

Inhaltsverzeichnis

1. OPEN-HYTERA-OE-MASTER-ENGLISH	18
2. Benutzer:Oe1kbc	10

OPEN-HYTERA-OE-MASTER-ENGLISH

[Versionsgeschichte interaktiv durchsuchen](#)

[Visuell Wikitext](#)

Version vom 18. Oktober 2013, 11:33 Uhr

(Quelltext anzeigen)

Oe1kbc ([Diskussion](#) | [Beiträge](#))

[← Zum vorherigen Versionsunterschied](#)

Aktuelle Version vom 1. Februar 2014,

09:28 Uhr (Quelltext anzeigen)

Oe1kbc ([Diskussion](#) | [Beiträge](#))

(6 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:

– == DMR **WinMaster** ==

by: Kurt OE1KBC oe1kbc@oevsv.at

Zeile 1:

+ == DMR **DigitalMaster** ==

by: Kurt OE1KBC oe1kbc@oevsv.at

Zeile 14:

* IP Multi-Site Service: ""checked""

* IP Multi-Site Service UDP Port: ""62016""

– * RDAC: ""**unchecked**""

Zeile 14:

* IP Multi-Site Service: ""checked""

* IP Multi-Site Service UDP Port: ""62016""

+ * RDAC: ""**checked**""

+ * **Remote RDAC UDP Port: ""62017""**

* Super Master Service: ""checked""

* Super Master IP: ""178.188.156.53""

* Super Master Service: ""checked""

* Super Master IP: ""178.188.156.53""

Zeile 23:

* Super Master RDAC UDP Port: ""62007""

Zeile 24:

* Super Master RDAC UDP Port: ""62007""

**Please note: Use the UDP-Port "62006" only for the first tests and QSOs. After that you will get a fixed UDP-Port. This Port identify you repeater to routing- and informations systems.
**

**Only with a fix UDP-Port you can use all the features in the WinMaster system. You can get this fix port form your WinMaster administrator. In Austria please contact me oe1kbc@oevsv.at
**

== Server ID using RDAC Service ==

- **WinMaster** versions larger then 8.0 are able to read the programmed Repeater Parameters.

* DMR Repeater ID

* Repeater callsign

Zeile 34:

* Repeater RX frequency or shift

A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the **WinMaster**. This information will be transferd to the S /BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.

-

-

- == Server ID (old version without Super Master RDAC Service ==

- **The HYTERA Repeaters to not give their ID to the network streams so i've to take this information from "Super Master Multi-Site UDP" Port.**

- **Therefore, if you use the default UPD-Port 62006 no Server-ID can be calculated.**

- **In coordination with Torsten DG1HT (for BMaster and SMaster) and OE1KBC (for WinMaster) we have the following possibilities:**

- **Super Master Multi-Site UDP Port:**
""6FRLL""

- **6....fix**

== Server ID using RDAC Service ==

DigitalMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.

* DMR Repeater ID

* Repeater callsign

Zeile 32:

* Repeater RX frequency or shift

A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the **DigitalMaster**. This information will be transferd to the S /BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.

+

– **F....counting no. per region 1-4
**

– **R....Region 1-9 (in OE it is the state 1-9 in DL the first position of the postal code)
**

– **LL...country code - only the last both digits - (OE...2<32> DL... 2<62> HB9...2<28> US...3<10>)
**

– **e.g.:
**

– **the second repeater in region 8 in OE ""62832"" or
**

– **the third repeater in postal region 4 in DL ""63462"" or
**

– **the forth repeater in region 7 in US ""64710""
**

== Timeslots / Talkgroups ==

– * local QSOs - the timeslot **TS1** should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.

– * echo function- as a special we offer on **TS1** a echo function. All you speak to TG9990 on **TS1** will be responded after release of PTT.

– * national QSOs - the timeslot **TS2** with TG9 you can also **use** for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs

– * international QSOs - with TG1 you are connected to all repeaters WW (US, EU, ...).

– == LastHeard ==

== Timeslots / Talkgroups ==

+ * local QSOs - the timeslot **TS2** should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.

+ * echo function- as a special we offer on **TS2** a echo function. All you speak to TG9990 on **TS2** will be responded after release of PTT.

+ * national QSOs - the timeslot **TS1** with TG9 you can also **be used** for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs

+ * international QSOs - with TG1 **on TS1** you are connected to all repeaters WW (US, EU, ...).

+ == **HYTERA DashBoard** / LastHeard ==

<p>– via http://87.106.3.249/dmr you can see the list of the last heard QSOs.</p>	<p>+ the link http://ham-dmr.de/dmr/ show the LastHeard information. This can show you the right function of the DigitalMaster installation.
</p>
	<p>+ You can also reach the overview which repeaters are ONLINE to the OPEN-HYTERA-NET:
</p>
	<p>+ http://ham-dmr.de/1repeater_status.php
</p>
	<p>+ And also an overview to control which talkgroups are linked to each repeater is shown:
</p>
	<p>+ http://ham-dmr.de/group.php.
</p>
<p>– == WinMaster Software ==</p>	<p>+ == DigitalMaster Software ==</p>
<p>– The WinMaster software is written with .NET C# and connect the repeaters to the network..
</p>	<p>+ The DigitalMaster software is written with .NET C# and connect the repeaters to the network..
</p>
<p>– The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same WinMaster) on TS1 with TG9. This is a local area connection.
</p>	<p>+ The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same DigitalMaster) on TS2 with TG9. This is a local area connection.
</p>
<p>– If you run more than one WinMaster on the same SMaster (see routing concept) you can decided on every WinMaster how to connect this WinMasters together.
</p>	<p>+ If you run more than one DigitalMaster on the same SMaster (see routing concept) you can decided on every DigitalMaster how to connect the DigitalMasters together.
</p>
<p>The three step model give us a dynamic structure for the future.</p>	<p>The three step model give us a dynamic structure for the future.</p>
<p>– * WinMaster build the repeater connections and the network for the region</p>	<p>+ * DigitalMaster build the repeater connections and the network for the region</p>
<p>– * SMaster combine the WinMaster regions to a nationwide network</p>	<p>+ * SMaster combine the DigitalMaster regions to a nationwide network</p>
<p>* BMaster combine nations to continents</p>	<p>* BMaster combine nations to continents</p>
<p>
</p>	<p>
</p>

