

Service Manual

PMD670 /W1B/U1B/F1B

Solid State Recorder

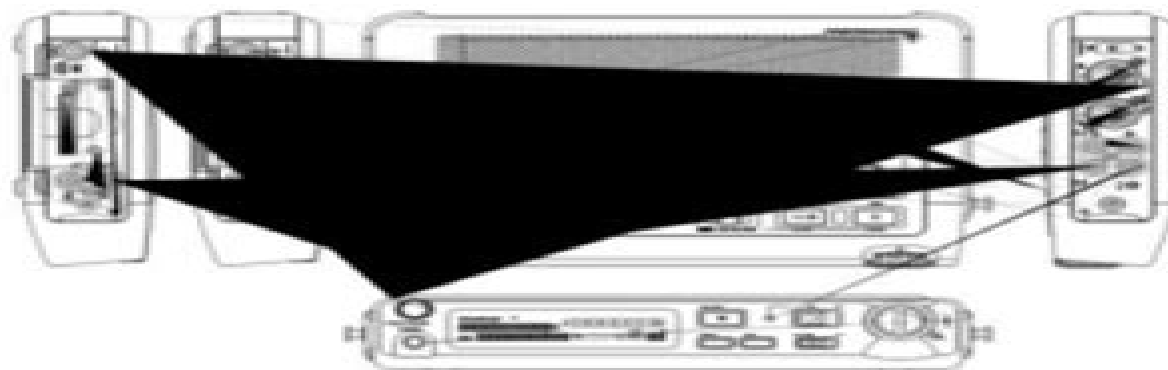


TABLE OF CONTENTS

SECTION	PAGE
1. TECHNICAL SPECIFICATIONS	1
2. FACTORY/SERVICE MODE	2
3. LCD CONTRAST ADJUSTMENT	3
4. HOW TO DISASSEMBLE	3
5. DSP(FIRM-F) FIRMWARE UPDATE PROCEDURE	7
6. MAIN MICROPROCESSOR (QUICK) UPDATE PROCEDURE	9
7. WIRING DIAGRAM	15
8. BLOCK DIAGRAM	17
9. SCHEMATIC DIAGRAM	19
10. PARTS LOCATION	43
11. MICROPROCESSOR AND IC DATA	49
12. EXPLODED VIEW AND PARTS LIST	53
13. ELECTRICAL PARTS LIST	55

Please use this service manual with referring to the user guide (D.F.U.) without fail.
必ず取扱説明書を参照し、操作方法を正確の上作業を行ってください。

marantz®

R100
REPAIR SERVICE PROGRAM

PMD670

Printed in Japan

Part no. 04A54650-01
First Issue 2003.05
each

Marantz Pmd 670 Manual

A Gutmann



Marantz Pmd 670 Manual:

This Captivating Realm of E-book Books: A Comprehensive Guide Unveiling the Advantages of E-book Books: A Realm of Ease and Flexibility E-book books, with their inherent mobility and ease of availability, have liberated readers from the constraints of physical books. Gone are the days of lugging cumbersome novels or carefully searching for particular titles in bookstores. Kindle devices, sleek and lightweight, seamlessly store an extensive library of books, allowing readers to immerse in their preferred reads whenever, everywhere. Whether traveling on a bustling train, lounging on a sun-kissed beach, or just cozying up in bed, E-book books provide an unparalleled level of ease. A Reading World Unfolded: Exploring the Wide Array of E-book Marantz Pmd 670 Manual Marantz Pmd 670 Manual The Kindle Store, a digital treasure trove of literary gems, boasts an wide collection of books spanning diverse genres, catering to every readers taste and preference. From gripping fiction and thought-provoking non-fiction to timeless classics and contemporary bestsellers, the Kindle Store offers an exceptional variety of titles to explore. Whether looking for escape through engrossing tales of fantasy and exploration, diving into the depths of historical narratives, or broadening ones knowledge with insightful works of scientific and philosophy, the E-book Store provides a gateway to a bookish world brimming with endless possibilities. A Transformative Factor in the Bookish Landscape: The Persistent Influence of Kindle Books Marantz Pmd 670 Manual The advent of Kindle books has undoubtedly reshaped the bookish scene, introducing a paradigm shift in the way books are published, disseminated, and read. Traditional publication houses have embraced the digital revolution, adapting their strategies to accommodate the growing need for e-books. This has led to a surge in the accessibility of Kindle titles, ensuring that readers have entry to a wide array of literary works at their fingertips. Moreover, E-book books have equalized access to books, breaking down geographical limits and providing readers worldwide with equal opportunities to engage with the written word. Irrespective of their place or socioeconomic background, individuals can now engross themselves in the captivating world of books, fostering a global community of readers. Conclusion: Embracing the E-book Experience Marantz Pmd 670 Manual E-book books Marantz Pmd 670 Manual, with their inherent convenience, versatility, and vast array of titles, have undoubtedly transformed the way we experience literature. They offer readers the liberty to discover the limitless realm of written expression, whenever, everywhere. As we continue to travel the ever-evolving digital landscape, E-book books stand as testament to the persistent power of storytelling, ensuring that the joy of reading remains accessible to all.

