

ASF-1 SUPER FEEDER® OPERATING MANUAL

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ACCESSORIES INCLUDED WITH THIS MODEL

- Low voltage power adapter with 6ft cord, special “Moisture Trap™” funnel to insure dependable flake feeding, feed time adjustment tool, one 2-Cup capacity food reservoir extension w/locking screws, and operating manual. Note: A remote timer may be included if combo deal ordered.

ADDITIONAL ITEMS THAT MAY BE REQUIRED

- An unlimited type of external timers can be used, analog or digital. Examples of ideal timers: 24-hour lamp timer, 7 day digital timer, sprinkler timer, home automation systems, etc... **Note:** If choosing a timer for an outdoor application, most timers are indoor types and must be enclosed, so be sure you follow the manufacturer’s recommendation. Our supplied power adapter is to be used indoors or with an outdoor approved enclosure. An optional outdoor power adapter/transformer is available from Super-Feed for most 120Vac outdoor timers.

APPLICATIONS

- Multi-purpose automatic feeder for distribution of most types of dry pet foods including flakes, pellets, granules, sunflower seeds, corn, dry cat food, etc... This feeder may also be suitable for other types of dry foods not listed here. This Super Feeder® is highly recommended for feeding fish and turtles. You may find helpful operation information at: <http://super-feed.com/quickinstallation.htm>

EXAMPLES OF PROGRAMMABLE TIMERS THAT CAN BE USED

- Plug the supplied power adapter into any digital or analog timer, and program "ON" time for desired feeding time to begin. Program an "OFF" time of at least 1-2 minutes before the next programmed "ON" time. The feeder will then reset itself for the next "ON" time. It will only run for the time you calibrated its internal feed timer, totally independent of the external timer's "ON" time (if longer).
- Program feed cycles as described above and trigger your Super Feeder® with any X-10 or other home automation system (perfect accessory to operate your Super Feeder). If you have an output from your system in the 9 to 24 Volt dc or ac range, you may directly hook up your system to the Super Feeder. You may also control the length of time the feeder will run from your system if you have programmable seconds from your system.
- Use the DT-03 12Vdc programmable timer (available from Super Feed) with a 12-volt battery (not supplied). Your Super-Feeder® uses an extremely small amount of power because it only needs to be powered for a short feeding cycle, thus making the battery last a very long time. Program number of "on-off" cycles as required.
- Plug several feeder power adapters into one common power strip plugged into any timer to trigger multiple feeders simultaneously, or run a wire from one feeder's bottom terminals to the other feeder's terminals.

We suggest watching our short video for operation of the feeder. It is for the cat feeder, but the ASF-1 operates the same way. 1

<http://www.super-feeder.com/video.html>

SUPER FEEDER® OPERATION TIPS

For a good averaged daily portion, we recommend two to three feeding cycles per day, which will simulate natural feeding habits throughout the day and keep your fish or other pets more active and healthier. Do not overfeed! Calibrate your Super Feeder® to dispense small portions more often.

As an example, you could program your external timing device to come on at 8:00 AM and power-down at 9:15 AM, come on again at 2:00 PM and off at 2:15 PM, then finally on again at 7:00 PM and off at Midnight if you trigger the feeder at the same time as turning your aquarium light on with a power strip. The feeder may be left on for any period of time after it is initially “triggered” by the remote timer. It will immediately drop food for its own pre-calibrated feeding length of time only. However, observe the required minimum “OFF” reset time of at least 1-2 minutes between programmed feed times. **(Make sure the external timer’s programmed “ON” time exceeds the feeder’s pre-calibrated “run” time!)**

Normally, you will plug your feeder’s power adapter directly into an external timer, however, by using a power strip plugged into the timer, you could also power a light fixture along with your feeder, thus giving your pet(s) lighting at dinner time as per second paragraph above. You may also trigger several feeders simultaneously by connecting several power adapters into one common power strip plugged into the external timer.