-	here a pictiure from ÖVSV HYTERA-DMR OE-MASTER main- and propertiespage	+	here a picture from ÖVSV HYTERA-DMR OE-MASTER main- and properties page
	[[Bild:OE-MASTER-PRINT.jpg 500px OPEN HYTERA OE MASTER]]		[[Bild:OE-MASTER-PRINT.jpg 500px OPEN HYTERA OE MASTER]]
-	== questions to the software and the Wi nMaster (OE-MASTER) in OE ==	+	== Questions to the software and the Dig italMaster (OE-MASTER) in OE ==
-	Please EMail to oe1kbc@oevsv.at	+	please EMail to oe1kbc@oevsv.at

Aktuelle Version vom 1. Februar 2014, 09:28 Uhr

Inhaltsverzeichnis

1	DMR DigitalMaster	23
2	Parameters	23
3	Server ID using RDAC Service	23
4	Timeslots / Talkgroups	24
5	HYTERA DashBoard / LastHeard	24
6	DigitalMaster Software	24
7	Questions to the software and the DigitalMaster (OE-MASTER) in OE	25

DMR DigitalMaster

by: Kurt OE1KBC oe1kbc@oevsv.at

On the ÖVSV server we installed the DMR OE-MASTER and you can use this master for testing issues.

You can connect with HYTERA RD985 or RD965 repeater with the IP Multi-Site Service license installed. The connection is done via the "Supermaster" service.

Parameters

- Repeater Type: **IP Multi-Site Master**
- Jitter Buffer Length: **8**
- Authentication Key: **!! leave empty !!**
- IP Multi-site Networking UDP Port: **62015**
- P2P Firewall Open Time (sec): **6**
- IP Multi-Site Service: **checked**
- IP Multi-Site Service UDP Port: **62016**
- RDAC: **checked**
- Remote RDAC UDP Port: **62017**
- Super Master Service: **checked**
- Super Master IP: **178.188.156.53**
- Super Master UDP Port: **62005**
- Super Master Multi-Site Service: **checked**
- Super Master Multi-Site UDP Port: **62006** as standard port. Please ask WinMaster SYSOP for your own individual port
- Super Master RDAC Service: **checked**
- Super Master RDAC UDP Port: **62007**

Server ID using RDAC Service

DigitalMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.

- DMR Repeater ID
- Repeater callsign
- Repeater TX frequency
- Repeater RX frequency or shift

A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the DigitalMaster. This information will be transferd to the S/BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.

Timeslots / Talkgroups

- local QSOs - the timeslot TS2 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.
- echo function- as a special we offer on TS2 a echo function. All you speak to TG9990 on TS2 will be responded after release of PTT.
- national QSOs - the timeslot TS1 with TG9 you can also be used for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs
- international QSOs - with TG1 on TS1 you are connected to all repeaters WW (US, EU, ...).

HYTERA DashBoard / LastHeard

the link <http://ham-dmr.de/dmr/> show the LastHeard information. This can show you the right function of the DigitalMaster installation.

You can also reach the overview which repeaters are ONLINE to the OPEN-HYTERA-NET:

http://ham-dmr.de/1repeater_status.php

And also an overview to control which talkgroups are linked to each repeater is shown:

<http://ham-dmr.de/group.php>.

DigitalMaster Software

The DigitalMaster software is written with .NET C# and connect the repeaters to the network.. The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same DigitalMaster) on TS2 with TG9. This is a local area connection.

If you run more than one DigitalMaster on the same SMaster (see routing concept) you can decided on every DigitalMaster how to connect the DigitalMasters together.

The three step model give us a dynamic structure for the future.

- DigitalMaster build the repeater connections and the network for the region
- SMaster combine the DigitalMaster regions to a nationwide network
- BMaster combine nations to continents