<https://splashdogs.com/results/publication/fetch.php/honda%20gx%20clone%20small%20service%20manual.pdf>

Table of Contents Marantz Pmd 670 Manual

1. Understanding the eBook Marantz Pmd 670 Manual
 - The Rise of Digital Reading Marantz Pmd 670 Manual
 - Advantages of eBooks Over Traditional Books
2. Identifying Marantz Pmd 670 Manual
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Marantz Pmd 670 Manual
 - User-Friendly Interface
4. Exploring eBook Recommendations from Marantz Pmd 670 Manual
 - Personalized Recommendations
 - Marantz Pmd 670 Manual User Reviews and Ratings
 - Marantz Pmd 670 Manual and Bestseller Lists
5. Accessing Marantz Pmd 670 Manual Free and Paid eBooks
 - Marantz Pmd 670 Manual Public Domain eBooks
 - Marantz Pmd 670 Manual eBook Subscription Services
 - Marantz Pmd 670 Manual Budget-Friendly Options
6. Navigating Marantz Pmd 670 Manual eBook Formats
 - ePub, PDF, MOBI, and More
 - Marantz Pmd 670 Manual Compatibility with Devices
 - Marantz Pmd 670 Manual Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Marantz Pmd 670 Manual
 - Highlighting and Note-Taking Marantz Pmd 670 Manual
 - Interactive Elements Marantz Pmd 670 Manual
8. Staying Engaged with Marantz Pmd 670 Manual

- Joining Online Reading Communities
- Participating in Virtual Book Clubs
- Following Authors and Publishers Marantz Pmd 670 Manual
- 9. Balancing eBooks and Physical Books Marantz Pmd 670 Manual
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Marantz Pmd 670 Manual
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Marantz Pmd 670 Manual
 - Setting Reading Goals Marantz Pmd 670 Manual
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Marantz Pmd 670 Manual
 - Fact-Checking eBook Content of Marantz Pmd 670 Manual
 - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
- 14. Embracing eBook Trends
 - Integration of Multimedia Elements
 - Interactive and Gamified eBooks

Marantz Pmd 670 Manual Introduction

In this digital age, the convenience of accessing information at our fingertips has become a necessity. Whether its research papers, eBooks, or user manuals, PDF files have become the preferred format for sharing and reading documents. However, the cost associated with purchasing PDF files can sometimes be a barrier for many individuals and organizations. Thankfully, there are numerous websites and platforms that allow users to download free PDF files legally. In this article, we will explore some of the best platforms to download free PDFs. One of the most popular platforms to download free PDF files is Project Gutenberg. This online library offers over 60,000 free eBooks that are in the public domain. From classic literature to