Although the remote timer can stay on as long as you wish, once again, remember that you must power-down your feeder as directed above to reset the feeder’s internal feeding timer for a next “trigger” to occur. While the feeder’s power light is on (external timer on), you may manually trigger additional feed cycles by simply pushing the feeder’s reset button (right side of lateral rubber plug indicating "PUSH"). No need to open the rubber plug.

Pellets and/or flakes may not be completely extracted by the distribution roller when the food in the hopper becomes very low. This is normal. The roller creates a much-needed internal motion to help prevent flakes from sticking together. Furthermore, with pellets, there may be small popping sounds (with pellets) created by the gate’s flexing action, which is a normal action to prevent "bridging" common with other feeders. If using the small lock screws on the clear extensions, you do not need a screwdriver each time you want to remove an extension or lid. Firmly squeeze **upper** front and back sides of extension to release or lock it in place.

Finally, it is highly recommended that you periodically inspect and remove excess food residue that may have accumulated on the slide at the chute’s outlet. Storing and/or feeding flakes outdoors is not recommended. Never use sharp objects to clean parts of your feeder. A soft dampened cloth works best.

As with any machine, preventive maintenance is very important and strongly encouraged.

Enjoy your Super Feeder®!



Funnel installation through top of aquarium

Install feeder so slide is just over the edge of the funnel’s opening. The lower end should protrude into the water if using flakes to lock out moisture. Funnel is not made to fit and attach to the chute of the feeder, it must be left in open-air. A rubber band can be placed above the retaining plate to help secure the funnel.

2 HINT: Another fun way to operate your feeder when you are home is to use a home automation lamp or appliance remote control or a “Clapper®” switch to manually feed your pets. You can do that repeatedly with a minimum of 1-2 minutes of “off” time after each feed cycle has ended.

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ADJUSTING FOOD DISTRIBUTION CYCLE TIME

You should do this **before** installation of your Super Feeder!

1. Plug supplied power adapter directly into a 120 Volt outlet, and insert plug into feeder's power jack located under the vertical black rubber plug. At completion of above procedures, feeder should run one full or partial feed cycle and its steady green or blue power light should come on and stay on. If your feeder has a blue power light, there will also be a green light that will go out at completion of the feed cycle when the motor stops.
2. Fill hopper with dry food, and while holding feeder over a dish, push reset switch 5-6 times, noting amount of food expelled each time it is reset. Some food may drop out from chute when first filling hopper, which is normal.
3. Expose feed adjustment controller (may be a slotted shaft or dial) under the rubber plug. This adjustment is the primary control of the amount of food dispensed by the length of each feeding cycle. Using supplied plastic screwdriver to turn the controller shaft or dial, adjust the controller and push the reset switch after each adjustment until required portion of food is obtained. Turn controller clockwise to increase feeding time and counterclockwise to decrease it (max. time is about 70 sec.). It is sensitive, so adjust it in **fine increments! If controller has a shaft instead of a white dial, each 1/4 turn is approximately 1 second of feed time change.**
4. If not enough food is dispensed at max. time setting, try to adjust volume of food with large volume plastic screw located above side chute which controls the gate opening (gap between roller and gate). Turn screw clockwise to decrease flow and counterclockwise to increase it. The gate opening should be slightly less than the diameter of the pellets being used (1/8" for flakes), just enough to not let the food drop through freely. **Do not over-restrict!** If you still do not get enough food to dispense, you will need to program extra feed cycles, which can be easily done with the Super Feeder.
5. Disconnect power adapter from wall receptacle and push feeder's reset button for 5 seconds to void feeder's required "off" reset time if you are going to test it soon after it has already been operated. Program your external programmable timer to come on automatically like you would for a lamp or appliance. Each "on" time will be a feeding cycle as long as you observe the required "off" reset time between cycles. See page 7 for external timer programming examples.
6. Install feeder and plug its power adapter into the programmed external timer. Keep in mind that the feeder can also be directly wired to any power adapter or timing device with a 9 to 24 Volt A.C. or D.C. output, using the alternate hook-up input terminal screws underneath the feeder. **Do not hook-up to higher voltage than listed here!**

You have now completed your feed calibration and should see a feeding cycle at the next programmed "on" time.