here a picture from ÖVSV HYTERA-DMR OE-MASTER main- and properties page

DMR+ MASTER 7.00 Linux 64Bit																
HOME	Fri Mar 20 14:17:19 2015															
SYSTEM	DMR MASTER CONFIG															
LOGFILE																
GPS-USER	SYSOPEMAIL	LocalMasterName	Locator_ID	TS1_INTERN	TS1_EXTERN	Ref Link	Ref unlink	sMaster_IP								
	oe1kbc@chello.at	OE-Vienna	2322	1,2,20,232	1,2,20,232	User Link On	User Unlink On	44.143.9.60								
DONGLE	REPEATER ON MASTER															
RPT-GEO	CONFID	DmrID	CALL	LOGINTIME	IP	TX	QRG	RX	QRG	SHIFT	START	REF/RT	Reflector	TS1	FIRMWARE	MODEL
RPT-MAP	CONFID	232100	OE1XAR	Fri Mar 20 09:15:00 2015	44.143.9.70 62006	438.5000	430.9000	-7.6	4191/15	Link 4191	232 1 20	DMR+ MB 0.95	MBplus S			
	CONFID	228391	HB9RO	Fri Mar 20 09:15:00 2015	213.202.59.75 62006	439.4125	431.8125	-7.6	4180/15	Link 4180	228 1 20	A6.05.10.004	RD985 M			
	CONFID	232108	OE1XKK	Fri Mar 20 09:15:00 2015	44.143.9.72 62006	438.6000	431.0000	-7.6	4198/15	Link 4198	232 1 20	DMR+ MB 0.95	MBplus S			
DMR-LIVE	CONFID	262400	DEBNG	Fri Mar 20 09:15:00 2015	217.191.49.246 62006	438.9000	431.3000	-7.6	4006/15	Link 4006	262 1 20	A5.05.10.007	RD985 S			
	CONFID	232192	OE1XQU	Fri Mar 20 09:15:00 2015	44.143.8.68 62006	438.4500	430.8500	-7.6	4180/15	Link 4180	232 1 20	A6.05.10.004	RD985 M			
USER	CONFID	232605	OE1XCD	Fri Mar 20 09:15:00 2015	81.217.111.56 62006	438.9750	431.3750	-7.6	4191/15	Link 4191	232 1 20	A7.00.09.003	RD985 M			
	CONFID	232604	OE1XBE	Fri Mar 20 09:15:00 2015	185.29.89.105 62006	438.9125	431.3125	-7.6	4196/15	Link 4196	232 1 20	A6.05.10.004	RD985 M			
USER+	CONFID	232191	OE1XNK	Fri Mar 20 09:15:00 2015	44.143.9.52 62006	438.4250	430.8250	-7.6	4180/15	Link 4180	232 1 20	A7.00.09.003	RD985 M			
	CONFID	262899	DEBONA	Fri Mar 20 09:15:00 2015	212.125.105.170 62006	439.5875	431.9875	-7.6	4198/15	Link 4198	20 1	A6.05.10.004	RD985 M			
REF-LIST	CONFID	232893	OE1XNK	Fri Mar 20 09:15:01 2015	44.143.19.50 62006	438.4250	430.8250	-7.6	4191/15	Link 4191	232 1 20	A7.00.09.003	RD965 M			
	CONFID	232391	OE1XTR	Fri Mar 20 09:15:01 2015	82.218.27.11 62006	438.4000	430.8000	-7.6	4191/15	Link 4191	232 1 20	A7.00.09.003	RD625 M			
REF-LIST+	CONFID	232303	OE1XHB	Fri Mar 20 09:15:02 2015	44.143.9.73 62006	438.4250	430.8250	-7.6	4193/15	Link 4193	232 1 20	DMR+ MB 0.95	MBplus S			
	CONFID	232703	OE1XTI	Fri Mar 20 09:15:02 2015	44.143.9.77 62006	438.3500	430.7500	-7.6	4197/15	Link 4197	232 1 20	DMR+ MB 0.95	MBplus S			
MASTER	CONFID	232991	OE1XVJ	Fri Mar 20 09:15:02 2015	84.115.117.45 62006	438.5000	430.9000	-7.6	4199/15	Link 4199	232 1 20	A6.00.05.004	RD985 S			
	CONFID	232601	OE1XAG	Fri Mar 20 09:15:02 2015	44.143.9.71 62006	438.6000	431.0000	-7.6	4196/15	Link 4196	232 1 20	DMR+ MB 0.95	MBplus S			
	CONFID	262411	DEBMR	Fri Mar 20 09:15:03 2015	91.16.219.64 62006	439.0375	431.4375	-7.6	NO SET	NO-LINK	262 1 20 10	A5.05.10.007	RD985 S			
	CONFID	232193	OE1XOU	Fri Mar 20 09:15:03 2015	44.143.26.50 62006	145.5875	144.9875	-0.6	4191/15	Link 4191	232 1 20	A6.05.10.004	RD985 M			
RepeaterOnline: 17 ... Voice: GER EFN:off SPING: 41.50 ms Build: 000 Start Time: Fri Mar 20 09:14:57 2015																

Questions to the software and the DigitalMaster (OE-MASTER) in OE

please EMail to oe1kbc@oevsv.at

OPEN-HYTERA-OE-MASTER-ENGLISH: Unterschied zwischen den Versionen

[Versionsgeschichte interaktiv durchsuchen](#)

[Visuell Wikitext](#)

Version vom 18. Oktober 2013, 11:33 Uhr
([Quelltext anzeigen](#))

[Oe1kbc](#) ([Diskussion](#) | [Beiträge](#))

[← Zum vorherigen Versionsunterschied](#)

Aktuelle Version vom 1. Februar 2014, 09:28 Uhr
([Quelltext anzeigen](#))

[Oe1kbc](#) ([Diskussion](#) | [Beiträge](#))

(6 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:	Zeile 1:
– <code>== DMR WinMaster ==</code>	+ <code>== DMR DigitalMaster ==</code>
<code>by: Kurt OE1KBC oe1kbc@oevsv.at</code>	<code>by: Kurt OE1KBC oe1kbc@oevsv.at</code>
Zeile 14:	Zeile 14:
<code>* IP Multi-Site Service: "checked"</code>	<code>* IP Multi-Site Service: "checked"</code>
<code>* IP Multi-Site Service UDP Port: "62016"</code>	<code>* IP Multi-Site Service UDP Port: "62016"</code>
– <code>* RDAC: "unchecked"</code>	+ <code>* RDAC: "checked"</code>
	+ <code>* Remote RDAC UDP Port: "62017"</code>
<code>* Super Master Service: "checked"</code>	<code>* Super Master Service: "checked"</code>
<code>* Super Master IP: "178.188.156.53"</code>	<code>* Super Master IP: "178.188.156.53"</code>
Zeile 23:	Zeile 24:
<code>* Super Master RDAC UDP Port: "62007"</code>	<code>* Super Master RDAC UDP Port: "62007"</code>
– <code></code>	
Please note: Use the UDP-Port "62006" only for the first tests and QSOs. After that you will get a fixed UDP-Port. This Port identify you repeater to routing- and informations systems.
	