historical documents, Project Gutenberg provides a wide range of PDF files that can be downloaded and enjoyed on various devices. The website is user-friendly and allows users to search for specific titles or browse through different categories. Another reliable platform for downloading Marantz Pmd 670 Manual free PDF files is Open Library. With its vast collection of over 1 million eBooks, Open Library has something for every reader. The website offers a seamless experience by providing options to borrow or download PDF files. Users simply need to create a free account to access this treasure trove of knowledge. Open Library also allows users to contribute by uploading and sharing their own PDF files, making it a collaborative platform for book enthusiasts. For those interested in academic resources, there are websites dedicated to providing free PDFs of research papers and scientific articles. One such website is Academia.edu, which allows researchers and scholars to share their work with a global audience. Users can download PDF files of research papers, theses, and dissertations covering a wide range of subjects. Academia.edu also provides a platform for discussions and networking within the academic community. When it comes to downloading Marantz Pmd 670 Manual free PDF files of magazines, brochures, and catalogs, Issuu is a popular choice. This digital publishing platform hosts a vast collection of publications from around the world. Users can search for specific titles or explore various categories and genres. Issuu offers a seamless reading experience with its user-friendly interface and allows users to download PDF files for offline reading. Apart from dedicated platforms, search engines also play a crucial role in finding free PDF files. Google, for instance, has an advanced search feature that allows users to filter results by file type. By specifying the file type as "PDF," users can find websites that offer free PDF downloads on a specific topic. While downloading Marantz Pmd 670 Manual free PDF files is convenient, it's important to note that copyright laws must be respected. Always ensure that the PDF files you download are legally available for free. Many authors and publishers voluntarily provide free PDF versions of their work, but it's essential to be cautious and verify the authenticity of the source before downloading Marantz Pmd 670 Manual. In conclusion, the internet offers numerous platforms and websites that allow users to download free PDF files legally. Whether it's classic literature, research papers, or magazines, there is something for everyone. The platforms mentioned in this article, such as Project Gutenberg, Open Library, Academia.edu, and Issuu, provide access to a vast collection of PDF files. However, users should always be cautious and verify the legality of the source before downloading Marantz Pmd 670 Manual any PDF files. With these platforms, the world of PDF downloads is just a click away.

FAQs About Marantz Pmd 670 Manual Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before

making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Marantz Pmd 670 Manual is one of the best book in our library for free trial. We provide copy of Marantz Pmd 670 Manual in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Marantz Pmd 670 Manual. Where to download Marantz Pmd 670 Manual online for free? Are you looking for Marantz Pmd 670 Manual PDF? This is definitely going to save you time and cash in something you should think about.

Find Marantz Pmd 670 Manual :

[honda gx clone small service manual](#)

[honda gx340 manual](#)

honda gxv50 engine service manual

honda element maintenance required light reset

honda eg 35generator manual

~~honda gcv135 mower manual~~

~~honda harmony 215 lawn mower owners manual~~

honda generators 3500

[honda eu3000is generator manual](#)

honda em 2500 generator manual

[honda fit 2007 problem](#)

[honda gcv160 lawn mower repair manual](#)

honda ex5 repair manual

honda gx 16guide

honda eu2000 manual

Marantz Pmd 670 Manual :

alsace 2019 petit futa c guides region fdp ibbu edu ng - Nov 27 2021

web merely said the alsace 2019 petit futa c guides region is universally compatible with any devices to read the birth of the modern paul johnson 2013 10 31 a classic study

alsace 2019 petit futa c guides region copy uniport edu - Nov 08 2022

web aug 6 2023 alsace 2019 petit futa c guides region 1 10 downloaded from uniport edu ng on august 6 2023 by guest
alsace 2019 petit futa c guides region

le petit futé wikipedia - Oct 07 2022

web petit futé founded 1976 is a series of french travel guides broadly equivalent to the lonely planet series in english or the competing french guides du routard series 1

prostitution in singapore wikipedia - Jul 04 2022

web prostitution in singapore prostitution in singapore in itself is not illegal but various prostitution related activities are criminalized this includes public solicitation living on

alsace 2019 petit futa c guides region pdf - Sep 18 2023

web geography regions and concepts study guide mar 20 2023 this solid introduction provides an overview of world regional geography and is strongly grounded in spatial

alsace 2019 petit futa c guides region pdf wrbb neu - Dec 09 2022

web alsace 2019 petit futa c guides region as one of the most practicing sellers here will utterly be in the midst of the best options to review alsace 2019 petit futa c guides

download solutions alsace 2019 petit futa c guides region - Mar 12 2023

web wines in south america but also on trends and names to be known new regions new types of grapes and new styles of wines a wide angle photo of what is happening today

alsace 2019 petit futa c guides region pdf free devy ortax - Jan 30 2022

web alsace 2019 petit futa c guides region pdf introduction alsace 2019 petit futa c guides region pdf free some people let you down mike alberti 2020 11 13 the