SPECIAL NOTES

Reset "off" time may vary from 1-2 minutes. Your feeder may have a feed time controller with a dial or a slotted shaft. You will have the ability to program successive feeding cycles down to 2-3 minutes apart if using a digital timer, or 30 minutes apart with most analog timers using 15 min. on-off tabs.

Crushing large flakes and/or mixing a few pellets with flakes can greatly improve extraction of flakes, particularly in a very humid environment. Generally, the smaller the flakes, the more accurate flake distribution will be. Make sure the slide shakes if dispensing flakes!

The shaking action of the distribution slide is primarily designed to prevent bridging and help expel flake food and/or alert your pets of mealtime like a slot machine. If not using flakes, and you want a quieter operation, you can disable that feature as follows: Facing the chute outlet, lift slide, and using a thin small object, flip the trip-wire underneath the slide forward and down (toward you) and away from the bottom of the slide. Note: If the slide does not already shake and you want it to shake during feeding, check the wire underneath the slide for proper position. If the wire is down and away from slide, reverse the procedure above to move the trip-wire back in place against the bottom of the slide.

Choose a remote timer to fit your needs. The number of "on-off" cycles will be the number of feeding cycles available. If choosing an analog timer with on-off tabs, one with 15 minute tabs is recommended. As an example, a basic 24-Hr lamp timer with 15 minute tabs can provide up to 3 cycles the first hour span. One with 30-minute tabs can provide up to 2 (1 "on" tab to trigger and 1 "off" tab to reset).

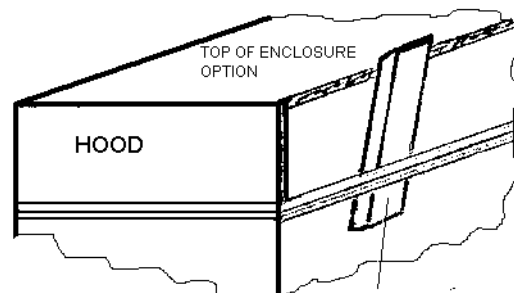
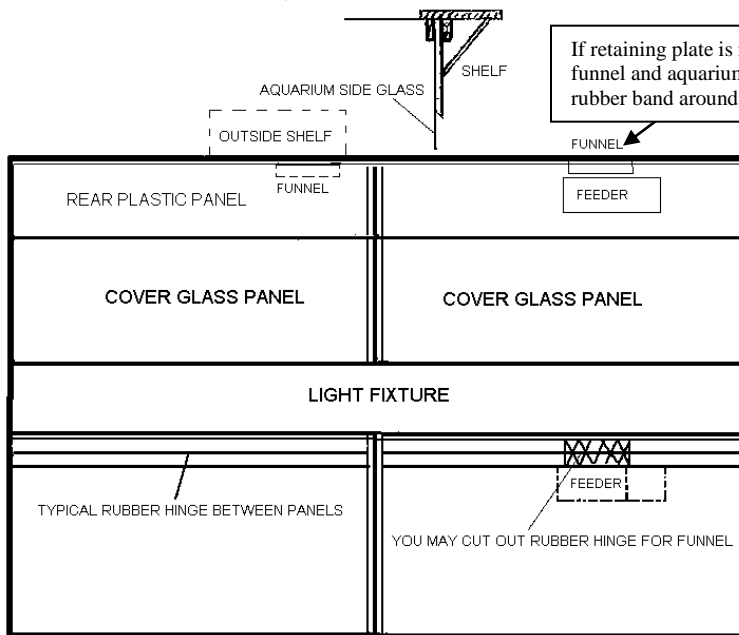
AQUARIUM SUPER FEEDER® INSTALLATION

If at all possible, we recommend that you install your Super Feeder® in the open-air. However, if you must enclose it, we highly recommend that you completely seal the water area around and below the feeder, except for the required funnel opening. A light fixture and a well-ventilated area around your Super Feeder® will assure reliable performance. With a hood/enclosure, an opened backside is a must. The preferred location is on top of your aquarium, but if you do not have the space, you could install it on a small shelf on the outside of your aquarium wall. You may turn the rubber feet to level feeder in position.

