firing the weapon as fast as its maximum rate of fire
Alpha/X,T,Theta,n = Rotate turret left/right. Most units have rotating gun turrets, meaning you must rotate the turret to fire a certain direction.
Mode = Switch Between Air Attack and Ground Attack, used for units that can attack both air and land

Special Abilities

Every unit can be upgraded to use a special weapon or ability. An upgrade need only be researched once. There are three types of upgrades.

Refillable Upgrade

A Refillable Upgrade is an upgrade that can be used only a set number of times. This set number varies with the type of upgrade. An Argo, for instance, has a refillable upgrade: Dronomonic Torpedoes. It can use its upgrade 10 times, firing one of its 10 torpedoes each time. After that, it loses its ability to use the upgrade.

As the term "refillable" implies, a unit may restock its upgrade so that it can be used. An Argo, for example, that has used up the last of its Torpedoes can go to a base or Transformation Gateway and receive 10 more Dronomonic Torpedos. A unit need not run out of Refillable Upgrade usage to restock; an Argo could use 6 of its 10 torpedoes, then use a Transformation Gateway to receive 6 more torpedoes to full its capacity. Also, a player can choose to restock only to a certain point—say, 5 torpedoes instead of 6 using the aforementioned Argo.

Restocking a Refillable Upgrade *is not free*. It costs a certain amount of belthium crystals to restock an upgrade. Also, a unit spawned starts out with its upgrade capacity completely empty, thereby having to restock to use the ability. However, once a refillable upgrade is purchased, it will never disappear unless, of course, its respective research station is destroyed.

Permanent Upgrade

A permanent upgrade is an upgrade that, once installed, will operate under any conditions. It does not require transformation gateways or sephrane gas to operate. For example, a Degruser's Hornet Gun will operate under any circumstances, except lack of fuel: It will fire all the time, does not need a replacement, and will not damage the Degruser itself.

Deteriorating Upgrade

Deteriorating Upgrades are probably the most common type of upgrade. These upgrades describe a weapon or ability that is so powerful, a unit operating it would be ripped apart if not for sephrane gas, a substance used to operate the unit's cooling system.

Every unit capable of holding a deteriorating upgrade carries sephrane gas…Camozas are the only exception. When a unit is spawned or re-spawned, it comes completely filled with a supply of sephrane gas. A deteriorating upgrade is, in addition, ready to use any time, anywhere.

A deteriorating upgrade is turned on or off using the same button assigned to it. For instance, the cloaking device on a scouter is turned on using the **Window** button and turned off using the same button. Whenever a deteriorating upgrade is turned on, it slowly uses sephrane gas to keep the respective unit from overheating. Sephrane gas does not replenish itself, but a unit can refuel itself with sephrane gas at a transformation gateway or a base.

A unit can still use a deteriorating upgrade when it is out of sephrane gas, but by this point the unit does not have anything left to cool itself down with and begins overheating. This causes the unit to slowly lose its HP until the upgrade is turned off. The damage is not irreparable, but certainly drains HP faster.

However, this should not keep you from using the upgrade without sephrane gas. There are times where you should sacrifice some HP to achieve your goals with a deteriorating upgrade. A very obvious example is the Camoza, which has no capacity to hold sephrane gas. Using its boosters will immediately begin overheating the ship, but gives you that extra damage potential that could mean the difference between destroying a structure or not. Another example is using a Reclauda's detector…when it battles with a cloaked Balkstone, you may need to use the detector beyond its safety limits in order to finish off the Balkstone.

UNITS

Scouter

Role: Scout, Construction Worker

As the name implies, a scouter is useful for gathering information about your enemy. It has light armor, basic weapons, and a radar suite capable of detecting all units, including cloaked units. In addition, a scouter is responsible for building every structure you may require in the game.

Cost: Free

Special Abilities: Cloak (Deteriorating Upgrade). When "cloak" is researched, a scouter can cloak itself, rendering it hidden from anything except from Reclaudas and some radar.

Tank

Role: Artillery

A heavy unit that places all its damage in one well-placed shot. This unit excels at taking out structures, but is not a good vessel for attacking other vessels directly.

Special Abilities: Extended Range (Permanent Upgrade). When extended range is researched, any tank built will have a firing range that keeps it safe from enemy fire, except from universal defense systems.

Raptor

Role: Early Assault, Surprise Attacks

A Raptor is a cheap land unit with basic weapons, making it perfect for attacking scouters and structures early in the game. It cannot attack air units.