– Only with a fix UDP-Port you can use all the features in the WinMaster system. You can get this fix port form your WinMaster administrator. In Austria please contact me oe1kbc@oevsv.at
	

== Server ID using RDAC Service ==	== Server ID using RDAC Service ==
– WinMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.	+ DigitalMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.
* DMR Repeater ID	* DMR Repeater ID
* Repeater callsign	* Repeater callsign
Zeile 34:	Zeile 32:
* Repeater RX frequency or shift	* Repeater RX frequency or shift
– A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the WinMaster . This information will be transferd to the S /BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.	+ A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the DigitalMaster . This information will be transferd to the S /BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.
–	
–	
– == Server ID (old version without Super Master RDAC Service) ==	
– The HYTERA Repeaters to not give their ID to the network streams so i've to take this information from "Super Master Multi-Site UDP" Port. 	
– Therefore, if you use the default UPD-Port 62006 no Server-ID can be calculated. 	
– In coordination with Torsten DG1HT (for BMaster and SMaster) and OE1KBC (for WinMaster) we have the following possibilities: 	
– Super Master Multi-Site UDP Port: ""6FRLL"" 	

-	6....fix 	
-	F....counting no. per region 1-4 	
-	R....Region 1-9 (in OE it is the state 1-9 in DL the first position of the postal code) 	
-	LL...country code - only the last both digits - (OE...2<32> DL... 2<62> HB9...2<28> US...3<10>) 	
-		
-	e.g.: 	
-	the second repeater in region 8 in OE ""62832"" or 	
-	the third repeater in postal region 4 in DL ""63462"" or 	
-	the forth repeater in region 7 in US ""64710"" 	
	== Timeslots / Talkgroups ==	== Timeslots / Talkgroups ==
-	* local QSOs - the timeslot TS1 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues. 	+ * local QSOs - the timeslot TS2 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.
-	* echo function- as a special we offer on TS1 a echo function. All you speek to TG9990 on TS1 will be responded after release of PTT. 	+ * echo function- as a special we offer on TS2 a echo function. All you speek to TG9990 on TS2 will be responded after release of PTT.
-	* national QSOs - the timeslot TS2 with TG9 you can also use for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs 	+ * national QSOs - the timeslot TS1 with TG9 you can also be used for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs
-	* international QSOs - with TG1 you are connected to all repeaters WW (US, EU, ...). 	+ * international QSOs - with TG1 on TS1 yo u are connected to all repeaters WW (US, EU, ...).
-	== LastHeard ==	+ == HYTERA DashBoard / LastHeard ==

<p>– via http://87.106.3.249/dmr you can see the list of the last heard QSOs.</p>	<p>+ the link http://ham-dmr.de/dmr/ show the LastHeard information. This can show you the right function of the DigitalMaster installation.
</p>
	<p>+ You can also reach the overview which repeaters are ONLINE to the OPEN-HYTERA-NET:
</p>
	<p>+ http://ham-dmr.de/1repeater_status.php
</p>
	<p>+ And also an overview to control which talkgroups are linked to each repeater is shown:
</p>
	<p>+ http://ham-dmr.de/group.php.
</p>
<p>– == WinMaster Software ==</p>	<p>+ == DigitalMaster Software ==</p>
<p>– The WinMaster software is written with .NET C# and connect the repeaters to the network..
</p>	<p>+ The DigitalMaster software is written with .NET C# and connect the repeaters to the network..
</p>
<p>– The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same WinMaster) on TS1 with TG9. This is a local area connection.
</p>	<p>+ The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same DigitalMaster) on TS2 with TG9. This is a local area connection.
</p>
<p>– If you run more than one WinMaster on the same SMaster (see routing concept) you can decided on every WinMaster how to connect this WinMasters together.
</p>	<p>+ If you run more than one DigitalMaster on the same SMaster (see routing concept) you can decided on every DigitalMaster how to connect the DigitalMasters together.
</p>
<p>The three step model give us a dynamic structure for the future.</p>	<p>The three step model give us a dynamic structure for the future.</p>
<p>– * WinMaster build the repeater connections and the network for the region</p>	<p>+ * DigitalMaster build the repeater connections and the network for the region</p>
<p>– * SMaster combine the WinMaster regions to a nationwide network</p>	<p>+ * SMaster combine the DigitalMaster regions to a nationwide network</p>
<p>* BMaster combine nations to continents</p>	<p>* BMaster combine nations to continents</p>
<p>
</p>	<p>
</p>

-	here a pictiure from ÖVSV HYTERA-DMR OE-MASTER main- and propertiespage	+	here a picture from ÖVSV HYTERA-DMR OE-MASTER main- and properties page
	[[Bild:OE-MASTER-PRINT.jpg 500px OPEN HYTERA OE MASTER]]		[[Bild:OE-MASTER-PRINT.jpg 500px OPEN HYTERA OE MASTER]]
-	== questions to the software and the Wi nMaster (OE-MASTER) in OE ==	+	== Questions to the software and the Dig italMaster (OE-MASTER) in OE ==
-	Please EMail to oe1kbc@oevsv.at	+	please EMail to oe1kbc@oevsv.at

Aktuelle Version vom 1. Februar 2014, 09:28 Uhr

Inhaltsverzeichnis

1	DMR DigitalMaster	15
2	Parameters	15
3	Server ID using RDAC Service	15
4	Timeslots / Talkgroups	16
5	HYTERA DashBoard / LastHeard	16
6	DigitalMaster Software	16
7	Questions to the software and the DigitalMaster (OE-MASTER) in OE	17

DMR DigitalMaster

by: Kurt OE1KBC oe1kbc@oevsv.at

On the ÖVSV server we installed the DMR OE-MASTER and you can use this master for testing issues.