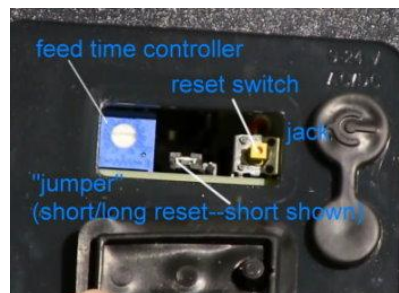
Although it may not always be required with some applications and under some conditions, use of the “Moisture Trap™” funnel is strongly recommended with flake food. Provide a small opening through your aquarium cover through which you will slip the funnel’s neck. You may use the retaining plate as a template to cut out the correct size opening. When installing the funnel, the wide end should protrude into the water, preferably ½ inch or more. If your funnel does not reach the water, and you cannot raise the water level, you may try gluing an extension to the lower end using a strip of thin plastic sheeting, which can be purchased at a hobby shop or plastic outlet (see drawing below). You may need to rough up the plastic for better adhesion. If you still cannot reach the water level and you have problems with flakes sticking to the funnel and/or feeder’s slide, try moving the funnel to a different area and open up some of the water area away from the feeder so that the funnel does not act as a water vapor “chimney”. Our feeder’s side chute and patented food delivery system has been proven to be very helpful in keeping excessive moisture away from its food reservoir. Although your fish will normally keep the funnel clean, you should periodically inspect the distribution slide along with the funnel, and clean them as needed.

If only using pellets (not flakes!), and you would like a quieter operation, you may disable the shaking slide (see “Special Notes,” page 3). Do not use your power adapter outdoors, and always follow your remote timer manufacturer’s instructions and recommendations.

TYPICAL AQUARIUM COVER FEEDER INSTALLATION



A RECTANGULAR FUNNEL CAN BE MADE OUT OF THIN PLASTIC AVAILABLE AT MOST HOBBY SHOPS. AN EXTENSION COULD ALSO BE ADDED TO CURRENT FUNNEL.



Note: Controller may be a slotted shaft component instead of a dial. Jumper will not be present with that system.

4 REMEMBER THAT YOU SHOULD INSTALL THE FUNNEL SO THE LARGE END PENETRATES THE WATER TO INSURE RELIABLE FLAKE DISTRIBUTION (see page 2). IF ONLY DISPENSING FLOATING PELLETS, AND YOU WOULD LIKE TO DISPERSE THEM, SUBMERGING THE END OF THE FUNNEL MAY NOT BE NECESSARY. YOU MAY CUT THE FUNNEL OR NOT USE IT. DEPENDING ON YOUR FUNNEL PLACEMENT AND AMBIENT CONDITIONS, THE FUNNEL MAY NOT NEED TO BE SUBMERGED