Special Abilities: The Raptor has two available upgrade options. These abilities extend the Raptor's usefulness into late game as a unit providing unexpected attacks

Teleport (Refillable Upgrade). A Raptor can transport instantly to any accessible area

that's been explored. It cannot transport to an area that has not been scouted at least once. A Raptor can teleport twice before having to restock.

Deflector Shield (Deteriorating Upgrade). With its Deflector Shield turned on, a Raptor can protect itself from any weapon fire. This includes Dronomonic Torpedoes and Universal Defense weapons.

Argo

Role: Combined Anti-Unit and Anti-Operation Center Attack

An Argo is a hovercraft unit. Its speed and rate of fire make it a perfect counter for most units, whether air or ground. However, its weapons have absolutely no effect on structures, and the Argo has relatively weak armor.

Special Abilities: Dronomonic Torpedoes (Refillable Upgrade). Although an Argo's weapons cannot attack structures, an Argo can refit itself with these Torpedoes, allowing it to attack an Operation Center. An Argo can hold 10 torpedoes.

Degruser

Role: Assault

Second in power only to Splitrons, a Degruser is the most powerful land unit. It can attack both air and ground, and its heavy armor plating can withstand enemy fire for an extended period.

A Degruser's method of attack is rather unique, in that, unlike most vessels, it does not fire from a rotating turret or barrel. It fires from its wheels when attacking sideways and backwards, and it fires from its "eyes" when attacking towards the front. This means that a Degruser can fire instantly in any direction. But it also implies that a Degruser's one weakness is it cannot attack units directly behind it without a Hornet Gun.

Special Abilities:

Hornet Gun (Permanent Upgrade). An added gun that allows a Degruser to fire from behind itself. It uses the same ammunition as the rest of the Degruser's weapons.

Instant-Destroy Shot (Refillable Upgrade). A Degruser can hold one instant-destroy shot that can destroy any unit. This upgrade does not work on buildings.

Reclauda

Role: Air-Superiority Fighter, Air Scout

Reclaudas are the fastest units in the game. A Reclauda is specifically designed to eliminate air units, but it also has light weapons for attacking ground targets.

A Reclauda is equipped with free radar, but the radar does not have as great a range as a scouter's radar.

Special Abilities:

Booster Engines (Deteriorating Upgrade). Booster Engines will further increase the Reclauda's speed

Detector (Deteriorating Upgrade). A Reclauda using its detector will be able to see cloaked units

Splitron

Role: Capital Ship

A Splitron is the most powerful unit in the game. Its armor and weapon damage exceed that of any other unit, although it is a slow unit and thereby vulnerable to Reclaudas and Argos. Similar to a Degruser, a Splitron does not fire from turrets, so it can fire in any direction instantly. However, a Splitron can fire from behind without aid from upgrades.

Special Abilities: Dronomonic Torpedoes (Refillable Upgrade). A Splitron can refit itself to hold Dronomonic Torpedoes, allowing it to attack an Operation Center. It can hold 20 torpedoes at a time.

Balkstone

Role: Stealth Fighter/Gunship

Balkstone weapons have substantially limited range, but an extremely fast rate of fire. They excel, therefore, as air-to-ground units, but are not efficient as anti-air units unless cloaked. Balkstones can only fire forward, so a Balkstone must turn itself to fire at moving targets. On the flip side, a Balkstone fires three weapons at once. Two of the weapons are located on the Balkstone's wings, and fire at a slightly greater range in order to reach as far from the Balkstone as its front weapon does.

Special Abilities:

Extension Coils (Permanent Upgrade). Normally, a Balkstones weapons all target the same unit or structure. By refitting a Balkstone's side-weapons with Extension Coils, one has the option of using the weapons to attack different targets underneath the Balkstone, thereby attacking more than one unit at the same time (a fake form of splash damage). This is done by using the _____ and _____ keys to move the side weapons up or down. Extension Coils do not allow a Balkstone's weapons to move sideways, but they do allow a Zinyar Railgun, if added, to move up and down in addition.

Zinyar Railgun (Permanent Upgrade). This adds a weapon to the back of Balkstones, adding a fourth gun and allowing the Balkstone to fire backwards. This gun will not fire forward.

Boost Engines (Deteriorating Upgrade). Boost Engines will further increase the Balkstone's speed

Cloak (Deteriorating Upgrade). When "cloak" is researched, a Balkstone can cloak itself, rendering it hidden from anything except from Reclaudas and some radar.