You can connect with HYTERA RD985 or RD965 repeater with the IP Multi-Site Service license installed. The connection is done via the "Supermaster" service.

Parameters

- Repeater Type: **IP Multi-Site Master**
- Jitter Buffer Length: **8**
- Authentication Key: **!! leave empty !!**
- IP Multi-site Networking UDP Port: **62015**
- P2P Firewall Open Time (sec): **6**
- IP Multi-Site Service: **checked**
- IP Multi-Site Service UDP Port: **62016**
- RDAC: **checked**
- Remote RDAC UDP Port: **62017**
- Super Master Service: **checked**
- Super Master IP: **178.188.156.53**
- Super Master UDP Port: **62005**
- Super Master Multi-Site Service: **checked**
- Super Master Multi-Site UDP Port: **62006** as standard port. Please ask WinMaster SYSOP for your own individual port
- Super Master RDAC Service: **checked**
- Super Master RDAC UDP Port: **62007**

Server ID using RDAC Service

DigitalMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.

- DMR Repeater ID
- Repeater callsign
- Repeater TX frequency
- Repeater RX frequency or shift

A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the DigitalMaster. This information will be transferd to the S/BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.

Timeslots / Talkgroups

- local QSOs - the timeslot TS2 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.
- echo function- as a special we offer on TS2 a echo function. All you speak to TG9990 on TS2 will be responded after release of PTT.
- national QSOs - the timeslot TS1 with TG9 you can also be used for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs
- international QSOs - with TG1 on TS1 you are connected to all repeaters WW (US, EU, ...).

HYTERA DashBoard / LastHeard

the link <http://ham-dmr.de/dmr/> show the LastHeard information. This can show you the right function of the DigitalMaster installation.

You can also reach the overview which repeaters are ONLINE to the OPEN-HYTERA-NET:

http://ham-dmr.de/1repeater_status.php

And also an overview to control which talkgroups are linked to each repeater is shown:

<http://ham-dmr.de/group.php>.

DigitalMaster Software

The DigitalMaster software is written with .NET C# and connect the repeaters to the network.. The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same DigitalMaster) on TS2 with TG9. This is a local area connection.

If you run more than one DigitalMaster on the same SMaster (see routing concept) you can decided on every DigitalMaster how to connect the DigitalMasters together.

The three step model give us a dynamic structure for the future.

- DigitalMaster build the repeater connections and the network for the region
- SMaster combine the DigitalMaster regions to a nationwide network
- BMaster combine nations to continents

here a picture from ÖVSV HYTERA-DMR OE-MASTER main- and properties page

DMR+ MASTER 7.00 Linux 64Bit												
HOME	Fri Mar 20 14:17:19 2015											
SYSTEM	DMR MASTER CONFIG											
LOGFILE												
GPS-USER	SYSOPEMAIL	LocalMasterName	Locator_ID	TS1_INTERN	TS1_EXTERN	RefLink	Refunlink	sMaster_IP				
	oe1kbc@chello.at	OE-Vienna	2322	1,2,20,232	1,2,20,232	User Link On	User Unlink On	44.143.9.60				
DONGLE	REPEATER ON MASTER											
RPT-GEO	DMR-ID	CALL	LOGINTIME	IP	TX	QRG	RX	QRG	SHIFT	START	REF/RT	Reflector
	CONFID	232100	OE1XAR	Fri Mar 20 09:15:00 2015	44.143.9.70	62006	438.5000	430.9000	-7.6	4191/15	Link 4191	232 1 20
RPT-MAP	CONFID	228391	HB9RO	Fri Mar 20 09:15:00 2015	213.202.59.75	62006	439.4125	431.8125	-7.6	4180/15	Link 4180	232 1 20
	CONFID	232108	OE1XKK	Fri Mar 20 09:15:00 2015	44.143.9.72	62006	438.6000	431.0000	-7.6	4198/15	Link 4198	232 1 20
DMR-LIVE	CONFID	262400	DB0NG	Fri Mar 20 09:15:00 2015	217.191.49.246	62006	438.9000	431.3000	-7.6	4006/15	Link 4006	262 1 20
	CONFID	232192	OE1XQU	Fri Mar 20 09:15:00 2015	44.143.8.68	62006	438.4500	430.8500	-7.6	4180/15	Link 4180	232 1 20
USER	CONFID	232605	OE1XCD	Fri Mar 20 09:15:00 2015	81.217.111.56	62006	438.9750	431.3750	-7.6	4191/15	Link 4191	232 1 20
	CONFID	232604	OE1XNF	Fri Mar 20 09:15:00 2015	185.29.89.105	62006	438.9125	431.3125	-7.6	4196/15	Link 4196	232 1 20
USER+	CONFID	232191	OE1XNK	Fri Mar 20 09:15:00 2015	44.143.9.52	62006	438.4250	430.8250	-7.6	4180/15	Link 4180	232 1 20
	CONFID	262899	DB0NA	Fri Mar 20 09:15:00 2015	212.125.105.170	62006	439.5875	431.9875	-7.6	4198/15	Link 4198	20 1
REF-LIST	CONFID	232893	OE1XNK	Fri Mar 20 09:15:01 2015	44.143.19.50	62006	438.4250	430.8250	-7.6	4191/15	Link 4191	232 1 20
	CONFID	232391	OE1XTR	Fri Mar 20 09:15:01 2015	82.218.27.11	62006	438.4000	430.8000	-7.6	4191/15	Link 4191	232 1 20
REF-LIST+	CONFID	232303	OE1XHB	Fri Mar 20 09:15:02 2015	44.143.9.73	62006	438.4250	430.8250	-7.6	4193/15	Link 4193	232 1 20
	CONFID	232703	OE1XTI	Fri Mar 20 09:15:02 2015	44.143.9.77	62006	438.3500	430.7500	-7.6	4197/15	Link 4197	232 1 20
MASTER	CONFID	232991	OE1XVJ	Fri Mar 20 09:15:02 2015	84.115.117.45	62006	438.5000	430.9000	-7.6	4199/15	Link 4199	232 1 20
	CONFID	232601	OE1XAG	Fri Mar 20 09:15:02 2015	44.143.9.71	62006	438.6000	431.0000	-7.6	4196/15	Link 4196	232 1 20
	CONFID	262411	DB0MR	Fri Mar 20 09:15:03 2015	91.16.219.64	62006	439.0375	431.4375	-7.6	NO SET	NO-LINK	262 1 20 10
	CONFID	232193	OE1XOU	Fri Mar 20 09:15:03 2015	44.143.26.50	62006	145.5875	144.9875	-0.6	4191/15	Link 4191	232 1 20
RepeaterOnline: 17 ... Voice: GER EFN:off SPING: 41.50 ms Build: 000 Start Time: Fri Mar 20 09:14:57 2015												