Revised 02/05/2012

TROUBLESHOOTING

<u>PROBLEM</u>	<u>POSSIBLE CAUSE/SOLUTION</u>
<u>OPERATING SUPER FEEDER?</u>	Please view our video which will be extremely helpful for assembly and operation of the Super Feeder (link on Index Page).
<p><u>UNIT DOES NOT RUN, DOES NOT RUN PROPERLY, OR DOES NOT TRIGGER AT PROGRAMMED REMOTE TIMER TIME or WHEN TIMER IS MANUALLY SWITCHED "OFF AND BACK 'ON" AGAIN.</u></p> <p>Some Super Feeders may have two internal lights: One power light is blue instead of green when feeder is powered, and a green light, which will only be on while motor is running. Also, the original feed adjustment dial has been replaced by a multi-turn slotted shaft screw-type portion controller for finer tuning of feed cycle time.</p> <p>Use supplied plastic screwdriver to turn dial or portion controller shaft. Slotted shaft portion controller timing change: 1 full turn = 4 seconds---1/4 turn = 1 second</p>	<p>1. Confirm power light (steady green or blue depending on model) illuminates when you plug the power adapter directly into an outlet. If light not on, power adapter could be defective. Also check for proper electrical connections. Try switching wire connections under the feeder if using that alternate input. If still not on, call or send an e-mail to possibly return unit for service.</p> <p>2. If power light is on, push reset switch and confirm that motor runs. With power off, push reset switch for 5 seconds, then plug power adapter directly into an outlet without timer. If it does not run, contact us. If it runs, check timer for proper operation/setting/programming.</p> <p>3. Reset "off" time not long enough (most common!). Make sure feeder is at least off for a minimum of 1-2 minutes between feed cycles to reset itself. If testing the feeder repeatedly, manually void required "off" reset time between test cycles by pushing and holding down the reset switch for 5 seconds with no power going to the feeder (power light off).</p> <p>4. Feeder triggers/runs for just a split second. Make sure feed cycle time adjustment is not turned all the way down (very important). Turn dial or portion controller's shaft clockwise as needed.</p>
<p><u>AQUARIUM MODELS</u></p> <p><u>FLAKES STICK TO SLIDE AND/OR FUNNEL EXCESSIVELY.</u></p>	<p>1. Surfaces damp or wet. Funnel's lower end is out of the water and/or bubbles are bursting and splattering around the feeder's chute. Make sure the funnel is at least 1/2" below the water line at all times and not installed directly above a bubble source/generator. Also, the feeder's chute and slide may be too close to the funnel's neck. Slightly move feeder away or move feeder to other area. Check slide for shaking action* (see "special notes," page 3).</p>
<u>UNIT RUNS BUT DOES NOT EXPEL FOOD PROPERLY.</u>	<p>1. Clear extension and or large 1.5 gal. hopper low/empty. Fill.</p> <p>2. Food packed. Loosen food. Do not stuff kibbles in feeder.</p> <p>3. Food too large. Crush or replace food with smaller size.</p> <p>4. Feed time adjustment incorrect. Using supplied small plastic screwdriver, turn portion controller's dial or slotted shaft to the left or right in fine increments to achieve correct timing for desired portion size.</p> <p>5. Gate to roller gap too small. Rotate large black nylon screw counterclockwise located above chute.</p> <p>6. Slide does not shake. Check for proper shaking action (very important). See page 3 of instructions manual.</p> <p>7. Distribution drum surface worn out (all the small teeth sheared off). Return for service or order new drum (also referred to as "roller."</p>
<u>UNIT EXPELS TOO MUCH FOOD</u>	<p>1. Feeding time too long. Using the supplied small plastic screwdriver, turn portion controller's dial or slotted shaft to the left in fine increments to achieve correct timing for desired portion size.</p> <p>2. Gate opening too wide. Reduce gate to roller gap by turning large black screw above chute opening clockwise.</p>
<u>UNIT CRUSHES FLAKES TOO MUCH</u>	<p>1. Gate to roller gap too narrow. Open gate by turning volume screw counterclockwise located above chute opening or use smaller flakes.</p>
<u>FEEDER VERY NOISY</u>	<p>Check for food stuck between distribution slide and roller. You may also disable slide shaking mechanism (check page 3 of manual for directions)--not recommended with flake distribution.</p>