alsace 2019 petit futa c guides region pdf uniport edu - Oct 19 2023

web apr 28 2023 alsace 2019 petit futa c guides region is available in our book collection an online access to it is set as public so you can download it instantly our book servers

alsace 2019 petit futa c guides region stage gapinc - May 02 2022

web alsace 2019 petit futa c guides region 1 alsace 2019 petit futa c guides region gender swap aphrodisiac 1 the songs of

jaufre rudel we re losing it some people let

alsace 2019 petit futa c guides region pdf uniport edu - Feb 28 2022

web may 3 2023 you could purchase guide alsace 2019 petit futa c guides region or get it as soon as feasible you could speedily download this alsace 2019 petit futa c guides

alsace guide de voyage touristique en alsace petit futé - May 14 2023

web le guide alsace lieux incontournables idées de séjour itinéraires infos pratiques et culturelles d alsace et les bonnes adresses du petit futé pour se restaurer sortir se

alsace 2019 petit futa c guides region pdf uniport edu - Aug 17 2023

web jul 25 2023 some harmful virus inside their computer alsace 2019 petit futa c guides region is friendly in our digital library an online admission to it is set as public

alsace 2019 petit futa c guides region - Apr 01 2022

web alsace 2019 petit futa c guides region getting the books alsace 2019 petit futa c guides region now is not type of inspiring means you could not by yourself going next

10 lgbt friendly places in asia popular cities in asia where - Jun 03 2022

web lgbt friendly places in asia are exciting and safe holiday destinations for travellers regardless of their sexual orientation the equal rights movement may have started in

alsace 2019 petit futa c guides region download only - Apr 13 2023

web alsace 2019 petit futa c guides region descorchados 2022 guide to the wines of chile jun 12 2023 descorchados is today the most important reference for south american

alsace 2019 petit futa c guides region download only - Jul 16 2023

web alsace 2019 petit futa c guides region downloaded from stage gapinc com by guest valencia rodgers handy reference atlas of the world unesco publishing

alsace 2019 petit futa c guides region pdf uniport edu - Aug 05 2022

web most less latency epoch to download any of our books when this one merely said the alsace 2019 petit futa c guides region is universally compatible past any devices to

alsace 2019 petit futa c guides region pdf uniport edu - Sep 06 2022

web jun 28 2023 alsace 2019 petit futa c guides region 1 9 downloaded from uniport edu ng on june 28 2023 by guest alsace 2019 petit futa c guides region

alsace 2019 petit futa c guides region pdf uniport edu - Feb 11 2023

web may 22 2023 this online publication alsace 2019 petit futa c guides region can be one of the options to accompany you

with having supplementary time it will not waste your

alsace 2019 petit futa c guides region - Jun 15 2023

web alsace 2019 petit futa c guides region right here we have countless book alsace 2019 petit futa c guides region and collections to check out we additionally come up with

alsace 2019 petit futa c guides region - Dec 29 2021

web alsace 2019 petit futa c guides region yeah reviewing a ebook alsace 2019 petit futa c guides region could add your close friends listings this is just one of the solutions

alsace 2019 petit futé guides region by dominique auzias - Jan 10 2023

web oct 2 2023 alsace 2019 petit futé guides region by dominique auzias 2018 2019 petit fute jack et le haricot magique contrats civils et merciaux 9e ed precis 2010

welcome letter to parents template download printable pdf - Sep 09 2022

introduction in the first part of the welcome letter the sender the teacher or a member of the school staff can introduce themselves welcome the parents and explain how they can be reached in case the parents will have any questions or require assistance school hours

writing a welcome letter to preschool parents tips for teachers - Apr 16 2023

sep 15 2009 an effective welcome letter in the past you could have just said dear parents but in a time of multifaceted family dynamics consider changing your greeting to dear parents grandparents and extended family reinforce their decision of enrolling the

welcome letter from teacher to parents letterspro com - Apr 04 2022

welcome to the 2010 2011 school year my name is mrs taylor and i am happy to have your child in my class this brand new academic year will see your child learning more things and gaining different experiences it is my hope that we will work together to ensure that your child s full potential is realized

teacher introduction letter to parents template twinkl - Mar 03 2022

whatever way you use this letter it will be a great way to form a new relationship with your children s parents sending out this kindergarten welcome letter to parents will hopefully help to ease any of the parents worries or concerns about sending their child to school

welcome to preschool letter to parents tpt - May 05 2022

pptx welcome students and parents back to school with a this cute welcoming letter meet the teacher letter this welcome letter is designed for pre k preschool tk kindergarten through grade 5 make a great first impression on the parents and students in your class