Questions to the software and the DigitalMaster (OE-MASTER) in OE

please EMail to oe1kbc@oevsv.at

OPEN-HYTERA-OE-MASTER-ENGLISH: Unterschied zwischen den Versionen

[Versionsgeschichte interaktiv durchsuchen](#)

[Visuell Wikitext](#)

Version vom 18. Oktober 2013, 11:33 Uhr
([Quelltext anzeigen](#))

[Oe1kbc](#) ([Diskussion](#) | [Beiträge](#))

[← Zum vorherigen Versionsunterschied](#)

Aktuelle Version vom 1. Februar 2014, 09:28 Uhr
([Quelltext anzeigen](#))

[Oe1kbc](#) ([Diskussion](#) | [Beiträge](#))

(6 dazwischenliegende Versionen desselben Benutzers werden nicht angezeigt)

Zeile 1:	Zeile 1:
– <code>== DMR WinMaster ==</code>	+ <code>== DMR DigitalMaster ==</code>
<code>by: Kurt OE1KBC oe1kbc@oevsv.at</code>	<code>by: Kurt OE1KBC oe1kbc@oevsv.at</code>
Zeile 14:	Zeile 14:
<code>* IP Multi-Site Service: "checked"</code>	<code>* IP Multi-Site Service: "checked"</code>
<code>* IP Multi-Site Service UDP Port: "62016"</code>	<code>* IP Multi-Site Service UDP Port: "62016"</code>
– <code>* RDAC: "unchecked"</code>	+ <code>* RDAC: "checked"</code>
	+ <code>* Remote RDAC UDP Port: "62017"</code>
<code>* Super Master Service: "checked"</code>	<code>* Super Master Service: "checked"</code>
<code>* Super Master IP: "178.188.156.53"</code>	<code>* Super Master IP: "178.188.156.53"</code>
Zeile 23:	Zeile 24:
<code>* Super Master RDAC UDP Port: "62007"</code>	<code>* Super Master RDAC UDP Port: "62007"</code>
– <code></code>	
Please note: Use the UDP-Port "62006" only for the first tests and QSOs. After that you will get a fixed UDP-Port. This Port identify you repeater to routing- and informations systems.
	
– Only with a fix UDP-Port you can use all the features in the WinMaster system. You can get this fix port form your WinMaster administrator. In Austria please contact me oe1kbc@oevsv.at
	

== Server ID using RDAC Service ==	== Server ID using RDAC Service ==
– WinMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.	+ DigitalMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.
* DMR Repeater ID	* DMR Repeater ID
* Repeater callsign	* Repeater callsign
Zeile 34:	Zeile 32:
* Repeater RX frequency or shift	* Repeater RX frequency or shift
– A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the WinMaster . This information will be transferd to the S /BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.	+ A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the DigitalMaster . This information will be transferd to the S /BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.
–	
–	
– == Server ID (old version without Super Master RDAC Service) ==	
– The HYTERA Repeaters to not give their ID to the network streams so i've to take this information from "Super Master Multi-Site UDP" Port. 	
– Therefore, if you use the default UPD-Port 62006 no Server-ID can be calculated. 	
– In coordination with Torsten DG1HT (for BMaster and SMaster) and OE1KBC (for WinMaster) we have the following possibilities: 	
– Super Master Multi-Site UDP Port: ""6FRLL"" 	

-	6....fix 	
-	F....counting no. per region 1-4 	
-	R....Region 1-9 (in OE it is the state 1-9 in DL the first position of the postal code) 	
-	LL...country code - only the last both digits - (OE...2<32> DL... 2<62> HB9...2<28> US...3<10>) 	
-		
-	e.g.: 	
-	the second repeater in region 8 in OE ""62832"" or 	
-	the third repeater in postal region 4 in DL ""63462"" or 	
-	the forth repeater in region 7 in US ""64710"" 	
	== Timeslots / Talkgroups ==	== Timeslots / Talkgroups ==
-	* local QSOs - the timeslot TS1 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues. 	+ * local QSOs - the timeslot TS2 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.
-	* echo function- as a special we offer on TS1 a echo function. All you speak to TG9990 on TS1 will be responded after release of PTT. 	+ * echo function- as a special we offer on TS2 a echo function. All you speak to TG9990 on TS2 will be responded after release of PTT.
-	* national QSOs - the timeslot TS2 with TG9 you can also use for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs 	+ * national QSOs - the timeslot TS1 with TG9 you can also be used for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs
-	* international QSOs - with TG1 you are connected to all repeaters WW (US, EU, ...). 	+ * international QSOs - with TG1 on TS1 you are connected to all repeaters WW (US, EU, ...).
-	== LastHeard ==	+ == HYTERA DashBoard / LastHeard ==