Camoza

Role: Kamikaze

A Camoza attacks its target by slamming itself into the target at high speed, destroying itself in the process. With weak armor, any anti-air unit can bring it down in a few well-placed shots, but its speed, damage potential and researchable cloak pose quite a threat when used correctly. A Camoza can crash itself into anything except Operation Centers, and causes a light amount of splash damage.

A Camoza has the lowest fuel capacity of any unit, but if it manages to run out of fuel yet crash into a unit, it will do about ¾ its normal damage, and this includes the damage that would be inflicted by the ITNT upgrade.

Special Abilities: One must be careful when using these upgrades. Boost Engines and Cloak are, as usually Deteriorating Upgrades, but a Camoza does not have enough armor to allow long-term usage.

ITNT (Permanent Upgrade). Camozas loaded with ITNT will cause even more damage to any target they hit.

Boost Engines (Deteriorating Upgrade). Boost Engines will further increase the Camoza's speed. In addition, a Boost Engine will add enough momentum and speed to

further increase the amount of damage a target receives from a destroyed Camoza.

Cloak (Deteriorating Upgrade). When "cloak" is researched, a Camoza can cloak itself, rendering it hidden from anything except from Reclaudas and some radar.

STRUCTURES

Operation Center

An Operation Center is the most important, but the most expensive, unit in the game. General information on a base can be found in the section "How to Play." Operation Centers can only be attacked by dronomonic torpedoes, and come with free radar coverage.

Radar:
HP: 1000

Transformation Gateway

Although exchanging, refueling, repairing and restocking can be done at an Operation Center, a transformation gateway offers a cheaper and more flexible alternative. Building transformation gateways allow you to maintain your goals further from your base, and allow you to re-spawn at said gateways rather than from your Operation Center. A transformation gateway, however, being cheaper than an Operation Center, has less HP and can be attacked by any weapons, not just dronomonic torpedoes.

Use a transformation gate the same way you use an Operation Center. Move your unit over the pad, and select from the list of available options.

Point Defense

Point Defense protects an area from land vessels and buildings, but cannot attack air vessels. It does not require any Belthium Crystals to run, and will attack anything that comes in range.

 Photon Beam: A cheap form of point defense that protects a limited area. It can be upgraded to a Plasma Beam.

 Plasma Beam: Plasma Beams are more expensive than Photon Beams, but attack at greater range and with greater damage. It can be upgraded to Universal Defense.

Anti-Air Defense

Anti-Air Defense protects an area from air units, but cannot attack ground units or buildings. It does not require any Belthium Crystals to run, and will attack anything that comes in range.

Anti-Air Defense: A cheap form of anti-air defense that protects a limited area. It can be upgraded to Tech II Anti-Air Defense.

Advanced Anti-Air Defense: Advanced Anti-Air Defense is more expensive than Type I Anti-Air Defense, but attacks at greater range and with greater damage. It can be upgraded to Universal Defense.

Universal Defense

Universal Defense is a defense system that attacks both air and ground units. It is also guaranteed to out-damage any possible vessel and defense system. As an offset, it is a very expensive defense system and requires Belthium Crystals to operate.

Radar

Radar is useful for detecting units hidden by fog. Although radar can detect where a unit is, it cannot detect what kind of unit it is. It can, however, detect whether a unit is a building, an air unit, or a ground unit. Buildings will appear up as white squares, ground units will appear as white circles, and air units will appear as white triangles. Radar costs energy, and will slowly drain your belthium crystal amount.

Radar: Radar offers limited radar coverage. It is the cheapest form of radar available, and can detect any units in a limited range. It cannot, however, detect cloaked units. It can be upgraded to Tech II Radar.

Advanced Radar: Advanced Radar costs more than Radar, but offers greater radar coverage. It can also detect cloaked units from a limited range, and also offers line of sight, meaning it can uncover fog from a limited distance. It can be upgraded to Tech III Radar.

Ultimate Radar: Offers the greatest radar coverage of all radar, and can detect cloaked units from a great distance. It is also the most expensive.

Mine: A mine is used to harvest Belthium Crystals. Up to four Mines can be placed around a Belthium Crystal deposit, one on each side.

Factory: Allows you to use Tanks and do research for them.

Argo Lab: Allows you to use Argos and do research for them

Armory: Allows you to use Degrusers and do research for them. Requires Factory.

Starbase: Allows you to use Reclaudas and do research for them. Requires Factory.

Manhatton Station: Allows you to use Camozas and do research for them. Requires Starbase.

Command Center: Allows you to use Splitrons and do research for them. Requires Manhatton Station.

Quantum Facility: Allows you to use Balkstones and do research for them. Upgrades require Command Center.