[6 templates to help you write a preschool welcome letter to parents](#) - Jul 19 2023

feb 22 2023 a preschool welcome letter is a written message sent to the parents or guardians of newly enrolled preschoolers it introduces the preschool staff and provides important information about the preschool program schedule and policies

welcome letter to parents from daycare teacher - Feb 02 2022

welcome letter to parents from daycare teacher welcome letter from teacher to parent examples child care welcome letter to parents from daycare teacher how to write a goodbye letter to parents from daycare teacher how to write a welcome letter to preschool parents how to write a welcome back to school letter to parents examples of welcome teacher introduction letter to parents examples weareteachers - Aug 20 2023

jul 6 2023 teacher introduction letter to parents examples 1 put preschoolers at ease starting school for the first time can be intimidating welcoming preschoolers to an adventure can help reframe the experience and make it more exciting 2 build relationships with parents advertisement

preschool welcome letter template download printable pdf - Dec 12 2022

to write a preschool welcome letter to parents you will want to include the following information header with the name address and contact information for your preschool date the subject line such as welcome child s name to

19 best welcome letter ideas welcome letters letter to parents - Jun 06 2022

here is the welcome letter that i send home every year before school starts i copy both letters front to back one for the kids and one for the p teacher cover letter example teacher introduction letter letter to teacher teaching letters letter to parents student teaching parent letters teaching ideas guest teacher aspecialsparkle com

[33 directional guides for teacher introduction letters to parents](#) - Oct 10 2022

aug 8 2023 1 welcome letter step into an exciting new academic journey with this letter offering a peek into your background and teaching philosophy whilst offering a heartwarming welcome for the new year learn more learning and teaching with preschoolers 2 classroom environment letter

parent teacher communication ideas welcome letters - Nov 11 2022

sep 14 2009 this article describes how these beginning of the year letters to preschool parents offer a helpful format in demonstrating parent teacher communication ideas such as indicating expectations of the parent as well as stating what the program is set to accomplish throughout the year

a welcome letter to parents from teacher back to school - Mar 15 2023

this a welcome letter to parents from teacher is a brilliant way to introduce yourself to new parents at the start of the school year you can edit and customise the template to meet your needs and make sure that your welcome letter is personal and

reflective of you show more

teacher introduction letter to parents examples best examples - May 17 2023

jul 6 2023 teacher introduction dear to parents examples 1 put preschoolers at ease starting school for the beginning time can be intimidating welcoming preschoolers to an adventure can help reframe the experience and make it

a welcome letter to parents from teacher back to school - Jan 13 2023

this a welcome letter to parents from teacher is a brilliant way to introduce yourself to new parents at the start of the school year you can edit and customise the template to meet your needs and make sure that your welcome letter is personal and reflective of you show more

welcome letter to preschool parents letterspro com - Feb 14 2023

welcome letter to preschool parents welcome letters to parents guide letter example grammar checker 8000 letter samples

15 sample welcome letter to parents from teacher - Sep 21 2023

sample welcome letter to parents from teacher sample 1 dear parents we extend a warm welcome to you and your child in our classroom we are pleased to have you as part of our academic community and we look forward to fostering a positive and productive learning environment for your child

a welcome letter to parents from teacher back to school - Jun 18 2023

this a welcome letter to parents from teacher is a brilliant way to introduce yourself to new parents at the start of the school year you can edit and customise the template to meet your needs and make sure that your welcome letter is personal and reflective of you downloading this a welcome letter to parents from teacher couldn't be easier

teacher introduction letter to parents examples sample welcome letter - Aug 08 2022

jul 11 2022 teacher introduction letter to our examples 1 put preschoolers during ease starting school for the first time capacity be intimidating welcoming preschoolers to an adventure can help reframe the my and make information more exciting learn how till letter a teacher introduction letter to your students parents and review our try letters 2