<p>– via http://87.106.3.249/dmr you can see the list of the last heard QSOs.</p>	<p>+ the link http://ham-dmr.de/dmr/ show the LastHeard information. This can show you the right function of the DigitalMaster installation.
</p>
	<p>+ You can also reach the overview which repeaters are ONLINE to the OPEN-HYTERA-NET:
</p>
	<p>+ http://ham-dmr.de/1repeater_status.php
</p>
	<p>+ And also an overview to control which talkgroups are linked to each repeater is shown:
</p>
	<p>+ http://ham-dmr.de/group.php.
</p>
<p>– == WinMaster Software ==</p>	<p>+ == DigitalMaster Software ==</p>
<p>– The WinMaster software is written with .NET C# and connect the repeaters to the network..
</p>	<p>+ The DigitalMaster software is written with .NET C# and connect the repeaters to the network..
</p>
<p>– The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same WinMaster) on TS1 with TG9. This is a local area connection.
</p>	<p>+ The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same DigitalMaster) on TS2 with TG9. This is a local area connection.
</p>
<p>– If you run more than one WinMaster on the same SMaster (see routing concept) you can decided on every WinMaster how to connect this WinMasters together.
</p>	<p>+ If you run more than one DigitalMaster on the same SMaster (see routing concept) you can decided on every DigitalMaster how to connect the DigitalMasters together.
</p>
<p>The three step model give us a dynamic structure for the future.</p>	<p>The three step model give us a dynamic structure for the future.</p>
<p>– * WinMaster build the repeater connections and the network for the region</p>	<p>+ * DigitalMaster build the repeater connections and the network for the region</p>
<p>– * SMaster combine the WinMaster regions to a nationwide network</p>	<p>+ * SMaster combine the DigitalMaster regions to a nationwide network</p>
<p>* BMaster combine nations to continents</p>	<p>* BMaster combine nations to continents</p>
<p>
</p>	<p>
</p>

- here a pictiure from ÖVSV HYTERA-DMR OE-MASTER main- and propertiespage	+ here a picture from ÖVSV HYTERA-DMR OE-MASTER main- and properties page
[[Bild:OE-MASTER-PRINT.jpg 500px OPEN HYTERA OE MASTER]]	[[Bild:OE-MASTER-PRINT.jpg 500px OPEN HYTERA OE MASTER]]
- == questions to the software and the Wi nMaster (OE-MASTER) in OE ==	+ == Questions to the software and the Dig italMaster (OE-MASTER) in OE ==
- Please EMail to oe1kbc@oevsv.at	+ please EMail to oe1kbc@oevsv.at

Aktuelle Version vom 1. Februar 2014, 09:28 Uhr

Inhaltsverzeichnis

1 DMR DigitalMaster	23
2 Parameters	23
3 Server ID using RDAC Service	23
4 Timeslots / Talkgroups	24
5 HYTERA DashBoard / LastHeard	24
6 DigitalMaster Software	24
7 Questions to the software and the DigitalMaster (OE-MASTER) in OE	25

DMR DigitalMaster

by: Kurt OE1KBC oe1kbc@oevsv.at

On the ÖVSV server we installed the DMR OE-MASTER and you can use this master for testing issues.

You can connect with HYTERA RD985 or RD965 repeater with the IP Multi-Site Service license installed. The connection is done via the "Supermaster" service.

Parameters

- Repeater Type: **IP Multi-Site Master**
- Jitter Buffer Length: **8**
- Authentication Key: **!! leave empty !!**
- IP Multi-site Networking UDP Port: **62015**
- P2P Firewall Open Time (sec): **6**
- IP Multi-Site Service: **checked**
- IP Multi-Site Service UDP Port: **62016**
- RDAC: **checked**
- Remote RDAC UDP Port: **62017**
- Super Master Service: **checked**
- Super Master IP: **178.188.156.53**
- Super Master UDP Port: **62005**
- Super Master Multi-Site Service: **checked**
- Super Master Multi-Site UDP Port: **62006** as standard port. Please ask WinMaster SYSOP for your own individual port
- Super Master RDAC Service: **checked**
- Super Master RDAC UDP Port: **62007**

Server ID using RDAC Service

DigitalMaster versions larger then 8.0 are able to read the programmed Repeater Parameters.

- DMR Repeater ID
- Repeater callsign
- Repeater TX frequency
- Repeater RX frequency or shift

A Repeater with activated Super Master RDAC Service is able to transfer the parameters to the DigitalMaster. This information will be transferd to the S/BMaster system. So we can display this informations on the DashBoard. Please keep in mind to coordinate the Repeter IDs and store them to the DMR-MARC database. So we do not run in conflicts on international calls.

Timeslots / Talkgroups

- local QSOs - the timeslot TS2 should be complete free for local QSOs. Please use TG9 to be compatible to the network issues.
- echo function- as a special we offer on TS2 a echo function. All you speak to TG9990 on TS2 will be responded after release of PTT.
- national QSOs - the timeslot TS1 with TG9 you can also be used for local QSOs. With your country code (e.g. in OE TG232 or TG3 in USA) you can make nation wide QSOs
- international QSOs - with TG1 on TS1 you are connected to all repeaters WW (US, EU, ...).

HYTERA DashBoard / LastHeard

the link <http://ham-dmr.de/dmr/> show the LastHeard information. This can show you the right function of the DigitalMaster installation.

You can also reach the overview which repeaters are ONLINE to the OPEN-HYTERA-NET:

http://ham-dmr.de/1repeater_status.php

And also an overview to control which talkgroups are linked to each repeater is shown:

<http://ham-dmr.de/group.php>.