Super Feed®

WARRANTY STATEMENT

We, at Super-Feed Enterprise, warrant our Super Feeders to be free from defects in material and workmanship for a period of 1 YEAR from the original date of purchase by the original owner/purchaser. On claims submitted as outlined above, we will repair, or at our discretion replace without charge any Super Feeder that has failed through defect in material and/or workmanship (all timers and power adapters shall only be warranted for a period of 90 days from date of purchase). Suitable external 120V feeder timers can be purchased from various sources. Warranty does not cover any Super Feeder® or accessory if it is being or has been used for any purpose other than its obvious original intent, has been damaged, altered, installed and/or operated contrary to instructions. We assume no other liabilities or responsibilities other than listed herein. Missing/damaged parts must be reported within 14 days of purchase to qualify for replacements, adjustments or refunds.

WARRANTY AND REPAIR PROCEDURES

We, at Super-Feed Enterprise, are dedicated to providing you with the ultimate automatic feeder and the quality support necessary to assure your utmost satisfaction. For warranty repair, ship your product to us postage prepaid. You will be responsible for any damage incurred while in transit. We'll pay for the return shipping back to you via 3-5 Day "Ground" shipping. If you desire any other mode of shipment, Express Mail as an example, you will be responsible for the difference in cost. Please include a brief statement regarding the problem along with your original purchase receipt, your name, address and phone number for contact. You may also submit your E-mail address for easy correspondence. For non-warranty items, you will be charged for repairs and shipping. You may obtain a quote from us before sending your product for repair. Payment for repairs must be via PayPal or Credit card. Ship To: Super-Feed Enterprise, 2072 Logue Road, Mount Juliet, TN 37122 Tel: 615-470-5596

RETURN/REFUND POLICY

VERY IMPORTANT INFORMATION! We will no longer accept ANY returns for refund if any Super Feeder and/or accessories ARE NOT IN THEIR ORIGINAL NEW-IN-THE-BOX CONDITION." If you believe that the feeder will not work out for you when received, do not use it if you wish to return it for a refund of the feeder price. If you are not sure that your food will work, ask us or send us a sample, and we will be more than happy to test it for you before you buy or use the feeder. We are always ready to assist you with any issues you may have, but we must know about them first. Other than a possible unfortunate and rare malfunction, we know without a doubt that our product works exactly as disclosed, as well proven by thousands of past customers for the past 17 years. If your Super Feeder® has been purchased from a source other than directly from us, you should contact the seller for return/refund policy. If purchased it directly from us or from our Amazon store, you may only be refunded not to include shipping and handling and also subject to limitations listed herein. You MUST contact us for a return authorization number (RMA) and state reason for return **and our inability to resolve your issues**. For a full refund of the feeder price, product must be returned to us in its original packaging and new/unused condition (without damage or missing parts) within 30 days of purchase date. Any damaged items, if applicable, will also be assessed and deducted from the product price for refund. **Absolutely no refund for any item received by us past 30 days from date of purchase.** Used or not, we will of course repair/replace items under disclosed warranty terms as deemed necessary. If returned to us contrary to conditions listed herein and without our prior permission, the items will not be accepted and will be returned to you. With prior authorization, return to: Super-Feed Enterprise, 2072 Logue Road, Mount Juliet, TN 37122 (write authorization number on a top corner of shipping box) **Non-exchanged** return of **any unused** dc or ac timer (**low voltage** dc/ac timer--not typical 120V pug-in programmable timers used on feeders) will be assessed a re-stocking fee of \$20.00 per timer if returned for refund request.

For assistance with return authorization, warranty and/or repair, call or fax: (615)470-5596 or e-mail info@super-feed.com Websites: <http://www.super-feed.com> <http://www.super-feeder.com>

SAFETY REMINDER

All Super Feeders are meant to assist you in providing timely meals for your pets and not to entirely replace human supervision. As with any machine, the Super Feeder® should be monitored at regular intervals for proper operation. If you anticipate being away for an extended period of time where a lack of food could cause harm or even death to your pet (s), you MUST make arrangements with someone to inspect your feeder at regular safe intervals.