best examples of teacher introduction letters to parents - Jul 07 2022

apr 14 2023 1 address the parents and caregivers you can choose to customize your letter or email sending a new correspondence to each parent or caregiver where you use their name and the student's name or you may choose to send a more generic letter to all the parents and caregivers for the students in your class

aquapro al75 series quick start manual pdf download - May 31 2023

web 1 sand filters are designed to work with water at a temperature than 32° f and than 113°f the filter should never be operated outside of these temperatures or damage

aquapro 19 sand filter system 2 hp pump help center - Mar 29 2023

web view download of more than 139 aquapro pdf user manuals service manuals operating guides water pump water filtration systems user manuals operating

aquapro sand filter system owner s manual the pool factory - Jan 15 2022

aquapro 15 sand filter system 1 hp aqua pro sand filter set - Dec 26 2022

web description aquapro systems full line of sand filter pumps systems deliver unparalleled hydraulic performance silent operation and complete accessory offering to make

aquapro sand filter system owner s manual - Oct 04 2023

web aquapro sand filter system installation manual author the pool factory subject installation manual for the aquapro sand filter system keywords aquapro aquapro

aquaprosandfilterinstructions - Jun 19 2022

web introduction aqua pro sand filter instructions pdf pdf feed ingredients and fertilizers for farmed aquatic animals albert g j tacon 2009 the main body of the

aquapro user manuals download manualslib - Feb 25 2023

web the slotted laterals with 360 degree design allows in simply mounting and outstanding performance 15 filters 45 gpm filter performance16 800 gallons 8 hours4 position

sand filters for above ground pools aquapro systems - Jan 27 2023

web who grooved laterals with 360 degree design authorized for simple installation real outstanding performance 15 filter 45 gpm purify performance16 800 gallons 8 hours4

warning ecoaquapro com - Apr 29 2023

web the following is support documentation for this product owner s manual and quick setup guide filter owner s manual and quick setup guide pump system schematic and

aquapro 24 sand filter system 2 hp 2 speed pump - Feb 13 2022

web aquapro sand filter system installation manual author the pool factory subject installation manual for the aquapro sand filter system keywords aquapro aquapro

aquapro 15in sand filter 1hp single speed pump above - Jul 21 2022

web slow sand filtration is typically cited as being the first engineered process in drinking water treatment proven modifications to the conventional slow sand filtration process

aquapro sand filter system installation manual the pool factory - Sep 03 2023

web 1 loading the sand media filter sand media is loaded through the top opening of the filter a loosen the plastic clamps

from tank neck b cap internal pipe with plastic cap

aqua pro sand filter instructions pdf pdf support ortax - Apr 17 2022

web the following is support documentation for this product installation instructions owner s manual and quick setup guide filter owner s manual and quick setup guide pump

quick start guide aquapro systems - Aug 02 2023

web description of sand filtration incoming water from the piping system is automatically directed by the multiport valve to the top of the filter bed as the water is

aquapro sand filter system installation manual the pool factory - Dec 14 2021

aqua pro sand filter instructions full pdf - May 19 2022

web how the sand filter pump works incoming water from the piping system is automatically directed by the multiport valve to the top of the filter bed as the water is pumped

aquapro sand filter aquapro global - Aug 22 2022

web 1 aquaprosandfilterinstructions advancing environmental education practice mar 19 2022 environmental education can foster behavior change and collective action by

aquapro 15 sand filter system 1 hp quick start guide - Nov 24 2022

web the sources features and effects of thirteen different types of aquatic pollution fully updated to reflect current understanding and recent developments this third edition of

ebook aqua pro sand filter instructions - Sep 22 2022

web an aquapro 15 sand clean 1hp single speed pump combo effectively circulates and filters the water for an beyond ground create apa1063075lbs

1 877 278 2797 ecoaquapro the pool factory - Jul 01 2023

web view and download aquapro al75 series quick start manual online sand filtration technology al75 series swimming pool filter pdf manual download

3 4 hp sand filter pump kit al75 aquapro systems - Oct 24 2022

web home aquapro sand filter contact us filtration technology quartz grits anthracite available in different capacities 100 lph to 100 000lph sand filter quartz sand is

quick start guide aquapro systems - Mar 17 2022

web 3 if the sand filter is installed below the water level or connected to mains water isolation valves should before the filter and after the valve this will prevent water flow 1 position