DigitalMaster Software

The DigitalMaster software is written with .NET C# and connect the repeaters to the network.. The parameters in the properties form give you the possibilities to assign talkgroups to your slots. So you can make your own local TGs and bind repeaters to a local DMR-Network. So it is possible to connect the local repeaters (connected to the same DigitalMaster) on TS2 with TG9. This is a local area connection.

If you run more than one DigitalMaster on the same SMaster (see routing concept) you can decided on every DigitalMaster how to connect the DigitalMasters together.

The three step model give us a dynamic structure for the future.

- DigitalMaster build the repeater connections and the network for the region
- SMaster combine the DigitalMaster regions to a nationwide network
- BMaster combine nations to continents

here a picture from ÖVSV HYTERA-DMR OE-MASTER main- and properties page

DMR+ MASTER 7.00 Linux 64Bit													
HOME	<div> Fri Mar 20 14:17:19 2015 DMR MASTER CONFIG </div>												
SYSTEM													
LOGFILE													
GPS-USER													
	SYSOPEMAIL	LocalMasterName	Locator_ID	TS1_INTERN	TS1_EXTERN	Ref Link	Ref unlik	sMaster_IP					
	oelkbc@chello.at	OE-Vienna	2322	1,2,20,232	1,2,20,232	User Link On	User Unlink On	44.143.9.60					
DONGLE	REPEATER ON MASTER												
RPT-GEO	DmrID	CALL	LOGINTIME	IP	TX_QRG	RX_QRG	SHIFT	START REF/RT	Reflector	TS1	FIRMWARE	MODEL	
RPT-MAP	CONF#	223100	HBXAB	Fri Mar 20 09:15:00 2015	44.143.9.70 62006	438.5000	430.9000	-7.6	4191/15	Link 4191	232 1 20	DMR+ MB 0.95	MBplus S
	CONF#	223891	HBXBO	Fri Mar 20 09:15:00 2015	213.202.59.75 62006	439.4125	431.8125	-7.6	4180/15	Link 4180	228 1 20	A6.05.10.004	RD985 M
DMR-LIVE	CONF#	223108	OE1XKN	Fri Mar 20 09:15:00 2015	44.143.9.72 62006	438.6000	431.8000	-7.6	4198/15	Link 4198	232 1 20	DMR+ MB 0.95	MBplus S
	CONF#	262400	D8QNG	Fri Mar 20 09:15:00 2015	217.191.49.246 62006	438.9000	431.3000	-7.6	4006/15	Link 4006	262 1 20	A5.05.10.007	RD985 S
USER	CONF#	223192	OE1XQU	Fri Mar 20 09:15:00 2015	44.143.8.68 62006	438.4500	430.8500	-7.6	4180/15	Link 4180	232 1 20	A6.05.10.004	RD985 M
	CONF#	223605	OE1XCD	Fri Mar 20 09:15:00 2015	81.217.111.56 62006	438.9750	431.3750	-7.6	4191/15	Link 4191	232 1 20	A7.00.09.003	RD985 M
USER+	CONF#	223604	OE1XBE	Fri Mar 20 09:15:00 2015	185.29.89.105 62006	438.9125	431.3125	-7.6	4196/15	Link 4196	232 1 20	A6.05.10.004	RD985 M
	CONF#	223191	OE1XJK	Fri Mar 20 09:15:00 2015	44.143.9.52 62006	438.4250	430.8250	-7.6	4180/15	Link 4180	232 1 20	A7.00.09.003	RD985 M
REF-LIST	CONF#	262890	D8QON	Fri Mar 20 09:15:00 2015	212.125.105.170 62006	439.5875	431.9875	-7.6	4198/15	Link 4198	20 1	A6.05.10.004	RD985 M
	CONF#	223893	OE1XIK	Fri Mar 20 09:15:01 2015	44.143.19.50 62006	438.4250	430.8250	-7.6	4191/15	Link 4191	232 1 20	A7.00.09.003	RD985 M
REF-LIST+	CONF#	223391	OE1XDE	Fri Mar 20 09:15:01 2015	82.218.27.11 62006	438.4000	430.8000	-7.6	4191/15	Link 4191	232 1 20	A7.00.09.003	RD625 M
	CONF#	223203	OE1XHB	Fri Mar 20 09:15:02 2015	44.143.9.73 62006	438.4250	430.8250	-7.6	4193/15	Link 4193	232 1 20	DMR+ MB 0.95	MBplus S
MASTER	CONF#	223703	OE1XTI	Fri Mar 20 09:15:02 2015	44.143.9.77 62006	438.3500	430.7500	-7.6	4197/15	Link 4197	232 1 20	DMR+ MB 0.95	MBplus S
	CONF#	223991	OE1XVJ	Fri Mar 20 09:15:02 2015	84.115.117.45 62006	438.5000	430.9000	-7.6	4199/15	Link 4199	232 1 20	A6.00.05.004	RD985 S
	CONF#	226601	OE1XAG	Fri Mar 20 09:15:02 2015	43.439.3.71 62006	438.6000	431.0000	-7.6	4196/15	Link 4196	232 1 20	DMR+ MB 0.95	MBplus S
	CONF#	223211	D8DMR	Fri Mar 20 09:15:03 2015	91.16.219.64 62006	439.0375	431.4375	-7.6	NO SET	NO-LINK	262 1 20	A5.05.10.007	RD985 S
	CONF#	223193	OE1XQU	Fri Mar 20 09:15:03 2015	44.143.26.50 62006	145.5875	144.9875	-0.6	4191/15	Link 4191	232 1 20	A6.05.10.004	RD985 M
<div> RepeaterOnline: 17 — — — — Voice: GER EFN:off SPING: 41.5</div>													

Questions to the software and the DigitalMaster (OE-MASTER) in OE

please EMail to oe1kbc@oevsv.at